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Working Paper

Evolving procurement organizations: A contingency model for structural alternatives

UASM Discussion Paper Series, No. 1/2015

Provided in Cooperation with:
Fachbereich Wirtschaft, Hochschule Mainz, University of Applied Sciences

Suggested Citation: Bals, Lydia; Laine, Jari; Mugurusi, Godfrey (2015) : Evolving procurement organizations: A contingency model for structural alternatives, UASM Discussion Paper Series, No. 1/2015, University of Applied Sciences Mainz, Mainz

This Version is available at:
https://hdl.handle.net/10419/181885

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UASM Discussion Paper Series
University of Applied Science Mainz

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Evolving Procurement Organizations:
A Contingency Model for Structural Alternatives

Paper No. 1/2015, published March 01, 2015

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Please cite as: Bals, Lydia/Laine, Jari/Mugurusi, Godfrey (2015): Evolving Procurement Organizations: A Contingency Model for Structural Alternatives. In: UASM Discussion Paper Series No. 1, University of Applied Sciences Mainz/Germany.

UASM Discussion Paper Series
University of Applied Science Mainz

ISSN 2366-9578

Editors:

Porath, D./Schrank R./Schüle, U./(eds.):

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Abstract

Procurement has to find further levers and advance its contribution to corporate goals continuously. This places pressure on its organization in order to facilitate its performance. Therefore, procurement organizations constantly have to evolve in order to match these demands. A conceptual model putting the structural elements in focus is derived from the analysis of two case companies, which extends the existing literature and opens new avenues for future research. The findings highlight the importance of taking a contingency perspective on procurement organization, understanding the internal and external contingency factors and having a more detailed look at the structural dimensions chosen, beyond the well-known characteristics of centralization, formalization, participation, specialization, standardization and size. From a theoretical perspective, it opens up insights that can be leveraged in future studies in the fields of hybrid procurement organizations, global sourcing organizations as well as international procurement offices (IPOs). From a practical standpoint, an assessment of external and internal contingencies and their relation to specific structural dimensions that can be chosen provides the opportunity to consciously match an organization to its operating environment and internal demands.

Keywords:

Procurement, Purchasing, Supply Management, Sourcing, Purchasing and Supply Organization (PSO), Contingency Theory, Structure

1. Introduction

With increasing reliance of firms on suppliers' inputs and contributions, the procurement function's importance as the interface managing these inputs has gained in importance. The leverage refers to cost savings on the external spend incurred on the supply side, but moreover to gains in speed, quality and flexibility with the right supply base (Carr, & Smeltzer, 2000; Matthyssens, Quintens, & Faes, 2003; Scannel, Vickery, & Dröge, 2000).

During the last decade and the recent financial crisis, procurement has put a lot of these levers in motion to a much higher scale than before. As a result, the function is now under increased pressure to bring further financial and value-adding results in an increasingly international business context. The search for additional value generation is placing particular emphasis on more value-added activities in sourcing. Such more value-added activities are supplier management and innovation integration versus more transactional ones as for example purchase order processing. A good example for a value added sourcing activity is the true integration of suppliers, having them bring actual product or process innovations to the table, often across borders and time zones. This is quite a different goal from maximizing a financial goal like savings or from maximizing an operative efficiency goal like increasing automation rates. These considerations raise the question of how to optimally organize procurement functions in order to optimally fulfill the procurement goals of organizations.

Towards this point Schneider & Wallenburg (2013) recently reviewed 50 years of research on organizing the purchasing function with the question if more research is needed and conclude that (p. 152) "future research will need to consider especially (a) how to support purchasing's growing importance and enlarged set of responsibilities by (more) effective and (more) efficient organizational structures. (b) how to deal with increasing market dynamics and volatility by providing purchasing with the structural adaptability and flexibility necessary to support the company's overall market responsiveness and competitiveness".

Research demonstrated that firms make frequent major changes to their organizational structures, e.g. in order to optimize costs (Leenders, & Johnson, 2000). Looking at the way companies have structured their procurement organisations, increasingly they are choosing others than just a centralized versus decentralized model, such as hybrid models (e.g. Johnson, & Leenders, 2006), involving two or even three-dimensional matrices. The challenge organizations face relates to finding a sustainable balance between the (additional) benefit of the new organizational layers and dimensions versus a growing number of communications interfaces and an increase in organizational complexity. Nevertheless, the many studies carried out are rather descriptive and provide only a snapshot of what is visible in practice, not shedding much light on the decision process and the actual structural dimensions chosen.

Previous research in procurement has taken a contingency perspective in order to study the basic drivers behind its organization only to a very limited extent. The work by Rozemeijer, van Weele, & Weggeman (2003) stands out here, highlighting in their conceptual model that the business context (market, technology and business environment), corporate organization, corporate strategy and purchasing maturity (the level of professionalism in procurement) impact corporate purchasing synergy, structure and ultimately performance.

We hereby also seek to address the need for further research as spelled out by Johnson & Leenders (2006), who stated that future studies would have to go beyond studying how a variety of contingent factors such as economic, political, social and technological influence organizational change, but also study the internal decisions regarding the functional structure, resources, roles and responsibilities and activities. They also stated that "largely absent from the purchasing literature is research that examines the environment-strategy-structure relationship" (Johnson, & Leenders, 2006: 333). This was also reemphasized by Glock & Hochrein (2011: 173) based on their extensive literature review from 1967 to 2009 on purchasing organization and design, as they see further need to "1) Analyze inconsistent results between contextual variables and the structure of the purchasing function. […]4) Identify additional contingency relationships to further our understanding of which situational factors influence the PO [purchasing organization]".

Therefore, we go a step further with our study to shed light on procurement organizations with a Contingency Theory Perspective and a more detailed analysis of the actual structural dimensions chosen, advancing our understanding beyond the classical centralized, decentralized and hybrid models (Leenders, & Johnson, 2000; Johnson, & Leenders, 2006). These other structural aspects were not studied extensively (Glock, & Hochrein, 2011), but only touched upon in studies as different "structural alternatives" for procurement, as for example by product line divisions or by geographic area (e.g. Narasimhan, & Carter 1990; Giunipero, & Monczka 1990, 1997; and Cavinato, & Joseph 1992).

In our study we present a research model combining the classical organizational characteristics centralization, formalization, participation, specialization, standardization and size, with a total of four different structural alternatives, which can be found in practice. Our research question is: How do external and internal factors relate to the individual organizational dimensions and degree of centralization?

Finding answers to this question is important from a theoretical as well as managerial perspective. From a theoretical perspective, it opens up insights on procurement Organizations that can be furthermore leveraged in future studies in the fields of hybrid procurement organizations, global sourcing organizations as well as international procurement offices (IPOs). In addition, the paper makes an attempt to advance the contingency theory within PSM literature. From a practical standpoint, an assessment of external and internal contingencies provides the opportunity to consciously match a procurement organization to its external and internal environment.

2. Dimensions of Procurement Organization, Contingency Factors and Performance

First of all, the concept procurement organization or purchasing organization has been used in literature to refer to how procurement activities and competencies are organized and structured in the firm (Carter, Carter, Monczka, Slaight, & Swan, 2000). In most companies, procurement organization dimensions are ostensibly conveyed by structure (Trent, 2004).

The review of literature on the organization of procurement by Schneider and Wallenburg (2013) underlines the most dominant dimensions of procurement structure. Their study analyzed 212 journal articles on the procurement organization topic alone over 50 year period. It resulted in 99 articles in the category 'structure and formalities' and 26 articles in subcategory 'structural determinants'. Of the 26 journal articles, 14 studies specifically highlighted the most frequent features of the procurement organization over those years sampled. We summarized the content of the 14 studies in Table 1 and unsurprisingly, the centralization versus decentralization discourse is the most prevalent.

Table 1: Dimensions of the procurement organization addressed in literature

Article	Research question or objective	Structure construct(s) addressed	Performance outcome
Toyne (1977).	Factors that affect authority levels of foreign-based purchasing managers	Centralization and decentralization of authority	Structure defines the extent of integration and decision making in procurement.
Wagner (1984).	Systematic review of the purchasing function	Centralization	Economies of scale
Ronchetto Jr, Hutt, & Reingen (1989).	The nature of workflow and communication patterns in purchasing activities	Position and influence of a buyer in purchasing structure	The basis for development of strategy
Taylor & Tucker (1989).	Factors for centralized procurement	Centralization and decentralization of structure	Cost reduction
Narasimhan & Carter (1990).	The implementation of a materials management structure in an international sourcing firm	Centralization , decentralization and matrix structures	Determines the extent of strategy and sourcing integration as well as reduction of cost.
Stanley (1993).	The relationship between environment, structure and performance of the purchasing function	Centralization, formalization, specialization and reward systems	Better purchasing and supply chain performance
Giunipero & Monczka (1993).	What is the appropriate structure to support international purchasing activities?	Centralized, decentralized, coordinated and international purchasing groups	Structure supports purchasing effectiveness
Laios & Xideas (1994).	Differences in purchasing structures of public institutions and industrial companies	Decentralization, articulation and depth of analysis	Improvement in organizational decision making processes
Arnold (1999).	How to organize for effective global sourcing	Centralization and decentralization of purchasing	Better structure can enhance the firms of competitive advantage.
Rozemeijer, van Weele & Weggeman (2003).	How to organize for purchasing synergy in multi-business unit firms.	Centralized, decentralized, federated and centre-led purchasing.	Purchase synergies leads to improved corporate advantage
Wood (2005).	Relationship between firm's configuration and the structure of it's of buying centre.	Centralization, formalization and size of buying unit	Structure a basis of resource allocation in seller organizations.
Ganeshan, Ring & Strong (2007).	How to strike a balance between centralized and decentralized purchasing in retail firms.	Centralization and decentralization of structure	Structure can be a basis of improvement in supply chain efficiencies and better customer service
Trautmann, Turkulainen, Hartmann, & Bals (2009).	How to organize global sourcing at category level in purchasing.	Centralization , decentralization and hybrid structures	Opportunities for economies of scale, information and process

Table 1 also highlights a number of in-between (de)centralization dimensions that organizations are increasingly adopting to manage varied procurement complexities. The latter being hybrid approaches, matrix structures to organize global sourcing and international procurement (Narasimhan & Carter, 1990: Trautmann, Bals, & Hartmann, 2009a) and centre-led federated and centre-led purchasing structures in the case of purchasing synergy (Rozemeijer et al. 2003).The common feature of these studies on procurement organizational dimensions is the positive relationship structure has on purchasing and organizational performance. Each dimension leads to varying performance outcomes (Laios & Xideas, 1994; Wood, 2005). The inconsistencies of findings may be attributed to the contingency settings of the companies studied. However, the danger of inconsistency shows how important it is to find a comprehensive model of procurement organization.

