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Doctoral Thesis

Key Success Factors for Sales Force Readiness: A Study of Product Launches in the Swedish Pharmaceutical Industry

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Key Success Factors for Sales Force Readiness during New Product Launch

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A Study of Product Launches in the Swedish
Pharmaceutical Industry

Stefan Fraenkel

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A Study of Product Launches in the Swedish Pharmaceutical Industry

By

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Doctoral Thesis

Abstract

This research identifies a set of key success factors for sales force readiness, for driving the success of a new product launch within the pharmaceutical industry. Drawing from the analysis of fifty product launches in the Swedish pharmaceutical market, the study has succeeded in discriminating between four types of key success factors: the key factors that are *important and crucial* for a successful launch; the key factors that are *important yet not necessarily crucial* for a successful launch; the market conditions that are most ideal for a successful launch, and finally the type of newness of the product that is most suitable for successful launch. The overall aim of the research project was to provide guidance in optimizing the sales force readiness during the launch of a new pharmaceutical product. The research question is driven by the great importance and high cost of the sales force, together with the need for the pharmaceutical companies to continuously launch new products in a marketplace with increased challenges for all parts of the business. The research approach divides the research into two main parts. The first part reviews earlier studies/findings in the literature, collects empirical data in the form of six case studies and conducts six expert interviews with the purpose of formulating a Research Model. In the second part, the Research Model and its variables are quantitatively tested against fifty launched pharmaceutical products in Sweden. The study employs a bottom-up analysis method with Partial Least Squares Analysis, being predictive in nature, rather than the more conventional top-down and hypothesis-testing approach that typically employs regression analysis methods. In order to provide both practitioners and researchers with guidance on the results, its interpretation is presented in terms of its managerial implications as well as proposals for further research.

Key Words: *Sales Force, Sales Force Management, Product Launch, Product Introduction, New Product Launch, Pharmaceutical Industry*

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/Stefan

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1. INTRODUCTION

This study aims to provide guidance in how to successfully launch a pharmaceutical product with the use of a sales force. The launch of a pharmaceutical product is its commercial entry into the market and represents an important phase in a product's life cycle. The study sets out to identify the key success factors for sales force readiness during this stage of the life cycle. The research topic crosses three broad areas of the literature: Sales Force Management (including Selling), Product Launch, and the Pharmaceutical Industry. However, the definitions and terms found to be used within each area only partially or too broadly cover the specific kind of empirical situation addressed in the present research. Therefore, the label "Sales Force Readiness during New Product Launch" has been chosen to denote the kind of empirical situation addressed here. In the research conducted here, "Sales force Readiness during New Product Launch" is broadly understood to be the degree to which a sales force is prepared, able or willing to support a new product in order to generate a successful launch. The term will later be further defined and linked to the literature, but in short, "sales force readiness during new product launch" refers to a set of properties of the product to be introduced into a market place, properties of such a market, properties of the sales force conducting such an introduction, and the outcome of such a product launch.

The following introductory text is structured with the aim of giving an overview of the research topic. First, a brief broader background is given and the two main issues, *the high sales force cost* and *the need to effectively launch new products*, are introduced as core drivers for the research question. Secondly, these two issues are explored in more detail under the sections, *the cost issue of sales forces* and *sales force and the launch of new products*. Thirdly, the research aim is presented and described in terms of the target groups of the research findings as well as the objectives, purpose and process of the research. Fourthly, the justification of the research is given. Fifthly, the research focus and scope are defined followed by the definition of sales force readiness during new product launch. The introduction ends with an overview of the pharmaceutical sales force operations and the pharmaceutical product's life cycle challenges in order to give a more complete background as well as to further define and describe the context and challenges that the pharmaceutical companies and their sales forces are facing.

1.1. Background

As the sales force is suggested to be a major contributing factor or maybe the most important contributing factor to new product success (Cooper 1998; Cooper 1980; di Benedetto 1999; Hultink and Atuahene-Gima 2000; Moriarty and Kosnik 1989; Song et al. 1997; Song and Parry 1997), managers need to pay attention to the sales force's preparation and execution of the launch. In broad terms, the new product launch of a pharmaceutical product includes many strategic elements that need to be considered. Examples of these elements are the way in which the sales representatives and managers adapt themselves, their working processes and behavior to fit the new conditions. Further examples are the effort and commitment the new product gains from the sales force, how outcome control or behavior control are enforced in the sales force together with how management succeeds with internal marketing, training, selection of the right salespeople in terms of their characteristics and competence as well as organizational set-up and incentive systems. There are also many other aspects in the environment that may influence the launch and/or the sales force in their effort to achieve a successful launch. The majority of these elements aim to prepare the sales representatives to successfully conduct sales calls, also referred to as detailing, which is one of the most important communication tools for the sales force (Lilien et al. 1981; Hahn et al. 1994) as it is the sales call that is the primary interaction point between the sales representative and its main customer, the physician. Literature has proven that the sales call (detailing) is effective in increasing the mean prescription rate (Elling et al. 2002; Gonul et al. 2001; Manchanda and Chintagijnta 2004; Mizik and Jacobson 2004; Rhee 2009).

The pharmaceutical industry is currently exposed to significant changes and unprecedented market dynamics, challenging the conventional Big Pharma research-oriented business model, where all functions of the value chain are integrated (Dutton and Reece 1996; Elling et al. 2002; Gilbert et al. 2003; Rod et al. 2007; Smith 1991; Smith et al. 2002; Tengilimoglu et al. 2004). The challenges for the executives of these Big Pharma companies are many in this new environment. The pharmaceutical industry is a truly global industry, in the sense that a developed product is typically launched across all the major markets, including North America, Europe, Asia, and South America (EIU 2005; Popper and Nason 1994). A driving force of the industry has been the sales of the so-called blockbuster products that are sold across the world. A blockbuster product is usually defined as a single product generating total revenue of more than one billion dollars. The phrase "Big Pharma" is often used to refer to companies with revenue in excess of \$3 billion, and/or R&D expenditure in excess of \$500 million, and represents around 30 or so companies (Gilbert et al. 2003). The United States is the largest

pharmaceutical market, followed by Europe, where the largest markets include the UK, Germany, France, Italy, and Spain (MIDAS-Database 2007a). Based on the most recent years' growth, rates are declining in both the United States and the European big five markets (MIDAS-Database 2007a). A brief overview of the pharmaceutical industry size and value is presented in Appendix 7. One key issue for Big Pharma is how to effectively launch new products in order to maximize return on investments and in turn support the development and clinical research for these firms. Another key issue being dealt with by these firms is how to optimize sales forces utilization in order to control the extensive operating costs of sales forces in times when efficiency and effectiveness are required. These two issues combined create the topic of sales force readiness during new product launch, where this research aims to provide additional scientific learning.

To better contextualize the empirical situation investigated it can be formulated as; the challenge met by the managers responsible for the configuration and management of a sales force, with the aim of contributing to a successful launch of a pharmaceutical product.

In order to better handle the two above mentioned key issues *the high sales force cost* and *to effectively launch new product with a sales force*, managers need guidance as to where to focus their efforts to optimize the prediction of a successful launch. It is, as stated above, in a combination of these areas that this research aims to generate knowledge, defined as a set of key success factors. In addition, there are other broader issues for the pharmaceutical companies, their sales forces and their products that highlight and reinforce the need for a successful launch, and these will be discussed later in this Chapter.

The text above provides a brief introduction to the pharmaceutical industry and the context of the research. It also introduces two key issues, *the cost issue of sales forces* and *the need to effectively launch new product*, which are the core drivers for the research question. These two issues will be explored in more detail in the next two sections under the topics of *the cost issue of sales forces* and *sales force and the launch of new products*.

1.1.1. The Cost Issue of Sales Forces

Kotler (2000) reinforces the cost element with the statements, “No one debates the importance of the sales force in the marketing mix. However, companies are sensitive to the high and rising costs (salaries, commissions, bonuses, travel expenses, and benefits) of maintaining a sales force”. Companies sometimes see the sales force as a cost item instead of an investment (Rangaswamy et al. 1990). In general, the expenditure of utilizing a sales force in the form of a field sales force is a substantial investment and the

maintenance and deployment of a field sales force is, according to Piercy et al. (1999), at least equal to marketing expenditure on advertising and sales promotions (Piercy et al. 1999). Moreover, Piercy et al. (1997) and Baldauf and Cravens (1999) concluded that for the business-to-business marketplace, the field sales force is also one of the main marketing expenditures, and estimates of total cost suggest that personal selling may account for as much corporate resources as higher profile media advertising. They continue to suggest that for many organizations in industrial markets, direct selling costs far exceed expenditure on media advertising or other forms of sales promotion (Baldauf and Cravens 1999; Piercy et al. 1999). Baldauf and Cravens (1999) also suggest that as the selling cost accounts for a major portion of sales and marketing expenditure in business-to-business sales organizations, companies are consequently recognizing the importance of improving the effectiveness of sales organizations as a high priority on the agenda. Lilien et al. (1981) argue that sales efforts in the sales force are the major portion of expenditure in the pharmaceutical marketing mix.

Responding to the challenges of the rapidly changing global business environment, sales executives need to take actions to improve sales organizational effectiveness (Baldauf and Cravens 1999; Corcoran et al. 1995; Cravens 1995; Elling et al. 2002; Rangaswamy et al. 1990). Also, the increased pressure on competitiveness from global sourcing, reductions by major customers in supplier bases, and additional problems imposed by low economic growth add a sense of urgency to the need to seek greater effectiveness and superior performance in selling operations (Piercy et al. 1999).

The costs of pharmaceutical sales forces, as for most other industries' sales forces, as described above, are significant (Dannacher and Stahl 2005; Elling et al. 2002; Manchanda and Chintagijnta 2004; Mizik and Jacobson 2004) and are becoming a burden for Big Pharma (Dannacher and Stahl 2005; Elling et al. 2002). Actions to reduce and identify less burdensome cost structures and alternatives are ongoing. As an example, there has been a significant increase in the cost of personal selling activities, which makes managers seek more knowledge of the various factors which can be influenced, e.g. productivity and improved recruitment (Blackshear and Plank 1994). Manchanda and Chintagunta (2004) give an example within the pharmaceuticals industry of a typical product and how the sales force cost accounts for 80% of all promotional expenditure, or represents 20% of sales. Also, in the case of companies that utilize multi-product sales forces, which is often the case in pharmaceutical companies, there is research that argues considerable "duplications" of sales force efforts (Rangaswamy et al. 1990). There is evidence in literature that suggests that the pharmaceutical industry spends around one quarter of its revenue on sales and marketing, almost twice as much as it spends on research and development (Froud et al. 1998; Lloyd and Newell 2001). Furthermore, there is a concern among pharmaceutical companies that expenditures are "wasted" due

to “over-detailing”, which has not led to more sales and in some cases may have a negative impact on sales (Elling et al. 2002; Manchanda and Chintagijnta 2004).

The section has provided an overview of the key issue, *the cost issue of sales forces*, which together with the second key issue, *the need to effectively launch new product*, is the driver for the research question. An overview of the challenges when launching a new product with a sales force is explored in the next section.

1.1.2. Sales Force and the Launch of New Products

Several studies have suggested that the sales force is a major contributing factor to new product success (Cooper 1998; Cooper 1980; di Benedetto 1999; Hultink and Atuahene-Gima 2000; Moriarty and Kosnik 1989; Song et al. 1997; Song and Parry 1997); however company management has no guarantee of sales force commitment to a new product (Atuahene-Gima 1997). A new product can create excitement; however, many companies are reluctant to add additional sales representatives in support of both the new and older products, even though they usually recognize that this is required (Rangaswamy et al. 1990). Atuahene-Gima (1997) suggest that successfully launching a new product to the company’s sales force requires the same high levels of creativity, energy, and managerial insights as does the product’s launch into the marketplace. Also, it is argued that to ensure sales force adoption of a new product, careful consideration of the characteristics of the product, the competitive environment, the firm, and the sales force itself is required. Managers should view the salespeople as the first line of customers to ensure that they have full support of the sales teams (Atuahene-Gima 1997). Consequently, managers and researchers need to examine more closely the factors underlying the successful launch of a new product to a firm’s sales force (Atuahene-Gima 1997).

While the literature on the full discipline of selling and sales force management has increased in the last decade and a substantial amount of literature continues to become available (Baldauf et al. 2005; McBane et al. 2003; Moncrief et al. 2000), there is not nearly as much activity in the research community around the product launch phase (excluding new product development process), especially on the sales force impact on the successful launch of a product. In a way, this may be odd, as a successful commercial product-launch process may bring a product to its sales peak faster, which in turn, may contribute to its overall market success; while a badly performed product-launch process may actually contribute to a product never reaching its projected sales peak (Cooper 1998; Rao 2002). The literature supports the notion that a significant determinant of a successful launch is the motivation of the sales force selling the product (Cooper 1998; di Benedetto 1999; Micheal et al. 2003). Also, the literature around new product development has repeatedly shown that a major cause of failure of a new product is inadequate marketing, including sales (Calantone and Cooper 1981; Cooper 1998;

Cooper 2000; Song and Parry 1994). For example, Smith et al. (2002) concludes that the product launching phase is found to be typically decisive for the success of a new product and requires significant investments. In addition, some literature suggests that successful commercialization of new products is a core factor for a firm's survival (Calantone et al. 1996; Cooper 1998; Cooper 1979; Cooper 1980; Cooper 2000; Cooper and Kleinschmidt 2000; Smith et al. 2002). In addition to these general launch challenges; the pharmaceutical sales forces are meeting new challenges. These challenges will be described in more detail later in this chapter, however, the issue of limited access to physicians (Dannacher and Stahl 2005; Elling et al. 2002) is an example of a key issue for Sweden, the country being investigated in this research.

This section provided an overview of the challenges when launching a new product with a sales force, the actual core of this research. This topic will be further discussed in later sections.

1.2. Research Aims

The overall aim of conducting this research project is to provide guidance in how to successfully launch a pharmaceutical product with the use of a sales force. More specifically, this guidance is aimed to be formulated as a set of key success factors for sales force readiness during new product launch.

This research and its model aim to answer the research question:

What are the Key Success Factors for Sales Force Readiness during the Launch of a New Pharmaceutical Product on the Swedish Market?

These key success factors will provide insights into which factors matter the most and should receive maximal attention by management when launching a product if the product launch is to be a success.

The assumption is that by studying earlier launches, it is possible to conduct new launches with a higher probability of success. A second assumption underlying this research is that there are systematic differences in successful launches compared to those that are unsuccessful in terms of sales force readiness.

1.2.1 Target Groups for the Research Findings

The results of research findings presented in this text aim at two types of professionals: *researchers* and *practitioners*.

The first major target group addressed here is the scholars studying and researching the area of product launch and sales force.

Continuing with the second target group, practitioners may be divided into two subgroups: the staff members of companies formulating and implementing sales force strategies, as well as management consultants and advisors. The staff members include any role that conducts activities related to the launch of products. Examples of this are market directors and managers, market and business analysts, business developers, product managers, and business unit managers. This refers also to management consultants, advertising and communication advisors who specialize in product launch or sales force consultancy.

In addition, even if the research presented here has been adapted for the Swedish pharmaceutical industry, the findings could very likely provide guidance to other countries. The Swedish local industry has probably experienced one of the most radical transformations in the pharmaceutical industry in many areas, yet this is foremost in terms of sales force-imposed-regulations and guidelines and may, therefore, be used for forward-seeing purposes for other markets. This is argued to be highly likely because of the global trends showing that most markets will eventually face very similar conditions (Dannacher and Stahl 2005; Dutton and Reece 1996). This will be further explored later in this Chapter.

1.2.2. Research Objectives

Within the defined research scope, the research objective is:

To have identified the Key Success Factors for Sales Force Readiness during New Product Launch, within the Swedish Pharmaceutical Industry.

1.2.3. Research Purpose

The focus will be defined below and given this focus, the defined target groups and objective for this research; two purposes have guided this research.

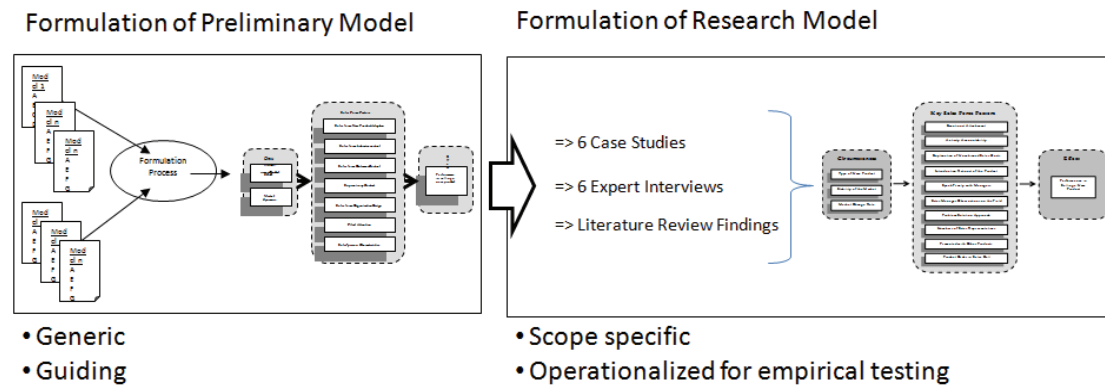
Research Purpose 1: To contribute to the knowledge constitution process that accumulates scholarly knowledge about successful strategies and management of sales forces, during the product launch phase, thereby increasing the understanding of this process. This advanced understanding, in turn, aims to facilitate design of further research investigations within the addressed domain.

Research Purpose 2: To guide managers and management advisors in the process of design and execution of successful strategies and execution for sales force readiness during the product launch phase, thereby facilitating achievement of higher return on investment from the product development.

1.2.4. Research Process

The research is conducted in two parts; the first with a qualitative focus and the second with a quantitative focus. In the first part of the research, the research question is defined and the literature review conducted followed by the formulation of a Preliminary Model. The Preliminary Model was derived from six models drawn from literature and the models belong to the two scholarly areas of new product adoption and sales force efficiency. The nature of the Preliminary Model is highly generic and is intended to guide the next research step where six case studies and six expert interviews are conducted. The findings of these case studies and interviews, together with other findings in literature, provide knowledge for developing the Preliminary Model into a Research Model as defined for the scope of this research. See Figure 1 for an overview of the formulation process. The Research Model includes a set of variables to be tested quantitatively with empirical data. The second research part includes the formulation of the data collection instrument, identification of subjects for investigation, data collection, statistical analysis and interpretation of the results. The research utilizes a bottom-up pattern identifying research approach, employing the Partial Least Squares Analysis (PLS) guided by e.g. Thomson (2004), Chin (1998) and Haenlein and Kaplan (2004). The test has predictive aspiration, where PLS is considered more powerful than its current alternatives (Ryan et al. 1999). The research process and methodology are described in more detail in Chapter 2, Research Approach.

Figure 1: Formulation process of the Preliminary Model and the Research Model



1.3. Research Justification and Motivation

The justification and motivation for this research is built on the many areas described in the full introduction chapter, with the key motivational factors being; 1) the importance, challenges and cost issue of sales force operations, and 2) the need for pharmaceutical companies to successfully launch new products, in order to receive returns on investments on their research efforts, within the increased challenging environment. These two key motivational factors are summarized below.

1.3.1. The Importance of the Sales Force

Strategy development, in the phase of a new product's introduction, has always been a key marketing process, where sales force management and sales force readiness belong (Cooper 1998; Cooper 1979; Cooper 1980; Cooper 2000; Cooper and Kleinschmidt 2000; Rao 2000b). Sales force management plays an important role in the implementation of a business strategy and is a key functional activity driving success (Slater and Olson 2000). According to Kotler (2000), "No one debates the importance of the sales force in the marketing mix". Furthermore, the importance of sales organizations is emphasized by companies' continuous modifications to sales management strategies and sales organization variables in an attempt to enhance or retain competitiveness, and the urgency of such changes appears greater in the current business environment (Babakus et al. 1996; Hise and Reid 1994; Lloyd and Newell 2001; Piercy et al. 1999).

Sales personnel serve as the company's personal link to the customers and the sales representative is often regarded as the company for many of its customers while at the same time bringing back much-needed information from the customer (Kotler 2000).

Corcoran et al. (1995), defines the rationale for sales force investments: "Ultimately a sales organization's role is to translate the company's strategy from a board-room vision to an everyday reality, add value for customers beyond that provided by the products and services, create competitive differentiation, and contribute to the company's profitability" (Corcoran et al. 1995). Moreover, the sales representative plays a central role in many companies, linking the production of product or service to the customer (Lloyd and Newell 2001). Lilien et al. (1981) and Hahn et al. (1994) argue that detailing (sales calls) from sales representatives to physicians is one of the most important components in the marketing mix for a pharmaceutical company. If the Big Pharma is to maximize revenue, it must invest in extensive sales and marketing operations, with large sales teams spanning a broad range of countries (Datamonitor 2007b). Streamlining marketing and sales processes can fundamentally alter a new pharmaceutical product sales profile with incremental revenue of \$500 million to \$1 billion within five years of sales (Rao 2002).

The literature regarding the full discipline of selling and sales force management has increased substantially in the last decade and has started to mature as a field (Baldauf et al. 2005; McBane et al. 2003; Moncrief et al. 2000). Having said that, it is also concluded that even if there is a rapid increase in the number of publications, most of the research areas within selling and sales management as well as sales performance are still in their infancy (Giacobbe et al. 2006; Ingram 2004). This is especially true for the literature around sales force management during the new-product-launch phase.

The importance of the sales force has gained strong support in literature, as well as the acknowledgement of the costs associated with its operations, which drives researchers to conclude the rising need for managers to find efficiency and effectiveness. The sales force operations for the pharmaceutical companies will be further explored and described later in this chapter in order to give a more holistic view of the change drivers and empirical situation being investigated.

1.3.2 The Importance of a Successful Launch

The risks encountered by a pharmaceutical product during its life cycle are many. The rising cost of research and development (Gilbert et al. 2003; Pharmaceutical-Executive-Europe 2006; Popper and Nason 1994; Yeoh 1994), the struggle for high cost R&D organizations to bring new innovative entities through the pipeline (Gilbert et al. 2003; IMS 2007; Yeoh 1994) and the increased challenges of getting the few products that

come through the pipeline approved by the regulatory authorities around the world (Datamonitor 2007b; IMS 2007; Pathak et al. 1992; Popper and Nason 1994; Yeoh 1994), are a few examples. This means that the so-called blockbusters together with all the new products are harder to introduce and have a lower return on investments (Gilbert et al. 2003). To make matters even more challenging, recent market trends show that the overall global pharmaceutical industry growth rate is declining (IMS 2007). Some suggest that for a pharmaceutical company to maintain double-digit growth, the company would need to launch four new products every year (Rao 2002). The time when the products are in the market is also challenged on the other end of the life cycle, where generic companies very aggressively challenge patents earlier and more frequently (Datamonitor 2007b; Elling et al. 2002; Gilbert et al. 2003; IMS 2006; Yeoh 1994). Other issues are the price pressure and the stricter reimbursement guidelines that pharmaceutical products meet around the world (Datamonitor 2007b; Elling et al. 2002). The consequence is a significant loss of revenue over time (Pharmaceutical-Executive-Europe 2006). As all these broader issues contribute to the importance for companies to launch new products successfully, these will be explored in more detail later in this chapter.

With the high risk of medical and commercial failure of a product as well as loss of time in the market, it is becoming crucial that these products reach peak sales as early as possible to optimize the time on the market and generate maximized revenue (Elling et al. 2002; PhRMA 2003; PhRMA 1995; Rao 2002). The risk research-based companies are facing as they commercialize pharmaceutical products is very uncertain (Cooper 1998; Cooper 1979; Cooper 1980; Cooper 2000; Cooper and Kleinschmidt 2000; Gilbert et al. 2003; Popper and Nason 1994; Rao 2000b) and the launch phase is becoming increasingly critical, as there is less time and money available allowing less room, if any, for a second chance to recoup a failed launch, i.e. a re-launch.

This could also be further supported by Guiltinan's (1999) more general analysis of the whole new product development process. A conclusion made is that the phase labeled "the product launching"; here called "new product launch", is found to be typically decisive for the success of a new product and requires significant investments; despite that, there are few empirical studies on the subject (Guiltinan 1999).

Almost all of the above broad-range challenges and issues remain unanswered. The research presented here, which investigates and focuses on the key success factors for sales force readiness during the new product launch phase of pharmaceutical products on the Swedish market, aims to bring directions and guidance in this topic, both to practicing managers and as a contribution of new information for scholars.

1.4. Research Focus and Scope

The key message in this section is the defined focus and scope, hence the boundaries, of the domain researched in this study.

Overall, the scope of the investigation is identifying the key success factors for sales force readiness during the new product launch phase for pharmaceutical products on the Swedish market. In broad terms, a “Key Success Factor” refers here to any quality, characteristics, or condition, present in the sales force readiness during a product launch phase, which positively influences its outcome in such a way that without it, the outcome would not be as favorable.

The scope is further laid out and presented in detail according to the areas; Industry (pharmaceutical) & Geographical (Sweden), Life Cycle Stage (new product launch), Pharmaceutical Products (ethical prescription drugs) & Customers (physicians). These areas are further described and justified below.

Industry and Geographical (Market) Scope

The research presented here has been adapted for the Swedish pharmaceutical industry. The general arguments for focusing on a particular industry type and its market have been provided by various contributions to industry analyses (McGahan 2004; Porter 1995; Porter 1987), which basically argue that different industries and markets are governed by different conditions, for example, regulatory, economic, cultural and social etc. (McGahan 2004; Porter 1995; Porter 1987). Furthermore, every industry imposes various *determinants* upon its actors, here the pharmaceutical companies, where these determinants condition the performance of these companies, and by derivation, the set-up of the capabilities of these companies (Churchill Jr et al. 1985; Porter 1995). Indeed, various investigations have argued that the pharmaceutical industry manifests a particular uniqueness, driven by tight and heterogeneous regulatory conditions. This postulate is clearly manifested by the new regulations within the industry with regard to physician-access (Dutton and Reece 1996). In literature with empirical data collected around new-product launches, it is found that the role of the behavior of the team leader and marketing skills are affected by national culture (Calantone et al. 1996; Shane 1994a; Shane 1994b; Song et al. 1997). Also, this research area has proven that there are differences as to which launch decisions are of importance when introducing a new product between industrial and consumer products (Hultink and Robben 1999). Furthermore, research in the area of sales organization effectiveness suggests that cultural differences may be determinative (Baldauf et al. 2001a; Piercy et al. 1999; Piercy et al. 2004; Rouzies and Macquin 2003).

The conclusions from the literature of selling and sales force management, mostly pooled information from a number of unrelated industries is investigated together in an attempt to provide generalization of results (Blackshear and Plank 1994; Ingram 2004), which might not then provide a sufficiently specific result for practical guidance for managers in a particular industry.

The research is focused on the discipline of sales force management and selling in a field-based environment. As discussed earlier, even though the whole global pharmaceutical industry is experiencing transformation, the Swedish local pharmaceutical industry has probably experienced one of the most radical transformations. This is true in many areas, but primarily in terms of sales force-imposed regulations and guidelines, and it may therefore, not be representative of the pharmaceutical industry in other countries. However, based on the global emerging environment for pharmaceutical sales forces around the world (Dutton and Reece 1996), this market might be used for forward-seeing purposes in other markets, where the same trends are emerging (Dannacher and Stahl 2005). Moreover, some evidence has been found that differences occur between sales forces in different nations: e.g. Engle and Barnes (2000) found, when investigating beliefs about the various uses and value of the sales force automation systems in three countries within a pharmaceutical company, that the individual country means were significantly different for almost all questions (Engle and Barnes 2000). It is also concluded in literature that the role of a sales representative varies according to type of industry, product, market structure, and customers (Tengilimoglu et al. 2004). This suggests differences in market dynamics over nations, industries and within the same industry, which might have implications on sales force readiness.

Product Life Cycle Phase

Building on Kotler's (2000) definition of the stages of a general product's lifecycle, the definition of the full lifecycle for an ethical research-based pharmaceutical product is defined and described in five main phases, *Research & Development*, *Introduction (Launch)*, *Growth*, *Maturity* and *Decline*. The full definition and description are presented in Appendix 8. The *Research and Development* stage could also be further divided in the sub-stages *Discovery*, *Clinical Development* and *Registration*. The development of pharmaceutical products is to a great degree done by pharmaceutical companies, with academia and government contributing less than 10% (Dimasi and Grabowski 1995). In the pharmaceutical industry, the *Launch phase* or *Introduction* accounts for two sub-stages: firstly, market inductor activities, such as delivering the product to the pharmacies and informing the physicians of its existence and basic characteristics, while the second stage is the initial marketing and sales operations that

follow immediately after the market introduction. The first stage, the physical market introduction of the product, is typically short and definitive. It is during the second stage, the initial marketing and sales operations, that the actual communicative and other tactical launch activities may be executed. The *Growth and Maturity* stage of the lifecycle is constituted by regular marketing and sales operations, representing the typical activities conducted by the various marketing, sales, medical, regulatory, and other types of resources of the company, in order to reach sales goals. The *Decline* phase is defined as a period when sales show downward drift and profits are eroded (Kotler 2000). This phase could also be referred to here as Patent Expiry.

This research is investigating the *Introduction* phase, which will be mainly referred to as *new product launch* or *launch*. There are suggestions from research conducted around sales call effectiveness in the pharmaceutical industry, that selling a new product differs from selling an old or mature product, based on its relative importance for the physician (Parsons and Abeele 1981).

Pharmaceutical Products & Customers

There are different “categories” of pharmaceutical products, their target customers and the way marketing literature has defined marketing and selling efforts or strategies towards these customers. Here, the scope of the research in the area of the products and their customers will be described in accordance with “*research-based, ethical and prescription drug*” (product category), “physicians” (target customers) and “mass market” (marketing strategy). These concepts and the way in which they are applied here will be defined below. Further, the products investigated were launched during the time period between 1995 and 2005. The key motivation for this was to keep the product launches current in order to best reflect ongoing changes, while still representing a sufficiently large base of research subjects.

Research-based, ethical and prescription drugs

The pharmaceutical industry provides so-called ethical drugs or ethical pharmaceuticals, also referred to as prescription drugs, which are defined as a patented drug, marketed under a brand name which cannot be bought without the written permission, or prescription, of a doctor or dentist (Froud et al. 1998). This denotes those pharmaceutical products that are sold for the deliberate treatment of an individual’s health as opposed to illegal drugs on the market (note that the same drug substance – e.g. morphine – may be regarded as ethical or as illegal, depending on the manner and context of its use).

A second distinction to be introduced here is that between *research-based drugs* and *generic drugs*. A new drug is typically the outcome of an intensive and costly R&D process, conducted by one or more pharmaceutical companies, sometimes in collaboration with universities and institutes. Typically, one or more patents protect a drug for 20 years, which means that the patent holder has exclusive rights to produce and sell the patented drug. A new product that is the result of an R&D process and is protected by patents, is categorized here as a *research-based drug*. On the other hand, there are companies that copy products which have been successful in the marketplace, and produce and sell them after the patent protections have expired; these products are understood as *generic drugs* (Froud et al. 1998).

The third distinction here is the difference between drugs under *prescription*, i.e. pharmaceutical products that require a physician or other eligible health care professional to prescribe the drug, and *Over-The-Counter (OTC)* drugs, i.e. pharmaceutical products which can be bought by anyone at the pharmacy or department store (Froud et al. 1998). The rules and regulations concerning marketing and sales differ greatly between prescription and OTC drugs, based on both how they are bought and how they are allowed to be marketed. The rules and regulations also differ from country to country, for example European regulations do not allow direct marketing of prescription drugs to consumers, but in New Zealand and the USA, promotion is allowed via general media (Lloyd and Newell 2001).

Physicians

A further factor limiting the scope of this research is the target customer group towards which the products are marketed. This refers to the specific group that a pharmaceutical sales force can target, namely a certain type of physicians or other stakeholders. There are three core customer types for the pharmaceutical company (Rao 2000a). *Physicians* – in which the value propositions are primarily treatment results and options but could also be process support and issue handling. *Patients* – depending on therapy and treatment goal, the value propositions are the increased possibility of being cured, relief of symptoms or prevention of disease. *Payers* – the value propositions are increased efficiency in healthcare and its related costs. Depending on the system, usually defined by the nation, the payers could be governments, insurance companies, patients or a combination of the above. In this research, the physicians in their role as prescribers will be the subject of investigation.

Mass Market

To further clarify and limit the scope of this research, the concept of mass market is introduced. This factor is introduced so that sales management practitioners can better relate to the results in a real world environment and to more accurately use any recommendation in practice. Also, some literature argues that measures and scope should be related to an explicit situation, thus rendering the patterns in the results more reliable and making them more valuable for managers (Blackshear and Plank 1994). This is further supported by Wotruba (1991) who suggests that to be able to better compare the outcome of research, the studied subjects should be homogenous in terms of the sales forces' need for internal capabilities and know-how as well as to which extent their customers' operations are conducted (Wotruba 1991). Lilien et al. (1981) in their investigation of detailing effort effect in the pharmaceutical industry, have also selected a certain physician specialty in order to gain better accuracy in results.

Under Kotler's concept of a product's life cycle he discusses the stages of market evolution and how a market can be divided or how it can emerge in terms of optimizing the launch of a product (Kotler 2000). He refers to three options of introduction for a product: 1) a single-niche strategy, where the new product meets the preference of one of the corners of the market; 2) a multiple-niche strategy, where the new product can be simultaneously launched towards two or more parts of the market; or, 3) a mass-market strategy, where the product meets preference to the middle or majority of the market.

In the pharmaceutical industry, all of the above options could apply depending on how the company or product management choose to approach the market (Rangaswamy et al. 1990). The most common way of segmenting the market is by physicians' therapeutic or medical specialty (Rangaswamy et al. 1990). Depending on the market, physicians can be divided up into many specialties (Manchanda and Chintagijnta 2004), such as cardiologists, psychologists or transplant surgeons. The physicians classified as General Practitioners (GP), also referred to as Primary Care Physicians (PCP), represent the largest group of physicians in most markets. Literature has empirically proven that pharmaceutical sales representatives' detailing (sales calls) has different effects according to physician specialty just as the physicians' prescription behavior and their prescription rates significantly differ within types of physician specialty groups (Manchanda and Chintagijnta 2004). Also, anecdotally, there are several differences between drivers in the market and practical sales force implementation when launching a product aimed at General Practitioners and specialists (e.g. psychologists or transplant surgeons).

Following the above line of argument, physicians working as General Practitioners are defined as the mass market in the pharmaceutical industry. It is also in this mass market

segment that sales forces are the largest and drive the most costs. The population of General Practitioners is usually seen as a homogenous group with similar requirements, purchasing power, buying attributes or buying habits. Relating to the pharmaceutical sales forces, Rangaswamy et al. (1990) argues that a large segment with specialized needs can often be reached by a sales force selling only the relevant products for that one segment, which often increases profitability and sales force effectiveness thus compensating for any increases in the cost of selling (Rangaswamy et al. 1990).

Therefore, it is argued that sales force activities towards General Practitioners can be considered to be a mass marketing strategy, while sales force activities aimed at a group of specialty physicians could be a single-niche or a multiple-niche strategy.

This research has defined and assumed a market introduction matrix for the pharmaceutical industry, based on the core customer groups defined above (Rao 2000a), and the introduction strategies defined by Kotler (2000) - see Figure 2. This narrowing of the scope and definition for the sales force context will further increase the relevance of the results, in the form of the identified key success factors, for the intended target groups of this research.

Figure 2: Market introduction matrix for the pharmaceutical industry

Introduction Strategy \ Core Customer Group	Mass Market*	Multiple-Niche	Single-Niche
Consumer			
HCP (Health Care Professional)	X		
Payers			

*Mass Market towards HCP = General Practitioners

Summary of Scope

In sales management literature, it is argued that depending on the practice of selling, this may not be the same at a given time in all industries, or in all companies in the same industry or even in all components of the total sales organization within one company (Wotruba 1991). Even if this does apply to reality, this research argues that in the case of scoping by geographical borders (giving similar regulatory, legal and governmental conditions), industry (adopting similar entry and exit barriers, risks and dynamics) and a homogenous group of research subjects (here manifested by pharmaceutical products

aimed at the same homogenous customer group – defined as General Practitioners), the right level of limitations to the scope has been applied in order to identify interesting and relevant results applicable both to the academic community and to the practicing sales management and company executives. This more explicit situation will make the patterns in the results more reliable as well as more valuable for managers (Blackshear and Plank 1994).

In summary, the defined focus, hence boundaries, of the researched domain in this research project could be stated as the identified key success factors for sales force readiness for field sales forces during new product launch for research-based ethical pharmaceutical products launched between the years 1995 – 2005, aimed at physicians working as general practitioners in the Swedish pharmaceutical industry. See Table 1 for an overview of the research focus.

Table 1: Summary of the research focus assumed in the present study

Research Focus Attribute	Scope
Industry	Pharmaceutical
Geographical Market	Sweden
Product Life Cycle phase	Product Launch
Product	Pharmaceutical, Research-based, Ethical
Selling mechanism	Prescription (Rx)
Operations	Management of Field Sales Force
Sales Force Target Group	Physicians as Prescribers
Type of Prescribers	General practitioners (Mass Market)
Time Frame	Launched products 1995-2005

1.5. Definition of Sales Force Readiness during New Product Launch

Given the previously characterized empirical situation covered here, as described in the Background, the Research Justification and Motivation, together with the defined Research Focus and Scope, which challenge managers responsible for the configuration and management of a sales force, which in turn are aimed at contributing to a successful launch of a pharmaceutical product; a number of terms and their definitions are utilized to characterize these kinds of situations, or parts thereof. Examples of such terminology include; “New Product Adoptions” (Atuahene-Gima 1997), “Sales Force Effectiveness” (Piercy et al. 1997), and “Sales Force Management Control” (Baldauf et al. 2005). However, as understood here, all these definitions only partially or too broadly cover the specific kind of empirical situation addressed in the present research. Therefore, the label “Sales Force Readiness during New Product Launch” has been chosen here to denote the empirical situations addressed in this research. In this research, the label “Sales force Readiness during New Product Launch” is broadly understood as the degree to which a sales force is prepared, able or willing to support a new product in order to generate a successful launch. More specifically, this label refers to situations when the context is constituted by a product of a certain kind (Micheal et al. 2003) that is to be introduced (Kotler 2000) into a certain market-place, with its specific characteristics (Hultink and Atuahene-Gima 2000). In such contexts, Sales Force Readiness accounts for one of several sales representatives conducting actual sales behavior, which is commanded and controlled by one or more supervisors in relation to defined sales and other kinds of targets, all of which are aimed to contribute to the overall sales performance of the product (Hultink and Atuahene-Gima 2000). In this case, the sales representatives have a certain kind of characteristics as individuals (Atuahene-Gima 1997), are organized into a certain kind of organizational set-up (Micheal et al. 2003) and have received a certain kind of preparation for their product introduction sales work (Hultink and Atuahene-Gima 2000). The above description is what is meant here by “Sales Force Readiness during New Product Launch” and more detailed definitions of each part are further explained when presenting the Preliminary Model in section 4.1.

In short, “Sales Force Readiness during New Product Launch” refers to a set of properties of the product to be introduced into a market place, the properties of such a market, the properties of the sales force that conducts such an introduction, and then the outcome of such a product launch.

Given this notion of the real-life concerns of managers occupied with reflections about and actions to configure a sales force for a successful product launch, the sales force readiness during new product launch is here understood to be one central managerial

domain of any Sales Force Strategy. However, clearly there are other managerial domains that may also be regarded to be part of a Sales Force Strategy, such as the coordination of the sales force operations with marketing or after-sales operations, as well as sales force configuration to address post-product launch phases, such as growth or decline.

1.6. Pharmaceutical Sales Force Operations and Life Cycle Challenges

Pharmaceutical companies are subject to an increased number of challenges in today's market, making it harder to achieve their projected return on investments (ROI) for their products. In addition to sales force issues and launch issues, the broad spectra of challenges faced by pharmaceutical companies all reinforce the importance of a successful new product launch.

To give a more complete background and to further define and describe the context and challenges that the pharmaceutical companies are facing, a description of the sales force operations and its challenges together with the challenges being met by the pharmaceutical product during its life cycle are presented here.

1.6.1. Pharmaceutical Sales Force Operations and its Challenges

The success of a pharmaceutical product and its market presence, in terms of sales volume, is primarily managed within the marketing and sales operations of a pharmaceutical company. For pharmaceutical companies, the sales force activity is the primary source of promotion (Lilien et al. 1981; Manchanda and Chintagijnta 2004; Mizik and Jacobson 2004; Tengilimoglu et al. 2004). In the industry, several different drugs or treatment choices are available for a given medical condition and therefore pharmaceutical companies must invest heavily in marketing and sales (Datamonitor 2007b). In this respect, successful management of the sales force has been and still is a crucial component while also remaining a dominating cost component (Dannacher and Stahl 2005; Dutton and Reece 1996; Kotler 2000; Lloyd and Newell 2001; Mizik and Jacobson 2004; Tengilimoglu et al. 2004; Zoltners et al. 2001). Sales operations are typically executed by a group of sales representatives and their managers, such as field sales managers and area sales managers (Kotler 2000). The description of the role of the sales force as the face of the company is also applicable to the pharmaceutical industry (Parsons and Abeele 1981). However, the actual sales moment in the pharmaceutical business differs somewhat from sales in most other industries, as the sales representatives

do not actually close the product sales. The sales moment is typically a pharmacy selling the pharmaceutical products to the patients. Rather, the sales representative's key role is to deliver messages and provide information to their primary customers (the physicians) and to educate them about the product's therapeutic value, side effects, dosage (based on clinical studies) and deliver samples to promote the company's products (Dong-Gil and Dennis 2004; Lloyd and Newell 2001; Mizik and Jacobson 2004; Parsons and Abeele 1981; Rangaswamy et al. 1990). The sales connection is only made when a physician meets a suitable patient and writes a prescription, which the patient takes to the pharmacy to be dispensed (Datamonitor 2007b; Dong-Gil and Dennis 2004; Lloyd and Newell 2001). The sales representative and physician interaction is considered the primary source of information for the physicians and literature has proven that detailing (sales calls) is effective in increasing the mean prescription rate (Elling et al. 2002; Manchanda and Chintagijnta 2004).

There are several types of stakeholders influencing the sales performance of a product; these include physicians, nurses, patients and their relatives, pharmacists, local and central authorities, insurance companies, and press and media. The stakeholders vary depending on the market and the product; however, it is the *physician* in her or his role as *drug prescriber* that the sales representatives typically target with their promotional messages (Elling et al. 2002). To clarify this, a particular physician may also assume *various other roles than that of prescriber*. He/she may be a member of various local, national and international professional organizations and committees, may be a member or advisor to various expert committees making recommendations regarding the medical preferences of a drug; and may be a so-called key opinion leader (Meffert 2009), in terms of clinical research, thus influencing the professional community, the authorities, or the public opinion. However, in the context of this study, the focus is on the physicians in their role as a prescriber of drugs to patients.

It is important to note that a drug may be prescribed by professions other than physicians. For example, contraceptive products are often also prescribed by nurses in some countries. These exceptions will not be considered in this research.

Another point around the sales channel for a pharmaceutical drug is the distinction between *prescription-based* drugs and those sold *over-the-counter* (OTC). A patient does not need a prescription to buy the latter, which is typical for ordinary "headache" pills. However, the major volume and the overwhelming value of drugs are sold via prescriptions, which thus *control* the sales volume and consequently, the revenue streams. The sales forces of pharmaceutical companies attempt to influence this control mechanism by informing the prescribers in order to steer the prescription habits (Elling et al. 2002; Manchanda and Chintagijnta 2004). This is typically accomplished by means of

sales representatives' face-to-face visits with the physicians, in which they are informed of the existence of the product, its medical and therapeutic functions, and when needed, of the product's advantages compared with other competing drugs as well as its health economic benefits (Elling et al. 2002; Mizik and Jacobson 2004). These sales operations are typically coordinated in some manner with the marketing operations that may, for example, deliver a similar message to the physicians by means of advertisements in medical magazines and other channels.

Pharmaceutical sales force operations are meeting new challenges

The pharmaceutical sales force operations described above are increasingly encountering challenges in the market place in the form of stricter regulations and restrictions, a trend which is taking place in most countries around the world (Dutton and Reece 1996; Smith et al. 2002). Over the years, pharmaceutical sales forces have undergone significant changes in both the total number of representatives in the field, and the necessary skills required for representatives to excel in their position. As in many other industries, the pharmaceutical industry has lately seen a decrease in sales force sizes together with a reassessment by the firms of the overall effectiveness of their sales forces in the light of the changing environment (Datamonitor 2007a; Dutton and Reece 1996; Rangaswamy et al. 1990). Rangaswamy et al. (1990), has put the selling of pharmaceutical products in the category of a repetitive buying environment, which is usually defined as having short purchase cycles and competitive interchangeable products available. The consequence of this is that the sales representatives must attempt to maintain a constant presence at the doctors' offices (Rangaswamy et al. 1990). More recently, the issue of limited access to physicians (Dannacher and Stahl 2005; Elling et al. 2002) or decision makers has escalated, driven by regulations as well as by the fact that the physicians themselves are beginning to view the presence of the sales representatives as an inconvenience, feeling that the sales representative is not helping them in high-stake decisions (Lloyd and Newell 2001; Rangaswamy et al. 1990). Furthermore, it is argued that calling on customers is vital for maintaining sales of the product and in many situations the relationship between the sales representative and the physician has a positive impact on sales (Rangaswamy et al. 1990).

In the case of the Swedish pharmaceutical industry, which is the scope of this research, ongoing developments have transformed the conditions of the sales forces operations of the pharmaceutical companies, with regard to the sales representatives' access to the physicians (Dannacher and Stahl 2005). While in most markets, and indeed previously within the Swedish market, sales representatives were granted free access to the physicians, conditioned only by the decisions of the physicians themselves; recently formulated and implemented regulations have restricted this free access (Dannacher and

Stahl 2005). These restrictions have developed over time, resulting only in tighter regulations. Furthermore, the typical access *method* was that a sales representative could meet a physician on a face-to-face, one-to-one basis at any pre-determined time period, at the discretion of the physician. However, the newly emerged conditions restrict this format and the majority of meetings are set up as a meeting for a group of physicians, at a pre-determined time period, for example over a lunch.

The pharmaceutical companies are making all attempts to adjust to these new conditions (Dannacher and Stahl 2005; Elling et al. 2002; Lloyd and Newell 2001; Tengilimoglu et al. 2004). Currently, there is limited scientific analysis of these situations for potential strategies to overcome these hurdles. Many companies have been experimenting with novel approaches in order to adapt to the changed environment. An example is the introduction of call centres whereby the physicians are invited to learn about new products at their convenience. Another example is the introduction of so-called Medical Science Liaisons positions, which are more scientifically and medically-oriented personnel, and are thereby less influenced by all the new access regulations. In addition to these examples, some companies have approached this issue by having more sales representatives selling a narrower range of products and by introducing multiple sales forces instead of single sales forces (Rangaswamy et al. 1990).

1.6.2. Challenges during a Pharmaceutical Product's Life Cycle

The challenges encountered by pharmaceutical companies exist and are increasing during all the phases of the life cycle in terms of substantial costs and risks attached to undertaken investments. A more detailed definition and description of a pharmaceutical product's life cycle can be found in Appendix 8.

The identified macro challenges highlight the need to successfully introduce a new product in order to maximize return on investments. The following section summarizes these issues, divided in three areas: cost and risk in research and development; market risks; and risks at the end of the life cycle. This order also follows the phases of product's life cycle.

Cost and Risk in Research & Development

The pharmaceutical industry has the highest research and development investment of all industries (PhRMA 2001). Pharmaceutical research and development expenditures in 2004 were around \$38 billion (PhARMA 2005). Of the total research and development investments being made, the pharmaceutical industry accounts for around 17%. The

industry in second place in terms of the highest investments was Computer Software & Services, accounting for around 10-11% of the total, followed by Electrical & Electronics with around 8% and then Office Equipment & Services with around 7-8%. The pharmaceutical development process is exceptionally hazardous and the development cost of a novel prescription drug, from discovery to marketing authorization, typically exceeds \$800 million (Datamonitor 2007b; Gilbert et al. 2003). All of this suggests enormous capital investments for a major pharmaceutical company developing a large portfolio of products which must always be balanced against the risks.

High and increasing cost of development

The cost of research and development is rising (Gilbert et al. 2003; Popper and Nason 1994; Yeoh 1994). There are measurements that suggest that the average cost of discovering and developing a new pharmaceutical product has increased from around \$1.1 billion during the years 1995-2000, to around \$1.7 billion during the years 2000-2002 (Gilbert et al. 2003). Cost in all phases of research and development has increased; however, the largest increase can be seen in the clinical development phase, where costs have more than doubled. Split by development phase, the average cost of development through 1995-2000 compared to the years 2000-2002 has increased significantly. Spending in the *discovery* phase has increased from \$0.6 to \$0.65 billion, *pre-clinical* from \$0.05 to \$0.1 billion, *Phase I* from \$0.05 to \$0.15 billion, *Phase 2* from \$0.15 to \$0.3 billion, *Phase III/file (registration)* from \$0.2 to \$0.4 billion (Gilbert et al. 2003). The fact that development is becoming more costly and implies greater risk is further supported in literature (Ballance et al. 1992; Lloyd and Newell 2001; Popper and Nason 1994; Rao 2000a; Rao 2000b; Rao 2002).

Low success rate of new compounds

Data from the *Centre for the Study of Drug Development, Tufts University*, shows that the calculated success rate for moving compounds through the different research and development stages imposes a high risk for the pharmaceutical companies. During the *discovery* phase more than 10,000 compounds are screened. Out of the 10,000 only about 250 enter *Pre-clinical* testing and out of those 250 only 10 enter the *Clinical testing* phases. Of the 10 compounds making it to the expensive clinical testing phases only 1 (one) receives regulatory approval (PhRMA 1995; Rao 2002)

Proportion of increased R&D investments versus new products approved

The increased research and development spending has not led to a greater number of approvals over the years (Gilbert et al. 2003; IMS 2007; Yeoh 1994). In fact, while the

cost of research and development spending has risen dramatically, the numbers of NME (New Molecule Entity) approvals have not increased to nearly the same extent (PhRMA 2003). According to PhRMA (2005), in 1975 there were 15 new drug approvals, while the research and development expenditures were about \$5-6 billion. For 1993, the numbers of new drug approvals were around 20, while research and development expenditures were about \$16-17 billion. By 2004, the number of new drug approvals had increased to 25, while the research and development expenditures had ballooned to about \$38 billion. All expenditure has been adjusted to reflect inflation (PhRMA 2005).

Increased regulatory burden

The increased challenges of getting the few products that come through the pipeline approved by the regulatory authorities around the world is a major concern for the research-based pharmaceutical companies (Datamonitor 2007b; IMS 2008; IMS 2007; Pathak et al. 1992; Popper and Nason 1994; Yeoh 1994). The regulatory burden on the pharmaceutical industry is increasing in many aspects: for example, “over –regulation”, lack of harmonization of regulatory guidelines among nations and regions, different geographical standards of medicine and the requirement for large-scale post-approval commitments (Rod et al. 2007). Also, the trend is moving towards a growing regulatory conservatism, with the shift in risk/benefit ratio, increasing safety requirements as well as increasing efficacy requirements (Mizik and Jacobson 2004; Popper and Nason 1994; Rod et al. 2007). Furthermore, the government is becoming more restrictive about marketing activities during the launch of new drugs (Mizik and Jacobson 2004; Popper and Nason 1994; Rod et al. 2007).

Increased time in the Research & Development process

Another factor influencing the return on investment is the increased time the drug stays in the research and development stage after the patent has been filed (CMR 2005). Data from the Centre of Medicine Research, CMR, shows that the duration in years from when the patent application is filed to when it is approved has increased from 6.1 years in 1997 to 10.1 years in 2003 (CMR 2005). This is of great importance as pharmaceutical products in most markets are only of substantial value for researched-based pharmaceutical companies during the time the product has exclusivity, in other words, under patent protection.

Market Risks

Risk in clinical learning

The risk of product failure continues even after launch. Once the product is in the market and while still covered by its patent exclusivity, referred to as the stages “Introduction” (Launch), “Growth” and “Maturity” in the lifecycle, the clinical learning around the product imposes a risk. This is because any pharmaceutical product on the market, successful or not, can be withdrawn due to emerging adverse events and negative safety profile. An example is the case of the product Vioxx (trade name), rofecoxib (generic name), from Merck & Co (MSD), which was withdrawn in 2004 based on confirmed cardiovascular events (Stockholm-TT 2008; www.merck.com 2004).

Competitors

As in any industry, competitive forces are in full force in the pharmaceutical industry. Usually a new drug, - innovative or not - is often followed by intense competition from other companies developing compounds for the same medical condition or symptom but with another solution or mechanism of action. This is reinforced by Srivasava et al. (1995) in the quotation “Pharmaceutical companies traditionally made investments in the marketing support for new drugs via communications and branding when patents were about to expire in order to extend the life of drugs by sustaining higher margins and revenue beyond patent expiration. However, in these days of substantially shorter life cycles (competitors might develop drugs with equal or better performance characteristics before the patent expired), it is becoming important to invest in marketing and branding activities at the launch stage for two reasons – first, to accelerate time to market in order to recoup cash flow at higher margins as soon as possible and second, to provide protection against ever-faster competitive entries” (Srivastava et al. 1999).

Pricing and reimbursement issues

There are increasing challenges and obstacles to receiving a good price and reimbursement all around the world (Gilbert et al. 2003). As suggested by Kolassa (1997), current trends that, if left unchallenged, are likely to continue include: narrowing of the range of prices charged in different nations; further consolidation of buyers into more powerful groups; more non-physician decision makers; continued growth of generic drugs; continued increase in healthcare spending and scrutiny of drug budgets; more attempts by pharmaceutical manufacturers to use price as a selling point; and, continued demand for discounts by many customers (Kolassa 1997; Yeoh 1994). In many regions,

especially in Europe, there has been an increase of parallel imports among nations, which leads to a further erosion of prices (IMS 2007).

Certain nations are actively working on lowering the price of pharmaceutical products and are utilizing different mechanisms to secure that spending does not increase or that it remains within the expected range (Elling et al. 2002; Kolassa 1997).

All these factors have implications on the price and reimbursement status a pharmaceutical product can achieve at launch as well as how it develops over time.

Risks at the end of the life cycle

Generic patent attacks

A product is generally protected for a period of twenty years (Rhee 2009). A product's patent protection usually starts after discovery of the substance; thus, it is typically several years before the product has been developed and is ready for market introduction, giving the product a shorter period of patent protection when on the market. As soon as a successful drug loses its patent protection, generics are introduced thus eliminating the basis for generation of any significant revenues in most markets (Elling et al. 2002; Popper and Nason 1994).

Traditionally, in the pharmaceutical industry, when the patent of a pioneering brand expired, the loss of sales to less expensive drugs occurred only very gradually. However, since the 1990s, the competitive environment and government pressure has intensified (Yeoh 1994), leading to a rapid loss of revenues for products losing their patent. As a generalization, in the 1990's, after losing patent protection, a branded ethical drug lost about 50 per cent of sales within two years, but recent examples have shown a drop in sales of 50 per cent after only a few months (Froud et al. 1998). Generic companies are also becoming more aggressive at an earlier stage in questioning the patents or part of the patents protecting a drug, sometimes even entering the market "on chance" before the questionings of original patents are proven right (Thomaselli 2005). Once a product has been targeted by a generic, the odds are not in a branded company's favor. Historical data on patent litigation with court decisions in the USA, shows that a generic applicant wins 72,5% (n=29 of 40), while a brand-name company wins 27,5% (n=11 of 40). In the cases appeals are done by brand-name companies, the generic wins 93% (n=13 of 14) of those cases (FTC 2002).

1.7. Structure of this Thesis

Given the defined justification, focus and aims of this research, the structure of the remaining text will be as follows.

The next chapter presents the Research Approach that accounts for the methodological aspects of this study, in other words, its *how*. This includes the chosen methods of research; both for the review of existing literature on the topic being addressed here, the formulation of the Preliminary Model and the Research Model, and for the collection and analysis of empirical data.

The following chapter presents the Literature Review, identifying the models, theories and frameworks received, or utilized, here in order to proceed with the study and to guide the design of the empirical investigation.

The chapter after that presents the Development of the Research Model, in which a Preliminary Model for sales force readiness during new product launch is first derived from the literature and subsequently tested with six case studies and six expert interviews in order to formulate the Research Model for the assumed research scope. The Research Model is then tested empirically with 50 new product launches. The Research Model, its variables and data collection instrument are also described in this chapter.

The next chapter presents the Results, comprising a brief description of the data set followed by the key success factors for sales force readiness during new product launch in the Swedish pharmaceutical industry. Also included in this chapter are the discussions and managerial recommendations derived from the results.

The full text ends with a Summary and Conclusion chapter, where the whole research project is summarized and concluded together with proposal for further research. . References and the Appendices are provided after the final chapter.

2. RESEARCH APPROACH

This chapter presents the Research Approach employed here, as a means for answering the defined research question. It opens with a presentation of an overview in which the research approach employed is presented as a chain of subsequent activities conducted in order to answer the defined research question. Each of these parts will thereafter be presented in detail.

2.1. Overview

This section provides a brief overview of the Research Approach. The aim here is to provide an understanding of the whole research approach as such prior to characterizing each of the constituting parts in detail.

The research approach is divided into two main research parts. The first research part reviews and utilizes the findings in the literature, a set of case studies, and a set of expert interviews to formulate the Research Model. This Research Model includes a set of variables that represent the proposed key success factors to be tested within the defined research scope. In the second part of the research, the model and its variables are quantitatively tested after which the test results are analyzed and an interpretation is done. The study conducted here employs a bottom-up analysis method with Partial Least Squares Analysis, rather than the more conventional top-down and hypothesis-testing approach that typically employs regression analysis methods. The results and their interpretation are presented as key success factors with their respective importance. A conclusion is drawn and the second part concludes with a discussion on the results with managerial implications and topics for possible further research.

The whole research process presented here may be understood from the above-mentioned two research parts and in terms of eight key phases of research. The first part includes the following phases: Formulation of the Research Question; Literature Review; Formulation of the Preliminary Model; and Formulation of the Research Model. The second part includes the following phases: Design of the Empirical Survey; Collection of the Empirical Data; Analysis of the Empirical Data; and Derivation of Implications and Conclusions. Each phase is briefly presented below and this research process in terms of its key phases and their outcomes is summarized in Table 2.

