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## Article

# Managing innovation of care services: An exploration of Norwegian municipalities

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## MANAGEMENT | RESEARCH ARTICLE

# Managing innovation of care services: An exploration of Norwegian municipalities

Tor Helge Aas<sup>1,2\*</sup>, Nina Jentoft<sup>2,3</sup> and Mikaela Vasstrøm<sup>2,4</sup>

**Abstract:** The social impact of care services provided by the public sector is significant. Nevertheless, these services have received relatively little attention from prior innovation management practices research. This paper addresses this gap by raising the question: *What characterises management-driven innovation processes in public organisations providing care services?* The qualitative exploration of this question is based on in-depth interviews with key managers in three Norwegian municipalities, and in-depth observation of one ongoing innovation initiative in one municipality. Our findings supplement the findings of prior research by showing that different actors are involved in different stages of management-driven innovation processes in care services and by showing that employee-based “bricolage” may be an integrated part of management-driven innovation processes in this sector. The findings provide both managerial implications and implications for further research.

**Subjects:** Innovation Management; Organizational Change; Strategic Management

**Keywords:** public sector; care services; innovation management; service innovation; innovation practices

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## PUBLIC INTEREST STATEMENT

The social impact of care services provided by the public sector is significant. In part, due to the fact that the population is ageing rapidly in most western countries, these services are in desperate need of innovation. This paper discusses the characteristics of management-driven innovation processes in public organisations providing care services. The discussion is based on a qualitative exploration in three Norwegian municipalities. The findings suggest that different actors are involved in different stages of management-driven innovation processes in care services and that employee-based “bricolage” could be an integrated part of management-driven innovation processes in this sector. These insights are useful for managers that are responsible for organising innovation processes in public organisations providing care services, and for policy-makers responsible for stimulating innovation in this sector.

## 1. Introduction

The path to outstanding innovation results is challenging and positive results of innovation activities do not come automatically. Consequently, to succeed, innovation activities have to be managed wisely (Barczak, Griffin, & Kahn, 2009). Until now, much research has focused on how for-profit organisations in the private sector should manage innovation activities (Kahn, 2013). Most innovation management research has investigated innovation practices in manufacturing firms, but in recent years also the service sector has been focused (Aas & Pedersen, 2011).

The research results indicate that the characteristics of innovation activities in service firms are different from the characteristics of traditional product innovation activities in manufacturing firms in some dimensions (Aas, 2011), in part due to the characteristics of services (Zeithaml, Parasuraman, & Berry, 1985). Traditional research and development is, for example, seldom the source of ideas in the service sector (Droege, Hildebrand, & Forcada, 2009), and the innovation activities are not always organised as formal projects following pre-defined processes (Gallouj & Weinstein, 1997). Instead innovation activities in the service sector are often organised on an “ad-hoc” basis (Gallouj & Weinstein, 1997), and recognised “a posteriori” (Toivonen, Touminen, & Brax, 2007). Indeed, these characteristics have consequences for how innovation in the service sector is and should be managed.

The results of this research stream also suggest that the characteristics of innovation activities in different service sub-sectors differ (e.g. Kuester, Schuhmacher, Gast, & Worgul, 2013; Miles, 1993, 1994), and a relatively new research stream investigating the detailed innovation practices of different service sub-sectors through qualitative empirical studies is emerging. Recent contributions to this stream of research includes, for example, Zomerdijk and Voss (2011) who studied innovation practices in firms providing experiential services, Aas, Breunig, Hydle, and Pedersen (2015) who studied innovation practices in firms providing production-intensive services and Barczak, Kahn, and Moss (2006) who studied the innovation practices of private non-profit organisations.

However, one important service sub-sector, the public sector, is largely missing in this research stream (e.g. De Vries, Bekkers, & Tummers, 2016). The literature suggests that public sector organisations have some characteristic features related to organisational goals and structures that distinguish them from other organisations (Koch, Cunningham, Schwabsky, & Hauknes, 2006). Due to these differences it is not obvious that all knowledge of innovation management practices produced by prior research is transferable to the public sector. Thus, a better understanding of how public sector organisations manage their innovation activities is a prerequisite for realising the potential benefits of innovation in this sector (Kuipers et al., 2014).

