Balancing Control and Breakthrough in Public Management

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ABSTRACT

Previous research shows that a good balance between focus on development of existing processes with development of new and innovative products, processes or services has a positive effect on organizational excellence. However, the relationship between these two quality perspectives is not easy to maintain and it is a challenge for every organization to find an appropriate balance between them. Previous research shows also that there is often a striking overemphasis on continuous improvement and stepwise refinement at the expense of working with innovations. Consequently, it has become necessary to find forms for development of the balance between improvement of existing processes and innovations. It is a question of how to manage both exploitation (improvement of existing processes) and exploration (innovations). Being able to manage both exploitation and exploration and maintain a good balance is known as organizational ambidexterity.

The purpose of this thesis is to develop existing knowledge of how organisational ambidexterity and innovation can be understood and developed as an approach to increasing customer value in the context of the public sector. In order to meet the purpose, the research behind this thesis was conducted through six studies. The results have been presented in six scientific articles. The analytical focus in the research has been on management of public organization. Thus, the unit of analysis has been public sector management both at national, regional and municipal level. The studies have been conducted with a qualitative approach and data collection has primarily been done through semi-structured interviews. Most of the data has been collected in Sweden.

Through the studies, it appears that the current quality practice in the Swedish public sector to a large extent relates to and supports exploitation, but not exploration. The empirical findings give examples of organizations that have a large focus on systematic measurement and control of the work process. An inhibition of increased customer value is indicated in the studied organizations’ current emphasis on exploitation at the expense of exploration. The research also shows that there are a number of impediments for the public organizations studied to combine their current quality practice with an improved ability to explore. It appears that there is a need for development of the leeway for exploration in order to increase the ability to be ambidextrous.

The research behind this thesis empirically identifies a number of enablers the public organization may need to work actively with in order to develop
organizational ambidexterity. Some of these enabling factors harmonize with quality movement core values. This applies to core values like committed leadership, focus on customers and a holistic system perspective. In addition, the following factors are perceived to be enabling factors for organizational ambidexterity: specific budgets for both exploration and exploitation; development of a culture in which employees feel that they are allowed to make mistakes; a good dialogue both internally and with external stake holders; focusing on the implementation of innovations and clear incentives for work on exploration as well as for work on exploitation. Finally, the empirical data also shows that an enabling factor is to get different professions involved in explorative processes. This can be achieved by working through ambassadors who can promote the explorative processes.

The enablers, which have been empirically identified in this research as important for organizational ambidexterity, have also previously been identified by scholars as enablers for innovations. The research behind this thesis contributes to the empirical sorting out which - out of a wide range of factors - may be the most important factors for organizational ambidexterity.
SAMMANFATTNING

Tidigare forskning visar att god balans mellan å ena sida utveckling av befintliga processer och å andra sidan innovation är viktigt för en organisations långsiktiga resultat. Det visar sig dock inte vara så lätt att balansera dessa två perspektiv. Vidare visar tidigare forskning att organisationer ofta lägger tonvikt vid att arbeta med ständiga förbättringar på bekostnad av ett arbete med innovation. Följaktligen är det viktigt att söka former för att förbättra balansen mellan arbetet med ständiga förbättringar och innovationer. Att kunna arbeta med - och balansera - både perspektiv kan kallas att ha god organisatorisk simultankapacitet.

Tidigare forskning om organisatorisk simultankapacitet har främst bedrivits inom den privata sektorn. Det är ont om tidigare studier av organisatorisk simultankapacitet inom offentlig förvaltning. Däremot finns det relevant tidigare forskning om innovation inom offentlig sektor. Den forskningen är relevant för att identifiera variabler som kan skapa förutsättningar för god organisatorisk simultan-kapacitet.

Syftet med denna avhandling är att utveckla befintlig kunskap om organisatorisk simultankapacitet och om hur innovation kan förstås och utvecklas som en strategi för att öka kundvärden och kundvärdet av den offentliga sektorns erbjudande.


Forskningen visar att nuvarande kvalitetsarbete inom den svenska offentliga sektorn till stor del handlar om kontroll och utveckling av befintliga system och mindre om innovation. De studerade organisationernas nuvarande betoning på kontroll och utveckling av befintliga strukturer kan inverka menligt på värdet av leveransen till medborgarna. Forskningen visar även att det finns ett antal hinder för offentliga organisationer att kombinera sitt nuvarande kvalitetsarbete med innovation.

Flera av de faktorer som i denna forskning empiriskt har identifierats som viktiga för organisatorisk simultankapacitet har även av tidigare forskare identifierats som möjliggörare för innovationer. Forskningen bakom denna avhandling bidrar med att sortera ut vilka faktorer - av en lång rad möjliggörare för innovationer - som kan vara de viktigaste faktorerna för organisatorisk simultankapacitet.
ACKNOWLEDGEMENTS

First of all I want to thank my supervisors, Professor Dr. Håkan Wiklund and Associate Professor Dr. Johan Lilja for their outstanding knowledge, advice and ability to find interesting perspectives in my research. A special thanks to Johan for his exceptional ability to contribute to exciting and functional headings. I would also like to thank my colleagues at the Quality Technology and Management Research Group at Mid Sweden University for all their advice and encouragement.

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Thanks also to Magnus MackAldener for opening my eyes to the exciting area of innovation and its relationship to today’s quality management practice.

Finally, I want to say a very warm thanks to all my family. My wife Mirjam, my children Albin and Ella, my parents and siblings. Thank you for giving me energy and making it possible for me to set aside time to explore the exciting phenomena described in this thesis. Your support has not only been there while working on this thesis. Unwavering encouragement from my parents has been there from day one.
LIST OF PAPERS

This thesis is mainly based on the following six papers, herein referred to by their Roman numerals:


ix
1. INTRODUCTION

This chapter describes the background, purpose, research questions and structure of the thesis.

1.1 Control and breakthrough

The public sector of today is facing a wide range of challenges. Daglio (2014) argues that the public sector in many countries is approaching the limit of what they are able to achieve with the existing processes and service delivery systems. Albury (2011), Brorström (2015), and Wiehlman (2014) argue that it is not enough to have incremental development but that public sector also needs to explore new products, processes and services in order to meet the challenges. However, the noted importance of balancing incremental development with exploration of new products, processes and services is far from new within the quality movement. For instance, the managerial breakthrough approach, as proposed by Juran (1964) argues that all managerial activities should be directed either at a) control with boundaries within which the work can be improved, i.e. prevention of big changes, or b) breaking through into new levels of performance, i.e. what Juran calls breakthrough. Juran believed that there is a rhythm in which these two states work together and that it is in the balance between them that quality occurs.

Juran’s ideas have also been followed up by scholars showing that teams successful in multi-tasking explorative development with incremental development have the highest levels of effectiveness (Gilson et al., 2005). Likewise, March (1991) and Gibson & Birkinshaw (2004) state that one key factor affecting an organization’s long-term success is its ability to exploit its current capabilities while simultaneously exploring fundamentally new areas. March (1991) argues that organizations, which failed to deal with these two perspectives, risked being left behind and being ousted. March uses the terms “exploration” and “exploitation” to describe these two basic perspectives.

Also other researchers have noticed that simultaneous management of exploration and exploitation has a positive effect on organizational excellence. This is seen, for example, in Geerts et al.’s (2010) study of more than 500 firms over a four-year period. Other researchers have identified the need for a trade off between the two perspectives (see e.g. Duncan, 1976; Tushman & O’Reilly, 1996). Gibson & Birkinshaw (2004) argue that achieving balance between these two perspectives has been a crucial factor in ensuring high quality and sustainability. See Figure 1.1.
A good balance between exploration and exploitation contributes to high quality.

However, earlier research shows that there is usually a striking overemphasis on continuous improvement and stepwise refinement at the expense of working with larger pervasive developmental stages. Uotila et al. (2008), for example, estimated that 80% of the firms in their sample underemphasized pervasive developmental stages and overemphasized the work with continuous improvement and stepwise refinement. Consequently, Madjar et al. (2011) and Zhang & Bartol (2010) argue that it has become necessary to find new forms for employees to be more flexible and innovative in how they perform their work.

The capability to balance and simultaneously cope with exploration and exploitation has become known as “organizational ambidexterity”.

March (1991) notes also a conflict between the two phenomena exploration and exploitation, and other scholars argue that organizational ambidexterity is tricky to achieve in practice (e.g. Ng, 2009; Goh, 2002; Cole, 2002; Clifford, 2001). In the same vein Vadera et al. (2013) explain that, on one hand, it is important that employees follow corporate norms for smooth functioning and survival of the organization, however strictly following all norms may inhibit employees from finding innovative ways of solving workplace problems. Several other researchers have also regarded the balance between exploration and exploitation as conflictual (e.g. Auh & Menguc, 2005; Smith & Tushman, 2005; Sidhu et al., 2007). The fact that previous research indicates a complex and ambiguous relation, raising questions as how to optimally integrate or balance these two organizationally, operationally and culturally. Nevertheless, despite the previous research conducted on the phenomenon of organizational ambidexterity, Simsek (2009,) concludes that “organizational ambidexterity remains an undertheorized, under-conceptualized, and, therefore, poorly understood
phenomenon (p. 598). Perhaps Gupta et al. (2006) put it best when they note that, “although near consensus exists on the need for balance [of exploitation and exploration], there is considerably less clarity on how this balance can be achieved” (p. 598).

Furthermore, Smith & Umans (2015) argue that the focus of the research that actually has been implemented in the field of organizational ambidexterity has primarily been on the private sector. Smith and Umans (Ibid) even comment that it is difficult to find any studies at all exploring the concept of ambidexterity in public sector organizations. This is clearly problematic as research also has shown and argued that the private and public sectors have different conditions to achieve organizational ambidexterity (e.g. Cunningham & Kempling 2009; Lee et al. 2012; Howells, 2000; Hsieh et al., 2002; Lagrosen & Lagrosen, 2003; Hipp & Grupp, 2005; Nählinder, 2005). Stentoft (2015) generally notes “…they are so different that it is problematic to transfer modern management tools from the private sector to the public sector without further reflection” (p.14).

However, some research has been carried out on the public sector’s capacity to work with exploration and exploitation. Wihlman (2014) argues that the public sector seems to have a culture and structure for exploitation but lacks the culture and structures for exploration. This conclusion is also supported by research on innovation, stating that the public sector seems to have difficulties in coping with innovation in general (Aagaard 2011; Stacey & Griffin 2006; Hartley 2005). In both research literature and the empirically examined organizations the concept of innovation is commonly used and is often used instead of, or synonymously with, the concept of exploration. This implies that the word “innovation” is central in this thesis. Therefore, in order to develop the conditions for organisational ambidexterity in the public sector, it is important to increase the knowledge of how the public sector understands innovation, the relationship between current quality practice and innovation, and how organizational ambidexterity can be developed in the public sector.
1.2 Purpose and research questions

The purpose of this thesis is to develop existing knowledge of how organisational ambidexterity and innovation can be understood and developed as an approach to increasing customer value in the context of the public sector.