Table 2: Summary of the research process

The research process in terms of its key phases and each phase's activities, outcomes, and purpose

Phase #	Research Part 1	Key Phase Activities	Phase Outcome	Phase Purpose
1	Formulation of the Research Question	<ul style="list-style-type: none"> - Personal professional experience - Professional dialogues - Preliminary literature studies 	Research Question Defined	To guide the Research Process aiming at developing new and relevant knowledge
2	Literature Review	<ul style="list-style-type: none"> - Literature search & retrieval - Literature analysis 	Patterns of current knowledge identified and literature reviewed.	<p>To enable the formulation of a Preliminary Model with relevant scientific models</p> <p>To find specific scientific results in order to ground the Research Model's variables in the literature</p>
3	Formulation of Preliminary Model	<ul style="list-style-type: none"> - Comparison of identified models - Synthesis of the relevant parts of the models into a Preliminary Model 	Preliminary Model defined	To enable formulation of an adapted Research Model
4	Formulation of Research Model	<ul style="list-style-type: none"> - Design & execution of relevant case studies - Design & execution of expert interviews - Analysis of collected information - Adaptation of the Preliminary Model (using results from case studies, expert interviews and literature review) into the Research Model 	Formulated Research Model with a set of variables (proposed key success factors) to be quantitatively tested	To guide the quantitative data collection process
#	Research Part 2	Key Phase Activities	Phase Outcome	Phase Purpose
5	Design of the Empirical Survey	<ul style="list-style-type: none"> - Identification of the inquired population - Selection of data analysis approach - Design of data collection instruments 	Execution of Empirical Data Collection Defined	To enable the actual data collection & analysis
6	Collection of the Empirical Data	<ul style="list-style-type: none"> -Initiating contacts with the inquired subjects - Execution of the data 	Empirical Data collected	To enable data analysis

		collection		
7	Analysis of the Empirical Data	Execution of statistical analysis of collected data	Data patterns identified	To enable the possibility to answer the Defined Research Question
8	Derivation of Implications and Conclusions	- Interpretation of the results obtained in the context of the literature reviewed	-Scientific Conclusions Defined -Managerial conclusions defined	Contribute to the knowledge and success of the field

The first research phase defined is the Formulation of the Research Question. This was motivated and driven by the researcher's professional experience in the addressed field, together with a set of professional dialogues with colleagues and professors as well as preliminary literature research. All this leads to the general conclusion that pharmaceutical companies are highly dependent on successful product launches and that they spend significant resources on the sales force during these launches, yet there are very limited scientific guidelines for how to conduct this in a successful manner. A further focus of this research was set as the Swedish pharmaceutical industry. The purpose of this definition was to guide the rest of the Research Process to generate the necessary knowledge and answer the defined research questions properly. Given the inductive and intuitive nature of this research phase, no further characterization is provided here; however, the actual definition and justification of the defined Research Question is detailed in Chapter 1, Introduction.

The second research phase defined is the Literature Review, which is a classical literature review, aiming to identify current knowledge about the addressed research area. The main purpose of this is to enable the formulation of a Preliminary Model and ground any variables to be tested in earlier literature results.

The third research phase is the Formulation of the Preliminary Model, which includes a reformulation and synthesis of the relevant findings from the previous research phase. This Preliminary Model assumed a generic character and aimed at becoming customized for the purpose of the Research Questions and Scope defined here.

The fourth research phase is the Formulation of Research Model, which includes two of the three empirical data collection activities in the full research process. A set of case studies and a set of expert interviews are conducted. The outcome of this qualitative-oriented data collection is a formulated Research Model with a set of variables, defined

as proposed key success factors to the research scope and focus addressed here, all aiming at providing guidance for the successive collection of a larger set of empirical data.

The fifth research phase is the Design of the Empirical Survey that produces a detailed and operational definition of how data is to be collected. This include the definition of the population of concern, design of data collection instruments but also selection of data analysis methods. The purpose is to enable a successful data collection process.

The sixth research phase is the Collection of the Empirical Data which resulted in data being collected. This aims at enabling the data analysis work.

The seventh research phase here is the actual data analysis work. This resulted in an identification of the identified patterns in the data and aimed at a forthcoming derivation of answers to the Research Question. The present study employed a so-called bottom-up analysis approach with Partial Least Squares Analysis, rather than the more conventional top-down and hypothesis-testing approach that typically employs regression analysis methods.

The final research phase conceived is the Derivation of Implication and Conclusions, which include an interpretation of the identified data patterns and thereby derivation of scientific and managerial conclusions that became the answer to the initially posted Research Question; this ultimately aiming at a contribution to the knowledge and success within the field of concern.

Confidentiality

The majority of people involved in this research have asked for confidentiality with regard to their respective names, products and company. In honoring this request, the traceability to a specific person, product or companies has been minimized. The implication on this presented text in relation to procedures, analysis and results is seen as relatively insignificant.

2.2. Literature Review

This section describes the second key research phase, the Literature Review. As the intriguing and important Research Question was identified and defined in broader terms, this research phase conducted a careful literature review aiming at identifying the current knowledge within the defined research area. This literature review resulted in the precise formulation of the research question and the identification of available knowledge in the area of concern.

Given the aim of this research, the review of the literature was focused on three main areas and their overlaps. The main areas targeted within the literature search were Sales Force Management (including Selling), Product Launch, and the Pharmaceutical Industry. The overlaps identified were Sales Force Management during Product Launch, Sales Force Management within the Pharmaceutical Industry and Product Launch within the Pharmaceutical Industry. See Figure 3 for a graphical representation.

The first main area was Sales Force Management, beginning with a limited focus on “sales force management during the launch of pharmaceutical products”, expanding the focus to include “sales force management during product launch” and “sales force management within the pharmaceutical industry” and ending with the broader scope within the full discipline of “Selling and Sales Force Management”. The second main area was Product Launch, adding search and review in the area of “Product launches within the pharmaceutical industry” and in the broader scope of “Product Launch”. The third main area was the pharmaceutical industry. This was reviewed more briefly as the overlaps of importance were covered within the other topics. However, some literature and sources were advised in order to gain full support for the motivation and justification of the research as well as for an industry overview with related definitions.

Besides literature in academic search engines, the reference list of each retrieved text was also scanned for additional relevant sources. In addition, other sources were utilized, such as industry and sales management reports and magazines covering the defined topics.

The next key activity within this research phase was the analysis of the identified literature. This included a careful perusal of these texts followed by an analysis of their content. The central aspects of this analysis are presented in Table 3. The results and knowledge obtained from this analysis were implemented to a different extent in the further research phases. The literature review revealed that there is still much to learn in the area of the chosen research topic and that no literature has covered this subject in the past. However, in addition to the justification and motivation of the research question, the literature provided two main areas of important knowledge – relevant academic models

and specific scientific results within the research field and supporting the identified model variables, as described in the next two paragraphs.

Figure 3: A graphical representation of the scope of the literature review.

This research may be understood to be an intersection of three professional and intellectual domains: Sales Force Management, Product Launch, and the Pharmaceutical Industry; the area of this research is the intersection of these three domains.

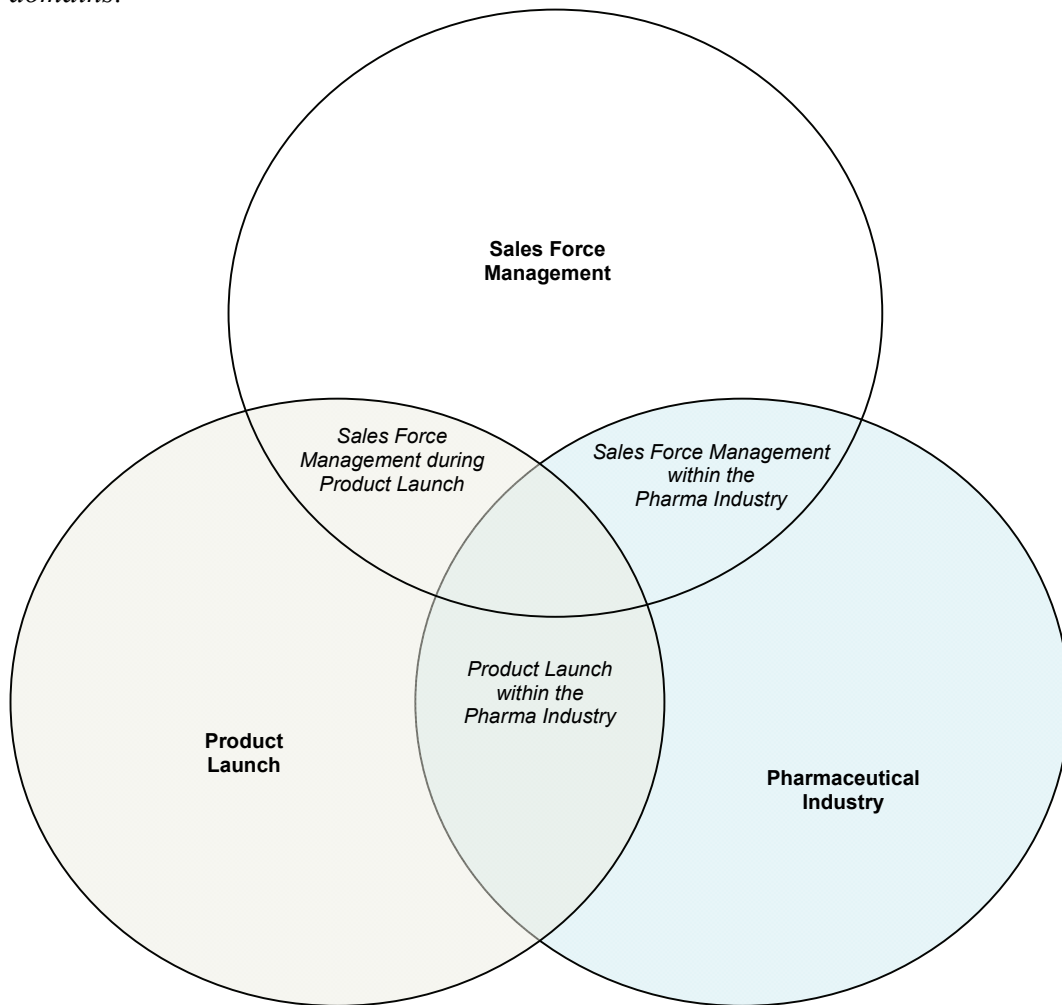


Table 3: The central aspects of the analysis of the identified literature

Central Aspect of Literature Analysis	
The actual research area?	<ul style="list-style-type: none">• type of industry, e.g. pharmaceutical, chemical, etc.• markets addressed, e.g. Europe, Australia, Austria, etc.• phase of lifecycle: product launch, product on-market, product withdrawal, etc.• function: marketing, sales, after-sales, etc.
The research questions defined?	<ul style="list-style-type: none">• sales force• product launch• pharmaceutical industry
The type of constructs employed?	<ul style="list-style-type: none">• outcome control• behavioral control• sales representative characteristics• etc
The type of research conducted?	<ul style="list-style-type: none">• conceptual, empirical, empirical cases, empirical survey
Type of data analysis utilized	<ul style="list-style-type: none">• content analysis, statistical hypothesis-testing
The results obtained	<ul style="list-style-type: none">• patterns identified positively or dismissed
The validity claim of the results obtained	<ul style="list-style-type: none">• explorative and suggestive, conclusive
The limitations of the research and its results	<ul style="list-style-type: none">• constructs and variables utilized, number of respondents
And then the relevance of the results for the present research process	<ul style="list-style-type: none">• not-relevant = no constructs and patterns to be absorbed here• partly relevant = some constructs and/or patterns to be absorbed here• fully relevant = all constructs and/or patterns to be absorbed here.

Results in terms of relevant academic models

Six highly relevant models and constructs, key scientific contributions, were found and subsequently compared to each other which revealed a pattern where some, in terms of their conceptualization and constructs, overlapped and some did not. This, in turn, constituted the foundation for the next key step of the research phase: the Formulation of the Preliminary Model.

Results in terms of specific scientific results

The literature review also provided important information and specific results related to both the broader research topic and to the various variables in the identified models. The information obtained from the literature was mainly used to finalize the Research Model and its variables. This secured utilization of earlier scientific contributions, but most importantly, it led to a final Research Model, with variables (proposed key success factors), well-grounded in the literature.

Presentation of the literature review

The reviewed literature, which investigated the three academic fields of Sales Force Management (and Selling), Product Launch and Pharmaceutical Industry, included a group of heterogeneous publications. Based on this, the literature review is presented in Chapter 3, Literature Review, according to four main sales force management themes together with the identified six key scientific contributions. The main sales force management themes are; Sales Force Management Control; Internal and External Sales Force Collaboration; Sales Force Accountability and Decision Making; and Complexity of the Sales Environment. The choice to present the review according to these themes is based on the fact that they follow, and match well, the areas defined in the Preliminary Model and the Research Model. The six key scientific contributions are presented in greater detail than any other publication, based on their importance for this research's model formulation process. These six publications (see Table 4) also include the different constructs and definitions which are the main foundation for the definition of Sales Force Readiness during New Product Launch. In addition to the review of these publications in Chapter 3, Literature Review, their models are further described and presented in Appendix 1.

Furthermore, many of the literature findings describing the sales environment and new product launch for the pharmaceutical sales forces are presented in Chapter 1, Introduction.

2.3. Formulating the Preliminary Model

The third research phase covered the Formulation of a Preliminary Model. This model was constructed from one of the key outcomes of the preceding research phase where current knowledge of the area addressed was identified and six relevant key models were identified. The formulation of this preliminary model was a conceptual endeavor, and was guided by the following central question:

- *Which of the identified models, from the literature review, manifest relevance to the research question addressed here?*

This was assessed in terms of each of the model's dependent and independent variables, and the underlying constructs for each of these variables. The constructs (that gave a positive response to the question defined here) were included into the newly formulated Preliminary Model.

The purpose of the Preliminary Model was to act as a foundation, well-grounded in the literature, to guide the identification of the most important variables (proposed key success factors), for this research scope, with a set of six case studies, a set of six expert interviews and the specific scientific results found in the literature, in the next phase of the research; Formulation of the Research Model. The formulation process of the Preliminary Model included synthesis and merger of the models and their constructs. A graphic representation of the formulation process can be found in Figure 4.

The models identified in the literature were derived from rather different areas in the literature. Based on the respective area in which they were found, they were divided into two groups. All models are based on the selling and sales management area of the literature, but different focuses and research streams have taken the concepts and constructs in somewhat different directions. However, similarities and overlaps of constructs could be identified.

The first group included constructs from the literature in the sales force management discipline in terms of sales force adoption, sales force performance and the new product launch discipline. This group was named, "Models for Sales Force Strategy for New-Product-Launch". The second group included models found in the literature in the discipline of sales force management in terms of sales force effectiveness, in where no regards to product life-cycle stage were considered. This group was named, "Models for Sales Force Strategy disregarding the product-lifecycle". The source models from the literature are listed in Table 4 and are described in detail in Appendix 1.

Within each group, the models were compared and were synthesized into one model. The two synthesized models were unified into one model, which resulted in the Preliminary Model. This model could also be referred to as a “Generic Model for Sales Force Readiness during New Product Launch”. The Preliminary Model or generic model for sales force readiness during new product launch is described in three stages: 1) Circumstance; 2) Sales Force Factors; and, 3) Effect. Each stage comprises one category or a set of categories and these categories are themselves made up of a different number of variables and items, all of which are well-grounded in the literature. As the concern here is on new product launch, the interrelations between the mediating variables are ignored in this model synthesis as they may be assumed to be general.

The process of synthesizing the models and their constructs within each group together with the merger into one Preliminary Model is described in detail in Appendix 2.

Figure 4: Illustration of the process for Preliminary Model formulation

On the left hand, a set of research models has been identified in the literature, and analyzed and assessed for their relevance for the present research initiative. Relevant constructs were selected from each of the selected research models and introduced into the Preliminary Model formulated here.

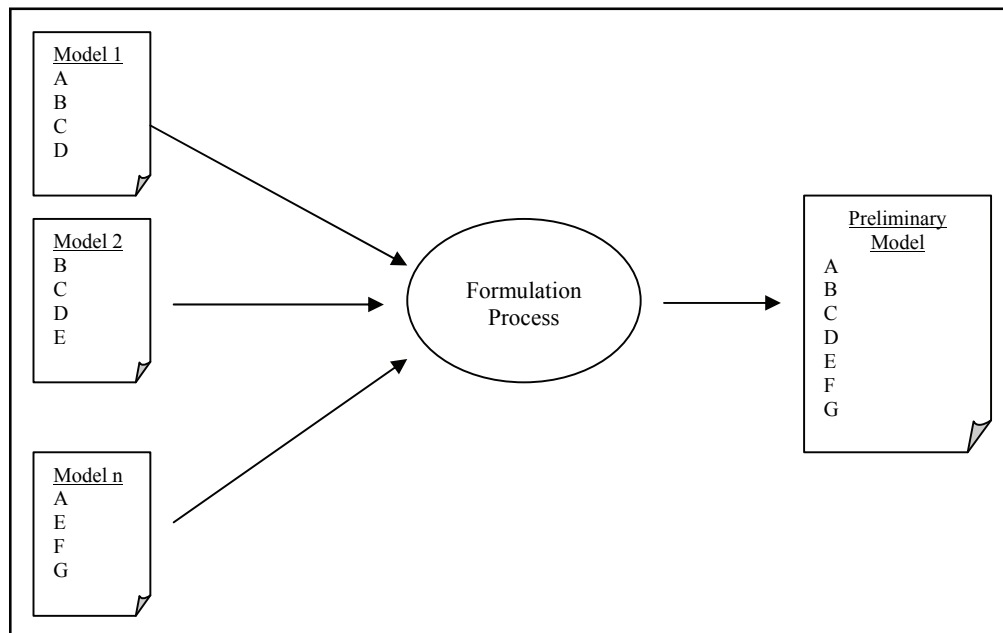


Table 4: Source models for the development of the Preliminary Model

The Preliminary Model is also referred to as the generic model for sales force readiness during new product launch.

Model	Source
<i>Models for Sales force Strategy for New-Product-Launch</i>	
“Model #1: The Adoption of New Products by the Sales Force”	(Atuahene-Gima 1997)
“Model #2: Effect of Sales force Adoption on New Product Selling”	(Hultink and Atuahene-Gima 2000)
“Model #3: Product Newness and Sales Management Strategy”	(Micheal et al. 2003)
<i>Models for Sales force Strategy disregarding the product-lifecycle</i>	
“Model #4: Model for Sales Force Effectiveness in B2B organizations”	(Piercy et al. 1997)
“Model # 5: Model for Sales Organization Effectiveness - A”	(Baldauf and Cravens 1999)
“Model # 6: Model for Sales Organization Effectiveness - B”	(Piercy et al. 1999)

2.3.1. Limitation of the Preliminary Model

The limitation of the research activities presented here, and therefore of the formulated Preliminary Model, may at least have two kinds of characteristics. The first is related to the literature review and may include at least two limitations: (i) that the literature review has not been successful in identifying all currently available and relevant research models; and, (ii) that the analysis of the identified models made a mis-assessment by either not including relevant constructs or vice versa, by including constructs that lack relevance. The second kind of limitation could be (iii) faulty design of the Preliminary Model, such as a misalignment of the included constructs.

The limitation concerning unsuccessful literature review was addressed by a particular activity at the very end of the research process, as a new, shorter, literature review was conducted to search for any new or missed publications. Nothing critical was found. Furthermore, this limitation may be easily diagnosed by any reader conducting a brief literature review, which would typically show if any key publication and thus substantial knowledge relevant for this research has been omitted.

The second limitation of mis-assessment of the models identified may also be easily assessed by the reader, as the content of the models is presented openly in Appendix 1.

Finally, the third potential limitation of faulty alignment of constructs in the formulation process could also be diagnosed by the reader as the process and content are presented in Appendix 2. However, the Preliminary Model does not necessarily aim to cover all aspects, but only the ones found to be most relevant, in part or in full. This research phase with the Preliminary Model aims to secure that concept and conceptualizations are valid and relevant. Therefore, as the Preliminary Model has more of a guiding purpose within this research, all of the above limitations are carefully considered and covered by the addition of the next research phase. In the next phase, a set of case studies and expert interviews together with specific literature findings will guide the adaptation of the Preliminary Model into a final model, the Research Model, which is optimized and relevant for the industry, the phase of product lifecycle and the market of concern.

2.4. Formulating the Research Model

The fourth research phase concerns the formulation of the Research Model. This is achieved by adapting the Preliminary Model. The process is qualitative and empirical data is collected from six case studies and six expert interviews. These interviews were conducted during end of 2007 and beginning of 2008. In addition, the second key outcome from the literature review, specific scientific results, is used in the formulation process to further ground the Research Model in the literature. As the Preliminary Model is of generic nature in terms of relevance for the industry and the market of concern, this generic nature reduced the efficiency of the Research Question addressed here. Therefore, the research strategy makes a deliberate adaptation of this Preliminary Model into the scope and focus addressed by the Research Question. As defined in Chapter 1, the latter implied the focus on the successful sales force readiness, during product launch phase, in the Swedish pharmaceutical industry.

This adaptation process initiates the start of the first systematic empirical experience in this research process. The selected approach here is to conduct a set of case studies and a set of interviews with local industry experts so as to obtain the specific characteristics of the addressed research. These specific characteristics are, in turn, utilized to inform the adaptation and thus re-shape the Preliminary Model thereby transforming it into the adapted Research Model. The case study process follows methodology described by Yin (1984). For example, well-received theoretical propositions should be acquired before going into “the field” and the same theoretical propositions should be followed, i.e. those leading to the case study (Yin 1984), here defined as the Preliminary Model.

This adaptation and reshaping process starts with the identification of a set of cases from actual product launches within the Swedish pharmaceutical industry – see Table 5 for a summary. Once these cases have been identified, the next step is to identify interview subjects to represent these cases and thereby provide necessary case information. This identification further includes booking interviews with the selected informers. Two to four people involved in each product launch as either sales management or sales representative are interviewed.

The case study selection criteria include product launches that match the scope of the research. This match is made based on the author’s experience and dialog with managers in the pharmaceutical industry. All investigated products are launched by marketing and sales subsidiaries belonging to a company defined as a “Big Pharma”. To recall, the term Big Pharma is usually referred to pharmaceutical companies with revenue in excess of \$3 billion, and/or R&D expenditure in excess of \$500 million (Gilbert et al. 2003). These global companies have marketing and sales affiliates that execute the product launches.

All companies being investigated are marketing and sales affiliates of Big Pharma in Sweden, and the country of origin should not be of significance based on the received notion that these companies are seen to be very homogeneous in terms of processes and culture. However, the choice is to include in the case studies some products launched by the same company so as to deliberately be able to reflect upon, for example, the impact on company processes and culture. This reflection is discussed in section 4.2.3. Conclusions and Results from the Case Studies. Further, as the author is a native of Sweden and has practical experience of some of these companies, a greater understanding of discussions and interpretation of the case studies' result and expert interviews might be assumed.

The interviews are steered by an interview-guide that specifies the type of information to be obtained, in terms of defined questions. This interview-guide is reproduced in Appendix 3. Moreover, this interview-guide has been formulated to reflect the content of the defined Preliminary Model.

Finally, the interviews have either been conducted face-to-face or via the telephone, to secure the quality of the information obtained, when compared with the traditional written survey. The final set of case studies comprises six products launched by three different companies. The case studies are presented in Section 4.2, Case Studies and Appendix 4. The reporting of the case studies follows a multiple-case study report method, with the individual cases being described separately and with a cross-case analysis and results report (Yin 1984), see Section 4.2 and Appendix 4. Further, the case study does examine, as described as an important methodological aspect by Yin (1984), the conditions of time-series analysis, i.e. the *how* and *what* questions about the relationship of events over time. In addition to the subsequent expert interviews, the case study reports and their results have also been validated by some of the participants being allowed to read the reports, also in accordance with the case study methodology guidance from Yin (1984).

Table 5: Overview of the case studies*Conducted case studies of product launches in the Swedish Pharmaceutical Industry.*

Company	Disease Area	# of sales management interviewees	# of sales representatives interviewees	Case #
Company A	Infection	1	1	1
Company A	Pain	1	1	5
Company B	Depression	2	2	4
Company B	Gastro	2	1	2
Company B	Birth Control	1	1	3
Company C	Migraine	1	1	6

The interviews with selected local industry experts represent the second empirical information collection phase in this research. See Table 6 for a summary of the experts' profiles. The actual procedure and content of these interviews are similar to those of the cases studies presented above, with a structured interview approach, following the Yin (1984) guidelines; however, some of the case studies' results are also presented during the interviews together with some literature findings which are briefly discussed to enrich the discussion. The main purpose of the interviews is to validate the results and narrow down the identified variables for the final model including the recommendation for data collection procedure. To secure this, this process is also iterative with the expert in terms of clarifying their opinion on data collection measures once the variables of the Research Model's have been finalized. The experts are selected both from the academic world or are individuals considered to be experts in the industry with experience of formulating and implementing sales force strategy. Two experts have marketing expertise from the academic world, while two experts are strategy consultants working with pharmaceutical companies formulating and implementing marketing and sales strategies. One is a senior executive within a company providing outsourcing of sales forces and sales personnel to pharmaceutical companies and one is a senior executive within the Swedish pharmaceutical industry association (LIF) with broad industry experience.

The interviews, both of the actual launch cases and the local industry experts, build on the assumption that they may provide information as to the actual local conditions that could not be supplied by the Preliminary Model. In practical terms, each attribute of the model is critically reviewed, and where evidence from the cases and the experts induces this, current attributes are eliminated alternatively additional new attributes are added – an example of the former is “organizational design” and of the latter “number of sales representatives” - see section 4.4 Construction of the Research Model, for further details.

Table 6: Summary of the key characteristics of the interviewed experts

Expert #	Expert: Line of Profession	Background / Expertise
1	Academic	University Professor in Sweden with and extensive background in both the academic world and commercial industry. This expert has seven years of sales and marketing experience in the pharmaceutical industry and an additional eight years in other industries, prior to assuming a Professor position at a Business School in Sweden.
2	Academic	Professor at Business School in Sweden. This expert has a background within academic institutions and a research focus on customer value and CRM. Has consultancy and research experience with mainly consumer product companies but also with a few pharmaceutical companies. Has taken part in launching new pharmaceutical products in the Swedish market in an advisory role.
3	Consultant	CEO of a Business Consultancy Company. This expert has a background of senior management consulting in a number of high profile consultancy firms. Extensive experience of the pharmaceutical industry and many other industries. Main competence and experience in formulation of company, marketing and sales force strategies. Has actively taken part in launching new pharmaceutical products in the Swedish market. Academic record: MBA and PhD.
4	Consultant	Senior Management Consultant. This expert has a background in management consulting with focus on sales strategies, sales force efficiency and sales force training. Focus on pharmaceutical industry, but has experience of other industries. A working history as Product Manager, Sales Manager and Sales Representative within a pharmaceutical company. Has actively taken part in launching new pharmaceutical products in the Swedish market. Academic record: MBA
5	Pharmaceutical Sales Force Outsourcing	Partner in a company outsourcing pharmaceutical sales forces and providing consultancy services to this industry. This expert has a background in several pharmaceutical companies in positions such as Sales Manager, Sales Representative, Product Manager and Business Unit Manager. Has actively taken part in launching new pharmaceutical products in the Swedish market. Academic record: M.Sc.
6	Pharmaceutical Association Executive	Leading Executive within the Swedish Pharmaceutical Industry Association (LIF). Extensive experience of the pharmaceutical industry and within the public healthcare sector. Has actively taken part in launching new pharmaceutical products in the Swedish market. Academic record: M.Sc.

Although the Preliminary Model is well-grounded in the literature, the specific scientific results found in the literature review are also used in the analysis and formulation in order to ground and validate the Research Model's variables (proposed key success factors) even more with existing literature.

As a result of this process of local knowledge collection and the reshaping of the Preliminary Model, a new and adapted Research Model has been produced, including a set of proposed Key Success Factors (the Research Model's variables) related to the scope of the assumed research presented here. This model reflects the addressed area of concern as closely and as practically as possible. The purpose of this model is to guide the forthcoming quantitative collection of empirical data, so as to secure the relevance of the data to be collected. The Research Model's variables are directly linked to the Preliminary Model categories, as the variables in the Research Model are derived variables or items. The variables are listed in the Research Model in the order they are derived from the categories in the Preliminary Model.

By adding interviews and earlier scientific results to the case studies when adapting the model, the Research Model and its more limited number of variables are validated from several angles; i.e. internal, external and academically. This also helps recognize any bias that might arise from the interviews in the case studies, as the personnel interviewed had experienced the launch, but the fact remained that the launch had taken place in their history. Also, the process validated the use of consistent interpretation of taxonomy.

2.4.1. Potential Limitation of the Formulation of the Research Model

There may be several potential limitations of the above described adaptation process and thus its outcome: the Research Model.

One fundamental limitation originates in the quality of the Preliminary Model Process, as the conducted data collection and consequent adaptation were guided by the content of the Preliminary Model, their limitations will limit the adaptation. For example, if the preliminary model did not include some of the key attributes (as a consequence of the limitations inherent in its formulation process, as discussed above) then the interview process and the interviewed subjects could not actively reflect upon these non-existent attributes and therefore assess their relevance or otherwise for the research area addressed here. In such a case, the quality was left to the assumption that the interviewed person could spontaneously add such a crucial and missing attribute, of which he or she was aware.

This fundamental limitation of the Preliminary Model opens itself to some potential limitations which are specific to the adaptation work. One limitation may emerge if the wrong case studies were selected and a similar limitation may emerge if the wrong experts were selected. The term "wrong" is used here to mean not representative of the

addressed research area. As these selections were guided both by knowledge of and the availability of the people to be interviewed, it is possible to reflect briefly upon this here.

The selection of the cases was partly based on the researcher's more than five years of practical knowledge of the Swedish pharmaceutical industry, and after having met representatives of most of the key companies within that industry. The knowledge was also based upon having actively worked with business development and product launch activities within the industry, during the last five years. Secondly, the availability of the selected representatives for interview is assumed to be positive as none of the approached persons declined the opportunity to provide this research process with their information.

The case studies and expert interviews suggest a continued development of the pharmaceutical industry, especially in terms of customer access issues, and governmental and economic pressure. This is also highlighted in the literature, where it is concluded that physicians are starting to ask questions about what patients think of the drug, how much they pay, whether they comply with treatment regime and recommendation lists, etc. (Elling et al. 2002; Tengilimoglu et al. 2004). This will probably have some impact on the Research Model in the long-term, however, the results in this study are considered stable over the foreseeable future since, as discussed earlier: the industry over most markets show a great amount of homogeneity, the Swedish pharmaceutical industry is considered to be ahead of other markets in terms of its evolution (Dannacher and Stahl 2005) and the global emerging environment for pharmaceutical sales forces around the world follows this trend (Dutton and Reece 1996). This evolution seems to have stagnated in Sweden, but is still ongoing in the Northern European markets, as well as other parts of the world. However, the likely long-term impact of the Research Model and results are primarily identified to be two things. Training, which was excluded in the Research Model, might arise as one of the Key Sales Force Factor, in the form of the need to provide sales representatives with further surrounding knowledge of important influencers of prescribing behaviors, such as health economy, hospital budget processes, etc. The second identified possible modification is the problem-solving approach, because of the increased complexity to the sales situation (as discussed above). The trend might shift from systematic problem-solving towards a more flexible and intuitive problem-solving approach as it may be necessary to have a more flexible and innovative sales force to penetrate with the message or convince the prescribers of the full product benefits. For the future, it might be of interest to build-in the relationship management concept around the sales role (Davies et al. 2010). This suggests a changing role of the sales person in business-to-business, which may require a different attitude among many sales representatives. Also of interest is the debate introduced by Dinu and Tachiciu (2009) concerning "the Sales-Entrepreneur", in which the sales person is looking at sales

as his own business. Overall it can be concluded that further research is needed to find out which market trends would drive changes over time.

This study does, to a great extent use single-item measures. This is because the variables (key sales force factors) selected from the Preliminary Model are, to a majority, an item from another defined variable within the Preliminary Model. Since specific item was chosen as a key success factor, it was decided that instead of developing new items relating to the Research Model's identified variables, these could remain single-item and dichotomous in the majority of cases. It is acknowledged that multiple-item measures are usually preferred over single-item measures. However, based on the process of formulation, it is believed that they provide validity and are reliably captured for the domain of the construct. This was also confirmed with the interviewed experts. Also, the analysis method chosen, Partial Least Square analysis (as further described below) puts minimal demands on measurement scales. Further, the Research Model formulated is constituted by a fairly large set of variables, which opens up the possibility for a large amount of interrelations or multi-collinearity amongst them. This issue is also handled by the Partial Least Square analysis (Ryan et al. 1999). In addition, this study offered independent variables with different weights, which can be handled successfully by PLS (e.g. Ryan et al, 1991). Also the fact that these variables were different (incl. dichotomic variables) is again something that PLS handles better than the more conventional approaches (Hernandez-Maestro et al. 2009).

2.5. Designing and Executing the Data Collection

Design and Execution of the Data Collection are the fifth and sixth phases of this research. These phases included three distinct areas of research work: the definition of the subject to be inquired, the design and method of the data collection instruments, and the selection of data analysis approach. While the two first-mentioned are detailed in this section, the data analysis approach is presented with the seventh phase, Analysis of the Empirical Data, below.

2.5.1. Definition of Subjects of Inquiry and Response Rate

A central research task was to determine the subjects of the research. This was achieved with regard to the following aspects. First, as derived from the defined Research Question, the matter in hand here was the product launches within the Swedish pharmaceutical industry where General Practitioner physicians were targeted. The second limitation was set to these product launches (registration date) during the time period

between 1995 and 2005. The key motivation for this was to keep the product launches current in order to best reflect ongoing changes, while still representing a sufficiently large base of research subjects. Furthermore, the product should be a prescription-based ethical drug from a research-based company, which is under patent, i.e. not a generic drug.

A list of products was received from a database of all registered pharmaceutical products during in Sweden 1995-2005 (MIDAS-Database 2007b). The list included over 3500 registered products. In the database, it was possible to filter out the original brands thus eliminating the registered generic products and the products registered for parallel import. Also, even with a filtered list, inconsistencies were identified in for example manufacturer versus the company actually selling the product, based on licensing agreements. This was identified by using the Internet and questioning companies by phone, to search for the product and validate which company it belonged to for sales and marketing in Sweden. Products that were registered but not sold by a sales force or had no sales were eliminated. Molecules that were launched under different brand names were retained. The rationale is that the product might have used a different sales force, had a different launch timing, etc.

The list now included 247 original brands that were identified to have been launched in Sweden with an active sales force during 1995-2005. To find the products that had been launched aimed at general practitioners, three industry experts were consulted. Two of the experts had a commercial background in the pharmaceutical industry and one had a medical director background in the pharmaceutical industry. All products identified by the experts as having a potential history of being launched towards general practitioners were included.

A final population of 79 subjects was identified for investigation in this research. These subjects were clearly-identified pharmaceutical products that had been launched in Sweden and were highly likely to have been launched with a sales force aimed at general practitioners.

To secure that the right subjects were included in the data set, a control question initiated all data collection interviews, confirming a launch towards General Practitioners with a sales force. This process further limited the population to 68 subjects.

Given that the number of product launches in the total population was not enormous, the approach selected was to make an attempt to investigate all subjects, i.e. product launches within the scope. Typically for research data collection efforts, some subjects did not respond for various reasons. Out of the total population number of 68 subjects, the

response number was 50, giving a response rate of 74%; which is considered to be very good. The respondent representing each product launch was, at the time of launch, in a Sales Manager or equal position. There were two principal reasons for the non-responses, as understood here. Firstly, in some cases it was not possible to identify any trustworthy informants who could represent the particular product launch. In the second case, some of the identified potential informants did not want to participate. In some such instances, alternative informants were identified and inquired; however, it was not possible to do this in all of these cases.

2.5.2. Design of the Data Collection

Given the definition and identification of the population of subjects to be investigated and then that the Research Model was elaborated and defined, the foundations for the design of the data collection instruments were established. This consisted of the following stages: the design of the data collection questions, the selection of the data collection channel, and the design of the data collection procedure. Starting with the second stage, the choice of data collection channel was direct telephone interviews with the person representing the subjects, i.e. product launch. This was driven by two aspects: firstly, the aspiration to collect high quality data, limiting the cases of no full responses; secondly, as the total number of the subjects was not very great this allowed the utilization of this channel. Moving over to the third mentioned component, the data collection procedure, the following procedure was designed and utilized:

1. Establishing contact with the representative of the subject to be interviewed, via telephone
2. Establishment of an agreement regarding the representative's participation in the inquiry and consequently the date and time for an interview
3. Execution of the interview, in which the defined data was collected, in accordance with the defined data collection questions
4. Entrance of collected data directly into a predefined Excel-file

Finally, the first-mentioned component, i.e. the data collection questions, was formulated in accordance with the Research Model, defined and based on recommendation from the interviewed experts. The model provided a set of constructs that were also validated by previous research initiatives. These constructs were transformed into questions. Section 4.4, The Research Model, lists and explores the model's constructs and questions. The full data collection instrument can be found in Appendix 6. The questions were asked in

English and further explained in Swedish if necessary, as the chosen data collection channel admitted this approach.

2.6. Analyzing the Empirical Data

In this seventh phase, the selection of approach to the data analysis was conducted. This is summarized in two steps: first, the motivation of the selected type of data analysis method, and secondly, the character of the selected data analysis method. Starting with the former, the motivation of the method selected, the current research circumstances were determinative. Firstly, the formulated Research Model is constituted by a fairly large set of variables, which opens up the possibility for a large amount of interrelations or multi-collinearity among these. Secondly, no related empirical research has previously been conducted within the selected focus: sales force readiness during the launch of new products in the Swedish pharmaceutical industry. Rather, the Research Model defined here is the result of a synthesis process, where various models were developed in other contexts and circumstances, which made the Preliminary Model highly generic. To reduce some parts of this generic quality and thus to adapt the Preliminary Model to the research domain addressed here, an adaptation of that model was conducted resulting in the current Research Model, which also defined the proposed key success factors as identified from the case studies, expert interviews and literature. Yet, as mentioned, this model has a fairly large amount of variables and no qualified interpretations between these were obtained during the adaptation process.

2.6.1. Partial Least Squares Analysis

Instead of utilizing the traditional top-down, hypothesis-testing research approach with regression analysis techniques and Structural Equation Modeling, the approach selected here was to utilize a so-called bottom-up pattern identifying research approach, employing Partial Least Squares Analysis (PLS). A number of modern statistical methods are used “to develop theory regarding the nature of constructs” and “to summarize relationships in the form of a more parsimonious set of factor scores that can then be used in subsequent analyses” (Thompson 2004). Indeed, supported by Chin (1998, 295-296) Haenlein and Kaplan (2004, p.283) summaries that PLS “...can be used to either identify or confirm theoretical hypothesis based on the analysis of empirical data” (Chin 1998; Haenlein and Kaplan 2004).

Partial Least Squares (PLS) analysis is a more recent statistical technique that generalizes and combines aspects from principal component analysis and multiple regressions

(Haenlein and Kaplan 2004). Its aim is to analyze and predict a set of dependent variables from a set of independent variables or predictors. This in turn is achieved by extracting from the predictors a set of latent variables (i.e. the largest sources of systematical variance) that have the best predictive strength.

In this study, the Research Model (see Figure 6, the Research Model, in Chapter 4) can be regarded as the grand hypothetical model proposed for the empirical test. In this Research Model, all independent variables may receive a specific type of relation with the dependent variable and the question is then: What is the pattern of these relations in the proposed Research Model?

Justification of PLS analysis in this research

Beside this bottom-up approach to the empirical investigation, and thus its justification of the PLS-method selection here, several other peculiar characteristics of the present study have motivated the employment of PLS for data analysis.

- 1) This grand-model test has predictive aspiration, where PLS is clearly more powerful than the current alternatives mentioned (Ryan et al. 1999).
- 2) PLS is more suitable for use when the data set to be analyzed is relatively small (Brown and Mazzarol 2009) and simultaneously the number of independent variables is relatively large (Garthwaite 1994) – both are features of the present study.
- 3) As described in brief above, the ability of PLS to handle positively multi-collinearity (Ryan et al. 1999) is also a characteristic of the present data set. F
- 4) This study offered independent variables with different weights, which can be handled successfully by PLS (e.g. Ryan et al, 1991), and also the fact that these variables were different (incl. dichotomic variables) is again something that PLS handles better than the more conventional approaches (Hernandez-Maestro et al. 2009).
- 5) The PLS approach which are relevant for the present study, are that it puts minimal demands on measurement scales (Brown and Mazzarol 2009) and also that it handles random error variance well (Garthwaite 1994).
- 6) A more general supportive fact, for using PLS here, is that while PLS is still not widely used within the various social science disciplines, despite its being advocated by prominent authors (Cassel and Hackl 2000; Ryan et al. 1999), it seems that it has been successfully adopted in marketing science (Graber et al. 2002).
- 7) Finally, a somewhat tautological yet powerful motive for utilizing PLS in this study is the fact that the conducted analysis generated a clear and undistorted data

pattern within the proposed Research Model. This outcome, as described and discussed in the Result Chapter, is regarded as very feasible, thus receiving a positive face-validation.

Given this, the judgment in the present selection of analytical method was that a PLS analysis was well suited to the conditions at hand: the fairly large set of independent variables and the lack of full knowledge for the formulation of hypotheses regarding the potential relation between the independent and the dependent variable. The analysis included the preparation phase, the analysis phase and the validation phase.

Preparation Phase

Starting with the preparation phase, three means were assumed: handling the possibility of missing data; handling variable expansion; and, conducting auto-scaling. Even though there is no perfect way to fully compensate for the lack of information, there are ways of handling it so as to improve the case compared with no data. In the present case, the assumption was that there would be sufficient redundancy between variables and the object in the data, so that a few random or evenly distributed elements with missing data will not affect the modeling in a significant way, if properly handled in the estimation algorithms. It is important to substitute the missing values with other values by using a method that does not create systematic patterns in the data which could be interpreted as actual phenomena. In this case mainly two different methods would be used. In the case of missing values in variables with continuous values (1-10) mean average would be used. Other methods such as approximation of the missing value can be hazardous since no underlying truth exists to guide the relation between the variables as in natural science. Discrete variables of the nature Yes/No will be expanded into two variables, numerically described with 1/0 for yes respective no. Missing values will be replaced with 0. Secondly, the approach for handling all non-linear or bilinear variables was to expand them into several variables, described by alternative 1 / 0. For example, in the present case one of the independent variables, the character of sales representatives in problem solving situation, could assume two positions: Systematic Approach or Intuitive Approach. In such a case this bilinear variable was expanded so that one variable Systematic Problem Solving Approach could be described by the alternative 1 / 0, and likewise the a second variable, Intuitive Problem Solving Approach could be described by the alternative 1/ 0. Thirdly, the units of measurements can be very different for the variables (descriptors) and their measured values can vary in magnitude, i.e. 1-10 or 1/0 etc. For this reason it is necessary to scale the values of the descriptors so that their variations can be compared to each other. One common way to scale values of descriptors is to subtract their mean and divide them by their standard deviation over the

set of variables. This will give each variable a standard deviation of one. Scaling to unit variance will give each variable an equal chance to influence the model. With this procedure, no prior assumptions as to the relevance of the different variables are made. This procedure is particularly important in a data set with a large spread in the numerical values of the variables.

Analysis

The choice made was to define “Successful Launch” as the dependent variable and open up for the possibility that any of the remaining variables may cause or drive this success to a greater or lesser degree. A successful launch was defined in the data set as a having given a positive answer to the two questions (items), defined as “subjective data”, under the variable “Performance in selling a new product”. Also, for validation purposes, data was collected from two sources. In addition to the more subjective data collected, being the two items in the collection instrument, data available from a third party sales and market share database (MIDAS-Database 2007b) was also used and defined as “objective data”. For more detailed information see Chapter 4, Development of the Research Model and Appendix 6, Collection Instrument for the Research Model. As the investigated launches were products within different therapy areas, where the size of the market differed, the effort to normalize this was made thorough a comparison of the mean increase for years one and two and the mean increase for years three and four. The results from the two data sources, “subjective data” and “objective data” were put in to a PLS score plot for comparison and the results are presented in Chapter 5, Results.

The PLS regression analysis, as conducted here for the variables in the Research Model, produces a model that transforms a set of correlated explanatory variables into a new set of uncorrelated variables (Graber et al. 2002). The set of uncorrelated explanatory variables is the *predictors* (i.e. the biggest sources of systematical variance) *that have the best predictive strength* towards a “successful launch”. Several PLS-algorithms can be used, where each has its advantages according to the situation (Geladi and Kowalski 1986). The algorithm utilized here is described in detail in the publication by Geladi and Kowalski (1986) and is, according to the authors, the most complete PLS-algorithm when prediction is important.

The interpretation of success for each variable, or key success factor for sales force readiness during new product launch, is set within a range, what is here called the success-range. This means that in order to contribute to a successful product launch the given variable must assume a value within the defined *success-range*. Further, within this success-range, an *ideal-value* has been defined, which is the mean-value for each variable within the success-range.

Validation

The third phase included the question of internal validity of this modeling. The PLS modeling was performed with a leave-one-out cross-validation technique (jack-knifing) in all cases. The jack-knifing validation technique is used here because of the limited numbers of objects. The ideal situation to test robustness would have been to possess a larger data set in order to be able to split up the data and use one set for building the model and one set for validation of the model. In this research, as discussed, the data set was not sufficiently large for this approach. The number of valid principal components is determined by leave one out cross-validation. The leave-one-out prediction results are also used as validation data, i.e. the predicted object is never included in the model while it is predicted. This is an internal validation method which, like an external validation method, seeks to validate the calibration on independent test data. But contrary to external validation it does not waste data for testing only. If there are 100 objects, one object will be removed and a model is created with the remaining 99 objects; the object left out is predicted with several numbers of principal components by the obtained model. The object is put back into the data-set and the next object is removed and the technique is repeated. When all objects are tested, the number of significant principal components can be determined. With this technique, over-estimation can be avoided and an accurate model be obtained. Jack-knifing technique determines the numbers of Principal Components (PC) to be used in the model. If the prediction errors over the objects are added together, the minimum error which can be reached in the modeling is obtained with three PCs. If more than three PCs are included, more “noise” will be included in the model, which is comparable with a less accurate model. Hence, three PCs have been used in this model. The results of the validation are presented in Figure 12.

2.7. Derivation of the Implication and Conclusions

Finally, after the collected data was analyzed and a pattern emerged as presented in Chapter 5, Results; the eighth and final research phase was the interpretation of the identified pattern, and derivation of conclusions, both scientific and managerial. This work is not merely analytical as it also includes associations and synthesizing, and can thus not be accounted fully. However, the guidelines assumed here were to relate the identified data pattern first to the Research Model utilized, thereafter to the Research Question defined, and finally to the its context: the challenge of sales force readiness to achieve a successful launch of products in the Swedish pharmaceutical industry. In this step-by-step reflection and contextualization process attempt, the scientific and managerial implications will be presented in Chapter 5, Results.

2.8. Overview of Validity, Reliability, Relevance and Generalizability

In addition to the research process described above, an overview of *Validity*, *Reliability*, *Relevance* and *Generalizability* is presented here.

The question of how valid the findings of this study may be considered in various ways, of which two are assessed here: *construct validity* and the *representational validity*.

The first question concerns the *validity of constructs* utilized here to collect the empirical data. The invariable meaning of these constructs is important to assure that the correct data was collected. Three approaches were considered as an attempt to secure this construct validity. The first is the fact that the utilized constructs were derived from literature that presented previous studies where the constructs were validated (see Chapter 3, Literature Review and Chapter 4, Formulation of Research Model). Secondly, and important if to be confident in the above studies, was the utilization of the so-called face-validity. This was done by an exposition of the whole survey, and its constituting constructs, to three industry experts. This included an investigation into their assignment of meaning to the construct, looking for potential differences between the expert assigned meanings and the intended meanings. No significant differences were identified. Finally the data collection in this study was achieved by means of survey-guided interviews, and not through paper- or web-based survey, but by telephone interviews. This made an additional service available to the inquired responders, in that whenever a given question, or some part of it, was not clear enough the interviewer was able to provide clarification. This may have been the single most important measure for eliminating misinterpretations; however, taken together the three utilized validity securing measures (validation by previous studies, face-validation, and interview information) suggest that the construct validity should be satisfactory.

The next question is that of *representational validity*, which in this case closely relates to *generalizability*. This study focused on the success factors for the readiness of a sales force in the Swedish pharmaceutical industry, with specific focus on product launches aimed at general practitioners. The investigation focused on a one-decade time-interval, where all product launches between 1995 and 2005 were addressed. This research succeeded in collecting data about a majority of the addressed instances of product launches and their associated sales force readiness. Clear and unambiguous patterns of product launch success vs. lack of such success were obtained from the data collected. It is therefore reasonable to conclude here that the results generated by this result effort are valid for the addressed instances: sales force readiness for new product launches aimed at general practitioners in the Swedish pharmaceutical industry, conducted between the years 1995 and 2005. The more interesting and difficult question here is whether the

results obtained here may be valid or generalized for related domains yet outside the defined scope investigated here. In general, caution is suggested here against any uncritical generalizations outside the present scope. However, it is suggested that the findings here may well be assumed for the same industrial and operational domain, in most of North European markets – e.g. Nordic markets, Benelux, UK, Ireland and Germany – and for the post-2005 year period up to now. The reason for this is that this industry and the mentioned markets show a great amount of homogeneity, and that the Swedish pharmaceutical industry was ahead of the mentioned markets in terms of its evolution with regard to the sales representatives' access to the General Practitioners (Dannacher and Stahl 2005) and that the global emerging environment for pharmaceutical sales forces around the world follows this trend (Dutton and Reece 1996; Rhee 2009). This evolution seems to have stagnated in Sweden but is still ongoing in the Northern European markets. While it is assumed that other markets in Europe, such as Eastern and Southern Europe, as well as the North and South American markets differ more significantly in their structure and process of sales operations aimed at General Practitioners, it is reasonable to assume that several of the findings obtained in this study may be less relevant for these later markets.

Reliability is described in section 2.6, where the validation process for the PLS modeling is described as performed with leave-one-out cross-validation technique (jack-knifing) in all cases. The results of the validation are presented in Figure 12 and are considered to be very good.

Relevance of this study has been justified extensively in Chapter 1, Introduction, and will not be repeated here. However, in summary the key justification here is that on the one hand, managers face significant challenges in situations when sales force must be managed to successfully launch a new pharmaceutical product and, on the other hand, there is little available empirically-based scientific knowledge to guide such product launch sales forces, and there exists no such knowledge for the Swedish pharmaceutical industry. Taken together, this creates an urgency of unmet knowledge need, where managerial mistakes give rise to significant losses of potential sales revenue at a time when the industry needs them more than ever.

3. LITERATURE REVIEW

The three investigated fields of research are Sales Force Management (and Selling), Product Launch and Pharmaceutical Industry. From these main fields, a set of overlaps were identified as important for this research; Sales Force Management during Product Launch, Sales Force Management within the Pharmaceutical Industry and Product Launch within the Pharmaceutical Industry (graphically presented in Figure 3). Many of the findings discovered in these overlaps during the literature review are integrated in Chapter 1, Introduction.

The sections below will provide a summary overview of the relevant literature, presented according to four identified sales force management themes. In addition, this text analyzes, in detail, the key publications which include the most important constructs and form the scientific base for the formulation of the Preliminary Model and the Research Model. The literature review process is described in more detail in Chapter 2, Research Approach.

An overall conclusion is that the three investigated fields of research; Sales Force Management (and Selling), Product Launch and Pharmaceutical Industry and their areas of overlap form a group of heterogeneous publications. However, from the most relevant findings within these research areas, a pattern, or a number of main themes could be identified. These themes were; 1) Sales Force Management Control; 2) Internal and External Sales Force Collaboration; 3) Sales Force Accountability and Decision Making; and, 4) Complexity of the Sales Environment. The formulated Preliminary Model and the developed Research Model are based on and structured very similarly to these overarching themes. Further, as described in Chapter 2, Research Approach, six key scientific models were identified and selected from the literature to be included as the scientific base when the Preliminary Model were formulated. Further, these six models and their publications include the key constructs and definitions which serve as the foundation for the definition of Sales Force Readiness during New Product Launch. These publications will be explored in more detail later on.

The text below opens with a presentation of the identified main sales force management themes. The key scientific publications are then explored in more detail and the text ends with a conclusion based on the full literature review.

3.1. Identified Sales Force Management Themes

The findings from the literature review are presented here as an overview, following the four main sales force management themes that emerged from the research areas investigated. The most extensive area in the literature, Sales Force Management Control is presented first, followed by the themes Internal and External Sales Force Collaboration; Sales Force Accountability and Decision Making; and Complexity of the Sales Environment.

3.1.1. Sales Force Management Control

Sales force management control is an important cornerstone within the literature field of sales force management. In the literature, the terms *sales management control* and *marketing and sales management control* are often used synonymously. It could be concluded that there are several gaps in the present literature and empirical research and that knowledge is very limited concerning the effect of management control on sales managers' attitude, behavior, and performance (Baldauf et al. 2005). Further, it is pointed out that one challenge for management will be to decide how much control should be applied and the extent to which it should focus on behavior and (or) outcomes (Baldauf et al. 2005).

Some of the literature on sales force management within the pharmaceutical industry does cover management control issues. For example, some older results in the area of *management control and performance* within the pharmaceutical industry concluded that higher performing pharmaceutical salesmen have three predictable characteristics in relation to lower performing salesmen: 1) perceive high clarity of the management control system; 2) perceive high personal influence and control over established job goals; and, 3) perceive that job rewards are based on performance (Futrell et al. 1976). Furthermore, it has been investigated in which way changes in the pharmaceutical industry and the reorganization of the UK's national health service have led management to re-evaluate the balance between control and autonomy in managing sales representatives' work (Lloyd and Newell 2001). The key findings are that management's desire to empower and upskill the representatives were undermined by the use of forms of control which reduced autonomy and routinized the work process.

One of the questions asked in the literature about the general field of sales force management control is what should drive the choice of control strategy. Considering the sales force management elements of environment, organization and individual

(salesperson), the empirical evidence does not point in any strong direction to any predictors of an appropriate type of management control according to Baldauf et al. (2005), who further argue that there appears to be an emerging view that management control in sales and marketing consists of a *combination* of different control dimensions rather than a fixed set of control categories or types. The “*combination view*” of control dimensions is present in the work of, for example, Cravens et al. (2004) and Jaworski et al. (1993). Jaworski (1993) identifies four alternative combinations or “systems” of control. The first is a traditional bureaucratic management control system with primary emphasis on formal controls; the second, a clan system with primary emphasis on informal controls; the third, a low control system, and the fourth, a high control system (Jaworski et al. 1993). Others support this notion, for example, there has been a conclusion that salesperson supervision, evaluation and compensation decisions should be seen as a continuum ranging from behavior to outcome control and that movement in one direction or another entails a compensatory process (Oliver and Anderson 1995).

In the overview of sales management control by Baldauf et al. (2005), two selected theoretical foundations have been identified as pathways for following the research development. The first foundation and conceptualization is the one developed by Anderson and Oliver (1987), where behavior-based sales management control is characterized by “high levels of supervisor monitoring, direction and intervention in activities, and subjective and more complex methods of evaluating performance, typically centered on the salesperson’s job inputs” (Anderson and Oliver 1987). The definition here of behavior-based sales management control is “an organization’s set of procedures for monitoring, directing, evaluating, and compensating its employees” (Anderson and Oliver 1987). This theoretical foundation is drawn from the economic, organizational behavior and psychology theoretical approaches. The second selected conceptualization is Jaworski’s (1988) *formal and informal control* theoretical foundation (Jaworski 1988). The resulting research propositions from this conceptualization are rooted to a great extent in the management and accounting disciplines and are concerned with the antecedents (e.g. environment) and consequences (e.g. individual effects) of formal and informal control. Unlike Oliver and Anderson (1987), Jaworski (1988) defines control as “attempts by managers and other stakeholders within the SBU (strategic business unit) to influence the behavior and activities of marketing personnel to achieve desired outcomes” (Jaworski 1988). Formal control is comprised of output and process, and formal control is a written, management-initiated mechanism. Informal control includes social, cultural, and self-control, and is an unwritten, worker-initiated mechanism. Given these two control conceptualizations in sales and marketing, it has been pointed out that Anderson and Oliver (1987) focus on the consequences of their formal control construct, whereas Jaworski (1988) relates the use of formal and informal controls to antecedents and consequences. It is concluded that, without this being explicitly addressed, their

contributions correspond well with the Walker et al.(1979) important core sales management paradigm (Walker et al. 1979). Within that paradigm, management control is placed under supervision and motivation and identifies control as an important part of the responsibilities of sales force management.

The two theoretical foundations by Anderson and Oliver (1987) and Jaworski (1988) respectively led to different research streams, which have brought different insights and learning to the broad field of sales management control. These two research streams are followed separately in the next two sections.

Based on the Anderson and Oliver (1987) theoretical foundation

Following the research stream, categorized as using the Anderson and Oliver (1987) control philosophy and using either Anderson and Oliver (1987), Oliver and Anderson (1994), Babakus et al. (1996), Cravens et al. (1993) and/or own scale as control measures, several studies of interest can be identified (Anderson and Oliver 1987; Babakus et al. 1996; Cravens et al. 1993; Oliver and Anderson 1994). *In chronological order*, the first example is Cravens et al. (1993), in which the readers are first reminded that it is important to note that compensation control should not be confused with the far more comprehensive concept of management control. Their results suggested that the use of heavy incentive pay plans as the core for sales force control systems could be a risky strategy and should be combined with other control mechanisms (Cravens et al. 1993). It has also been identified that industrial field sales people could encounter ethical conflicts when dealing with customers and others as often as on a daily basis (Robertson and Anderson 1993). The research by Robertson and Anderson (1993) aims to determine the effect of the firm's control systems and dimensions of work task environment upon ethical judgments made by the sales people. The findings indicate that the firm's sales force control system does have an impact on the ethical reaction patterns of its salespeople and that more ethical responses are seen in behavior-control systems.

Oliver and Anderson (1994) empirically test a set of propositions about how control system perceptions influence salespeople (Oliver and Anderson 1994). They found that the perception of behavior control appeared to be related to greater affect and acceptance among salespeople than did outcome control. The results further indicated that the commitment of the salespeople was greater in a behavior-controlled system. The reasons given are reduced stress as a result of a more formalized system, which is perceived by the sales representatives to be more innovative and supportive. Interestingly, in this case, more formal is not seen to mean more bureaucratic. In another empirical investigation in Australia, a model examines the sales management control system, sales territory design, sales force behavior and outcome performance, and sales organization effectiveness

(Babakus et al. 1996). This investigation found that higher sales force behavioral performance gives higher outcome performance and sales organization effectiveness. Moreover, they found that more behavior-based sales management led to higher sales behavioral performance and greater satisfaction with the territory design. The conclusion drawn was that well-designed sales forces with high performance led to effectiveness and that field sales managers are very important if effectiveness is to be achieved.