The public sector in most developed countries is large and provides a number of heterogeneous services often including, for example, security services provided by the police and the defence, educational services provided by schools and advanced health services provided by hospitals (Gallouj & Zanfei, 2013). Due to this wide span of services it has been argued that innovation practices are likely to vary to some degree between different parts of the public sector (Gallouj & Zanfei, 2013). To be able to capture true innovation practices innovation management research therefore needs to focus on different sub-sectors of the public sector, and in this paper we have chosen to focus on the specific case of care services.

These services are chosen as our area of focus for two main reasons: firstly, undoubtedly care services are central in securing the quality of life of large groups of the citizens in a country. Thus, they have a considerable social impact. Secondly, these services are facing a number of challenges nowadays. One challenge is related to the fact that the population is ageing rapidly in most Western countries (e.g. Castillo, Patier, & Arnáiz, 2014). Other challenges relate to the facts that care services are becoming more complex since a larger share of the population reaches a higher age than before and that a larger degree of mobility and career structures in the society, mean that many elderly do not have their families available to the same degree as before when it was more common that

generations lived close to each other. As a consequence the demand for care services is increasing dramatically. Since most countries have limited resources to spend on producing welfare services, it is difficult to meet the increasing demand. This challenge calls for innovation in many forms, including process, product and service innovation (Hovlin, Arvidsson, & Hjort, 2011). More specifically, Djellal and Gallouj (2006) suggest that the targets of innovation in care services may be related to changes in (1) the assistance and residential provision, (2) the technologies deployed, (3) the services provided, (4) the human environment and (5) the institutional environment.

Although the literature discussing innovation practices in care services is limited, some contributions do exist. One example is Fuglsang and Sørensen (2011), who study innovation in care services in Denmark and find that innovation in care services in reality often either takes the form of innovation projects driven by management or incremental changes implemented by front-line employees during their daily work, so-called employee-based “bricolage”. The case study of Fuglsang and Sørensen (2011) mainly focused on employee-based “bricolage” and suggested that these activities often happen with limited managerial involvement.

A relevant follow-up question is how the practices of management-driven innovation processes in care services look like. How are these processes led and who are involved in these processes? We argue that to be able to answer this question and provide relevant guidance to managers of care service providers, more research is needed. This call for more research is also echoed by other researchers (e.g. Fuglsang & Rønning, 2014; Hartley, 2008). Therefore, through an in depth qualitative exploration of management-driven innovation processes in the care service departments of three Norwegian municipalities, this paper aims to answer the following research question: *What characterises management-driven innovation processes in public organisations providing care services?*

The paper is organised in the following way: in Section 2, we review the literature on innovation management in the public sector. Next, we present the chosen qualitative case study methodology used to explore management-driven innovation processes in this paper. In Section 4, we present the empirical findings of the study. In Section 5, the paper finally discusses the theoretical and practical implications of our findings and Section 6 concludes and discusses further research.

## 2. Theory

### 2.1. Characteristics of innovation management practices in service firms

The results of research on innovation in private service firms suggest that innovation activities in the service sector are conceptually particularly complex due to the fact that the development and implementation of new services often require parallel and simultaneous changes in different dimensions, such as the technology dimension, the organisational dimension, the business process dimension as well as the service concept dimension (e.g. Den Hertog, 2000, 2002; Den Hertog, van der Aa, & de Jong, 2010; Froehle & Roth, 2007; Miles, Kastrinos, Bilderbeek, & den Hertog, 1995; Sundbo, 1997). Therefore, the successful accomplishment of innovation activities in service firms requires that the firms both establish appropriate innovation processes, and that they build necessary capabilities and resources to carry out these processes (Den Hertog, 2000; Froehle & Roth, 2007; Den Hertog et al. 2010).

While innovation processes in manufacturing often follow a linear stage-gate process (Cooper, 2008), research has suggested that both linear (e.g. Johnson, Menor, Roth, & Chase, 2000) and non-linear (e.g. Edvardsson & Olsson, 1996; Johnson et al., 2000; Stevens & Dimitriadis, 2004) innovation processes coexist in service firms. While linear innovation processes are characterised by formality, planning and control, non-linear innovation processes may be described as informal, ad hoc and unsystematic explore and learn processes without pre-defined stages (Gallouj & Weinstein, 1997; Sundbo, 1997; Toivonen, 2010).