The following research questions have been formulated:

RQ 1. What is the current understanding of innovation within Swedish governmental agencies?
RQ 2. How is the relationship between current quality practice and innovation perceived in Swedish governmental agencies?
RQ 3. How can organizational ambidexterity be managed in the public sector?

1.3 Structure of the thesis

The research is presented in six chapters that highlight the following perspectives, respectively:

Chapter 1 The background to and the purpose of this thesis.
Chapter 2 The theoretical framework.
Chapter 3 The methodological choices that have been made in the research process.
Chapter 4 A summary of the appended papers that this thesis is based on. A list of these is provided on Page ix.
Chapter 5 A summary of the conclusions that have been drawn.
Chapter 6 A discussion and suggestions for future work.

The thesis closes with references followed by appended papers.
2. THEORETICAL FRAMEWORK

This chapter provides a theoretical framework to the research presented in this thesis. The chapter describes how the quality movement relates to the phenomenon of innovation in general and in the public sector in particular. The chapter also describes characteristics of the public sector and former research on enabling factors for organizational ambidexterity therein.

As illustrated in Figure 2.1, the chapter is structured so it first describes the development of the quality movement. The first section describes core values and the quality movement’s relation to customer value and provides some critical perspectives. It is followed by a second section describing theories about quality management as a matter of control and breakthrough. This section describes theories about organizational ambidexterity, deviation and innovation. The third section describes theories about the public sector. It deals with current quality practice and ability to innovate. Finally, the fourth section highlights existing theories about enabling factors for ambidexterity.

![Figure 2.1](image-url)

Figure 2.1 Illustration of the theoretical framework and the order in which the different theoretical perspectives in this chapter are described.
2.1 The Quality Movement

The Quality Movement can refer to many things. However, one of its most prominent figures, Taylor (1911), identified some basic ideas, which are still fundamental to the quality movement. Taylor’s ideas are based on the foundation that quality management should be based on continuous improvements and the method to achieve this is to learn from what you are doing in order to develop it further. Taylor also emphasized another important issue, namely the importance of quality work involving those who are close to the production itself, whether it involves manufacturing or services. Despite this, other researchers have described the quality movement’s first phase oriented towards Quality Inspection, as elaborated below.

2.1.1 The development of Quality Management

Garvin (1988) explains the emergence of the quality movement by pinpointing certain “quality eras”. These are quality inspection, quality control, quality assurance, and quality development. See Figure 2.2.

![Figure 2.2](image)

Figure 2.2 Illustration of the concepts of Quality inspection, Quality control, Quality assurance and Quality development. The diagram shows one common description of the evolution of Quality Management (after Garvin, 1988 and Bergman & Klefsjö, 2010, p. 97).

These eras have of course been interpreted differently throughout the quality movement’s history. Some interpretations are presented below.
Quality inspection
Dale et al. (1994) describe quality inspection as “an after-the-event screening process with no prevention content other than, perhaps, identification of suppliers, operations, or workers, who are producing non-conforming products or services” (p. 5).

Quality control
Yong & Wilkinson (2002) explain that Shewhart in 1924 developed a statistical chart for the control of product variables. They state that Shewhart’s work marked the beginning of statistical quality control and that his thesis was recognized as giving the quality discipline a scientific footing for the first time.

On the basis of Quality Inspection, the work with Quality Control was during this era developed in terms of sophistication of methods, systems and quality management tools and techniques. The focus was on clearer control of the quality (Dale et al., 1994).

Quality assurance
Yong & Wilkinson (2002) argue that when the quality movement in the 1950s and 60s was moving into the era of quality assurance (QA) industry shifted focus to preventing defects. The QA professional’s tools also expanded beyond the statistical methods of the quality control era. In 1956, Feigenbaum introduced the concept of ‘total quality control’ (TQC) which can be seen as a precursor to what was to become the fourth era. Dale et al. (1994) summarizes the development in this era: “More emphasis is placed on advanced quality planning, improving the design of the product, process and services, improving control over the process and involving and motivating people” (p. 8).

Total Quality Management
In Yong & Wilkinson’s (2002) description of the quality movement’s development, they comment on how the on-going quality era, what they call Total Quality Management (TQM), was developed in Japan and spread west. Miller (1996) who investigates how to define TQM, defines it as “An ongoing process whereby top management takes whatever steps necessary to enable everyone in the organization in the course of performing all duties to establish and achieve standards which meet or exceed the needs and expectations of their customers, both external and internal” (p. 157). Several researchers are in agreement with this definition. One example is Grant et al. (1994) who describe TQM as a system that has a profound ambition to control and motivate employees. Hellsten & Klefsjö (2000) describe TQM as a perspective consisting of values, methodologies and tools. This also
indicates that TQM could be considered as a complex organizational management system. See Figure 2.3.

Yong and Wilkinson (2002) note further that each TQM-era can in turn be divided into different time phases. They suggest that the TQM-era consists of four phases:

1. First phase: ‘Japanization’ and quality circle.
3. Third phase: Catering for the customer.

Clarke (1992) argues that the fourth phase started in the 1980s. Quality management was seen as an opportunity to answer the principal criticisms of the public services. Walsh (1995) argues that the criticism against the public sector in many cases focused on the belief that the public sector was ineffective and remote from those whom it was supposed to serve. In this context, the current quality practice in the public sector emerged.
2.1.2 Core values

Values are generally considered as the basis of Quality Management (Lagrosen, 2006; Ingelsson, 2013; Åslund, 2013). Despite the fact that definitions of the values may vary somewhat between different researchers, the similarities are striking. Bergman & Klefsjö (2010) have chosen to describe the values in a cornerstone model. See Figure 2.4. Lagrosen & Lagrosen (2003) also note that these values accurately describe several other writers’ opinions on core values.

![Figure 2.4](image-url) Illustration of the core values as cornerstones according to Bergman & Klefsjö (2010, p. 38).

Another important perspective within quality movement, which even can be seen as an additional core value, is the importance of having a holistic perspective, i.e. to see the system’s components and how they fit together. The ability to see how the different parts interact with each other was something that Senge (1990) worked with when he introduced the system image with positive and negative feedbacks. Even Deming (1993) believed that systems thinking is a cornerstone for improvement management. Deming (Ibid) also argued that the systems approach was fundamental to the work of a TQM.

2.1.3 Customer value

Another of the quality movement’s proponents, Shewhart, emphasized a fresh idea that has come to characterize the quality movement. He noted that quality is ultimately about satisfying the desires that people have (Shewhart, 1931). The purpose of satisfying people’s desire has more recently been related to as raising customer value. Thereby is it possible to relate organizational ambidexterity to “customer value”. By good management of the balance between exploration and exploitation a sustainable customer value can be maintained over time. See Figure 2.5.
However, the research literature offers various interpretations of what customer value is. Woodruff (1997) argues that even customer-oriented management practice provides only a vague sense of what customer value means. Woodruff (Ibid.) summarizes some definitions of the term:

1. “Value is the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml 1988, p. 14).

2. “Value in business markets [is] the perceived worth in monetary units of the set of economic, technical, service and social benefits received by a customer firm in exchange for the price paid for a product, taking into consideration the available suppliers’ offerings and prices” (Anderson et al., 1993, p. 5).

3. “Buyers’ perceptions of value represent a trade-off between the quality or benefits they perceive in the product relative to the sacrifice they perceive by paying the price” (Monroe 1990, p. 46).

4. “Customer value is market-perceived quality adjusted for the relative price of your product” (Gale 1994, p. xiv).

5. “By customer value, we mean the emotional bond established between a customer and a producer after the customer has used a salient product or service produced by that supplier and found the product to provide an added value” (Butz & Goodstein 1996, p. 63).
Van Nasution et al. (2011) argue that customer value can simply be conceptualized as a comparison between the weights of “get” attributes with “give” attributes. This is aligned with Mele (2007) who notes that it is generally common that authors have agreed that value resides in the balance between the functional solution acquired by the customer and that customer’s sacrifice in acquiring the solution. Their analysis is also consistent with several definitions above. The fact that several researchers arrive at that description of value is something that Van Nasution (2011) also points out. He argues that the majority of past studies on perceived value have focused on the definition that value is what the consumer gets for what they give up. Assuming this, one can then extend the analysis of what sacrifice means. Sacrifices have been given various interpretations to include total costs or other broader dimensions. Van Nasution (Ibid.) discloses that perceived sacrifice includes both tangible and intangible aspects and that it is a trade-off between total perceived benefits and total perceived sacrifices.

Another key aspect that can be seen as part of the definition of value for the customer is that the value is something perceived by customers rather than being objectively determined by the one that provides the customer with a service or product.

This resulted in Woodruff (1997) defining customer value as:

“A customer-perceived preference for and evaluation of those products’ attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations” (p. 142).

Woodruff (Ibid.) notes that this definition adopts a customer perspective on value derived from empirical research into how customers think about value. Woodruff’s (Ibid.) definition of customer value is the one used in this thesis.

### 2.1.4 Exploration, exploitation and ambidexterity

There seems to be a relatively large consensus on what exploration and exploitation represent. Exploration is created by variety, experimentation, and a curiosity for testing new ideas. It’s about generating novel recombination of knowledge (e.g. Taylor & Greve, 2006; Wadhwa & Kotha, 2006; Simsek, 2009). Exploration is often synonymous with innovation. Exploitation, on the other hand, is created by refinement, efficiency, convergent thinking, and continuous improvement of products (e.g. March, 1991; Simsek, 2009). However, Gupta et
al. (2006) also point out that the definition of exploitation is less clear than of exploration.

Figure 2.6 clearly shows the obvious contradictions between exploitation and exploration and thereby also the tricky challenge of accomplishing organizational ambidexterity in practice.

### Explore

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<td>Radical innovation</td>
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<td>Risk taking</td>
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<tr>
<td>Debate and question the present</td>
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<tr>
<td>Double-loop learning</td>
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<td>Increase deviation from existing standard and norm</td>
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### Exploit

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<td>Stepwise refinement</td>
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<td>Risk reduction</td>
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<tr>
<td>Accept and preserve the present</td>
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<tr>
<td>Single-loop learning</td>
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<tr>
<td>Reduce deviations from existing standard and norm</td>
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Figure 2.6 The two types of logic related to organizational ambidexterity, in terms of exploitation and exploration. (Inspired by Magnusson, 2003, p.45).