Similar to the research examples above being based on Anderson and Oliver's (1987) theoretical foundation; Krafft (1999) looks into a set of hypotheses from agency theory, transaction cost analysis and Ouchi's theoretical framework for the environmental, company, and salesperson characteristics, on the design of sales force control systems (Krafft 1999; Ouchi 1979). The conclusion is that to reduce uncertainty among the sales representatives, the sales manager extends the product line or territory to give the sales representative a wider scope of products and customers to select from. Also, it is perceived that coaching reduces uncertainty. Furthermore, the results showed that environmental and company factors are more important than the characteristics of the sales representatives when designing control systems. Another empirical investigation aiming to examine the relationship between sales force management practices and performance has been made by Slater and Olson (2000). Using the distinction between constructs of the four product and market strategy approaches; prospectors, analyzers, defenders and reactor, the role of marketing in the implementation of business strategy has been examined (Slater and Olson 2000). The core findings related to sales force were that prospectors, analyzers, and differential defenders perform better when employing an internal sales force, while low-cost defenders should contract an external sales force. Moreover, it was found that moderate supervisory control should be utilized by prospectors and analyzers. Low supervisory control should be the choice for low-cost defenders and differentiated defenders should utilize high supervisory control. As far as control systems are concerned, an outcome-based control system is preferred for the prospector and low cost defender, a mix control system for analyzers and behavior-based for the differentiated defender.

The literature argues the need for non-US based sales force research to prescribe better local recommendations and to validate earlier research in a more global business setting (Baldauf et al. 2001a; Baldauf et al. 2001b). Baldauf et al. (2001a) investigates sales organizations from the UK and Austria and finds that behavioral-based control on behavioral performance was only valid for the Austrian population, showing that cultural differences are a fact within sales force strategy elements. They suggest that it may be a possible failure to align strategy and structure when implementing business strategy through sales force operations. Their line of arguments is based on finding a weak link between some of the key elements of companies' strategic orientation and salespeople

performance and effectiveness. In the area of effectiveness, they found that salespeople who achieve their targets are very important for effective sales organizations and that territory design may be important for outcome performance but not for effectiveness. In the second investigation, Baldauf et al. (2001b) point out the value of behavioral control; however they conclude that the research area is incomplete in order to draw any final recommendations. They summarize that much research evidence supports the importance of motivated salespeople, but also that there is a lack of knowledge about the impact of behavioral control on motivation. Others drawing the conclusion of cultural differences are Rouzies and Macquin (2002), who state that there exist differences across borders and that personnel sales governance structure needs to be reassessed per market or cultural background. This concerns how managers conduct monitoring, directing, evaluation and compensation.

During the more recent years, research based on Anderson and Oliver's (1987) theoretical foundations is exemplified by investigations such as Menguc and Barker (2003) where it is concluded that a mix of both financial and non-financial incentives in the sales force is preferable (Menguc and Barker 2003). This was found during an investigation of the performance effect of outcome-based incentives on sales organizations. Another research that further extends the geographic scientific base on salesperson performance and effectiveness is Piercy et al. (2004) who have conducted an investigation in developing countries. They examine the impact of management control in combination with incentive pay and territory design on salespersons' performance and the unit's effectiveness (Piercy et al. 2004). They find differences between the countries, and conclude that it is a concern that managers sometimes have over-reliance on incentive pay for the sales force. Furthermore, their findings did not indicate that behavior control, percentage incentive pay and territory design satisfaction cause any changes in the performance and effectiveness.

Based on the Jaworski (1988) theoretical foundation

The second path or theoretical foundation of research identified by Baldauf et al. (2005) with regard to sales management control research was the one developed by Jaworski (1988). There are several examples of research using Jaworski (1988) and/or Jaworski and MacInnis (1989) as control measures (Jaworski 1988; Jaworski and MacInnis 1989). Some interesting examples are *presented in chronological order* below. Jaworski and MacInnis (1989) continue the work towards a more complete framework and investigate the role of task characteristics when developing control systems and how these systems affect marketing managers. The findings showed strong positive relationships between procedural knowledge and process controls and performance documentation and output controls. Further, self-controls are associated with reduced dysfunctional behavior and

output and process controls are associated with less information asymmetry. In a study about supervisory feedback, Jaworski and Kohl (1991) conclude that sales managers should provide positive feedback instead of negative feedback (Jaworski and Kohl 1991). Positive feedback about behavior seems to be good as information about clarifying expectations for outputs and behaviors. On the other hand, negative feedback does not seem to be as motivating for salespeople as positive feedback and the impact on performance seems to be less with negative feedback. However, the authors suggest that negative feedback does not lower salespeople's satisfaction with supervisors. Lusch and Jaworski (1991) have conducted an investigation into management control, stress and performance of managers (Lusch and Jaworski 1991). They found that control systems played a role in affecting performance but that they do not directly affect it. However, it is concluded that a direct link to performance could be made in other situations, but this might be offset by various psychological (stress and nervousness) and behavioral (dysfunctional behavior) responses. To develop a control combination framework and empirically test the types of control combinations in marketing operations, Jaworski et al. (1993) have conducted a study (Jaworski et al. 1993). In this study they also set out to find variables that predict the use of these control systems. They argued that organization size and task complexity appear to be good predictors of which control system is used. With increased size, bureaucratic control systems are more likely. Also, the authors suggest that earlier literature associated tighter controls with profitability, but argues that this is not the case.

For capability control, it was found that sales managers are likely to increase salespeople's motivation and enjoy a more productive relationship with them, as well as improve their selling (Challagalla and Shervani 1996). It was further found that supervisors should be careful when using activity control, even if it is useful under certain circumstances. This is because salespeople may view monitoring and reinforcing routine activities as redundant. The study by Challagalla and Shervani (1996) focuses on practical and theoretical issues regarding the impact of supervisory controls on individual salespeople, such as on capability control and activity control. Activity control was not found to be as effective as capability control in reducing ambiguity and enhancing satisfaction with the supervisor. A well-balanced mix is preferred between the managers' time spent on improving skills versus detailed activity specification. In the study made by Lusch, Boyt and Schuler (1996), it was shown that social controls were important in building company culture, and that they may have the effect of increased support from the employees (Lusch et al. 1996). It was found that increased social control increased socialization; however, a company can not translate social controls into higher employee socialization. The authors argued that this was a neglected area and that more research is needed as it might provide valuable benefits for managers and well as scholars.

An investigation examines two different theories of marketing control systems; traditional and contingency (Ramaswami 1996). It was found that the traditional perspective gained more support than the contingency perspective. This conclusion was drawn when using dysfunctional behavior as the focal negative response. Tasks and supervision were examined where tasks are defined as performance documentation and procedural knowledge and supervision defined as the degree to which employees perceive that they are allowed to participate and that supervisors are both knowledgeable, and considerate about their performance.

Again, activity and capability control have been investigated by Challagalla and Shervani (1997). In this study, they suggest that it is important for the effectiveness of the organization that activity control ensure that employees focus on activities that are identified as key for long-term success (Challagalla and Shervani 1997). They present a measurement model that is argued to have several theoretical, substantive, and methodological implications for future research on control. It claims to provide a set of measures that capture the nine facets of output and behavior control. The study also provides evidence for both activity control and capability control.

In an attempt to investigate distribution channels in terms of the coordination processes that govern the relationship between export manufacturers and their foreign-based distributors, Bello and Gilliland (1997) found that control and flexibility are associated with export channel performance in terms of meeting economic goals, achieving high levels of selling performance, and establishing effective marketing strategies for the foreign market (Bello and Gilliland 1997). Also, it was found that process control had no performance effect. It was concluded that it is the manufacturers' emphasis on output-based monitoring rather than on process controls that accounts for the performance benefits of a firm's involvement with its foreign partner. Moreover, influencing a distributor's specific selling and marketing behavior will not contribute directly to channel performance outcomes.

In regards to the question whether output-based or process-based controls help reduce the harmful impact of formalization on salespeople's attitudes, support was found that formalization leads to negative attitudes among salespersons (Agarwal 1999). However, Agarwal (1999) found that the use of output-based control reduces the negative impact of formalization on role ambiguity and organizational commitment, but not on role conflict. For process-based control, the findings showed that it is not helpful in reducing the negative impact of formalization for any of three outcomes - role ambiguity, organizational commitment and role conflict. Bonner, Ruekert, and Walker (2002) conduct a study about control with teams dealing with new product development projects (Bonner et al. 2002). The findings indicate that the creative potential of a cross-functional

new product development team is likely to be better realized if less control, or more flexibility, is given by upper management. The team should decide their own procedures and processes, with only a more strategic directive and less intervention from upper management.

As far as gender differences are concerned, the generalization of Jaworski's framework has been tested (Ramaswami 2002). The results indicate that there is no difference between how control systems are perceived by men or women, nor in their responses to controls. In a gender neutral cross-industry investigation, it was further found that the most favorable salesperson consequences were with high control combination, while low control is linked to the least favorable consequences (Cravens et al. 2004). It was also found that salespeople under a more visible control system (high control) perform better, are more satisfied, and display lower role stress when compared to salespeople working under bureaucratic, clan, and low control combinations. Cravens et al. (2004) examine the conceptualization of the high, bureaucratic clan and low management control combinations as another perspective to behavior-based management control (Cravens et al. 2004).

In specific findings to new product launch and sales force within this second path or theoretical foundation based on Jaworski (1988), it was found that behavior and outcome controls have differential effects on sales force performance in selling a new product; while the implications of behavior control (lack of discretion and flexibility) are resented by the sales force, outcome control is positively related to salespeople's selling performance (Hultink and Atuahene-Gima 2000). This study examines the effect of new product adoption by the sales force on selling performance, and the potential supervisory and market factors that moderate this linkage. The constructs and model from this investigation are found to be key for this research and will be used when formulating the Preliminary Model in a later chapter. The publication and model will be discussed in more detail below. In another study focused on trust, in which trust is defined as the salesperson's belief that the sales managers genuinely care and are concerned for his or her welfare in the process of new product selling (Atuahene-Gima and Li 2006), it is argued to be the first study where the relationship between formal control mechanisms and supervisee trust in new product selling are tested. The investigation concerns young and inexperienced salespeople in China. The conceptual model is related to parts of the broader model by Atuahene-Gima (1997). A set of hypotheses was formulated and tested empirically on 250 high-technology firms in China. The key findings show that the use of process control rather than output control helps in building trust with the young Chinese salespeople during new product launch.

3.1.2. Internal and External Sales Force Collaboration

In the literature, it is argued that both internal and external collaboration for sales organizations are of increasing importance (Ingram 2004). As with the theme of sales force management control, it can be concluded that there are gaps in the literature and that further research is needed. Ingram (2004) has developed a set of sub-categories within the theme of collaboration and provides some thoughts about the opportunities for further research. Others support these identified sub-categories of collaboration (Corcoran et al. 1995; Schwepker Jr 2003). The first sub-category is the need for more collaboration between the internal functions such as sales, marketing and other functional units. The identified research opportunities in this subcategory explore the impact of joint goal-setting, inter-functional teams, common rewards and how the salespeople's roles might be changed to better coordinate activities. The second sub-category is also directed internally and deals with the needs to shift from having sales management direct their sales force and instead having them move towards a more collaborative approach. The direction is to have sales managers collaborate with their salespeople without relying on authority. For this to take place, sales managers need to build trust as well as ensure that the salespeople take leadership for self-managing when required. The area for closing the research gap would be to expand the Leader-Member Exchange (LMX) research to determine where the manager and salesperson need a stronger relationship. Furthermore, it is important to investigate how managers could develop, and Ingram (2004) suggests further expansion of Behavioral Self-Management (BSM) within sales management research. The issue around the need to be more customer-oriented in selling is identified as the third sub-category. The managerial response suggested should be to expand and train the salespeople towards more customer-oriented behavior, handling conflicts and service recovery as well as to build on trust-based relationship selling. The opportunities for research in this area are suggested in the following areas: evaluating the effectiveness of service recovery and conflict resolution efforts; investigating how to promote customer-orientation in the organization and expanding customer oriented research around aspects such as definitions, concepts and measures. Interaction with customers should be added to this last sub-category.

Internal collaboration has been investigated within the pharmaceutical companies' sales force. One example is a study based on the *socioanalytic theory*, where a model is tested on a US pharmaceutical company in order to examine the relationship between lone wolf tendencies, task performance, contextual performance, job satisfaction, and turnover intentions (Mulki et al. 2007). Sales people with lone wolf tendencies dedicate very little time and energy to developing interpersonal relationships: they like to work alone and believe others are less capable and effective. The sample of pharmaceutical salespeople showed that about one-third of the respondents had moderate to high levels of lone wolf

tendencies. A lone wolf's unwillingness to become a team player leads to lower contextual performance as represented by the dimensions of helping, courtesy, and sportsmanship and is harmful to the organization in a number of ways. Task performance is subsequently reduced. Also, some research from *sales force automation (SFA) literature* was found to be related to investigations in the pharmaceutical industry. Engle and Barnes' (2000) study showed that the use of sales force automation technology contributes to more effective sales operations and higher volumes (Engle and Barnes 2000). The two most dominant factors contributing to higher sales performance were "active sales tool" and "administration and external information exchange", which suggested, based on the authors' analysis, that sales performance will increase when usage of a sales force automation system directly involves customers. They concluded that it may be possible for information technology to create value in terms of productivity without improving profits due to productivity being channeled to fewer or non-profitable activities. There are also lessons to be learned from Dong-Gil and Dennis (2004) research within this area. They relate to the lack of benefit of using a SFA in Big Pharma for an experienced sales representative compared to an average one, and the possibility that a more experienced sales representative could be more reluctant to change (Dong-Gil and Dennis 2004).

External collaboration with customers is of utmost importance as the sales staff serve as the company's personal link to the customers and the sales representative is often regarded as the company for many of its customers while at the same time bringing back much-needed information from the customer (Kotler 2000). Within the pharmaceutical industry, research discusses and investigates the sales force topic of collaboration during launch. As an example of how it is related to external collaboration with, or sales aimed at, customers and in the form of tactical execution that focuses on a launch situation; a model for repeat purchase environment has been developed and investigated with pharmaceutical firms as research subjects (Lilien et al. 1981). The investigation concerns a physician specialty being detailed (sold) an ethical drug. The model is focused on the situation when word-of-mouth in effect is present and is then tested with a few cases which give a fairly good performance of the model within the scope. Another investigation of a pharmaceutical product launch, defined as a disruptive innovation, concluded that the product was extensively used, because of the buildup of market awareness before the launch (Sandberg 2002). Also, the same basic targeting actions (e.g. symposiums and congresses) could be used to arouse interest, primarily in the customer groups referred to as innovators and early adopters. The study was conducted in the form of a case study and the author illustrated proactiveness through this case study. Firms that develop and launch disruptive innovations, i.e. innovations that create their own market, face challenges when proactively preparing the market. The author used proactiveness as a concept with the definition of proactiveness being the firm's ability to create

opportunities or the ability to recognize or anticipate and act on opportunities (or dangers) when they present themselves. Moreover, innovations are referred to as something that is invented for the first time and is a commercial success, while disruptive innovations are innovations that involve significant new technologies, require a considerable change in consumption patterns and are perceived as offering substantially enhanced benefits.

There is also literature that investigates the external collaboration, or sales situation, with customers within the pharmaceutical industry; however, this is not focused on the launch phase. For example, Mizik and Jacobson (2004) prove that, for three drugs investigated, the *effect of detailing* (sales call) had a positive statistically significant effect *on prescriptions* (Mizik and Jacobson 2004). This is also proven by Manchanda and Chintagunta (2004) and Gonul et al. (2001) in other studies (Gonul et al. 2001; Manchanda and Chintagijnta 2004). In another research on the subject of *sales call elasticity*, it was concluded with a model for sales response that sales call elasticity is negative when no samples or handouts are given during a sales call (Parsons and Abeele 1981). That samples have a positive and significant effect on prescriptions in detailing is also found by Gonul et al. (2001).

3.1.3. Sales Force Accountability and Decision Making

Sales force accountability and decision making is of interest when managing the sales force, especially during new product launch, as company management has no guarantee of sales force commitment (Atuahene-Gima 1997).

Sales Force Accountability

Motivation of the sales force could also be included in the broad spectrum of accountability. Ingram (2004) identified and defined three subcategories in the area of accountability and suggests areas of further research. Of the three accountability issues identified, the first was the justification of sales as an important marketing communications tool. For managers to appreciate this, salespeople should be a part of both designing and delivering relevant sales messages. The identified opportunity for further research included determining the sales presentation variables such as content, sequence, style, amount of two-way interaction and methods for addressing questions and objections. Also included are exploring presentation strategies and accurately identifying reasons for sales presentation success and failure as well as investigating how a sales manager can assist the salesperson in doing this. The second subcategory under accountability refers to the demand from customers to be faced with trustworthy and professional salespeople. The managerial response suggested is to ensure that the ethical

and legal framework is understood by the salespeople. This also includes understanding variations in culture and global market conditions. The identified areas for research opportunities involve how buyers and salespeople differ or agree on unethical behavior, how goal-setting impacts ethical or unethical behavior in addition to the opportunity to study the interactions between ethical climate, control systems, goal-setting as well as how management's role should be in communicating ethical climate. The third subcategory identified is the increasing efficiency and effectiveness of sales operations in which the managerial implication is to find and implement less expensive methods, more effective sales organizational structures and to develop new evaluation procedures including metrics. Ingram (2004) refers to research opportunities in the examination of hybrid coverage models for sales where the integration of personal selling is mixed with other customer contacts. Moreover, suggested research opportunities would be to model sales force decisions such as sales force size, workload, allocations and geographical or territory design as well as measure customer value and return on CRM. Some of the areas suggested as further research have been touched upon by research identified above (Dong-Gil and Dennis 2004; Engle and Barnes 2000).

For a sales force launching a new product it was found that salespeople selling new products had a higher level of education and experience, lower customer role ambiguity, and a positive attitude towards the potential for new products (Atuahene-Gima and Micheal 1998). However, the findings indicated that it would be wrong to assume a simple direct relationship between a salesperson's effort and his or her satisfaction and performance in new product selling, which again shows that accountability cannot be taken for granted within a sales force. The findings of Atuahene-Gima and Micheal (1998), were made in an investigation of the potential moderators of the link between effort in new product selling and satisfaction and performance.

Within pharmaceutical sales force research, the literature includes suggestions for the *characteristics of a good pharmaceutical sales representative*, including criteria such as the ability to close sales, the degree of service orientation, knowledge of the company, its products and its customers, personal appearance, gender, age, as well as ability to learn and think analytically, which all are recommended when hiring, training and managing the pharmaceutical sales force (Parsons and Abeele 1981; Tengilimoglu et al. 2004). Further, it is concluded that the characteristics of a good pharmaceutical sales representative are being warm (empathic), easy going (socially oriented) and cooperative (approval seeking), which was argued to be in line with earlier research (Sager and Ferris 1986). Sager and Ferris (1986) also propose in this study a two-facet process for hiring pharmaceutical sales representatives. In other pharmaceutical industry research, a study investigated job-performance and job-related behavior of pharmaceutical sales representatives with the aim of finding the impact of task-specific behaviors as opposed

to adaptive behavior on sales performance (Blackshear and Plank 1994). Blackshear and Plank (1994) found that both managers and salespeople reported that task-specific behavior was important to performance, whereas adaptive behavior had a weaker impact. However, the authors argue that the evidence calls for a re-evaluation of adaptive behavior to sales effectiveness. Giacobbe et al. (2006) conducts a research that investigates the relationship between adaptive selling behavior and selling performance, where a multi-division health-care product company (including pharmaceuticals) represented one of two subgroups (Giacobbe et al. 2006). The findings from Giacobbe et al. (2006) strongly indicate that adaptive selling behaviors are positively associated with the performance of salespeople and that the sales situation moderates the strength of the relationship. Furthermore, with concepts and theory from organizational literature, Futrell et al. (1983) have developed a model about *salespersons' motivational behaviour* (Futrell et al. 1983). Parts of the model are tested on a US pharmaceutical company and a hospital supply company. The findings reveal that the relationship between effort and performance is surprisingly low, although statistically significant. Further, the low performance-satisfaction correlations imply that salespeople who are rated as high performers do not necessarily enjoy high levels of satisfaction. In addition, they found that the links between five job satisfaction facets and the propensity to leave the job have a clear inverse relationship between satisfaction to and propensity to leave.

Sales Force and Decision Making

The selling job has changed and evolved over time and some literature has linked the different stages of evolution to the impact of key sales management decision areas (Wotruba 1991). Wotruba (1991) identifies five stages in the evolution of selling and lists the related literature and its development in chronological order. An important contribution is the summaries concluded by Wotruba (1991) on how these evolutionary stages impact key sales management decision areas. The five areas identified to be impacted are *organizational design, recruiting and selection, training, compensation and control, and performance evaluation*. The evolutionary stages are defined as the *Provider Stage*, in which selling is limited to accepting orders for supplier's available offerings, the *Persuader Stage*, which involves attempting to convince any and all market members to buy, the *Prospector Stage*, in which selling includes seeking selected buyers who are perceived to have a need for the available offerings, the *Problem-Solver Stage*, in which the selling involves obtaining the participation of the buyers in identifying their problems and translating them into needs, and the *Procreator Stage*, in which selling is defined as creating uniquely tailored solutions to buyers problems or needs by means of active buyer-seller collaboration. According to Wotruba (1991), these stages of evolution are cumulative, and are defined as a growing and enlarging selling job, where the previous stage does not dismiss, but rather includes the preceding stages of necessary capabilities.

Furthermore, the author argues that the result of this is that the selling strategy expands in complexity and that this is made necessary by the growing intensity of competition and the increasing sophistication of buyers. It is also argued that the intensity of competition and sophistication of buyers differs from market to market and it is even stated that “the practice of selling may not be at the same stage at a given time in all industries, or in all companies in the same industry or even in all components of the total sales organization within one company”. To still be effective, each additional step imposes greater costs as well as the need for more time and talent. This implies that in the move towards the later stages, more attention has to be paid to efficiency, because as the firm’s selling focus evolves from stage to stage; policies and procedures for managing the personal selling function will also change. A very important note by the author is that an advanced step is not necessarily associated with greater success, but it might be necessary based on the market dynamics of competitors and buyer sophistication as argued above.

As for most companies, making marketing decisions is important for pharmaceutical companies and the support for these decisions is discussed in the literature, for example, in terms of Marketing Decision Support System (MDSS), diagnostics for new products and the product launch process. Further, research on the tactical execution that focuses on a launch situation provides examples of contributions to this. With the great uncertainty in the marketplace when the launch strategy for a pharmaceutical product is formulated, it is suggested that the marketing department will be better off taking a more “holistic” view. To be more specific, a Marketing Decision Support System (MDSS) is proposed for building the launch strategy (Rao 2000b). The usage of the MDSS within the pharmaceutical industry is further explored in other research, but with focus on pricing (Rao 2000a). The model from this investigation includes various pricing-related decision-making processes while capturing the interrelated dynamics of all key players with the aim of providing knowledge of a new product’s potential performance over time as a basis for resource allocation in marketing and sales. Furthermore, within an investigation, a more streamlined marketing approach is described to market new pharmaceutical products more efficiently (Rao 2002). The author continues to refer to the “holistic” view explored in earlier research and the approach is based on a more systematic use of marketing research. This approach is argued to lead to benefits in the sales force, such as more optimized sales force sizing, structure and alignment. The proposed market-driven approach enlarges traditional methods, referred to as historically generated prescriptions and analogue product comparison. The enlarged approach would include customer viewpoints, customer profiles and present and future customer practices.

Diagnostics for new products in areas such as early estimate of long-run market share and the breakdown of total sales due to marketing activities, word-of-mouth and repeat sales, are provided in a model developed by Hahn et al. (1994) (Hahn et al. 1994). The

model was tested with 21 ethical drugs in seven different product classes to calibrate a four-segment trial-repeat model. The model is developed to model sales of a frequently purchased product early in its life cycle. Furthermore, the model covers four customer segments in the market. In addition, the effectiveness of the marketing efforts for the product to be introduced, word-of-mouth communication and buyers' trial experience could be analyzed with the model. The situation is described as when a new product is launched into an established product class, consumers become aware of the product through the marketing efforts or through word-of-mouth. It is assumed that these two sources of indirect product experience lead to trial. In the model, the number of new prescriptions is used as a measure for sales. It is concluded that the most important activities for pharmaceutical sales are sales force activities and advertising in medical journals, which makes the authors use total expenditure for detailing and advertising as the measure of the firms' marketing activities. One of the findings suggested that activities on trial are mainly related to product quality attributes. In addition, the authors found that word-of-mouth was associated with product class characteristics and market competitiveness. It was also found that the repeat purchase was related to product quality attributes and market characteristics such as size, growth, competitiveness and familiarity.

Concerning product launch process support, a model to guide the product launch process for pharmaceutical companies launching their products is proposed with the objective of constructing a valid and user-friendly new product launch strategy (NPLS) model in which marketers can eliminate risk or reduce specific types of risk associated with a successful new pharmaceutical product strategy (Trim and Pan 2005). It should be seen as a decision-foundation on which to build a brand positioning strategy that will result in a successful positioning within the industry. Three key strategic decisions have been identified to precede the product launch. These three decisions concern: (a) product strategy; (b) market strategy; and, (c) firm's strategy. A second key component of the proposed model is the *pharmaceutical industry factors*. The suggestion of Popper and Nason (1994), who argue for the specificity of the pharmaceutical industry, which governs its strategies and operations, is followed. The third and final component of the proposed model is the *tactical product launch decisions*. These are adapted from a set of references but with no clear specification of the specific origins of each factor. This includes four areas: (i) decisions regarding the *product*, including branding and assortment; (ii) decisions regarding the *prices*, including level and strategy; (iii) decisions regarding the *promotion*, including expenditure and instruments; and, (iv) decisions regarding the *distribution*, including channels and expenditure. The model is then validated, where the validation consists of two interviews with two product managers within one pharmaceutical company, and a focus group with product managers and sales managers, within the same pharmaceutical company. It is stated that on the whole, the

interviewers and the focus group participants find the proposed model to be valid. Two limitations of the proposed model are given. First, the assumption that there is a one-way relationship between the strategic and the tactical decisions in a product launch process; rather, there may be an interaction between these. The second limitation is the lack of a feedback loop for evaluation of the conducted launch.

In research investigating whether launch strategy decisions lead to changes being made by companies when introducing and adding a new product to the sales force, it has been concluded that significant changes are made to the sales management mix (Wotruba and Rochford 1995). As a conclusion, the investigation summarized that adjustments to quotas are the most frequent changes, while organizational structure is changed least. The investigation focuses on changes which take place within a company and provides no guidance as to what would contribute positively or negatively during launch. However, another investigation found that a larger extent of changes made by the firm within the controllable sales force management mix led to more successful launches (Rochford and Wotruba 1996). In this study it was found that quotas, compensation and supervision/motivation brought about the most changes in these successful firms.

Sales force sizing and structure issues have been investigated in order to support resource allocation decisions. One investigation analyzes the problem of designing the structure of multi-product sales forces within pharmaceutical companies, with a generalized angle on an environment where purchase decisions are made on a straight rebuy or modified rebuy situation (Rangaswamy et al. 1990). Rangaswamy et al. (1990) present a mathematical programming model with the aim of helping firms design the structure of the multi-product sales force. The authors also refer to how some implementations of the applied model have led to improved decision making, results and insights, from which they suggest two important lessons resulting from applying the model to these few cases. The first is that companies with mature product lines who are not achieving their annual profit goals will frequently view the sales force as a cost item. The second lesson is that merely applying the model might not be beneficial from a humane and sales force morale stand-point, as it may recommend substantial downsizing ultimately impacting many people in order to optimize profit, and companies are recommended to examine sales force implications before major changes are made.

3.1.4. Complexity of the Sales Environment

As far as the theme *complexity of the sales environment* is concerned, even if it is not recognized as being unique to sales, the literature argues that as the sales organization has most contact activities with customers, this puts them in the first-line for dealing with rapid changes and the increased pressure to perform to higher standards (Ingram 2004).

Much of the literature describing the complexity of the sales environment in general, and for new product launch and pharmaceutical sales forces in particular, is presented in Chapter 1, Introduction. However, within the area, some general categories are identified and gaps in the literature for further research can be highlighted.

The first category includes the increasing expectations from customers which are argued as being fueled by buyer dominance, slow-growth economics and increasing competition (Ingram 2004). In this category, some research opportunities have been highlighted. First, a recommendation to scientifically and more explicitly define the customer centric firm has been made, followed by the recommendation to define the role of the sales organization in a customer-centric firm and to examine the impact this would have on sales organizations and individuals' performance and effectiveness. The second category highlights the issue of change and how it occurs more frequently. Examples such as rapid advancing of sales technology, new product development, and accelerating product life cycle were put forward (Ingram 2004). Proposed managerial responses to these issues are to put sales in a more strategic position for the company and to move towards a learning organization with more initial and ongoing training. Identified research opportunities in this category are to work on the conceptualization and measurement of the sales strategy construct, specifying optimal process for information handling. Also, examining CRM and how it can be used as a strategic business capability for both the firm and the sales organization were put forward as other important areas. The third identified area is how the buying center interaction is becoming more complex, and the influencers of purchase decisions are increasing (Ingram 2004). The managerial response should be to develop sales strategies and tactics suited for different buying centers, and to ensure that salespeople can be able to analyze lines of power and influence. For further research in this category, a suggestion for research that determines how effectiveness differs from group or individual was proposed. The fourth category in this theme addresses the issue of sales organizations becoming more global and the fact that the customers are becoming more diversified (Ingram 2004). The research opportunities here would be in the area of the identification of sales people adaptiveness to multi-cultural customer types. Also, the selection and training methods for evaluation and education of intercultural competence are of interest together with how to handle distance communication and related supporting technology.

During launch, complexity is added to the environment depending on the new product's level of innovation. The area of innovativeness is another area of the research literature where information about new product launch and sales has been found. For example, it has been found that the relation between product innovativeness and product performance is U-shaped, concluding that an innovative product has significant impact on new product performance, but most interestingly, also giving non-innovative revisions and cost improvements a significant relationship to product performance as well (Kleinschmidt and Cooper 1991). Innovativeness is not alone in adding complexity to the new product launch; rather there exist a whole range of criteria. This is for example illustrated by a developed model which consists of three sets of variables; launch strategy, market characteristics, and new product performance (Hultink and Robben 1995). The model is build on earlier literature based on Montoya-Weiss and Calantone (1994) meta-analysis of determinants of new product performance and studies within the same area (Choffray and Lilien 1986; Green et al. 1995; Hultink et al. 1997; Hultink and Robben 1995; Montoya-Weiss and Calantone 1994). The conclusion is made that earlier work relied on industrial and high-tech products. This research aimed to expand the scope with samples from consumer and industrial products cross-industry. The results concluded for both consumer and industrial products, that the impact of launch strategy was greater for market acceptance than for product performance. Furthermore, and in line with previous studies, market acceptance and product performance are driven by multiple factors, e.g. the product's innovativeness, branding and breadth of assortment. The overall results suggest that to achieve successful new product performance, important factors are an innovative product, a broad range of complementing products, early timing, capitalizing on existing brand names, specific penetration objectives per market, pricing and competitive awareness.

The complexity of pharmaceutical sales force operations is described in more detail in section 1.6, The Pharmaceutical Sales Force Operations and Life Cycle Challenges, where it is concluded that the pharmaceutical sales force operations are increasingly encountering challenges in the market place in the form of stricter regulations and restrictions, a trend which has been observed in most countries around the world (Dutton and Reece 1996; Smith et al. 2002). Other literature highlights and adds to this complexity from a slightly different angle. For example, the issue of *over-detailing of sales force leading to diminishing return* at individual physician level in certain product categories is true (Manchanda and Chintagijnta 2004). Also it was found that excessive detailing or samples are counterproductive, suggesting an inverted-U shape for these activities (Gonul et al. 2001). Moreover, other literature suggests the same issue of diminishing return on over-detailing and other sales force activities, and proposes increased effectiveness by building better long-term relations with physicians (Elling et

al. 2002). These findings include improved segmentation, providing better information, and redefining the sales manager's role as well as including concepts such as life-time value of physicians' prescribing behavior. With all these suggestions driving cost upwards at a time when cost efficiency and savings are sought, it is further concluded, from the *resource-based view*, from an examination of the sustained competitive advantage in the U.S. pharmaceutical industry, that sales force expenditures have a direct impact on sustained competitive advantage (Yeoh and Roth 1999). Also, they found that sales force expenditure positively and indirectly affects approval success of NCE (New Compound Entity). Yeoh and Roth (1999) concluded that in the pharmaceutical industry, sustained competitive advantage is dependent on: (1) sales and technological strength; and, (2) having a unique, superior product with a differentiated advantage in the market.

3.2. The Key Constructs and Models

In this section, the most relevant constructs and models used in the formulation process of the Preliminary Model and the Research Model will be presented. These will be reviewed and presented in greater detail than the other publications reviewed, based on their importance for this research's model formulation process. In addition to the review within this section, the models will be further described and presented in Appendix 1. These six publications also include the different constructs and definitions which are the main foundation for the definition of Sales Force Readiness during New Product Launch.

The first three identified key scientific contributions are developed by Atuahene-Gima (1997), Hultink and Atuahene-Gima (2000) and Micheal et al. (2003). These three publications include concepts and constructs within the scholarly area of new product adoption. The other three identified scientific contributions are developed by Baldauf and Cravens (1999), Piercy et al. (1999) and Piercy et al. (1997) and are derived from the scholarly research area of sales organizational effectiveness.

3.2.1. New Product Adoption

The most comprehensive constructs and model are found within the research stream about the broader concept of new product adoption in the sales force (Atuahene-Gima 1997). The constructs and model were developed by Atuahene-Gima (1997). Atuahene-Gima (1997) attempts to fill the argued gap in the literature regarding which factors affect sales force adoption of new products. The conceptual comprehensive model (see Appendix 1) was built describing the factors and outcomes of new product adoption by the sales force and propositions and managerial implication of the model were suggested.

The model and propositions were not empirically tested in this publication. Some examples from case studies are used to highlight managerial importance, stating that changes in both sales force organization and management practices might be necessary during launch. Also, it was argued that there may be sales force resistance to management changes and that other changes might lead to dysfunctional behavior among the sales force. It is of importance that the sales force be treated as internal customers and that the sales representatives must “buy” the new product in order to achieve success in new product selling. New product adoption by the sales force is defined as “the interaction between the degree to which they accept and internalize the goals of a new product (i.e. commitment) and the extent to which they work smart and hard (i.e. effort) to achieve these goals”. The construct is built on the two dimensions, commitment and effort, and is based on the assumption that the sales force is an internal customer. This definition is in line with the innovation adoption literature. By developing this model, Atuahene-Gima (1997) forms a good foundation in this area of the literature for further development and empirical testing. Atuahene-Gima (1997) builds the concepts, model and propositions from a broad range of sales force management and innovation literature, e.g. Cravens et al. (1993), House and Mitchell (1974), Jaworski and MacInnis (1989), Mathieu and Zajac (1990), Meyer and Allen (1991), Oliver and Anderson (1994) and Ouchi (1979) (Cravens et al. 1993; House and Mitchell 1974; Jaworski and MacInnis 1989; Mathieu and Zajac 1990; Meyer and Allen 1991; Oliver and Anderson 1994; Ouchi 1979). The formulation of propositions is well grounded in earlier research and an academic line of arguments. The propositions are formulated within the categories of salesperson characteristics, organizational factors, sales management support, sales control, product innovativeness and the outcome of new products by the sales force. The model takes into account the moderating of product innovativeness and market competition. It is argued that several factors may be moderators between new product adoption and dysfunctional behavior and outcome. Five propositions are formulated here. The author argues that this theoretical framework set-up will open up for empirical research in the field of the role of sales force in the new product process as the definitions are sufficiently broad to integrate selling of both products and services as well as a multiple level of analysis such as individual, sales team and the whole firm’s sales force. The publication is focused on the individual salesperson. Among the benefits of the model is the fact that it appears to be a relevant model and proposition for the conception and understanding of the sales force’s adoption of a new product. It is further theoretically grounded in an extensive literature review. The model includes and integrates interesting and relevant constructs about product innovativeness and intensity of market competition, which are typically eliminated in other models. One limitation is that, when written, the model is a theoretical construction and lacks any empirical experience and testing. Also the model is slightly too complex; and will probably need to be divided when tested.

Among the studies investigating a more specific area of the conceptualization of new product adoption in the sales force is the research done by Hultink and Atuahene-Gima (2000), in which they develop and modify the model proposed by Atuahene-Gima (1997) for empirical testing (Hultink and Atuahene-Gima 2000). This study examines the effect of new product adoption by sales force on selling performance, and the potential supervisory and market factors that moderate this linkage. They found that sales force adoption is positively related to selling performance. It is clearly acknowledged that earlier studies have found and suggested that the sales force is a major contributor to new product success, but they were conducted without any deeper investigation into the adoption of the new product by the new sales force. The model (see Appendix 1) and research also looked at supervisory factors such as sales controls, internal marketing of new product, training, trust, field attention and market volatility. They found that internal marketing and market volatility were positively related to new product success, defined as selling performance. Further, results reveal that behavior and outcome controls have differential effects on sales force performance when selling a new product; where the implications of behavior control (lack of discretion and flexibility) are presented by the sales force, outcome control is positively related to salespeople's selling performance. Furthermore, the findings showed that training and field attention weakened the adoption-performance linkage, with a possible explanation being culture differences in the country of the study, the Netherlands. They argue that based on the culture in the Netherlands, salespeople interpret these two variables as "micro-managing" and having the supervisor looking over their shoulders. Hultink and Atuahene-Gima (2000) adopt the Atuahene-Gima (1997) definition of sales force new product adoption being the degree to which sales people accept and internalize the goals of the new product (i.e. commitment) and the extent to which they work hard and smart to achieve these goals (i.e. effort). The construct is two dimensional; *commitment*, which is attitude, including acceptance of the new product, emotional commitment to make it a success to fulfill self-interest objectives and *effort* being the salesperson's force, energy, persistence and intensity of activities to reach the results. An important notion for the definition suggested by Atuahene-Gima (1997) being two dimensional is his argument that, although the two dimensions could have independent effects on selling performance, effort alone without commitment to its goal does not constitute adoption. The argument is built on the fact that effort without salesperson commitment could be misdirected at activities that lead to short-term sales but are non-favorable to the long-term success. The conclusion would be that a combination of the two dimensions would have greater impact on selling performance than each dimension alone. This is argued by Hultink and Atuahene-Gima (2000) to be further supported by innovation adoption literature. Eight hypotheses are formulated in the publication. These hypotheses are to some extent grounded in the literature. The data sample was high technology firms in the Netherlands. The choice of industry was based on the assumption that this industry would be more likely to have launched new products

recently. A pre-tested questionnaire was sent out to sales managers for distribution in the sales force. The instrument was developed and well tested. The final sample size was 97, which was a response rate of 23%.

The research provides opportunities in terms of identifying many areas of research yet to be explored. One of the limitations identified, to some extent even by the authors, is the low relevance of the research results in terms of being cross-industry and conducted only in the Netherlands market. The study is of an exploratory character with few tested moderators. The relationships between the mediators are not verified, and the sample size is small. Moreover, the results are based on collected data from the perception of sales representatives only.

A further addition to the investigations of a more specific area of the full conceptualization of new product adoption in the sales force is the research conducted by Micheal et al. (2003). Micheal et al. (2003) build their construct on similar concepts described about new product adoption in the sales force, but expand on the concepts of newness that the product has brought to either the firm or the market (Micheal et al. 2003). The concepts are influenced by e.g. Kleinschmidt and Cooper (1991) and Rochford and Wotruba (1996) (Kleinschmidt and Cooper 1991; Rochford and Wotruba 1996). The model (see Appendix 1) does not include the concept of measuring performance, which is acknowledged as a weakness by the authors. Also, the focus and research aim is different in terms of the investigation being into how firms adjust sales management strategy for new product launch. In other terms, they investigated the relationship between the type of newness of a new product and the sales force changes accompanying its launch by the sales force. Michael et al. (2003) concluded that the type of newness of a product does affect the incidence of changes made to the sales management strategy of the firm introducing the new product. In general, firms with not-new-to-the-market but new-to-the firm products made more changes in sales strategy than did firms with new-to-the-market and new-to-the-firm products, with the exception of the strategy categories of supervision/motivation and compensation. It was considered interesting that the results showed that, in general, firms with the greatest degree of market newness do not make the most adjustments for products. The authors formulated and tested four hypotheses. These hypotheses were tested in two ways: 1) the incidence of sales management strategy changes by measuring the percent of firms making at least one change in each sales management strategy category and in aggregate; 2) measurement of the average number of changes made in each sales management strategy category and in aggregate. The sample population was 1,100 firms with 30 or more employees. The subjects were selected from a commercial source of Australian manufacturing firms. After the selection based on set criteria, 378 sales managers were

sent a pre-tested mail questionnaire. The response rate was 51%, resulting in 187 questionnaires that could be categorized properly.

The most relevant part of the Michael et al. (2003) publication is the model and how well grounded it is in earlier research. Benefits of the model are the inclusion of the six categories for sales management strategies with the addition of the three categories for product newness. Furthermore, the model builds perceptual-logical elimination of external factors. The limiting factors are first, that the research only indicates that things change and in which specific areas of sales management strategy this occurs. The missing pieces are the reasons for these changes being made, which ones are most important and most critical, and which of these changes is successful. This last issue is identified in the article and proposed as a recommendation for further research. Also, the market focus is in Australia and thirdly the subjects are cross-industry.

The three publications discussed above included relevant models representing the main contribution to the formulation of the Preliminary Model, which is used in this research as a base for conducting case studies and expert interviews. They also provided important information to be used in both the formulation of the Research Model and for interpretations and recommendation of the results.

3.2.2. Sales Organizational Effectiveness

The concern here is new product launch, and as stated above, the constructs of the Preliminary Model and Research Model were chosen in preference to the construct developed within the new product adoption models. The reason for this was that the constructs in these models have been developed, tested and validated with learning about sales force strategy for new product launch as a main research goal, which fits well with the scope of this research. The following three scientific contributions within the research area of sales organizational effectiveness did however include very important constructs for the whole formulation process for the Preliminary Model and the Research Model.

In the fourth key publication, identified within sales force effectiveness literature, Piercy et al. (1997) suggest that their model (see Appendix 1) is a summary view of the approaches shared by several studies in this research stream of sales organizational effectiveness (Piercy et al. 1997). The model proposes five categories of sales force operations that determine the sales organization's effectiveness. The investigation shows that there are major differences between efficient and inefficient sales organizations. However, it is concluded that it is not easy to explain what determines these differences.

In the publication, some arguments are included to try to clarify how the construct of performance of salespeople is used in the effectiveness literature. The difference between “the effectiveness of the sales organization” and “the performance of salespeople” is explained in terms of effectiveness as the overall organizational outcome. Organizational effectiveness is usually measured as sales revenue, profit contribution, or the like. On the other hand, sales force performance is defined as the working behavior of salespeople and the results they achieve. High sales force performance is expected to contribute to the effectiveness of the sales organization. Other factors that may also influence overall effectiveness, outside the control of the salesperson, are factors such as competitive behavior, market potential, and market change. Piercy et al. (1997) argue, with support from earlier literature (Anderson and Oliver 1987; Challagalla and Shervani 1996; Oliver and Anderson 1994), that a salesperson’s behavior performance in such activities as planning sales calls and involvement in team-based selling may make a significant contribution to sales outcome performance and, in turn, sales organization effectiveness. It has also been found; with support from the literature (Babakus et al. 1996; Cravens et al. 1993; Cravens et al. 1992; Grant and Cravens 1996), that superior sales force behavior performance is directly related to superior outcome performance.

The research by Piercy et al. (1997) collected data from 144 field sales managers in companies in the United Kingdom and the aim of the sampling plan was to include organizations in different environments, following an approach employed in other similar studies (Babakus et al. 1996; Cravens et al. 1993; Grant and Cravens 1996). The objective of the research was to find sales organizations with relatively high performance and to examine why differences exist. They formulated five more specific research questions to gain wider knowledge of the source of sales organizational effectiveness. The first question addressed the relationship between salesperson compensation (as a control mechanism) and sales organizational effectiveness. They found that the most effective sales organizations are those where salary is a high proportion of total compensation, but rarely comprises the total compensation package and that there is typically an incentive payment in the 5-25 per cent range while in less effective organizations the incentives element is lower. The second question addressed the salesperson characteristics associated with higher effectiveness and in this instance the result showed that the effective organizations are characterized by high salesperson motivation. Thirdly, for the question addressing the sales force performance that produces higher sales organization effectiveness, they found that high outcome performance stands out in terms of a characteristic of the highly effective sales organizations. Selling activity performance around sales presentation and technical knowledge are higher, but not significantly so, while non-selling activities, such as support, planning, adaptiveness, and teamwork are higher and significant. The fourth question addressed the sales management control practices that appear to be related to

higher effectiveness. Here the overall findings were that field sales managers spend significantly more effort on behavior-based control in effective organizations. The fifth question addressed the structural or organizational issues that provide a salesperson with the opportunity to achieve superior performance and higher sales organization effectiveness, where they concluded that organizational design is also an important driver for effectiveness in sales organizations. An interesting finding was that the units dedicated to the more effective group (better; sales volume, market share, profitability and customer satisfaction), were larger but they sold less per head from a smaller customer base, had lower new customer sales per cent and spent more time selling, and their selling costs ran substantially above the level of the other. Based on this, they concluded that if the real achievements in effectiveness are to be found, conventional metrics such as call rates and expense ratio, are not simply lacking insight, they may be positively misleading.

Some of the identified benefits with the model developed by Piercy et al. (1997) are the proposed five categories for sales force organization efficiency and also the identified interrelations between these categories and sales organization effectiveness. The items in the model were developed and tested in earlier research (Cravens et al. 1993) and are grounded in the literature area of outcome and behavior performance in selling (Anderson and Oliver 1987; Oliver and Anderson 1994). The research has only been conducted in the United Kingdom market. The survey and the subjects of the research are cross industry as well as multi-type sales forces (generalists, product-market specialists and product-customer specialists), making it less relevant for the pharmaceutical industry targeted in this research. Also, the measurement of the sales organization is based on closing a deal, which is not possible to the same extent in the pharmaceutical industry.

In the fifth publication, also identified within the area of sales force efficiency, Baldauf and Cravens (1999) define and examine sales organization effectiveness and hypothesize relationships between constructs, which they argue are potentially useful in explaining differences in effectiveness (Baldauf and Cravens 1999). Both salesperson and sales organization constructs are included in their model (see Appendix 1). They define sales organization effectiveness as a summary of organizational outcomes (e.g. sales, volume, market share, profit contribution, or customer satisfaction) to which the salesperson is a partial contributor (Churchill et al. 1997). The research is focused on field sales unit level instead of the entire sales organization, with respondents being field sales managers responsible for direct supervision of assigned salespeople.

The study was conducted in Austria and the research methodology and employed research instrument were adopted for this market. An eight-page questionnaire was used

and responses were obtained from 159 sales managers in 79 companies giving a response rate of 39%.

Baldauf and Cravens (1999) have developed five main hypotheses. Their work is based on earlier research (Beswick and Cravens 1977; LaForge and Cravens 1985; Ryans and Weinberg 1987). The first hypothesis suggests that the greater the extent of monitoring, directing, evaluating, and rewarding activities by field sales managers, the higher the level of sales unit effectiveness. They received mixed support for this hypothesis. There was stronger support on directing activities which gave significance over all four effectiveness variables. The second hypothesis, stating that field sales managers who are more satisfied with their unit's sales territory designs will display relatively high sales unit effectiveness compared to managers who are less satisfied with the design, found strong support in the results. The third hypothesis was divided into four parts, being that the greater the extent that a sales organization's salespeople have the following characteristics; intrinsic motivation; recognition motivation; sales support orientation; customer orientation, the higher the effectiveness of the sales unit will be. Intrinsic motivation and recognition motivation were found to be significant for all effectiveness measures. Sales support orientation was perceived to be significant in effectiveness measures 1, 2 and 4 and customer orientation only in effectiveness measures 2 and 4. The fourth hypothesis formulated as; higher levels of sales unit effectiveness will be found in organizations where salespeople display relatively high performance for the following aspects of behavioral performance: Technical knowledge; Adaptive selling; Teamwork; Sales presentation; Sales planning; Sales support, was found to have overall strong support for all aspects, with the exception of technical support and sales support. The fifth hypothesis, that higher levels of sales unit effectiveness will be found in organizations whose salespeople display relatively high outcome performance, gained strong support in the results. They concluded that the role of sales managers in many organizations is shifting away from command and control management toward a coaching style of management. Also, this study validates and reinforces previous studies with similar constructs. The study was conducted cross-industry and does not take into consideration the product's position in the lifecycle. Furthermore, the study does not seem to address interrelations between the determinants.

In the sixth key publication, and the third identified in the sales force effectiveness literature, Piercy et al. (1999) evaluates the determinants of sales organization effectiveness with the purpose of examining important relationships between sales management control, sales territory design, sales force performance and sales organization effectiveness (Piercy et al. 1999). In the article, the authors elaborate on the differences and similarities of sales organization effectiveness and sales force performance. According to their line of argument, the performance of sales

representatives contributes to, but does not completely determine, sales organization effectiveness. The view is that salespersons performance should be restricted to factors under the control of sales representatives, whereas sales organization effectiveness assessments are overall results determined by many situational factors including sales representative performance. Piercy et al. (1999) refers to earlier research with empirical support to justify the suggestion that organizational effectiveness and salesperson performance are related but conceptually different constructs (Beswick and Cravens 1977; Cravens et al. 1972; LaForge and Cravens 1985; Ryans and Weinberg 1979; Ryans and Weinberg 1987). Their findings support that the variations in sales organization effectiveness are explained by changes in the environmental factors (e.g. competition) and organizational factors (e.g. management control systems, advertising spending and brand image) as well as by salesperson factors, which are broader and include salesperson performance.

The study was conducted among sales organizations in the United Kingdom. The data was collected using a postal questionnaire. The questionnaire used was adapted from instrument used in previous research (Babakus et al. 1996; Cravens et al. 1993; Grant and Cravens 1996). From the sent questionnaires 144 responses from 62 different sales forces were received (approx 25% response rate).

The empirical research data collected showed that, overall, effective sales organizations are those that are both well-designed and have high performance sales forces. The research validates and reinforces previous studies with similar constructs. It also suggests that cultural differences may be determinative. Seven specific hypotheses were formulated and tested in the research. The first one argued that the higher the level of sales force behavioral performance, the higher the levels of sales force outcome performance, and received strong support in the results. High, positive correlations between outcome performance and the various components of behavioral performance were found. The second hypothesis suggested a positive association of the fact that the higher the levels of sales force outcome performance, the higher the level of sales organization effectiveness. The third argued that the greater the extent of behavior-based sales management control, the higher the level of salesperson behavioral performance. This third hypothesis received substantial support, with a few exceptions. However, the authors concluded that the evidence was convincingly strong for support of the hypothesis overall. The fourth suggested that, the greater the extent of behavior-based sales management control, the higher the level of satisfaction with the sales territory design, and the results showed support for the directing and evaluating components of sales management control, but not for the monitoring and rewarding components. The fifth hypothesis, i.e. the greater the extent of satisfaction with sales territory design, the higher level of sales organization effectiveness, did receive strong support. The sixth

suggested that the greater the extent of satisfaction with sales territory design, the higher the levels of sales force behavioral performance, also received strong support. The seventh and final hypothesis, i.e. that the greater the extent of satisfaction with sales territory design, the higher the level of sales outcome performance, received strong support in a significant correlation.

The model (see Appendix 1) developed by Piercy et al. (1999) is valuable as it identifies many important aspects of the sales management factors. However, the model does not address the individual characteristics of the sales person as do the other models. The empirical research has been conducted as a cross-industry survey and covers the United Kingdom market. Furthermore, the product's position in the lifecycle has not been taken into consideration.

3.7. Conclusion

Based on the review of Sales Force Management (including Selling), Product Launch, and Pharmaceutical Industry literature, it can be concluded that these areas are developing as research domains but that there exists limited research related to sales force management within the pharmaceutical industry and that it is almost non-existent for the Swedish market, which is the focus of this research. Even if the conclusion is that the research focus selected here – sales force readiness during new product launch in the pharmaceutical industry in Sweden – is as such unresearched, there are still interesting findings in the literature on which this research has been built.

A key lesson learned is that there are strong indications that evidence, or at least rational discourse, does exist for issues when sales force management research is compared. To be able to better compare the outcome of research, the studied subjects should be homogenous in terms of the sales forces' need for internal capabilities and know-how as well as to what extent their customers operations are conducted (Wotruba 1991).

The broader area of the literature on the full discipline of Selling and Sales Force Management has increased substantially in the last decade and it has started to mature as a field (Baldauf et al. 2005; Dinu and Tachiciu 2009; Dong-Gil and Dennis 2004; McBane et al. 2003; Moncrief et al. 2000). It has also been concluded that even if there is a rapid increase in the number of publications, most of the research areas within selling and sales management are still in their infancy (Ingram 2004). There have been several efforts at writing overviews of the field of sales force management and selling. The overview publications have approached the field from somewhat different directions (Baldauf et al. 2005; Ingram 2004; Wotruba 1991). For example, Baldauf et al. (2005) are

making an effort to synthesize various sales management control research initiatives to guide the development of an agenda for further research. Of the articles identified by Baldauf et al. (2005) in the field of sales force management control, including empirical work, over half of the research knowledge came from data gathered in the United States. However, it was concluded that empirical studies have also been conducted in Europe (Austria, Germany, Greece, the Netherlands, and the United Kingdom), Australia, and Asia (China, India, and Malaysia). In another overview, Ingram (2004) makes an effort to identify critical issues in selling and sales management and attempts to illustrate how progressive sales organizations are responding to these issues and also presents related research opportunities. Ingram's (2004) article and themes are very well grounded in a broad range of sales force management literature. Further, Wotruba (1991) has conducted an inductive analysis of how selling jobs change and evolve based on available literature. There have also been studies within the selling and sales management literature that examine this research fields' productivity concerning publications as well as which authors and institutions that are most represented. They conclude that the field is growing and the importance of selling and sales management as a sub-discipline of marketing has increased substantially (Bush and Grant 1991; Bush and Grant 1994; Moncrief et al. 2000; Swan et al. 1991). In addition, there is literature that has worked to index and classify the selling and sales management discipline (McBane et al. 2003).

Much of the literature describing both the sales environment and new product launch for pharmaceutical sales forces is presented in Chapter 1, Introduction. However, the main themes identified and presented above, match well to the defined Preliminary Model and Research Model. The themes were; *Sales Force Management Control*; *Internal and External Sales Force Collaboration*; *Sales Force Accountability and Decision Making*; and *Complexity of the Sales Environment* (Baldauf et al. 2005; Ingram 2004; Wotruba 1991), and these formed the structure for the literature review presentation, together with the six identified key scientific contributions which were presented in more detail. The overview of *sales force management control* summarizes an overview of two research paths in the sales management literature (Baldauf et al. 2005) which are of great importance for this research and are to a major extent visible in the Research Model. Here, the basic constructs have been developed by Oliver and Anderson (1987) and Jaworski (1988), but control within these constructs is defined differently. Under this framework of control, the relevant literature on sales forces management control for new product launch and in the pharmaceutical industry is added to make the focus more relevant. The other three main themes, also visible in the Research Model, were described as 1) *collaboration, both internal and external to the sales organization*, is necessary for survival and success; 2) the need for sales executives, sales managers, and salespeople to be held more *accountable for their actions, decisions and outcomes*; and, 3) *sales environment is becoming more complex* (Ingram 2004). When reviewing these main

themes, the literature concluded that it seems to be hard for the academic efforts to keep the research up to speed in the changing environment. It further implicitly argues for more micro studies of isolated situations, market dynamics, or conditions. This isolated focus seems to gain more specific learning and avoids for example the risk of cultural implications on the applied theories (Ingram 2004).

Concerning the launch process literature, little detail is revealed of the new product launch process in relation to sales force, pharmaceuticals, or the geographical scope of Sweden. This limited literature base is also true for the area of pharmaceutical industry research, within the defined focus of this research. When reviewing the literature on the management of sales forces during new product launch with focus on pharmaceutical products, it was found that the topic was present in the literature but that it was very limited and had no collective focus. Examples and relevant literature directed towards sales force management and also marketing during launch within the pharmaceutical industry are spread in focus in terms of both what is investigated and how the research is conducted, i.e. no research or discourse stream could be clearly identified. The area was found to not follow any specific research stream related to the pharmaceutical industry and sales force, but could rather be divided into two separate groups. The first group is research with the intent to guide managers in the pharmaceutical industry, while the second group includes research that builds on already existing various research streams within the general sales management literature but where the pharmaceutical business is applied as a subject for investigation with the aim of drawing a generalized conclusion. The models and concepts developed and empirically tested are not sufficiently detailed in the research to form any sales force management or sales force readiness conclusions for the here assumed scope. However, two overall conclusions can be drawn from this literature review namely: 1) a new product launch process is of great value for any company, and the findings in this research might feed well into the marketing and sales domain of further exploration and research of the full new product process; 2) marketing and sales force execution, often referred to as a critical contributor in driving the success of new products, is confirmed as very important.

The reviewed literature for the management of sales force during new product launch, not specific to the pharmaceutical industry, was found to have high relevance for this research. Primarily, the area of new product adoption in the sales force stood out as important, together with the area of sales force efficiency, and these areas contributed with six key scientific contributions. Another research stream in the literature, which added value, included some of the investigations from the new product development (NPD) literature. This research stream has some specific sales force or marketing-related studies: however, most are very brief and the conclusions are not specific enough to provide complete understanding of sales force management and launch.

The key scientific contributions, which have laid the foundation for formulating the Research Model and for defining Sales Force Readiness during New Product Launch, are found, as stated above, in the sales force management literature's area of new product adoption and sales force efficiency. In addition to their interesting scientific findings, the six models developed in these publications (Atuahene-Gima 1997; Baldauf and Cravens 1999; Hultink and Atuahene-Gima 2000; Micheal et al. 2003; Piercy et al. 1999; Piercy et al. 1997) formed the scientific base in the formulation and synthesis of the Preliminary Model or generic model for sales force readiness during new product launch. As a final conclusion it can be stated that the literature in the area of the academic fields reviewed here, i.e. Sales Force Management (including Selling), Product Launch, and Pharmaceutical Industry, which has increased in quality and importance, the here assumed research is so far unresearched and its results should contribute with interesting and relevant learning to the existing literature.

4. DEVELOPMENT OF THE RESEARCH MODEL

This chapter opens with a presentation of the Preliminary Model, which was derived from the relevant models identified during the literature review. Next, the outcome of the case studies and the expert interviews will be summarized, followed by the construction of the Research Model, comprising an adaptation of the Preliminary Model with the results of the case studies, expert interviews and findings in the literature. The chapter ends with a walkthrough of the Research Model and its variables.