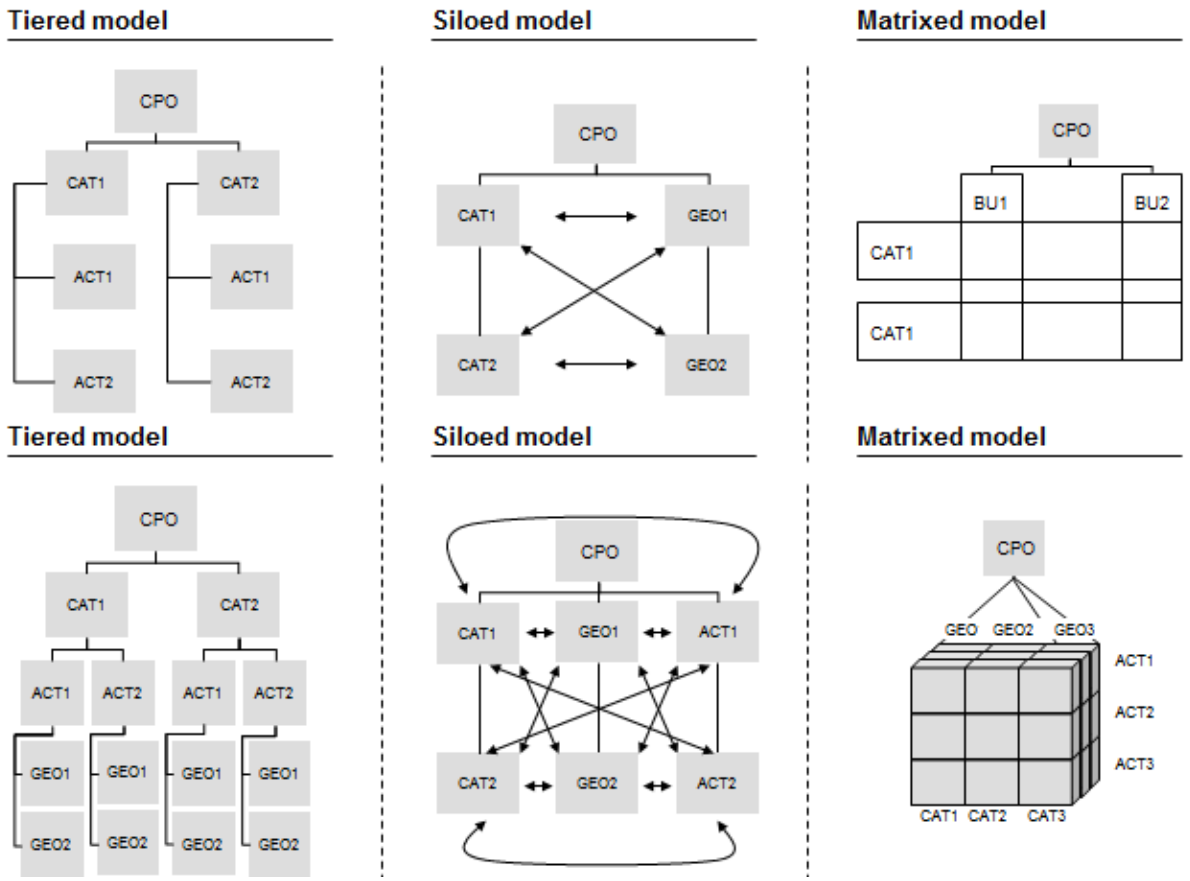
2.1 Describing the Procurement Organization

Beyond the traditional (de)centralization duality, Table 1 also showed other attributes employed in literature to describe the procurement organization. They include the level of formalization (Stanley, 1993), specialization and standardization (Laios & Xideas, 1994), as well as participation or involvement (Wagner, 1984: Ronchetto Jr et al., 1989). In addition, Wood (2005) discussed size as another prominent descriptor of the procurement organization, say for example, the number of employees involved in purchasing.

Whereas these characteristics described above definitely have their value for describing an organization, we go a step further and herewith present four structural dimensions of procurement organizations that address the current research gap on “structural alternatives”. In their studies over the last years, the Procurement Strategy Council, a practice-oriented provider of benchmarking information and specific procurement topic white papers, studies and handbooks, have identified 4 structural alternatives: Companies can structure their procurement organization according to Business Units, Customers, Activities and/or Categories (Procurement Strategy Council, 2010). These reflect the rationale companies do follow (e.g. respective procurement strategy, geographical coverage, customer-orientation, efficiency maximization intentions).

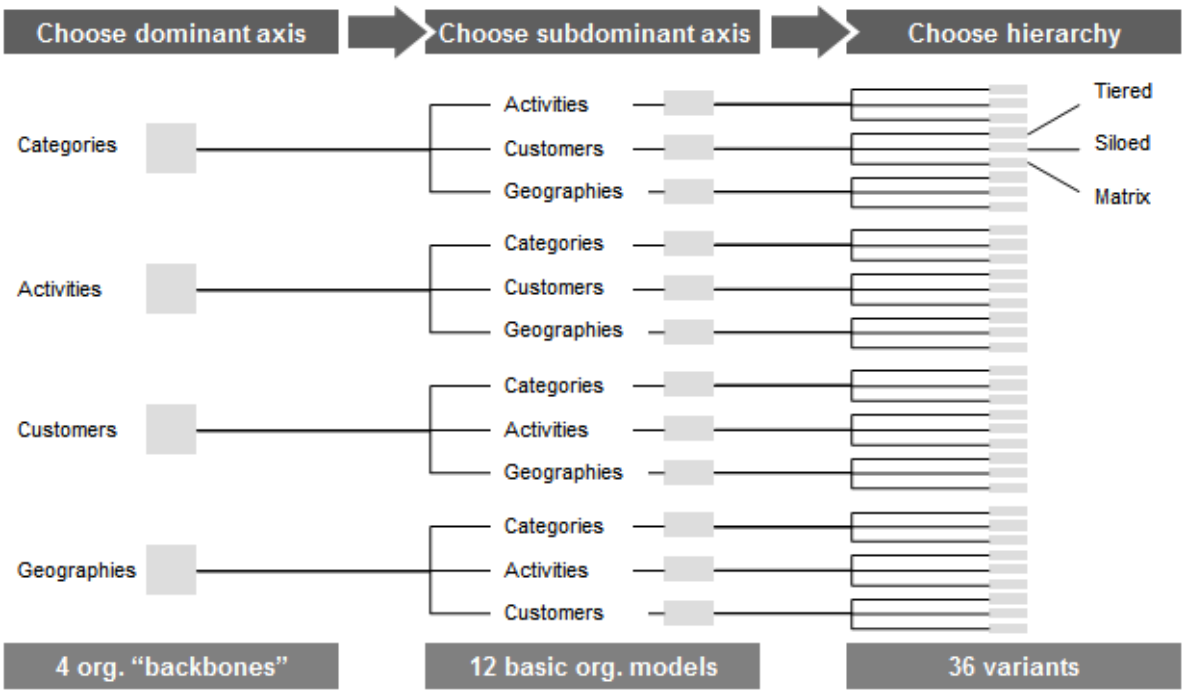
In line with their studies, the authors through experience observe that in determining the structure, companies often choose two of these dimensions and combine them, i.e. they take a dominant and a subdominant dimension into their organizational structure, which are visible in the organizational chart. An example would be that they choose “geography” as the dominant one and “category” as the subdominant one. This implies that the procurement heads of countries or regions, who report to the CPO do have respective next level management structured according to procurement categories (e.g. categories such as “raw materials”, “professional services”, etc.). Apart from choosing the dominant and subdominant dimensions, the companies then still have to choose their way of handling reporting lines in the charts, therefore they still have to decide if they go for a tiered, siloed or matrixed model as shown in Figure 1.

Figure 1: The potential ways to define reporting lines, for two dimensions versus three dimensions, based on: Procurement Strategy Council, 2009



The overall combinations possible for two dimensions or theoretically for three are shown in Figure 2. In practice, however, after having seen studies and seen various companies from within covering about 100 examples in total, there has never been one with three chosen dimensions. Presumably because it becomes too complex to handle. Also, there has not come up anything like a fifth or sixth dimension beyond these four in all these companies, therefore for future research we deem these four dimensions to be a very suitable starting point.

Figure 2: The potential combinations of structural alternatives, based on: Procurement Strategy Council, 2009



The first descriptive study (Procurement Strategy Council, 2010) across several industries showed the most often chosen dominant dimension is by Categories (e.g. IT Services, Raw Materials) chosen by 51% of the respondents with the most prevalent sub dimensions being Customers (27%) and Activities (14%), Geographies least chosen (9%) (n = 54; Procurement Strategy Council, 2009) and the next popular being the combination of the dominant dimension Customers and sub dominant dimension Categories (14%). In comparison to these results in 2009, an updated study released 2013 shows that particularly Activities have gained popularity in the sample surveyed. The most commonly chosen dominant dimension is now by Activity chosen by 26%, with the sub dimensions chosen being Category (16%), Geography (6%) and Customer (4%), followed be the next popular being the combination of the dominant dimension Customer combined with sub dominant dimension Category (14%) (Procurement Strategy Council, 2013).