As already mentioned, the ability of an organization to handle both exploration and exploitation is referred to as organizational ambidexterity. Tushman & O’Reilly (1996) define an ambidextrous organization as one that is “able to implement both incremental and revolutionary changes” (p. 8), i.e. able to be both exploitative and exploratory. Smith & Tushman (2005) describe ambidextrous organizations as those that “can both explore and exploit” (p. 524) and Lubatkin et al. (2006) define them as firms “capable of exploiting existing competencies as well as exploring new opportunities with equal dexterity” (p. 2). Similarly, Aagard (2011) concludes “Most researchers define ambidexterity as the simultaneous pursuit of exploration and exploitation” (p. 5).
2.1.5 Criticism of the Quality Movement

One of the fundamental problems with the quality movement is the lack of consensus on definitions and terminology. The lack of a clear definition has been a problem from the early days of the movement, and remains so today (e.g. Dean & Bowen 1994; Giroux & Landry, 1998; Dahlgaard-Park, 2011; Steiber & Alänge, 2013). Maybe the problem with the lack of consensus regarding definitions and terminology also contributes to blurring the whole quality movement. Barouch & Kleinhans (2014) argue that one of the strongest criticisms against it is the fact that it lacks a fundamental theory. This implies that Quality and TQM mean different things to different people. Hackman & Wageman (1995) describes the problem as the lack of clarity as to the conceptual core of the quality movement. They mean that it is possible to interpret TQM as products, services or processes with a particular characteristic or a relationship to what customers had been promised or a specific management system. Barouch & Kleinhans (2014) further point out in their research that some researchers see it as problematic that a conflicting relationship between quality practice and innovation management tends to occur, a phenomenon Juran (1964) drew attention to.

Ramis-Pujol (2003) also shows that quality programs appear to be more related to continuous improvement and stepwise refinement than pervasive developmental stages. His argument is consistent with others, such as Williams et al. (2006), who state that a problem for the quality movement is the difficulties it has to adapt to the agile social and organizational structures that characterize today’s society. Apart from them, there are currently several researchers who argue that the quality movement underestimates the need for drastic change in order to achieve quality. Small incremental adjustments are not enough: many processes and products need to take more innovative steps (e.g. Cole, 2002; Sing & Smith, 2006). It is a challenge for the quality movement to find ways to both improve the products and services already offered to the customer and develop new products and services. Barouch & Kleinhans (2014) note that quality management in particular increases stability and routines but reduces opportunities regarding new technologies and new markets and that there consequently is a need for further work as regards balancing processes for continuous improvement and stepwise refinement with larger pervasive developmental stages. This perspective is amplified by Atkinson & Ezell (2012) who argue that we live in an innovation economy where the development of society is based on its innovative strength.
2.2 Quality Management as a matter of control and breakthrough

Ng & Ang (2011) state that it is often unclear how organizations actually integrate quality management practice. Wilkinson et al. (1997) and Sing & Smith (2006) argue that the quality tools that are used today lead to a systematic measurement and control of the work process, ensuring conformance to performance standards but at the same time risk leading to an overly rationalistic and narrow approach to the task of management, making it too bureaucratic and rigid, and hence stifling personal initiative and creativity. Grabowski & Roberts (1998) argue that quality management should not be so concerned with gradually reducing routine variation but rather with ensuring readiness for and openness towards dealing with new situations as they arise. Likewise, Steiber & Alänge (2013) identify the dilemma for organizations to manage Total Quality Management (TQM) while maintaining an innovative culture. At the same time, we also have several scholars arguing for the synergetic relation between current quality practice and exploration. One may therefore possibly consider that current quality practice and exploration can take three types of relations to each other: conflicting, synergetic or ambiguous. Previous research and theories relating to each of these three types of relationships are elaborated below.

A synergetic relation

Several research results indicate that current quality practice positively reinforces the possibilities to develop both exploration and exploitation in an organization. Flynn et al. (1994) and Baldwin & Johnson (1996) express the opinion that the implementation of a TQM system could foster the explorative process in companies and that elements common in TQM, such as continuous improvement and customer focus also contribute to an enabling environment for exploration. Martinez & Martinez (2008) also find clear evidence that TQM promotes exploration within companies. Byrne et al. (2007) argue that Lean Six Sigma has enabled companies to produce breakthrough innovation that has caused profound improvements in their performance. And it creates an organizational climate in which innovation has become expected. This is in line with Matias & Coelho (2011) and Kim et al. (2012) who state that quality management supports the management of innovation.

Furthermore Moreno-Lyzon et al. (2014) argue that the cultural context created by process management practices applied in a total quality management framework acts as a platform for developing organisational ambidexterity. Steiber & Alänge (2013) also see opportunities to synergetically combine current
quality practice with improved ability to explore by concluding that many of the core elements in the current TQM concept, e.g. importance of a strong culture, employee empowerment, the primary role of visible leaders and a total approach, all contribute to exploration. Similarly, Prajogo & Sohal (2001) conclude that some of the best practices of exploration management could be recognized as TQM elements.

A conflicting relation

In contradiction, other researchers argue that the culture created by TQM and process management practices favour exploitative activities at the expense of explorative activities and is not a good ground for organizational ambidexterity (e.g. Lund Stetler 2015, Cole & Matsumiya 2008). Lilja et al. (2016) conclude that quality movement initiatives might impede firms’ ability to explore. March (1991) argues that the contradiction lies in the idea that investing in the development of existing systems reduces the urge to experiment and develop new systems, whereas investing in experiments and new systems reduces the efficiency and quality of existing ones. Also Williams et al. (2006) argue that TQM discourages exploration. They say that TQM encourages the standardization process and therefore, hinders exploration. The focus on achieving working routines aiming at zero defects can result in a slower development of new products or services, since exploration necessitates that people are motivated to take risks and to tolerate mistakes. This is in line with several other researchers who argue that TQM might hinder exploration (e.g. Tidd & Besant, 2011; Kim & Marbourgne, 1999). Castillo-Rojas et al. (2012) also join the ranks of researchers who see a conflict and conclude that management systems such as ISO 9001 and ISO 14001 might hinder exploration processes.

Prajogo & Sohal (2001) summarize previous research on how the incremental quality management negatively affects exploration. In their research, they look at TQM and its relation to exploration.

They identify and list six perspectives on the negative relationship between TQM and exploration:

1. The customer focus philosophy could easily lead organizations to focus only on incremental improvements in their current products and service activities rather than trying to create novel solutions.

2. TQM could lead organizations to be narrow-minded. Customer focus could lead organizations to be reactive and short term in their focus in terms of serving the current and stated needs of customers.
3. TQM could strategically lead organizations to be imitators or followers rather than innovators or leaders. The pursuit of customer satisfaction can overwhelm other strategic performance indicators such as those concerned with new product success.

4. TQM could hinder creativity due to the enforcement of standards, or formalization.

5. Traditional quality improvement tools usually emphasize analytical, structured and linear thinking, while innovation is more unstructured and non-linear (Bookman, 1994). Incremental improvements tend to emphasize starting with factual information (left-brain thinking), whilst breakthrough and radical thinking both start with intuitive insights (right-brain thinking).

6. From a strategic point of view, TQM focuses on cost efficiency that could limit the capacity and opportunity for innovation.


An ambiguous relation
In recent years, there have been several research reports pointing out both the positive and negative correlations between the application of current quality practices and the ability to explore within an organization. Those reports try to clarify specific components within current quality practice that impact positively and negatively on an organization’s ability to explore. Hoerl & Gardner (2010) conclude, for example, that the organization must combine traditional quality tools such as Lean Six Sigma with other approaches that are better suited for breakthrough exploration. They believe that organizations should develop holistic improvement approaches that are not based on one methodology. They point out that innovation consists of four process steps: idea generation, conceptual design, product development and product launch. They further argue that current quality practice is helpful in the later stages of the innovation process. Also Johnstone et al. (2010) notice that there is an inherent conflict but they state that if the conflict is handled correctly, quality management tools can positively contribute to innovation.

These various findings can possibly be attributed to what Jinhui Wu et al. (2011) describe, namely the organization’s context is crucial for the results of the different organizations’ choice of how to work to manage the balance between exploration and exploitation.
2.2.1 Perspectives on deviation

(Johnstone et al., 2010) explain that one of the more prominent contradictions between exploration and exploitation is the view on deviation. In order to reach success through exploitation, one must first achieve the interim target of low deviation. This argument is based on the idea that high quality is ensured by low variation in processes and products. An idea that has permeated the exploitation management from the early days of the quality-paradigm and even emerges in Shewhart’s (1931) work, as previously argued.

In contrast, however, before reaching success through exploitation, one must first achieve the interim target of high deviation from existing products and processes and in that way generate a wide range of different ideas, different product suggestions, i.e. flexibility and adaptations to different customer segments as argued by e.g., Georgsdottir & Getz (2004), Williams et al. (2006), and Steiber & Alänge (2013). This requires that the organizations concerned actually encourage deviation, and exploit its potential (Galperin, 2003; Spreitzer & Sonenshein, 2003; Warren, 2003).

Likewise (Grabowski & Roberts, 1998) argue that quality management should not be so concerned with gradually reducing routine variation but should rather ensure readiness and openness to deal with new situations as they arise.

Deviation in the service sector is essentially about how individuals behave. We can speak about theories of “deviant behaviour.” These have often been described in the research literature as either constructive or negative deviance (Warren, 2003; Vadera et al., 2013). Common to both conceptualizations is that the concept entails deviation from the norms of a reference group, which could be society, the organization, the department, or the work group. It can be about violating explicit rules or not following unspoken norms. Often this means that the employee must resist the pressure of conformity.

The concept of deviance is often used within Quality Management, referring to some sort of deviation from what is “normal”. The traditional focus on deviance assumes that the deviance is negative and refers to behaviours that involve nonconformity or underconformity to normative expectations. Heckert & Hechert (2002) argue that the traditional perspective puts the focus on behaviours that violate the norms resulting in negative evaluations. They comment that the concept of positive deviance is marginalized in the literature by the focus on negative deviance and the absence of comprehensive conceptions of deviance.
Research on constructive deviance has however increased in recent years and is described in several research papers (e.g. Warren, 2003; Grant & Ashford, 2008, Vadera 2013). In previous research, the concept of constructive deviance is described as behaviours that depart from the norms of the reference group in such a way that the behaviour benefits the reference group or contributes to a higher objective (e.g. Spreitzer & Sonenshein, 2003; Vadera et al., 2013). An example of a definition of constructive deviance is Galperin’s (2003), who defines it as “Voluntary behaviour that violates significant organizational norms and in doing so contributes to the wellbeing of an organization, its members, or both.” (p. 158).

From a quality perspective, the customer should be at the centre in the analysis of whether deviation is constructive or negative. The definition of deviance should be determined based on customer value, i.e. whether the value for the customer increases or decreases as a result of the deviation. The deviation can also be either intentional or unintentional. The definition used in this thesis is therefore:

*Intentional or unintentional behaviour that violates significant organizational norms and in doing so affects the value for the customer.*

2.2.2 Innovation

As stated in the introduction, previous research about exploration is often done through the term “innovation”. Therefore, is it important to study former research on innovation and what previous researchers have formulated about the phenomenon of innovation.