4.1. *The Preliminary Model*

As described in the Research Approach chapter, the Preliminary Model has been derived and formulated from earlier scientific work. The model is developed as a generic model for sales force readiness during new product launch. The purpose of the Preliminary Model is to make sure that concept and constructs are grounded in the literature and also to form a broad base of variables for the identification, via qualitative research, of potential key success factors (variables in the later defined Research Model), which are relevant within the scope of this research. The detailed formulation process of the Preliminary Model is described in Appendix 2 and shown in a graphical representation in Figure 5.

The formulated Preliminary Model is defined in three stages. The first stage, Circumstance, includes the two categories *type of new product* and *market dynamics*. The **type of new product** is understood here either as a new product type to the world and hence for the company, or that the product type is not new to the world but new to the company or that the product is only a revision or update of a product currently within the company (Micheal et al. 2003). The **market dynamics** are understood here as the nature of the market environment for the product at the time it was introduced (Hultink and Atuahene-Gima 2000).

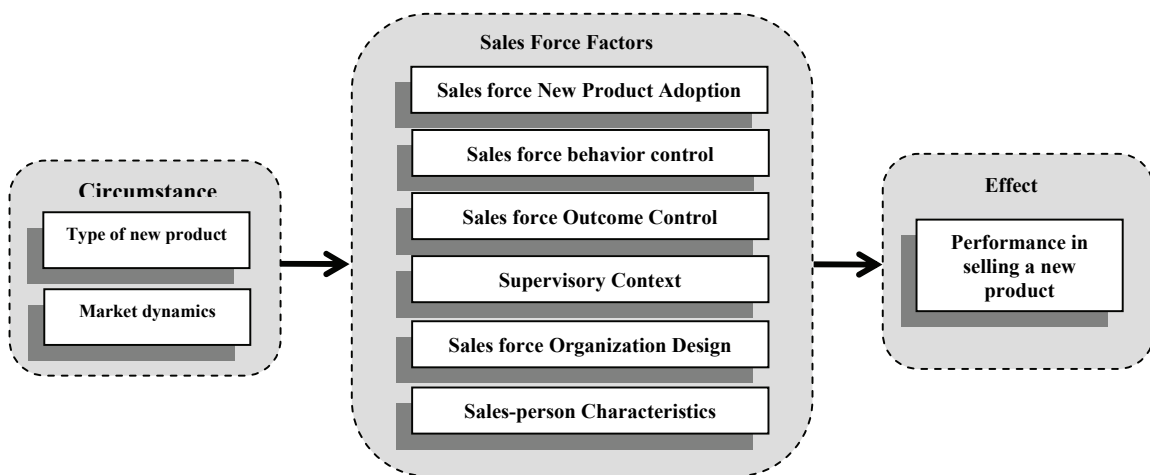
The second stage, Sales Force Factors, includes the six categories: sales force new product adoption, sales force behavior control, sales force outcome control, supervisory context, sales force organization design and salesperson characteristics. The categories are described as follows: **Sales force new product adoption** is defined as the commitment and effort the sales representatives put into the new product, emotionally, in interaction with other sales representatives and in the planning and execution phase (Hultink and Atuahene-Gima 2000). **Sales force behavior control** focuses on how the sales forces followed procedures and the evaluation of how they were held accountable for their actions (Hultink and Atuahene-Gima 2000). **Sales force outcome control** is

described as to what level performance goals were evaluated, weight towards tangible rewards and how the follow-up on these goals was handled (Hultink and Atuahene-Gima 2000). **Supervisory context** includes the level of internal marketing around the sales force understanding of the background and rationale of the product, trust in supervisors and intra-company relationships, training received and the field attention that they were given (Hultink and Atuahene-Gima 2000). **Sales force organization design** is described as the way in which the sales force was organized, e.g. geographic, assigned towards customer type, in teams, etc (Micheal et al. 2003). **Salesperson characteristics** described the salesperson's experience, ability to learn, solve problems and his/her preference for career success (Atuahene-Gima 1997).

The third stage, Effect, is described by the category **performance in selling a new product**, which constitutes the extent to which the product has been successful in terms of market share, volume, uptake in the market, exceeding set targets, achievement of sales managers' objectives and profit generation of old products (Hultink and Atuahene-Gima 2000).

Figure 5: Preliminary Model

Generic model for sales force readiness during new product launch.



The variables and items identified in the Preliminary Model will be further explored in section 4.4, Construction of Research Model, in relation to the outcome of conducted

case studies and expert interviews, both in terms of how they apply to a final Research Model and their base in the literature.

The stages, categories, variables and related items of the Preliminary Model are presented in Table 7, together with its primary sources in the literature.

Table 7: Details of the Preliminary Model

The Preliminary Model (generic model for sales force readiness during new product launch) with its stages, categories, variables, items and primary source within the literature.

Stage	Category/Variable	Items	Primary Source
Circumstance			
	Type of new product	<ul style="list-style-type: none"> new-to-the-market and new-to-the-firm not-new-to-the-market but new-to-the-firm not-new-to-the-market and revisions-to-the-firm 	Micheal et al (2003)
	Market Dynamics	<p>the nature of the market environment for this new product at the time it was introduced</p> <ol style="list-style-type: none"> 1. Stable – unstable 2. Certain – uncertain 3. Changes slowly – changes rapidly 4. Predictable – unpredictable 	Erik Jan HULTNIK, Kwaku ATUAHENE-GIMA. (2000).
Sales Force Factors			
	Sales-force new product adoption	<p>a. <u>commitment</u></p> <ol style="list-style-type: none"> i. Sales Rep emotionally attached to the success of this new product ii. Achieving objectives for this new products has a great deal of personal meaning to the Sales Rep iii. Sales Rep discusses this new product with other salespeople iv. Sales Rep feel a strong sense of duty to ensure the success of this new product v. Sales Rep would be willing to make further investment of my time and energy to support this new product <p>b. <u>effort</u> (formative scale)</p> <ol style="list-style-type: none"> i. Compared to other products you have sold, how much effort did the Sales Rep 	Erik Jan HULTNIK, Kwaku ATUAHENE-GIMA. (2000).

		devote to this new product in: <ol style="list-style-type: none"> 1. Prospecting for customers 2. Planning sales calls 3. Collecting market information 4. Using market information 5. Building customer relationships 	
	Sales-force behavior control	<p>a. Sales people are held accountable for their <u>actions</u> in selling the new product, regardless of results they achieve</p> <p>b. Sales Rep's supervisor monitors the extent to which salespeople <u>follow established procedures</u> pertaining to the new product</p> <p>c. Sales Reps' supervisors <u>evaluates the procedures</u> salespeople use to accomplish the task of selling this new product</p> <p>d. Sales Rep's pay increases and other tangible rewards depend on:</p> <p>d-i. How well I <u>follow laid down procedures</u> pertaining to this new product</p> <p>d-ii. My <u>knowledge of specific procedures and practices</u> in selling this new product</p>	Erik Jan HULTNIK, Kwaku ATUAHENE-GIMA. (2000).
	Sales-force outcome control	<p>a. <u>Performance evaluations</u> of salespeople on this new product place primary weight on <u>results</u></p> <p>b. If Sales Rep's <u>performance goals</u> for this new product were not met, the Sales Rep would be required to explain why</p> <p>c. Sales Rep's <u>pay increases</u> and other tangible rewards depend on:</p> <p>c-i. How Sales Rep's performance compares with the <u>goals</u> for this new product</p> <p>c-ii. The degree to which Sales Rep have achieved the <u>goals</u> for this new product</p> <p>c-iii. The degree to which Sales Rep have achieved specified <u>outputs</u> regardless of whether sales procedures were followed or not</p>	Erik Jan HULTNIK, Kwaku ATUAHENE-GIMA. (2000).
	Supervisory context	<p>a. Internal Marketing</p> <p>i. Sales Rep's supervisory made sure every salesperson knew the incentives for</p>	Erik Jan HULTNIK, Kwaku ATUAHENE-

		<p>selling this product</p> <p>ii. Sales Rep's supervisory explained the rationale for the introduction of this product</p> <p>iii. Sales Rep's supervisory explained the research behind the development of this new product</p> <p>iv. Sales Rep's supervisory explained how this new product fits in the company's strategic objectives</p> <p>b. Trust</p> <p>i. Sales Rep's supervisory and I have a sharing relationship. Sales Reps can freely share ideas and feelings about the work.</p> <p>ii. Sales Rep can freely talk to his/her supervisor about difficulties they have at work and know that he or she will want to listen.</p> <p>iii. Sales Rep's supervisor and Sales Rep have made a considerable emotional investments in our working relationship</p> <p>c. Training</p> <p>i. Sales Rep received substantial training before assumed responsibility for selling this new product</p> <p>ii. Sales Rep have spent a significant amount of time in training for this new product</p> <p>iii. training program for this new product is first class</p> <p>d. Field Attention</p> <p>i. Sales Rep's supervisor spends time with me in the field</p> <p>ii. Sales Rep's supervisor makes joint sales calls with me</p> <p>iii. Sales Rep's supervisor observes my performance in the field</p>	GIMA. (2000).
	Sales force organization design	<p>a. Geographic (are territories assigned geographically?)</p> <p>b. Customer types (are customer types</p>	Micheal et al (2003)

		<p>assigned independent of or dependent on geography)</p> <p>c. National Accounts</p> <p>d. Independent Agents or Representatives</p> <p>e. Product Groups</p> <p>f. Selling Teams</p>	
	Sales-person characteristics	<p>a. <u>learning orientation</u> of the salesperson</p> <p>b. <u>performance orientation</u> of the salesperson</p> <p>c. <u>problem-solver: (intuitive vs. systematic)</u></p> <p>d. <u>career success</u> of the salesperson</p> <p>e. <u>salesperson's experience</u></p>	Atuahene-Gima (1997)
Effect			
	PERFORMANCE in Selling a new product	<p>a. to what extent have you been successful in</p> <p>i. gaining significant market share for this new product?</p> <p>ii. Generating high level sales volume for this new product?</p> <p>iii. Quickly generating sales for this new product?</p> <p>iv. Exceeding sales targets set for this new product?</p> <p>v. Assisting sales manager in achieving the objectives for this new product?</p> <p>vi. Profits/enabling sales of "old" products?</p>	Erik Jan HULTNIK, Kwaku ATUAHENE-GIMA. (2000).

4.2. Case Studies

This section presents the findings from six case studies of product launches in the Swedish pharmaceutical industry, while the next section presents the results from six expert interviews. The case study findings were, together with the set of expert interviews and findings in the literature, the foundation for the qualitative adaptation of the Preliminary Model (generic model for sales force readiness during new product launch) into the Research Model.

The cases conducted for this research were real pharmaceutical product launches in Sweden. The information is collected from two to four people involved in each product launch. The interviewed group always included both sales management and sales personnel. The six products were launched by three different companies. The companies in which the launch took place are Big Pharma companies operating with a marketing and sales affiliate in Sweden. For further details of the case studies' products and companies selection criteria and profiles, see section 2.4, Formulating the Research Model.

When conducting the case studies, a discussion guide was used, which was based on the Preliminary Model. As the interviews were conducted either face-to-face or over the phone, explanations and definitions of each variable and item could be included to secure full understanding of its meaning. This better secured the results as to which variables should be selected as being the most important. The case study summaries do not include any discussions or analysis by the author, and are entirely the perceptions and experiences of the participating sales personnel.

The following text presents a summary of two of the six case studies. The documentation of the remaining four case studies is found in Appendix 4. After the presentation of the two case studies, conclusions are drawn and a summary of the results from all the case studies is presented in terms of the most important outcomes from each study based upon their perceived key success factors (or variables from the Preliminary Model) for a successful launch.

4.2.1. Case Study 1 (of 6): The Launch of an Antibiotic

Sales Management saw this launch of their new antibiotic as a battle of having to do “more than the competitors”. They were referring to the share of voice, i.e. number of calls or recollection of core messages among physicians compared to their competitors. The physician target group for the product is identified as general practitioners. In addition, a handful of key experts, referred to as “gurus” in the antibiotic field were also targeted. The reason for including these experts as an initial target group together with the general practitioners is that the new product had only a few recommendations from the different counties; but needed to have many counties’ recommendations to be successful. The process for getting a recommendation was de-centralized and in every major town, different experts influenced the local recommendation. The need to have the experts’ support in being considered as first-line treatment was very important if the messages were to be effectively delivered to the general practitioners. **(Type of Product)** The product is considered fairly new to the market as well as new to the company. However, the company has experience of the therapeutic area, so there is no need for a steep learning curve. **(Market Dynamics)** The product is launched into a very competitive market. The market is seen as stable, certain, predictable and with slow change. The team agreed that both the type of product and the market dynamics are influential for formulating a launch strategy.

When the launch team agree on a marketing theme for launching the product as a first choice recommendation, the campaigns and marketing and sales material are developed around this theme. The developed theme and story resonate well in the sales force. The market, in which the product is being launched, had been identified as having a great need of supporting material in the field, e.g. such as books. This material enforces the theme of the sales discussions with the physicians and generates access to more sales meetings.

(New Product Adoption) The most important factor for generating commitment in the sales force is to get the sales personnel emotionally attached to the success of the product. “You need the sales representative to emotionally believe in the product and its success in the market, as it will show in every conversation with a customer, and if not shown, the sales call might actually hurt more than it helps”. The sales force consists of fairly young and active people. They are considered “hungry to sell”, so there is no perception that generating effort is an issue. The team also agrees that even though this might have been seen as an issue, the emotional component still far exceeds in importance. The emotional commitment is seen as generating the necessary effort. Product discussions among sales representatives are not encouraged, as the management want to ensure that sales personnel “stays on the message”.

The company's aim is to have and keep on generating a team spirit and a strong sense of belonging to the company throughout the launch. This team spirit generating effort is continuously integrated in all aspects of internal communications and interactions. The continuous message about being better than the competitors is primarily driven by the sharing of market data and success stories in the field. The company wants to be perceived as having a flat organization with delegated decision making. However, in this context, control mechanisms in the sales force are also perceived as very important.

(Sales-force behavior control) The individual sales representative's actions, especially when launching a new product, are considered to be of great importance. They should clearly be aware that they are accountable for their actions, regardless of whether their results are achieved or not. Also, the sales manager monitors them to make sure that set procedures are followed as this is seen as important for a successful launch. **(Sales force outcome control)** Incentives are not seen as very important for driving new launch success for this launch. Instead, the launch teams are allowed to set up internal sales competitions to generate excitement in the sales force. When setting the goals for a sales representative, it is seen as very important to follow up and to make sure that the person does explain why those performance goals were not met, if that turns out to be the case.

(Supervisory context) Given the contradictory situation of, on the one hand, the company's wish for a perceived flat organization and an open company culture with delegated decision making and, on the other hand, the close monitoring of the sales representative's behavior and actions, it is very important for sales managers to build trust among their representatives. Building trust between the sales manager and sales representative is perceived to be of outmost importance, especially in dialogues and discussions around difficulties at work. The ability of a sales manager to carefully listen to the sales representative and instill confidence by encouraging free expression of difficulties is seen as very important. Further, it is seen as crucial to a successful launch, to ensure that sales personnel understand the rationale for launching the new product. This covered all angles - the rationale from the overall company perspective, as well as that of the customers, patients and other stakeholders. The only importance of training is that the sales representatives spend significant time on the new product's literature. The team also agrees that quantity of training is more important than quality, because it generates the right language appropriate in the therapeutic area and around the customers. Much training is carried out, both within selling skills and product-specific education. The sales managers are also encouraged to develop their own adapted educational sessions. However, in general, compared to some of the other factors driving the successful launch, training is not seen as crucial.

The sales manager's effort in observing in the field is seen as important, helping them to stay updated about market conditions as well as around the control mechanisms that they are asked to monitor. The sales managers frequently travel in the field with each representative.

(Sales force organizational design) Each sales manager has seven to ten sales representatives in his/her team. The sales force is organized according to geographical areas. There are no indications or thoughts as to whether the organizational set-up would matter to the success of the launch or not. **(Other)** However, the number of sales representatives is seen as important. During the launch the team has a sense that there are sufficient sales representatives at hand that they do not need to worry about the size of their sales force too much. Furthermore, it is emphasized that the sales representatives carry several old products and are expected to sell these as well. Having the new product first in every sales call is seen as being essential to drive success.

Desirable **characteristics** for a **salesperson** are being seen as a driven individual who adheres to procedures and having a general good appearance and manners. It is perceived as most important that he/she solves problems in a systematic way according to set guidelines. Experience and career success, whether in the past or in the future, are seen as less important. The freedom to venture outside procedures is not desirable from a sales management viewpoint and the sales representatives are closely monitored. Learning orientation is good but not necessary. It is enough to learn the overall therapeutic area and the agreed messages. It is clearly stated that positive relationship building with customers is always important. The company sees all people as performance-oriented.

(Performance in Selling a New Product) Exceeding sales growth targets is the key measure for success. Other important measures are market share and share of voice. Sales management wants to always be on top of any research measuring share of voice during the launch. Also seen as important is the fulfillment of the objectives by the sales managers and the means by which sales representatives assist in the fulfillment of these. Profit is also measured.

Retrospectively, everyone in the team concluded that it was a successful launch, based on the fact that the sales targets were exceeded and the objectives set for the sales representatives and sales managers were met in the majority of cases.

4.2.2. Case Study 2 (of 6): The Launch of an Acid Reflux Medication

This PPI or acid reflux medication is launched in an environment with a clear market leader, which is perceived as the best and was almost a medical revolution at the time of its launch. Also, the competing company is much stronger in resources and has established relations with customers and other stakeholders. Now, the team is trying to launch a very similar product that is not seen as new to the market, but rather a “me-too” product. **(Type of Product)** Conversely, for the launch team and its company, the product and therapeutic area are new. The type of newness is an important influencer in how the launch strategy is formulated. The team has primarily planned for a price strategy. Their market research shows clearly that a 20-25% price reduction at launch will be feasible if they are to successfully enter and compete in the current environment. However, the global corporation, to which this marketing and sales affiliate belongs, does not approve of such a price decrease in the local market, so the team has to rely heavily on marketing and sales force messaging to complement the 10% decrease in price that they have approval for. **(Market Dynamics)** The market environment is considered stable, certain, slow to change and fairly predictable. The market environment is not a huge concern, based on its simplicity of nature and straightforward competitor environment with only one main player. At the time of launch, the main competitor is prepared and ready. The competitor is doing everything they can to interfere with the launch, e.g. they stop the launch product brochure, with the result that the launch team initially loses momentum. This is not, as agreed by the team, a good opening. One of the more resource-intensive tactics is the inclusion of 25 sites for clinical testing around the country, which is followed up with extensive pre-launch and launch activities. The main target group is general practitioners and some key “gastroentologists”. A secondary target group is the rest of the “gastroentologists” as well as practicing surgeons.

As the launch team is faced with a very competitive landscape, or more correctly, a very strong competitor, “team-spirit” is perceived as easy to build. However, building this team-spirit is also seen as one of the most important factors during launch. **(New Product Adoption)** The team point out the paramount importance of the sales representatives being emotionally attached to the success of the product and that they are willing to make further investments of time and energy. Effort is seen as important in the sense of thoroughly prospecting for customers and quickly building customer relations. As the team perceives that relations are built by investing extra time and energy with the customers, these factors of the discussion are also related to the commitment factor of their willingness to make further investments of time and energy. A lot of work is done by management to build up excitement and emotional attachment to the product in the sales force. There are off-site meetings and a larger kick-off meeting as well as some educational efforts. As much as possible is done in a collective group and in teams to

reinforce the “we-spirit”. This “we-spirit” leads to greater motivation that the team is able to do better than its competitor. Within this, the management encourages sales representatives to discuss the product with others. However, these discussions between sales representatives are not seen as a very important component for driving a successful launch.

During the early launch, one mistake is made and needs to be corrected. The mistake is to initially promote a sales representative to product manager. The person’s experience of product management was not sufficient to build a compelling enough story in the tough competitive climate. This became a burden in the sales force, but once corrected, things improved quickly and the launch was back on track.

With the competitor being so strong, the behavioral aspects become very important from the point of view of how the sales representatives act in the field. **(Behavior Control)** Sales management put much effort into spending as much time as possible in the field together with the sales representatives. The primary focus is to monitor and adjust the actions of the sales personnel. The sales representatives are held accountable for their actions, and sales management continues to do this for each sales representative, regardless of whether their sales results are positive or negative. There are hardly any formal procedures or guidelines set up within the company for the sales representatives to follow. These are primarily made up “on the go” as they are agreed upon by sales management in relation to how things develop in the field. Given this lack of processes and guidelines, there is no effort from sales management to either monitor or evaluate this.

(Outcome Control) To reinforce the group and team spirit, incentives and performance evaluations of salespeople are set up accordingly. Sales are the highest valued and important measure. Performance evaluations are primarily based on these sales results. Also, an important factor in the follow-up of performance is to let failed results be explained. This is done in a group environment, mostly for learning and best practice sharing. Pay increase is not perceived as being connected in a positive way to performance evaluations. Most incentives are collective and rewarded in the form of a better choice of, for example, internal conference locations and levels of luxury. Since most incentives are team-based and fairly simple, management does not spend time making sure that every sales representative knows or understands exactly how they are set up, but just assumes that they understand.

(Supervisory Context) The product and therapeutic area is new for the company, so emphasis is placed on internal marketing of several aspects. As the competing product is well-established in the market, a lot of effort from management is put into explaining the

rationale of introducing the new product from many angles, e.g. what it means for patients, physicians and payers. The research effort and strategy behind the product is not emphasized as the product was not developed within the company. To some degree, the company's strategies are explained, but it is not seen as very important. The focus on team-spirit and collective incentives makes the sales management assume that trust will be easy to build. Even though it is seen as easy to build, it is also viewed as being very important, so all aspects of trust between the supervisor and sales representative are emphasized, (i.e. they are encouraged to freely share ideas and feelings about work, freely talk about difficulties while knowing the supervisor will listen, and make considerable emotional investments in the working relationship). Trust is seen to be well established throughout the launch. Training in the product is not really well-organized; it is communicated as being important, but it is seen as on-the-job learning as the sales representatives build up field experience in the therapeutic area. Instead of training, a lot of time is spent by management in the field, focusing on joint sales calls and observations of performance.

(Sales force organizational design) The sales force is organized in geographical teams, with two sales representatives collaborating within that area. The only matter of importance in sales force organizational design, is the fact that there are sales teams of two sales representatives for the same geographical area, (i.e. they have to collaborate and share customers). **(Other)** The number of sales representatives is seen as important for ensuring that the number of sales calls is better than or in line with competitors. While sales management wants to have many sales representatives, the senior company management wants to minimize costs to generate a good profit. Therefore, how to optimize the number of sales representatives is under continuous discussion within the company. During the launch, a co-promotion agreement is made with another company. As a result of this agreement, additional sales representatives are added to better meet the share of voice of the competitor. The focus on the new product in the sales calls is seen as very important and as a consequence, the sales representatives only sell the new product.

(Salesperson Characteristics) The background of the sales representatives in the sales force differs as people are moved from other products within the company into the new product. There are no established recruitment processes and the characteristics of the salesperson that are seen as important are their problem-solving techniques and their ability to learn fast. The preferred problem-solving approach for the sales representative is to be intuitive and adaptable to the situation. As quoted from one sales manager, "with sales representatives that learn fast as they go and solve problems based on their intuition, even the customer sees the engagement".

(Performance in Selling a New Product) Exceeding the sales targets is the primary measure of launch success. Also, with collaborating teams and incentives built in the same way, success is also achieved when sales representatives, together with their manager, achieve their objectives (how the sales representative assists the sales manager in achieving the objectives for the new product). Secondary measures are volume uptake and profit, but these measures are not monitored frequently or with any great interest from the sales force or launch team.

The launch is considered a success by the launch team members as sales targets were exceeded and sales managers' and their team's objectives were met.

4.2.3. Conclusions and Results from the Case Studies

The six case studies, where a summary of the first two is presented above and a summary of the remaining four is presented in Appendix 4, gave strong indications of what was perceived as driving the success of a product launch. During the interviews, each case study pointed out the most important variables in the Preliminary Model in relation to what had been a successful product launch in their case. All the launches covered in the case studies were perceived as successful by the launch teams. Even though some of the launch approaches did differ between case studies, it was mostly found that the same variables were of great (or greatest) importance for achieving a successful launch. In Table 8 below, the most important variables (perceived Key Success Factors) identified in the case studies are presented and reported in a consolidated format. In addition, all the case studies confirmed the assumption that after studying earlier launches, it will be possible to conduct new launches with a higher probability of success. The following is a reflection on the company to which the product belongs and how it might impact the sales force and launch success. Also, a short reflection as to whether the product's success is driven by the sales force or the medical benefits of the product. The next step is to discuss and validate the case study findings, with a selected group of industry and academic experts. This is the topic of the next section.

The product launch and the company launching the product

The conclusion from the results of the case studies is that the investigated companies launching the product are all similar in their operations, which is further confirmed by both the interviewed sales people and the experts. The case studies are all of products belonging to Big Pharma companies. These companies are global companies with marketing and sales affiliates executing the product launches. Even though the companies do not operate identically and differences are detectable, the impact on this research is

considered minimal. The only clear patterns that could be identified, as also agreed by the experts as having some relation with regard to the company to which the product belonged, were within the category of Salesperson Characteristics and related to problem-solving, as “intuitive” seemed to be preferred in Company B and “systematic” within the other two companies. The experts drew the conclusion that this could be related to whether or not the company has well-defined procedures for the sales force. In the product launches which had highlighted following procedures as being important for successful launch, there still seemed to be very little focus on measuring and rewarding on how these procedures were followed. However, accountability for the sales representatives’ actions seemed to be an important launch success factor cross-cases, whether or not procedures were established.

The product launch and the culture

It is acknowledged that earlier research has shown that the culture is of importance, such as in organization effectiveness research where it is suggested that cultural differences have an impact (Baldauf et al. 2001a; Piercy et al. 1999; Piercy et al. 2004; Rouzies and Macquin 2003). However, as the scope of this research includes launched products by the homogeneous base of sales and marketing affiliates of Big Pharma companies operating in Sweden, any minor differences in culture should not impact these research findings in a significant way. This is also confirmed by the case studies above, with conclusion that the investigated companies all have similar operations, processes and culture. The cultural aspects are further discussed in the limitations and further research section (6.2.1. Limitations).

The product launch and the product’s medical benefit

It is interesting to reflect upon the question whether the actual sale of a pharmaceutical product is driven by its medical benefits or by sales force activities. It is most likely to be a combination of the two. However the findings in the case studies and the literature clearly suggest that sales success is sales force driven to a greater extent than driven by medical benefit. As described earlier under the importance of the sales force, Lilien et al. (1981) and Hahn et al. (1994) argue that detailing (sales calls) from sales representatives aimed at physicians is one of the most important components in the marketing mix for a pharmaceutical company and that for the pharmaceutical companies, the sales force activity is the primary source of promotion (Lilien et al. 1981; Manchanda and Chintagijnta 2004; Mizik and Jacobson 2004; Tengilimoglu et al. 2004). The literature conclude that, for a given medical condition, several different drugs or treatment choices

are available and therefore pharmaceutical companies must invest heavily in marketing and sales (Datamonitor 2007b) and that streamlining marketing and sales processes can fundamentally alter a new pharmaceutical product sales profile with incremental revenue of \$500 million to \$1 billion within five years of sales (Rao 2002). Rangaswamy et al. (1990), put the selling of pharmaceutical products in the category of a repetitive buying environment, which is defined as usually having short purchase cycles and competitive interchangeable products available. The consequence is that sales representatives must attempt to maintain a constant presence at the doctors' offices (Rangaswamy et al. 1990). It is therefore argued that calling on customers is vital for maintaining sales of the product and in many situations the relationship between the sales representative and the physician has a positive impact on sales (Rangaswamy et al. 1990). One practical example among many others is the launch of the product Zolof, which was the third product to be launched in its category, with an almost identical medical profile to its competitors, yet won the position as market leader within a few years (Legernaes 2003). It should be mentioned that this was done without any price differences. All this suggests that an assumption to exclude the medical benefit from this research will give reliable results in terms of the key success factor for sales force readiness during launch, especially with the chosen focus of the physician group being General Practitioners.

Table 8: Consolidated results from the Case Studies

The most important variables (or perceived key success factors) for a successful new product launch identified in the six case studies

	Case #1 (Company A)	Case #2 (Company B)	Case #3 (Company B)	Case #4 (Company B)	Case #5 (Company A)	Case # 6 (Company C)
Type of New Product	New-to-Market and New-to-Company – influenced launch strategy formulation	Not-New-to-Market and New-to-Company – influenced the launch strategy formulation	Not-New-to-Market and New-to-Company – influenced the launch strategy formulation	Not-New-to-Market and New-to-Company – influenced the launch strategy formulation	Not-New-to-Market and Not-New-to-Company - High influence on strategy formulation	Not-New-to-Market and New-to-Company – influenced the launch strategy formulation.
Market Dynamics	Stable Certain Predictable Slow change – Influenced launch strategy formulation	Stable Certain Predictable Slow change – Low impact on launch strategy formulation	Stable Certain Predictable To be rapid change – Influenced launch strategy formulation	Stable Certain Predictable Slow change – Medium impact on launch strategy formulation	Stable Certain Predictable Slow change – High impact on strategy formulation	Stable Certain Predictable Slow change – Influenced launch strategy formulation

Sales Force New Product Adoption	<u>Commitment</u> Emotionally attached	<u>Commitment</u> Emotionally attached Willing to make further investment in time and energy <u>Effort</u> Prospecting for customers Building customer relations	<u>Commitment</u> Emotionally attached	<u>Commitment</u> Emotionally attached Formulate objectives with personal meaning <u>Effort</u> Prospecting for customers	<u>Commitment</u> Emotionally attached Strong sense of duty to secure success	<u>Commitment</u> Emotionally attached <u>Effort</u> Building customer relations
Sales Force Behavior Control	Held accountable for their actions Follow established procedures	Held accountable for their actions	Held accountable for their actions	Held accountable for their actions	Held accountable for their actions	Held accountable for their actions Follow established procedures
Sales Force Outcome Control	Explain outcome of goal when not met	Evaluations primary weight on results Explain outcome of goal when not met.	Explain outcome of goal when not met Pay increase compared with achieved goals	Explain outcome of goal when not met Pay increase compared with achieved goals	Explain outcome of goal when not met	Evaluations primary weight on results Explain outcome of goal when not met
Supervisory Context	Rationale for introduction Freely talk about difficulties Time on training. Sales managers observation in the field	Rationale for introduction Freely sharing ideas and feelings, Freely talk about difficulties. Emotionally invest in relationship Time spent with sales rep in field Sales manager makes joint calls Sales manager's observations in the field	Knowledge of incentives Rationale for introduction Freely talk about difficulties Sales managers observations in the field	Rationale for introduction Freely talk about difficulties Sales managers observations in the field	Rationale for introduction Freely talk about difficulties Sales managers observations in the field.	Rationale for introduction How new product fit with company strategy Freely talk about difficulties
Sales Force Organization Design	Not of importance	Selling teams	Not of importance	Not of importance	Not of importance	Not of importance
Salesperson Characteristics	Problem-solver: "systematic"	Learning orientation Problem-solver: "intuitive"	Learning orientation Problem-solver: "intuitive"	Problem-solver: "intuitive" Performance orientation	Problem-solver: "systematic" Performance orientation	Problem-solver: "systematic"
Performance	Exceed sales	Exceed sales	Exceed sales	Exceed sales	Exceed sales	Exceed sales

in Selling a New Product	targets Sales manager's objectives	targets Sales manager's objectives	targets Exceed Profit target. Sales manager's objectives	targets Exceed Profit target Sales manager's objectives	targets Sales manager's objectives	targets
Other	Order of product in sales call	An optimal number of sales people Order of product in the sales call	An optimal number of sales people Order of product in the sales call	An optimal number of sales people Order of product in sales call (product sold alone)	An optimal number of sales people Order of product in the sales call.	An optimal number of salespeople Order of product in the sales call
Result of Launch	Successful	Successful	Successful	Successful	Successful	Successful

4.3. Expert Interviews

This section presents the important step of using expert interviews to support the analysis of the case study results and to adjust the Preliminary Model into the Research Model. The experts' views of the most important variables (perceived key success factors) in the Preliminary Model were identified here. These interviews were also used to identify and validate the variables within the Research Model and build the data collection instrument. The experts were selected from both academic institutions and from the pharmaceutical industry, where the latter were considered to be industry experts with experience of formulating sales force strategies. The method and expert profiles are described in Chapter 2, Research Approach.

A general analysis and observations from the experts regarding the case studies are presented below and a summary of the expert interviews is presented in Table 9. The results from the expert interviews related to each variable in the Preliminary Model are presented in Appendix 5. These results are based on the experts' analysis of the six case studies and their own expertise around each variable in the Preliminary Model. In addition, some literature findings were discussed during the interviews.

All the experts concluded that the case studies provided good insight into the perceived key success factors for a successful launch. Furthermore, all of them expressed that the pattern was clear in guiding the choice of the proposed key success factors (variables), for sales force readiness during new product launch, for inclusion in the Research Model.

The cases' spread among therapeutic areas and the selected companies was agreed to be good. Experts 1, 2, 3 and 5 raised and, in consensus, agreed with the conclusion that the

actual company to which the product belonged to seems to have very little relation to the perceived key success factors. The company to which the product belongs, its culture and established procedures or lack of the same, as well as the medical features of the product being launched, could probably in many areas have an impact on a launch, as briefly discussed in the sections above. However, to find the key factors for success in the sales force, all the experts concluded that this should be disregarded and an adapted Research Model based on the Preliminary Model should still be very accurate in guiding key success factors, as established in this research.

The experts gave their full support to the research scope of sales force operations targeting physicians who were General Practitioners. Experts 3, 4, 5 and 6 all had a background of actively launching pharmaceutical products targeted at both specialists and general practitioners. These experts all concluded that it is most likely that there would be a difference in the set of success factors for launch if the product were launched towards specialists versus General Practitioners. Therefore, the scope defined was perceived as very positive by the experts and the agreed conclusion was that the final results would most likely be more accurate with the distinction between the sales force target groups, being the physicians' specialty. Also, the experts agreed with the assumption that by studying earlier launches, it should be possible to conduct new launches with a greater probability of success.

Table 9: Consolidated results from the Expert Interviews

The most important variables (or perceived key success factors) for a successful new product launch identified in the six expert interviews

	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6
Type of New Product	Inclusion in research model	Inclusion in research model	Inclusion in research model	Inclusion in research model	No recommendation for inclusion nor protest against inclusion	Inclusion in research model
Market Dynamics	Inclusion of stable/unstable and slow/rapid Exclusion of certain/uncertain and predictable/unpredictable	Inclusion of stable/unstable and slow/rapid Exclusion of certain/uncertain and predictable/unpredictable	Inclusion of stable/unstable and slow/rapid Exclusion of certain/uncertain and predictable/unpredictable	Inclusion of all	Inclusion of stable/unstable and slow/rapid Exclusion of certain/uncertain and predictable/unpredictable	Inclusion of all

Sales Force New Product Adoption	<u>Commitment</u> Emotionally attached	<u>Commitment</u> Emotionally attached	<u>Commitment</u> Emotionally attached	<u>Commitment</u> Emotionally attached Objectives has a great deal of personal meaning <u>Effort</u> Prospecting for customers	<u>Commitment</u> Emotionally attached	<u>Commitment</u> Emotionally attached
Sales Force Behavior Control	Held accountable for their actions	Held accountable for their actions Monitor established procedures Evaluates established procedures	Held accountable for their actions Pay increase depended on how they follow any processes as well as their knowledge of these	Held accountable for their actions Monitor established procedures Evaluates established procedures	Held accountable for their actions	Held accountable for their actions
Sales Force Outcome Control	Explain outcome of goal when not met Evaluations primary weight on results	Explain outcome of goal when not met. Pay increase degree to achieved goals	Explain outcome of goal when not met	Explain outcome of goal when not met Evaluations primary weight on results Pay increase regardless procedures were followed or not	Explain outcome of goal when not met Pay increase degree to achieved goals	Explain outcome of goal when not met
Supervisory Context	Rationale for introduction Freely talk about difficulties Receive substantial training before assuming responsibility Sales manager's observation in the field	Rationale for introduction Freely talk about difficulties. Sales manager's observation in the field	Rationale for introduction How new product fits in with company strategy Sales manager's observation in the field	Rationale for introduction How new product fits in with company strategy Knowledge of incentives Freely talk about difficulties Sales manager's observation in the field	Rationale for introduction Freely talk about difficulties Sales manager's observation in the field	Rationale for introduction Freely talk about difficulties Sales manager's observation in the field
Sales Force Organization Design	Not included in research model	Not included in research model	Not included in research model	Not included in research model	Not included in research model	Not included in research model
Salesperson Characteristics	Problem-solving style Career success	Problem-solving style	Problem-solving style	Problem-solving style	Problem-solving style	Problem-solving style
Performance in Selling a New Product	Exceed sales targets Sales manager's objectives	Exceed sales targets Sales manager's objectives	Exceed sales targets Sales manager's	Exceed sales targets Sales manager's objectives	Exceed sales targets Sales manager's objectives	Exceed sales targets Sales manager's

		Exceed Profit target.	objectives			objectives
Other	An optimal number of sales people Product order in sales call	An optimal number of sales people Product order in sales call (and promoted with other products)	An optimal number of sales people Product order in sales call	An optimal number of sales people Product order in sales call (and promoted with other products)	An optimal number of sales people Product order in sales call (and promoted with other products)	An optimal number of sales people Product order in sales call

4.4. Construction of the Research Model

The following text presents the implications of the case studies, expert interviews and findings in the literature on the Preliminary Model, in terms of subtraction, additions and choice of variables or items to form the Research Model to be utilized here. All adaptations to the Preliminary Model were made with the objective of qualitatively formulating a Research Model that includes a set of proposed key success factors for sales force readiness during product launch in the Swedish pharmaceutical industry, for testing with quantitative empirical data collection and statistical analysis.

The results and the findings from the six case studies and from the six expert interviews, summarized in earlier sections, led to several implications and adaptations to the Preliminary Model. Overall, the final Research Model was, like the Preliminary Model, found to be described in three stages, but with a much more limited set of variables. Stage one, Circumstances, aims to find any relations with relevant strategic background information for strategy formulation. Within stage two, Sales Force Factors, the identified key variables and items from the Preliminary Model were transferred into variables in the Research Model under the new name, Key Sales Force Factors. If a specific item within any variable in the Preliminary Model was identified as a standalone key success factor for launch success, it was transferred to represent a variable in the Research Model. In the third stage, Effect, the core items identified for measuring success were transferred in to the Research Model.

The findings in the literature review were consulted regarding the items identified as proposed key success factors by the experts and case studies, in order to validate them in relation to earlier scientific results and lessons learnt. However, as concluded in the literature review chapter, the literature on sales force management and selling during the launch phase is limited, which makes it less conclusive, however some guidance is provided in most areas.

Circumstances

The specific and detailed implication on the Preliminary Model for the *Circumstances* stage is described below.

Type of Product

The *type of new product* is understood here as whether the product type is new to the world and also for the company, or the product type is not new to the world but new to the company or that the product is only a revision of a product currently existing within the company. The conclusion from the case studies and expert interviews is that this variable is of interest when formulating a launch strategy. Based on the collected results and conclusions, the variable will be used in the Research Model, with the aim of finding how the type of newness of the launched product impacts the success of the launch.

The variable, *type of product*, was transferred as derived from the literature into the Preliminary Model and will also be used in the Research Model. The variable was based on and derived from a variable in the literature by Michael et al (2003). Michael et al. (2003) measured product newness in a direct way based on a combination of two states of market newness and two states of company newness. In their questionnaire, two dichotomous questions were used to obtain this information from each respondent about the firm's new product, and the answers were coded to place each new product into one of three groups (new-to-the-market & new-to-the-firm, not-new-to-the-market & new-to-the-firm, not-new-to-the-market & revision-to-the-firm). These groups were also aligned with earlier research conducted by Kleinschmidt and Cooper (1991), where essentially the same groups or categories were used (Kleinschmidt and Cooper 1991). Kleinschmidt and Cooper (1991) found that product innovativeness does have a significant impact on new product performance. However, this relationship between innovativeness and product performance was found to be U-shaped, showing that even non-innovative products perform well.

The recommendation gained from discussions with the experts as to how to measure this variable was followed. The recommendation meant that the information was collected directly according to one of the three groups: new-to-the-market & new-to-the-firm; not-new-to-the-market & new-to-the-firm; not-new-to-the-market & revision-to-the-firm.

Market Dynamics

The *market dynamics* part of the Preliminary Model is understood to be the nature of the market environment for the product at the time it was introduced, i.e. intensive or no competition, and/or major market dynamics or not.

Going back to the literature, the original variable (Hultink and Atuahene-Gima 2000) was developed for market volatility and the degree of unpredictability of new product's market condition. The commercialization of pharmaceutical products is very uncertain (Rao 2000b). Hultink and Atuahene-Gima (2000) argue that in a more volatile market, salespeople are less able to forecast customer preferences, new introductions, price changes, etc. Support for this can also be found in Achrol and Stern (1988), where they note that market unpredictability creates adaptation problems for market participants (Achrol and Stern 1988). Hultink and Atuahene-Gima (2000) use this argument to support their hypotheses that "the positive effect of sales force new product adoption on selling performance is weaker when market volatility is higher". This hypothesis was not supported in their empirical data. However, Atuahene-Gima and Micheal (1998) found that "salespeople who perceived the market environment as intensely competitive derived greater satisfaction from their efforts in new product selling than those who perceived the environment as less competitive". Hultink and Atuahene-Gima (2000) measured market variable volatility through four items in the instrument; "state your opinion of the nature of the market environment for this new product at the time it was introduced: 1) stable – unstable, 2) certain – uncertain, 3) changes slowly – changes rapidly, 4) predictable – unpredictable". This aimed to reflect the salesperson's perception of the degree of predictability of the market conditions. As the original variable was set up to measure product adoption, while the aim of this research is to find the relations between the new formulated variables and product launch success, a modification was made, based on the results of the case studies and expert interviews.

Variables in the Preliminary Model were adjusted based on findings, to some extent from the case studies and to a greater extent from the expert interviews. It was identified that the market dynamics variable should exclude the two items "certain – uncertain" and "predictable – unpredictable" based on the agreement that they were less relevant. On the other hand, the two items "stable – unstable" and "changes slowly – changes rapidly" were retained, but broken down into two separate variables. The item "stable – unstable" was agreed by all experts to fairly well include the meaning of the two items "certain – uncertain" and "predictable – unpredictable". The two new variables were named *stability of market*, and *market change rate*. In the instrument, based on the experts' recommendation, these variables will be measured as binary, asking the respondent

which situation or state applied at time of launch: stable or unstable; changes slowly or changes rapidly.

Sales Force Factors

The adjustments made to the stage Sales Force Factors in the Preliminary Model to adapt it for the Research Model are described below.

New Product Adoption

In the Preliminary Model, the variable is derived from Hultink and Atuahene-Gima (2000), who have adopted the Atuahene-Gima (1997) definition of sales force new product adoption as being the degree to which sales people accept and internalize the goals of the new product (i.e. commitment) and the extent to which they work hard and smart to achieve these goals (i.e. effort). Commitment is an attitude (acceptance and emotional commitment to make it a success), while effort is defined as energy, force persistence and intensity of actions (Atuahene-Gima 1997).

Atuahene-Gima (1997) based the Commitment variable and its items on the work of House and Mitchell (1974), Mathieu and Zajac (1990) and Meyer and Allen (1991) (House and Mitchell 1974; Mathieu and Zajac 1990; Meyer and Allen 1991). The variable commitment in Hultink and Atuahene-Gima (2000) was measured by five items. The case studies identified four items within commitment seen as key success factors. These were: “sales representatives emotionally attached to the success of this new product”; “sales representatives would be willing to make further investment on my time and energy to support this new product”; “achieving objectives for this new products has a great deal of personal meaning to the sales representative”; and, “sales representatives feel a strong sense of duty to ensure the success of this new product”.

The item formulated as to whether a sales representative was emotionally attached to the success of this new product was identified as a key success factor in all case studies, while the other three only appeared once in a case study as an identified key success factor for successful launch. The item for the importance of whether the sales representative discusses this new product with other salespeople was not identified in any case study.

In the literature, Hultink and Atuahene-Gima (2000) found that new product adoption (combination of effort and commitment) is positively related to performance in selling a new product in the sales force, and that commitment correlates to performance by itself. Atuahene-Gima (1999) suggests that it is of key importance that the sales force “buys”

the new product in order to sell it effectively and efficiently. Atuahene-Gima and Micheal (1998) found that salespeople with a positive attitude to the potential of new products strengthen customer relations.

The consolidated expert view from the interviews supported and endorsed the main findings in the case studies. All experts highlighted the item; “sales representatives emotionally attached to the success of this new product”, as the most important key success factor.

Based on the findings in the case studies and recommendations from expert interviews and literature, it was decided to include the item “sales representatives emotionally attached to the success of this new product” in the Research Model. The item was defined as a variable and named *Emotional Attachment*. The variable was, after discussions with the experts, decided to be measured as binary, yes or no, in the instrument, with the aim of finding out how it contributes positively to a successful new product launch. It was decided that the other items be excluded from the Research Model.

The variable *effort* in Hultink and Atuahene-Gima (2000) was measured by five items. The case studies identified two items within effort as potential key success factors: “effort devoted to the new product in prospecting for customers” and “effort devoted for the new product in building customer relationships (compared to other products the sales representative has sold)”.

The three other items in the variable effort: “effort devoted to the new product in planning sales calls”; “effort devoted to the new product in collecting market information”; and, “effort devoted to the new product for using market information (compared to other product the sales representative have sold)”, were not identified in any of the case studies, nor by the experts, as potential key success factors.

As mentioned above, in the literature, Hultink and Atuahene-Gima (2000) found that new product adoption (combination of effort and commitment) is positively related to performance in selling a new product in the sales force. Atuahene-Gima (1997) suggests that a combination of commitment and effort yields greater impact on selling performance than the impact of each factor alone. However, he still acknowledges that the two dimensions of the adoption construct could have independent effects on selling performance.

Even though it is important to acknowledge “effort” in the sales force, based on the findings in the case studies and discussions with the experts, there is not enough support to include the variable “effort” or any of its items in the Research Model as a key success

factor for sales force readiness during new product launch. The line of argument by Hultink and Atuahene-Gima (2000) that effort without commitment for a salesperson is not enough for effective performance in new product selling, could be true regarding adoption of the new product, but could be questioned as a key success factor for launch and is taken out as a variable in the Research Model. It is possible to argue that effort is always important, maybe equally important, when selling a product, whether it is old or new and independent of industry.

The line of argument for excluding the variable “effort” and its items from the Research Model gains strong support in the conducted case studies and in the expert interviews. Also, although Hultink and Atuahene-Gima (2000) found that new product adoption is related to new product selling performance, further support for excluding “effort” as a key success factor is derived from the details in their results. They found that commitment correlates to performance while effort is unrelated to performance (Hultink and Atuahene-Gima 2000).

Sales Control

Sales control systems refer to systems in which managers can align the behavior and actions of the sales force, or individual sales representatives, with the organization’s objectives (Bello and Gilliland 1997; Jaworski 1988; Jaworski and MacInnis 1989).

Two types of control systems are identified in the literature: formal and informal (Jaworski 1988; Ouchi 1979). The variable here is in line with the formal type. The formal control system in the literature is further divided into behavior-based control and outcome-based control.

Behavior Control

The extent to which managers emphasize procedures and activities in monitoring, evaluating and rewarding the salesperson is included in a behavior-based control system (Anderson and Oliver 1987; Jaworski 1988; Ouchi 1979).

In the Preliminary Model, the variable is derived from Hultink and Atuahene-Gima (2000) and adopted from the Atuahene-Gima (1997) conceptual model. Hultink and Atuahene-Gima (2000) measured the variable with four items; however, five items were initially included. In the Preliminary Model all five items were kept to fully reflect the earlier conceptual model by Atuahene-Gima (1997).

In the case studies, the items that were identified as key success factors were: “salespeople are held accountable for their actions in selling the new product, regardless of results they achieve”; and “my supervisor monitors the extent to which salespeople follow established procedures pertained to the new product”. The former item was identified in all case studies, while the latter only in two. None of the three other items gained support in the case studies for being a potential key success factor. From the case studies, the excluded items were: “my supervisor evaluates the procedures salespeople use to accomplish the task of selling this new product”; “my pay increases and other tangible rewards depend on how well I follow established sales procedures pertained to this new product”; and, “my pay increases and other tangible rewards depend on my knowledge of specific procedures and practices in selling this new product”.

Some evidence in the literature has been collected by empirical studies suggesting that behavioral control of the sales force is one of the most important factors for a successful launch of a new product (Ramaswami 1996). Although Hultink and Atuahene-Gima (2000) argue that if a salesperson is committed and willing to extend his/her effort in selling a new product, he or she requires flexibility and discretion, leading to the hypothesis that behavior control weakens the link to adoption and selling performance. This was not supported significantly in their results, but they do suggest an appropriate sign that the hypothesis is supported. However, the item identified in all the case studies as a key success factor was the one item: “salespeople are held accountable for their actions in selling the new product, regardless of the results they achieve”, which had been excluded from their measurement instrument by Hultink and Atuahene-Gima (2000). The conclusion of an appropriate sign in the research from Hultink and Atuahene-Gima (2000) might thus be disregarded, or at least questioned. This argument is based on the findings from the case studies, as it may have been the case that the most important item was taken out of their research, and the results of a signal for a weaken relationship to selling performance might have been neutralized or may even have rendered opposite results if the item had been included. Furthermore, Lloyd and Newell (2001) acknowledge that a common problem with control mechanisms is the development of control systems which are too rigid and which conflict with the need for discretion (Lloyd and Newell 2001). However, Piercy et al. (1997) found evidence that in more effective sales organizations, field sales managers spend significantly more effort on behavior-based control, which suggests support for the importance, even though it is acknowledged that behavior control in this study was measured by slightly different items. Other literature has also found a strong relationship between sales force behavioral performance and outcome performance when examining the relationship of the control system with design, sales force performance, and organizational effectiveness (Babakus et al. 1996; Baldauf et al. 2001a; Baldauf et al. 2001b). Also, Blackshear et al. (1994) found that

pharmaceutical representatives' behavior, in a US firm, does have a positive effect on sales performance (Blackshear and Plank 1994).

As to the items connecting pay increase with following procedures and knowledge of those procedures, Piercy et al. (1997) found that in more effective organizations, rewarding is concerned predominately with feedback and rewards, which are often non-financial for the quality of activities as well as results. Also, Cravens et al. (1993) found that incentive compensation played a limited role in sales force control systems. They also suggest the need for a proper blend between field sales management and compensation control. These results suggest support of the case study findings for not including these items.

The expert interviews supported the notion that behavioral control of the sales force is one of the most important factors for a successful launch of a new product. Their consolidated view concluded the case study findings. There were some different opinions about inclusion of the other items in the Research Model; however, they all agreed that the most important item was to hold sales representatives accountable for their actions regardless of the results.

Based on the findings in the case studies, recommendations from expert interviews and findings in the literature, the item "salespeople are held accountable for their actions in selling the new product, regardless of results they achieve" was defined as a variable in the Research Model and named *Activity Accountability*. It was decided, after discussions with the experts, that the variable be measured as binary, yes or no, in the instrument, with the aim of finding how it contributes positively to a successful new product launch. It was decided to exclude the other items from the Research Model.

Outcome Control

As described in the literature, an outcome-based control system is a subgroup of a formal control system (Jaworski 1988; Ouchi 1979). Outcome-based control pertains to the emphasis managers place on results when monitoring, evaluating and rewarding the sales force and is used to directly influence the performance objectives set for the sales representative (Hultink and Atuahene-Gima 2000). It provides incentives for the sales representative to take responsibility for results (Jaworski 1988; Ouchi 1979), but it also transfers risk to the sales representatives, especially in terms of environmental conditions over which they have little or no influence (Ramaswami 1996).

In the Preliminary Model, the variable is derived from Hultink and Atuahene-Gima (2000) and adopted from the conceptual model by Atuahene-Gima (1997). Hultink and

Atuahene-Gima (2000) measured the variable with five items: “performance evaluations of salespeople on this new product place primary weight on results”; “if my performance goals for this new product were not met, I would be required to explain why”; “my pay increase and other tangible rewards depend on how my performance compares with the goals for this new product”; “my pay increase and other tangible rewards depend on the degree to which I have achieved the goals set for this product”; and, “my pay increase and other tangible rewards depend on the degree to which I have achieved specified outputs regardless of whether sales procedures were followed or not”.

In the case studies, three items were identified as key success factors: “performance evaluations of salespeople on this new product place primary weight on results”; “if my performance goals for this new product were not met, I would be required to explain why”; and, “my pay increase and other tangible rewards depend on the degree to which I have achieved the goals set for this product”. The first and third items were identified in two case studies each, while the second was identified in all of the case studies.

In the literature, Hultink and Atuahene-Gima (2000) support that selling performance is stronger when outcome-based control is greater. They argue that the sales representatives might find a greater sense of commitment and effort in achieving their results under outcome performance based on the greater autonomy and flexibility this might give them in the selling process (Hultink and Atuahene-Gima 2000). Also, it is suggested that explicit market penetration objectives are important if the firm is to achieve a successful product introduction (Hultink and Robben 1999)

Piercy et al. (1997) and Baldauf et al. (2001a) found that in more effective sales organizations, sales managers both monitor and discuss performance evaluations with salespeople, which can be argued to support the item “if my performance goals for this new product were not met, I would be required to explain why” as a key success factor.

Moreover, Piercy et al. (1997) found that the most effective sales organizations are those where salary is a high proportion of total compensation, but rarely makes up the total compensation package and where there is typically an incentive payment in the 5-25 per cent range. Menguc and Baker (2003) first argue that the earlier research is inconclusive if outcome-based incentive improves sales force performance, and then concluded that it is important with a mix of both financial and non-financial incentives in the sales force (Menguc and Barker 2003). Also, Piercy et al. (2004) are, based on their findings, providing a warning for over-reliance on incentive pay for achieving results in the sales force, and argue that it can have a negative impact (Piercy et al. 2004). Elling et al. (2002) conclude that bonus for the pharmaceutical sales representative in the United States is around 25 per cent. Between 5-25 per cent could be considered fairly low

incentive pay (Elling et al. 2002), so only 5-25 per cent of incentive rewards depending on achieved goals in effective organizations would suggest support of the case study results that the third item is not a key success factor. However, it should be acknowledged that sales bonuses implemented by more developed compensation tools might change the importance of this in the future (Turner et al. 2007) as well as the use of new sales competitions with pharmaceutical sales forces (Murphy and Dacin 2009), which was not found during the here conducted data collection.

The expert interviews supported the notion of flexibility and autonomy in the selling process; however, the insights given were much more focused on the flexibility of continuous adjustments of outcome control measures such as sales and market share, as these usually deviate greatly from what had been expected before and during early launch. Measuring strictly on early set outcome control measures might generate a lack of motivation in the sales force based on these measures' incorrectness instead of the intended motivation of giving more flexibility in the process.

The experts concluded in consensus, and in line with the results from the case study findings, that the most important item for successful launch was, "if my performance goals for this new product were not met, I would be required to explain why". This would give the sales representative together with management a formal process to continuously update objectives. Two experts agreed with the first item identified in the case studies, while two other experts agreed with the third. Also, only one expert found the evidence in the case studies to be sufficient for including any other item in the research model.

Based on the findings in the case studies, recommendations from expert interviews and findings in the literature, the item, "if my performance goals for this new product were not met, I would be required to explain why", was chosen for inclusion in the Research Model. The item was defined as a variable and named Explanation of Unachieved Sales Goals. It was decided, after discussions with the experts, to measure the variable as binary, yes or no, in the instrument with the aim of finding how it contributes positively to successful new product launch. It was decided to exclude the other items from the Research Model.

Supervisory Context

Supervisory Context refers to several supervisory behaviors which could be exercised in order to improve the sales representative's performance when selling the new product (Hultink and Atuahene-Gima 2000; Rochford and Wotruba 1996; Rochford and Wotruba 1993). Based on concepts and findings in the literature; internal marketing, trust, training, and field attention were included in the Preliminary Model.

Internal marketing

The extent to which the sales management explains the background and rationale behind the new product to the sales representatives is referred to as *internal marketing* (Hultink and Atuahene-Gima 2000). In the Preliminary Model the variable “internal marketing” is derived from Hultink and Atuahene-Gima (2000) and adopted from the Atuahene-Gima (1997) conceptual model. Hultink and Atuahene-Gima (2000) measured the variable with four items: “my supervisor made sure every salesperson knew the incentives for selling this product”; “my supervisor explained the rationale for the introduction of this product”; “my supervisor explained the research behind the development of this new product”; and, “my supervisor explained how this new product fits in the company’s strategic objectives”.

In the case studies, three items were identified as key success factors: “my supervisor made sure every salesperson knew the incentives for selling this product”; “my supervisor explained the rationale for the introduction of this product”; and “my supervisor explained how this new product fits in the company’s strategic objectives”. The first and third were identified in one case study each, while the second was identified in all of the case studies. The item “my supervisor explained the research behind the development of this new product” was not identified in any of the case studies.

Earlier research suggests that sales representatives need to be convinced of both the benefits and the strategic importance of the new product as well as the fact that internal marketing reduces ambiguities among the sales force in terms of procedures and objectives (Anderson and Robertson 1995). Moreover, Hultink and Atuahene-Gima (2000) gained strong support for their hypothesis that sales force new product adoption on selling performance is stronger when internal marketing is higher, and that internal marketing was significantly related to selling performance by itself. They argue that managers should focus significant resources and effort on internal marketing before sending sales representatives to the field.

With the strong support found in the case studies for the item of having the supervisor explain the rationale for the introduction of this product, the experts agreed that this should be a variable in the Research Model. The variable was named *Introduction Rationale of the Product*. It was decided, after discussions with the experts, that the variable would be measured as binary, yes or no, in the instrument with the aim of finding out how it contributes positively to successful new product launch.

The experts did not fully agree about including the item about the importance of sales managers explaining how this new product fits in the company’s strategic objectives.

Two experts argued that it should be included while the other four agreed that with the results from the case studies, that it was of less importance and definitely not a key success factor. It was decided to exclude this item as well as the other two.

Trust

Trust refers to how willing the sales representative is to rely on the sales manager and whether the sales representative has confidence in an exchange relationship.