Interestingly, in their recent update (Procurement Strategy Council, 2013) they also analyzed how many companies actually have the right "fit" of their chosen dimensions with their internal and external environment. Their conclusion was that only 31% of the companies they have studied (n= 93) do have the optimal dominant dimension and even only 13% do have the optimal combination of both dominant and subdominant dimension. Although theirs is not yet a scientific study, it is worthwhile noting that this is exactly the contingency-based line of thinking that the structure should match the external and internal requirements. Factors such as the nature of industry, level of internationalization, corporate goals etc. do influence how companies organize their procurement functions and how they adjust over time.

Contrary to how procurement organization is mostly covered in the academic literature, from a practical viewpoint the decisions on centralization versus decentralization and choosing the

structural dimensions are not happening simultaneously. In general, the decision on the structural dimensions precedes the decision on the degree of centralization (PSC, 2009; and own evidence in our case studies).

Therefore, the question of how decentralized or centralized the organization is, needs to be answered in addition to this, as the dimensional logic is applicable to both centralized and decentralized levels. Centralization in general refers to "the degree to which authority, responsibility, and power are concentrated within an organization or buying unit" (Johnston, & Bonoma, 1981:148). Centralization in our context means that the procurement activities are consolidated in one organizational unit versus decentralized meaning to have them dispersed in multiple units. The hybrid approach goes towards having a mixture of both centralization and decentralization by establishing meta-structures and mechanisms such as heads of competence centers and/or for example lead buyer roles, in order to reap the best of both worlds (Leenders & Johnson, 2000; Trautmann et al. 2009a). Also coined as organizational "integration" by coordinative mechanisms (e.g. Trautmann, Turkulainen, Hartmann, & Bals, 2009b), hybrid approaches tend to ensure alignment of purchasing decisions across multiple business units.

In general, the dominant and subdominant logic subsumes the degree with which an organization centralizes its procurement operation. In most cases, only the centralization and decentralization of authority (as shown in organograms and functional reporting chats) is visible. However, our argument in this paper is that beyond the boxes and arrows, the diffusion of procurement structure occurs across and within the organizational axes Business Units, Customers, Activities and/or Categories.

2.2 The Contingencies

Proponents of the Contingency Theory suggest that organizational effectiveness is in essence a result of fitting characteristics of the organization, e.g. its structure, to contingencies reflecting the situation of the organization (Lawrence, & Lorsch, 1967; Pennings, 1992). Examples for contingencies are the environment (Burns, & Stalker, 1961) and organizational size (Chandler, 1962). According to the theory, fit between the contingencies and structure leads to high performance, therefore organizations strive for it. The idea behind the contingency perspective is that organizational context and structure have an effect on performance (Chandler, 1962). Context being the organizations operating environment while structure being the mechanism in which organizational activities organized. Change in specific contingencies such as the growth of the market, increase in firm size or increase in number of customers would imply that the organization would adjust its structure and resources to accommodate the new demands (of size and customers) and arguably change its performance trajectory(Burns & Stalker, 1961). In this paper, we propose that procurement organizational adjustments (for fit) are driven not only by the external contingencies but also by internal contingencies. So what external and internal factors influence the type of procurement organization a company adopts and why?

2.2.1 External Contingencies

A brief overview of the contingencies discussed can be seen in Table 2. The main factors discussed here are inspired by the Pfohl & Zöllner (1987) study. The study suggests a relationship between increasing complexity of external environment and orientation of the logistics function. The impact of environmental relations on structure was grouped into 2 categories by Pfohl & Zöllner (1987) which include: complexity of the environmental relations and the dynamics of the environmental relations; each with subcategories relating to the flow of goods and information.

Table 2: Review of the internal contingencies

Internal variable	Attribute
Procurement strategy	Extent of goal alignment/functional alignment, change in performance outcomes
Supplier management practices	Nature of supplier relationships, supply base rationalization and supply network reconfiguration
Level of cross-functional integration	Extent of cross-functional interface, teams and team functioning and quality of communication exchanges
Level of purchasing maturity & coherence	Extent of formalization, professionalism and the standardization of tasks/process
Size of organization & the technology	Number of staff in procurement department and nature of technology in use

The effect of increasing complexity

The Pfohl & Zöllner (1987) study suggested that when environmental complexity (e.g. number of suppliers and customers) increases, the functions responsible for value creation and capture adjust their tasks and activities in order to match the growing complexity. And since the amount of information demands varies with these changes, even adjustments in information uses should be expected. The effects are most visible in functions such as logistics, procurement, production etc. which are seen to directly influence value creation and firm cost performance.

The effects of dynamics of the environmental relations

Pfohl & Zöllner suggest that the rate of change in customer delivery times, the nature and type of demand and the demands from suppliers together increase organizational turbulence and therefore to some extent, influence the structure of organizations. When coupled with the amount of information needed to go along with all demands, especially for organizations with dispersed operations, the cumulative effect on structure is enormous. Consistent with Haeckel (2013) organizations are adaptive systems and structure is one of the many conduits of their change processes.

The effect of market size and growth

The type of market specifies in which sector the firm competes. Moreover, manufacturing and service environments each have unique challenges to structure (Tate & Ellram, 2012). Iravani, Van Oyen & Sims (2005) suggest that the nature of service operations dictate organizations adopt customer centered structures that allow for flexibility within and across functions. Yet for manufacturing firms, flexibility as only a means to improve efficiency. It therefore explains why across sectors, structural variations persist.

With regards to the market size and growth, research has shown that changes in a firm's market size, either by contraction or expansion leads to change in organization strategy and its structure. Market growth may imply change in; location, product lines, distribution hubs, internationalization etc. Organizations respond to expansion by adding more hierarchical layers, tasks and roles in order to reduce uncertainty and increase internal control (Trautmann et al., 2009b).

2.2.2 Internal Contingencies

A brief overview of the internal contingencies discussed can be seen in Table 3. Most companies change their corporate strategies frequently, often as result of the external contingences discussed earlier. For strategy to take effect, companies also make various organizational changes to enable proper execution. We discuss these briefly further on.

Table 3: Review of the external contingencies

External Variable	Attribute
Environmental complexity	Change in number customers/product variants/raw material suppliers
Environmental dynamism	Change in supply market demands and relationships
Market changes	Market growth or contraction

Within procurement, procurement strategy often transcends from corporate strategy. At least this is what the literature on alignment has long argued (e.g. Paulraj, Chen & Flynn, 2006). The subtle effect of this argument, however, is that procurement must adjust its structure in order to support the new procurement strategies or else the ability to effectively coordinate these strategies internally is lost (Virolainen, 1998).

At a most specific level, supplier management practices such as supplier performance management, supply base management, early supplier involvement etc. provide for new forms of functional configurations (Lakemond, Echtelt, & Wynstra, 2001). More importantly, performance driven strategies such as make or buy, outsourcing, supplier involvement in new product development etc. are forcing organizations to make amends in their supply structure in order in increase focus, flexibility and flow of innovation from suppliers. As McIvor, Humphreys, & McAleer (1997) have explicitly mentioned, when organizations change the way they interact

with suppliers and supplier networks, the role and setup of their purchasing functions must therefore reflect the new reality.

Furthermore, the growing emphasis of cross-functional integration and cross-functional teams such as involving procurement personnel in new product development and other cross-functional sourcing processes, not only advances the strategic role of procurement in the organization, it improves knowledge diffusion and flow of information organizationally (Foerstl, Hartmann, Wynstra & Moser, 2013). Somewhat paradoxically, cross-functional integration is one among the many perquisites for purchasing integration, yet it also influences the ability of purchasing to "actively participate" in the organization's strategic debate (Narasimhan, & Das, 2001: 596). From a structural point of view, cross-functional purchasing processes demand cross-functional structures in order to allow teamwork, flexibility and diffused responsibilities (Trent & Monczka, 1994). In fact some studies have previously viewed cross-functioning (or matrix/project organizations) as a procurement structural option of improving sourcing effectiveness.

Purchasing maturity and corporate coherence

Apart from procurement's relations to other functions, it also is important to consider which synergies procurement can offer to the overall organization it is part of. Recent trends have seen the growing interests in the economics of procurement synergy, thereby suggesting changing how procurement should be organized. Proponents of this view (Rozemeijer, 2000 and Rozemeijer et al. 2003) introduced two important factors which influence purchasing synergy. They include purchasing maturity and corporate coherence. On one hand, purchasing maturity which is related to the level of professionalism in the procurement function, suggests that more mature procurement operations (high status) tend to have more complex structures to support the increase purchase volumes and a more diversified BU network and vice versa. High purchasing maturity also emphasizes the "simplification" of acquisition processes by clearly defining how purchasing should be done hence the prevalence of any viable structural alternatives combination (in Figure 2) as long as the choice improves their cost competitiveness. Moreover, purchasing maturity infers professionalism of human resource practices in procurement. Therefore the competences of the procurement staff have been put forward as important performance drivers (Carter, & Narasimhan, 1996; Smeltzer 1998; van Echtelt et al., 2007).

On the other hand, corporate coherence relates to "the extent to which the different parts of the corporation operate and are managed as one entity" (Rozemeijer et al. 2003:10). Because different BUs operate with a certain degree of independence as a result of differences in geographical characteristics, corporate coherence is limited compared to those that have homogeneous characteristics. For the independent BUs, the focus on geography and customers will be dominant for the purpose of developing unique supply market capabilities, while procurement organizations in homogeneous BUs will adopt synergistic strategies that emphasize activities and categories dimensions in order to reduced coordination costs and leverage spend across similar items.