Schumpeter (1934) explains that historically the term innovation has not been used extensively, but the processes that we now regard as innovative were also previously perceived as being important. Juran (1964) described the important personal attitude "to be innovative". He evidently believed that the innovative individual drives change and development and by that contributes to higher quality. Likewise Sood & Tellis (2009) highlight the importance of innovation, claiming that “Innovation is probably one of the most important forces fuelling the growth of new products, sustaining incumbents, transforming industries and promoting the global competitiveness of nations” (p. 3). Therefore, it is not surprising that innovation for many organizations is a priority and a key factor to achieve customer value and for survival (Roger & Martha, 2010). Most of the literature and research supports this view. For instance Kaivo-oja (2011) states that “Today
it is important to understand that innovation is no longer optional, but a necessary activity in every competitive industry or in the service market” (p. 4).

Schumpeter (1934) argued that innovations are based on new combinations, constructed within social networks (Schumpeter 1934 and Dodgson 2011). Schumpeter described the power of new combinations, which is still considered one of the main elements of innovation processes. Schumpeter (1934) also argued that innovation can take different forms.

He came to categorize innovation which includes (p. 66):
1. Product innovation—new or improved products;
2. Production innovation—new methods for turning inputs into outputs;
3. Market innovation—opening and developing new markets;
4. Supply innovation—new sources and methods of supply and
5. Organizational innovation—new ways of organizing business and work.

Innovation as a phenomenon is however a relative concept related to several other concepts. Damanpour & Schneider (2006) state: “Innovation is studied in many disciplines and has been defined from different perspectives” (p. 216). Baregheh et al. (2009) conclude that there are 60 distinct definitions of the concept. The demarcation of what is within the definition of an innovation is difficult. To develop a new service or product can often be considered as either an incremental development of a previous product or an innovation. Ng & Ang (2011) point out that there is an overlap between these two concepts. Baregheh et al. (2009) suggest, on the basis of their research on the innovation concept, that the concept of innovation should consist of a few key components:

A. That it is a multi-stage process. This component is supported by several other scientists who state that the definition of innovation consists of two components: development of good ideas and ideas brought into implementation (e.g. Tidd & Bessant 2011; Wolfe, 1994).

B. That innovation will lead to a positive development.

C. That the innovation transforms ideas into new/improved products, service or processes. That it will improve existing products or develop something new.
Here arises a difficult delimitation concerning what qualifies as an innovation and what rather just qualifies as a development of something that already exists, as illustrated in Figure 2.7. If the definition states that it must be a new product, service or process, it is still a difficult definition due to the fact that even the concept "new" is a relative concept. One may ask the question, for whom the product, service or process must be new.

Nählinder (2005) states that we must distinguish between what is customization, i.e. to adopt a product for a customer resulting in a unique product for a customer, and what can be seen as an innovation. Each customization is not an innovation. The exact definition of the concept of innovation can possibly only be made in the unique organizational context. Lynn (1997) argues along the same lines and states that: "Innovation must not simply be another name for change, or for improvement, or even for doing something new lest almost anything qualifies as innovation. Innovation is properly defined as an original, disruptive, and fundamental transformation of an organization’s core tasks" (p. 154).

Figure 2.7  No exact definition of what counts as an innovation exists.

In the same vein, Brown & Osborn (2012) argue that it is important to differentiate between incremental, i.e. continuous change, and innovative change. They believe that innovation is not simply a normative word to connote beneficial change in public policy or services, but is rather a distinctive category of discontinuous change.

From a quality perspective, one can also argue that the customer should be at the centre in the analysis of the concept of innovation. The definition of innovation should be determined based on achieved customer value, i.e. whether the value for the customer is increased by the innovation.

There are not only several definitions of innovation. There are also numerous theories that attempt to describe the process of innovation. Scholars have divided the concept into either multiple or a few phases. Some previous
researchers have divided the process into just two phases (e.g. Somech & Drach-Zahavy, 2013; George, 2007; Wolfe, 1994): the idea generation phase and the implementation phase. The first phase consists of the generation of new ideas and the second of their successful implementation. This is a simplified description, but in many cases, practical and adequate. Moore & Hartley (2008) stress the two phases when they argue that innovation occurs only when new ideas and practices are brought into implementation. In this thesis, the following definition of innovation is used:

“Innovation is the process of transforming and implementing ideas into new products, service or processes, in order to achieve increased customer value.”

One of the latest trends in innovation is that many organizations are moving from “closed” towards open innovation (Huizingh, 2011). Traditionally, innovation processes have taken place in closed systems in organizations and companies. Kaivo-oja (2011) argues that the paradigm of closed innovation is based on the idea that successful innovation requires control in organizations and institutions. “In the closed innovation model organizations must generate their own ideas, and then develop, build, market, distribute and support them on their own” (p. 20). An alternative is the concept of open innovation, i.e. a paradigm that assumes that organizations can and should use external ideas as well as internal ideas in the innovation process (Chesbrough, 2003). Open innovation includes users and customers. Bommert (2010) argues that an increasing number of non-profit organizations are initiating a shift towards an open innovation. They take advantage of a growing number of citizen networks and new types of online intermediaries to enhance public value. The Open Government Initiative, allowing members of the public to contribute ideas and expertise to government is one such approach under development (Lee et al., 2012).

Concerning service innovation, an interesting perspective has in recent years been emphasized by e.g. Kristensson et al. (2014) who suggest that service innovation processes need to be closer to quality management practice than product innovation processes. The argument being that the service innovation process is characterized by being an outside-in process, i.e. starting from the customer and carried inwards while product innovation has traditionally been conducted from inside and out, i.e. innovation created by a research department that under secrecy has created new products.
2.3 The public sector

What is the public sector? The British standard dictionary Encyclopædia Britannica (2016) defines the public sector as: “a portion of the economy composed of all levels of government and government-controlled enterprises. It does not include private companies, voluntary organizations, and households.” The Swedish standard dictionary National Encyclopedia (Engström, 1994,) defines the public sector as “the state, municipalities and county councils’ operations” (p. 395.) The latter definition is the definition that has been used in this thesis, with the complement that even the organizational form “Regions” are included in the concept of public sector.

One can of course ask whether it is at all possible to work with the concept of public sector while it is such a broad definition of various activities. The concept covers activities at state, regional and municipal level. The concept includes activities such as garbage collection, education, healthcare, the police forces, the defence forces and development of new laws. Despite this range, there are common management factors in the public sector. The possibility to work with the public sector as a phenomenon is evidenced by previous scholars who have described and analyzed the phenomenon of the public sector. Among others, some researchers have for many years been working with definition and description of the uniqueness of the public sector in relation to the private sector. Thus, we can see what differences there are between them in order to better understand the context in which this research has been carried out.

The main distinction between public and private organizations seems to be their ownership (Rainey et al., 1976). Shareholders or private individuals own private firms, public agencies are owned collectively by citizens in political communities (Boyne, 2002). Niskanen (1971) argues that public agencies are funded largely by taxation rather than fees paid directly by customers and that political forces, not market forces, control public sector organizations predominantly. Lee et al. (2012) argue that the drivers in the public sector are to increase customer value for the target groups and reduce costs for the taxpayer. There is not an economic incentive for the public sector in the same way as for the private sector. The incentives for action in the public sector lie in service for citizens, not to turn a profit. It creates both different incentive structures and contributes to a different culture than in the private sector. Furthermore, Van Der Wal et al. (2008) state that in recent administrative and organizational literature much attention has been paid to values that guide organizational and managerial behaviour in the public and private sectors. The organization’s fundamental values are one of the most significant management perspectives and constitute therefore an
appropriate angle to describe the differences and similarities between the two sectors. Van Der Wal et al. (Ibid.) conclude that there are many equal core values but that there are some values that differ between them. See Figure 2.8. It is notable that the value of innovativeness is highlighted as a distinguishing value of the private sector in this model.

![Figure 2.8](image)

**Figure 2.8** Value layers with a public and private pole and a common core of shared organizational values (Van Der Wal et al., 2008).

Furthermore, the public sector is to a very high degree controlled by laws and regulations governing what can and cannot be done. Even if the private sector also must stay within the law, its activities are often not controlled in such detail by political decisions, which also lie outside the organization’s mandate to change.

In the public sector, there is also a lot of negotiation and an invisible culture among staff and customers. This fact, identified by Cunningham & Kempling (2009), is another aspect that differentiates the public from the private sector. It means more negotiation in relation to users and employees regarding what tasks must be performed. There are always a large number of users who are concerned with how the business is carried out and developed. Users who make demands have different requirements according to Albury (2011).
But does it matter in which sector research on ambidexterity has been conducted? Cunningham & Kempling (2009) believe that it does because the context for the public sector is different to that of the private sector. Cunningham & Kempling (2009) as well as Lee et al. (2012) conclude that the differences between the two sectors implies that they have different conditions to take into consideration when they strive for organizational ambidexterity.

2.3.1 Current quality practice in the public sector

Lagrosen & Lagrosen (2003) argue that quality management, both as a theoretical concept, as well as a managerial practice, originated in the industrial manufacturing sector. It is only in recent years that interest in quality perspectives has been brought to the service sector. This interest started in the private service sector and has subsequently also been introduced into the public sector where several of the traditional quality practices have been used. Beckett (2000) also argues that many public organizations worldwide have put pressure on all aspects of the public sector to more closely approximate those same aspects as in private industry, in terms of greater productivity, efficiency and better value for money. Beckett (Ibid.) shows that countries such as the US, Britain, Finland and Sweden have brought about a big change in public management by introducing a style of public management, which is to become more market-driven and entrepreneurial. Hsieh et al. (2002) argue that the phenomenon can be called “New Public Management” (NPM) and was developed as a label for solutions with an emphasis on competition, disaggregation, “incentivization”, and a transformation of public management to a more business-like administration. Gruening (2001) asks: From where does NPM come? He answers his own question: “The NPM movement began in the late 1970s and early 1980s. Its first practitioners emerged in the United Kingdom under Prime Minister Margaret Thatcher and in the municipal governments in the U.S. (e.g., Sunnyvale, California) that had suffered most heavily from economic recession and tax revolts. Next, the governments of New Zealand and Australia joined the movement. Their successes put NPM administrative reforms on the agendas of most OECD countries and other nations as well” (p. 2). Gruening (Ibid.) notes that it was only later that academics identified the common characteristics of these reforms and organized them under the label of New Public Management.