Research also suggests that the resources and capabilities needed during innovation processes in service firms are different from those needed during innovation processes in manufacturing (Froehle & Roth, 2007). While access to technical R&D expertise is often particularly important in innovation processes in manufacturing, the involvement of “soft” actors, such as users, suppliers and front-line employees, has been found to be particularly important in service innovation processes (Menor & Roth, 2007; Meyer, 2010). This is in part due to the fact that the simultaneous production and consumption of services implies that these actors have particularly advanced knowledge of the demands and needs of customers (De Jong, Bruins, Dolfsma, & Meijgaard, 2003; Sillanpää et al., 2010). Likewise, research has suggested that innovation in service firms is more dependent upon a strong innovation culture than innovation in manufacturing (Lyons, Chatman, & Joyce, 2007; Savory, 2009).

## **2.2. Innovation in public service organisations**

As mentioned, until now most service innovation research has used private for-profit firms as their empirical setting (Gallouj & Zanfei, 2013). However, increasingly the public sector is also getting attention. The stream of research focusing public services has indicated that there are some similarities in innovation processes between private and public services, but also distinctive and important differences (Hartley, 2005). The public sector has different goals, purposes, institutional cultures, chains for implementation and responsibilities and a strong degree of formal procedures that provide different conditions for innovation management (Moore, 2005; Robertson & Seneviratne, 1995). To promote the innovative capacity and create an innovation culture in the public sector one needs political as well as administrative support (Borins, 2002; Hartley, 2011; Moore, 2005).

Djellal, Gallouj and Miles (2013) suggest that “the processes for generating creative ideas, and for selecting among them to develop some into applicable innovations, are many and varied in public services, just as they are across service industries more generally” (p. 27–28). Case studies on public services, such as cleaning, care of elderly, hospitals and social services (Djellal, 2000, 2002; Djellal & Gallouj, 2006; Fuglsang, 2007; Sundbo, 1996), for example, demonstrate the importance of non-technological sources of innovation (Gallouj & Djellal, 2010). It has also been suggested that informal non-linear innovation processes are particularly common in the public sector (Djellal, Gallouj and Miles, 2013; Fuglsang, 2008, 2010; Gallouj & Zanfei, 2013), and recently focus has also increased on the staff as a source of innovations in the public sector (e.g. Carol Rusaw, 2007; Fuglsang, 2008, 2010; Fuglsang & Sørensen, 2011; Moore, 2005). Recent literature also highlights the relevance of user involvement in the service innovation processes in the public sector (e.g. Donetto, Pierri, Tsianakas, & Robert, 2015).

Although the literature discussing innovation in the public sector is increasing, the amount of research literature specifically discussing innovation in the public care sector that is focused in this paper is still limited. Bason (2010) is concerned for this situation and suggests that researchers should start to focus on innovation in these services due to their importance for the citizens of a country. According to Djellal and Gallouj (2006), care services “constitute an activity that is not easily defined” (p. 303) and these services “are located at the intersection of various other major groups of activities: (...) health services, local services and so on” (p. 303). Djellal and Gallouj (2006) focus specifically on care services for elderly, but also other groups may be in need of care services on certain occasions. Arguably, care services have some characteristics that distinguish them from other public services. They are, for example, more personal and labour intensive than many other public services. Thus, we argue that all innovation practices from other parts of the public sector may not be transferred to care services, although some practices may indeed be transferrable.

There are relatively few publications in the research literature discussing innovation in care services specifically. Exceptions include Djellal and Gallouj (2006), Fuglsang and Sørensen (2011), Herzlinger (2006) and Windrum and García-Goñi (2008). The contribution of Djellal and Gallouj (2006) presents the targets of innovation in care services for the elderly as: the structures, the technologies, the elderly persons’ families, the caring personnel, the service provided to the elderly and

the institutional environment. They claim that “it is much easier for the professionals involved in the provision of care services for the elderly to identify innovation in terms of targets than using the distinction economists have traditionally made between product, process and organisational innovations” (Djellal & Gallouj, 2006, p. 307).

Fuglsang and Sørensen (2011) study care services in Denmark and their findings suggest that bottom-up processes dominate in this sector. They suggest that the concepts “ad hoc innovation” (Gallouj & Weinstein, 1997), “a posteriori recognition of innovation” (Toivonen et al., 2007) and “bricolage” (Styhre, 2009) are relevant to understand the dynamics and potential of innovation in care services, and to see the connection between micro- and system-level innovation. At the same time, these concepts point to a practice-based understanding of innovation in care services; “Do it yourself problem-solving activities that create structures from available resources” (Fuglsang & Sørensen, 2011, p. 583).