The effect of size and technology

The factors, size of organization and technology are arguably the most discussed organizational level contingencies in literature. Partly because the size of the organization strongly influences how procurement roles change in the entire organization (Johnson & Leenders, 2003). Trent (2004) showed that the size of organization (measured by sale revenues) influences the type of design features adopted. The study shows that larger firms that have more at stake in terms of global resources and facilities tend to adopt more complex procurement organizations than smaller firms. This therefore suggests that the dominant and subdominant logics discussed in this paper is perhaps apparent in medium and larger firms which need to control operations that are many cases geographically dispersed.

In terms of technology, there has been an ongoing debate about how IT adoption within organizations improves how purchasing relates with other functions and suppliers (Sriram & Stump, 2004). Pfohl & Zöllner (1987) highlight technology as one of the many factors that influence how logistics activities are organized. Brenner & Hamm (1996) showed that although IT (e.g. EDI) adoption in many organizational processes improved efficiency, it changed work patterns and behaviors.. Moreover, investments in technology increase the communication aspects of work relationships in the purchasing function, which in turn improve performance (Sriram & Stump, 2004).

2.3 The Structure and Performance Link

We follow the line of thinking that an organization's structure determines the performance of the system (Weber, 1974). Considering how to evaluate a "fit" of structure and the contingency factors, we need to operationalize what we mean with procurement's performance. Here, we refer to quality, time and costs (Carr, & Smeltzer, 2000; Carr, & Pearson, 2002; Chen et al., 2004; Choi, & Krause, 2006), plus flexibility (Scannel et al., 2000; Young, & Varble, 1997) as well as innovation (Carr & Pearson, 2002; Monczka et al., 2005; Narasimhan, & Das, 2001). Impact on quality, delivery flexibility and cost reductions was also taken as a purchasing performance measure by Carr & Smeltzer (2000). We complement these more internal performance considerations with innovation, as well as market performance, operationalized via sales growth (e.g. Murray, Kotabe, & Wildt, 1995) and market share (e.g. Carr & Pearson, 2002; Galbreath, & Galvin, 2004). Both of these measures were also used in the study of procurement's contribution to business performance by González-Benito (2007).

3. Methodology and Data Collection

With our research we want to shed light on how contingency factors influence the choice of certain structural dimensions in procurement Organizations as well as their degree of centralization. A case study approach is therefore selected, particularly helpful to investigate "how" and "why" aspects (Yin, 2003). Moreover, our goal is to develop a conceptual research model that can be used for future testing purposes. Siggelkow (2007) argues that using a case is valuable in light of making a conceptual contribution. By our findings we seek to add to our understanding of procurement organizations and contingency theory in general (depending on the overall insights gained, e.g. should there a new and/or contradicting insight to theory), therewith following a theory elaboration approach (Ketokivi & Choi, 2014). As there is not much previous research in the contingency relationships of procurement organization and even less regarding the detailed working mechanisms of the individual contingency factors and individual (dominant and sub dominant) organizational dimensions and degree of centralization in procurement organizations, we needed to go for in-depth case study analysis (Borch, & Arthur, 1995; Eisenhardt, 1989; Yin, 2003).

For case company 1 the data is based on the interview with two corporate executives responsible for procurement and one business unit, respectively. The interviews were conducted by two researchers, recorded and transcribed for analysis. Data collected was both qualitative and quantitative by nature.

For case company 2 the analysis can be based on longitudinal data. The data was collected from 2009 (only initial discussions, the actual start of the project was in early 2010) until 2013 (2 years after the go-live of the new model). The researchers had access to the data throughout the whole time, from early discussions 2009, over the initial scoping workshop 2010, through interviews within the organizations and their results, the exact discussions when variants of the model were detailed, as well as when the final variant was decided for implementation (second half of 2010). They also were able to observe the first actual implementation (Mid 2011) as well as to investigate the further rollout to other countries and the subsequent results during 2012 and 2013, i.e. until 2 years later.

In order to ensure validity and reliability of the results (Venkatesh, Brown & Bala, 2013), the researchers closely relied on documentation that was directly prepared during the project, i.e. actual interview instruments, minutes, workshop summaries and documents, therein gathering multiple documents as sources of evidence, and therein relying on multiple informants. For the subsequent analysis an overall case study database was created.

4. First company case

The case company 1 is one of the most significant bakery operators in Northern Europe. It is the leading bakery company in Finland and the Baltic region. The Group is also the largest thin crisp and the second-largest crisp bread producer in the world, and a leading Nordic operator in bake-off products. In 2009 the Group's net sales is approximately EUR 400 million. The Group employs some 3,000 people in Finland, Estonia, Latvia, Lithuania, Sweden, Norway and Denmark. The group has been formed through a number of mergers and acquisitions and nowadays has more than 20 production units, most of them in Finland and the Baltic countries.

4.1 Industry specific external contingencies found and their implications to procurement

1. Increasing bargaining power of the retail customers

Under the recent decenniums, the bakery industry has undergone a major consolidation in the Nordic countries. Most of the bakery products are nowadays not delivered through the traditional small bakery shops, but through supermarkets. In order to cope with the increasing bargaining power and service requirements of the dominant retailers, bakeries have had to realign their targets related to operational efficiency and the product offering. A wide product offering should be managed at a competitive price.

2. Price volatility and availability of agricultural raw materials

Depending on the yearly yield, political risks and speculation on the market, the price changes of key raw materials can vary considerably. Since last summer, the price of wheat has almost doubled. Regarding some materials, like sugar, there might by temporary availability issues. Operating in this field calls for some very specific competences like operating in the global raw material market and utilizing statistics, tools and instruments used for currency hedging and risk migration.

3. Nature of “living” raw materials, supply risk

Due to the nature of agricultural, “living”, raw materials, suppliers are very often “designed in” in the recipe of a bakery product. There is even variance in quality between different raw material batches for a same supplier. These differences have to be compensated through adjustments in production process. Differences between similar raw materials from different suppliers can be even larger, thus making it very laborious and expensive to change sources of supply in the short run. This has obviously a meaning in both cost and availability. Due to this, many commodities are practically single source items. This can to an extent be compensated by developing parallel “back-up” recipes and process settings and proactive supplier approvals. This needs to be done in deep cooperation with R&D and production operations.

4.2 Corporate specific internal contingencies found and their implications to procurement

1. Change in corporate strategy

In the past, the company was organized and run based on separate, P&L responsible legal country units reporting to a holding company type of headquarters. Financial reports were used to analyse business and decide on investments, but there was little other synergy utilized across the business units. Since a few years, following a change in ownership, there is now a more coherent corporate strategy in place, emphasizing corporate growth without jeopardizing profitability. This is to be supported by moving from fully country based legal entities and operations to product portfolio based business lines supported by country marketing & sales offices. Own product portfolio will be supplemented by traded products. Whereas procurement function used to be totally decentralized, serving separate country and production unit dimension, now there is a possibility to leverage corporate synergy, while assuring service in business unit dimension across the whole geographical dimension.

2. Organizational and IT legacies of the past

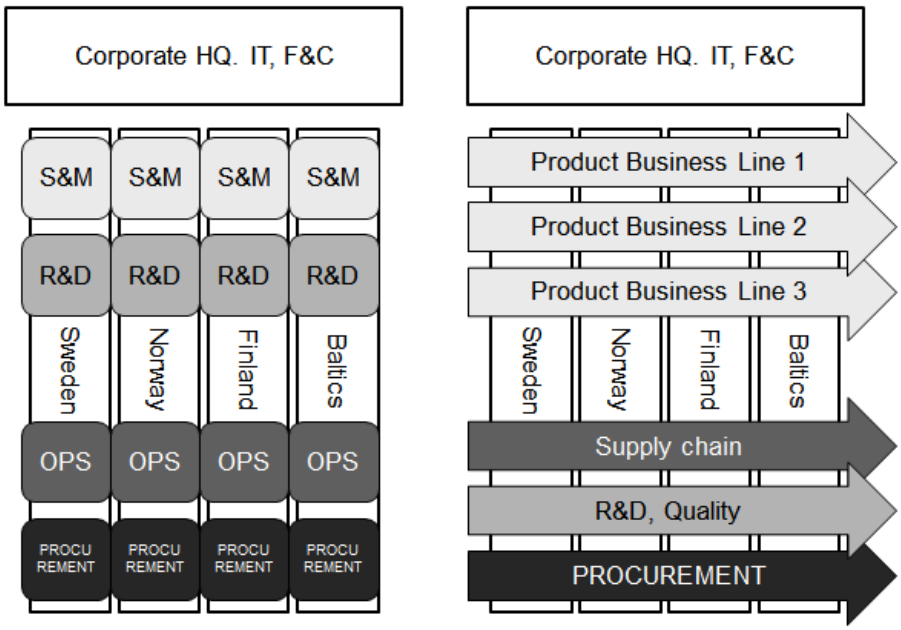
Because of the previous country based structure and corporate formation through a chain of M&As, the previous governance structure, strategy, target setting and not yet fully integrated IT-platform have caused some hinders in fully utilizing the potential synergy in procurement. Acquiring reliable data for reporting and metrics has proven to be especially difficult from previous country operations, as the ERP systems, while technically of the same origin, are not used and configured in a harmonized way. Also, there are some issues related to changes in responsibilities caused by the organizational change that need to be addressed and agreed on.

4.3 Organizational changes undergone and planned

To begin with, the strategic importance and role of procurement was emphasized by lifting the CPO from an all-round administrative function to the executive board of the company. Overall, the organizational transition has been made from a functional, country based, production and availability oriented procurement structure to a corporate-wide centralized one. The previous main target of satisfying production needs regarding materials availability has been changed to total cost of ownership thinking, focusing on supplier selection, contract management, price negotiations and supplier base management.