When we analyze the current quality practice, Lagrosen (2003) notes that the service sector does not apply as many accepted methodological quality management tools as the manufacturing sector. Possibly, this could be because of what Robinson (1999) and Wisniewski (2001) describe, namely that there is
much disagreement about how to measure service quality and that there are a variety of difficulties in both defining it and measuring it. However, other researchers have noticed that TQM in recent years has come to be applied in the public sector. Hsieh et al. (2002) explain that “a variety of the public sector services of many countries, such as health care, education, social services, and government services, have adopted the total quality management (TQM) philosophy and practices to enhance service quality and improve performance” (p. 900). Hsieh et al. (Ibid.) further explain that while some researchers have identified successful cases that support the theory that TQM is enhancing the service quality of public sector services, Hsieh et al.’s research shows that many researchers have concluded that TQM is ill-suited to the public sector. This is because of a number of different factors. For example, the nature of TQM itself, the nature of the public sector, the work cultures of the professionals in the public sector, and the problematic concept of the customer in the public sector (Hsieh et al., 2002; Morgan & Murgatroyd, 1994; Swiss, 1992). Lagrosen & Lagrosen (2003) also comment that the use of TQM in the public sector is often difficult. Lagrosen (Ibid.) notes that the effect that the organization had experienced from their quality initiative was not as high in the public service sector as in the manufacturing sector. Lagrosen shows that the general functioning of quality management systems does not work equally well in the public service sector as in the manufacturing sector. Yung & Wilkinson (2002) have in their literature research also noted a difficulty with how public organizations implement quality management: “We have also seen very critical accounts starting to be published with regard to the practice of quality management in the public sector (Kirkpatrick & Martinez-Lucio, 1995; Walsh, 1995). The “success” of such initiatives is often seen as being at the expense of declining levels of service provision, job losses, the intensification of work for public sector staff, the undermining of trade union influence and employment conditions, and increases the level of stress-related illness and ill-health retirements amongst public sector employees. Competitive mechanisms ostensibly designed to improve quality seem to have as much to do with driving down costs as promoting enhanced quality (Pollitt, 1993)” (pp. 116).

### 2.3.2 Innovations in the public sector

Borins (2001) argues that the public sector is often considered to be a far less fertile ground for innovation than the private sector. For instance, the rewards for successful innovation are much smaller and the consequences of unsuccessful innovation are often grave, leading to an adverse impact on recruitment, which results in many innovative individuals turning their back on careers in the public sector.
Theories that describe innovative work in the service sector are often relevant to the public sector as it generally conducts service delivery rather than manufacturing. However, it can be more difficult to recognize development and innovations in the service sector compared to the manufacturing sector because there are fewer formal economic funds set aside for research and development. Kanerva et al. (2006) suggest that paradoxically more people can actually be involved in research, development and innovation in the service sector than in manufacturing firms. This situation is recognized in Høyrup’s (2010) research about employee-driven innovation, where employees working with service delivery are also involved in innovation activities. Tidd & Bessant (2011) are in agreement with that idea and explain that a characteristic of innovation processes in the service sector is that they are often part of the normal working pattern rather than an “off-line” activity. Cristina et al. (2010) take the perspective one step closer to the customers and argue that, unlike the manufacturing sector, innovation management in service-producing organizations is often focused on end-user driven innovation.

Ettile & Rosenthal (2011) comment that innovation has arrived relatively recently in the service sector and Nählinder (2007) argues that research on innovation in the service sector is quite limited and even more limited in the public sector. This in contrast to the existence of an extensive body of research literature covering innovation in manufacturing industry.

However, Albury (2011) identified that there are powerful forces now creating the conditions for increased work with innovative development in the public sector, as illustrated in Figure 2.9. Albury (Ibid.) argues that: “We are in the middle of a ‘perfect storm’ around public services to which radical innovation provides a form of solution” (p. 227).
We can further see that Moore & Hartley (2008) clarify the relation between innovation and the quality management in the specific context of the public sector with the following formulation: “Innovation is seen as a key means to go beyond the quality improvement approaches of the 1980s and 1990s into a step change in the overall efficiency, effectiveness and responsiveness of government and public service organizations” (p. 4).

As noted above, public administration has in recent years been characterized by New Public Management (NPM). One list of common attributes of NPM is presented in Table 2.1.
It can be noted that the above table does include some characteristics contributing to innovation. Despite this, several researchers conclude that NPM is not to any great extent focused on innovation as a key characteristic in the current management practice in the public sector. Most researchers seem today to be in agreement that there is a need to develop public management in order to increase the ambidexterity in the public sector, and that there is a particular need for a greater ability to manage exploration (e.g. Albury, 2011; More & Hartley, 2008; Brown & Osborne, 2012).

In Sweden, much in line with Moore & Hartley’s (2008) thoughts, the Swedish Government has increasingly emphasized the importance of the public sector working more innovatively. Investigations about the importance of innovation in the public sector have been carried out and calls for increased innovativeness have been included in the budget proposals (Swedish Government, 2009; Swedish Government, 2010; Swedish Government, 2011). However, there are a relatively limited number of scientific studies over how these requests have been received.
2.4 Enabling factors for ambidexterity in public sector

As described in chapter 2.2, some previous scholars have identified factors in the quality movement forming contributing factors for explorative activities which in turn can contribute to better balance between exploration and exploitation. However, Smith and Umans (2015) argue that it is difficult to find studies that specifically explore the concept of ambidexterity in public sector organizations.

Although organizational ambidexterity in the public sector is a poorly explored area, some previous thoughts and arguments concerning what may create favourable conditions for organizational ambidexterity in public sector can be found. Bryson et al. (2008) have compiled a list of what may create favourable conditions for this. The list is not primarily built on empirical studies but consists of nine broad factors:

- Effective relations with oversight authorities (legislative, executive, juridical),
- Responsive autonomy in relation to political oversight and influence,
- A statement of strategic intent that justifies ambidexterity,
- Strong organizational culture, lined to mission,
- Effective strategic leadership,
- Strong planning and decision-making system,
- Ambidextrous organizational architecture,
- Effective relations with partners and suppliers, and
- Effective utilization of technology.

An additional success factor highlighted by Aagard (2011) is:

- Public employees are empowered to have a stronger decision-making authority.

Another aspect that relates to success factors is the ongoing discussion concerning if and when exploration and exploitation should be handled in separate organizational units or integrated in the same organizational unit (e.g. O’Reilly & Tushman, 2013; Raisch et al., 2009; Gupta et al., 2006; Adler et al., 1999). According to O’Reilly & Tushman (2013) some earlier researchers argue that a separation of exploratory and exploitative projects is an enabling factor for organizational ambidexterity. On the other hand, other researchers have seen that it is the integration of the two perspectives that is important for achieving good results, (e.g. O’Reilly & Tushman, 2013; Smith & Tushman, 2005). Hill & Birkinshaw (2014) conclude that temporal separation, (which involves an organization switching back and forth over time between exploration and
exploitation), in recent years has emerged as a not uncommon conclusion as a success factor for a functioning ambidexterity. Aagaard (2011) also argues that mixing the different approaches is the key. However, in sum there seems not to be any conclusive research showing that one would be better than the other. Thus, we still have reason to stick with Raisch et al. (2009, p 687) when they state that “it is still unclear how the tensions between differentiation and integration (of exploration and exploitation) should be managed”.

2.4.1 Focus on innovation as an enabling factor

As described earlier, it seems as if lack of leeway for innovation is a key obstacle for achieving organizational ambidexterity. Thereby, enabling factors for innovation can be expected to be potentially enabling factors for organizational ambidexterity. It is possible to identify a number of different descriptions of enablers for the overall phenomenon of innovation. However, the different perspectives and descriptions of these enablers follow no common structure. They are described from different angles and do partly overlap each other. It is therefore difficult to make a coherent and distinct compilation of perspectives identified by different researchers. However, one possible compilation and description of previous research on enablers for innovation in public management is the following 16 enabling factors. It can be questioned whether the last two, to a far larger extent than the other 14, are enabling factors or not.

- Several scholars agree that a committed management which encourages staff to experiment and innovate and supports their attempts is very important for the innovation process. This goes for both top and middle managers’ ability to demonstrate support for innovation and develop incentives for individuals and organisations to be innovative (Birken et al. 2015; Denti 2013; Albury 2011; Choi & Chang 2009; Damanpur 2006; Mulgan & Albury 2003; Chatterjee et al. 2002; Borins 2001 and Klein et al. 1990).

- Another enabler, related to the leadership, is a permissive organizational culture. There is a need for leaders who tolerate failure and who can create an organization that learns from failure and from mistakes. This reasoning is consistent with the development of a risk management including a positive engagement with risk. This enabler is also about developing a more positive view on deviation (Steiber & Alänge 2013; Denti 2013; Brown & Osborn 2012; Borins 2001; Albury 2011; Williams et al. 2006 and Georgsdottir & Getz 2004).
• Further, we can see that scholars have identified that innovation effectiveness seems to be positively related to a shared vision among those involved in innovation processes (Pearce & Ensley 2004).

• Paying attention to the needs and expectations of users and frontline staff is described by scholars as another enabler for innovation in public management (Mulgan & Albury 2003 and Høyerups 2010). This perspective is aligned with Greenhalgh et al. (2008) and argues that the innovation will be more easily adopted and implemented when the users perceive the benefits of the innovation.

• It is also important that the public organization promotes formal creativity techniques to generate innovative ideas (Mulgan & Albury 2003). One example could be to institute innovation competitions (Bason 2010).

• Another enabler is to develop a structure to support further development of innovations. These can be incubators, labs, innovation intermediaries etc. (Frenkel et al. 2008 and Albury 2011). Leminen et al. (2012) have expressed similar opinions and argue that an effective approach to support further development of innovations would be to set up organizational structures, such as living labs as open innovation networks.

• Internal and external networking processes are also key factors for innovation. This includes the need to form guiding coalitions to assist a change process in concerned organisations (Cunningham & Kempling 2009).

• It is also important to create structures in order to overcome the extremely common short-term delivery pressure (Mulgan & Albury 2003).

• Innovation can be facilitated if the organization has the time to try out the innovation. The more opportunities that those who will use the innovation can have to try it out, the more efficient the implementation will be (Pienning 2011; Zuboff 1988 and Choi & Chang 2009).

• It seems also to be important that there is organisational flexibility and leeway for experimentation with the innovation. If a potential adopter can adapt or modify the innovation to suit his or her own needs, it will be more easily adopted (Broström 2015; Denti 2013 and Greenhalgh et al. 2008).
• Design-led processes are identified as enablers for innovation in public administration. Scholars argue that a valuable toolkit can be found in the field of design methods (Bason 2010 and Bessant & Maher 2009).

• Furthermore, knowledge support to those who will use the innovation is important. If, for example, new technology is supplied with a support system, i.e. training and a helpdesk, it will be more easily assimilated. The other side of the same coin is that lack of capacity development in relation to the innovation can be an obstacle for moving the innovation forward (Choi & Chang 2009; Greenhalgh et al. 2008 and Wolfe 1994).

• Scholars also argue that resources are critical for a successful innovation process. Innovation requires both financial and human resources (Damanpour et al. 2006; Klein et al. 2001 and Kumar 2002).

• Brorström (2015), Birken et al. (2015) and Piening (2011) have identified a major underlying cause of the difficulty for the public sector to manage innovation. They have concluded that a basic difficulty in innovation processes is the difficulty in moving on from idea generation to implementation. The innovation process often stops after idea generation. This problem has also been identified by Klein & Sorra (1996), who identified implementation failure as the cause of many administrations’ inability to achieve the intended benefits of radical innovation development. On the whole, this is problematic as the radical innovative development processes can only be considered as complete when a new product, service or process has been implemented (e.g. Knight 1967 and Damanpour et al. 2006), and only then can exploration balance the incremental development and ambidexterity be achieved.