However, there is a literature gap concerning management-driven innovation in the public care sector. Fuglsang and Sørensen (2011) do acknowledge that management-driven innovation processes in this sector exist and they argue that when an innovation process is management-initiated the role of management is intuitive: the managers are assigned to work with new ideas, developing them into new concepts and implement the new concepts. Although this is indeed true, Fuglsang and Sørensen (2011) did not investigate the characteristics of these management-driven innovation processes further. The aim of our paper is therefore to extend the knowledge of innovation practices in public care services organisations by investigating management-driven innovation processes in this sector.

### **2.3. The research framework**

Dooley, Subra, and Anderson (2002) suggest that the term “innovation management practices” refers to the tactics and methods implemented by managers to carry out innovation activities. A number of different dimensions of innovation management practices have been suggested in the extant literature on innovation in for-profit firms (e.g. Kahn, Barczak, & Moss, 2006; Zomerdijk & Voss, 2011), and according to Froehle and Roth (2007) these dimensions can be categorised into two aggregated dimensions; (1) activities related to the management of the innovation processes and (2) activities related to obtaining the resources (intellectual, organisational and physical) needed to carry out the innovation processes. A similar framework for innovation in the public sector is suggested by De Vries et al. (2016). They distinguish between the innovation processes and the antecedents of the innovation processes, where the antecedents correspond to what Froehle and Roth (2007) call resources in their framework. The aggregated framework of Froehle and Roth (2007) will guide our empirical study in the sense that we will explore (1) the management-driven innovation processes and (2) the core resources that are used during these processes. Note, however, that our intention is not to explore all resources/antecedents that may affect innovation in the public sector (see De Vries et al. (2016) for a comprehensive overview). In this paper, we will only explore the core resources that are used directly *during* management-driven innovation processes.

### **3. Method**

Fuglsang and Rønning (2014) emphasised that it is important to identify what the employees really do, and not just be concerned with formal templates and models when researchers are identifying how innovation activities take place in organisations. Therefore, a qualitative case study approach (e.g. Yin, 2014) was chosen to get an in-depth understanding of the management-driven innovation processes in public organisations providing care services.

It has been argued that innovation processes in the public sector may vary between different countries due to institutional variations (De Vries et al., 2016). The results of a recent literature review by De Vries et al. (2016) suggest that most existing studies of public sector innovation have been conducted in liberal market economies such as the USA and the UK, implying that more



research from other countries is needed. We therefore decided to conduct our study in Norway which has a coordinated market economy like many other European countries (Hall & Soskice, 2001).

Care services departments in three municipalities in southern Norway were selected as case organisations. Our aim was to explore three different representations of Norwegian municipalities to draw out more general lessons about management-driven innovation processes across these. The first case organisation (case organisation A) was a rather large municipality that was particularly well recognised for its health care innovation commitment and had recently received a national innovation prize among Norwegian municipalities for their innovations in the care sector.

Case B was a (in Norwegian measures) middle-sized municipality. It was selected because they had publically promoted plans about developing innovative care services. The last case C was a small municipality that was chosen due to the absence of any publically mediated innovation strategies in the care sector. Thus, the resulting sample consisted of three case organisations that varied both in size and in their public presentation of their innovation capability. Table 1 lists key characteristics of the sample.

In this study, the exploration was based both on in-depth semi-structured interviews and observation. In each case organisation, we interviewed key informants, especially at the management level (top managers and line-managers). We started with the top manager of the health care sector and continued using a snowball approach by asking each informant who else in the organisation we should interview about the topic. This procedure was repeated until we obtained saturation of the narrative and understanding of the management-driven innovation processes.

To get an in-depth understanding of the management-driven innovation processes in the case organisations we started by asking if the informant could reflect upon how the care services provided by the case organisation had changed the last five years. This approach to identify examples of management-driven innovations in the case organisations was in line with Rogers (2003) broad definition of innovation that is often used in studies of innovation in the public sector (De Vries et al., 2016). The definition of Rogers (2003) suggests that innovation is “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (p. 12). We purposely, however, avoided the term “innovation” in this initial stage of the interview since we had learned from informal contact with employees in this sector that this term was seldom used to describe changes, and since

**Table 1. The sample**

Case organisation	Number of employees (FTEs)	Number of inhabitants	Empirical data collected
A	2,275	44,000	In-depth interviews: <ul style="list-style-type: none"> <li>• Top managers: 1</li> <li>• Line managers: 2</li> </ul>
B	670	10,000	In-depth interviews: <ul style="list-style-type: none"> <li>• Top managers: 1</li> <li>• Line managers: 2</li> </ul> Observation: <ul style="list-style-type: none"> <li>• One ongoing innovation project</li> </ul>
C	260	3,500	In-depth interviews: <ul style="list-style-type: none"> <li>• Top managers: 1</li> <li>• Line managers: 3</li> <li>• Front-line employees: 1</li> </ul>

innovation in the public sector is often described as something that is recognised “a posteriori” in the literature (Toivonen et al., 2007).