The corporate structure change is presented in Figure 3 below. The primary dimension is now product business line and the secondary is procurement category. The categories are constructed around direct and indirect procurement main categories, which are then in turn divided into several subcategories. Although some country and business dedicated procurement resources will remain, all will have also corporate-wide category responsibilities. Material call-offs will remain decentralized per production unit, whereas other procurement tasks will be centralized or center-led.

Figure 3: Organizational change, the old organization structure on the left, new on the right, own illustration



4.4 Procurement Performance, evidence of results so far

At time of observation, the change process started less than one year ago and has mostly been concentrating on defining and putting in place basic structures, processes and competences but there has also already been some measurable benefits achieved by the new structure. As a result of a joint effort to reduce expenditure in outbound logistics, transport cost savings of 25% were achieved by leveraging corporate volume when compared to previous contracts. In order to leverage the benefits further, the aim is to build up a performance reporting system for raw material price development. At the moment, reliable comparison of procurement performance is not possible due to reporting system structure and basic data issues.

4.5 Enablers in the change process

Hence, based on the interview, some matters arise as critical internal enablers in the process of transformation:

1. Need for consolidated, reliable reporting structure and platform
2. Harmonization of processes and ways of working across the units
3. Competence of modern procurement know-how, as the focus has been more production than supply line management based.

5. Second Company Case

The case company 2 CHEM (anonymized) is a major chemical and pharmaceutical company worldwide. It offers a suitable setting in which to address the research questions for several reasons. First, in 2010 the Global Procurement Head initiated a procurement optimization project to analyse the most suitable structure for the company. Second, the full analysis as well as

implementation data of the time period 2010-2013 can be analysed for this project, including insights on the implementation.

The project was initiated in 2010. There had been a lot of acquisitions of other company locations during the last years, but the procurement units had never been harmonized, but left at each site operating pretty autonomously. At the same time, the various business units were estimated to have synergies in their sourcing needs, but this had never been fully analysed yet. Finally during that briefing it was clearly stated that the developed model could be fundamentally different than the current setup if that was a well-grounded recommendation and that it should become the procurement organization blueprint for all major countries of the company. This was a very important first clarification for the project team, as it was clear from the onset that basically no page could be left unturned. At the same time there was no preferred future model thrown into the discussion, but the project team was entrusted with finding an "optimal" solution, which would become the standard set-up for CHEM's procurement units worldwide. The first phase therefore comprised interviews with procurement employees in order to determine the current status quo of the external factors (going under the heading of "operating environment") and the internal factors (going under the heading of "current structure" as well as "enablers").

5.1 Industry specific external contingencies found and their implications to procurement

The interviews always started with a conversation about the overall satisfaction of the respondent with the current procurement organization and the reasons for the respective level rating. Then a question on the top 3 priorities followed, which might have been referring to either an external or internal factor. Please see the selection possibilities below in Table 4 (showing number of times mentioned as a top priority). During the interviews it became clear that regarding top priorities, while the current priority was seen on "spend transparency & compliance", particularly the aspect of "efficient processes & clearly assigned activities, roles & responsibilities" was seen by most as one of the top 3 priorities for the future. This becomes even more pronounced, when the weighting of the priorities (1, 2 or 3, with 1 being the most important) is taken into account. For the project, this hinted at a need for more activity-focus in the model, in order to bundle critical mass of activities and establish more clarity of roles, i.e. in that sense to increase standardization and formalization. The other two most prominent future priorities coming out were "supplier management & development" as well as "procurement skills & competence", pointing at a need to further specialize procurement employees.

Table 4: Top Priorities Today and in Future

	Name top 3 priorities	
What are your top 3 priority goals today, and which will become such in the future (ca. 3 years from now)?	**Today**	**Future**
Efficient Processes & clearly assigned activities, roles & responsibilities	2	4
Supplier Management & Development		3
Early involvement & business aligned supply strategies	2	2
Category strategy development	2	
Spend Transparency & Compliance	3	1
Better serve local needs		
Internal Performance Management		2
Procurement skills & competence	1	3
Supply Security	2	2

The various questions for the operating environment part can be seen in Table 5 below.

Table 5: Questions/statements on external factors

Operating environment
It is crucial to manage local suppliers on site.
We have minimal synergistic spend across sites.
We have minimal synergies spend across business units.
Business units do not strictly comply with procurement policies and procedures.
Business units tend not to collaborate well with each other.
We must develop creative new category strategies as the low-hanging fruits are taken.
Top Management has defined aggressive savings targets as core organizational priority
Our critical spend items require a high degree of category expertise.
Due to resource constraints local buyers are in charge of more than one sourcing category.
Due to resource constraints local sourcing and purchasing activities are performed by the same employees.
Local sourcing and purchasing activities are common across sites.
Within a country, suppliers are approached by more than one procurement expert/multiple contracts exist.
A separation of activities towards sourcing and purchasing would leverage synergies.
A standardized sourcing process with dedicated resources per process step would leverage supply market knowledge/tool/data analysis expertise.
A standardized purchasing process with dedicated resources per process step would leverage process efficiency.

Regarding the operating environment, the main answers indicating the need for an activity-oriented set-up were in particularly "Our critical spend items require a high degree of category expertise" and "Top Management has defined aggressive savings targets as core organizational priority". To both questions all respondents marked "strongly agree". With expertise needed, this question also at the same time highlights need for a category-based set-up, but in order to reach critical mass to be able to specialize it also pointed out the necessity to bundle processes. Another aspect to be particularly highlighted was that there was agreement to the statement "Local sourcing and purchasing activities are common across sites", which pointed out that there were process synergies to be expected if the activities could be bundled across sites. Also, statements probing the potential benefit of splitting strategic and operational tasks as well as standardizing processes more were met with considerable agreement. The only "surprise" result during the interviews in hindsight is that there was disagreement on the statement that "due to resource constraints local buyers are in charge of more than one sourcing category". As the project team discovered later on in the project, this was actually not to be disagreed with, but was the case in many instances. Nevertheless, that was the only contradiction found in the proceeding after the interview stage when further data was collected and analyzed, and would it have already been indicated in the interviews, it just would have highlighted the need for an activity-based organization earlier, but the final result would have been the same. For the emergence of "category" as the second most suitable dominant axis, the following considerations in the interviews were the most important, i.e. received the highest points: Regarding future priorities the emphasis on "Supplier Management & Development" and "Procurement Skills & Competence" stood out. Interestingly, regarding the statement "The current structure supports great expertise in all spend categories" there was an equal amount of responses for "strongly agree" and "disagree". This though is explainable by considering that indeed expertise was rather scattered and in some areas higher than others, so the respondents gave their individual perception of certain categories. Similarly, for the aspect whether in a country suppliers were being approached by multiple procurement employees of different sites independently and if multiple contracts exist, there were almost equal numbers of respondents who agreed and disagreed, depending on how they perceived it from their work experiences. As already mentioned for "activities" above, the priority of savings targets and the necessity of further category expertise were particularly agreed to by the interviewees and indicated a need to highlight the category dimension more in future.

5.2 Corporate specific internal contingencies found and their implications to procurement

The various questions for the internal factors can be seen in Table 6 below. Again emphasizing the need to take activities more into focus, there was disagreement regarding the statement "In the current structure activities are split in an optimal way to maximize efficiency and effectiveness of the procurement function" (most gave a 3 on a scale 1 "strongly supports" to 4 "does not support at all"; and one interviewee even gave a 4).

Table 6: Questions/statements on internal factors

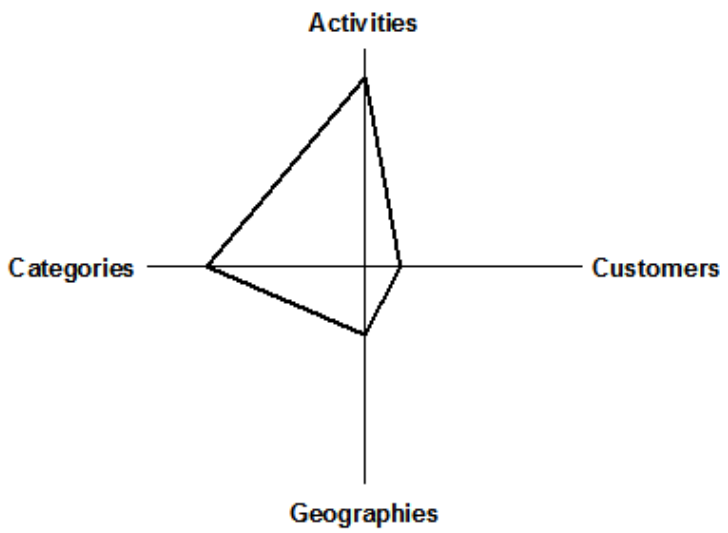
Current structure
The current structure supports the alignment with geographically dispersed sites
The current structure supports our alignment with business units
The current structure supports great expertise in all spend categories
In the current structure supports an optimal activity split to maximize efficiency and effectiveness of the procurement function

This also contributed to the emergence as activity as one of the primary dimensions of a future model in order to reach critical mass as a pre-condition to achieve new activity-splits.

5.3 Towards the final model

The overall interview results plus additional company material (e.g. regarding information on the operating environment, such as which markets are growing) were analyzed. Based on a scoring model it was evaluated which organizational dimensions would fit to the company. The result of this analysis is shown in figure 4 below.