• Another aspect that relates to enabling innovation processes is if and when innovation should be handled in a separate organizational unit or be integrated in the operation organizational unit (O’Reilly & Tushman, 2013; Raisch et al., 2009; Gupta et al. 2006 and Adler et al., 1999). Damanpour et al. (2006) argue that it is important to separate innovation processes from those for operations. On the other hand, other researchers have seen that it is the integration of innovation within the operational organizational unit that is important for achieving good results (O’Reilly & Tushman, 2013 and Smith & Tushman, 2005). Aagaard (2011) argues that mixing the different approaches is the key. However, in sum there does not seem to be any conclusive research showing that one approach would be better than the
other (Raisch 2009).

- Maintaining a diversity of staff is also described as a key enabler for innovation (Mulgan & Albury 2003). However, this is a factor that is questioned. Østergaard et al. (2012) and Bassett-Jones (2005) argue that it is doubtful whether this is really an enabler or not.

The importance of integrated learning

One can also think in terms of integrating learning results in development of innovation processes. A tool from the quality movement can be useful. One cyclic development process (PDSA) can be used as an important method for creating a learning process where experiences are used to develop a sustainable work with innovation. Dahlggaard-Park & Dahlgaard (2010) formulate the process as: “By integrating learning results into the strategic feed-forward loop, it is assured that learning moves from fads to fact and improved sustainable innovation” (p. 156). Working with the PDSA cycle creates good conditions for basing decisions on facts.

Another researcher working in this area, Dervitsiotis (2010) argues that increased customer satisfaction is an important indicator when evaluating innovativeness. This should be combined with system variables that determine an organization’s innovation capability. Dervitsiotis (Ibid.) argues that this requires periodic assessment not only of innovation outputs, i.e. new products, services or business models, but also assessment of the innovation process itself. Something that is in line with Dahlggaard-Park & Dahlgaard (2010) who argue that evaluation should be made in relation to the innovativity itself. It is important to not only look at the innovation output but also look at the organizational capacity to innovate. They explain that we cannot only look at financial metrics or to what extent the innovation gives increased customer value.

However, Kanerva et al. (2006) noticed that earlier research has shown that the existing theories about measuring innovations are often developed for the manufacturing sector. Hipp & Grupp (2005) even conclude that: “new indicators are needed to develop both an overview and more detailed insight into the innovation activities of the service sector” (p. 526). This is in line with the Hipp & Grupp (Ibid.) as well as Lee et al. (2012) who also argue that incitements for innovation differ a lot between the private and public sectors and that it is therefore important to clarify the system for measuring and evaluating innovation in the public sector.
3. RESEARCH DESIGN

This chapter describes the research approach, methods, cases, and data collecting techniques and concludes with considerations concerning validity and reliability.

3.1 Overview of the research process

The research process has constantly been in progress from 2012 to 2017, resulting in this thesis as seen in Figure 3.1. This thesis is based on six papers and a “Cover”. The research process started at the end of 2011 when the author began searching for and exploring relevant theory. The research was intensified from 2012. The three research questions were identified during the first half of 2012. At the same time the process of designing and conducting empirical studies was started.

![Diagram of the research process]

Figure 3.1 Overview of the research process.

The first presented paper (Paper III) was based on empirical material collected during the second quarter of 2012 and was published as a conference paper presented in September 2012 at the 15th QMOD Conference in Poznan, Poland. The second presented paper (Paper II) was based on empirical data collected during 2012 and 2013 and was published in the journal Total Quality Management and Business Excellence. The third presented paper (Paper I) was based on empirical data collected during 2012 and 2013 and was published in the International Journal of Quality and Service Science.
It turned out that the data collection for Paper III was carried out faster than for Papers I and II. This is probably because the empirical material was collected from one organization in contrast to the collected data for Papers I and II which were collected from two, respectively three, organizational units. It was also a faster process to get the paper accepted for the QMOD conference than getting the paper accepted for publication in the peer-reviewed scientific journals resulting in Paper III being published before Papers I and II.

During the research process, the third research question was refined and reformulated to better address relevant knowledge. The third research question was thus reformulated in that the question was lifted from a specific focus to a broader perspective. This to allow a broader response to the basic how-question. Until 2014 the third research question was "How could the ability to innovate in the Swedish public sector be improved through quality tools?" From 2015, the question was "How can organizational ambidexterity be developed in the Public Sector?" The previous question fit as a partial perspective within the new question.

As the research question was reformulated, paper IV was written as a concept paper sketching ideas on how the public sector can work to integrate quality and innovation management in practice by ambidextrous deviation management. The paper was published as a conference paper presented in September 2014 at the 17th QMOD Conference in Prague, Czechia.

To obtain a broader empirical material for addressing the third research question, two empirical studies were thereafter carried out during 2015 and generated data for Paper V and VI. These were written during 2015 and 2016. Paper V is published in International Journal of Quality and Service Sciences and paper VI is submitted to the same journal. Finally, the “Cover”, was written from 2013 and through the research until 2017. This means that research question number one is addressed in Paper I, question two in Paper II, and question three in Paper III, IV, V and VI. Figure 3.2 illustrates the relation between the research questions, studied objects and research papers.
The research carried out in order to address RQ1 was dealt with in a case study comprising of three embedded units. The units were the Swedish International Development Cooperation Agency (Sida), the Ministry for Foreign Affairs (MFA), and the Swedish Government (Gov.). The second research question was addressed through two case studies at Sida and Lantmäteriet (Swedish Land Survey), the government agency that maps the country, demarcates boundaries and guarantees secure ownership of Sweden’s real property. The third research question was addressed with four papers. One concept paper and three papers developed with empirical material gained through a case study at Sida, a multiple study at the organizations responsible for health care and regional development in the regions of Halland and Jämtland Härjedalen, and finally through an empirical study at municipal level in Kisumu in Kenya, Manchester.
in the United Kingdom, Los Angeles and Santa Monica in USA and Auckland in New Zealand.

3.2 Method

“Methods cannot be always “right” or “wrong”, only more or less appropriate” (Silverman 2013, p. 6). The research questions of this thesis aim to build knowledge about organizational ambidexterity in public organizations. The research is furthermore focused on “what” and “how” questions. The research questions are hence of such a nature that a qualitative research approach has been chosen as preferable.

3.2.1 Scientific perspective

The sources of data in the empirical material are to a large extent individuals. Individuals acting in a structure, and this structure shapes the individuals (Haideger 1996; Gadamer 2008). Understanding the researched perspectives in depth requires that one gets to know both the individuals and the structure, and simultaneously relates individuals’ stories to each other, the context and to existing theory. The reasoning is also in line with a constructivist perspective, i.e. that knowledge is generated from interaction between experiences and ideas (Piaget 1995). To achieve this, one has to process the information during, rather than just after, the research process. The processing follows also a hermeneutic development, as seen in Figure 3.3, in the sense that gained knowledge has opened up opportunities for further deepening the research perspectives, formulating new questions and gaining new understanding of theories and a comprehensive understanding of the researched phenomenon. Knowledge is applied to the whole. The knowledge becomes contextualized and specific knowledge is added. The new knowledge is integrated with the overall picture and new understanding is created. The research behind this thesis is thus inspired by the hermeneutical tradition.

Figure 3.3 The hermeneutic circle, where the understanding is built by moving from the whole to the parts back to the whole, etc. (Inspired by Haideger, 1996 and Gadamer, 2008).
Furthermore, the research behind this thesis is descriptive and the method is chiselled from a phenomenological idea. The phenomenology is based on Edmund Husserl's ideas (Koch, 1996; Scruton, 1995) and is essentially the study of individuals’ experience of the situation around that individual (Van Manen, 1997). Laverty (2008) writes “Husserl saw this method as a way of reaching true meaning through penetrating deeper and deeper into reality” (p. 23). As Laverty (Ibid.) expresses it, this means that questions to respondents, such as "what is your experience" are important in this research tradition.

Laverty (Ibid.) states that the hermeneutics of Heidegger and Gadamer and the phenomenology of Husserl share some similar components. Each philosopher sought to uncover the human experience as it is lived. The research community therefore writes about a hermeneutic phenomenological research tradition. It is in this hermeneutic phenomenological tradition the research behind this thesis is done.

Research can be conducted from a deductive or an inductive perspective. The deductive perspective is based on theories and uses these to move towards the empirical material in the research process. The deductive approach is hence about testing theories using the empirical material. The inductive approach is, on the other hand, in principle the opposite. The research then starts with the empirical material and aims to build theories based upon it.

However, Svennevig (2001) argues that “practical scientific programs cannot be based on either pure deduction or pure induction. Central to any scientific process is the inferential step from some initial puzzling fact to some theoretical hypothesis which can explain it. This inferential process is called abduction by the pragmatist philosopher Charles S. Peirce” (p.1). See Pierce (1955). The different processes are illustrated in Figure 3.4.
The research forming the basis for this thesis has taken an abductive perspective aligned with the hermeneutic principle of interaction between greater overall understanding and detailed understanding as well as the phenomenological method signifying that the researched phenomenon is understood through the individuals’ experience of the situation. In sum, the research behind this thesis is carried out from a hermeneutic phenomenological and abductive approach.

### 3.2.2 Unit of analysis

The analytical focus in the research behind this thesis is on the management of public organization. Thus, the unit of analysis is the Public Sector Management both at national, regional and municipal level.

### 3.2.3 Interviewees

The empirical material in the research behind this thesis consists of documents and interviews conducted with management, staff and some politicians from the selected organizations involved in processes aiming at developing organizational ambidexterity. In those papers the selection of respondents was made based on the presumption that the interviewee would possess information that could contribute insights that meet the research questions. The selection of interviewees has thus been made through a strategic selection.

**Go to Gemba**

Those interviewed have in paper V and VI at various levels been responsible for different initiatives aimed at driving development processes. The selection of respondents has been based on the idea that knowledge development should be based on knowledge among those who work daily with these issues. This is in
line with the quality management principle of “go to gemba”, where gemba stands for “the real place” (e.g. Dombrowski & Mielke, 2013). It refers to the actual service operations, service delivery, or rather the place of value-adding.

How the interviews were conducted
The interviews were conducted through semi-structured interview methodology. The interviews were held on the basis of a structure with basic questions reflecting the research questions. This was done in order to get respondents to understand the fundamental questions the interviewer needed to get answered. Based on these basic questions, the interviewees had the opportunity to steer the conversation in such a way that aspects which they considered to be important were highlighted. The interviews were characterized by flexibility from the interviewer. The order of the questions varied depending on how the interviews developed and additional questions were used in order to explore the research questions and purpose. The interview methodology has been based on what Holme & Solvang (2010) formulate about the qualitative method’s assumptions: “In qualitative research, we must be able to alter the formation during the implementation of the survey. This flexibility applies to two things. Firstly, in relation to the experiences we have during the investigation and information gathering phase. If we during the investigation find that some issues have been forgotten or formulated wrongly, we correct for this. Second, the organization of questions has to be flexible in relation to the way in which we approach the various survey units. This applies both to the issues raised and what order they have. Survey planning is both control from the researcher’s side and of openness to new knowledge and understanding” (p. 80).