In the Preliminary Model the variable is derived from Hultink and Atuahene-Gima (2000) and adopted from the conceptual model by Atuahene-Gima (1997). Hultink and Atuahene-Gima (2000) measured the variable with five items: “my supervisor and I have a sharing relationship, we can freely share our ideas and feelings about the work I do”; “I can freely talk to my supervisor about difficulties I am having at work and know that he or she will want to listen”; “if I share my problems with my supervisor, I know he or she would respond constructively and caringly”; “we both feel a sense of loss if we could no longer work together”; and, “my supervisor and I have made considerable emotional investments in our working relationship”.

In all the case studies the item “I can freely talk to my supervisor about difficulties I am having at work and know that he or she will want to listen” was identified as a key success factor. In addition, in one case study the two items; “my supervisor and I have a sharing relationship, we can freely share our ideas and feelings about the work I do” and “my supervisor and I have made considerable emotional investments in our working relationship”, were identified as a key success factors. No other items were identified in the case studies.

Hultink and Atuahene-Gima (2000), argued, based on earlier research involving interpersonal trust, that trust leads to greater commitment to the relationship and increased cooperation. However, they did not find support for any positive effect on sales force adoption of a new product on selling performance being stronger when trust is greater. On the other hand, Atuahene-Gima and Li (2006) found that sales management process control has greater potential than output control in building a salesperson’s trust in new product selling. Also, Piercy et al. (1997) found that in more effective sales organizations, the field managers spend significantly more effort on coaching and communicating, which can be argued as a way to build trust.

The experts did have different notions of the importance of the items about trust, and whether it could be classified as a key success factor. However, with strong indications from the case studies, the majority of them recommended inclusion of the one item; “I

can freely talk to my supervisor about difficulties I am having at work and know that he or she will want to listen”.

Based on the case study results and experts’ recommendation, the item; “I can freely talk to my supervisor about difficulties I am having at work and know that he or she will want to listen”, was included in the Research Model as a variable. The variable was named *Speak Freely with Manager* and it was decided, after discussions with the experts, to measure it as binary, yes or no, in the instrument with the aim of finding how it contributes positively to successful new product launch. The other four items were not included in the Research Model.

Training

“Training” is defined as the understanding and guidance received by the sales representative on the product and process of selling before assuming responsibility for selling the new product (Hultink and Atuahene-Gima 2000). In the Preliminary Model, the variable is derived from Hultink and Atuahene-Gima (2000) and adopted from the Atuahene-Gima (1997) conceptual model. Hultink and Atuahene-Gima (2000) measured the variable with three items: “I have received substantial training before I assumed responsibility for selling this new product”; “I have spent a significant amount of time in training for this new product”; and, “our training program for this new product is first class”.

Only one case study identified the time the sales representatives spent in training for the new product as a key success factor. The experts interviewed also revealed that training was not seen as being very important for a successful launch. This down-prioritization of training came in the light of the much greater perceived importance of the other variables and items. Only one expert assumed a position where the opinion of training was a potential key success factor.

The case study and expert interview findings gain support in some of the literature. Hultink and Atuahene-Gima (2000) not only found that training weakened the adoption-performance linkage but also that that results suggested that salespeople who are committed to selling the new product may perform poorly when they receive more training. Their explanation is based on potential perceived “micro-managing” of the sales representatives. Rackham (1998), observed that companies often train the sales force on new features, while they should secure good coaching where the customer problems can be solved by the product instead of only pushing the features (Rackham 1998). This is also confirmed in research, which applies to pharmaceutical companies (Giacobbe et al. 2006; Lloyd and Newell 2001). Further support for dismissing training as a key success

factor when launching a product is suggested in the research results by Piercy et al. (1997), in which they found that salesperson performance in the area of technical knowledge, which includes knowing the product's functions and applications as well as design and specification of the company's product or services, is not significantly higher in more effective sales organizations.

However, the literature is mixed in the area of training as research has also been conducted which suggests that effective training is important for new skills in selling, for sales representatives to understand responsibilities as well as to provide an indication of management commitment to the new product (Anderson and Robertson 1995; Atuahene-Gima 1997).

Based on the case studies' and expert interviews' clear signal that training should not be perceived as a key success factor together with results obtained from earlier literatures, the variable training and its items were excluded from the Research Model.

Field attention

Field attention is defined as the extent to which managers attend to the needs and problems of salespeople through field contacts such as making joint calls and being accessible to them in the field (Oliver and Anderson 1994). In the Preliminary Model, the variable is derived from Hultink and Atuahene-Gima (2000) and adopted from the Atuahene-Gima (1997) conceptual model. Hultink and Atuahene-Gima (2000) measured the variable with three items: "my supervisor spends time with me in the field"; "my supervisor makes joint sales calls with me"; and, "my supervisor observes my performance in the field".

In the case studies, all three items were identified as key success factors. The third item, managers' observation of performance in the field, was identified in five case studies, while the two other items were both identified in one and the same case study.

The literature is mixed about the importance of field attention, both pointing out its importance while also suggesting weak relations to selling performance. For example, Hultink and Atuahene-Gima (2000) found in their research that field attention weakens the new product adoption on selling performance when supervisors' field attention is greater. In fact, their results showed that salespeople may become less effective with more field attention. They explain this with cultural differences regarding the acceptance of a "don't look over my shoulder" attitude. Other research findings suggest that travel with sales representatives is important to demonstrate recognition of special problems with the new product and for managers to gain firsthand knowledge of the situation, for

them to be able to provide quality feedback (Anderson and Robertson 1995). Piercy et al. (1997) found that in more effective sales organizations, sales managers do monitor and place more emphasis on observing the performance of salespeople. This is also further supported in other studies (Baldauf et al. 2001a; Baldauf et al. 2001b). Futrell et al. (1976) found that the pharmaceutical salesman's supervisor must provide information to the employee to enable the employee to know what is expected and to bring clarity into how the supervisor makes his or her evaluation (Futrell et al. 1976), which suggests further importance of being close to the sales representatives in the field.

The experts all agreed with the findings in the case studies that the item involving the supervisors' observation of performance in the field is a key success factor.

Based on the findings in the case studies, the expert interviews and the line of argument in the literature around the importance of field attention, the item, "my supervisor observes my performance in the field", was included in the Research Model. The variable was named *Sales Manager Observations in the Field*, and was, after discussions with the experts, decided to be measured as, "no", "medium" or "high", in the instrument, with the aim of finding how it contributes positively to a successful new product launch. The other two items were not included in the Research Model.

Sales force organizational design

Sales force organizational design is referred to as the deployment of the sales force, and in the Preliminary Model the variable is derived from Micheal et al. (2003). Micheal et al. (2003) used seven items when they measured changes in sales force management strategy of new product introductions: geographic (assigned geographical territories); customer types; national accounts; independent agents or representatives; product groups; selling teams; and, other.

The literature indicates both that there exists some support as to the importance as well as some questions as to the importance of sales organization design, even with the suggestion that changes of structure might be harmful when launching a new product (Baldauf and Cravens 1999; Micheal et al. 2003; Piercy et al. 1999). In their research, Micheal et al. (2003) did not gain support for their hypothesis that "change in the sales management strategy category of organizational structure, size, and deployment is most likely to occur with new products". Further in their research, they argue that organizational change can be disruptive for the sales force when new territories are drawn, particularly in the area of customer relations. Piercy et al. (1999) and Baldauf and Cravens (1999) concluded that sales territory design has received little interest in earlier research, and in their research, they found that the greater the extent of satisfaction with

sales territory design, the higher level of sales organization effectiveness (Baldauf and Cravens 1999; Piercy et al. 1999). However, it was found that sales force design was not a predictor for effectiveness (Baldauf et al. 2001a). Also, empirical data has shown that even if a significant number of sales force management changes are made when launching a new product, organizational changes are made least often (Wotruba and Rochford 1995). However if an organizational change is to be made, it is usually related to organizations with salespeople specialized by customer or product group, not divided by geography (Wotruba and Rochford 1995). Another study showed that more changes in the sales management mix could lead to a more successful launch. However, organizational change had not taken place to any great extent within these successful cases (Rochford and Wotruba 1996). It is suggested that the sales force design for pharmaceutical products has been set up to serve the more valuable customers, commonly identified with methods assessing the amount of prescriptions generated historically or with analogue products (i.e. existing products with as many similarities to the new product as possible), and that this is somewhat out-of-date and needs extended analysis in order to fine-tune according to product and customer specifics (Rao 2000a; Rao 2002).

In the case studies, one item only in one case study, “selling teams”, was identified as a key success factor for new product launch. The experts did not support any of the items as being a key success factor. However, in both the case studies and in the expert interviews, a related set of key success factors were identified, which was triggered during the interviews under the sales force organizational design topic. The set of key success factors was defined as: “optimal size of the sales force”; “the new product being promoted alone or with other products”; and, “sales order of the new product when promoted together with other products”. The literature confirms that the sales force structuring decision is related to the issues of sales force size and sales effort deployment and that is an important managerial concern (Lilien et al. 1981; Manchanda and Chintagijnta 2004; Rangaswamy et al. 1990). None of these related specific items were included in the Preliminary Model, however guiding support was found in the literature, as described below.

The first factor, related to sales force organizational design and identified as a key success factor, was the question of size of sales forces and how this could be optimized. A main reason for this being such an important managerial question, according to the expert interviews, is the high impact on profit, as the sales force is one of the, or indeed the highest, cost elements for the company as a whole during launch. The cost of sales force as a managerial issue is also raised as an overall issue for companies and particularly for pharmaceutical companies in the literature (Baldauf and Cravens 1999; Blackshear and Plank 1994; Corcoran et al. 1995; Cravens 1995; Elling et al. 2002;

Kotler 2000; Manchanda and Chintagijnta 2004; Piercy et al. 1999; Rangaswamy et al. 1990). Piercy et al. (1999) found that too many or too few salespeople where needed, will influence what salespeople do (behavioral performance) as well as the results they achieve (outcome performance). Situations like this could lead to extreme role conflict, which has been identified as a source of psychological stress linked to lower levels of salesperson satisfaction and performance (Churchill Jr et al. 1985; Piercy et al. 1997; Rangaswamy et al. 1990; Sager 1994). Piercy et al. (1997) found empirical evidence, in terms of sales unit size and staffing, that more effective sales organization managers see far less scope for improving performance by changing the number of salespeople, while in the less effective organizations the satisfaction with headcount is markedly less. Manchanda and Chintagijnta (2004) raise the issues around diminishing return on sales calls for the pharmaceutical representative to physicians, also referred to as “over-detailing”. This is further supported in the literature (Elling et al. 2002). By “over-detailing” they mean “more sales calls than optimal” and prove this as true in many categories by empirical testing. This suggests that the more effective sales organizations may be closer to being right-sized. Piercy et al. (1999) suggest that effectiveness cannot be increased by just adding further salespeople to sales units. Even though, as an interesting note, the number of pharmaceutical sales representatives doubled in the United States between 1995 and 2001 (Elling et al. 2002). Another interesting conclusion from Piercy et al. (1999) was that if a firm advocates a customer-oriented relationship, selling could very well inhibit the sales behavior desired, simply by there being too many customers assigned to each sales representative.

The second factor, related to sales force organizational design and identified as a key success factor, was whether or not the new product was being promoted with other products. The experts strongly advise including a variable investigating the importance of promoting the new product alone or with other products. In the pharmaceutical sales forces, the practice has often been that more than one drug is sold during a sales call (Mizik and Jacobson 2004), but it is becoming more common that one or two products are the scope in the sales call (Elling et al. 2002; Manchanda and Chintagijnta 2004). This is also highlighted in the literature in terms of when a major new product is being launched, it might be beneficial to create a special sales force for that product, in order to give it necessary coverage as well as to ensure that the older products receive enough attention and focus (Rangaswamy et al. 1990). Rangaswamy (1990) gives an example of a pharmaceutical company splitting their one sales force into two when launching their new blockbuster. Further, selling multiple products might be a major constraint with limited access and time to spend with the physicians and a particular mix of products in a sales force (Rangaswamy et al. 1990). There is also cross-industry literature that suggests that a broad product assortment has a positive impact on new product performance (Hultink and Robben 1999).

The third factor, related to sales force organizational design and identified as a key success factor, was the sales order of the new product when the decision is made to sell multiple products with the same sales force. The experts strongly advised including a variable to investigate the importance of the order in which the product is sold in the sales calls, specifically whether it is first or not. Even if companies might see the benefits, (e.g. customer access with split sales forces), it might limit profitability (Rangaswamy et al. 1990). The facts that sales force focus is one of the core decisions in most organizations and that a pharmaceutical sales force usually promotes between two and four medically sophisticated products (Rangaswamy et al. 1990), also highlight the importance of this success factor if the choice is to promote several products together with the new one within the same sales force.

Based on the case studies and expert interviews' clear signal about the items in the Preliminary Model for sales force organization design not being perceived as key success factors while at the same time receiving support in the results of some earlier literatures, the variable "sales force organization design," and its items in the original format were excluded from the Research Model. However, based on the findings in the case studies and expert interviews and with strong support from the literature, three new variables were added to the Research Model.

The first added variable was named Numbers of Sales Representatives. The recommendation from the experts, in order to investigate the optimal number of sales representatives, was to collect data in terms of how many sales representatives were used during launch. The limitation could be argued that the results will be very specific to the market investigated. However, it might also be argued that in a market with conditions similar to the one to be tested (General Practitioners in Sweden), other markets should be able to draw conclusions based on size of the population targeted with the product. Further, it could be debated as to whether this would be different per therapeutic area or product category even in the pharmaceutical market in Sweden. However, with a homogenous group such as the General Practitioners, being the target population here, it is argued that the same guidelines about sales force size could be directive for all therapeutic areas and product categories, aimed at this customer group.

The second variable added was named Promoted with Other Products. This variable should investigate how a successful launch is positively impacted dependent on whether the product is sold alone or together with other products. The recommendation from the experts was to collect data binary, in terms of the new product being promoted alone or together with other products.

In the case of the product being sold together with other products, a third variable was added to the Research Model. This was named Product Order in Sales Call, and the experts recommended limiting the collection of data to asking whether the product was first or not first in the sales call.

Salesperson Characteristics

In the Atuahene-Gima (1997) article, a set of salesperson characteristic propositions are developed for the adoption of a new product in the sales force. Salesperson characteristics are described by Atuahene-Gima (1997) as the salesperson's experience, ability to learn, solve problems, performance orientation, and his/her preference for career success.

All case studies found problem-solving style to be a key success factor; however, both the intuitive and the systematic problem-solving style were identified. The intuitive problem-solving style was preferred in three case studies and systematic in the other three. Learning style and performance orientation were also identified as key success factors in two case studies each. The other items did not receive any support in the cases studies.

The experts concluded that the salesperson characteristics: "learning orientation"; "performance orientation"; and, "preference for career success", were too generic to have any impact on launching a new product versus selling an old product or be a key driver for new product success. These were seen as basic criteria for any salesperson's success. The experts recommended not including any of these variables in the Research Model. In the literature, specific to pharmaceutical sales representatives' characteristics, criteria such as the ability to close sales, the degree of service orientation, knowledge of the company and its products and its customers, personal appearance, gender, age, and ability to learn and think analytically are seen as reasonably important for increasing results of individual sales calls. However, these attributes are seen as a more qualitative dimension, which should be taken into account by managers when hiring and managing the sales force (Parsons and Abeele 1981; Tengilimoglu et al. 2004). Further, Sager and Ferris (1986) concluded that the characteristics of good pharmaceutical sales representatives include a person being warm (empathic), easy-going (socially oriented) and cooperative (approval seeking), which they argued to be in line with earlier research. These findings are considered to support the experts' view of being too generic to be characteristics to be included as key factors for success sales force readiness during new product launch.

Concerning "salesperson's experience", some discussions took place among the experts about its potential relevance as a key success factor. Based on the fact that none of the case studies identified it as a key success factor, it was recommended by the experts that

it be excluded from the Research Model. Also, Atuahene-Gima and Micheal (1998) found that their hypothesis, “that salespersons with greater experience will derive greater satisfaction and performance from their efforts in new product selling than those with less experience”, was not only wrong but also supported a contrary hypothesis. Some literature found general relevance of experience for sales representative performance (Parsons and Abeele 1981; Tengilimoglu et al. 2004), but it could only be proven to be marginally significant in a more attitudinal empirical study with pharmaceutical sales representatives (Tengilimoglu et al. 2004). Further, there are also arguments in this literature stating that sales representatives with long experience may be less willing to adapt to new situations (Dong-Gil and Dennis 2004), which can be seen as the case when launching a new product.

The greatest interest from the experts was generated around finding out how problem-solving style positively influenced the success of a new product. Even though all experts thought, based on experience, that the systematic problem-solving style would be preferred over intuitive problem-solving, their recommendations were based on the case studies’ results and their notion of problem-solving style as being very important, and suggested having both the intuitive and the systematic style tested.

In the literature of innovative behavior, there are arguments for two problem solving styles: systematic and intuitive (Jabri 1991; Scott and Bruce 1994).

Systematic problem-solving style is defined as using rationality and logic, following a set of routines and habits within disciplinary boundaries. Some literature suggests that the systematic problem-solver is likely to generate conventional solutions (Jabri 1991; Scott and Bruce 1994). Atuahene-Gima (1997), argues that systematic problem-solving is less likely to lead to success in new product selling and, hence, is likely to have a greater propensity for dysfunctional behavior in selling. Atuahene-Gima (1997) formulated the following proposition; “The greater the degree of systematic problem-solving style of the salesperson (a) the lower the adoption of new products and (b) the greater the dysfunctional behavior in selling”. This proposition was not tested empirically, which makes it hard to draw any conclusion of its correctness.

Intuitive problem-solving style is defined as giving little attention to rules and disciplinary boundaries, with greater propensity to collect and process information from different sources, act on intuition and generate novel solutions to problems (Jabri 1991; Scott and Bruce 1994). Atuahene-Gima (1997) argues that selling new products entails greater uncertainty than selling existing products since it requires the use of novel solutions for customer problems. Atuahene-Gima (1997) formulated the following proposition; “The greater the degree of intuitive problem-solving style of the salesperson

(a) the greater the adoption of new products and (b) the lower the dysfunctional behavior in selling”. This proposition was not tested empirically, with the implication that it is not easy to draw any conclusion as to its correctness. As intuitive problem solving could be seen as more participative, research has found that pharmaceutical sales representatives in the United States had increased commitment when increased participative decision-making occurred (Futrell et al. 1976), which might be seen as supportive.

One argument is that the match between the problem-solving style and the task determines employee performance (Payne et al. 1990). Scott and Bruce (1994) found that a predicted positive relationship between intuitive problem-solving style and innovative behavior was not supported. Also, they found that systematic problem-solving style is negatively related to innovative behavior of employees. A non-innovative behavior in the sales force when launching a product was supported by the experts. The experts argued for support of a preferred systematic problem-solving style, and, in line with some of the case studies, that to succeed with a new product launch, it is desired to have non-innovative behavior in the sales force, to secure that the core message is delivered in a consistent way and that problems which are taken care of in a systematic manner also reinforce a consistent core message.

Based on the findings of the case studies, the expert interviews and the line of arguments of its potential impact in the literature, the “problem-solving characteristic” was included in the research model. The variable was named Problem Solution Approach, and it was, decided after discussions with the experts, that it would be measured as either “intuitive” or “systematic” in the instrument with the aim of finding how the different styles contribute positively to successful new product launch and which one is preferred. The other salesperson characteristics were not included in the Research Model.

Performance in Selling a New Product

The construct of “performance in selling a new product” is similar to the “sales organization effectiveness” and the “new product success” constructs. Sales organization effectiveness has been defined as a summary evaluation of overall organizational outcomes, which may refer to the entire sales organization or an organizational subset; such as region, district, territory or customer group (Churchill Jr et al. 1985). According to some literature, the most frequently used measures of sales organizational effectiveness and new product success are total sales volume, followed by market share and profit (Baldauf and Cravens 1999; Cooper and Kleinschmidt 2000; Hultink and Robben 1999; Piercy et al. 1999).

The variable in the Preliminary Model is derived from the research variable from Hultink and Atuahene-Gima (2000). The items belong to the “performance in selling a new product” category. Hultink and Atuahene-Gima (2000) build their items on the work of Sujan, Weitz and Kumar (1994) (Sujan et al. 1994). The variable has six items: (To what extent have you been successful in): “gaining significant market share for this new product”; “generating a high level of sales volume for this new product”; “quickly generating sales for this new product”; “exceeding sales targets set for this new product”; “assisting sales manager in achieving the objectives for this new product”; and, “exceeding profits and/or enabling sales of old products”. These measures seem to fit well with the overall literature of measuring sales force performance, but it is also acknowledged that there are many ways of measuring new product success, such as their impact on the firm; being seen as “great” technical success or advancement, etc. (Cooper and Kleinschmidt 2000; Hultink et al. 1999; Hultink and Robben 1995). It is suggested that there are over 75 different measures of new product performance in the literature (Griffin and Page 1993; Griffin and Page 1996).

The conclusion from the case studies was that the item, “exceeding sales targets set for this new product”, was seen as the most important measure and was identified by all case studies, and that the item, “assisting sales manager in achieving the objectives for this new product”, was identified in five of the case studies, and was also seen as important for measuring new product success. In addition, “exceeding profit target for the new product” was identified in two case studies. The other items were not seen as important measures.

The expert interviews concluded that exceeding the sales target and meeting the manager’s objectives were the two most important variables for measuring new product launch success. Exceeding profit target was also seen as important, however the experts highlighted that it is very difficult to use this measure in a correct way as the real profit numbers might not be known by any of the subjects interviewed. This is based on many factors identified, (e.g. a new pharmaceutical product is often a global product, produced to supply many markets), which makes it hard to estimate the exact numbers for matters like cost of goods, shipping etc, as this information may only be available to upper management or finance and not to persons at sales manager or even sales executive level. Collecting profit data was perceived as potentially misleading and the recommendation was to collect the data from the subjects in form of the two items exceeding sales target and meeting the managers’ objectives. However, to define launch success, this should be positive for the first two consecutive years in order to more accurately measure a successful launch.

There was also a recommendation from the experts to validate these more subjective launch success measures with more objective third party data. Based on this, a decision was taken to increase the quality of the classification of a successful launch in this research. More objective market sales numbers and market shares from a third party database would be used as a “validation” of the more subjective items (“exceeding sales targets set for this new product” and “assisting sales managers in achieving the objectives for this new product”).

By using third party sales and market share data as above, a launch that was classified successful, (i.e. as exceeding its set sales targets, as well as having the sales force successfully assisted the sales managers in achieving the objectives), could be validated by the relative increase in sales and market share during the first four years (or two to three years for later launches), using data from a different source.

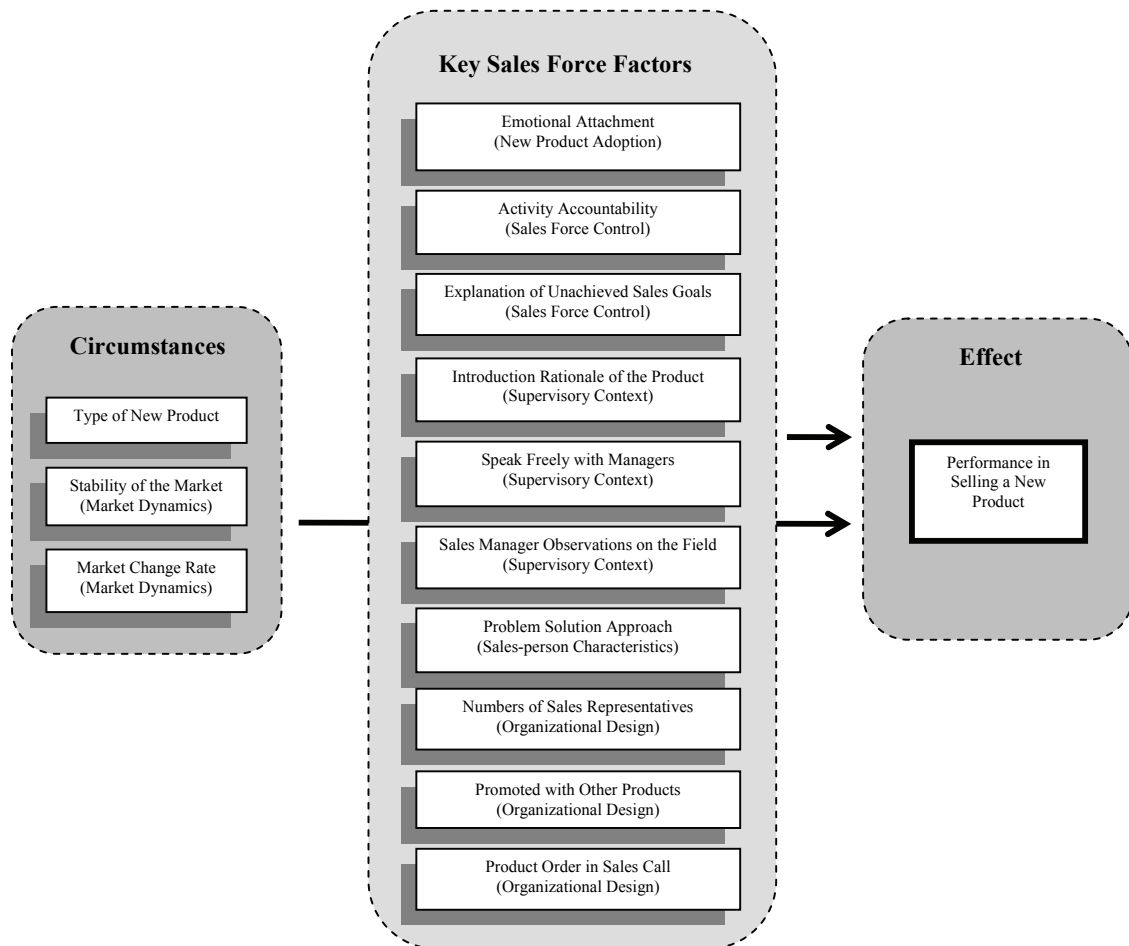
This variable in the Research Model, kept its original name Performance in selling a new product and was agreed to be measured with the items: “exceeding sales targets set for this new product (year 1 and year 2)”; “assisting sales managers in achieving the objectives for this new product (year 1 and year 2)”; and, to be classified as a successful launch, more objective third party sales numbers and market shares should show a clear growth trend over years one to four.

4.5. The Research Model

This section presents the final Research Model and its variables as well as the operational questions and instrument used to investigate key success factors for sales force readiness during new product launch in the Swedish pharmaceutical industry. See Figure 6 for a graphical presentation of the Research Model. Based on the analysis of the conducted case studies, the expert interviews and findings in the literature, the Research Model was finalized and the operational data collection instrument developed. The data collection instrument can be found in Appendix 6. The final model and its variables have strong support in the six conducted case studies and the six conducted expert interviews as well as in the literature. The Research Model is divided into three stages. The first stage, circumstances, is intended to identify how the product's newness, the stability of the market and the change rate of the market are related to launch success. The notion is that these factors are not controllable by sales management, but are useful and important insights for sales force strategy formulation. Stage two, key sales force factors, includes the key sales force variables to be investigated in terms of their importance to a successful new product launch. The notion of key sales force factors is that these sales force readiness elements involve methods and practices controllable by the sales manager, which is in line with the way sales force strategy elements are defined in the literature (Dubinsky and Barry 1982; Dubinsky and Hansen 1981; Micheal et al. 2003). The third stage, effect, includes the outcome of the launch in terms of being successful or not.

Figure 6: The Research Model

The model used for investigating key success factors in sales force readiness during launch of pharmaceutical products in the Swedish market.



Circumstances

Type of New Product:

This variable investigates whether the type of newness of the launched product impacts the success of the launch. The three defined types are: (a) the product is not a new type of product to the market and a revision of a previous product for the company launching it (Old-Old); (b) the product is not a new type to the market while it is of a new type to the company launching it (Old-New); and (c) the product is a new type of product to the market and it is also new to the company launching it (New-New). This variable is shown under the stage “circumstances” in the Research Model. The variable is derived from a variable in the literature by Micheal et al (2003).

This variable was made operational in the data collection instrument as:

- At time of launch, was this product:
 - a. not-new-to-the-market and revisions-to-the-firm?
 - b. not-new-to-the-market but new-to-the-firm?
 - c. new-to-the-market and new-to-the-firm?

Stability of the Market

This variable is shown under the stage “circumstances” in the Research Model. This variable aims to investigate whether a successful product launch is more favored by a stable market or by an unstable market. The variable is a derived item from the variable “market volatility” in the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- What was the nature of the market environment for this new product at the time it was introduced: stable or unstable?

Market Change Rate

This variable aims to investigate whether a successful product launch is more favored by a rapidly changing market, or the opposite, by a slowly changing market. This variable is shown under the stage “circumstances” in the Research Model. The variable is a derived item from the variable “market volatility” in the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- What was the nature of the market environment for this new product at the time it was introduced: did it change slowly, or change rapidly?

Key Sales Force Factors

Emotional Attachment

This variable aims to investigate the emotional attachment and commitment of the sales representatives for the success of the new product. This variable is shown under the stage “Key Sales Force Factors” in the Research Model. The variable is a derived item from the variable “new product adoption / commitment” from the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- During launch, did the sales representatives feel emotionally attached to the success of this new product? (Yes/No)

Activity Accountability

This variable aims to investigate whether or not the sales representatives were held accountable for their sales activities. This variable is shown under the stage “Key Sales Force Factors” in the Research Model. The variable is a derived item from the variable “Sales Controls / Behavior Control” from the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- During launch, were the salespeople held accountable for their actions in selling the new product, regardless of results they achieved? (Yes/No)

Explanation of Unachieved Sales Goals

This variable aims to investigate whether the sales representatives had to explain themselves to their manager(s) when they did not achieve their set performance goals. This variable is shown under the stage “Key Sales Force Factors” in the Research Model. The variable is a derived item from the variable “Sales Controls / Outcome Control” from the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- During launch, if the sales representatives' performance goals for this new product were not met, would the sales representatives be required to explain why? (Yes/No)

Introduction Rationale of the Product

This variable aims to investigate whether the sales representatives were provided with an explanation of the rationale for the introduction of the product. This variable is shown under the stage "Key Sales Force Factors" in the Research Model. The variable is a derived item from the variable "Supervisory Context / Internal marketing" from the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- Did the sales representatives' supervisors explain the rationale for the introduction of this product? (Yes/No)

Speak Freely with Managers

This variable aims to investigate whether the sales representatives were able and also encouraged to speak freely with their managers regarding easy and also difficult issues in their work, in the knowledge that he or she would want to listen. This variable is shown under the stage "Key Sales Force Factors" in the Research Model. The variable is a derived item from the variable "Supervisory Context / Trust" from the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- During launch, the sales representatives could talk freely to their supervisor about difficulties they had at work and would know that he or she would want to listen? (Yes/No)

Sales Manager Observations in the Field

This variable aims to investigate to what extent the sales manager should, or should not, observe the sales representatives' performance in the field in order to contribute to a successful product launch. This variable is shown under the stage "Key Sales Force Factors" in the Research Model. The variable is a derived item from the variable "Supervisory Context / Field Attention" from the literature by Hultink and Autahene-Gima (2000).

This variable was made operational in the data collection instrument as:

- During launch, to what extent did the sales representatives' supervisor observe their performance in the field: no-monitoring; medium-monitoring; or high-monitoring?

Problem Solution Approach

This variable aims to investigate the character of sales representatives for a successful product launch with focus on the approach that sales representatives utilize for problem solving in their sales situations. This variable is shown under the stage "Key Sales Force Factors" in the Research Model. The variable is a derived item from the propositions around "Sales-person characteristics / Problem-solving: intuitive and systematic" from the literature by Atuahene-Gima (1997).

This variable was made operational in the data collection instrument as:

- During launch, how did the sales representatives handle problem solving: intuitive or systematic?

Numbers of Sales Representatives

This variable aims to investigate the optimal number of sales representatives to be utilized by the sales force during a successful product launch. This variable is shown under the stage "Key Sales Force Factors" in the Research Model. The variable is derived from the conducted expert interviews and case studies with strong support from the literature (Churchill Jr et al. 1985; Piercy et al. 1997; Rangaswamy et al. 1990; Sager 1994) and based on the variable "sales force organizational design" derived from Micheal et al. (2003).

This variable was made operational in the data collection instrument as:

- How many sales representatives did you utilize during the launch of this new product?

Promoted with Other Products

This variable aims to investigate whether the product launched on the market should be sold by the sales representatives together with other products or otherwise alone. This variable is shown under the stage "Key Sales Force Factors" in the Research Model. The variable is derived from the conducted expert interviews and case studies, with support in the literature (Rangaswamy et al. 1990) and is based on the variable "sales force organizational design" derived from Micheal et al. (2003).

This variable was made operational in the data collection instrument as:

- Did the sales representatives sell the new product only or did they sell other products during the same sales call: “Alone” or “Together with other products”?

Product Order in Sales Call

This variable aims to investigate the order in which the product launched is sold during a sales representative’s sales call with the physician. The variable addresses those situations when a sales representative sells two or more pharmaceutical products during his or her sales call to the physician. The question is whether the launched product should be sold first in order to contribute to a successful launch, or if the launched product does not need to be sold first and the launch will still be successful. This variable is shown under the stage “Key Sales Force Factors” in the Research Model. The variable is derived from the conducted expert interviews and case studies, with support in the literature (Rangaswamy et al. 1990) and is based on the variable “sales force organizational design” derived from Micheal et al. (2003).

This variable was made operational in the data collection instrument as:

- During launch, was the new product sold first during the sales call? (Yes or No)

Effect

Performance in selling a new product

This variable aims to investigate if a launch was successful or not, in measure of performance outcome. This variable is shown under the stage “Effect” in the Research Model. The variable is partly based on and derived from items in the variable “Sales force outcome performance / performance in selling a new product” from the literature by Hultink and Autahene-Gima (2000). The data was to be collected from two sources for validation purposes; of which one, the data collection instrument, was considered more subjective and, the other, available third party sales and market share data, was considered more objective.

This variable was made operational in the data collection instrument (subjective) with the following items:

- a) For launch year one, did you exceed sales targets set for this new product? (Yes or No)

- b) For launch year two, did you exceed sales targets set for this new product? (Yes or No)
- c) For launch year one, did sales representatives assist sales managers in achieving the objectives for this new product? (Yes or No)
- d) For launch year two, did sales representatives assist sales managers in achieving the objectives for this new product? (Yes or No)

Items where data was to be collected from a third party data source (objective):

- e) Gaining significant market share for this new product:
 - Market share, year one
 - Market share, year two
 - Market share, year three
 - Market share, year four
- f) Generating a high level of sales volumes for this new product (quickly generating sales for this new product);
 - Sales, year one
 - Sales, year two
 - Sales, year three
 - Sales, year four

The full data collection instrument can be found in Appendix 6. The instrument was tested on four sales managers and two of the experts from the expert interviews. Minor modifications were made to the formulation of the questions to secure better understanding of the concept, however as the interviews were conducted over the phone there was always an opportunity to explain concepts or questions.

All items are derived from earlier research and are well grounded in the literature and from the empirical data collected in the course of the case studies and expert interviews. The scale has been modified and defined based on the interviewed experts' recommendations in order to better suit the investigation pursued here.

5. RESULTS

The Research Model was empirically tested on fifty product launches of pharmaceutical products in Sweden. This text presents the results from the statistical analysis together with discussions and recommendations arising from these scientific results.

The overall aim of the research project was to guide the sales force readiness during new product launch. The assumption is that by studying earlier launches, it should be possible to conduct new launches with a higher probability of success. The result of the statistical analysis conducted on the data collected here gives a good indication of how, and to what degree the variables in the Research Model (or Key Success Factors) are of importance during launch.

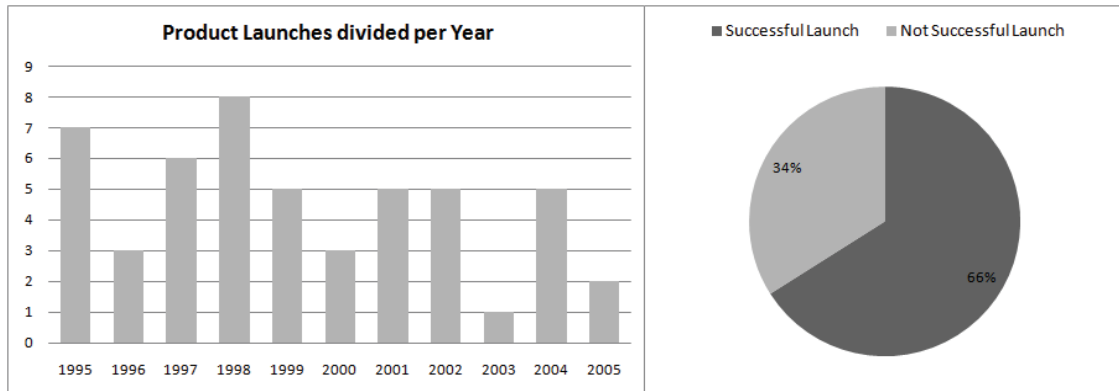
This chapter presents the actual results of the analysis of the empirical data collected for the Research Model. A brief description of the collected empirical data set is presented first, after which the identified patterns of the successful product launches are displayed and discussed. The third section presents the results from the validation of the model generated with PLS analysis. The fourth section presents the values that each variable from the model generated using the PLS analysis, together with an interpretation of their meaning; see Table 10 for an overview. The fifth section presents the pattern created by the values together and thereby provides a clear indication of the answer to the addressed research question; see also the related Table 11. This is followed by the conclusions that may be drawn from the results presented here and a section with discussions and managerial recommendation.

5.1. Description of the Empirical Data Set

The fifty products investigated were launched on the Swedish market by fifteen different companies. The product launches took place between the years 1995 and 2005. Of the investigated product launches, 66% were successful and 34% were not successful. Figure 7 illustrates how the product launches are divided between the years and broken down into successful and not successful launches.

Figure 7: Investigated product launches

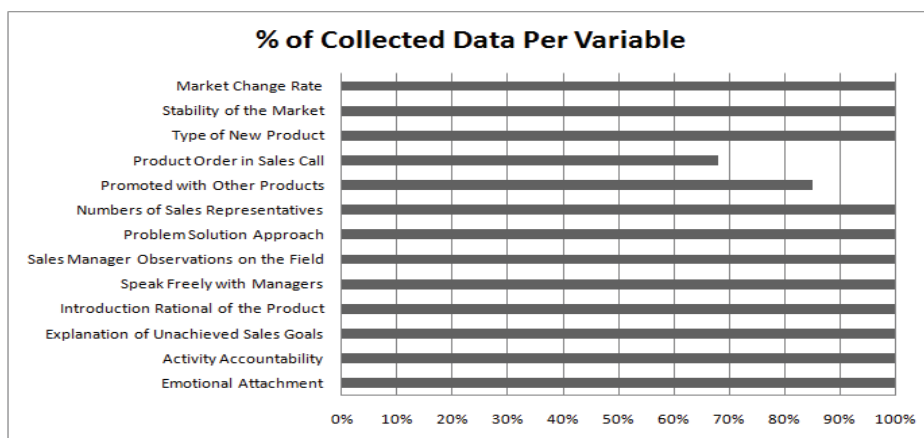
Product launches divided per year with “successful launch” and “not successful launch”



The Empirical Data Set and Missing Values

For the key sales force factors or variables in the Research Model, only two had missing values in the full data set. For the variable “Promoted with Other Products” 32% of the data was missing, prompting a caution as to the results. Furthermore, the data set included thirteen launches where the product was identified as being sold together with another product during the sales call. Even here, a caution has been introduced to the results, as 15% values were missing and a limited number of investigated objects were identified in this situation. Figure 8 illustrates the results for missing values for the collected data set for each variable.

Figure 8: Percent of collected data for each variable



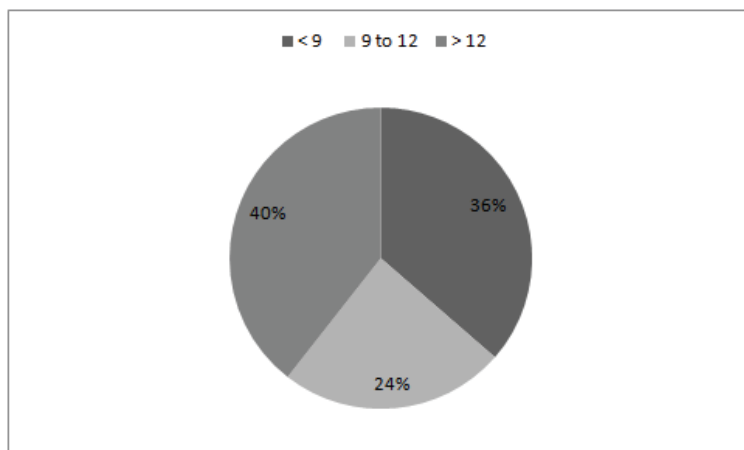
The Empirical Data Set and Successful Launches

With further investigation into the data set of the product launches that were identified as successful, the responses for each of the variables in the data set were seen to be divided up as follows:

- Emotional Attachment: 94% responded that the sales representatives felt emotionally attached to the success of this new product
- Activity Accountability: 79% responded that the salespeople were held accountable for their actions in selling the new product, regardless of the results they achieved
- Explanation of Unachieved Sales Goals: 58% responded that if the sales representatives' performance goals for this new product were not met, the sales representative was required to explain why
- Introduction Rationale of the Product: 100% of the successful product launches responded that sales representatives' supervisors did explain the rationale for the introduction of the product
- Speak Freely with Managers: 88% responded that the sales representatives could freely talk to their supervisor about difficulties they had at work and knew that he or she would want to listen
- Sales Manager Observations on the Field: 9 % responded that "no-monitoring" was done by the supervisors of the sales representatives' performance in the field, while 52% responded "medium-monitoring" and 39% responded "high-monitoring".
- Problem Solution Approach: 52% responded that they had an "Intuitive Approach" to problem solving, while 48% responded that they utilized a "Systematic Approach"
- Numbers of Sales Representatives: The average number of sales representatives used in launching a product was thirteen (13,1), with a spread from 3 to 40. Figure 8 shows the numbers of sales representatives that were utilized for the successful launches, within and outside the generated success range, as generated by the PLS analysis in section 5.2.2.
- Promoted with Other Products: 49% of the products were sold alone and 21% sold together with other products, while 30% of the values were missing for the successful launches
- Product Order in Sales Call: Among the successful products sold together with other products, 57% were sold first, and 14% not sold first, during the sales call, while 29% were missing values for the successful launches

- Type of New Product: 18% were product launches that were not a new type of product to the market and a revision of a previous product for the company launching it (Old-Old). 52% were product launches that were not a new type of product to the market while it is of a new type to the company launching it (Old-New). 30 % were product launches that were a new type of product to the market and also new to the company launching it (New-New).
- Stability of the Market: 67% of the product launches were faced with a stable market, while 33% faced an unstable market.
- Market Change Rate: 61% of the product launches were launched into a slowly changing market, while 39% were launched in a rapidly changing market

Figure 9: The number of sales representatives utilized for the successful launches
The numbers of sales representatives that were utilized for the successful launches, within (9 to 12) and outside the, by PLS analysis generated, success range.



5.2. Identified Patterns of the Successful Product Launches

As described in the Research Approach chapter, PLS (Partial Least Squares) analysis has been applied to the data set. From this analysis, a clear pattern for successful launch has been identified and will be discussed in this section.

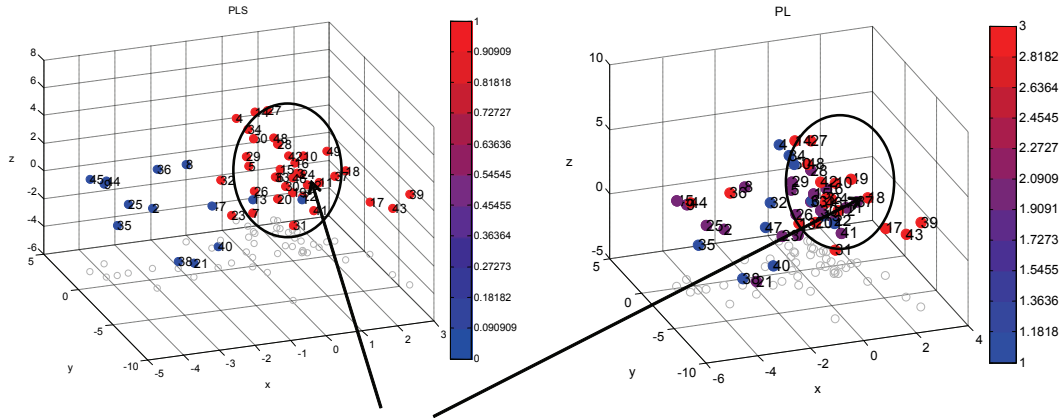
Successful Launch

The analysis of the data collected via the questionnaire showed a clear difference between successful launches and not successful launches. The way in which successful launch has been defined in the data is described in Chapter 2, Research Approach. The items collected by the questionnaire for the variables “successful launch” could be seen as a more subjective measure, as someone “decides” whether the launch was successful or not. One way to add objectivity and verify whether the launch was successful or not, is to collect third-party sales and market share data (MIDAS-Database 2007b) and make an analysis of these data.

The analysis of the more “objective” data, i.e. the sales and market share data, shows a clear match with the more “subjective” data.

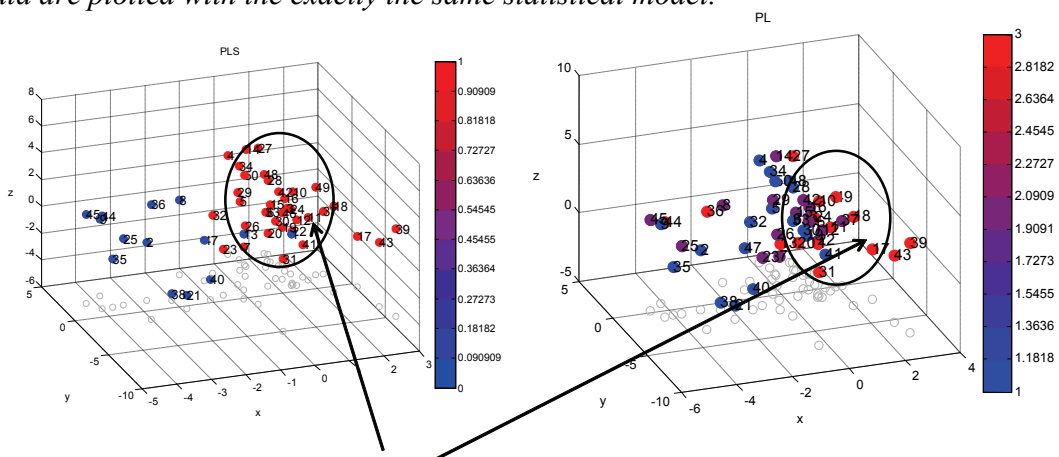
An analysis of the sales data is shown in Figure 10, where every data-point is an object, i.e. a launched pharmaceutical product. The two graphs show exactly the same model. In the left graph, a successful launch has been colored red and a not successful one blue as defined by the research instrument's "subjective" data collection, i.e. interview subjects' perceived successful launch. In the right graph, the colors are blue, purple and red depending on whether the sales increase has been low, medium or high during the launch years. The data in the right graph comes from the research instrument's "objective" data collection, i.e. sales data from a third party database. Both graphs show that the successful launches are placed in the same area of the model, i.e. the graphs give the same clusters of successful (defined by a circle in the graphs) and not successful launches.

Figure 10: Sales data matched against successful and not successful launches
Data are plotted with the exactly the same statistical model.



Market share data analysis also clearly validates the more subjective results of successful and not successful launches. Figure 11 shows the market share increase in the same way as sales increase was shown in above analysis. In the left graph, a successful launch has been colored red and a not successful one blue. In the right graph, the colors are blue, purple and red depending on whether the market share increase has been low, medium or high during the launch years. Again, both graphs show the successful launches placed in the same area of the model, i.e. the graphs give the same clusters of successful (defined by circle in the graphs) and not successful launches.

Figure 11: Market share data matched against successful and not successful launches
Data are plotted with the exactly the same statistical model.

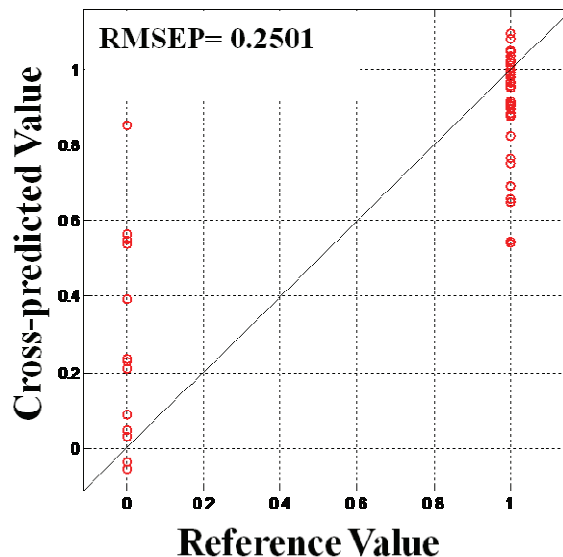


It can be concluded that the more subjective measure of “Successful launch” well matches the more objective measure (of sales and market share increase) of “Successful launch”. So, since the data clearly shows systematic differences between successful and not successful launches, the ability to handle this information in the right way should give important guidance on how to more quickly reach peak sales while utilizing available resources better in future launches in the form of key success factors.

Validation

While the PLS model gives a very good split between the “successful launches” and the “not successful launches”, it still has to be acknowledged that the received data is binary, i.e. 1 or 0. As reality is not this black and white, the two groups’ data has a spread. With cross validation, the group to which each specific launch belongs has a Root Mean Square Error of Prediction (RMSEP), being standard deviation over range, of 0,25. This can be considered to be very good. See Figure 12 for a graphical presentation. Further, it can be concluded that the group with “not successful launches” has a greater spread, which indicates that it is possible to “fail” a launch in many ways, while the more homogeneous group of “successful launches” indicates that there is a narrower span of ways of driving success.

Figure 12: Successful Launch - Root Mean Square Error of Prediction (RMSEP)



5.3. The Realized Value of each Variable and its Interpretation

This section opens with some methodological aspects, for easier comprehension of the results, followed by a presentation of the results of each variable.

5.3.1. Value Interpretation Framework

As described in chapter 2, Research Approach, this research does not utilize the traditional top-down, hypothesis-testing research approach, with regression analysis techniques and Structural Equation Modeling. Instead, the approach selected here was to utilize a so-called bottom-up pattern identifying research approach, employing the Partial Least Squares Analysis (PLS). The choice has been guided by e.g. Thomson (2004), Chin (1998) and Haenlein and Kaplan (2004). Examples of arguments specified in chapter 2 for using this analysis are that the conducted test has predictive aspiration, where PLS is suggested to be more powerful than its current alternatives (Ryan et al. 1999). Also, PLS is more suitable for use when there is a relatively small data set to be analyzed (Brown and Mazzarol 2009) and the number of independent variables is relatively large (Garthwaite 1994). Also, PLS' ability to positively handle multi-collinearity and independent variables with different weights (e.g. Ryan et al, 1991) supports this choice. Additional advantages of the PLS approach, which are relevant for the present study, are that it puts minimal demands on measurement scales (Brown and Mazzarol 2009) and also that it handles random error variance fairly well (Garthwaite 1994). The Research Model, as described in Chapter 2, Research Approach, is validated with the jack-knifing technique, also referred to as the leave-one-out cross-validation technique. With this technique, over-estimation (noise) can be avoided and an accurate model be obtained.

The interpretation of success for each variable or key success factor for sales force readiness during new product launch, is set within a range, known here as the success-range. This means that in order to contribute to a successful product launch, the given variable must assume a value within the defined *success-range*. Further, within this success-range, an *ideal-value* has been defined, which is the mean-value for each variable within the success-range. A variable is defined as sensitive if the “success-range” is 0,2 or less from the “ideal value”, i.e. that it offers a narrow tolerance-space for failing this variable to obtain a successful product launch. To give an analogy for illustration purposes; if the dependent variable is “*to drive a car without collision*”, and one of the independent variables is “the driving speed”, then we could say that, for example, in order “*to drive without collision*” we must drive at a speed between 50 – 70 km/h, while the ideal is 60 km/h in order to give the highest probability of reaching the targeted goal. In this case, the speed range given is the success-range while the ideal is the ideal-value.

5.3.2. Generated Values of the Variables

The individual variables of the Research Model and their generated values are presented and discussed below and a summarized overview of the variables together with their respective range and ideal values is presented in Table 10. The results from the variables included as Key Sales Force Factors will be presented first, followed by the variables included under the category Circumstances.

Key Sales Force Factors

Emotional Attachment of the Sales Representatives

For the variable Emotional Attachment held by the sales representatives for the product and its successful launch, this analysis generated a success-range between 0,6 and 1,5 for a successful product launch, while the ideal-value is 1,0; where the meaning of “1” was set to a full emotional commitment.

Clearly, this shows that a positive emotional commitment held by the sales representatives during a product launch positively impacts the success of this launch. On the other hand, the values of the success-range show that this is not a very sensitive variable; hence a successful product launch may be generated even when only a partial emotional commitment has been achieved.

Activity Accountability of Sales Representatives

This variable investigates whether or not the sales representatives were held accountable for their sales activities. The performed analysis generated a success-range between 0,8 and 1,0 for a successful product launch, while the ideal-value is 0,9; where the meaning of “1” was set to a full accountability.

This result shows that Accountability of sales representatives contributes positively to a successful product launch. Unlike the previously presented variable, this is a very sensitive variable where the generated values show that high accountability will contribute to a successful product launch, and that if this is not achieved then the contribution of this success-driver will likely not contribute at all to a successful product launch.

Explanation of Unachieved Sales Goals

This variable inquires whether or not the sales representatives had to explain themselves to their manager(s) when they did not achieve the set sales goals. The performed analysis generated a success-range between 0,6 and 0,8 for a successful product launch, while the ideal-value is 0,7; where the meaning of “1” was set.

This variable’s mean-value is somewhat distant from to a full requirement for explanation, while at the same time being rather sensitive. This is interpreted as, on the one hand, asking the sales representatives to explain themselves when they do not reach their performance goals in contributing to a successful product launch; and on the other hand, that the sales representatives do not fully need to explain themselves when not reaching their sales goals.

Introduction Rationale of the Product for the Sales Representatives

This variable investigates whether the sales representatives were provided with an explanation of the rationale for the introduction of the product. The outcome of the analysis generated a success-range between 0,7 – 1,4, for a successful product launch, while the ideal-value is 1,0; where the meaning of “1” was set to a full explanation of the product rational.

Clearly, the ideal-value shows that if the sales representatives are provided with a full explanation of the product rationality, this will contribute positively to a successful product launch. However, this variable is not very sensitive, as it provides a significant span of success-range, showing that even if not all sales representatives are provided with an explanation of the product rationality then the product launch may still be successful.

Sales Representatives may Speak Freely with their Manager

This variable addresses whether the sales representatives were able and also encouraged to speak freely with their managers, regarding easy and also difficult issues in their work. The outcome of the analysis generated a success-range between 0,8 – 1,2, for a successful product launch, while the ideal-value is 1,0, where the meaning of “1” was that the sales representatives could speak freely with their managers.

These results show that if the sales representatives are provided the freedom to speak with their managers of any related work issues and that managers do listen, this will contribute positively to a successful product launch. Further, the success-range values

show that this variable is a crucial driver for a successful product launch, while at the same time providing some tolerance-space, about 20 % in each direction.

Sales Manager Observations of Sales Representatives in the Field

This variable investigates to what extent the sales manager should, or should not, monitor the sales representatives in their work in the field in order to contribute to a successful product launch. This variable could assume one of the following three values: “no-monitoring”, “medium-monitoring”, and “high-monitoring”. The outcome of the analysis conducted here showed that the success-range for “no-monitoring” was between 0,0 – 0,1 while its ideal-value was 0,0, where “1” accounted for a positive relation, (i.e. “no-monitoring” contributes positively to a successful product launch).

The results here show that the opposite value to “1” is the ideal, i.e. “0”, which is a negation of the relationship mentioned here. The results say thus that no “no-monitoring” relates positively to a successful product launch, or that no-monitoring is not good for a successful product launch. Further, the success-range values show that this variable is very sensitive.

When focus is transferred to the second value of the sales manager’s monitoring of the sales representatives, the “medium-monitoring” value, the analysis shows a success-range between 0,4 – 0,6 while the ideal-value was 0,5, where “1” accounted for a positive relation. Interestingly enough, exactly the same results for the success-range and for the ideal-value were obtained for the third variable value, “high-monitoring”. This means that these two variable values, medium-monitoring and high-monitoring, are preferable to the variable value “no-monitoring”. They also show that medium-monitoring and high-monitoring contribute positively to a successful product launch; ($0,5 + 0,5 = 1,0$) manifesting together a full positive relation with a successful launch. Further, the range-values show that this is a very sensitive variable.

Sales Representatives’ Problem Solution Approach

This variable investigated the character of sales representatives for successful product launch in terms of the approach they utilized for problem-solving in their sales situations. This variable could assume two distinct values: Systematic Approach or Intuitive Approach.

The results shows that the Systematic Approach received a success-range between 0,3 – 0,6, with the ideal-value of 0,5, while the Intuitive Approach received a success-range between – 0,1 – 0,6, with the ideal-value of 0,3. In this case, “1” was a positive relation

between the particular value and the successful product launch. The results here show that a Systematic Problem-Solving Approach for sales representatives is preferable to an Intuitive Approach, if a successful product launch is to be achieved. On the other hand, this variable is not sensitive, offering a tolerance in failing to achieve its value and yet obtaining a successful product launch.

Number of Sales Representatives

The variable is the number of sales representatives utilized by the sales force during the product launch. The analysis performed here generated a success-range between 9,4 and 12,3 sales representatives for a successful product launch, while the ideal-value is 10,8.

This means that about ten to eleven sales representatives provide the highest probability for a successful product launch, with a margin of about ten percent up or down. It also shows that this variable is rather sensitive, and if, for example, a launch is performed with five sales representatives it will most likely contribute to reduced success, while a launch with more than eleven may imply decreased success or no additional success.

Promoted with Other Products

This variable investigates whether the product launched on the market should be sold by the sales representatives together with other products or otherwise alone. In this case, “1” signifies for the value “together” a positive relation to successful launch; similarly “1” signifies for the value “together with other products” a positive relation to successful launch. The results gives a success-range of 0,0 – 0,5 and an ideal-value of 0,2 for the value “together with other products”, while a success-range of -0,1 – 0,6 and an ideal-value of 0,3 for the value “alone”. The numbers show that it is better to sell the launched product alone than together with other products if a successful product launch is to be achieved, but that it is not crucial.