Figure 4: Scoring model results of the four potential dimensions

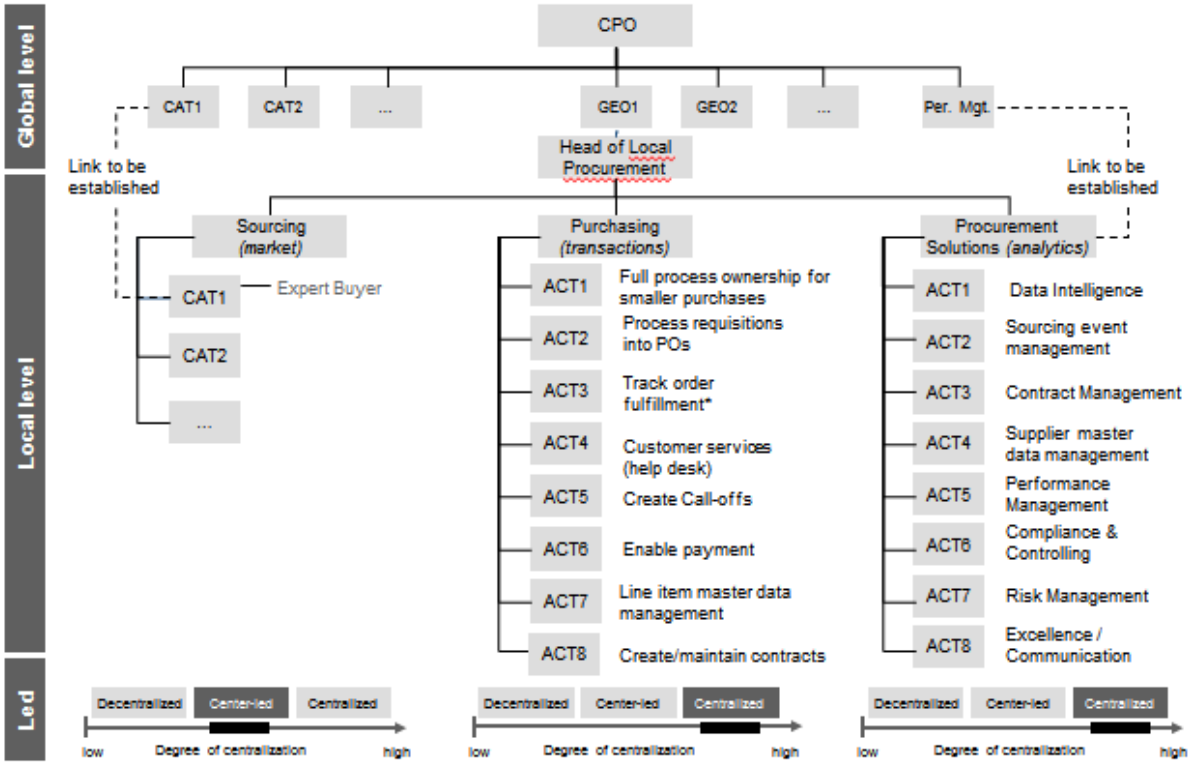


As was illustrated with the respective questions/statements and the responses in the earlier sections, it became evident that the new organizational model hat to incorporate activity and category orientation. Based on this finding, a final design workshop was conducted with the project core team and the resulting "blueprint" model was further developed into three variants depending on the level of centralization applied to each of the activity clusters, which will be highlighted in the next section.

5.4 Organizational changes undergone

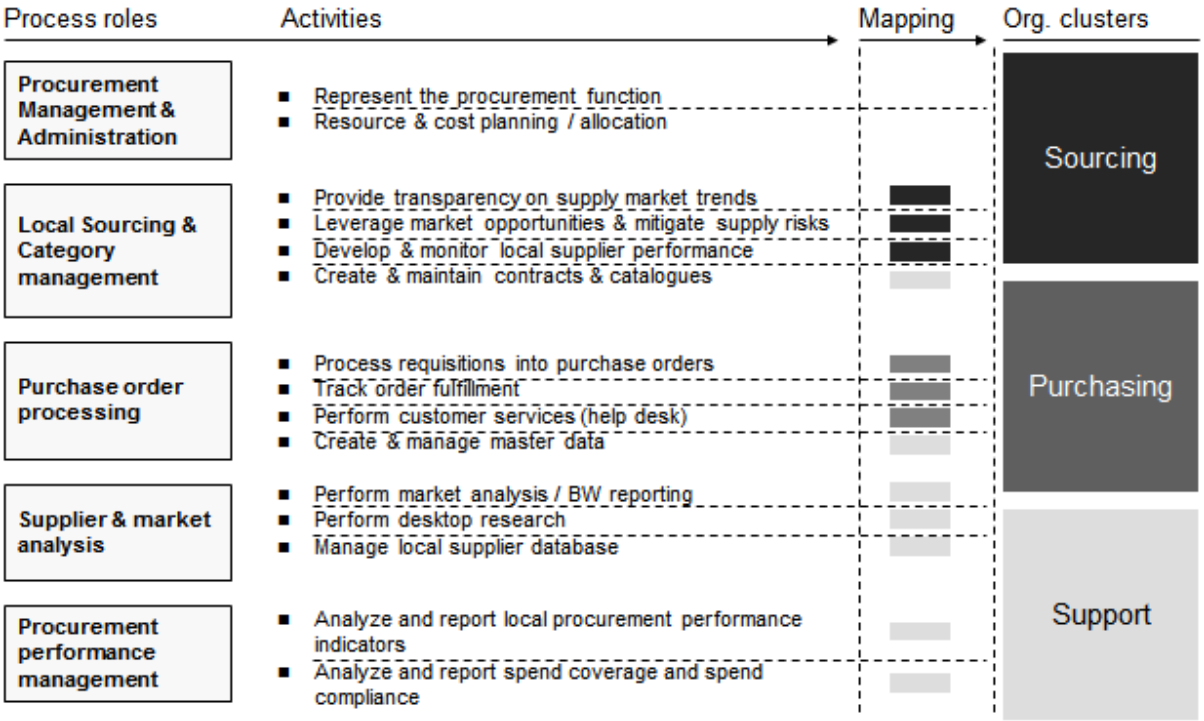
The organizational model changed from a geography (country)-geography (sites) set-up into a model, in which under the dimension of geography on global level, three pillars are established on the local level: The dominant dimension is activity and in the case of the activity-cluster "Sourcing" (strategic procurement activities) there is a sub-dominant dimension category. For the other activity-clusters "Purchasing" (operational procurement activities) and "Support" (analytical procurement activities) there was no sub-dominant axes chosen, it stayed on activity level. Please see the resulting model in Figure 5 below.

Figure 5: The developed blueprint model – highlighting category and activity



It can be seen in figure 6 how these activity clusters were formed. This had been prepared by making a general collection of activities based on the grouping into five activity groups that were then later aggregated to these three clusters by the core team. This aggregation is visible in figure 6.

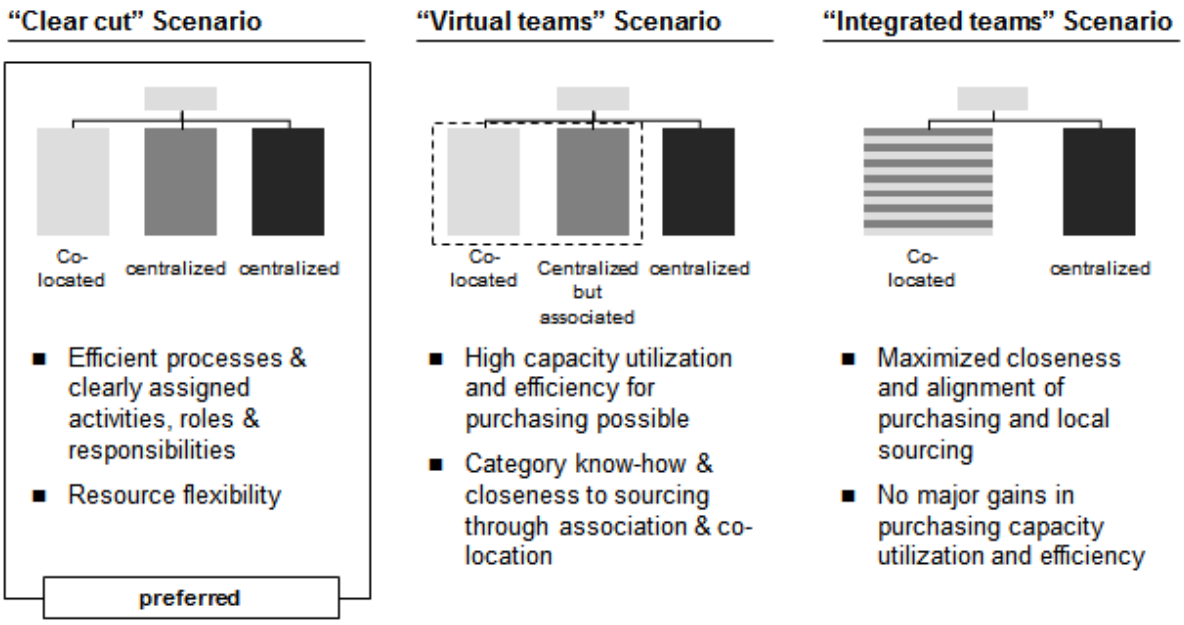
Figure 6: Matching of individual activities to activity clusters



In a subsequent analysis of the distribution of these roles for the country example of Germany before implementation of the three pillar concept, it was determined that more than 60% of employees had four or five of the process roles, underlining the need for more specialization as well as the need to reach critical mass especially at the smaller sites involved.

Before this version there was ample discussion of the possibilities of centralization versus decentralization, but the dimensions were clear at that point in 2010. Regarding the mentioned variants of the model, the level of centralization was then discussed based on the options shown in Figure 7. As it corresponded to the strategic priorities mentioned earlier (Table 4) to the highest extend, the "clear cut" scenario was chosen for implementation.