The interviews were carried out individually and in groups. The interviews lasted between 45 minutes and two hours. They were carried out by the author and took place mainly at the respondents’ offices. Interviews with personnel who worked at the Swedish embassies in Kenya and Colombia were conducted via telephone. Occasionally interviews were also carried out via e-mail.

In order to get a comprehensive understanding, it is important to understand both the individuals and the structure and at the same time relate individuals’ stories to each other and to existing theory. To achieve this, the information has to be processed during the research. This situation establishes cognitive frameworks for how large a sample can be. For precisely these reasons, Crouch & McKenzie (2006) argue for the use of small size samples in qualitative studies. In practice, a case could consist of a single interview and still be seen as a contribution to research as long as the material is analysed according to existing theories. But more material gives better answers to the research questions.
argument has led to the choice of a limited number of interviews. In addition to
documentation, the empirical material in the different papers is based on
interviews with 13 respondents for Paper I, 18 respondents for Paper II, ten
respondents for Paper III, 24 respondents for paper V and finally 21 respondents
for paper VI. The number is based on an assessment of what is practically
possible to handle and what it takes to get a good picture of the studied
phenomenon, also taking into account the time frame set of external
circumstances.

The respondents’ interpretations and understandings of the key concepts in the
interviews have been important in order get an understanding of the research
questions. Therefore, the respondents themselves have defined the key concepts
such as the current quality practices, innovation and enabling factors for
implementation of innovations.

The spoken interviews were recorded and thereafter transcripted into one single
interview document per interview. In this document, key comments were noted
in relation to the research questions.

3.2.4 Documents
Documents, which are part of the empirical data collection in paper one, two,
and three have been searched and chosen based on the idea of identifying
relevant documents answering the research questions. The documents have
been the empirical materials clarifying the Swedish Government’s standpoints
in relation to innovation and ability to innovate. This was done since it was not
possible to get the Government’s perspectives through interviews with
government representatives.

The prevailing management principles, management standpoints and
organizational culture as well as the social context that exists during data
collection is crucial for research outcomes and the documents have in addition
also created a contextual understanding of the studied phenomena.

Literature review
In Paper III, a systematic literature review of the phenomenon of “innovation
quality” was conducted. The scope was to identify how quality in innovation
currently is “measured”.

This review was conducted using a search strategy based on a scoping search of
electronic databases combined with a pearl-growing search, i.e. starting with the
most relevant articles, and from there developing the research. (Booth et al., 2012).

The pearl-growing search was based on two key articles written by Hipp & Grupp (2005) and by Haner (2002). These two papers were chosen as they seem to be highly relevant and frequently cited on the topics in question. The pearl-growing search was done by following up bibliographies, references, and articles that cited those two papers.

The scoping search was then based on a search in peer-reviewed journals. The specific search terms were: “Innovation Measure”, “Innovation Quality”, “Innovation Evaluation”, “Innovation Quality Measurement” and “Innovation Quality Evaluation”. The scoping search was carried out using the search engines Google Scholars and Primo Central Ex Libris.

3.2.5 Case study
Paper I and II were developed through case studies. This approach is used when the nature of the issues is of a how and why character. Yin (2008) explains that to answer questions such as “how” and “why” a case study can be an appropriate methodology for searching for answers. This research’s “what-question” is relatively close to “how” and when Yin explains where case studies are appropriate is it possible to deduce that he also includes the perspectives we ask for in this research.

Ragin & Becker (1992) raise the question as to what a case is. They explain that cases can be seen as existing units or as theoretical constructions. Different research perspectives can be used dependent on the idea of what a case is. One can problematize the consequences of simplifying the reality when we sum up a complex phenomenon as a case. But on the other hand, to condense a part of the world around us to a case gives us a manageable understanding and supports us and increases our understanding of the world we live in. We have to generalize about complex phenomena to understand the world around us. For example, the concept of red is actually an amalgamation of hundreds of different shades of red, but we call them all red. Similarly, a case may contain hundreds of different descriptions of reality, but we can nonetheless call it a case.
3.2.6 Selection

The research presented in this thesis is based on data collection from multiple sources. In order to understand innovation as an approach to quality in the large field of the “public sector” it has been useful to have different types of sources for data collection.

During the research process conversations took place with a large number of researchers and practitioners not directly involved with the current cases. Information from these sources has created a contextual understanding of the phenomena studied in the research. Becker (1998) explains that it is also important to use sources outside the case in order to get the broader picture about the case. Rothstein (1986) makes an important note in his dissertation about valuable sources in his case study. He notes that in his case study he quite often got better information about the studied organizations from retired staff or people who had left the organisation than people still within the organization.

The conclusion is that the quality of the investigation can be better if a multiple source approach is used.

In order to broaden the empirical data collection and obtain a more complete response to RQ 3 an international study was conducted at municipal level in paper VI. The study was carried out focusing on enabling factors for moving from idea generation to implementation of innovations in the public sector. The study was part of a larger study conducted by the authors of the paper. The larger study focused on innovation platforms for urban development in six different cities around the world. The purpose of the larger study was to understand how the different cities work with cooperation between the public and private sectors in order to achieve sustainable urban development. The selected cities are engaged in various forms of radical innovative initiatives aimed at finding innovative solutions to their urban challenges. The international study was based on interviewees in five municipal administrations in four different cities; Kisumu in Kenya, Manchester in the United Kingdom, Los Angeles and Santa Monica in USA and Auckland in New Zealand.

The empirical data forming the basis for answering the research questions in this thesis have mainly been collected by studying the cases presented below.
**Sida**

The state authority Sida has been included in both studies behind answering RQ 1 and 2. The choice of Sida as a case is due to the fact that it has had a clear mandate from the Swedish government to work innovatively. During the period from 2010 to 2012 the Swedish Government issued new instructions to more than 40 different authorities. One of these instructions contained a clear statement that the authority should work innovatively. This formulation was found in the instructions to Sida (Swedish Government 2010).

Sida administers approximately half of Sweden’s budget for international development cooperation. It works partly from its headquarters in Stockholm and partly from its departments within Swedish embassies in developing countries. These embassy departments are also subordinated to the embassies that in turn are subordinated to the Ministry for Foreign Affairs. Sida (2012) has around 1 000 employees in Stockholm and at Swedish embassies around the world.

Sida has a department that is set up to work with innovation as an operating method: the Department for Partnerships and Innovation. It has staff thematically responsible for the department's development and working with innovation processes. Sida has a department responsible for development of methods and project management. Neither that department, nor the overall management, has anyone responsible for innovation issues (Åkerblom, J., personal communication, 2012).

Sida is also interesting from another perspective. The authority was asked several years ago by the Government to improve the control of the financial resources it handles. After heated conflict between the Government and the Director General, the latter was dismissed in May 2010. The Government wanted to appoint a new management with better skills regarding financial and process control. Therefore the organization has since 2010 been driven by an agenda focusing on higher innovativeness in parallel with another agenda focusing on control and process alignment (Ingelstam, L., personal communication, 2012).

**The Swedish Government**

In relation to RQ 1, the governmental bodies that control Sida have also been included in the study. Sida is under the jurisdiction of The Swedish Ministry for Foreign Affairs who are part of the Swedish Government. All these three levels were part of the case study providing the empirical research material related to RQ 1.
In 2010 the parliamentary elections led to a political shift of government in Sweden. The new government stressed the importance of innovation in many sectors of Swedish society. The government initiated among other things an investigation of quality and innovation in public administration: The Innovation Council.

The Government’s Minister for Development Cooperation was critical of how Sida worked with its mandate from the government and early in the mandate period called attention to the need for Sida to become more open for innovations (Swedish Government, 2011; Ingelstam, L., personal communication, 2012).

**The Ministry for Foreign Affairs**

The Swedish Ministry for Foreign Affairs is responsible for Sweden’s relations with other countries, multilateral organizations and for humanitarian and international trade. Development cooperation is guided by the objective to create conditions for poor people to improve their living conditions. Multilateral organizations and Sida channel Swedish development cooperation. Within the Ministry for Foreign Affairs there is a department responsible for the governance of the international development cooperation; U-STYR (Mattsson, P-O., personal communication, 2012).

**Lantmäteriet**

In order to answer RQ 2 the research was carried out with two separate cases, namely Sida and another authority in Sweden. The additional authority was Lantmäteriet. This was selected because it provides a prime example of a certain group of major authorities (more than 300 employees) and it is dealing with innovation perspectives more actively than most Swedish authorities.

Lantmäteriet maps the country, demarcates boundaries and manages the Swedish land property register. The organization has just under 2000 employees. It comes under the Ministry of Social Affairs, where the Minister for Public Administration and Housing is responsible for Lantmäteriet and is also responsible for the National Council for Innovation and Quality in the Public Sector. Lantmäteriet’s management has shown an interest in the development of an innovation-friendly environment and has an informal working group of top and middle management who discuss innovation in the organization. They have during recent years, among other things, launched “innovation days” where members of staff are encouraged to develop innovative ideas (Eriksson, A., personal communication, February - May 2013).
Region Halland
In order to answer RQ 3 several different studies have been conducted. The organizations Region Halland and Region Jämtland Härjedalen were cases in Research Paper V.

“Region Halland” was established on 1 January 2011. It is a regional organization responsible for health care as well as for regional development and growth. It serves the whole Halland County with over 300 000 inhabitants. The health care section is both economically, and in terms of number of employees, several times larger than the organization's work with regional development. Before the organization was formed in 2011 health care and regional development were dealt with by two separate organizations. These were characterized by different organizational cultures which created different conditions to work with incremental vs. radical innovation in the organization. The new region organization’s senior management stress that employees in the organization have to develop a greater understanding of the systems approach. The management believe that it is important that employees in the organization understand the overall aim and relates their responsibilities and work to the overall aim (Preuss, J., personal communication, June 2015).

Region Jämtland Härjedalen
The geographical area Jämtland Härjedalen is a region of almost 150 000 inhabitants living in Jämtland and Härjedalen County. The organization, Region Jämtland Härjedalen, is responsible for healthcare and regional development in the geographical region. The organization was established on 1 January 2015. In the organization of Region Jämtland Härjedalen, health care also accounts for a far larger part of the organization’s budget and manpower than regional development. Region Jämtland Härjedalen faces big challenges: an aging population, large geographical distances between cities, low levels of investment in research and development and the absence of major companies. The region’s political and civil service leadership is positive towards the cultivation of the organization’s capacity for innovative development of both its own operations and entrepreneurship in the geographic region. Region Jämtland Härjedalen has been actively working with development of the organization to establish a more innovation-friendly culture (Noaksson, E., personal communication, 2014-2015).
The municipality of Kisumu

Kisumu is - compared to western standards – a poor municipality with about half a million inhabitants. It faces a challenge due to a large informal sector and blurred boundaries between town and country. The Kisumu Local Interaction Platform (KLIP) runs a development process involving various stakeholders. KLIP is run as a foundation and functions as a consortium of organisations representing academia, the public and private sectors, and civil society in Kisumu. The overarching purpose of this platform is to promote sustainable development of Kisumu, by jointly attempting to build up, apply in practical ways and disseminate knowledge about sustainable development. KLIP is striving to make Kisumu economically, socially and environmentally sustainable (Agong, S., personal communication, March 2015).