Then based on the change (innovation) examples provided by the informants, we asked open follow-up questions related to how this change had happened and who had been involved. This part of the interview was based on the resource-process framework of Froehle and Roth (2007). Open process-oriented questions such as where the initial idea came from, why they decided to invest in the idea and how results were measured, as well as resource-oriented questions such as what type of resources they used during the change (innovation) process, were asked during the interview. Each interview lasted for about two hours. The interviews were recorded and transcribed. The result was a large amount of qualitative data.

In addition to conducting in-depth interviews of key-informants, we also followed the development of the early phases of the proclaimed innovation project in case B. The project aimed to co-locate the care services provided by the case organisation and establish a new care centre. We participated on two workshops arranged in the early stages of this project that involved care-sector employees, politicians, user-groups and consultants. In addition we had several informal discussions with the project management of this project. Data from the observational period were very rich and contributed to shape our understanding of the complexities of management-driven innovation processes in care services.

#### **4. Findings**

The empirical data from each case organisation in this study allows us to depict different types of innovation practices, modes of management and stages of innovation process. In the following, we present our empirical findings, organised according to our research framework.

##### **4.1. Innovation processes**

We identified a number of different innovation initiatives in each case organisation related to change of organisation, of communicative practices, of practice and collaboration. In addition, there were also examples of physical material changes such as food-schemes or re-localisation of services. Some of these innovations were explicitly addressed as strategic changes by interview subjects, while others were considered more a matter of service adjustment than an actual change. The aim of this paper is not to present the innovations as such, but to depict the characteristics of the management-driven innovation processes. In the following, we give three examples of change of care practice and reflect this in relation to the organisational management of these changes.

In case organisation A, all informants explicitly referred to the development of a new concept and practice of the rehabilitation services. The care service organisation had established a separate interdisciplinary unit for this particular type of care services. This also included the implementation of new working methods and routines where the care services offered were personalised to a higher degree than before. The quality of the services, according to the informants, had increased when rated by the user groups. In addition, the case organisation had been able to reduce the overall service costs related to rehabilitation. This innovation as a change of practice and organisational collaboration was in this sense communicated as a success story by the management.

In case organisation B, the planned change was related to the physical construction of a health area that could co-locate public and private care services. The process of change involved several stakeholders in the early stages of the process. Further, the management of the case organisation decided to carry out a “feasibility study” to assess how co-location could help solve current and future challenges related to the provision of care services. To carry out the feasibility study, the management of the case organisation decided to supplement the internal expertise, with expertise from an external consultancy firm. As a part of the process with the feasibility study, the consultants



arranged a half-day workshop that gathered about 35 participants including representatives from the administrative and political management of the case organisation, employees involved in the provision of care services, as well as representatives from a main user group (the council of elders).

Case organisation C also had introduced some elements of a new concept of rehabilitation services. For example, one initiative was related to the implementation of new meal service for elderly living in care homes. Previously, these meals had been prepared by the staff, but to improve the quality of life for the elderly, and at the same time reduce costs, case organisation C arranged it so that the elderly could prepare their own food. Other initiatives for elderly living in their own homes were to give them an exercise programme and offer assistance in the use of assistive. The case organisation C is not the first in Norway or in its region introducing these initiatives, but the measures improved efficiency and performance in the municipality and provided better services to citizens.

The case organisation C is sparsely populated. According to the literature (e.g. Arduini et al., 2010) this fits the description of a municipality which to a limited extent adopts e-services. Yet, the municipality had introduced Ipad for organising work lists and documentation of term use. This, according to our informants, improved efficiency. Among other things, the number of users became more evenly distributed in home care. The municipality had also adopted an electronic medical records system. This was used in practice to read hospital records, medication lists and patient care. It is an arena for dialogue and quality assurance between case organisation C and the regional hospital and pharmacy. The initiative saved time. Previously, this interaction was taken over the phone and it was often difficult to reach the right person.