Figure 7: The 3 variants of the model discussed after basic dimensions were selected

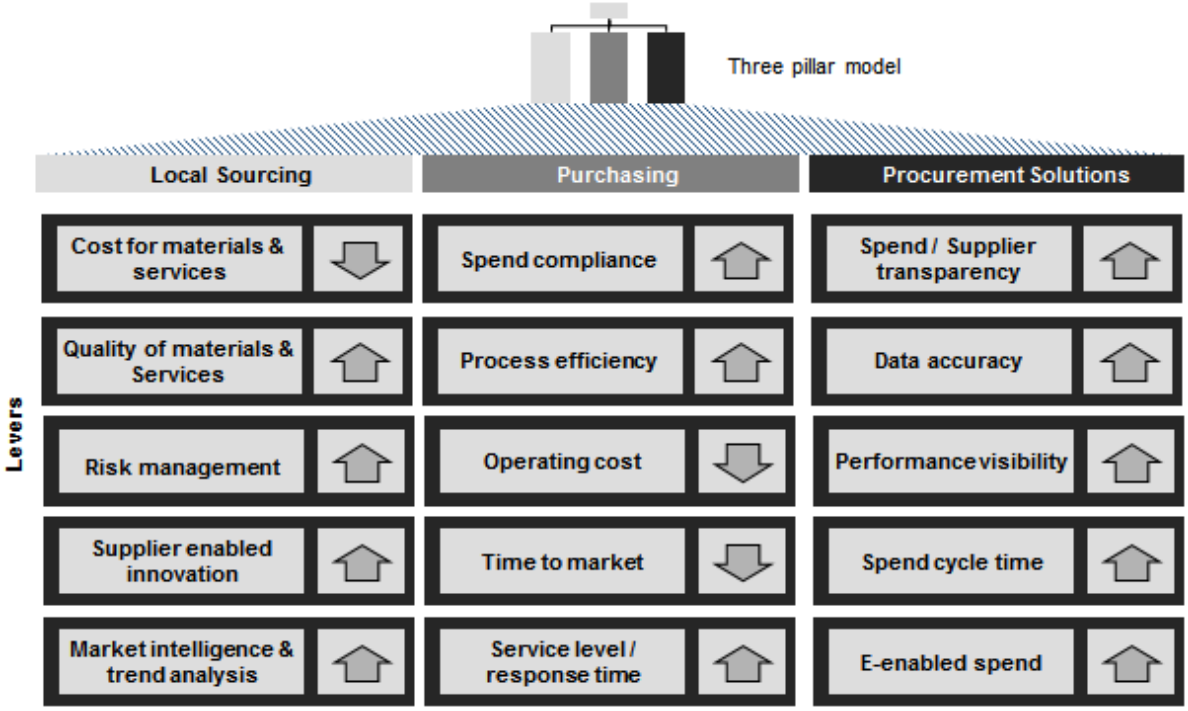


5.5 Procurement Performance, evidence of results so far

Implementation in the first major country (Germany) started in 2011, at the same time several (overall 12) smaller countries started implementation in parallel already End of 2010. Therefore, with the status of End of 2011 already 13 countries had implemented the model. One of the essential benefits from the new model was and is the improved coordination ability between the global organization and local (country) organizations. Now, it became possible for the global category heads to directly steer their local organization counterparts with a functional reporting line (shown in figure 5). This tremendously improved coordination ability in the sense of true global sourcing. For the Purchasing pillar and Procurement Solutions (the final name of the "Support" cluster), the main advantages lay in harmonizing and standardizing processes. Now it was feasible to train employees in common ways of working in strategic sourcing as well as transactional work and over time this also enabled the increasing use of external providers, as work became more modular. Tools and Systems for the first time could be harmonized worldwide, because also the staff function Procurement Solutions on global level now had a clear local counterpart organization, which could drive implementation of global initiatives locally and report back regularly.

Moreover, the new model enabled to set very specific objectives for each of the three pillars, which had not been possible in the past before. The way this was communicated throughout the organization is shown in figure 8

Figure 8: Performance measures within the model



The feedback was particularly positive from the global Category Managers' side, as their ability to create transparency and leverage local organizations to achieve their goals (e.g. in savings initiatives) tremendously increased. The feedback from the procurement country heads was also positive in general, as for many it was a means to get access to corporate resources (e.g. to know who does what and reaching out to these colleagues; benefiting from increasing use of standardized tools and systems which were now enabled by process and role standardization).

5.6 Enablers in the change process

Central to the change process were the CPO support as well the continuity of the project team. Moreover, the composition of the Steering Committee included one Head of Production of a site which already a few years back gave up their own site procurement and received a "remote" procurement service to their full satisfaction. This person therefore served as a kind of "ambassador" for the project with regards to its implications for centralization. After the blueprint "clear-cut" scenario was chosen, implementation was decided for the so called "tier 2" countries (middle-ranged spend), which were steered centrally as one "geography" by a global procurement management team member. Implementation in those countries began right away and in hindsight gave the implementation in the tier1 countries further backing, as month after month successful implementations were reported back, e.g. the first one only a few weeks later by Canada and another shortly after in Spain. For the highest spend countries it was evaluated whether to first pilot Germany or the United States to test model implementation on a large scale and then roll out to all tier 1 countries (five countries in total), and the decision fell on Germany, as it had most individual sites (8 in total) across the country and very heterogeneous roles (as mentioned earlier). Therefore it was considered a great pilot to derive further implementation

material for all subsequent implementations. After implementation in Germany Mid 2011, this implementation package was made available by the project team for all subsequent tier1 country implementations and this was another enabler in the change process.

6. Results of analysis

For ease of comparison, the two case examples are shown next to another in tables 7 and 8.

Table 7: Context of respective company

	Case 1 Finland	**Case 2 Germany (2010-2013)**
Environmental Complexity	The case company is the leading bakery company in Finland and the Baltic region. It has been formed through a series of M&A operations and has a legacy of multiple country based operations causing fragmented logistics and supply market.	The company is a major player in the healthcare industry, facing high complexity in terms of number of customers and supplier markets, facilities and products.
Environmental Dynamics	The supply market is very prone to changes in terms of purchase price and availability. Large retail customers dominate the business. There is growing trend in consumer behavior towards “fresh” bread offered by shop-in-shop bakeries instead of centrally baked and packed bread. Shut downs of capacity and M&As are expected to continue.	The environment is dynamic in that demand fluctuates an M&A activities are common and regular.
Corporate and procurement strategy	Corporate strategy prior to the take-over was country/market based wig little head office intervention. Due to the history, the procurement strategy has been mainly to satisfy the needs of the local production operations in terms of availability and quality.	The corporate strategy is margin-oriented, having procurement strategy being one of facilitating the company’s financial goals.
Supplier management practices	Not standardized, decentralized, aimed at fulfilling operations demand.	Not standardized, dependent on individual employees.
Cross functional Integration	Not standardized, decentralized, aimed at fulfilling operations demand.	Not standardized, dependent on individual employees.
Procurement coherence	Starting from low coherence level, the change from operations unit specific procurement to centralized model with category structure, the coherence is expected to grow.	As the current set-up is geography driven and every site has its own small purchasing team, coherence to the overall organization is limited.
Technology	Various systems in use, manual consolidation needed to create visibility to spend and KPIs..	There are various systems in use for purchase order processes and spend transparency relies on manual consolidation.
M&A trajectory [NEW]	Several M&As of local bakery houses carried out in the past.	A number of major acquisitions of brands of whole companies have taken place.

Table 8: Situation before respective project initiation

	Case 1 Finland	Case 2 Germany (2010-2013)
Size	A few tens of procurement FTEs, no clear picture, mostly situated at production units.	A few hundred procurement FTEs, there of about 110 in Germany Site Procurement.
Maturity	The organization is the process of early formation. The change form operational, unit level decentralized model towards centralized, category and business line based model is ongoing. The emphasis is in reaping the low hanging fruits like logistics.	Organization has been through a number of optimization projects, the approach to spend is still rather project-driven than steady-mode; operational targets are driven by "security of supply".
Dominant Axis	Category and business line for war materials.	On global level: Category + Geography (country) On country level: Geography
Subdominant Axis	Geography, consumables, transportation.	Be low Category: Category (sub-categories) Be low Geography (country): Geography (site)
Centralization	Global procurement is centralized in the head office, but site specific activities are decentralized (call off, quality feedback). Local procurement heads report in matrix to global procurement and have also global category responsibilities.	While the global procurement organization is centralized in the headquarter, the country organizations operate in a mode where there is one country head of procurement and his/her management time consists of site procurement heads.
Formalization	The organization is lacking information transparency due to fragmented IT-architecture.	The degree of formalization of how information is channeled within the organization is low.
Specialization	Site level activities like call offs and reclaim-processes have now been separated from the global procurement tasks. Due to the small size of site organizations, further division of tasks proves to be difficult. Strategic procurement is separated from site activities.	Due to the site set-up, the level of specialization at each site is low, sometimes only 2-3 employees covering all categories and strategic and operational tasks alike.
Participation	Site procurement heads are members of the global procurement team.	The site procurement employees have very limited participation in the development of global sourcing strategies in the global procurement at headquarters.
Standardization	The company is in the process of defining common sourcing strategy, process descriptions and instructions. The level of standardization is still low.	The degree of how similar sourcing approaches have to be, how documents/analyses need to be structured etc. is low.
Time	Lacking measurement systems and IT prevent centralized analysis. Local availability is the key.	Delivery speed and on time are no concerns, performance is deemed appropriate.