Product Order in Sales Call

This variable aims to investigate the order in which the product launched is sold during a sales representative’s sales call with the physician. The variable addresses those situations when a sales representative sells two or more pharmaceutical products during his or her sales call to the physician. The question is whether the launched product should be sold first in order to contribute to a successful launch, or if it does not need to be sold first and yet can still contribute to a successful launch. In the present analysis, “1” signifies that the product is sold first. The success-range obtained is 1,1 – 1,3 while the ideal-value is 1,2. These numbers show that it is important to have the launched product

sold first. Assuming that the results obtained here may be regarded as valid with regard to the missing values in the data set, the implication is that in situations when a product is being launched in a manner whereby it should be sold together with other products, it is crucial for the success of the launch that the launched product is sold first during the sales representative's sales call.

Circumstance

The next set of variables belongs under "Circumstances" in the Research Model. These elements of the Research Model aim to provide important circumstantial information of interest when formulating launch strategy, but are of the nature that sales management has little or no influence.

The Newness of the Launched Product

This variable investigates whether or not the type of newness of the launched product impacts the success of the launch. Newness was operationalized in terms of three values: (a) the product is not a new type of product to the market and is a revision of a previous product for the company launching it (Old-Old); (b) the product is not a new type to the market while it is of a new type to the company launching it (Old-New); and (c) the product is a new type of product to the market and it is also new to the company launching it (New-New). For each of the values, a positive relation with a successful product launch is signified by a "1".

The obtained results show that the Old-Old type of products had a success-range between 0,1 – 0,2 and an ideal-value of 0,1; the Old-New type of products had a success-range between 0,2 – 1,0 with an ideal-value of 0,6; while the New-New type of products has a success-range between -0,1 – 0,6 with an ideal-value of 0,3. The Old-New type of products seems to be the best contributor or driver of a successful product launch of the three types being investigated, as it is closest to the value 1,0. On the other hand this situation is not particularly sensitive. Also, the New-New type of products contribute more to a successful product launch than do the Old-Old type of products, while still contributing less than the Old-New type of products.

Given that the typical situation is that the team launching a product cannot determine or influence the newness of the product, an implication that can be perceived here is that a product launch team does not need to critically worry about the success of product launch with regards to the newness of the product launched. However, there is a fairly strong correlation between the Old-New type of product and the success of its launch. This is

not very sensitive, and thus not a particularly crucial driver for success. Some managerial implications will be discussed in a later section.

Stability of the Market

This variable investigates whether a successful product launch is more favored by a stable market or by an unstable market. This binary characterization – stable vs. unstable – of the market space of the launched product needs to have a “1” to denote a positive relationship. The results for the value unstable market showed a success-range between 0,7 – 0,8 with an ideal value of 0,7 while the results for the stable market show a success-range between 0,2 – 0,3 with an ideal value of 0,3. Clearly, the results show that a product launch in an unstable market space is more likely to generate success than a product launch in a stable market; this variable being very sensitive. The implications of this situation are challenging in so far as we can seldom choose whether the market the product will be launched in is stable or unstable; and that our ability to influence a market to change its condition is typically limited, however, some strategic considerations will be discussed in a later section.

Market Change Rate

This variable investigates whether successful product launch is more favored by a rapidly changing market or the opposite, by a slowly changing market. This binary characterization of the market of the launched product – slow vs. rapid – needs to have a “1” to signify a positive relationship. The results for the value rapid market change showed a success-range between 0,4 – 1,1 with an ideal value of 0,8 while the result for the slow market change showed a success-range between -0,1 – 0,6 with an ideal value of 0,2. The results show that a product launch in a rapidly changing market is more likely to generate success than a product launch in a slowly changing market; this variable is not very sensitive. Also here, as with the two previous variables, the implication of this situation is challenging in so far as we can seldom choose whether our launch will take place in a market space that is changing slowly or rapidly; also our ability to influence the rate of change of a market is typically limited, however, some strategic considerations will be discussed in a later section.

Table 10: Results from Research Model data analysis, utilizing PLS

Variables	Min	Ideal	Max
<i>Key Success Sales Factors</i>			
Emotional Attachment	0,6	1,0	1,5
Activity Accountability	0,8	0,9	1,0
Explanation of Unachieved Sales Goals	0,6	0,7	0,8
Introduction Rationale of the Product	0,7	1,0	1,4
Speak Freely with Managers	0,8	1,0	1,2
Sales Manager Observations on the Field: Non	0,0	0,0	0,1
Sales Manager Observations on the Field: Medium	0,4	0,5	0,6
Sales Manager Observations on the Field: High	0,4	0,5	0,6
Problem-Solving Approach: Intuitive	-0,1	0,3	0,6
Problem-Solving Approach: Systematic	0,3	0,5	0,6
Numbers of Sales Representatives	9,4	10,8	12,3
Promoted with Other Products: with other products	0,0	0,2	0,5
Promoted with Other Products: alone	-0,1	0,3	0,6
Product Order in Sales Call	1,1	1,2	1,3
<i>Circumstances</i>			
Type of New Product: Old-Old	0,1	0,1	0,2
Type of New Product: Old-New	0,2	0,6	1,0
Type of New Product: New-New	-0,1	0,3	0,6
Stability of the Market: Unstable	0,7	0,7	0,8
Stability of the Market: Stable	0,2	0,3	0,3
Market Change Rate: Fast	0,4	0,8	1,1
Market Change Rate: Slow	-0,1	0,2	0,6

5.4. The Total Pattern and its Interpretation

Given the-above presented results of each of the variables investigated here, it is now possible to identify the overall emerging pattern of successful sales force readiness during launch of new pharmaceutical product aimed at General Practitioners in Sweden. See Table 11 for an overview.

5.4.1. Five Important & Crucial Key Success Factors

Five *important & crucial key success factors* for sales force readiness were identified for driving successful product launch. By “important” it is meant that each of these factors shows a strong positive influence on the success of a launch; while “crucial” denotes here that the absence of any of the five factors found may negatively influence the product launch success. In analytical terms, “crucial” is defined here as the variables from the PLS analysis showing both an ideal value close to a full positive relation to a successful launch and which were identified as being sensitive, i.e. offering a narrow tolerance-space for failing this variable to obtain a successful product launch. The “cut-off” value for being “crucial” was selected, for the Key Sales Force Factors, as an “ideal value” close to equal or more (ideal value equal or more than 0,9) to a full positive relation towards a successful launch (1,0).

These five key success factors or success drivers include: (i) establishing a high sales representative activity accountability; (ii) establishing a relation between the sales representatives and their sales managers where the sales representative can speak freely about any related issue; (iii) establishing medium- to high-intensive monitoring of the sales representatives’ sales behavior in the field; (iv) securing that the launched product is sold by the sales representatives as the first one, in the case when several products are sold (detailed) during the same sales call, and finally; and, (v) the sales force should be composed of a range between nine and thirteen sales representatives.

5.4.2. Five Important Key Success Factors

The analysis performed here has also uncovered five *important key success factors* of sales force readiness that drive successful product launch. By “important” it is here meant that each of these factors shows a positive influence on the success of a launch; however, unlike the five previously-discussed “important and crucial factors”, the absence of each of the five factors found here should not show any significantly negative impact on the product launch success. The definition “important” (but not crucial) is used for the variables that in the PLS analysis showed as having a more distant “ideal-value” to a full

positive relation towards a successful launch and/or not being sensitive, i.e. offering more tolerance-space for failing this variable to obtain a successful product launch. The “cut-off” value for being “important” (but not crucial) was selected, for the Key Sales Force Factors as an “ideal value” being less close (less than 0,9) to a full positive relation to a successful launch (1,0) and/or a “success-range” being 20% or more distant from the “ideal value”.

These five important (but not crucial) key success factors or success drivers include: (i) having established emotional attachment of sales representatives to the launched product; (ii) requiring that the sales representatives explain themselves when their sales objectives are not met; (iii) having explained the product rationality for the sales representatives; (iv) acquiring sales representatives that possess a systematic problem-solving capability rather than an intuitive one; and, (v) securing that the launched product is sold (detailed) by the sales representatives as a stand-alone product, rather than together with other products.

5.4.3. The Ideal Market Conditions for a Successful Launch

The analysis performed here has further uncovered the ideal market conditions for a successful product launch. These market conditions are constituted by two market characteristics which typically cannot be influenced in the sense that they can be selected freely. However, the information about these market conditions produces managers with the opportunity to adjust other strategic and operational aspects of the product launch so that a match between market conditions and strategic and operational set-up can be achieved. The results show that the ideal market for launch is unstable in its behavior and that the market changes rapidly.

5.4.4. The Ideal Type of Product for a Successful Launch

The present study has also identified the type of newness of the product to be launched, which is the most ideal type for a successful launch. The ideal product should be of a type which is not new to the market, however, which is of a new type for the firm launching it on the market.

Table 11: Key Success Factors

Key success factors for sales force readiness during new product launch in the Swedish pharmaceutical industry.

Key Success Factors for Sales Force Readiness during New Product Launch	
<i>Five Important and Crucial Key Success Factors</i>	
(i)	Establishing a high sales representative activity <u>accountability</u>
(ii)	Establishing a relation between the sales representatives and their sales managers where the first-mentioned can <u>speak freely</u> about any related issue
(iii)	Establishing medium to high intensive <u>monitoring</u> of the sales representatives sales behavior in the field
(iv)	Securing that the launched product is <u>sold</u> by the sales representatives as the <u>first one</u> , in the case when several products are detailed during the same sales call
(v)	The sales force should be composed of a range <u>between nine and thirteen</u> sales representatives
<i>Five Important Key Success Factors</i>	
(i)	Having established <u>emotional attachment</u> of sales representatives toward the launched product
(ii)	Requiring that the sales representatives <u>explain</u> themselves when their <u>sales objectives</u> are not met
(iii)	Having <u>explained the product rationality</u> for the sales representatives
(iv)	Acquiring sales representatives that posses a <u>systematic problem solving capability</u> rather than intuitive
(v)	Securing that the launched product is detailed by the sales representatives as a <u>stand-alone product</u> , rather than together with other products
<i>Ideal Market Conditions</i>	
	The results show that the ideal market for launch is unstable in its behavior and that the market changes rapidly
<i>The Ideal Type of Product for a Successful Launch</i>	
	A product which is not new to the market, however, which is of a new type for the firm that launches it to the market

5.5. Conclusions of this Result

This study has been fruitful in that it has been able to discriminate a set of key success factors of sales force readiness, that drive the success of new product launch. Further, the study has also succeeded in discriminating between four types of key success factors: the key success factors that are *important & crucial* for a successful launch, the key success factors that are *important yet not necessarily crucial* for a successful launch, thirdly the market conditions that are most ideal for a successful launch, and finally the type of newness of the product that is most suitable for launch. While the two first-mentioned factors can be more easily managed and influenced by the company launching the product, the latter two types of factor can typically not be influenced by the launching company; rather the company needs to adapt or prepare itself to the prevailing conditions. With both the set of case studies and the set of expert interviews supporting the notion that, even with significant industry changes, it should be possible to conduct new launches with a higher probability of success by studying earlier launches, these results should be of considerable interest for both practicing managers and academic scholars.

5.6. Discussion & Managerial Recommendations

This section presents the discussions and managerial recommendations, based on the findings of this study. The managerial recommendation for each key success factor is also summarized in Table 12.

Five Important & Crucial Key Success Factors

(i) Establishing a high sales representative activity accountability

Activity accountability is identified as an important & crucial key success factor for a successful launch. It shows that there is a need to keep sales representatives accountable for their sales activities to a greater extent than other measures. As identified earlier, one implication of this result is that careful planning and efforts should be put into securing that sales representatives are held accountable for their sales activities, in order to generate a successful product launch. A possible explanation for this high importance of activity control during new product launch could be that outcome measures, such as sales numbers and market share prognosis, are very uncertain and hard to predict when launching a new product versus selling older products which have been on the market for some time. As these launch outcome measures could be obsolete or misleading very early in the launch, based on lack of information or “guesstimates” when setting forecasts, the sales representative might lose motivation as he/she would be chasing impossible or unrealistic objectives. One way to solve this would be to have more flexible outcome measures or update the measures very frequently. However, based on the results of this research, it is argued that the best solution is to put more emphasis on the activities, as this will keep the sales representatives focused on factors over which they have greater direct influence, even in an uncertain marketplace. This could also be argued to be even more important, as the ideal market for launch was found to be an unstable market with rapid change, in which it can be assumed that uncertainty will increase even more.

The “activity accountability” factor belongs to the category behavior control, and on an overview basis, the result here is supported by earlier research that concludes that the behavior control category is one of the most important factors for a successful launch of a new product (Ramaswami 1996). In the field of sales force effectiveness, Baldauf and Cravens (1999) suggest, based on their empirical findings, that the role of sales managers in many organizations is shifting away from command and control management toward coaching styles of management, which in some degree supports behavioral control over outcome control. Their finding concludes some support for behavioral-based sales management control strategies being associated with a higher level of sales unit

effectiveness. Also the characteristics of the pharmaceutical market, with its difficulties in measuring sales on a representative level, especially outside the US, might be part of the explanation as to why behavioral based-measures are to be preferred over outcome-based (Lloyd and Newell 2001). There are also a few earlier research efforts that have hypothesized the opposite, (i.e. behavior control weakens the relationship to successful launch), but have failed to support this hypothesis and also omitted activity accountability from their measurement instrument (Hultink and Atuahene-Gima 2000). In essence, the conducted research adds to the growing base of evidence that behavior-based sales management strategies are being adopted to a greater extent and that these strategies might provide a higher level of sales force effectiveness and readiness. It is however important to note that research has concluded that sales-managers competencies in behavior-based control is not well researched (Piercy et al. 2009), why this is an area for further research.

When managers plan to secure that sales representatives are held accountable for their sales activities, a recommendation is to put some emphasis on the clarification and description of what is defined by the company as excellent sales activity behavior, using descriptive examples. This will particularly guide new sales representatives as to the right expectations as well as to a better understanding of any objectives set by managers in support of reinforcing activity accountability. Also, using balanced scorecard or a modified version thereof, with weight on activities, might be a wise addition in the management control system.

- (ii) Establishing a relation between the sales representatives and their sales managers where the sales representatives mentioned can speak freely about any related issue

The results for the variable, Speak Freely with Managers, showed that if the sales representatives are provided with the freedom to speak with their managers about any related work issues and that managers do listen; this will contribute positively to a successful product launch.

The original variable belongs to the subcategory trust in the literature under new product adoption. The support for this in the new product launch literature is not very strong, for example, Hultink and Atuahene-Gima (2000), argued, based on earlier research on interpersonal trust, that trust leads to greater commitment to the relationship and increased cooperation, but they did not find support for any positive effect that sales force adoption of a new product on selling performance being stronger when trust is greater. As this is highlighted in all case studies conducted in this research and is also identified as an important & crucial success factor in the analysis for a successful launch, it is recommended here that managers keep this high on the agenda, both during preparation

and during launch. The implication for managers that may be drawn from the results found here is that the planning and execution of a sales force management strategy for a new product launch, should include the sales representatives' freedom to speak with their managers on any related work issue and making sure that managers are able to listen. This might be best achieved by training sales management in appropriate coaching techniques, following the findings of Piercy et al. (1997) that more effective sales organizations put more effort into coaching and communicating. Also, it is recommended that objectives supporting that behavior should be included in the sales managers' objectives.

(iii) Establishing medium- to high-intensive monitoring of the sales representatives sales behavior in the field

The results from the variable which investigated to what extent the sales manager should, or should not, monitor the sales representatives in their work in the field in order to contribute to a successful product launch, found that managers should monitor the sales representatives in the field. However, the results further showed that both "medium-monitoring" and "high-monitoring" contribute positively to a successful product launch, with no difference between their results.

The literature has some mixed support for this, as discussed earlier when constructing the Research Model under field attention. However, there is research that suggests that travel with sales representatives is important for a new product success (Anderson and Robertson 1995; Atuahene-Gima 1997). This literature indicates the importance of co-travel based on providing timely feedback and for managers to gain firsthand knowledge from the market.

The managerial recommendations, based on the findings in this research and on the literature, are to include field travel for monitoring sales representatives as an important and crucial factor in the sales force strategy when launching a new product. With medium and high monitoring having equal importance for a successful product launch, the recommendation is to keep the field monitoring on a medium level. This approach has several purposes; on the one hand to secure enough observation time for the sales managers to gain firsthand knowledge of the market issues, and to be able to provide quality, timely and fair objective performance evaluations, and on the other hand, to optimize resource consumption and hopefully avoid any perceived "looking-over-my-shoulder" perception in the sales force.

- (iv) Securing that the launched product is sold by the sales representatives as the first one, in the case when several products are sold (detailed) during the same sales call

The result showed that, even if the data collected on this topic had a smaller population, in situations when a product is launched and is planned to be sold together with other products, it is important and crucial for the success of the launch that the new product be sold first of all products during the sales representative's sales call. The managerial recommendation is to always adopt a sales force strategy during launch with the new product being sold first in all sales calls. The only exceptions would be if the company possesses a very good segmentation model, in which individual customers could be identified on the basis that another order of products sold during the sales call would increase benefits for another product, while still bringing equal benefits to the new product as if it was sold first, even if the new product is put in a non-first position during the sales call. In addition, it has also been learned from the literature that the salesperson is likely to be more effective if the product lines are synergistic with one another, such as complementary product positioning or customers who need many different products from the product line (Rangaswamy et al. 1990). This might be very true among the General Practitioners, who cover a broad range of therapeutic areas.

- (v) The sales force should be composed of a range between nine and thirteen sales representatives

The optimal numbers of sales representatives for a successful launch found in this research were between nine and thirteen. This number is of course valid for the project scope identified. In the collected data set, the average number of sales representatives used in launching a product was thirteen (13.1), with a spread from three to forty. For the successful launches, 40% of sales forces had above thirteen sales representatives, 36% below nine, and 24% within the identified success range. Figure 9 shows the numbers of sales representatives that were utilized for the successful launches, within and outside the generated success range. This indicates a slight overinvestment in sales force representatives, leading to a higher than necessary cost. These results suggest some confirmation of the issue raised by Manchanda and Chintagunta (2004) of the presence of over-detailing in the pharmaceutical industry. Recent trends have also shown that, even if this is not specific for product launch, that the numbers of representatives in the sales force are decreasing (Dutton and Reece 1996; Rangaswamy et al. 1990; Ruzicic and Danner 2007). Corporate down-sizing of sales forces in the pharmaceutical industry has been a trend for many years in the developed world, including Sweden. Piercy et al. (1997) refer, when in an era of substantial corporate downsizing, that "right-sizing" of the sales force is a highly significant issue for managers concerned about effectiveness. Their

findings suggest that “right-sizing” at sales unit level should be a priority in recovering from corporate re-structuring, if superior sales effectiveness is to be achieved (Piercy et al. 1997). Further they suggest that the more effective sales organizations may be closer to being right-sized. Their research also suggests that effectiveness cannot be increased by just adding further salespeople to sales units.

The managerial recommendation is that significant effort should be put into allocation of right-sizing the sales force, and from the results of this research, a number of between nine and thirteen should be pursued when launching aimed at General Practitioners in Sweden. Having a sales force larger than thirteen suggests inefficiency and might lead to lost profit. Also, having a sales force smaller than nine might jeopardize a successful launch of the new product. This result could also be complemented with other literatures suggestions for mathematical models to optimize the sales calls resources (Agnietis et al. 2010).

The results from this study on the number of sales representatives are, as already stated, of course guiding and very specific for the new product launch target group, general practitioners, and the market investigated in this research. However, as discussed earlier, it might be assumed, if in another market with similar conditions, with the new product launch target group being the same, that sales force number might be assumed to be scaled in a linear manner in accordance with the size of the target group.

Five Important Key Success Factors

- (i) Having established the emotional attachment of sales representatives toward the launched product

The results showed that emotional attachment held by the sales representatives towards the new product during a product launch positively impacts a successful launch. The managerial recommendation is to plan and execute activities for generation of emotional attachment to the product in advance and during early launch for greater possibility of success during the new product launch. However, the results also showed that a successful product launch may be achieved even with only partial emotional attachment. One implication is that high investments focused on initiatives that attempt to achieve high emotional attachment may not be efficient from a resource point of view. Emotional attachment activities are typically somewhat subtle and may require great effort and thus significant resources. The case studies identified examples to generate high emotional attachment in the sales force to the new product as activities such as teambuilding activities where the aim was to have everyone comfortable with the arguments for

skeptical customers; investments in bringing the sales representatives to congresses for further development; interactions with both physicians and nurses to learn the importance of the product in practice; and having the launch team meet with patients to hear their stories.

Emotional attachment belongs to the subcategory commitment under new product adoption in the literature (Hultink and Atuahene-Gima 2000). Hultink and Atuahene-Gima (2000) found that commitment correlates positively to performance when selling a new product. Even though emotional attachment is an item under the commitment variable in Hultink and Atuahene-Gima (2000), this suggests that the results support earlier findings in the literature.

(ii) Requiring that the sales representatives to explain themselves when their sales objectives are not met

In this research, having the sales representatives explain their unachieved goals is an important key success factor for a successful product launch. However, tolerance was also identified for the fact that a successful product launch may be achieved without having all sales representatives onboard. One implication is that planning of a successful product launch should include the need for sales representatives to explain themselves, while the other related implication is that there is no need to over-invest in this effort. However, formally giving the sales representatives the opportunity to explain their performance achievements, especially when their objectives are not met, might increase their motivation to still work towards objectives or outcome goals that are becoming unrealistic on the basis of unpredictable or unknown market dynamics before or during launch, as they would know that even if they cannot achieve their goals, their work will be fairly evaluated based on their explanations. Lilien et al. (1981) argue, in support of above, that often too little data is available during launch of a pharmaceutical product, to make accurate sales forecasts.

This suggests further support to and is complementary to the identified important and crucial key success factor, about accountability for activities, in terms of motivation being driven by factors within that the sales representative's control. So, the combination of behavior control in the form of activities performed in the field, together with outcome control in the form of clear managerial guidance of giving the sales representatives the chance to explain any outcome measures and why these are not achieved, might increase the sales representatives' ability to better influence their objectives in the unpredictable environment of a new launch environment, thus leading to higher motivation and commitment. Following this, the managerial recommendation is to include requirements for the sales representatives to explain performance in the control system, in form of a

formal process. It is recommended that this be communicated to the sales force as a means to give them ongoing influence on the adjustment of their performance objectives.

(iii) Having explained the product rationality for the sales representatives

The results of the key success factor for the variable if the sales representatives were provided an explanation of the rationale for the introduction of the product, clearly showed that if the sales representatives are provided with a full explanation of the product rationale, this will contribute positively to a successful product launch. Also, from the results it was concluded that even if not all sales representatives are given or understand the explanation of the product rationale, the product launch may still be successful.

Even if the literature has not directly analyzed the item about explanation of product rationale, it can still be argued that, with the variable belonging to the category of internal marketing, its results are supported in earlier research. Earlier research suggests that internal marketing reduces ambiguities among the sales force in terms of procedures and objectives (Anderson and Robertson 1995). Further, Hultink and Atuahene-Gima (2000) gained strong support for internal marketing being nearly significantly related to selling performance.

The managerial recommendations, to include in the strategic plan, are that the sales managers provide their sales representatives with a thorough explanation of the rationale for launching this product. The rationale should include how the new product fits into the market place for its customers (the physicians) and their customers (the patients) as well as for the company. This might preferably be implemented as a continuous agenda topic during pre-launch and launch meetings instead of a larger onetime event. Hultink and Atuahene-Gima (2000) argued that managers should focus significant resources and effort on internal marketing before sending sales representatives to the field. However, the results of this research identified that there should be no need to down-prioritize other factors in a situation with scarce resources in favor of explaining the rationale, as a certain lack of understanding should not jeopardize the launch. This indicates that over-investments may not pay off, suggesting clear inclusion with moderate investments to achieve the best profit situation.

(iv) Acquiring sales representatives that possesses a systematic problem solving capability rather than intuitive

This variable in the research model investigated the character of sales representatives for a successful product launch in terms of the approach that they utilized for problem-solving in their sales situations. This variable could assume two distinct values, a

systematic approach or an intuitive approach. The results found that a systematic problem-solving approach for sales representatives is preferable to an intuitive approach, if a successful product launch is to be achieved. On the other hand, the results also suggested the variable as not being sensitive, offering tolerance for failing to achieve a fully systematic problem-solving approach in the sales force and yet obtaining a successful product launch.

As research by Scott and Bruce (1994) found that systematic problem-solving style is negatively related to innovative behavior of employees, it can be elaborated based on the results found in this research that during product launch a company might want to have a sales force with little innovative behavior in order to reach a greater possibility of success. Therefore, a managerial recommendation is to place a specific recruitment criterion on problem-solving approach in the recruitment process for the new product's sales force in favor of sales representatives with a systematic problem-solving approach, and as discussed above, less innovative behavior might be a complementary criterion to include. Selecting and hiring salespeople is a difficult and important task for sales managers as it has long-range impact on sales district performance and the rate of salesperson turnover (Sager and Ferris 1986).

An observation from the case studies was that all cases that identified a systematic problem-solving approach as preferred also had a much higher level of implemented procedures and processes related to behavior and outcome control. The opposite applied to the cases that identified intuitive problem-solving approach as preferable, and they instead had a low degree of established procedures and processes for behavior and outcome control. Based on this, the recommendation is extended to take into consideration that if the company's defined processes for sales force control are developed and implemented to a high level, the stricter the above recruitment recommendation should be implemented.

Based on discussions with the experts and sales management in the case studies, it was argued that with future developments in the pharmaceutical industry in terms of customer access issues, governmental and economic pressure, etc, the trend might shift towards a more flexible and intuitive problem-solving approach as it may be necessary to be more flexible and innovative in the sales force to penetrate with the message. This is also highlighted in the literature, where it is concluded that physicians are starting to ask questions about what patients think of the drug, how much they pay, whether they comply with treatment regime and recommendation lists etc. (Elling et al. 2002; Tengilimoglu et al. 2004). A suggestion for future research is to see if the preferred problem-solving approach changes over time and which market trends would drive those changes.

- (v) Secure that the launched product is sold (detailed) by the sales representatives as a stand-alone product, rather than together with other products

The variable in the model investigated whether the product launched should be sold by the sales representatives together with other products or alone. The result showed that it is better to sell the new product alone than together with other products if a successful launch is to be achieved. However, the results showed little difference between selling the product alone or selling it together with other products. It might be seen as somewhat contra-intuitive, as one can easily intuitively assume that a standalone promotion is always better than a combined. Clearly, this does not need to be the case based on the findings in the research. However, a reminder here is the results found in this study around another variable, being an important and crucial key success factor, which states that if a new product is sold together with other products it should be sold first to achieve a successful launch. Therefore, everything indicates that being first is more important than being alone.

The managerial recommendation from these results may be twofold. In the cases when the costs of selling are crucial to the overall business and full product portfolio success, the alternative of promoting the launched product together with other products may be attractive. On the other hand, in a situation when the costs of selling are not as critical for the overall business and full product portfolio success, the alternative choice of selling the product alone should be considered as this option is more likely to contribute to a successful product launch than the former. Further, this choice may depend on how the sales force is organized before launching the product, as organizational change can be disruptive for the sales force (Micheal et al. 2003).

Ideal Market Conditions

The results show that the ideal market for launch success is both unstable in its behavior and in rapid change. The unstable variable was identified as the stronger driver.

It can be assumed that in an unpredictable market, salespeople will face more challenges or be less able to predict customer adoption or preferences, price changes and other factors that will have impact on the results for a new product launch (Hultink and Atuahene-Gima 2000; Rao 2000a; Rao 2000b). Further, the implication of this situation is challenging in so far as that we can seldom choose whether the market for the launch is stable or unstable, combined with the fact that our ability to influence a market to change its condition is typically limited. Some literature suggests that customers in a more

volatile market would show more resistance to new products and that salespeople encounter ambiguities versus a nonvolatile market (Achrol and Stern 1988; Atuahene-Gima 1997).

However, the findings in this research that unstable state and rapid change in the market have a positive relation to product launch success are argued to be further supported in the literature. Even if the two variables researched in this study do not add up to a full analysis of market volatility or degree of unpredictability according to some previously conducted studies on new product adoption in the sales force, there are such clear results suggesting a positive relationship to launch success for both variables, that it can be assumed here to support current literature with the same findings. The findings are supported by the results found in Hultink and Atuahene-Gima 2000. They also found that market volatility is positively related to salespeople's performance in selling a new product. They argue that salespeople may actually enjoy themselves and perform better when facing challenges in the environment. This argumentation is also supported in other research, where job satisfaction when selling new products is higher when the market volatility is greater (Atuahene-Gima and Micheal 1998). The research results can be further explained as when a product enters a market that is in rapid change and is unstable, customers' behavior or their preferences might be easier to change or influence.

This finding leads to several potential strategic considerations that can be drawn from these results. Firstly, as the sales force might encounter difficulties around targeting and segmentation of customers, while managers would still be advised to work with all key success factors, extra emphasis should be put on the key success factor "activity accountability", as it might be much easier for the sales manager and sales representative to set common accepted objectives and expectations for activities. More loosely-defined or more flexible sales targets might motivate as they are harder to predict, while managers should avoid pushing for extensive customer or territory profiles, so as not to demotivate the sales force with more onerous tasks.

When the ideal market conditions for launch are applicable, even if probability for success is increased when launching in an unstable market with rapid change, managers are recommended to use more caution in the forecasting and budget process. The preferred strategy would be to pursue a more defensive approach. However, an important implication in adopting a defensive forecasting strategy is the requirement of clear communication to any production and supply chain processes, in order to prepare them for a more flexible supply situation, handling any unexpected increase in forecasted sales. In a situation when the market situation is less ideal for launching a new product, being a stable market with slow change, with assumed better availability of reliable market and customer data, more accuracy could be assumed in the forecast and budget.

When launching in a less ideal market, which is thus likely to reduce the probability of success, other available actions should be taken to balance this negative driver. It becomes even more important to secure extra resources for all the key success factors that have been identified in this research.

The recommendation for companies that are not launching, but facing entering competitors, is to be extra prepared when unstable and rapid change is the defined market state at time of the competitor's product introduction. More actions and contra messaging might be necessary.

The Ideal Type of Product for a Successful Launch

The results from this research suggest that the ideal type of product for a successful launch is when a product type is “not-new-to-the-market but new-to-the-firm” launching it. In response to the question why this type of product is the best driver for a successful launch, a possible explanation is that when a firm is new to a product, there is a greater sense of urgency and understanding that knowledge needs to be acquired and the old way of working should be questioned to a greater extent. The results from some findings in the new product development literature support this explanation by highlighting that when this occurs, launch activities receive better resources and focus (Calantone and Cooper 1981; Hultink et al. 1999). The same explanation might apply to the product type “new-to-the-market and new-to-the-firm”, however, in this case it can be argued that the external factors are different in terms of the market data and information available, benchmarking opportunities and perhaps most important, that the customer will not have the knowledge to adopt the new product as quickly as if the behavior and product category is already understood. For the “not-new-to-the-market and not-new-to-the-firm” product type, the arguments would be that by having already established behaviors and processes both in the market and within the sales force, some assumptions might be wrongly used by sales management in terms that “business as usual” would apply best to the new product. This issue was also raised within some of the case studies, where it was seen as an important issue that new messages for the new product cannot be adapted and implemented as easily in the sales force if the pre-notion of “we already know this” exists, leading to the outcome that messages might not be optimal for the new product, but instead support old behaviors from customers where change is wanted and needed to drive success for the new product.

Previous research brings some further support to the findings and argumentation within this research. Michael et al. (2003) concluded that the implication on their results for firms launching new products suggest that all elements of current sales management

strategy should be scrutinized for potential beneficial changes. This was based on the overview results that nearly two-thirds of their respondent firms made some kind of change in sales management strategy to accompany the new product introduction. Micheal et al. 2003 did not measure or relate any of the changes to whether the product was successful or not, neither did this research capture the amount of changes, however both researches together indicate that “not-new-to-the-market but new-to-the-firm” has most changes when formulating strategy as well as likelihood of succeeding when launching a new product.

It is recommended, based on the above line of argument, that managers make sure that a deliberately increased focus and effort are applied to the strategy formulation process and the identified key success factors when the product type is “not-new-to-the-market and not-new-to-the company”, compared to the other two type of new products.

Table 12: Overview of managerial recommendation

Key Success Factor for New Product Launch	Managerial Recommendation
<i>Five Important and Crucial Key Success Factor</i>	
(i) Establishing a high sales representative activity accountability	<ul style="list-style-type: none"> - careful planning and efforts put into securing that sales representatives are held accountable for their sales activities - clarification and description of what is defined by the company as excellent sales activity behavior, using descriptive examples - using balanced score card, weights towards activities
(ii) Establishing a relation between the sales representatives and their sales managers where the sales representatives can speak freely about any related issue	<ul style="list-style-type: none"> - planning and execution of a sales strategy for a new product launch should include the sales representatives' freedom to speak with their managers about any related work issue as well as ensuring managers are able to listen - training and preparing sales management in appropriate coaching techniques - including behavior support objectives around open communication in the sales managers' objectives
(iii) Establishing medium-to high-intensive monitoring of the sales representatives' sales behavior in the field	<ul style="list-style-type: none"> - optimizing resource consumption by adopting medium monitoring effort, which might also avoid any perceived “looking-over-my-shoulder” mentality - securing enough observation time for the sales managers to gain firsthand knowledge of the market issues and to be able to provide quality, timely and

	fair objective performance evaluations
(iv) Securing that the launched product is sold first by the sales representatives, in the case when several products are detailed during the same sales call	<ul style="list-style-type: none"> - always adopting a sales strategy during launch whereby the new product is sold first in all sales calls
(v) The sales force should be composed of a range between nine and thirteen sales representatives	<ul style="list-style-type: none"> - significant effort should be put into allocation of the right-sizing of the sales force. The results here suggest a number between nine and thirteen sales representatives - having a larger size sales force than thirteen suggests inefficiency and might lead to lost profit - having a smaller size sales force than nine might jeopardize a successful launch <p><i>(results apply to the new product launch target group and market investigated here)</i></p>
<i>Five Important Key Success Factors</i>	
(i) Having established emotional commitment of sales representatives toward the launched product	<ul style="list-style-type: none"> - plan and execute activities for emotional commitment, however, efficient investment is recommended
(ii) Require the sales representatives to explain themselves when their sales objectives are not met	<ul style="list-style-type: none"> - include in the control system, but do not over-invest in this effort - implement sales representatives to explain themselves as a formal process - communicate process as a means for sales representatives and management to have opportunities for ongoing objectives adjustments
(iii) Having explained the product rationale for the sales representatives	<ul style="list-style-type: none"> - include a thorough explanation by managers of the rationale for launching this product to sales representatives in the strategic plan - the rationale should include how the new product fits in the market place, for its customers and their customers as well as for the company - implement continuously during pre-launch and launch - clear inclusion in launch plans but with moderate investments to gain best profit situation
(iv) acquiring sales representatives that possesses a systematic problem solving capability	<ul style="list-style-type: none"> - place a specific recruitment criterion for sales representatives with a systematic problem-solving approach in the recruitment process - emphasize the recruitment criterion to a higher

rather than intuitive	degree if the company's defined processes for sales force control are developed and implemented to a high level
(v) secure that the launched product is detailed by the sales representatives as a stand-alone product, rather than together with other products	<ul style="list-style-type: none"> - when the costs of selling <i>are not as critical</i> for the overall business and full product portfolio success, selling the product alone should be considered as it increases likelihood for success - when the cost of selling <i>is critical</i> to overall business and full product portfolio success, the alternative of promoting the new product together with other products may be more attractive - also, include consideration around how the sales force is organized before launching the product, as organizational changes might be disruptive for the sales force
<i>Launch Circumstances</i>	
Ideal Market Conditions	<ul style="list-style-type: none"> - the ideal market for launch success is unstable in its behavior and in rapid change - extra emphasis on the key success factor; activity accountability - more flexibility in sales targets for the sales force - avoid pushing for extensive customer or territory profiles - use more caution in the forecasting and budget process - prepare for a more flexible supply situation - for companies facing competing entry; consider more actions and contra- messaging - when the market conditions are not ideal, more accuracy in forecasts may be assumed - when the market conditions are not ideal, secure extra resources for all the key success factors
Ideal Type of Product	<ul style="list-style-type: none"> - the ideal type of product for a successful launch is when a product type is "not-new-to-the-market but new-to-the-firm" - make sure that a deliberately increased focus and effort are spent on the strategy formulation process when the product type is "not-new-to-the-market and not-new-to-the company", compared to the other two type of new products

6. SUMMARY AND CONCLUSIONS

The overall aim of this research initiative was to provide guidance for sales force readiness during a new product launch. The research set out to answer the research question: **What are the Key Success Factors for Sales Force Readiness during the Launch of a New Pharmaceutical Product on the Swedish Market?** The overall conclusion is that this focused research area had not previously been researched and that the initiative did successfully answer the research question.

The text below first provides a summary and conclusion for this research initiative, which is followed by the identified possibilities for further research.

6.1. Research Summary and Conclusions

The recent year's changes and increased challenges to which the pharmaceutical industry, and especially the Big Pharma companies, is currently exposed, highlight the increased need for successful launches of new products. These challenges are many and appear in all parts of a pharmaceutical product's life cycle. However, it is concluded that the launch phase is of particular importance for a product's chance of quickly reaching peak sales and receiving return on investments for the company's research efforts. Further, with the increased challenges in other parts of the life cycle, there is less, if any time available to re-launch a product without losing too much in potential sales. With detailing (sales calls) by sales representatives aimed at physicians being one of the most important components in the marketing mix for a pharmaceutical company, the sales force with its utilization and management is, together with the launch of new products, another key challenge for the pharmaceutical companies. The challenges for the sales force are for example increased cost, diminishing return on over-detailing and increased imposed regulations. This research dealt with a combination of the two key challenges; new product launch and sales force management, forming the defined area of "Sales force Readiness during New Product Launch". "Sales force Readiness during New Product Launch" is broadly understood as the degree to which a sales force is prepared, able or willing to support a new product in order to generate a successful launch. In short, "Sales Force Readiness during New Product Launch" refers to a set of properties of the product to be introduced into a market place, the properties of such a market, the properties of the sales force conducting such an introduction, and then the outcome of such a product launch.

The research was conducted in two parts; the first with a qualitative focus and the second with a quantitative focus. In the first, qualitative part of the research, the literature within the areas of Sales Force Management (including Selling), Product Launch and the

Pharmaceutical Industry was reviewed. The literature revealed little knowledge of the specific empirical situation investigated in this research; however six relevant models were found and utilized for formulating a Preliminary Model. These six key models formed the foundation of the theory and were derived from the literature area of new product adoption and sales force efficiency (Atuahene-Gima 1997; Baldauf and Cravens 1999; Hultink and Atuahene-Gima 2000; Micheal et al. 2003; Piercy et al. 1999; Piercy et al. 1997). This Preliminary Model was transformed into a Research Model adapted for the focus and scope of this investigation. The scope was defined as: Industry (pharmaceutical) & Geographical (Sweden), Life Cycle Stage (new product launch), Pharmaceutical Products (ethical prescription drugs) & Customers (physicians). This transformation was guided by six case studies, six expert interviews and findings in the literature. The Research Model included a set of variables to be tested quantitatively with empirical data.

The second research part, with a more quantitative focus, included the formulation of the data collection instrument, identification of subjects for investigation, data collection, statistical analysis and interpretation of the results. The research utilized a bottom-up pattern identifying research approach, employing the Partial Least Squares analysis (PLS) guided by e.g. Thomson (2004), Chin (1998) and Haenlein and Kaplan (2004). The test had a predictive aspiration, where PLS was considered more powerful than its current alternatives (Ryan et al. 1999). This analysis supplied knowledge in order to successfully answer the research question by identifying a set of key success factors for sales force readiness during new product launch.

In the interpretation of the results, the identified key success factors have also successfully discriminated between four different types of key success factors: the key success factors that are *important & crucial* for a successful launch, the key success factors that are *important, yet not necessarily crucial* for a successful launch; the market conditions that are most ideal for a successful launch, and finally the type of newness of the product that is most suitable for launch. While the two first-mentioned key success factors can be more easily managed and influenced by the company launching the product, the latter two types of factors can typically not be influenced by the launching company; instead the company needs to adapt itself to the prevailing conditions.

The *important & crucial* key success factor were: (i) establishing a high sales representative activity accountability; (ii) establishing a relation between the sales representatives and their sales managers where the sales representative can speak freely about any related issue; (iii) establishing medium- to high-intensive monitoring of the sales representatives' sales behavior in the field; (iv) securing that the launched product is sold first by the sales representatives, in the case of several products being sold (detailed)

during the same sales call; and, finally (v) the sales force should be composed of a range between nine and thirteen sales representatives (note that this fifth factors is being very specific to the scope of this research).

The *important, yet not necessarily crucial*, key success factors were: (i) having established emotional attachment of sales representatives toward the launched product; (ii) requiring that the sales representatives explain themselves when their sales objectives are not met; (iii) explaining the product rationale for the sales representatives; (iv) acquiring sales representatives who possess a systematic problem-solving capability rather than an intuitive one; and, (v) securing that the launched product is sold (detailed) by the sales representatives as a stand-alone product, rather than together with other products.

Further, the ideal market for launch is unstable in its behavior and the market is changing rapidly. The ideal product should be of a type which is not new to the market, but of a new type for the firm launching it on the market.

The results and their interpretation were also presented in terms of managerial implications and recommendations.

The target groups for this research were defined as two types of professionals: researchers and practitioners. The first being the scholars studying and researching the area of product launch and sales force, while the second target group could be divided into the staff members, primarily managers of companies formulating and implementing sales force strategies, and business advisors such as consultants. This research has been found to contribute to both the academic scholars and to managers.

This research's *main contribution to academic Scholars* can be summarized in four important areas:

The two developed models, the Preliminary Model and the Research Model.

The Preliminary Model can be used for further research to either investigate generalization over industries or validate the result within the pharmaceutical industry, primarily in other geographical markets. The Research Model with its identified factors (with the methodological aspect of being built with triangulation of case studies, expert interviews and literature, which adds to the “real life” validation of the model) can be suggested to be applied directly (i.e. instead of building a new model with the Preliminary Model as base) for the validation or confirmation of the results in the same industry in other geographical markets.

The utilization of the Partial Least Square analysis

With this research, a main contribution is the answer to the requests in the literature from several authors to more commonly apply Partial Least Square analysis to various social science disciplines (Cassel and Hackl 2000; Ryan et al. 1999), and also directly to marketing science (Graber et al. 2002). Further, conventional top-down hypotheses formulations and testing would be very cumbersome and undirected as there exists very little pre-knowledge regarding the investigated empirical domain. Indeed, in the present research, the results that have been received would most probably not have been obtained by means of conventional top-down research approach.

The results

As the generations of the results are done through the combination of literature review, case studies, qualitative interviews and quantitative empirical collection, the results provide a fairly unique dimension and validated learning to the collective scholarly knowledge within the area. Further, it is argued that with this research's scope (geographical borders - giving similar regulatory, legal and governmental conditions; industry - adopting similar entry and exit barriers, risks and dynamics; and a homogenous group of research subjects - here manifested by pharmaceutical products aimed at the same homogenous customer group, defined as General Practitioners), the right level of limitations to the scope has been applied in order to identify interesting and relevant results. This gives the third main contribution, where the results and conclusions can be used as comparators and references in future investigations, analysis and discourse.

Suggestions for further research

Fourthly, the base and suggestions for further research laid out within this research constitute an outline for a serious and important research program to be explored and researched.

This research's *main contribution to Practitioners (managers)* can be summarized in three important areas, emerging out of the results:

Focus attention on the most important factors for the sales force during launch

As the literature presents many possible factors (variables) for a sales force that influence the outcome of a launch, these results will help guide Managers to focus attention on the elements that contribute most positively to a successful product launch among the factors investigated here.

Better prioritize resources

With the sales force being a resource-consuming part (e.g. Kotler 2000; Piercy et al. 1999; Piercy et al. 1997; Baldauf and Cravens 1999; Lilien et al. 1981; Dannacher and Stahl 2005; Elling et al. 2002) during the launch for a pharmaceutical company, the results here will help guide managers to better prioritize their available resources to the activities that contribute to the highest predictability of a successful launch. One example is the resources allocated to a sales manager's monitoring in the field. The research results suggest that medium and high monitoring of the sales representative behavior in the field has contributed equally positively to a successful product launch. This clearly suggests that a high monitoring by the sales managers in the field, being very resource consuming, is not well-spent resources compared to keep the monitoring to a medium level.

Guide the implementation of Sales Force Readiness

The managerial recommendation presented in this research gives managers advice on how to practically implement sales force readiness, which is suggested to lead to a higher probability of success.

In addition, this research should also be able to add value for companies with products already in the market where competitors are due to enter as these companies could benefit from better-informed defense strategies, both in terms of the company's own actions around the key success factors and predicting what the competitor is going to do.

In general, this research suggests being cautious with any uncritical generalizations outside the present scope. However, it is suggested that the findings here may well be assumed for the same industrial and operational domain and for the post-2005 year period to date, primarily for the North European markets. The reason for this is that this industry and markets show a great amount of homogeneity, and that the Swedish pharmaceutical industry lies ahead of the other markets in terms of its evolution with regard to the sales representatives' access to the General Practitioners (Dannacher and Stahl 2005) and that the global emerging environment for pharmaceutical sales forces around the world is following this trend (Dutton and Reece 1996).

It is the author's aspiration that the results will add knowledge to future research colleagues' endeavors, but first and foremost that the results, and their recommendations, will be helpful for managers in their future strategy formulation and implementation of sales force readiness during new product launch.

6.2. Limitations & Further Research

This section first includes a discussion concerning some limitations and general areas for further research. This is followed by the presentation of a more structured proposed set of areas that may deserve further research attention. Limitations described here should be seen as an addition to the specified possible limitations of the Preliminary Model and formulation of the Research Model presented earlier in this text (Chapter 2, section 2.3.1 and 2.4.1)

Limitations and further research discussions

One aim of this research is to provide managers, who are planning and executing the sales force operations during launch, with a set of key success factors that should make them better prepared and give them a higher probability of success for an upcoming product launch. It is the author's belief that this has been achieved. However, at the same time it is acknowledged that there are many other aspects that might influence the success of a launch.

As the scope of this research concerns the sales force operations during a new product launch, one important aspect among many of the identified sales force factors is that the factors are assumed to lead to a successful sales call (detailing), being the interaction between the sales representative and its primary customer (here the physician classified as a general practitioner), which in turn should generate an uptake in sales and by that be classified as a successful launch. The sales call is generally the most effective tool that is available for the sales force, hence the central driver of how the sales force contributes to the success. However, there are several stakeholders, both internal and external, that might influence the overall success of a new product launch.

The internal stakeholders could include the marketing department, the medical department or any other department conducting market activities (as described in section 1.6.). Here it should be added the possible tools (e.g. advertising and advisory boards) and channels (e.g. e-marketing) that could be utilized by the various departments to influence the success of a launch. Looking into the future, e-marketing is predicted to have a higher influence, with increases in both opportunities and risks for the business (Davis 2010; Jambulingam and Sharma 2010) and it is a very important area for further research to define the impact on sales force operations. Also, one important influencer is the R&D organization's success in having conducted a trustworthy development of the product during the new product development phase (NPD) and also how they succeeded in making it appreciated among important key opinion leaders (Meffert 2009). The

importance of cross-functional work to achieve a successful product launch is also found in recent literature (Smith 2010).

Continuing with the external stakeholder (as described in section 1.6.), it is important to expand the knowledge base on how these stakeholders influence a successful launch and to what degree. External stakeholders could be nurses, patients, relatives, pharmacies, etc. Payers, whether it is insurance companies, governments, finance departments in hospitals or patients, are gaining in importance concerning the uptake of a new pharmaceutical product (Ruzicic and Danner 2007). This is why it is also encouraged to find how these stakeholders influence sales force and launch. Also payers as a stakeholder have been identified as important in the pre-launch phase (Smith 2010).

In addition to the importance of the different stakeholders comes the question of the impact of company culture, working climate and processes, as well as the medical benefit of the product (earlier discussed in section 4.2.3. Conclusions and Results from the Case Studies). As this research is conducted in a country-specific setting, it is assumed that the differences in cross-company cultures are insignificant to the results presented here. However, concerning cultural differences of country borders is definitely an interesting addition to the model for further research conducted in several countries. Further, in this research the sales force factors are to a great extent separated from the emotional and motivational aspects of the customers. Some of these aspects are inherent in the model through the qualitative phase by the experience of the interviewed subjects, but only less so in the quantitative phase. Related to this is the impact of the external environment in terms of the product's brand (built by the marketing department through other channels), the company's reputation, social responsibility engagements, etc. Therefore, for the future, it is encouraged to consider how this could be implemented in the model or how this could be investigated to complement the results found in this research. In this aspect, identified interesting areas that could be related towards the models and concepts addressed here, would be the concept of relationship management (RM), which has successfully been researched through the years (Grönroos 1994; Gummesson 1997).

Hence, concerning the Research Model, it will be interesting to further develop the current Model with the attempt to identify additional driving factors and moderating factors that would influence a successful launch.

Another aspect that has been argued in this text is the cost for having a sales force and especially a field-based sales force. As outsourcing of sales forces has started to interest many companies (Rapp 2009), it might be of interest to also consider this approach for further research to find how different aspects of the launch and the sales force differ between the two alternatives.

It is hard to draw any final conclusion whether the results in this research are specific to the pharmaceutical industry or if it could be generalized to other industries. The literature argues that different industries and markets are governed by different conditions, for example, regulatory, economic, cultural and social etc. (McGahan 2004; Porter 1995; Porter 1987; Churchill Jr et al. 1985), and this has also been suggested to apply for the pharmaceutical industry (Dutton and Reece 1996). In regards to the key topic here (the sales force), a very important difference between the pharmaceutical industry and most other industries is the sales process and in particular the close of the sales, which is manifested by the fact that a sales representative does not close the sale. The sale is typically made in the pharmacy or by a hospital, making the sales representatives' key role to deliver messages and provide information to their primary customers (the physicians), to educate customers about the product's therapeutic value, side effects, dosage (based on clinical studies), and deliver samples to promote the company's products (Dong-Gil and Dennis 2004; Lloyd and Newell 2001; Mizik and Jacobson 2004; Parsons and Abeele 1981; Rangaswamy et al. 1990). The sales connection is only made when a physician meets a suitable patient and writes a prescription, which the patient takes to the pharmacy to be dispensed (Datamonitor 2007b; Dong-Gil and Dennis 2004; Lloyd and Newell 2001).

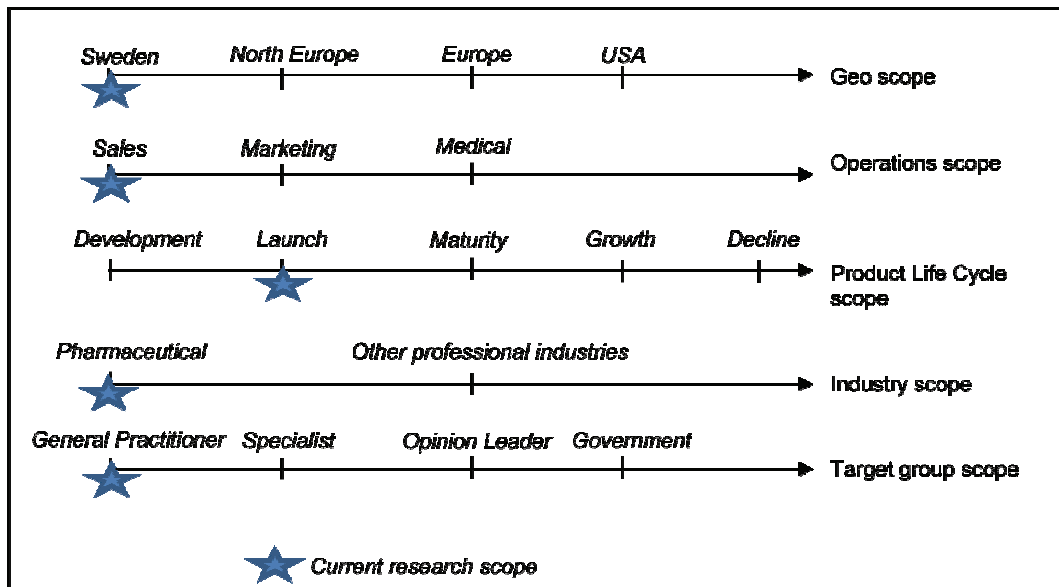
Hence, in industries with similar dynamics, a generalization of the results could more likely be made. However, since underlying sales processes and dynamics are also likely to be similar cross-industry, it might be found that the results are applicable over industry borders. These are possible topics for further research, as it should be fairly easy to investigate by applying the Preliminary Model to other industries. Preferably this would then be done using very similar methodology, i.e. utilizing case studies and interviews to first identify the most important factors and then quantitatively test an adopted model through PLS analysis. It would give a very good empirical base to compare the Key Success Factors across industries. This might also identify best practices over industry borders.

Propositions for Further Research

The discussion above concerning identified limitations and general encouragement for further research ideas, are followed here by a presentation of five more structured domain areas of potential further research, which cover the perceived most relevant part of the above discussions. See Figure 13 for an overview of the domain areas. The further research suggested here may be understood as representing two principal directions, an introspective and an extrospective. The introspective direction refers here to further development of details of the research scope as addressed in the present study. The

extrospective direction, on the other hand, refers to a broadening of the scope as addressed in the presented study.

Figure 13: Five domains areas of potential further research



Introspective Research Directions

The research focus of this study is to identify the key success factors for sales force readiness, for pharmaceutical products launches in Sweden. This is the first empirically driven study of its kind. This uniqueness represents both opportunities and risks in relation to the research results presented here. As no similar studies exist that can be compared with the research results, the question of validity becomes a central issue. Therefore, one central proposal for the further research-agenda is to conduct either similar or partly-similar studies, which can be compared to the present one, and thus assess the validity of the research results presented. Ideally, such a similar study would be conducted with an independently collected data set and data analysis capabilities.

The second area of research proposed here, indeed perhaps the most central area, is to address the type of constructs employed in this research to characterize the subject. The key question is whether there are enough constructs to do justice to the complexity of sales force readiness when launching a pharmaceutical product on the Swedish market. The present position is that the research results presented here, with the key success

factors identified, give a fair approximation of the real-life situation faced by sales directors when launching their pharmaceutical products. However, other research directions and the author's own professional experience suggest that there may be other characteristics which would be useful for the description of the phenomenon addressed here. Examples of this could be a richer characterization of the market conditions or circumstances when the product is to be launched. One such category is "the position of the target group targeted by the launched product", here the physicians versus the product to be launched. Another area is a further understanding of the characteristics of the sales representatives making up the sales force of the launched product, in relation to identified key success factors.

Extrospective Research Directions

In this section, a set of further research directions are discussed with the aim of broadening the research scope as assumed in this study. These cover five dimensions of the researched phenomenon, which are: (i) the geographical scope; (ii) the operational scope; (iii) the product lifecycle scope, (iv) the industry scope; and, (v) the target group scope.

Geographical Extensions

Starting with the Geographical scope, this study addresses the Swedish pharmaceutical market only. As discussed above, this was an intentional choice, as the Swedish market is assumed to have evolved ahead of other markets, particularly with regard to the regulations for the sales representatives' access to their various customers: for example, physicians or local governmental officers. The understanding here is that the remaining Nordic markets will soon be governed by similar regulatory conditions, followed by other north European markets. Therefore, a proposed research topic is to replicate a similar study for the mentioned markets, and to identify the similarities and the differences, which could then be related to differences in the local market conditions. This would advance the insight into both the generic features and the market-specific features of sales force readiness for a pharmaceutical product launch. Again, this procedure could be replicated for more distant markets, such as Southern and Eastern Europe, and the North American market.

Operational Extensions

The next area of concern with regard to further research, addresses the operational aspects of a pharmaceutical product launch in Sweden. While the research presented here clearly focuses on sales force readiness as the determinant of a successful product launch,

other operational aspects of an organization (or a collaboration of several organizations) clearly have an impact on the outcome of a pharmaceutical product launch. Therefore, questions of interest for further research would be how to configure not only sales force readiness, but also marketing strategy and medical strategy, all aimed at enabling a successful launch of a pharmaceutical product. Such research would need to understand the mentioned operational areas in themselves and then proceed with an understanding of the aggregations of these areas, i.e. how their interaction together could best reach the desired success.

Product Lifecycle Extensions

Product lifecycle refers here to the various stages or phases of a product, from development through pre-launch preparation, launch, growth, maturity and then to its decline and sometimes withdrawal from the market (see Appendix 8 for further discussion and definition of the product lifecycle). These product lifecycle phases are the domain of this proposal for further research. While the research presented here addressed the key success factors for sales force readiness during the launch of a pharmaceutical product in the Swedish market, there is both an intellectual and a professional interest in finding out which success factors govern sales force strategy during the rest of the product lifecycle.

Target Group Extensions

The focus of the present study has been sales force readiness where its sales representatives target General Practitioners. However, there are clearly other relevant target groups to be addressed. Firstly, when part of the sales force targets the General Practitioners, other target groups are often addressed simultaneously, such as Key Opinion Leaders (typically leading medical professors) who influence the regular General Practitioners, the local governmental officers that allocate and balance resources for and between various medical diseases and treatments within a specific geographical region such as a county; the Heads of Health Centers who are responsible for distribution of resources and budgeting health center resources. The question for further research would be what kind of sales strategy should be devised for the sales representatives and professionals whose tasks are to address the other target groups as defined here. This could be researched in two ways. Firstly, what strategy should such a complementary sales force assume, to reach success? Secondly, what overall sales force strategy should be assumed for all the sales forces, addressing the various target groups, in order to secure a successful pharmaceutical launch? Should it be the same sales force or separate ones?

Industry Extensions

The final area of further research, as mentioned here, addresses the industrial context. While this study focuses on the conditions in the pharmaceutical industry, several other industries may also be interested in knowledge and guidance for sales force readiness during successful product launch. As the study presented here may be regarded as having a business-to-professionals scope, where sales representatives address professionals within a health care context, other industries manifest a similar structural set-up. Examples of this may be the Information Technology Industry, where companies launching new hardware and software products target IT-managers. Other professionals could include lawyers, facility brokers etc. Further research could investigate the key success factors of sales force readiness when launching products, such as software, and then compare the identified key success factors with those identified here for similarities and differences, and for how the present study could be further developed with lessons learned from other industries.

Summary of Further Research Proposals

The discussion above presents five domains which may deserve attention for further research initiatives with regard to the present study. These domains include the geographical extensions, the operational extensions, the product lifecycle extensions, the target group extensions and the industry extensions. Each domain offers three or more sub-domains to be explored – e.g. product lifecycle offers the pre-launch, growth, maturity, and decline phases. If the five main domains proposed here are combined with their constituting sub-domains, we will receive at least fifteen sub-domains for further research. Clearly, this may constitute an outline for a serious and important research program to be explored and researched.