The examples of innovations identified during the in-depth interviews could all be categorised as “management-driven”, in the sense that the innovation initiatives typically originated from employees at the top managerial level of the organisations. Our findings suggested that the first stage of these management-driven innovation processes in all case organisations was about recognising general challenges facing the organisation. One informant (top manager) from case organisation A explained:

We start by looking at the future—what are the challenges we will face in the near future. There were some that were particular clear: the inhabitants’ livelihoods (...), recruitment to our disciplines (...), economy (...) and the demographic trends (...). The challenges made it apparent that we need to work in new ways. (...)

During this first stage, the top managers also took guidelines and reports from higher governmental authorities into account, here explained by the same informant:

The key national guidelines described in parliamentary report No. 47 are very good. These guidelines reinforced the challenge description we had created for our municipality. (...) Many of the perspectives [from parliamentary report No. 47] were used in the process. (...)

After the initial identification of the relevant challenges, the further innovation process of the three case organisations varied to some degree. Case organisation C (the smallest organisation in the sample) held the further discussion process at the top-managerial level until a formal decision was made. The outcome was typically a decision on what new service concepts and solutions the front line employees should implement. The following statement from an informant (top manager) in case organisation C explains this practice:

In this example the innovative idea was a result of the recruitment of a new manager [the informant]. However, I got my ideas from the national guidelines in parliamentary report No. 47. I think it is fairly typical that ideas about new practices come this way. (...)

In case organisation B, the further innovation process of defining solutions was to a large degree outsourced to external consultants and based on experiences from other public organisations.

However, the consultants were also involved in meetings with managers and users and in that sense there was a broader communicative process.

In case organisation A, the involvement of different stakeholders in the second stage of the innovation process was extensive. When the new rehabilitation services were to be developed, the top management arranged a three-day workshop. The workshop was based on the priorities of the top-management, but opened up for employee-based perspectives and initiatives within this framework. One informant from case organisation A explained:

We went on a three day seminar to discuss the challenges. About 50 persons participated including unit managers, department managers and other resource persons (...). The seminar ended with nine different proposals. After the seminar workgroups were established and they came up with concrete project proposals and plans (...). This plan was presented to the politicians in 2012 (...). They gave us the green light for the new organisation plus the creation of new services. (...)

The importance of involving the political management was perceived as fundamental by several informants. The administrative managers in the case organisations were in this sense highly dependent on political approval and their economic mandate to initiate changes in care services. One of the informants explained:

We have worked with the politicians in the city council (...). First we presented the identified challenges. Thereafter we presented a budget resolution. Here we got a mandate—a city council decision—stating that we could start working on the reorganisation of the services. The political decision was our entry ticket to work with the reorganization. (...)

Our findings suggested that the innovation processes did not end after implementation of the new solution or service. In all three cases, the change of practice was followed up by communication with user groups or internal assessments. A stage of innovation adjustment was in other words present in all three organisations. In case organisation A, the new radical rehabilitation services were continuously and incrementally improved. While the initial process had essentially been a management-driven top-down approach, the process in this stage was essentially a bottom up employee-based “bricolage” approach driven by the day-to-day challenges, ideas and initiatives of front-line employees.

Case organisation A had explicitly tried to institutionalise this twofold dynamic of change and innovation. They had established a so-called “innovation team” that could discuss both top-managerial priorities, but also employee-based suggestions. One informant of case organisation A explained:

We have established an innovation team working across departments. (...) Innovation can occur both top and down - and bottom up. It is important to take care of both. (...) The innovation group has members from all units. (...) Their task is to identify good ideas and good practices, and capture good ideas among employees and others. Their work shows that there is a wealth of opportunities. (...)

Another informant (manager) from case organisation A reflected like this about the period after implementation of the new rehabilitation service:

It has exceeded all expectations. They dare to try things, make mistakes, adjust gradually. Many things happen gradually. (...)

The other and smaller case organisations had not established so-called “innovation-teams”, yet they did reflect the importance of involving their front-line employees in the improvement of existing service solutions and concepts. In case organisation B, the front-line employees were used as informants in the feasibility study. In case organisation C, one informant stated:

We are discussing improvements at the staff meetings, and employees can provide input during these meetings. (...)