Cost	Cost has earlier been considered as a secondary issue to time and quality. However, first major cost reductions have been achieved in transportation.	Cos is named as a potential area of future improvement, as currently there is no overall no coordination of similar needs in a systematic manner across sites.
Quality	Quality of raw materials is essential due to the nature of the process. However, fluctuation of the properties of different batches has to be compensated by changes in recipes.	Quality of delivered goods is not a concern at the beginning of the project, performance is deemed appropriate.
Flexibility	Flexibility is important especially in cases of major undersupply or price increase. Second sources and fast recovery in crisis situations is needed.	Exemplary 1: Flexibility is named as a potential area of further improvement, as currently there is a challenge of stand-in rules and overburdening of individual employees, particularity at small sites. Exemplary 2: Lack of time to actively identify and leverage new (supplier) market opportunities is a concern at initiation of the project.

In the case example 1, structural changes in organization imply a shift from country and production centric, totally decentralized procurement to a two-dimensional, business line and category based structure. Whereas the former structure represents a dominant structural dimension towards geography, the new structure now is a clear matrix of customer (Business Unit) and category. The new organization operates virtually in a centralized manner in issues yielding highest potential in synergy, like supplier selection and contract/price negotiations. Call-off activities and some business dedicated tasks remain geographically decentralized. However, as all members of the procurement organization do also have a corporate-wide element of responsibility, there is an active strive for even higher procurement maturity and coherence despite of geographical separation.

In case example 2, the shift from a geography focused local model to one which is activity and category focused was marked by the need for change highlighted by the CPO due to the previous M&A activities, which had led to a setup in which further integration of the purchasing units was felt to be overdue.

Therefore, our insights lead to the following proposition:

1. External factors (e.g. business context) impact procurement organization, i.e. the organizational dominant and subdominant dimensions chosen by category, activity, customer or geography, the degrees of centralization, formalization, participation and specialization, as well as size.

In the first case example, the major change in marketplace towards the dominance of supermarkets in distribution has strongly formed the requirements for survival within the bakery industry. Consolidation as a means for achieving economies of scale and being able to sustain a larger portfolio of products has been chosen as a means of survival. Full utilization of the potential, increased synergy in procurement through corporate growth has not been easily

achievable due to the fragmented structure and strategy in the past. In the second case example, especially the cost savings focus was placing high emphasis on being better able to leverage specialized category knowledge within procurement. Also, in line with the earlier mentioned aspect that corporate coherence is limited when BUs have heterogeneous characteristics (Rozemeijer et al. 2003), the statement "We have minimal synergistic spend across business units." (Table 5) provided an indication if coherence was required to a higher degree or not. And in case company 2 this was not the case, as synergistic demand was low.

Therefore, we propose:

2. Internal factors (e.g. corporate strategy, corporate organization) impact procurement organization, i.e. the organizational dominant and subdominant dimensions chosen by category, activity, customer or geography, and the degrees of centralization, formalization, participation and specialization, as well as size.

In the first case company, overcoming historical legacies in the procurement competences and IT-systems are representing a major opportunity in further development of effective procurement processes. As a specific internal determinant, the relatively fast pace of corporate change program initiated by the current owners have caused some turbulence in the organization, as the bakery industry has traditionally been stable in nature. As an accelerator of that change, the corporate change program with a radical change towards integration of the previous independent actors has definitely been the critical factor in enabling major changes both in the organizational structure and the set of competences and skills needed to achieve new targets set.

In the second case company the implementation of the new set-up allowed for increased focus on activity cluster-specific KPIs, as was shown in Figure 5. Initial sample comparisons about half a year after implementation, done for the middle pillar of purchasing, indicated efficiency improvements. For the sourcing pillar, the effect is hard to isolate, but it can be said that procurement was able to meet its ambitious savings targets after implementation (from Mid 2010 onwards) of the new organizational model in all subsequent years observed (2011, 2012, 2013).

Therefore, we propose:

3. Procurement organizational set-up impacts procurement success, i.e. time, costs, quality, innovation, market performance and flexibility

In the first case company, the relatively small size of the corporation and the geographically dispersed footprint of the company are making it challenging to achieve integration and exploitation of procurement synergies. Scarcity of human resources can now partly be compensated and harmonization achieved by better utilization of existing IT-platforms. Also quick wins in wielding synergies, like in the case of outbound logistics, can be used as selling arguments in favor of advancing corporate coherence.

In the second case company, a large organization was observed, which already had a certain level of centralization to begin with (on the global level, with the respective country procurement heads as part of one single company-wide procurement management team).In that sense, this setting had a very different starting point in comparison to the first case in that such a project

could be centrally administered and communicated right from the beginning, without first having to clarify authority in general.

7. Discussion and conclusion

We started out with the research question: How do external and internal factors relate to the individual organizational dimensions and degree of centralization?

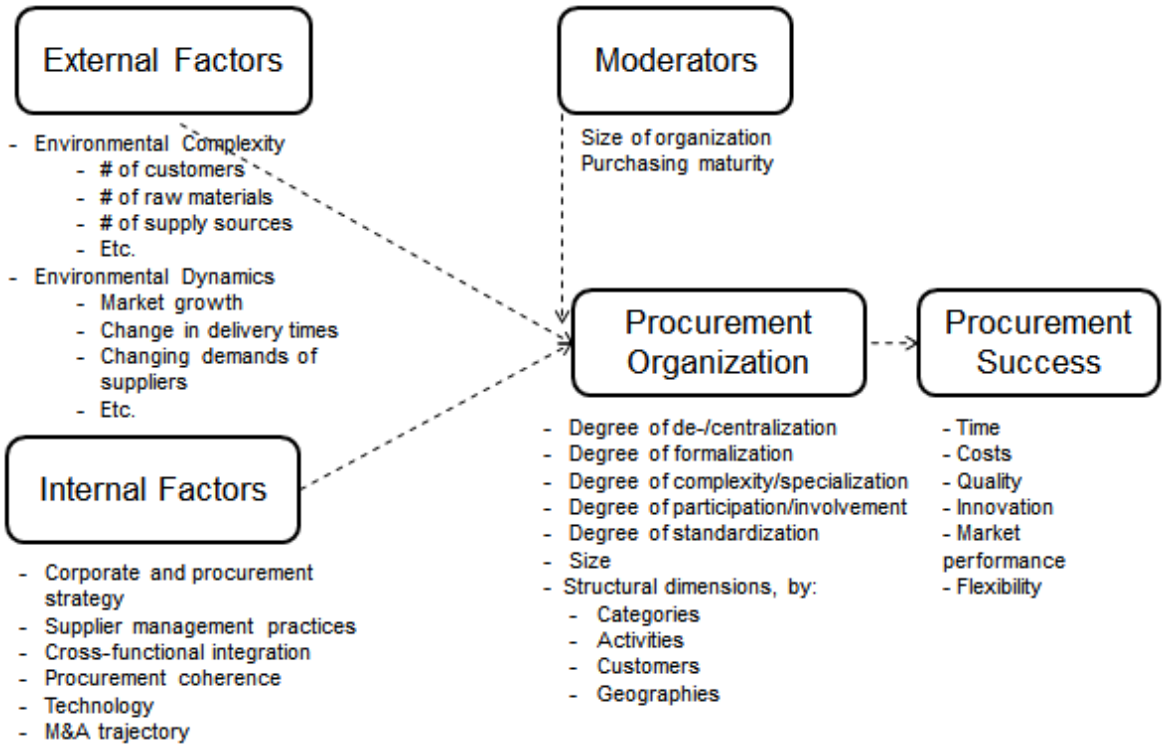
As a first theoretical contribution we go beyond the usual centralization-decentralization discussion. By studying the case companies, we derive insights into how the external and internal factors relate to the individual organizational dimensions as well as the degrees of centralization, formalization, participation and specialization, as a holistic approach to characterize the purchasing organization, as well as actually observing the structural dimension taken in terms of category, activity, customer or geography.

As a second contribution we put forward that in the two cases we observe that purchasing maturity as well as size of the organization have moderating roles. Most of previous scientific research has been concentrating on large corporations, and with case company 1 we felt that it was justified to also take the SME perspective and compare the prevalent models of organizing procurement in the environment of more limited and even scarce resources. The notions made in the case seem to be well in line with the assumptions made, especially in terms of firms seeking to realize savings and other business benefits though organizational changes. Also, limitations in resources when operating in SME environment became very clear. The case study highlights how external and internal factors drove the company to adapt its current structures towards a centralized set-up with an orientation towards Business Units and Categories, while operating under resource constraints, which corresponded with overall limited size of the organization. Although two cases can be challenges as a basis to generalize results, they provided us with valuable input in further sharpening our propositions and research model. More research is needed especially in means of compensating scarce resources and in the utilization of IT-tools and reporting systems. Therefore, we add a fourth proposition to our study:

4. The transition towards the new structure will be mediated by the internally available resources and capabilities of the Procurement organization (e.g. purchasing maturity and overall size).

As a third contribution, based on the conceptual background of contingency theory, we put forward a research model in which procurement organization becomes a function of the external and internal contingency factors. This implies that based on the external and internal influences, companies will adapt or feel increasing pressure to adapt their structure accordingly. For example, if demand is increasingly becoming regional, procurement might best serve business by also structuring according to geographies. If the company is not having a highly heterogeneous customer or geographical structure, it might be more appropriate to reap maximum bundling synergies via a category approach or maximum efficiency via an activity-based structure. The resulting conceptual model is shown in Figure 9. It shows the contingency logic corresponding with the presented propositions.

Figure 9: Basic conceptual model, own illustration



It is worth highlighting that apart from showing the various elements derived from the earlier literature review "M&A trajectory" has been added as a new internal factor based on our case studies in addition and the explicitly moderating effect of size and purchasing maturity is put forward herein for the first time for further research.

Managerially, the case results highlight that procurement's organizational structure must "fit" with the e external and internal situation of the company. In that sense, we provide a model which can serve for unbiased discussions about which structure serves an organization best, beyond a mere discussion of centralization versus decentralization, for example based on trends in one's own industry.

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