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APPENDICES

Appendix 1: Models Derived from Reviewed Literature

This appendix presents the models found in literature, forming a foundation for formulating the Preliminary Model, also referred to as the generic model for sales force readiness during new product launch. The six models identified as relevant in literature were divided into two groups; “Models for Sales force Strategy for New-Product-Launch” and “Models for Sales force Strategy disregarding the product-lifecycle”.

A1.1. Models for Sales force Strategy for New-Product-Launch

The identified models in this group are derived directly from the publications of Atuahene-Gima (1997), Hultnik et al. (2000) and Micheal et al. (2003). The models are broken down in more detail below.

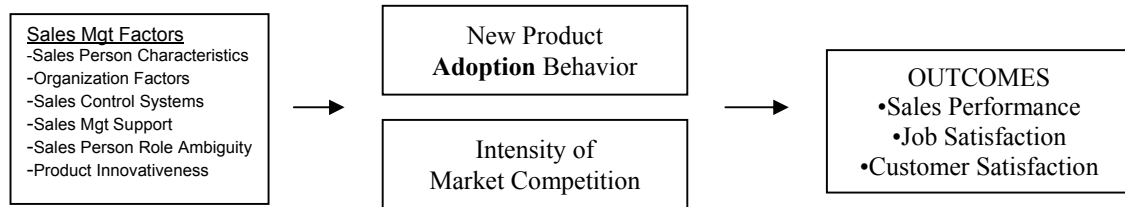
Derived Model #1

The first model is developed by Atuahene-Gima (1997), and is labeled here as “Model #1, The Adoption of New Products by the Sales Force”. This model is built upon a set of propositions derived and developed from earlier literature and research findings. The model is explained in the flow of; *Sales Person Characteristics => New Product Adoption & Selling Behavior + Market Competition => Outcome*.

The following is a slightly simplified overview of constructs and a graphical representation of the model (see Figure 14).

- *Sales Person Characteristics*: Goal orientation; Problem-solving style; Career success; Sales experience
- *Organizational Factors*: Firm commitment to innovation; Failure management; Speed of product innovation; Conflict in new product development process.
- *Sales Control Systems*: Behavior control; Output control
- *Sales Management Support*: Internal marketing of new product; Feedback from sales manager; Training
- *Sales Person Role Ambiguity*
- *Product Innovativeness*
- *New Product Adoption (Commitment x Effort)*
- *Dysfunctional Behavior in Selling New Product*
- *Intensity of Market Competition*
- *OUTCOMES*: Sales Performance; Job Satisfaction; Customer Satisfaction

Figure 14: Model #1, The Adoption of New Products by the Sales Force



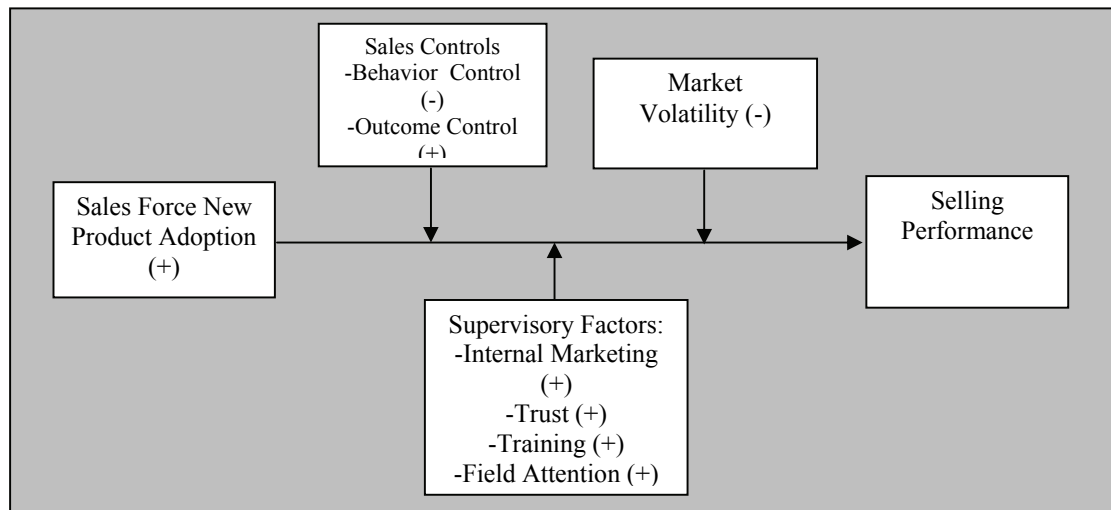
Derived Model #2

The second model used here is from Hultnik et al (2000). In this research, the model has been labeled; “Model #2, Effect of Sales force Adoption on New Product Selling”. The variables and items in the model are defined as below and a graphical representation of the model is found in Figure 15.

- *Performance in Selling a New Product:* To what extent have you been successful in gaining significant market share for this new product; generating a high level of sales volume for this new product; quickly generating sales for this new product; exceeding sales targets set for this new product; assisting the sales manager in achieving the objectives for this new product
- *New Product Adoption*
 - *Commitment:* I feel emotionally attached to the success of this new product; achieving objectives for this new product has a great deal of personal meaning to me; I enjoy discussing this new product with other salespeople; I feel strong sense of duty to ensure the success for this new product; I would be willing to make further investments of my time and energy to support this new product.
 - *Effort:* compared to other products you have sold, how much effort did you devote to this new product when prospecting for customers; planning sales calls; collecting market information; using market information; building customer relationships.
- *Sales Controls*
 - *Behavior based control:* salespeople are held accountable for their actions in selling the new product, regardless of the results they achieve; my supervisor monitors the extent to which salespeople follow established procedures pertaining to the new product; my supervisor evaluates the procedures salespeople use to accomplish the task of selling this new product; my pay increases and other tangible rewards are dependent on how well I follow established sales procedures pertaining to this new product, my knowledge of specific procedures and practices in selling this new product.

- *Outcome Control*: performance evaluations of salespeople on this new product place primary weight on results; if my performance goals for this new product were not met, I would be required to explain why. My pay increases and other tangible rewards depend on how my performance compares with the goals for this new product; the degree to which I have achieved the goals set for this product; the degree to which I have achieved specified outputs regardless of whether sales procedures were followed or not.
- *Supervisory Context*:
 - *Internal Marketing*: my supervisor made sure every salesperson knew the incentives for selling this product; my supervisor explained the rationale for the introduction of this product; my supervisor explained the research behind the development of this new product; my supervisor explained how this new product fits in the company's strategic objectives.
 - *Trust*: my supervisor and I have a sharing relationship; we can freely share our ideas and feelings about the work I do; I can freely talk to my supervisor about difficulties I am having at work and know that he or she will want to listen; if I shared my problems with my supervisor I know he or she would respond constructively and caringly; we would both feel a sense of loss if we could no longer work together; my supervisor and I have made considerable emotional investments in our working relationship.
 - *Training*: I received substantial training before I assumed responsibility for selling this new product; I have spent a significant amount of time in training for this new product; our training program for this new product is first class.
 - *Field attention*: my supervisor spends time with me in the field; my supervisor makes joint calls with me; my supervisor observes my performance in the field.
- *Market Volatility*: Indicate your opinion of the nature of the market environment for this new product at the time it was introduced: stable – unstable, certain – uncertain, changes slowly – changes rapidly, predictable – unpredictable
- *Covariates*:
 - *Selling experience*: number of years the salesperson has been in a sales function
 - *Main target market*: consumer market vs. industrial market
 - *Level of education*: less than bachelor degree, bachelor's degree, master's degree, more than master's degree

Figure 15: Model #2, Effect of Sales force Adoption on New Product Selling



Derived Model #3

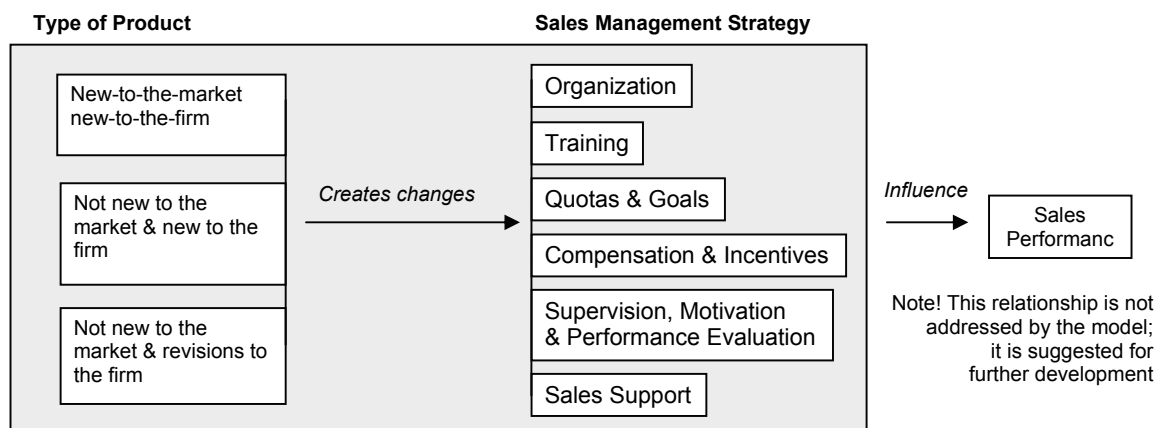
The third and final model in this group is the model identified and adapted by Micheal et al (2003) from earlier literature, labeled here; “Model #3, Product Newness and Sales Management Strategy”. The variables and items in the model are defined below and a graphical representation of the model is found in Figure 16.

- *Type of Product Newness:* New-to-the-market and new-to-the-firm; Not new to the market and new to the firm; and Not new to the market and revisions to the firm.
- *Organization:* assigned geographic territory; realigned territories; customer types, national accounts; independent agents/representatives; product groups; selling teams; hired new sales force for new products, added to existing sales force.
- *Training:* written training material for the new products; product training classes for the new products; training through supervisory visits related to new products; selling skill training for the new products; customer profiling and buying behavior training for new products; training videos related to new products, training thought videos.
- *Supervision, Motivation & Performance Evaluation:* weekly/monthly meeting with salespeople & field managers; supervisors accompanying salespeople in their call routes; call reports; formal performance evaluations; periodic morale surveys of salespeople; promotional opportunities and career planning programs; opportunities to earn pre-requisites.
- *Quotas & Goals:* sales quotas for all products; gross margin or other profit-oriented quotas for all products; activity gross; sales quotas for each product; sales quotas by

customer type; management by objectives; gross margin for each product; expense quotas; gross merging by customer type; sales estimates hand-in.

- *Compensation & Incentives*: salary; commission on sales for all products; bonus for individual performance; bonus for group performance; commission on total gross margin; sales contests; incentive pay for points earned; separate commission on sales for individual products; incentive pay for activities performed; separate commission for gross margin; guaranteed draw or non guaranteed draw.
- *Sales Support*: sales literature; catalogues; print media advertising; demonstrations; plant tours; promotional items; direct mail advertising; introductory pricing discounts; specially trained representatives; video programs; computer-aided purchasing systems for customers; special packaging; telemarketing assistance; trade shows; industrial stores.

Figure 16: Model #3, Product Newness and Sales Management Strategy



A1.2. Models for Sales force Strategy Disregarding the Product Lifecycle

The identified models in this second group are derived directly from the publications of Piercy et al (1997), Baldauf et al (1999) and Piercy et al (1999). These models are included in the sales management research stream for sales force effectiveness. The models are broken down in more detail below.

Derived Model #4

The first model in this group, and the fourth model identified in literature, is developed by Piercy et al. (1997) and is, labeled in this research; “Model #4, Model for Sales Force Effectiveness in B2B organizations”. The variables and items in the model are listed below and a graphical representation of the model is found in Figure 17.

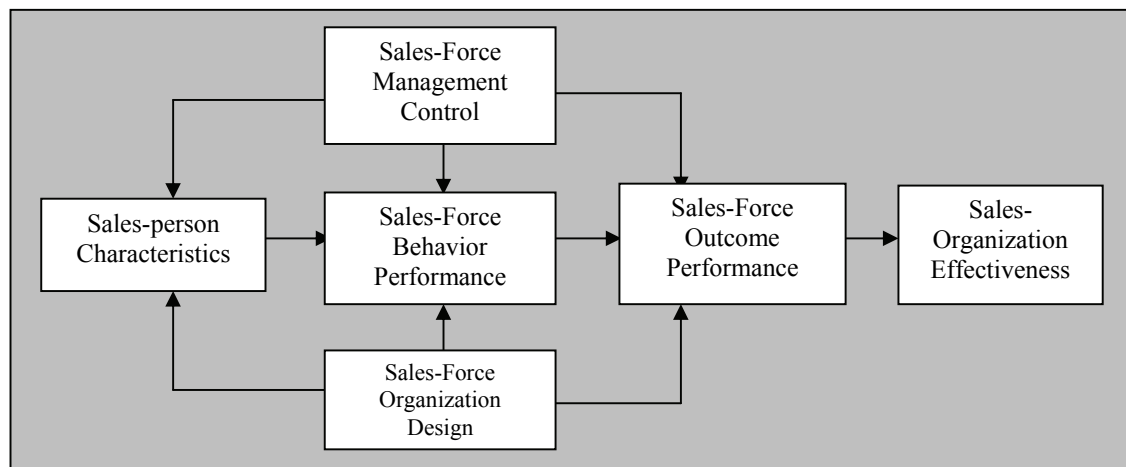
- ***Characteristics of Successful Salespeople:*** Measured by a 10-point scale where 1 = Not at All and 10 = To a great Extent, in response to the question “Please indicate the extent to which your salespeople...”.
 - *Motivation:* obtain a sense of accomplishment; feel a sense of personal growth and development in their work; receive high respect from supervisors; receive high respect from fellow workers; have a sense of being creative and imaginative in their work; get a feeling of loyal association with the company; feel a sense of being innovative in the work.
 - *Customer Orientation:* focus on satisfying customer needs; customize selling approaches to individual accounts; possess expert selling skills; possess extensive product/service knowledge; study customer needs to guide selling strategy.
 - *Team Orientation:* are willing to accept direction from you; co-operate as part of sales team; accept your authority; welcome review of their performance.
 - *Sales Support Orientation:* spend substantial time planning sales calls; perform non-selling activities effectively; perform sales support activities.
- ***Sales Management Control:*** Measured by a 10-point scale where 1 = Not At All and 10 = To A Great Extent, in response to the question “To What extent do you...?”
 - *Monitoring:* Spend time with salespeople in the field; make joint calls with salespeople; regularly review call reports from salespeople; monitor the day-to-day activities of salespeople; observe the performance of salespeople in the field; pay attention to the extent to which salespeople travel; closely watch salespeople’s expense accounts, pay attention to the credit terms that salespeople quote to customers.
 - *Directing:* encourage salespeople to increase their sales results by rewarding them for their achievements; actively participate in training salespeople on the

- job; regularly spend time coaching salespeople; discuss performance evaluations with salespeople; help salespeople develop their potential.
 - *Evaluating*: evaluate the number of sales calls made by salespeople; evaluate the profit contribution achieved by each salesperson; evaluate the sales results of each salesperson; evaluate the quality of sales presentations made by salespeople; evaluate the professional development of salespeople.
 - *Rewarding*: provide performance feedback to salespeople; compensate salespeople based on the quality of their sales activities; use incentive compensation as a major means for motivating salespeople; make incentive compensation judgments based on the sales results achieved by salespeople; reward salespeople based on their results; use non-financial incentives to reward salespeople for their achievements; compensate salespeople based on the quality of their sales activities.
- **Sales Organization Design**: Satisfaction with sales territory design was measured by a 7-point scale where 1 = Very Dissatisfied and 7 = Very Satisfied, in response to the question “My level of satisfaction with...?”
 - *Sales Territory Satisfaction*: including unit size; scope for improving performance by changing number of salespeople; etc.
- **Sales Performance**: Measured by a 7-point scale where 1 = Needs improvement and 7 = Outstanding, in response to the question What is “your judgement about how the salespeople in your unit are performing”)
 - *Outcome Performance*: producing a high market share for your company; making sales of those products with the highest profit margin; generating a good level of £ sales; quickly generating sales of new company product services; identifying and selling to major accounts; producing sales or blanket contracts with long-term profitability; exceeding all sales targets and objectives during the year.
 - *Selling Performance*: (*Sales presentation*:) listening attentively in order to identify and understand the real concerns of customers; convincing customers that they understand their unique problems and concerns; using established contacts to develop new customers; communicating their sales presentations clearly and concisely; working out solutions to a customer’s questions and objections. (*Technical Knowledge*:) knowing the design and specification of the company’s product/services; knowing the applications and functions of the company’s products & services; keeping abreast of your company’s production and technical developments.
 - *Non-Selling Performance*: (*Adaptiveness*:) experimenting with different sales approaches; being flexible in selling approaches used; adapting selling approaches from one customer to another; varying sales style from situation to situation. (*Teamwork*:) generating considerable sales volume from team sales

(sales made jointly by two or more salespeople); building strong working relationships with other people in our company; working very closely with non-sales employees to handle post-sales problems and service; coordinating very closely with other company employees to handle post-sales problems and service; discussing selling strategies with people from various departments. (*Sales planning:*) planning each sales call; planning sales strategies for each customer; planning coverage of assigned territory/customer responsibility; planning daily activities. (*Sales support:*) providing after-sale service; checking on product delivery; handling customer complaints; following up on product use; troubleshooting application problems; analyzing product use experience to identify new product/service ideas.

- *Sales organization effectiveness*
 - In order to identify high and low effectiveness in the sales unit, the multiple of measures of effectiveness relative to competitors and relative to objectives were combined into a single effectiveness index, and scores on this were used to divide respondents into three groups.

Figure 17: Model #4, Model for Sales Force Effectiveness in B2B organizations

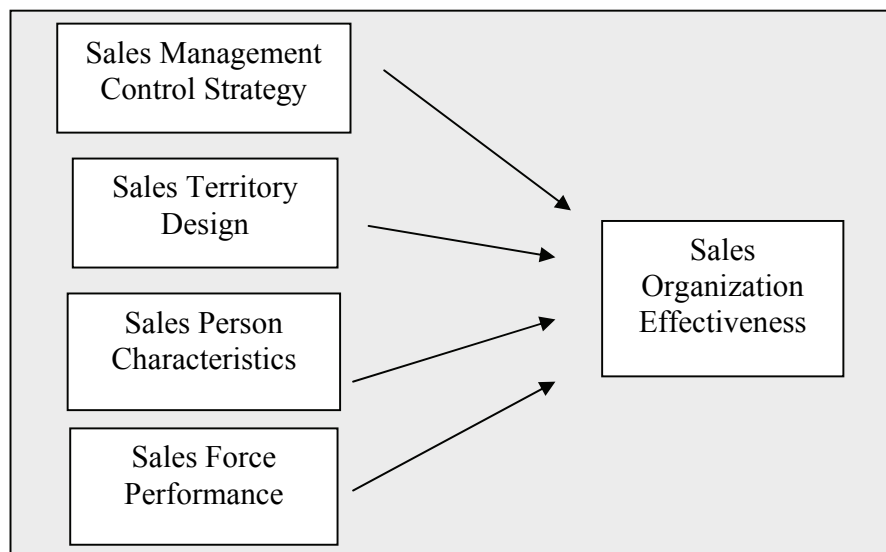


Derived Model #5

The second model in this group, and the fifth model identified in the literature, is developed by Baldauf et al (1999), and aims to show which factors determine the effectiveness of a sales organization. In this research, the model is labeled “Model # 5, Model for Sales Organization Effectiveness- A”. The variables and items in the model are defined below and a graphical representation of the model is found in Figure 18.

- ***Sales Management Control Strategy*** (based on Anderson and Oliver (1987), measured on a 10-point scale ranging from “to a great extent” to “not at all”): Monitoring, Directing, Evaluating, Rewarding
- ***Sales Territory Design*** (based on Babakus et al. (1996), measured on a 7-point scale ranging from “very satisfied” to “not at all satisfied”)
- ***Sales Person Characteristics*** (based on Cravens et al. (1993) and Oliver and Anderson (1994), measured on a 10-point scale ranging from “to a great extent” to “not at all”): Intrinsic motivation (three items); Recognition motivation (two items); sales support orientation (two items); customer orientation (two items).
- ***Sales Force Performance*** (based on Behrman and Perreault Jr (1982), measured on a 7-point scale, from “outstanding” to “needs improvement” (Behrman and Perreault Jr 1982))
 - *Behavior Performance*: Technical knowledge (three items); Adaptive selling (four items); Teamwork (five items); Sales presentation (five items); Sales planning (four items); Sales support (six items).
 - *Outcome Performance*: high market share; selling high-profit margin products; generating high dollar sales; selling new products/services; identifying and selling to major accounts, developing sales with long-term profitability, and exceeding all sales targets and objects.
- ***Sales Organization Effectiveness*** (based on Cravens et al. (1993), measured on a 5-point scale, from “much worse” to “much better”)
 - *Effectiveness 1, 2 and 3*: Sales unit objectives and market share compared with major competitor (four items); profitability (two items); customer satisfaction (two items).
 - *Effectiveness 4*: (New scale with six items, ranging from “needs improvement” to “outstanding”): sales manager’s evaluation of average sales per salesperson; selling expenses; obtaining new customers; salesperson turnover; use of computer technology; and retaining existing customers.

Figure 18: Model #5, Model for Sales Organization Effectiveness - A



Derived Model #6

The third and final identified model in this group, and the sixth model identified in literature, is developed by Piercy et al (1999), and is, labeled “Model # 6, Model for Sales Organization Effectiveness - B” in this research. The variables and items in the model are defined below and a graphical representation of the model is found in Figure 19.

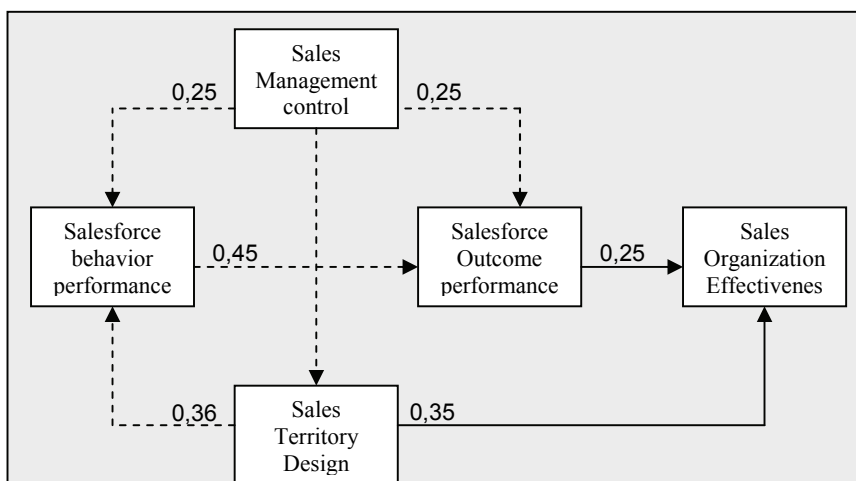
- *Behavior-based Sales Management Control:* (Based on Cravens et al. (1993), measured on a 10-point scale, from “to a great extent” to “not at all”)
 - *Monitoring (To what extent do you):* spend time with salespeople in the field; make joint calls with salespeople; regularly review call reports from salespeople; monitor the day-to-day activities of salespeople; observe the performance of salespeople in the field; pay attention to the extent to which salespeople travel; closely watch salespeople expense accounts; pay attention to the credit terms that salespeople quote customers.
 - *Directing (To what extent do you):* encourage salespeople to increase their sales results by rewarding them for their achievements; actively participate in training salespeople on the job; regularly spend time coaching salespeople; discuss performance evaluation with salespeople; help salespeople develop their potential.
 - *Evaluating (To what extent do you):* evaluate the number of sales calls made by salespeople; evaluate the profit contribution achieved by each salesperson; evaluate the sales results of each sales person; evaluate the quality of sales

presentations made by salespeople; evaluate the professional development of salespeople.

- *Rewarding (To what extent do you):* provide performance feedback to salespeople on a regular basis; compensate salespeople based on the quality of their sales activities; use incentive compensation as the major means for motivating salespeople; make incentive compensation judgments based on the sales results achieved by salespeople; reward salespeople based on their sales results; use non-financial incentives to reward salespeople for their achievements; compensate salespeople based on the quality of their sales activities.
- ***Satisfaction with Sales Organization Design:*** (New Scale, measured on a 7-point scale from “very satisfied” to “not at all”) My level of satisfaction with: the number of accounts in my territories; the number of large accounts in my territories; the number of calls made in my territories; the amount of travel required in my territories; the market potential in my territories; the number of territories in my sales unit; the assignment of salespeople to my territories; the equivalence in workload across territories; the overall design of my territories.
- ***Sales Organization Effectiveness:*** (Based on Cravens et al. (1993), measured on a 5-point scale, from “much worse” to “much better”): Sales volume compared with your major competitor (past 24 months); market share compared to your major competitor (past 24 months); profitability compared to your major competitor (past 24 months); customer satisfaction compared to your major competitor (past 24 months); sales volume compared to sales unit objectives; market share compared to sales unit objectives; profitability compared to sales unit objectives; customer satisfaction compared to sales unit objectives.
- ***Sales Force Performance:*** (Based on e.g. Behrman and Perreault Jr (1982); Cravens et al. (1993), measured on a 7-point scale, from “outstanding” to “needs improvement”):
 - *Outcome Performance: (How well are the salespeople in your unit performing:)* producing a high market share for your company; making sales of those products with the highest profit margins; generating a high level of £ sales; quickly generating sales of new company products/services; identifying and selling to major accounts; producing sales or blanket contracts with long-term profitability; exceeding all sales targets and objectives during the year.
 - *Technical Knowledge: (How well are the salespeople in your unit performing:)* knowing the design and specifications of company products/services; knowing the applications and functions of company products/services; keeping abreast of your company’s production and technological developments.

- *Adaptive selling: (How well are the salespeople in your unit performing:)* experimenting with different sales approaches; being flexible in the selling approaches used; adapting selling approaches from one customer to another; varying sales style from situation to situation.
- *Teamwork: (How well are the salespeople in your unit performing:)* generating considerable sales volume from team sales (sales made jointly by two or more salespeople); building strong working relationships with other people in our company; working very closely with non-sales employees to close sales; coordinating very closely with other company employees; handling post-sales problems and services; discussing selling strategies with people from various departments.
- *Sales Presentation: (How well are the salespeople in your unit performing:)* listening attentively in order to identify and understand the real concerns of customers; convincing customers that they understand their unique problems and concerns; using established contacts to develop new customers; communicating their sales presentations clearly and concisely; working out solutions to a customer's questions and objections.
- *Sales Planning: (How well are the salespeople in your unit performing:)* planning each sales call; planning sales strategies for each customer; planning coverage of assigned territory/customer responsibility; planning daily activities.
- *Sales Support: (How well are the salespeople in your unit performing:)* providing after-sales service; checking on product delivery; handling customer complaints; following up product use; troubleshooting application problems; analyzing product use experiences to identify new product/service ideas.

Figure 19: Model #6, Model for Sales Organization Effectiveness - B



Appendix 2: Formulation and Synthesis of the Preliminary Model

The development of the Preliminary Model, also referred to as the generic model for sales force readiness during new product launch, is presented in this section. This model will serve as the basis for identification of key success factors during launch in the Swedish pharmaceutical industry in a set of case studies and expert interviews.

Key models derived from the review of literature and presented in detail in Appendix 1, will be synthesized with the aim of identifying one generic model, including a broad range of concepts and constructs, preferably proven empirically. This generic model will be used to identify key success factors from the case studies and expert interviews considered when formulating the Research Model assumed here for further empirical and statistical testing on pharmaceutical product launches in Sweden. To further clarify this, the Preliminary Model does not necessarily aim to cover all aspects, but the ones found to be most relevant will be included, in part or in full. Further, some constructs will be simplified in order to best synthesize the identified models.

All models derived from literature are grounded in the sales force management area of the literature, but different focuses and research streams have taken the concepts and constructs in somewhat different directions. However, similarities and overlaps of constructs may be identified. The first group mainly belongs to the area and research stream of new product adoption of the sales force, while the other group belongs to the research stream of sales force effectiveness.

The first group included constructs from literature in the sales force management discipline in terms of sales force adoption, sales force performance and the new product launch discipline. This group has been named “Models for Sales force Strategy for New-Product-Launch”. Three models have been identified as relevant and current; Atuahene-Gima (1997); Hultink and Atuahene-Gima (2000); Micheal et al. (2003). These models are basically built on the same constructs and definitions, with the theoretical Atuahene-Gima (1997) as a base concept, with Hultink and Atuahene-Gima (2000) as a more operationalized adjusted model and Micheal et al. (2003) with a stronger focus on product newness. The Preliminary Model has most heavily adopted these constructs, as the focus of this research is sales force new product adoption during new product launch with the link to performance. By adopting this approach, the aim is to give the Preliminary Model the preference of tested variables and items within the sales force during the launch phase.

The second group includes models found in literature in the discipline of sales force management in terms of sales force effectiveness, where no regard to product life-cycle

stage is considered. This group was named “Models for Sales force Strategy disregarding the product-lifecycle”. The three models identified are all part of the same research stream, based on the same concepts and definitions within sales force effectiveness. All three models were complementary with minor differences. The models are derived from Piercy et al. (1997), Baldauf and Cravens (1999), and Piercy et al. (1999). Even though the Preliminary Model has largely adopted constructs from the models in group 1, it is well complemented with input from the constructs of the models in group 2.

The models were first compared and synthesized within each group, creating two synthesized models, which were then merged into one generic model.

A2.1. Synthesizes of Models for Sales force Strategy for New-Product-Launch

Synthesis took place in three steps: 1) identification of similarities and overlaps; 2) alignment and merger of constructs; and, 3) synthesis into one model. An overview of model comparison for this group showed that the three models constituting components did overlap to some extent. This synthesis is summarized below.

The first step, identifying similarities and overlaps, is summarized and presented in graphical form in Figure 20. Model #2 is an adaptation and operationalization of the theoretical Model #1. Model #1 is more extensive, while model #2 is much more specific in measures and has a supporting empirical outcome. Model #3 is also based on related literature as is Model #1, however as a different focus is assumed, some measures and definitions differ. The second step, which aligns and merges the three models’ constructs, is summarized in Figure 21.

Figure 20: Model similarities and overlaps in Group 1

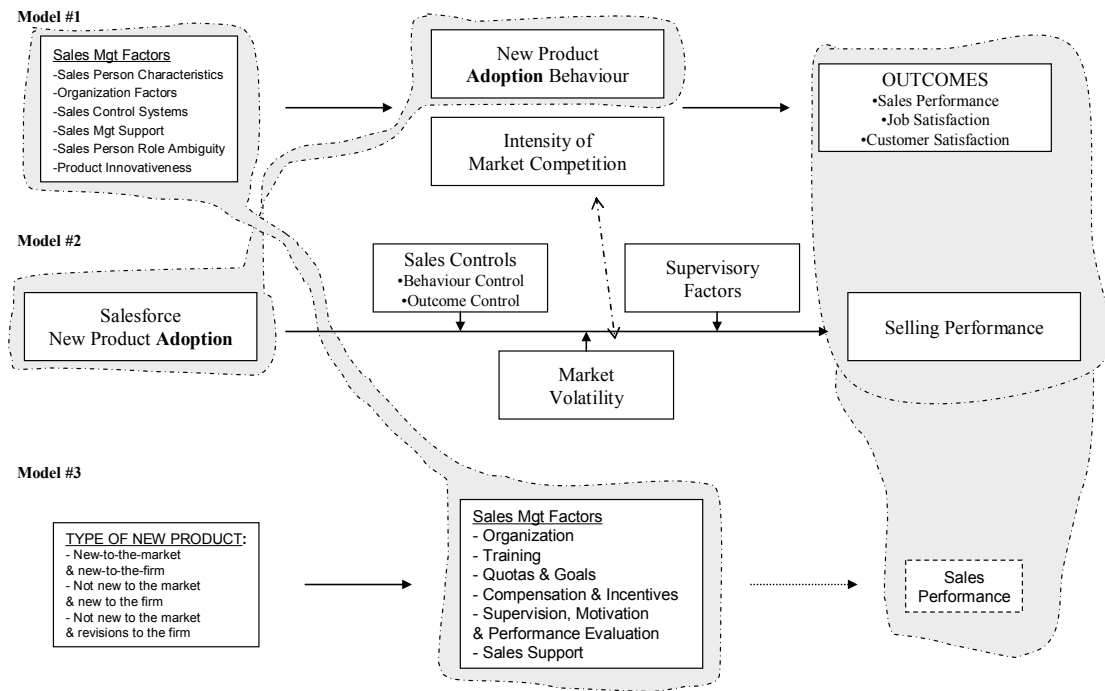
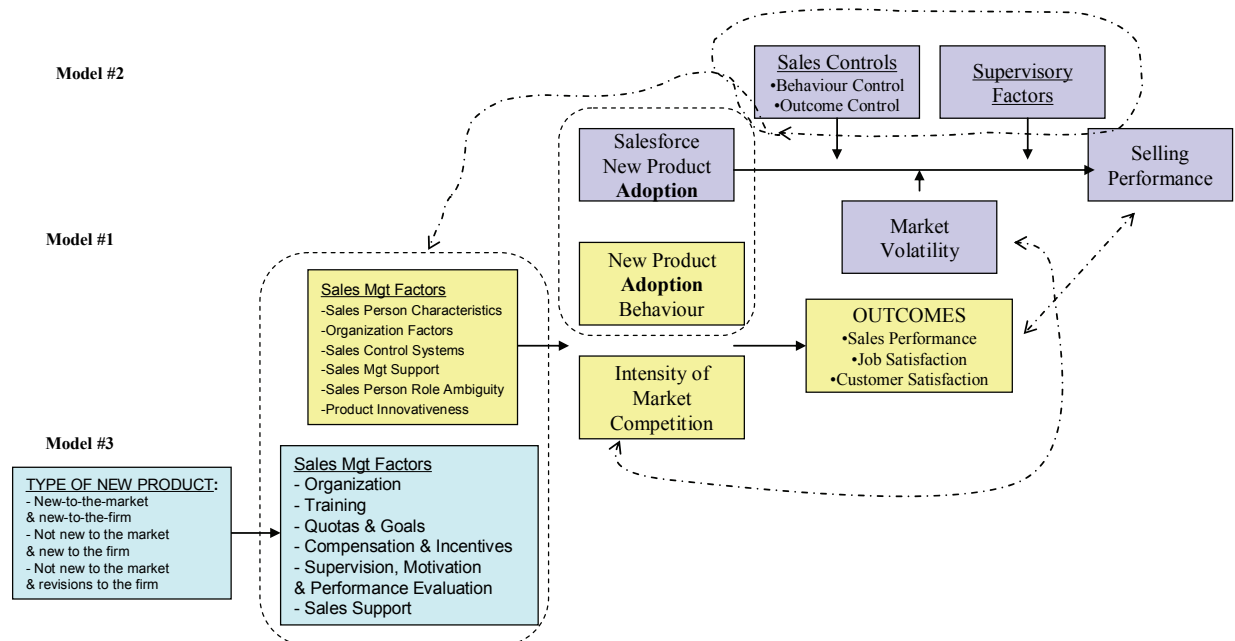


Figure 21: Model alignment and merger of constructs for Group 1



The third step, where the models are synthesized into one model, Synthesis-Model for Sales force Strategy for New-Product-Launch, is presented in graphical form in Figure 22 and summarized below.

The constructs and definitions are not exactly the same in Model #2 and Model #1. However, the two models are based on the same literature. Model #2 has its theoretical foundation in Model #1 and both are conceptualized in relation to the salesperson's performance and outcome, which is not the case with Model #3.

Type of New Product: Model #1 includes newness and measures it as product innovativeness. The construct examines the lack of synergy between the new product, current operations of the firm, and the salesperson's current knowledge. Model #3 on the other hand measures two states of market newness and two states of newness to the firm. The newness concept is not included in Model #2. As Model #1 did not test the concept empirically, the choice was to include the Model #3 construct for newness in the Preliminary Model.

Market dynamics includes “intensity of competition” from Model #1 and market volatility from Model #2. Model #3 lacks this construct. The definition and construct in Model #2 is broader and could be argued to include the concept from Model #1. The choice is therefore to include the construct from Model #2.

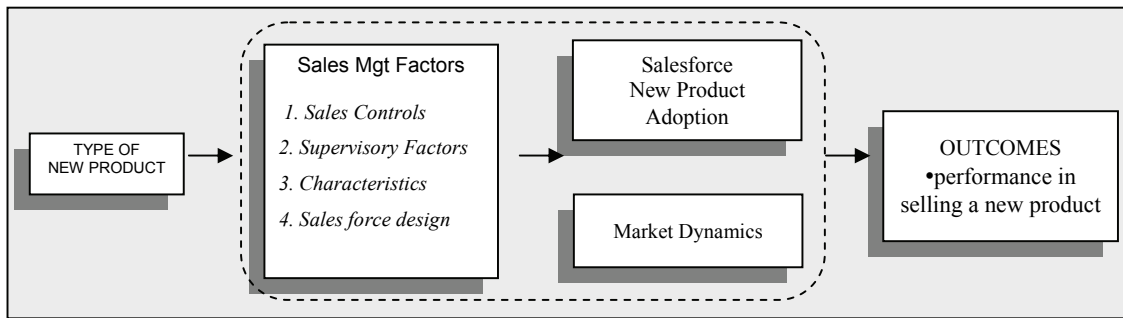
Sales Force Management Factors: Model #1 and Model #2 include roughly the same constructs for the sales management factors, with the exceptions of “dysfunctional behavior in selling new products”, “sales person role ambiguity” and “organizational factors”, which are present only in Model #1. The construct in Models #3 is fairly well covered in that of Model #1 and Model #2.

The concepts of “dysfunctional behavior in selling new products” and “sales person role ambiguity” from Model #1 are excluded based on the argument that these concepts, when synthesizing the models, are well covered under similar concepts in Model #2. Also, “organizational factors”, from Model #1, is disregarded, based on the argument that this construct, as defined, cannot be influenced by sales management when formulating their strategies for product introduction. However, it is acknowledged that these factors might have an impact on sales force management in general, yet on a higher, company-wide, level. Based on these rationales the choice here is to bring forward the variables and items from Model #2 with the addition of salesperson characteristics in Model #1 and sales force design in Model #3.

Sales Force New Product Adoption: Only Model #1 and Model #2 include this concept; Model #2 has more well developed measures than Model #1, so the choice is to bring forward the construct from Model #2.

Outcomes: Model #2 does not include job satisfaction and customer satisfaction, but they are included in Model #1. Model #3 does not include any outcome measures, even though they are acknowledged as important future possible extensions to that model. The construct in Model #2 has been tested with empirical data for new product launch, which is not the case with Model #1. Based on this, the decision was taken to remove the two variables “job satisfaction” and “customer satisfaction”, to measure new product performance outcome. The final choice became the construct of performance in selling a new product from Model #2.

Figure 22: Synthesized Model for Sales force Strategy for New-Product-Launch



A2.2. Synthesizes of Models for Sales Force Strategy Disregarding Lifecycle

The overview of model comparison for the second group showed that the three models constituting components overlapped very strongly, as is visualized in Figure 23. The three models within this group are very similar with regard to their constituting components and constructs, as they are all based on the same literature, being constructs mainly derived from Cravens et al. (1993), Anderson and Oliver (1987) and Oliver and Anderson (1994). Model #6 (Piercy et al. 1999) excludes the component “Salesperson Characteristics”. This implies that these models reinforce each other and that Model #4 (Piercy et al 1997) and # 5 (Baldauf et al 1999) are the most comprehensive. Based on this, the models were synthesized into one model as summarized in Figure 24.

Figure 23: A comparison; Models for Sales force Strategy disregarding lifecycle

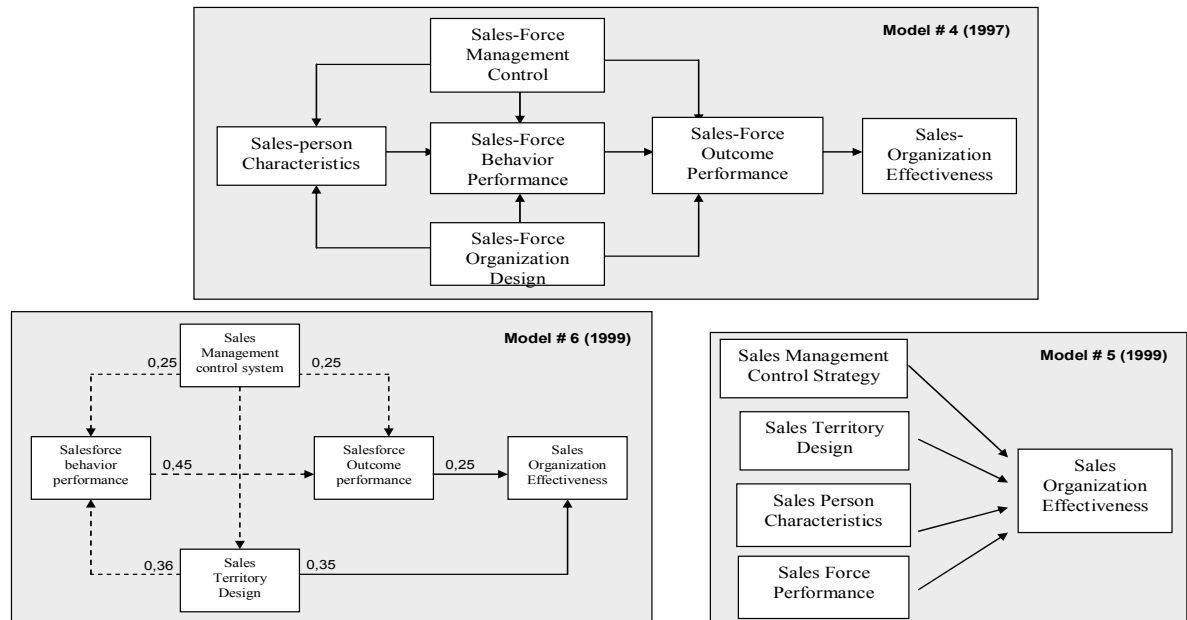
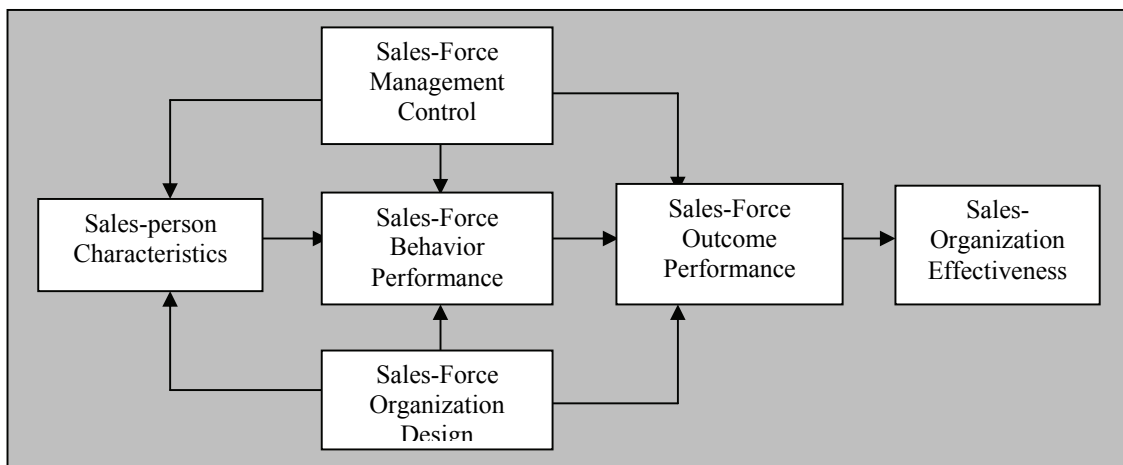


Figure 24: Synthesized Model for Sales force Strategy disregarding lifecycle



A2.3. Formulation of the Preliminary Model

The two synthesized models, “synthesized model for sales force strategy for new-product-launch” and “synthesized model for sales force strategy disregarding the product lifecycle” were further unified in to one model to form the Preliminary Model, as described in this section.

The overview comparison of the two synthesized models shows similarities between the two models (presented graphically in Figure 25). The “synthesized model for sales force strategy for new-product-launch”, from now referred to as “synthesized model for new-product-launch” adds the newness aspect. The “synthesized model for sales force strategy disregarding the product lifecycle”, from now referred to as “synthesized model disregarding product life-cycle”, adds the sales force effectiveness aspect. The “intensity of market competition/market volatility” is present in both models as it is also inherent in the definition of sales organization effectiveness. The two models are related around the middle section, “sales force factors” and “outcome”.

The first step of merging the models into one resulted in the model presented in Figure 26 below, however a further merger of concepts was needed to practically fit the here assumed research. This first step of merging the synthesized models indicates a five-stage model. However, an analysis of the content of each step, based on the models from which they are derived, shows that further adoption to the model can be performed within each category as described below.

Type of new product: This construct is derived from “synthesized model for new-product-launch” and is not a developed construct in the “synthesized model disregarding the product lifecycle”. The identified variables and definitions for product newness from the former synthesized model will be used in the Preliminary Model.

Market dynamics (intensity of market competition/market volatility): This includes concepts from both of the synthesized models, as it is related to sales organizational effectiveness in the “synthesized model disregarding the product lifecycle”, where environment aspects are included in its definition. There is strong support to retain this in the Preliminary Model. The choice was to include the construct from Model #2 in the Preliminary Model, as it was found in some research that during the new product process, the product’s competitive advantage (concept from “synthesized model disregarding the product lifecycle”) had a significant and negative effect (Song and Parry 1997).

Figure 25: Comparison of the two synthesized models

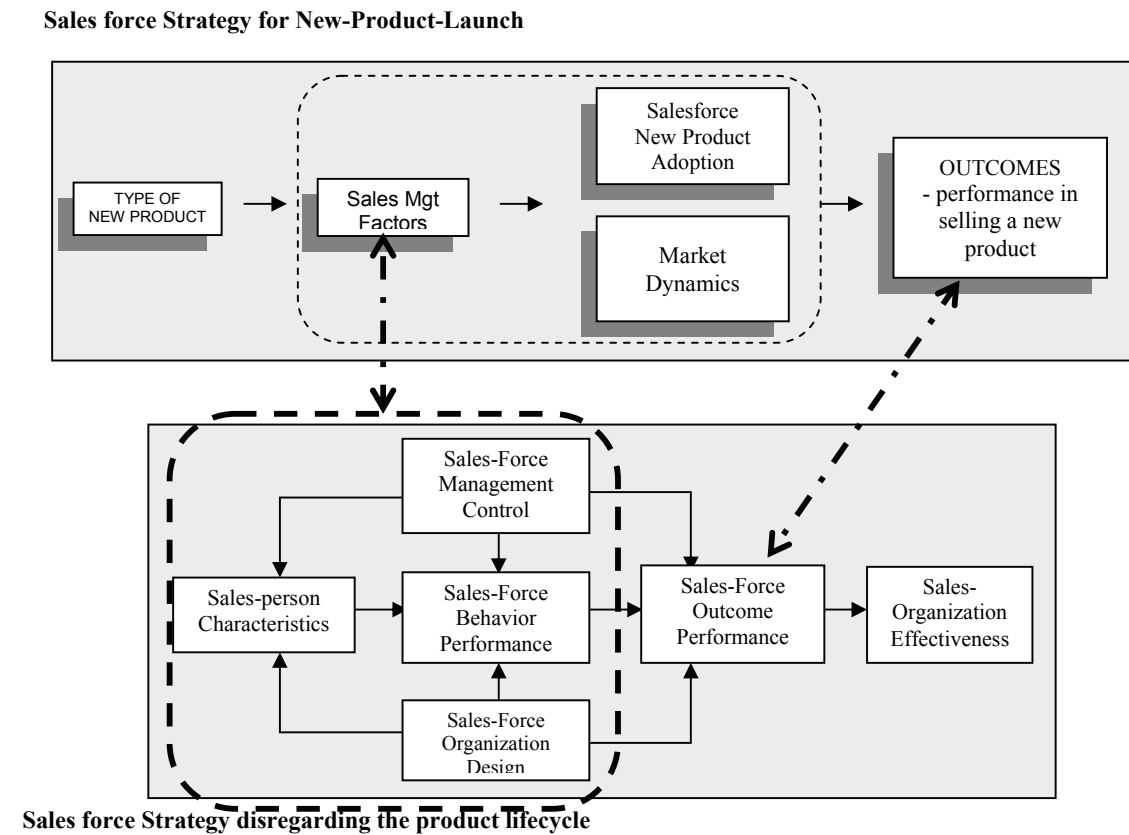
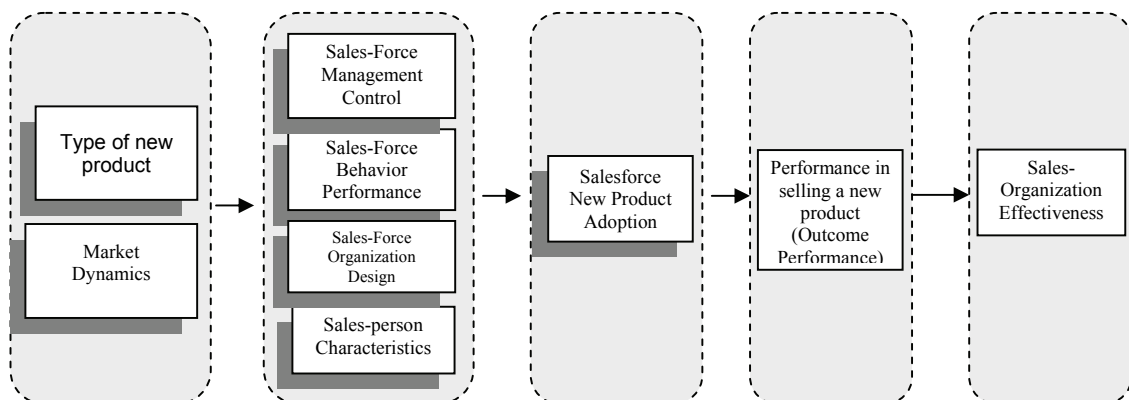


Figure 26: First step of merger of the synthesized models



Sales-force management control, sales force organizational design, sales-person characteristics and sales force new product adoption; there are many similarities and overlaps between the synthesized models, but the constructs and definitions differ.

Sales force management control is very similar in concept in the different models, however, the items used to measure the variables are somewhat differently formulated. Both constructs are linked back to the literature on the subject of behavior-based and outcome-based control systems (Anderson and Oliver, 1987). For the purpose of this research, the variables in “synthesized model for new-product launch” will be used in the Preliminary Model, as this construct has been adopted and tested according to the new product launch phase, which is the primary focus in the here assumed research.

For *sales force organizational design*, the concepts between the two models differ in terms of what was measured. The “synthesized model disregarding product life-cycle” measured satisfaction within the sales force, regarding territory market potential, travel within territory, etc. The “synthesized model for new-product-launch” measured changes in organizational structure and deployment as well as the construct of new product launch. Based on this, the latter model’s construct will be used in the Preliminary Model.

Sales person characteristics include different constructs between the two models. The “synthesized model for product-launch” uses the variables goal orientation, problem-solving style, career success and sales experience. The “synthesized model disregarding life-cycle”, uses the variables monitoring, directing, evaluating and rewarding. Again, as the former model takes in new product launch as a basis for its constructs, these variables will be used in the Preliminary Model. However, the concepts of monitoring, directing, evaluating and rewarding within the “synthesized model disregarding life-cycle”, overlap with the construct of commitment and effort, together forming *sales force new product adoption* within the “synthesized model for new-product-launch”. The conclusion of adding product adoption from the “synthesized model for new-product-launch” to the Preliminary Model, also assumes that the concept of sales person characteristics from the “synthesized model disregarding life-cycle” is to a great extent included in the Preliminary Model.

Performance in selling a new product (outcome performance) and sales organization effectiveness are two related concepts. The effectiveness and outcome performance constructs in “synthesized model disregarding product life-cycle” and the construct of performance in selling a new product in the “synthesized model for new-product-launch” are partly derived from the same literature (Oliver and Anderson, 1994) and the constructs are to some extent similar. Piercy et al. (1997) elaborates on the difference between the effectiveness of the sales organization and the performance of its

salespeople. According to them, the effectiveness describes the overall organizational outcome, and while high sales force performance is expected to contribute to the effectiveness of the sales organization, other factors may also influence overall effectiveness. These other factors may be outside the control of the salesperson (such as competitive behavior and market potential). Also, Piercy et al. (1997) found that high outcome performance is clearly an outstanding characteristic of the most effective sales organizations. They argue that salesperson behavior performance makes a significant contribution to sales outcome performance and in turn sales organization effectiveness (Piercy et al. 1997). They further argue that there is not a determined causal link between performance and effectiveness, however, the existence of a strong relationship does suggest a possible causal link. Based on the relations of the concepts of *performance in selling a new product (outcome performance)* and sales organization effectiveness, the proven direct link, and as effectiveness, is also determined by other factors outside the control of the sales force, the argument is made that the Preliminary Model could merge these concepts (or exclude effectiveness) in order to measure outcome of new product performance. Therefore, in the Preliminary Model, the preference for variables and items will be given to the “synthesized model for new-product-launch”, denote performance in selling a new product.

This leads to the second step of merging the two synthesized models, which concludes the final Preliminary Model or generic model for sales force readiness during new product launch (see Figure 5, Chapter 4). This proposed generic model for sales force readiness during new product launch is described in three stages: 1) Circumstance; 2) Sales Force Factors; and, 3) Effect.

Overall, the proposed merged model presents a set of variables and extensive interrelations that determine a very broad range of sales force management situations. As the concern here is on new product launch, the interrelations between the mediating variables are ignored in this model synthesis as they may be assumed to be general. Further, the final variables and items in each category were chosen in favor of the construct developed for the group “Synthesized model for Sales force Strategy for New-Product-Launch”. The reason for this was that the constructs within these models had been developed, tested and validated with learning about sales force strategy for new product launch as a main research goal.

Appendix 3: Data Collection Instrument for Case Studies and Expert Interviews

INTERVIEW GUIDE Empirical Data Collection for Case Studies & Topic Experts

*Key Success Factors for Sales Force Readiness during New Product Launch:
“A study of Product Launches in the Swedish Pharmaceutical Industry”*

Introduction

Sales Manager, Sales Representative or Expert information

Name (to be disclosed):

Title:

Job description:

Experience of Sales Management:

Experience of New Product Launches:

Years in industry:

Company/other organization: (Current & Previous):

Background to be given:

Sales Force: The following questions concern management of sales force readiness during the product launch. Please answer the questions with the assumptions and conditions given at the actual time of launch for the product. Please also give examples if possible. There will be time at the end to reflect over differences from this product launch to today's environment.

Expert: The following questions concern management of sales force readiness during the product launch. We will go through some important variables. Please point out the most important variables, and explain why these are picked. Please also give examples if possible. Assume a market environment up until around 2006. There will be some time at the end to reflect over differences of product launches from 1995 and to today's environment.

Variables

**

A product can have the following status (as set out below).

Sales Force: At the time of launch, how would you perceive the conditions for this product were, choosing between the following?

Expert: Could you elaborate on the consequences for each category when launching a product?

1. Type of Product:

- new-to-the-market and new-to-the-firm
- not-new-to-the-market but new-to-the-firm
- not-new-to-the-market and revisions-to-the-firm

**

A product can be launched in different market conditions (see below).

Sales Force: At time of launch, how would you perceive the market condition for this product?

Expert: Could you elaborate around the consequences for each when launching a product?

1. Market Dynamics

- a. the nature of the market environment for this new product at the time it was introduced
 - i. Stable – unstable
 - ii. Certain – uncertain
 - iii. Changes slowly – changes rapidly
 - iv. Predictable – unpredictable

**

Sales Force: During the time of the launch, how was the New Product Adoption from the sales force? (*Ask about each variable*)

Expert: For the below items, please point out which are the most important variables, and why. Please also give examples if possible. Assume a market environment up until 2006.

2. New Product Adoption

- a. commitment
 - i. Sales Rep emotionally attached to the success of this new product
 - ii. Achieving objectives for this new products has a great deal of personal meaning to the Sales Rep
 - iii. Sales Rep discusses this new product with other salespeople this item is not as good as the others
 - iv. Sales Rep feels a strong sense of duty to ensuring the success of this new product

- v. Sales Rep would be willing to make further investments of his/her time and energy to support this new product
- b. effort
 - i. Compared to other products you have sold, how much effort did the Sales Rep devote to this new product in:
 - 1. Prospecting for customers
 - 2. Planning sales calls
 - 3. Collecting market information
 - 4. Using market information
 - 5. Building customer relationships

Sales Force: ask about the most important variable(s) for a successful launch, with examples

**

Sales Force: During the launch, how was sales forces behavior influenced? (Ask about each variable)

Expert: Point out the most important variable(s), and explain why. Please also give examples if possible. Assume a market environment up until 2006.

3. Behavior Control

- a. Salespeople are held accountable for their actions in selling the new product, regardless of results they achieve
- b. Sales Rep's supervisor monitors the extent to which salespeople follow established procedures pertaining to the new product
- c. Sales Reps' supervisors evaluate the procedures salespeople use to accomplish the task of selling this new product
- d. Sales Rep's pay increases and other tangible rewards depend on:
 - i. How well I follow established procedures pertaining to this new product
 - ii. My knowledge of specific procedures and practices in selling this new product

Sales Force: ask about the variable(s) which were most important for a successful launch and ask for examples

**

Sales Force: During the launch, how were the sales force's outcome measured? (Ask about each variable)

Expert: Point out the most important variables, and why. Please also give examples if possible. Assume a market environment up until 2006.

4. Outcome Control

- a. Performance evaluations of salespeople on this new products place primary weight on results

- b. If Sales Rep's performance goals for this new product were not met, the Sales Rep would be required to explain why
- c. Sales Rep's pay increases and other tangible rewards depend on:
 - i. How Sales Rep's performance compares with the goals for this new product
 - ii. The degree to which Sales Reps have achieved the goals for this new product
 - iii. The degree to which Sales Reps have achieved specified outputs regardless of whether sales procedures were followed or not

Sales Force: ask about variable(s) which was/were the most important for a successful launch and ask for examples

**

Sales Force: During launch, how was this product supervised in the sales force? (Ask about each variable)

Expert: Point out the most important variables, and why. Please also give examples if possible. Assume a market environment up until 2006.