In addition, our findings suggested that users (and their relatives) do have opinions about the care services provided by the municipalities and ideas related to how these services could be improved. However, the case organisations had only to a limited degree established a structured way to handle these inputs. In the case organisation B, the workshops gave opportunity to user-based perspectives, but it was difficult to trail if these were followed in the further stages of the innovation process. Nevertheless, sometimes users were able to express their opinions and ideas, and we got examples indicating that such input had led to improvements of existing services. This may be exemplified with the following statement from a municipality C manager:

We introduced some changes related to the meals for the elderly living in caring homes, including that the elderly should prepare the food themselves. We had to reverse this change since the relatives reacted. (...) The relatives called both us and the politicians, and there was a subsequent newspaper article. Then we had a meeting with the relatives and thereafter changed our practice. (...).

To summarise, we may state that the management-driven innovation processes identified in the case organisations in our study typically consisted of the following stages:

- (1) Identification of the challenges to be addressed by innovation initiatives.
- (2) Identification of potential new service solutions or concepts.
- (3) Political decisions to implement specific new service solutions or concepts.
- (4) Development and implementation of the new service solutions and concepts.
- (5) Improvement of the new service solutions and concepts.

#### **4.2. Innovation resources utilised during management-driven innovation processes**

Our findings suggested that the case organisations utilised at least four types of internal actors during their innovation processes: (1) top and line managers, who initiated, prioritised, managed, specified, facilitated and controlled the innovation processes; (2) political managers who gave advice and made decisions; (3) project managers who managed selected parts of the process and implemented new solutions; and (4) front-line employees, who gave advice related to the design of new service solutions and concepts and improved the new service solutions and concepts through “bricolage”.

The studied organisations also involved external actors at different stages, in particular, users (including relatives), experts (consultants), as well as higher governmental authorities (policies, reports and white papers) in their innovation processes.

In Table 2, we have summarised what type of core resources that were typically used in the different stages of the management-driven innovation processes in the case organisations.

Our findings suggested that the two larger case organisations (A and B) had worked systematically to develop the innovation skills among employees in the organisation. One of the managers in case organisation A stated:

The important thing is what happens internally—learning—in the workplace. The personnel are learning together in the workplace. Improving skills here where we work (...). We also hold internal courses to improve competence. (...)

A general impression based on the interview data is that innovation was not explicitly the top priority on the organisational agenda. This was rooted in different types of constraints. None of the case organisations had, for example, defined an explicit innovation strategy. Another constraint was that the care service employee culture was characterised by a strong disciplinary focus,

**Table 2. Resources utilised during innovation processes in the case organisations**

Stage in the innovation process	Core internal resources	Core external resources
Identification of the challenges to be addressed by innovation initiatives	Top and line managers	Higher governmental authorities
Identification of potential new service solutions or concepts	Top and line managers, political managers, front-line employees	Experts (e.g. consultants), users (including relatives)
Decisions to implement specific new service solutions or concepts	Top and line managers, political managers	None
Development and implementation of the new service solutions and concepts	Project managers and front-line employees	None
Improvement of the new service solutions and concepts	Front-line employees	None

professionalism and traditions, rather than innovation. An employee-informant from case organisation A expressed:

It's hard to come up with new ideas and suggestions, perhaps because many have worked at the same place for many years. We are comfortable here.

Nevertheless, based on our findings, we also got indications suggesting that the culture was changing gradually in the case organisations. For example, according to our informants, the large and radical innovation initiative related to rehabilitation services in case organisation A created a greater awareness among management, political leadership and employees that innovation was important. One of the informants (top manager in case organisation A) said:

There has been an increased recognition that innovation is important in the municipality.

Several informants reflected on the political communication and decision-making system as a constraint to change. In case organisation B, the political level was detrimental for deciding if and how a co-location of services should be designed. In this sense, it could be argued that the innovation process became politicised and difficult to manage by the administrative staff. This is also reflected in a statement from an informant (manager) from case organisation C:

I feel that I have a clear mandate to develop the services further. But there may be political processes that hinder the development, strong trade unions who do not want a new solution and a general reluctance among employees.

Finally, we encountered that institutional frames for managing innovation processes were highlighted, especially in case organisation A. As mentioned previously, this case had created new innovation teams that created a communicative potential between different actors. An informant (top-manager) from case organisation A explained:

We have established a new management team with representatives from all units (...). In this group we are now able to discuss common themes such as ethics, skills, recruitment, innovation (...). This group is a new arena where we are creating a shared responsibility for service development in our organisation. (...)

The management of innovation is thus characterised by several aspects related to both processes and resources that require some further discussion.

## 5. Discussion

Our findings do confirm some important findings of prior research. In the same way as Fuglsang and Sørensen (2011), we find that innovation in care services can either be the result of a management-driven innovation process or the result of employee-based “bricolage”. Like prior authors (e.g. Windrum & García-Goñi, 2008) we also find that a number of different actors are typically involved in the innovation processes, including policy-makers, managers and users (including relatives).