5. Supervisory Context

- a. Internal Marketing
 - i. Sales Rep's supervisor made sure every salesperson knew the incentives for selling this product
 - ii. Sales Rep's supervisor explained the rationale for the introduction of this product
 - iii. Sales Rep's supervisor explained the research behind the development of this new product
 - iv. Sales Rep's supervisor explained how this new product fits into the company's strategic objectives
- b. Trust
 - i. Sales Rep's supervisor and I have a sharing relationship. Sales Reps can freely share ideas and feelings about the work.
 - ii. Sales Rep can freely talk to my supervisor about difficulties they have at work and know that he or she will want to listen.
 - iii. Sales Rep's supervisor and Sales Rep have made considerable emotional investments in our working relationship
- c. Training
 - i. Sales Reps received substantial training before assuming responsibility for selling this new product
 - ii. Sales Reps have spent a significant amount of time in training for this new product
 - iii. training program for this new product is first class

d. Field Attention

- i. Sales Rep's supervisor spends time with me in the field
- ii. Sales Rep's supervisor makes joint sales calls with me
- iii. Sales Rep's supervisor observes my performance in the field

Sales Force: ask about the variable(s) which was/were most important for a successful launch and ask for examples

**

Sales Force: During launch, how was the sales force organization set up? (Ask about each variable)

Expert: Point out the most important variables, and why. Please also give examples if possible. Assume a market environment up until 2006.

6. Organization

- a. Geographic (are territories assigned geographically?)
- b. Customer types (are customer types assigned independently of geography?)
- c. National Accounts
- d. Independent Agents or Representatives
- e. Product Groups
- f. Selling Teams

Sales Force: ask about the variable(s) which was/were the most important for a successful launch and ask for examples

**

Sales Force: During launch, what were the sales person's characteristics? (Ask about each variable)

Expert: Point out the most important variable(s) and why they are important. Please also give examples if possible. Assume a market environment up until 2006.

7. Sales Person Characteristics

- a. learning orientation of the salesperson
- b. problem-solver: (intuitive vs. systematic)
- c. career success of the salesperson
- d. salesperson's experience (no. of years, within ATC or outside)

Sales Force: ask about the variable(s) which was/were the most important for a successful launch and ask for examples

**

Sales Force: How was the overall Performance when launching this product? (Ask about each variable)

Expert: Point out the most important variables, and why. Please also give examples if possible. Assume a market environment up until 2006.

8. PERFORMANCE in Selling a new product

- a. to what extent have you been successful in
 - i. Gaining significant market share for this new product?
 - ii. Generating high level sales volume for this new product?
 - iii. Quickly generating sales for this new product?
 - iv. Exceeding sales targets set for this new product?
 - v. Assisting sales manager in achieving the objectives for this new product
 - vi. Profits/enabling sales of “old” products??

Sales Force: ask about the variable(s) which was/were most important for a successful launch and ask for examples

**

10. Sales Force & Experts: Which of the above variables or “categories of variables” would you, assuming a historical view, suggest to be most important for a successful launch?

Why, give examples/rationale

**

11. *Sales Force & Experts*: Which of the above variables or “categories of variables” would you, in today’s and future environment, suggest as the most important for a successful launch?

Why, give examples/rationale?

**

12. *Experts*: Of the variables chosen above, how should these be measured in a Research Model? (Open discussions depending on chosen variables above)

**

GUIDE APPENDIX 1: Preliminary Model – for use in discussions with experts

GUIDE APPENDIX 2: Table of summary results from Case Studies – for use in discussions with experts

end

Appendix 4: Case Study Results: Product Launches in Sweden

The cases conducted in this research were actual pharmaceutical product launches in Sweden. The information has been collected from two to four people involved in each product launch. The interviewed group always included sales management and sales personnel. The six products were launched by three different companies. The case study summaries do not include discussions or analysis by the author, but consist entirely of the perceptions and experiences of the participating personnel.

The first two case studies are presented in Chapter 4, section 4.2. Documentation of the four remaining case studies follows below.

Case Study 3 (of 6): The Launch of an Oral Contraceptive

At the time of its entry on the market, this type of product was not new in the market place and other competitors were on their way. The main competitor had built a very good feminine platform for messaging, so the obvious place for the team to position the product was already taken. Instead, the company created a campaign built on “balance”, as the product did not include as much estrogen as the main competitors’ product. This therapeutic area was surrounded by intense marketing spending. **(Type of Product)** The company was new to this area, so substantial resources were needed. The fact that the company had to enter this new therapeutic area, which was much more resource-intensive than those it was accustomed to, did influence how the strategy was formulated.

(Market Dynamics) The market was considered to be stable, certain and predictable. However new products soon to enter the market made the team think that changes would need to be made rapidly. This particularly influenced the allocation of resources to a strategy with fast uptake of market share. The perception was that the sales of these products were mainly driven by word-of-mouth among young women, i.e. this was something girls talked about and if a product worked well for one, her friends would go and ask for the same. The political environment and pricing were not major issues at the time of launch. The competition was very tough and most players invested heavily in marketing, including sales force resources. The first few months of the launch, the main targets were the experts, followed by heavy marketing and sales activities the most frequent prescribers. It was important to have acceptance and good relations with the experts, as too many negative statements from experts could have a considerable impact on sales uptake.

(New Product Adoption) During the launch, the team was certain that, to succeed in the environment, they needed sales representatives who were emotionally attached to the product. This emotional attachment was the most important driving force in establishing commitment in the sales force. The launch team had a clear view and strategy of how to build an emotional attachment to the product. Physicians, nurses and patients were all frequently invited to the company for presentations and lectures about how the product was perceived by them. The aim was to clearly describe the value of the product for the patients and how it had improved their lives. Effort, together with other commitment factors such as further investment in time etc, would develop if the sales representatives had the right emotional commitment. Very little effort was put into market and customer research before launching, and planning before the sales calls was minimal. In light of this, sales management did not push or think it was important for the sales representatives to do so either.

(Behavior Control) The company had not set up any established procedures and guidelines, nor was it viewed as important for any members of the marketing and sales organization to follow or be evaluated on processes. This meant sales management did not pay attention to procedures, nor were there any benefits or incentives related to it. What was seen as important, however, was that the sales representatives be held accountable for their actions when selling this new product. The goal was to build sales representatives with a strong emotional attachment to the product and to control their actions in the field.

(Outcome Control) The sales representatives' pay increase and incentive bonuses depended on how they achieved the goals for the new product. The sales representatives' goals were related to results, but not primarily, as their actions and behavior were weighted in equally. To reinforce the importance of the decided criteria for performance evaluation, pay increase and incentives, a routine was set up. If the sales representatives did not meet their performance goals, they were to report directly why this had happened and how they would deal with it. **(Supervisory Context)** Also, this was continuously emphasized in the field and practically handled with very active sales management. Sales management spent many resources and much time observing performance in the field. Sales managers traveled together with the sales reps to monitor behavior and actions and followed up customer reports carefully. This was a way of improving behavior and the question "what if" was often used by sales management to trigger even better behavior. Information was transparent among sales management and frequent communication to all sales representatives occurred in order to share as much as possible in an effort to enhance performance. The sales managers were seen as role models. Also, the sales managers made every effort to explain and make sure that everyone clearly understood and knew how the incentives were set up. Further, it was important for sales

representatives to feel confident that the sales manager would listen carefully when difficulties did arise. Rationale behind the launch of the product was important. The sales representatives needed to understand why the company needed a successful launch with just this new product and to understand the impact at different customer levels, i.e. physicians and patients. Little focus was put on formal training. It was up to the representatives to make sure they had full understanding of the product. With such tight observation in the field, sales management thought that this should take care of itself. This was also concluded not to have caused any problems during launch and was not perceived as important.

(Sales force organizational design) The sales force was organized according to geographic area, with six representatives per sales manager. The distribution of sales representatives was based on population distribution, which meant that sales personnel in less populated areas had larger geographical territories, while some sales personnel were dedicated only to one larger city. The organizational set-up was not seen as important at all for the launch success, as long as sufficient coverage of customers existed. The entire sales force operated with two to three fewer sales representatives than they would have wished for; however, as profit was important, there was an attempt from management to maximize this number. **(Sales Person Characteristics)** The sales team had much experience of general sales skills, but not in the area of this kind of product or within the therapeutic area. With no real process orientation or documentation describing guidelines and with training being the individual's responsibility, learning orientation was seen as important. Also, it was positive that there was flexibility in handling problems, so intuitive problem solving was preferred. The team was largely made up of women, but considering the product category, gender was not seen as anything that mattered during launch. **(Other)** All sales representatives carried two products, the new one and an older, much more established product. The established product was not related to the same therapeutic area. Having two products was not seen as a problem. However, it was seen as very important that the new product was sold first during the sales call.

(Performance in Selling a New Product) Exceeding profit target and sales targets were perceived as the most important measure of success. Also, the company had new products in the pipeline, which were soon to be launched within the same therapeutic area so relationship-building with key customers was seen as essential for future launches included in the sales manager's objectives. This made it important for the sales representative to assist sales managers in reaching their objectives. Other performance measured was market share gain, which was measured every quarter. In the first year profit was met, but not the set sales budget. The explanation for this was the time needed to build up relations with the experts did not generate direct prescriptions or sales as

quickly as the team had hoped for. In the second year, profit, sales and objectives were met and the launch was seen as a success.

Case Study 4 (of 6): The Launch of an Antidepressant

When this new anti-depressant for a major depressive disorder was launched, the product had a new mechanism of action and a different dosing scheme compared with the products currently on the market. However, early enthusiasm about the product was not great. Prior to the launch, the team received comments from senior management, such as “This is a me-too product and does not look as good as the competitors’ out there” and, “None of the differentiating factors seem to be very good or important”. This initial product perception from the marketing and sales directors made the planning for this launch difficult.

To make matters even worse for the launch team, the company did not have a great deal of experience of the anti-depressant market other than from some of the more out-dated therapies.

Despite its differences and novelties, the product was not seen as new to the market and the company had only limited and obsolete experience in the therapeutic area, yet the launch team had to consider it new for the company. **(Type of Product)**. This influenced the way in which the launch team approached the strategy for the product introduction. It had primary influence on how they went about setting up the sales and marketing organization. The plan was to hire a very experienced product manager, sales manager and sales force. However, with competition in the market for good staff, the company was only able to recruit a few experienced sales reps as the best ones in the field already had good jobs with the competitors. For the role of product manager, the decision was made to transfer someone internally. The choice fell on one of the upcoming product managers whom had shown great interest, motivation and action orientation in previous jobs. To prepare her for the launch, she was trained by physicians in the clinics about the product, the disease, and treatments. This also set the scene for future relationship building for the sales force, as she made initial contacts and gained an understanding of the experts in the field, referred to as key opinion leaders. As the launch approached, the leading sales manager was also transferred from another internal product. The sales manager had plenty of sales management experience but not any specific experience of the anti-depressant market.

The anti-depressant market was a fairly large market and it had a very satisfactory growth curve at the time of launch. About two to three years before the launch of the product a new treatment paradigm had penetrated the market. Up until then, only specialists,

psychiatrists, had been treating the disease and in an environment which had been characterized by close supervision of the patient under treatment. The treatments that had been available before had several side effects and an increased risk for suicide. With the new pharmaceutical options in the market, these issues became less important. This change in risk opened up treatment on a general practitioner level, as it was now perceived safer and simpler to prescribe those pharmaceuticals. The need for close supervision during treatment was no longer a crucial factor. The first of the new treatments launched quickly won a good market share, but close upon this came a competitor, who gained enormous growth with both specialists and general practitioners. These two successful products were the main competitors at the time of launch. (**Market Dynamics.**) By launch, however, the market dynamics had stabilized and were considered stable, fairly certain (and predictable) and major changes were not expected to come rapidly. The market dynamics were playing a medium role in the strategy formulation, mainly from the perspective of how competitors already acted in the market.

Based on the fact that psychiatrists and general practitioners were the product's target segments, the team identified an order of sales towards the target groups whereby they would first win over the specialists, the psychiatrists, and then quickly move on to reach the broad general practitioner segment. This was also the approach taken by the team. As the product launch approached, the product manager began to feel that the differentiating factors might be turned into an advantage and a marketing story was formed. The product manager and the leading sales manager were preparing to launch the product with main messages highlighting how the product worked differently in the body followed by very carefully crafted guidelines for communicating the dosing scheme, which was seen as a downside in the general practitioner segment but a upside in the psychiatrists' segment. The launch teams perceived that their most important task during the initial planning and launch phase was to build commitment to the product. (**New Product Adoption.**) On the sales representative level, the emotional attachment to the product was seen as critical for success with this new product. Also, they felt the need to formulate objectives with a great deal of personal meaning to the sales representative. With commitment being very important, effort was also focused on extensive preparation for prospecting for the right customers. To create the emotional attachment, the marketing and sales team took the time to interact with physicians and nurses to find out the practical importance of these kinds of products. However, the activity that gave the most emotional impact was the fact that the team was meeting patients to hear their stories, and learn how these therapies had enormously affected their lives, re-establishing them from a situation with no hope or wish to continue living. To build in objectives with personal meaning to the sales representatives, they were measured on number of sales calls and market share together with success stories collected from physicians' and nurses' about patients on the product

to be shared among the team members. This was aimed to bridge the emotional attachment and the personal objectives.

There were not many established procedures or guidelines to be followed by the sales force or the sales management. (**Behavior Control.**) Following pre-set procedures was not seen to be very important, so there was no sales management monitoring of such. At one point, at a higher company management level, there was an initiative to establish strict procedures for the sales force, however this initiative did not reach the sales force in any practical way during launch. On the other hand, it was seen as important that sales representatives' actions were appropriate in the field. There were considered to be informal directives on how to act as a sales representative, and all sales representatives were held accountable for their actions, regardless of whether the number of sales calls or market share were reached. The performance evaluations were not mainly weighted towards tangible results, such as sales calls and market share, but instead included more subjective measures, such as their actions in the field. (**Outcome Control.**) The evaluation measures, which were in practice the same as their goals, had a direct impact on pay increase and bonuses. A significant factor that was seen as important was to follow up on any area of the performance goals that was not met. This was followed strictly by sales management and sales representatives were obliged to explain why they had not reached their goals.

With limited enthusiasm and doubt from company management about the value and competitiveness of the product in the market, it was seen as extra important to have a very strong rationale for the team launching this product. (**Supervisory Context.**) The rationale was mainly built from an external perspective in a way similar to the way in which the emotional attachment was built. This was done by creating lectures for the whole launch team, where physicians spoke about failure and switch rates with existing products in the market and the gap the new product could fill, and patients told about how their lives had changed radically for the better when they were prescribed a therapy that worked. This created a very strong rationale for introducing this product. Little effort was put to explaining the research behind the product, with the exception of the fact that the product came from the company's own pipeline. Sales management assumed that everybody understood the set-up of incentives, so no effort was put into ensuring everyone had full understanding. During launch, the team did not talk about or explain any match with company strategic objectives. The team felt that trust between sales management and sales representatives became strong during the activities to build up emotional attachment to the product and with the activities to build a strong rationale for product introduction. The important part of driving launch success was that the sales representatives could talk freely about difficulties and that the sales managers would really want to listen. As a result of this open communication, issues that could have

become serious could be taken care of early. Emotional investments in the working relationships and sharing ideas were seen as less important. Further, based on the way in which performance evaluations were set up, sales management spent much time observing the sales representatives' performance in the field. This was seen to be very important for success of the launch. Dedication to actual training was small, as it was not seen as important for launch success.

The sales force was divided into territories based on geographic spread, which in turn were based on how national healthcare was organized in terms of budgets and prescription guidelines. **(Sales force organizational design)**. The way in which the sales force organization was set up was not seen by the team as making any difference for launch success or not.

The sales force was recruited from both outside and inside the company and all salespeople had different backgrounds and experience. **(Sales Person Characteristics)**. The sales representatives were chosen mainly based on previous success in terms of sales. A background in the depression therapeutic area was preferable, but this was hard to find in the competitive climate. The most important attribute, which was also looked for during recruitment, was the ability to solve problems in an individual self-decisive way. Performance orientation was seen as given and acknowledged as important. The team had a strong preference towards intuitive problem solving being important for launch success, mainly because the lack of guiding procedures in the sales force operations.

The sales force sold one product only, and this was seen as very important. Based on the fact the product was sold alone, there was no need to discuss which product should be sold first. However, the team highlighted the importance of having the new product first in the sales call with the quote from a sales manager "We once discussed co-promotion, and that would have been OK as long as they also had the product first in the call". **(Other)** Senior management measured the success of the product during launch in terms of profit for the company, referred to as "bottom line" as the prognosis was not set high. For the launch team this had implications on resources, and especially on the number of sales representatives available. **(Performance in Selling a New Product)**. The launch team on the other hand did measure success on sales growth and market share growth, referred to as "top line". For a few years after launch success, the company's management started to follow the same success measures as the launch team as it had quickly become a very important growth driver for the company. In addition to exceeding profit target to satisfy senior management and exceeding sales target to drive growth for the launch team; reaching all objectives based on sales management performance goals and the sales representatives' performance goals, were seen as very important aspects for measuring success. The team concluded that the launch was a great success, especially in

relation to the expectations communicated by senior management prior to launch. All criteria for a successful launch were met, with the exception of for some specific performance goals for individual sales representatives with very minor overall impact

Case Study 5 (of 6): The Launch of a Painkiller (Analgesic)

The launch of this analgesic, more commonly referred to as a painkiller, was somewhat similar to a launch of a "me-too" product in the marketplace. However, some features related to the substance made it possible to produce a compelling marketing story and gain a fairly good interest around the product in the sales force selling the product. The target group was General Practitioners and a few key opinion leaders in the field.

As with a "me-too product", the product was neither new to the company nor especially new to the market (**Type of Product**). The team was in agreement that the perceived "newness" of the product greatly influenced their approach to sales force strategy formulation both from an external and an internal perspective.

The market into which this new product was introduced was seen as stable, certain (predictable), as well subject to slow change. (**Market Dynamics**).

All involved parties concluded that adjusting strategy to the type of newness and the expected market dynamics was important and that it was likely to have a high impact on the selling performance.

Due to the fact that the product was perceived as a "me-too-product", the sales force's commitment to adoption was a concern when planning the launch. The team's pre-launch discussions included issues such as, whether it would be easier to gain commitment in the sales force since most of the sales personnel were already familiar with similar compounds, or if it would be more difficult because of already established sales arguments and relations, which would have to be altered for the new launch. During the actual launch, the sales force mostly consisted of younger, "hungry" salespeople. Also, the company in which the product was launched had a culture of fostering its sales personnel to perceive themselves as better than competitors. The culture and general training were also constructed to include commitment in selling new products. The launch team worked hard to produce the "news" argument and at the time of the launch the sales force accepted and perceived the product launch as bringing news to the customers. The driving force of commitment was identified as the emotional aspect, i.e. to make sure the sales representatives believed in and felt a connection to the product brand, its value as a therapy and its overall success. Sales representatives' discussions

about the product were not seen to be important, rather the reverse due to the risk that they distort implementation of new messages. (**New Product Adoption – commitment**)

The effort to sell the product was extensive, but as it originated from the culture within the company, it was similar to that with other products that had been launched or were already established in the sales representatives' portfolio. The difference between the efforts for a new versus an older product was not seen as a very important issue if emotional commitment had been established. (**Product Adoption – effort**).

In an effort to control the behavior and outcome (**Behavior Control and Outcome Control**), the sales force was kept very involved from the start in that they were shown sales numbers, market share and other market data as a means to push them to sell. It was also communicated to them that the company was the best in all aspects. This communication was a part of reinforcing the culture. The sales force carried several older products in the company portfolio in addition to the new one. The majority of incentives were aimed towards the new product to ensure that it was focused. However, the incentives were not high in monetary terms, but were more of a means to increase internal competitiveness. Also the new product was detailed first in the sales call. Managerial issues were how to continue selling the other products with the addition of the new one and how much time should be dedicated to the new versus the older products to optimize overall sales while still securing a sufficiently fast uptake of the new? The team agreed that even though the incentives and sales competitions were directed towards the new product, the two main drivers for controlling outcome were to first always let the sales representative be accountable, i.e. the sales representative would always have to justify and explain any outcomes versus set goal, good and bad, but especially bad outcomes. Secondly it was agreed that it was important to follow procedures, but to be successful in outcome control the sales representative should continuously be forced to explain his/her actions in selling the new products, and as quoted by a manager "actions speaks louder than words".

Supervisors' behavior and actions (**Supervisory Context**) were seen as important if the sales representatives were to achieve a successful launch. During launch, co-travel with the sales representatives became even more important. The sales managers increased their visit frequency, and spent at least one session a week in the field with each sales representative in their team. The purpose of this was not always to teach, as this competence should already be in place, but more to observe, as this was perceived to give a more robust platform for sales managers to continue the development of the whole team as well as later give feedback to any individual on behavior and actions.

One key objective when launching this product and in line with the company culture, was to build team spirit and the emphasis on “we”. The sales managers’ task was defined as providing support for the sales representatives and not acting as the boss pursuing a directive style. As a result of this, trust in the team, the manager and the company all became important for the sales representatives. The most important aspect of trust was the ability to openly discuss difficulties and that concerns raised were taken seriously by the managers. The perception of the manager as more supportive than directive was very important, while in reality, the manager was supposed to operate with very tight directions to the sales representatives, especially if something seemed to be going wrong as discussed in outcome control above.

Training is important, but as this was perceived as something of a me-too-product in the market place there were not really any new concepts in the area of product features for the sales representatives to be trained in as they were familiar with the area and previous products. The training was much more focused on messaging and building commitment. The team agreed that in any circumstances product training was of less importance than message training. To increase commitment and alignment and build team spirit, sales management was encouraged to develop their own training material. The team ranked training in the features of the product as the least important area of internal marketing.

Continuing the discussion about what was perceived as most important for supervisors, the team agreed that the internal marketing was of very great importance. Even if most of the aspects of internal marketing were perceived as significant, the importance of explaining the rationale for introduction from all angles far exceeded the importance of any internal marketing about the research behind the product or understanding of how the incentives had been set up.

The current geographic organizational structure was used during the launch, so no changes were made to accommodate the launch of this new product. The geographic split among sales staff and resources was based on area population, which meant that some areas, such as the northern part of the country, were left without sales representation. The sales teams had one sales manager to whom 5-7 sales representatives reported. The team agreed that organizational set-up (**Sales force organizational design**) was not of any great importance for a successful launch.

During the launch, the sales team comprised of both experienced and new sales representatives. Most of them had a common background, having been recruited directly from universities or other industries. Very few of them had any background in other pharmaceutical companies. Performance orientation was seen as important. However, as the product therapy was not new to the company, some had previous experience from

selling similar products before. The core characteristics that the company was looking for in sales representatives, both in general and for this new product, were people able to comply with given rules and generally possessing a polite manner. The sales personnel had little room to maneuver by themselves and were very tightly directed, both on behavior and actions. Most of the sales personnel followed designated procedures and guidelines and did not do much intuitive decision making on their own. This was seen as the most important characteristic of sales representatives compared to their learning orientation, their career success and their experience. (**Sales Person Characteristics**)

As interviews and discussions around the launch continued, **other** topics perceived as very important or almost critical for success were raised. The team pointed out that an important concern before the launch was to optimize the share of voice. They perceived share of voice as an important driver for sales uptake. The team described share of voice as being both number of salespeople and number of meetings with physicians. The share of voice could also be measured in market research as “top of mind” when physicians were asked the number one product or top message in the category. At the same time as wanting to maximize the share of voice, the team wanted to optimize the cost to meet set budgets and profit targets. Further, as the sales representatives carried several older products in their portfolio, the importance of placing the product as number one in the sales call was perceived as very important.

In **Performance in Selling a New Product**, measures of success were monetary sales targets which should be exceeded and the objectives of sales managers and sales representatives. As sales managers’ objectives were directly passed down to the sales representatives’ objectives, the sales personnel’s success, or assistance in meeting the sales managers’ objectives was critical in measuring success. Other important measures were market share increase, profit, and share of voice, i.e. number of calls or recollection of core messages among physicians compared to competitors. The launch of this painkiller was considered a success, as sales targets were exceeded and objectives of sales management were met.

Case Study 6 (of 6): The Launch of a Migraine Treatment

This product was due to be launched into a market where the competitor had been established over a period of ten years. The launch team could see many challenges in meeting a product that had been so well established for so many years. The competing company had great relations with all levels of customers within the therapeutic area. Many of the key customers had participated in post-marketing studies with the competing product and knew well how to handle any side effects and complications. The experience

of the launch team was that, under these circumstances, the customer base would welcome new choices and additions to their treatment options. However, judging from market anecdotes and market research this did not seem to be the case. The team's launch strategy was built on the improved effect of the product, and it had solid proof that it was based on sound data. They were however concerned as to whether this increase in effect would be enough to change behavior on a customer level. The product was also the first of its kind for the company, so the commercial organization was faced with something completely new. **(Type of Product.)** It had taken the company ten years to develop this product and the sales and marketing team were committed to using all the knowledge built up in the research department as an advantage when launching the product. **(Market Dynamics.)** The market had changed very slowly and was seen as stable and the future was certain and predictable, even though new competitors were on their way into the market. Both the type of product and the market dynamics had impact on the launch strategy formulation.

The product's target group was general practitioners together with neurologists in an open clinical setting. The launch strategy for this product was to shake the market with as much noise as possible with a message compelling enough for customers to question and change their habits with the competing product. This meant that resources were an important topic for the team. Once internal approval had been given, the launch team planned and executed two very expensive initiatives. These initiatives had to have several objectives to be able to provide the desired return on investment. The first initiative involved a series of post-marketing studies with a very broad range of participating customers. This would fulfill the objective of providing many customers with knowledge and experience of the new product at an early stage. The second initiative was based on the extensive product knowledge that had been built up in the research department during development. Early in the launch, a series of large scale educational seminars on the new product, its development and progress within the therapeutic were conducted. These educational seminars had multiple objectives. From a customer standpoint, the objective was to make as many of them as possible aware of the new product and how its benefits could provide the therapeutic area with a good new option. This would give the sales force a head start of product awareness. Internally, these educational seminars had several objectives. One of the bases of the idea was that the sales representatives participated in similar conditions to the customers. First this had the objective of providing the sales representatives with sufficient basic product training. Also, as the sales representatives' emotional attachment to the product was seen as very important, the second objective was to use this forum to build upon it. The third objective was to give the sales representatives a very relaxed and natural opportunity to build important customer relations.

With the aim of building emotional attachment to the new product, the sales organization conducted several teambuilding activities in order to make everyone comfortable with arguments for skeptical customers. Further, investments were made to bring the sales representatives to congresses to further develop that emotional attachment. Previously only product managers and medical personnel had attended congresses. Commitments, other than building a strong emotional attachment, were not seen to be very important. **(New Product Adoption)**. There was no indication that the success of the product launch had anything to do with the link to personal objectives or whether the sales representatives had discussed the product among themselves or not. Also, the team did not think that extra commitment compared to any other product sold would be needed. Much effort was put into building customer relations with key customers. This was seen as very important, especially in the light of the strong relationships the competitor had built over time. Other than for key customers, it was seen as less important to prospecting, planning, collecting or use market information collections.

The company had very strict procedures to be followed by the sales representatives. **(Behavior Control)**. It was seen as very important that these procedures were followed. When traveling with a sales representative, the sales manager monitored the sales reps' to make sure that procedures were adhered to at all times. The sales representatives were held accountable for their actions, regardless of whether they achieved their results or not. There was no monitoring in order to evaluate the procedures as such and pay increases were not dependent on how the sales representatives followed or knew the procedures. **(Outcome Control)**. The company wanted growth and evaluations were primarily based on results. The most important outcome metric was sales achieved by each representative and this was an important performance goal for them. Performance evaluations also included the extent to which the sales representative followed procedures. Pay increase and other tangible rewards were single-handedly based on the criteria of meeting or exceeding sales numbers, so there was no real connection between performance goals and pay increase or anything else the sales representative might have accomplished outside regular procedures. If the performance goals were not reached, the company required that the sales representatives explain why and present plans for achieving the next round of goals.

(Supervisory Context). Two matters of prime importance within internal marketing were that the rationale for the product was understood and that the company's strategy with the new product was explained. This was achieved by including the sales representatives in the educational seminars and bringing them to congresses and by continuously presenting the sales growth contribution and effect and market share numbers of the new product for the company. As the sales numbers alone provided the incentives for the new product, the team did not think that any explanation of how they

were set up was needed. The research behind the product was not important other than for the fact that it provided a valuable tool for marketing and sales operations in specific launch activities. Sales management considered that it was important to be what they referred to as “being ahead of the game”. This meant picking up signals in the sales force at an early stage. As product training and field attention in the form of joint calls or spending too much time with the sales representative were seen as not being too important, the trust between the sales representatives and sales management to freely talk about issues would give the sales managers these early signals without their having to spend extensive time in the field. To make this work the managers really needed to listen every time the sales representative spoke to reinforce the perception of them always being willing to listen. Sharing ideas and other emotional investments were not seen as very important.

The sales force was set up according to geographic territories, with a number of sales representatives in each comparable to number of customers in that territory. **(Sales force organizational design)**. As long as the coverage of customers was solid in terms of number of calls, the importance of the sales force organization design was not seen as significant for the success of the product. The number of sales representatives was important, but the team faced no staffing problems since the company’s strategy was growth and it was at the time less concerned with profit. **(Other)**. The sales force did carry other products, but this product was always first in every call. It was seen as necessary to have the product sold first if no opportunity was to be lost.

Based on the perceived importance of following processes, the criteria for problem solving were systematic and according to “the book”. **(Sales Person Characteristics)**. The profile the company expected and which was provided by the salespeople was competitiveness and adherence to procedures. Background and experience were of less importance. The sales force was made up of a range of personnel, from those with extreme explorer background to nurses and PhD’s. The performance orientation was obvious; all the sales representatives as well as competitors were seen to possess this, so competitiveness was preferred instead.

In the situation where growth was on the agenda, the criterion on which the company, the launch team and sales management measured overall launch success was exceeding sales targets. **(Performance in Selling a New Product)**. All other metrics were of less importance; even if metrics such as market share, volume, etc were all met, nobody paid attention to them at the time. The launch was successful and the sales targets were exceeded with good margin. After a few years the product became number one in sales and volume for the therapeutic area, outperforming the already established competitor.

Appendix 5: Expert Interview Results: Product Launches in Sweden

This Appendix presents the documentation of the expert interviews conducted to support analysis of the case study results, adapt the Preliminary Model to the Research Model and to identify and validate the variables within the model and build the data collection instrument. The expert results are based on the experts' analysis of the six case studies and their own expertise about each variable in the Preliminary Model. Also, during the interviews, some literature findings were occasionally discussed.

Overall the expert interviews were in line with the results from the case studies. The expert interviews provided valuable insights and recommendations for formulating the Research Model. Also a major contribution of the results from these interviews enabled the narrowing down of the number of key success factors and pin-pointing those considered most important for driving a successful launch of a new product in the Swedish pharmaceutical industry. A summary overview of the results from the expert interviews can be found in Table 9.

General Analysis of the Case Studies by the Experts

All experts concluded that the case studies provided an excellent insight into the perceived key success factors for sales force readiness during a new product launch. Further, all expressed that the patterns were fairly clear in guiding the choice of key factors driving success of new product launch.

The spread among therapeutic areas and companies was agreed to be good. Experts 1, 2, 3 and 5 raised and, in consensus, concluded that which company the product belonged to seems to have very little relevance or importance to the perceived launch success factors. The only clear pattern these experts could identify as far as company relations were concerned was within the areas of Sales Person Characteristics and problem-solving. As the concept "intuitive" seemed to be preferred in Company B and "systematic" within the other two companies, these experts drew the conclusion that this seemed to be related to whether or not the company had well-defined procedures for the sales force. Two of the three product launches had highlighted that following procedures was important for successful launch. On the other hand, within these cases there seemed to be very little focus on measuring and rewarding if the procedures were followed, while accountability to actions seems to be a cross-case important launch success driver, whether or not procedures were established. The company owning the product, its culture and

established procedures or lack of them could probably in many areas have impact on a launch. However, when identifying the key drivers for success in the sales force, all of the experts concluded that even if this was disregarded, an adapted research model based on the generic model would still be very accurate in guiding key success factors, as set out in the research objectives.

The experts all gave full support to the research scope of sales force operations towards physicians who were general practitioners. Experts 3, 4, 5 and 6 all had a background in launching pharmaceutical products aimed at specialists and general practitioners. These experts all concluded that it is not unlikely that the set of success drivers for launch might differ if the product was launched for specialists versus general practitioners and the scope was seen very positively and the final results would be likely to be more accurate with this distinction between the sales force target groups.

Type of Product

The experts, with the exception of expert 5, all concluded that the newness of a product could definitely have an important impact on the launch success. However, this is something on which commercial organizations, especially sales forces, have a minimum influence. The five experts highlighted this variable as something to be retained in the adapted research model as it might give important guidance as to environmental impact when sales management strategies are formulated. Expert 5 did not think it should be included in the adapted research model, as the perceived view was that it had no importance. However, if it were retained, no harm would be done to the model and the results might not be those expected, and new lessons might be learned.

The recommendation when data was collected was to ask which of the three conditions were met at time of launch and to analyze that condition against successful launch with the aim of identifying any relations indicating preferable or ideal condition. Expert 3 raised interest in analyzing relations between type of product and effort in training, but had a change of mind when realizing that gained experience in the case studies showed the standpoint of training in the sales force as not being such an important driver for launch success.

Market Dynamics

The experts all thought that market dynamics should be included in the model and that the arguments were the same as for the variable type of product, since these insights would give important guidance for formulating sales management strategies. However, experts 1, 2, 3 and 5 pointed out that the two important conditions during launch would

be the dynamics of stability (stable/unstable) and changing speed (slowly versus rapid). Their argument was that both the conditions of predictability (predictable/unpredictable) and certainty (certain/uncertain) were less valid at time of launch, as product launches in most cases would make the market both more uncertain and more unpredictable, which meant that these factors were of less importance as background when formulating a product launch strategy. Also, the conditions appeared to be less clearly defined. These experts suggested that the factors predictable and certainty be removed. They also pointed out support in the case studies for this.

As far as stability is concerned it was concluded that it should be kept in the research model as the product launch itself was not perceived to impact the stability of the market to any great extent and it was considered to be important input for launch strategy formulation. The launch itself could possibly impact the condition of slow or rapid change; however it was seen as very important knowledge when formulating the strategy. The recommendation when collecting data was to ask which of the conditions applied at time of launch and then analyze the condition against successful launch to find out which condition increased possibilities for a successful launch.

New Product Adoption

This was stated as an important variable by all the experts, who mostly agreed with the case studies. Regarding commitment, the experts were unanimous in their agreement that the item querying the sales representative's emotional attachment to the success of the new product was the most important item. Experts 3 and 6 both argued, based on their experience, that if emotional attachment is achieved among the sales representatives for the new product the rest will follow, i.e. product significance, sense of duty and investments in time and energy. They also argued that this included the effort variable. Experts 3 and 6 concluded that the only item that should be included in the key success factor research model for new product adoption was the emotional attachment. This viewpoint was largely similar for experts 1, 2 and 5, however, with a difference of opinion regarding the commitment item, willingness to make further investments in time and energy and the effort variable. On the one hand, they thought that the item (investments in time and energy) and variable (effort) could be taken for granted merely based on emotional commitment, and if included in the model should be treated separately. On the other hand, they did not think the either the item (investments in time and energy) or variable (effort) were important enough for inclusion in the research model as a key success factor. Expert 4 gave support towards including the variable for achieving objectives as having a great deal of personal meaning for the salesperson, in the research model. Further, this expert also wanted to include the item in the variable effort, for prospecting for customers. All experts dismissed the item of discussion with other sales representatives as important. The recommendation when collecting data was

to ask whether the sales force did or did not support the chosen item (binary) to find out if this was a driver for successful launch.

Behavior Control

That behavioral control is an important factor for successful launch was agreed by all the experts. Four of them (2, 3, 4 and 5) stated that based on their opinion, this factor is one of the most, if not the most important factor for achieving a successful launch. All the experts agreed with the findings in the case studies that the item about holding sales representatives accountable for their actions regardless of results was of importance. They all recommended including this item as a key success factor. On the other variables however, their opinions differed. Experts 2 and 4 suggested that the items that supervisors should monitor the extent to which the sales representatives follow established procedures and that supervisors should evaluate the procedures salespeople used were both important for new product success. Their arguments were that if this was not done, needed procedure changes would not be detected and identified early on which might jeopardize launch success. Further, these experts did not agree to any real importance of how this was connected to pay increase and other rewards. Experts 1 and 6 thought that none of the items other than holding the sales representatives accountable for their actions regardless of results, were sufficiently important to be included in the research model. Expert 3 suggested that for new product launch success, process evaluations, i.e. monitoring sales representatives and evaluating the procedure itself, should be excluded from the research model. However, expert 3 suggested that it would be of interest to include in the model if the item, if the sales representatives' pay increased and tangible rewards on how the sales representatives followed any processes as well as their knowledge of, would be of interest to include in the model. The argument was that then only little monitoring would be necessary as the sales representatives would have the incentives to follow set procedures which would benefit the new product launch. The expert did not think that this would be the case if it was not connected to pay increase and tangible rewards. The experts recommended, whichever item was chosen, to measure the items in terms of whether or not the sales force was controlled, or not, on that item (binary), during launch to find out if this was a driver for successful launch.

Outcome Control

Regarding the items within outcome control, the experts were mostly in line with the results of the case studies. All the experts highlighted the item concerning that if performance goals for the new product were not met, the sales representative should be required to explain why, as the most important item to include in the model. They based it both on their own experience and the results of the case studies. Experts 3 and 6 argued

that performance evaluation should primarily not be measured on results, dismissing the item indicating this. The argument made was that with sales representatives having to continuously explain their unachieved results, the sales representatives, together with management, would have a formal process to continuously update the objectives. In an uncertain environment, such as might be perceived at a time of launch, some flexibility is needed within the selling process, and set performance objectives tend to quickly become obsolete in a launch situation (Lilien et al. 1981), so primary emphasis on results will often be unfair or prove to be unachievable for the sales representatives, which in turn might lower motivation for selling the product. Experts 2, 3 and 5 had similar thoughts around flexibility in objectives and sales force outcome measures, such as market share and sales, to ensure that the sales force objectives do not deviate too much from reality and from expectations before or during a very early in the launch.

Experts 2 and 5 were in support of the item “pay increase and other tangible rewards depend on the degree to which I have achieved the goals set for this product”. They argued that it is an important factor for sales representatives to receive monetary rewards and that those rewards should be tied to the goals set for the new product. For the item “pay increase depends on how sales representative performance compares with the goals for this new products”, was not identified as a key success factor by either the case studies or the experts. Experts 2 and 5 express preference for the first item rather than comparative item. The other experts argued that none of these items should be included based on the case studies since the explanation of unachieved goals and flexibility of changing them, as discussed above, were more important during new product launch.

Experts 1 and 4 supported the item “performance evaluations of salespeople on this new product place primary weight on results”. They argued the standpoint that sales representatives are usually driven by results and that the item should be included based on this argument.

Expert 4 supported the item “pay increases and rewards depend on the degree to which sales representatives have achieved specified outputs regardless of whether sales procedures were followed or not”. This item did not find a great deal of support as a key success factor in the case studies, however expert 4 argued that following the stand-point of putting primary evaluation weight on results, payments and rewards should not be tied to whether or not procedures were followed. However, expert 4 did later open up for the possibility to include some part in the evaluation on procedures.

The recommendation was to keep the selected variable or variables to a binary measure, that is, did the variable find support or not during the launch in order to investigate if this was a driver for successful launch.

Supervisory Context

As far as *internal marketing* is concerned, the experts agreed with the clear and strong support for the item of having the supervisors explain the rationale for the introduction of the product and the recommendation from all the experts was to include this item in the research model.

While there was a consensus about the variable of explaining the rationale for product introduction, there was not full agreement as to whether or not to include the item about the importance for sales managers to explain how this new product fits in the company's strategic objectives, in the research model. Experts 3 and 4 argued that this was important and suggested inclusion in the research model. The other experts agreed with the findings from the case studies that showed this item to be less important as a key success factor. They clearly recommended not including this item as a key success factor.

All experts were in consensus about not including the item; "my supervisor explained the research behind the development of this new product", based on the findings in the case studies as well as their own experience.

The item identified in only one case study, "my supervisor made sure every salesperson knew the incentives for selling this product", gained some support from expert 4, however not to any great extent.

Interestingly and in contrast to the main outcome of the case studies, the *trust* variable generally received little support from all experts. The item, "I can freely talk to my supervisor about difficulties I am having at work and know that he or she will want to listen", which was identified in all case studies as a key success factor for new product launch, was also highly regarded as the same by the experts. However, with the exception of expert 3 who did not want to include the item in the research model, all other experts recognized the strong support this item had received in the case studies and recommended the inclusion of the item in the research model. For the other items, all experts recommended exclusion from the research model.

Regarding the *training* variable, the majority of the experts agreed with the findings of the case studies, suggesting exclusion of the variable. All experts, with the exception of expert 1, considered training to be of less importance and not regarded as a key success factor for inclusion in the research model. The argument was based on the relatively weak importance in relation to the recommended key success factors, such as emotional attachment to the new product and explanation of the rationale for introduction of the

product. Expert 1 argued that product training was important, mainly based on the nature of the complexity of pharmaceutical products in comparison with other categories such as most consumer products. Expert 1 argued for inclusion of the item that sales representatives should receive substantial training before assuming responsibility for selling the new product. This specific item was not identified in any of the case studies as a key success factor, however one case study did identify the item for time on training.

For the variable *field attention*, the experts were in line with the results of the case studies. In the case studies the item, managers' observation of performance in the field, was identified in five case studies as a key success factor. Also, all the experts agreed with inclusion of this item in the research model. They had several arguments in addition to the results from the case studies, such as their own experience, the importance of being seen as a manager in the field, closeness to customers and market dynamics, etc.

None of the experts suggested that the other two items about time spent and making joint sales calls should be considered for inclusion in the model. They did not dismiss these items as unimportant, but did not see them as sufficiently important to be included in the model as key success factor.

As with the previous variable, the expert recommended measuring the variable or variables for supervisory context as binary, i.e. yes or no, in the instrument with the aim of finding out whether they contribute positively to a successful new product launch.

Sales force organizational design

In the category of sales force organizational design, the experts were also in line with the results of the case studies. There was only one case that identified any of the items as a key success factor for new product launch and that was that of forming selling teams. Even though, discussions took place with experts 2, 4, and 5 about the benefits of organizing the sales force based on customers versus geographical organization, they were all in favor of a customer-organized sales force and none of them suggested including this or any other item about organizational design in the research model. However, they all pointed out that, based on their experience, one of the most important issues in sales management and especially in the pharmaceutical industry was the number of sales representatives that should be included in the sales force during a new product launch. This was highlighted in five case studies. The experts agreed that share of voice was important, but the most correct and holistic questions would be – what is the optimal number of sales representatives? This issue was raised on the basis of the balance of rapidly achieving sales and market share versus keeping the profit (P&L – profit and loss) optimized. The experts commented that, particularly in Sweden where most

pharmaceutical companies are only marketing and sales franchises of larger corporations, the main cost is the sales force. All experts recommended including a variable for measuring the optimal number of sales representatives needed for a successful product launch. Further, experts 1, 2, 4, and 5 recommended investigating the optimal number of sales representatives by collecting data in terms of how many sales representatives were used during launch and based on that, analyzing the optimal number of sales representatives needed.

Sales Person Characteristics

Even though the items, learning orientation and performance orientation, were identified in two case studies each as key success factors, none of the experts gave these items support. Their rationale was based on the fact that these two items were seen as inherent in a sales force and were too generic to have any impact on launching a new product versus selling an old product or be a driver for new product success. Experts 4 and 5 argued that this is a basic criterion for any salesperson and should not be considered a key success factor. The experts recommended not including any of these variables in the research model. Also, concerning the item, career success of the salespeople, only expert 1 considered it a driver for sales representatives to work with a new product and hence a driver for success.

All the case studies found that problem-solving style was a potential key success factor, and much attention was given to this by the experts. Based on the results found, all experts recommended inclusion of the item in the research model. The experts showed a great interest in finding out whether problem-solving style did positively influence the success of a new product and argued that it was definitely a key success factor. Also, they discussed the potential outcome in terms of which problem-solving approach would be preferred over the other. The intuitive problem-solving style was preferred in three case studies and the systematic style in three. All experts believed, based on their own experience, that systematic problem-solving would be preferable to intuitive problem-solving. Experts 1, 3, 4 and 5 argued for support of a preferred systematic problem-solving style and, in line with some of the case studies, that in order to succeed with a new product launch, it is desirable to have non-innovative behavior in the sales force, thus securing that the core message is delivered in a consistent way and that problems which are taken care of systematically also reinforce a consistent core message. Also, based on the results of the case studies, both intuitive and systematic styles should be tested in order to find out which one is preferred.

Concerning salesperson's experience, experts 1 and 3 discussed its relevance as a key success factor, but based on the fact that none of the case studies identified this as a

potential key success factor, it was recommended that it be excluded from the research model.

Performance in selling a new product

The case studies identified exceeding sales targets set for this new product and assisting the sales manager in achieving the objectives for this new product as the preferred items for measuring performance in selling a new product. Also, all experts concluded that these two items were the most appropriate for measuring new product launch success.

Exceeding profit target for the new product was identified in two case studies, and also identified by all the experts as an important measure. However, when this was discussed in a little more depth, the experts, with the exception of Expert 2, thought this might be difficult to measure in a correct way. They based this notion on many factors which they could identify, such as the fact that the launched products are often a global product produced in a larger context; that information such as cost of goods, shipping, etc., is often only known by upper management or finance and that sales managers will most likely not have access to this information, even high up in the sales organization, so the real profit numbers might not be known. They raised concerns about collecting this data with the risk of obtaining misleading results. Expert 2 still wanted to use the item as a measure, based on the perceived profit from the sales managers, as they still have assigned budgets to compare against.

Experts 2, 3 and 5 suggested collecting data over time to provide the best guidance of a successful launch. To define launch success, the sales and objectives item should be positive for the first two consecutive years in order for the launch to be deemed successful. Also, they suggested using third party data to validate the more subjective answers about launch success coming from the items. The third party data should then be used as a more objective validation of the final criteria if a successful launch was achieved.

Other

First, the number of sales representatives needed for an optimal sale force was recommended for inclusion in the research model based on the discussion in the section above under the sub-heading sales force organization design.

Of the issues arising from the case studies, those related to product order in sales calls attracted much attention from all the experts. They all concluded that many pharmaceutical sales forces carry several products or a portfolio of products. They all believed that handling this properly is a key success factor for new product launch. These issues were not included in any of the items in the generic model for sales force readiness during new product launch. All experts wanted to have this concept included in the research model. Experts 2, 4 and 5 recommended splitting this issue up into variables; one of which investigated the impact on successful launch if the product is promoted with other products (alone or with other products), and one investigating any impact from the order in which the product is sold during the sales call. Experts 2, 4 and 5 recommended collecting this data under the two separate variables and have both included in the Research Model.

Appendix 6: Data Collection Instrument for Research Model

Data Collection Instrument for Research Model

1. Was this product launch to General Practitioners? [Yes; No] – *if No, close interview*
2. Product name
3. Generic substance name
4. How many sales representatives did you have during the launch of this new product?
[integer]
5. During launch, did the sales representatives feel emotionally attached to the success of this new product? [Yes:=1; No:=0]
6. During launch, were the salespeople held accountable for their actions in selling the new product, regardless of results they achieved? [Yes:=1; No:=0]
7. During launch, if the sales representatives' performance goals for this new product were not met, would the sales representatives be required to explain why? [Yes:=1; No:=0]
8. Did the sales representatives' supervisors explain the rationale for the introduction of this product? [Yes:=1; No:=0]
9. During launch, the sales representatives could freely talk to their supervisor about difficulties they had at work and known that he or she would want to listen? [Yes:=1; No:=0]
10. During launch, to what extent did the sales representatives' supervisor observe performance in the field; no-monitoring, medium-monitoring, or high-monitoring?
[high-monitoring:= 3; medium-monitoring:=2; no-monitoring:=1]
11. During launch, how did the sales representatives handle problem solving; intuitive or systematic? [1:= intuitive; 2:= systematic]
12. *Successful Launch? (Yes:= 1; No:= 0) – not a question*
13. For launch year one, did you exceed sales targets set for this new product? [Yes:=1; No:=0]
14. For launch year one, did sales representatives assist sales managers in achieving the objectives for this new product? [Yes:=1; No:=0]
15. For launch year two, did you exceed sales targets set for this new product? [Yes:=1; No:=0]
16. For launch year two, did sales representatives assist sales managers in achieving the objectives for this new product? [Yes:=1; No:=0]
17. Did the sales representatives only sell the new product or did they sell other products during the same sales call? [Alone:=1; Together with other products:=2]
18. During launch, was the new product sold first during the sales call? (1:=Yes; 2:=No)
19. At time of launch, was this product:
- new-to-the-market and new-to-the-firm? (=3)

- not-new-to-the-market but new-to-the-firm? (=2)
 - not-new-to-the-market and revisions-to-the-firm? (=1)
20. What was the nature of the market environment for this new product at the time it was introduced, stable (=1) or unstable (=2)?
 21. What was the nature of the market environment for this new product at the time it was introduced, did it change slowly (=1), or change rapidly (=2)?
 22. Market share year one [per mille] – *not a question, data from third party database*
 23. Sales year one [SEK] – *not a question, data from third party data base*
 24. Market share year two [per mille] – *not a question, data from third party database*
 25. Sales year two [SEK] – *not a question, data from third party data base*
 26. Market share year three [per mille] – *not a question, data from third party database*
 27. Sales year three [SEK] – *not a question, data from third party data base*
 28. Market share year four [per mille] – *not a question, data from third party database*
 29. Sales year four [SEK] – *not a question, data from third party data base*

Appendix 7: The Size and Value of the Pharmaceutical Industry

In order to give readers not familiar with the pharmaceutical industry a better understanding of the industry's size and value, this appendix provides a brief overview. The pharmaceutical industry is a truly global industry, in the sense that a developed product is typically launched across all the major markets, including North America, Europe, Asia, and South America (EIU 2005; Popper and Nason 1994). In 2007 the global pharmaceutical market had total sales of around \$600 billion and the market had grown from around \$400 billion in 2002 (MIDAS-Database 2007a). To highlight overall growth of this industry; looking back to 1990, the world market for ethical pharmaceutical products was valued at \$147 billion and the top three companies in terms of global ethical sales were Merck, with \$6,4 billion, Glaxo, with \$5.4 billion and Bristol-Myers Squibb with \$4.9 billion (Yeoh 1994). In 2007, these companies are still on the top fifteen companies' list; their respective sales are around \$22 billion, \$42 billion and \$18 billion, and the growth of these companies has mainly been driven by new product introductions and mergers. See Table 13 for the top fifteen biggest pharmaceutical companies 2006.

While the US is the largest single market with total sales of \$293 billion in 2007 (growth 6%), Europe comes as number two with sales of \$162 billion, where the largest markets include the UK, Germany, France, Italy, and Spain. (MIDAS-Database 2007a)

However, the growth rate trend of the last few years is declining. During the period from 2002 to 2007 the global growth rate declined steadily from around 10% in 2002 to around 6% 2007 (MIDAS-Database 2007a). The market in the United States has had an overall decline in growth rate from around 11,5% in 2002 to around 4,5% in 2007. For the European big five markets (UK, Germany, France, Italy and Spain) growth has declined from around 8,5% in 2002 to 5% in 2007. (MIDAS-Database 2007a)

This study addresses the Swedish pharmaceutical market. The Swedish pharmaceutical market represents total sales of \$3.7 billion in 2007 (Datamonitor 2007b). The annual growth rate (CAGR) between 2003-2007 was 3,4% (Datamonitor 2007b).

Table 13: Top fifteen biggest pharmaceutical companies
(MIDAS-Database 2007a)

Revenue Rank 2006	Company	Country	Total Revenues (USD millions)	Healthcare R&D 2006 (USD millions)	Net income/ (loss) 2006 (USD millions)	Employees 2006
1	Johnson and Johnson	U.S.	61,095 (2007)	7 125	10,576 (2007)	119,200 (2008)
2	Pfizer	U.S.	48 371	7 599	19 337	122 200
3	Bayer	Germany	44 200	1 791	6 450	106 200
4	GlaxoSmithKline	United Kingdom	42 813	6 373	10 135	106 000
5	Novartis	Switzerla nd	37 020	5 349	7 202	102 695
6	Sanofi-Aventis	France	35 645	5 565	5 033	100 735
7	Hoffmann–La Roche	Switzerla nd	33 547	5 258	7 318	100 289
8	AstraZeneca	UK/Swed en	26 475	3 902	6 063	98 000
9	Merck & Co.	U.S.	22 636	4 783	4 434	74 372
10	Abbott Laboratories	U.S.	22 476	2 255	1 717	66 800
11	Wyeth	U.S.	20 351	3 109	4 197	66 663
12	Bristol-Myers Squibb	U.S.	17 914	3 067	1 585	60 000
13	Eli Lilly and Company	U.S.	15 691	3 129	2 663	50 060
14	Amgen	U.S.	14 268	3 366	2 950	48 000
15	Boehringer Ingelheim	Germany	13 284	1 977	2 163	43 000

Appendix 8: The Lifecycle of a Pharmaceutical Product

Kotler (2000) suggests that the concept of a product having a life cycle makes four assertions: “1) products have a limited life, 2) product sales pass through distinct stages, each posing different challenges, opportunities, and problems to the seller, 3) profits rise and fall at different stages of the product life cycle. 4) products require different marketing, financial, manufacturing, purchasing, and human resource strategies in each stage of their life cycle” (Kotler 2000).

This definition could be argued to also be applicable to a company developing and selling an ethical research-based pharmaceutical product, as: 1) the patent life usually defines and limits the life of the product as to when the company can generate substantial revenue from the product; 2) the product goes through distinct stages, such as when it is introduced, when it faces increased competition or when generic products enter the market; 3) the profits can rise and fall as with the example of the phases in point two; and, 4) the product needs different strategies, again once again when facing the examples of the phases in point two.

To better clarify and adopt a managerial literature-based definition of an ethical research-based pharmaceutical product’s life cycle, Kotler’s (2000) general lifecycle stages will be used as a base. They suggest that the lifecycle of a product in the market is usually defined in four stages, 1) *Introduction*, 2) *Growth*, 3) *Maturity* 4) *Decline* (Kotler 2000). To be able to better include and describe a more complete set of challenges and issues faced by a research-based pharmaceutical company and relevant to the justification and motivation of this research, the development of the product preceding the in-market lifecycle is added. The full life cycle of a drug may then be understood in terms of an additional stage, *Research and Development*.

As a definition in this research, the full lifecycle for an ethical research-based pharmaceutical product consists of the five main stages or phases, *Research & Development*, *Introduction (Launch)*, *Growth*, *Maturity* and *Decline*. These stages will be described below.

Research & Development

The *Research and Development* stage could also be further divided in the sub-stages *Discovery*, *Clinical Development* and *Registration*. The development of pharmaceutical products is to a great degree performed by pharmaceutical companies, with academia and government contributing less than 10% (Dimasi and Grabowski 1995). The

Pharmaceutical industry is the source of 93.3% of new drugs, while Academia or Non-Profit account for 3.5% and Government for 3.2% (Dimasi and Grabowski 1995).

As stated above, the first phase of Research and Development is the *discovery phase*, which could be 2-10 years long. During this phase, compounds are screened and tested for desired criteria (e.g. potency, efficacy, toxicity, bioavailability, scale up as well as a commercial assessment). If it is decided to take the compound further, it goes into *clinical development*. The clinical development program is divided in four phases, and starts with *pre-clinical testing*, where laboratory and animal testing is conducted. This phase is about 4 years in length. Phase I, Phase II and Phase III of the clinical development program follow the pre-clinical testing. During *Phase I*, around 20-80 healthy volunteers are used to determine safety and dosage. This phase takes about 2 years. *Phase II* includes 100-300 patient volunteers looking for efficacy (proof of concept) and side effects and the duration of this phase is about 2 years. *Phase III* is where the majority of subjects are tested. 3000 – 5000 patient volunteers are used to monitor adverse reactions to long-term use in phase III. This phase is timely and costly and takes about 4 years. As soon as the clinical development program is finalized, the potential new drug is moved into *Registration*. This phase could also be referred to as the *Pre-Launch* phase, and denotes all the activities that are conducted in order to prepare for the introduction of the product on the market. Examples of such activities are the medical approvals from authorities – e.g. the “Food and Drug Administration” in the USA or the “European Medicines Agency” – the manufacturing and supply planning and preparations, various market research activities, and so on.

Introduction (Launch)

The second stage of a product’s lifecycle is the *Launch phase* or *Introduction* of the product. The introduction or launch phase is defined as a period of slow growth at the product is introduced in the market (Kotler 2000). Profits are low or nonexistent in this stage because of the heavy expenses incurred by product introduction (Kotler 2000). In the pharmaceutical industry, this accounts for two stages: firstly, market inductor activities, such as delivering the product to the pharmacies, informing the physicians of its existence and basic characteristics, while the second stage is the initial marketing and sales operations that follow immediately after the market introduction. This stage may vary considerably in length, depending on the type of product: from one to three years for a conventional drug targeted at General Practitioners; two to five years for an advanced transplantation or oncology product. The two stages of the Launch phase are important, as the first stage, the physical market introduction of the product, is typically short and definitive. It is during the second stage, the initial marketing and sales operations, that the actual communicative and other tactical launch activities may be executed.

Growth and Maturity

The third and fourth stages of the lifecycle are constituted by regular marketing and sales operations, which represent the typical activities performed by the various marketing, sales, medical, regulatory, and other types of resources of the company, in order to achieve sales goals. The *growth stage* is defined as a period of rapid market acceptance and substantial profit improvement (Kotler 2000). The maturity phase, on the other hand, is defined as a period of a slowdown in sales growth because the product has achieved acceptance by most potential buyers. Profits stabilize or decline because of increased competition (Kotler 2000). These phases, in terms of time, may account for some ten years on the market where the product is protected by its patent. During this phase the responsible managers execute various tactical marketing and sales moves, all with the aim of maximizing sales and optimizing costs.

Decline

The decline phase is defined as a period when sales show downward drift and profits erode (Kotler 2000). When a pharmaceutical ethical product's patent has expired, various courses of action may occur. If the product has been successful in terms of sales, then one or more generic companies will launch their copies at a, usually radically, lower price, which in turn, typically causes the original company to exit its product. On the other hand, if the product has not been very successful in terms of sales, and is thus less attractive for generic companies, or if its production represents considerable difficulties and costs, then the product may enjoy continuous marketing and sales by the original company, as no generics enter the market with copies. This phase could also be referred to here as Patent Expiry. This phase includes two sub-phases or stages: the patent expiry stage, where various actions may be made by generics and original companies with regard to exit and entry of product, while the second stage is the post-patent stage, when a product is typically sold by the originator or by generics, and in some cases, by both. The time of these sub-stages varies among products as well as nations.

The focus of the research presented here encompasses the launch phase, also referred to as the introduction stage. As described in Chapter 1, Introduction, the issues and challenges identified in each stage reinforces the importance of successful launch to quickly secure return on investments as well as to maximize sales and profit.

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