However, our findings also moderate, supplement and challenge some findings of prior research, in particular: (1) management-driven innovations are found to be developed through a set of stages, (2) different actors are involved in the different stages of management-driven innovation processes, and (3) “bricolage” is found to be an integrated part of management-driven innovation processes. These points are now discussed:

Firstly, prior research often describes the innovation processes in services to be informal, ad hoc and without any typical stages (e.g. Gallouj & Weinstein, 1997). Our findings suggest that these characteristics do not quite fit for the management-driven innovation processes we identified in our case organisations. As reported in Section 4.1, the management-driven innovation processes in the case organisations in our study typically followed a five-stage process. Typically, new insights about the challenges facing the organisation or the sector in general were the starting point of these innovation processes.

Thus, it may be argued that these processes have some similarities with the “Science, Technology and Innovation (STI)” mode of innovation known from high-tech manufacturing firms (Lundvall & Borrás, 2005) where innovation “emerge as a result of scientific research” (Tidd & Bessant, 2013, p. 234), even if the type of research providing the new insights obviously differ. Just as the innovation processes we identified in our case organisations, STI processes in manufacturing typically follow a process with stages (Cooper, 2008). Based on this discussion we offer proposition 1 (P1):

P1: Management-driven innovation processes in care services are initiated by new insights and consist of development stages.

Secondly, in line with prior research focusing on innovation in the public sector (e.g. Windrum & García-Goñi, 2008) we found that different actors were involved during the innovation processes. Our findings supplement the insight of prior research by showing how different actors are involved in different stages of management-driven innovation processes (see Table 2). Interestingly, both internal actors such as “ordinary” employees and politicians, as well as external actors, such as higher governmental authorities, research institutes and users, were involved and played different and essential roles during the processes. This indicates that especially the early parts of the management-driven innovation processes in care services may to some degree be defined as “open” according to Chesbrough’s (2011) definition of this concept, since the organisations utilise knowledge from external sources. Thus, the ability to initiate the involvement of the appropriate actor at the right time was a crucial management task in our cases. We offer P2:

P2: Knowledge from different internal and external actors are used in different stages of the management-driven innovation processes in care services.

Thirdly, although the innovation activities identified during our study had been initiated by employees at the management level we also identified that the front-line employees’ gradual changes of their work practice, often termed “bricolage” in the literature (Styhre, 2009) played an important role also in these management-driven innovation processes in the case organisations. Indeed it is in line with prior research on innovation in the service sector in general (e.g. Toivonen, 2010) and in care services specifically (e.g. Fuglsang & Sørensen, 2011) that “bricolage” is important. However, while Fuglsang and Sørensen (2011) found that “the link between bricolage and management

innovation is very weak" (p. 588), we found that "bricolage" was an integrated part of the management-driven innovation processes in our cases.

In practice, this integration of management-driven innovation processes and "bricolage" was done by not considering the new solutions and service concepts implemented in stage 4 of the innovation process (see Section 4.1) as the "final" solution. Instead the management realised that the new solutions and services implemented in stage 4 of the process had to be fine-tuned through a continuous employee-based "bricolage" process. The management encouraged employees to participate in this "bricolage" process, and incremental positive changes of work procedures were valued. While prior research (e.g. Fuglsang & Sørensen, 2011) often describes "bricolage" as an activity hidden for the management, the establishment of cross-functional innovation teams where changes were discussed made the "bricolage" visible and ensured that good working practices were spread in our case organisations. We offer P3:

P3: To fine-tune new solutions and service concepts continuous "bricolage" may be integrated in the final stage of management-driven innovation processes in care services.

## 6. Concluding remarks and further research

In this paper, we have addressed how innovation in care services is managed. Our study contributes to the literature by offering three propositions (see Section 5). The propositions offered are based on a qualitative investigation. Qualitative case studies have known limitations due to the sample size (Yin, 2014) and in our study this limitation has resulted in the identification of a relatively low number of innovation examples. Each type (target) of innovation in care services discussed by Djellal and Gallouj (2006) was only represented by a few examples. Thus, based on our findings we were not able to identify if different types of innovation in care services are associated with different management practices. Further research is needed to explore this. In addition, further research is needed to understand how contextual factors, such as country, may explain variations in innovation management practices in this sector.

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