The municipality of Manchester

Politicians and senior civil servants who work with the radical development towards a sustainable Manchester constituted the basis for interviews in Manchester. The definition of a sustainable Manchester often takes the aspect of the economic dimension of sustainability and much of the city’s development is about creating jobs. The city has a little less than half a million inhabitants, with just over 2.5 million inhabitants in the whole metropolitan area (Greater Manchester). Manchester is centrally located in one of Britain’s most densely populated regions, with several major cities very near, including Leeds, Liverpool, Stoke and Sheffield. Within an eighty mile radius there are over 10 million inhabitants. In Manchester several cooperation platforms exist between the private sector and the public sector in order to develop the environment for businesses (Priest, B., personal communication, June 2015).

The municipalities of Los Angeles and Santa Monica

Los Angeles is a rapidly growing city with an increasingly complex infrastructure. The city has a large number of innovation processes on-going to deal with those challenges. The city lacks a comprehensive innovation strategy, but is driven by a culture of innovation that encourages civil servants to act innovatively. Los Angeles has about 4 million inhabitants. (Firestone, H. & Chen, J., personal communication, October 2015). Interviews in Los Angeles were carried out with civil servants involved in urban sustainability issues from a social and environmental sustainability perspective.

Santa Monica is a city in the western part of the Los Angeles metropolitan area. Santa Monica is characterized by many tourist, business and restaurant areas. Santa Monica has about 100,000 inhabitants (Lejeune, S., personal communication, October 2015).
cation, October 2015). In Santa Monica interviews were done with civil servants involved in innovation processes aiming to develop the city's sustainability particularly in climate and environment.

The municipality of Auckland
Auckland is New Zealand’s largest urban region with about 1.4 million inhabitants. The city has recently worked actively to develop the Waterfront area. An area previously dominated by the shipping industry but which in recent years has developed into an area hosting service companies, restaurants, cafes and a residential area. Auckland has a mayor who clearly signalled the need for an open, design-driven and innovative development of the city including the Waterfront (Eriksson A., personal communication, October 2015). Interviews were conducted with city planners and those responsible for the municipal Auckland Design Manual, developed in order to guide the development, construction and urban planning in Auckland.

3.2.7 Development of a model
During the research process, it turned out that a key factor in order to develop organizational ambidexterity seemed to be a dynamic view on deviation as a phenomenon. In order to answer RQ 3, the research was thus developed in relation to what previously had been written about deviation. On the basis of former scholars’ research on deviation and the research behind this thesis, some models and concepts were developed through discussions between authors to Paper IV, i.e. Dr. Lilja, J. and the author of this thesis. The development of the Ambidextrous Deviation Management model was done by juggling ideas and by testing different models on a fictitious reality.

3.3 Choice of analytical strategy
One important issue to deal with is how to compile and make an analysis of data collected from different sources and data collected by different methods in the same research. In this research the compilation topic has been dealt with by first collecting data through different data collection techniques and then in the different papers making an analysis of the different types of data collected through a standardized analysis structure. A thematic analysis inspired by Braun & Clarke (2006), Silverman (2010) and Ritchie et al. (2013) has been used. The thematic analysis was generally done in three steps. In the first step, the information was categorized based on the research questions. In the second step, the material was analysed to see which perspectives emerged in the context of the various research questions. In the third step, the explored understanding
was compiled within the identified perspectives. The thematic analysis therefore implied a systematic work through texts and identification of topics that progressively were integrated into higher-order key themes.

Furthermore, the analysis of the information revealed in the interviews has taken place as a “part analysis” in accordance with Holme & Solvang’s approach where they in turn were inspired by Borum & Enderud, (1979): "the starting point for a part analysis is that the printouts in itself is a text which contains different allegations of a series of occurrences that are more or less linked to the phenomenon that is the focus of the investigation. /.../ From these individual allegations, then through the analysis we build an interpretation of the phenomenon we are investigating." (Holme & Solvang, 2010, p.141)

Yin (2008) also refers to Miles & Huberman (1994) who recommend the researcher to arrange and play with data in order to search for interesting patterns and structures. This was done to uncover interesting aspects of the investigated phenomena.

### 3.4 System analysis

Analysing organisational ambidexterity in public organizations implies to analyze a complex phenomenon in a complex context. There is a need to create knowledge out of this complex situation in order to answer the research questions. Several factors that create conditions for ambidexterity can be identified through the conducted interviews, but the purpose of the study may not only be fulfilled by identifying separate factors. Understanding how these separate factors interact might also fulfil the purpose. It often turns out that the whole is more than the sum of the parts (e.g. Arbnor Bjerke, 2009; Jackson, 2003). A system analysis raises the possibility to get a richer picture of the studied phenomenon. For this reason, the thematic analysis and the part analysis has also been supplemented with a system analysis. Thereby different success factors have been identified and the interactions between those factors have also been mapped out in order to see how they may reinforce each other. In paper V this resulted in the third stage in the thematic analysis containing an analysis of the predominant relations between the former identified parts.

In order to analyze the human system where the narrative discourse, culture and politics are more important than logic components, the analysis has been inspired by what Jackson (2003) describes as the best known analytical tools from Soft System Methodology. The system analysis has hence been carried out.
with an application of Checkland & Schole's (2007) most used tools, i.e. to formulate a root definition of the studied phenomenon, and describe key enabling factors for ambidexterity and their relationships in a rich picture.

3.5 Validity and reliability

The following sub-chapters describe the studies’ validity, generalization and reliability.

3.5.1 Validity

In order to identify correct operational measures for the concepts being studied, what Yin (2008) calls construct validity, multiple sources of information have been used. The data collection was done by spreading the data sources both over time and by type and/or source such as including different staff categories from different organizations and geographical areas in the empirical data collection. In the earlier phase of the research interviews were combined with a broad amount of written material whereupon the researched phenomena have been described from different perspectives. The written documentation was seen as having equal weight as the interviews. Every statement in the documents has hence been given the same credibility as the statements heard during interviews. This was done despite the fact that the data-collection method used for creating the documents obviously was not under the same level of control as the method used for the interviews.

Moreover, some reports do not only report statements but also compiled statements because the authors processed collected material from various sources. However, the sources have been considered as credible enough to equate their statements with the statements identified during interviews.

The method is inspired by Denzin & Lincoln (2011) and Patton’s (2002) description of data triangulation, which gives demonstrably higher overall quality in relation to single-source-based studies (Yin, 2008). Triangulation means that, for example, two or more methods or sources are used in a study to improve the quality of the results. The idea is that with more methods or sources pointing to the same results, the validity will be increased. Through triangulation, weaknesses from single method or single-sources can be overcome.

Furthermore, to achieve good construct validity, the construction of the interview situation was done in such a way that the interviewees had the opportunity to describe the phenomenon in the semi-structured interviews
based on their own response logic. Key informants have also been involved in reviewing draft analyses. This has been an important issue in order to achieve validity.

Yin (Ibid.) also describes the phenomenon of Internal Validity. He believes that it is all about knowing whether the researcher interferes with the researched phenomenon. It is very difficult to analyse how this interference occurs. However, the interviewer has strived not to influence the interviewees' opinions in the interview situations.

**External Validity**

Marshall (1996) argues that: “improved understanding of complex human issues is more important than generalizability of results” (p. 524). However, it is important that the knowledge gained can be generalized in some respect if it is to be useful. Generality is something Yin (2008) calls External Validity.

In qualitative studies generalization is possible when the researcher, with the help of theories, seeks to understand and explain what transpires in the empirical material. Through a generalizable theory, experiences can be transferred to other contexts. By combining and developing theories to answer the study’s research questions, the presented research in this thesis is generalizable and relevant to other organizations similar to those analysed in this thesis.

The empirical data behind the research presented in this thesis is taken from a large number of organizations. It would take a large space to make a full description of each of the organizations. For that reason, no complete description has been made of all the organizations included in the empirical material. However, a brief description of the different organizations is made in the chapter describing the cases from which data is collected, i.e. chapter 3.2.6.

Furthermore, in order to create conditions for good external validity, inspiration is taken from the methodological idea of making a so-called thick description. The thick description method was developed by Geertz (1994), who in turn got the idea from the philosopher Gilbert Ryle. The term “thick description” represents a methodological approach where the studied objects are explained and described in order to create more understanding for the analysis of the data in the research project. In this way, the reader of the research findings can get a broader contextual understanding of the situation and the organization where
data is collected. Thereby the reader can better determine whether the research results are valid.

The inspiration from the ideas behind thick description has been used to make a relevant organization description at a slightly higher level of organisational abstraction. It is possible to see common features and a common context for all organizations on which the research behind this thesis is made. The common context is based on the fact that the organizations are public organizations with all the similarities that entails. Public organizations in the western world are to large extent driven by a similar management paradigm (Hartley 2005). Therefore it is possible to make a description of common characteristics of the public sector although - of course - there also exist big differences between the different organizations. The description of common characteristics provides support for an understanding of the public sector and of the context in which the data in this research is taken. The description of common characteristics can be found in the chapter describing Public Sector, i.e. chapter 2.3.

**Face Validity**
Arbnor & Bjerke (2009) describe how validity also can be achieved when the research results undergo a subjective assessment of their plausibility. This is done by asking external experts and concerned respondents whether or not they accept the results. Arbnor and Bjerke (Ibid.) refer to this as Face Validity.

The research behind the now present thesis was presented in 2015 and 2016 at a dozen different workshops and seminars organized in Sweden with representatives of municipal, regional and state government organizations. The research results have also been presented to the majority of the respondents included in the research. The participants at the seminars and workshops and interviewed respondents have perceived the presented research findings as valid for them and their organizations.

**3.5.2 Reliability**
Pyräklä & Ruusuvuori explain in Denzin & Lincoln (2011) that an informal approach (without matrixes or database structures) in many cases is the best choice of method in analysing written texts. However, this is not an obvious approach to the collected data. Yin (2008) notes that a common problem with case studies is the lack of documentation, which can make critics become suspicious of research reliability. Therefore, Yin (Ibid.) suggests that the researcher should work with clear documentation of the data collection. The method of analysis in this research has followed Yin’s recommendations by
developing a database where all the information collected through different sources and data collection techniques was stored. This was done in order to deal with the problem Yin (2008) describes: “The lack of a formal database for most case studies is a major shortcoming of case study research and needs to be corrected” (p. 119).
4. RESULTS

In this chapter the six appended papers are briefly presented. In the last section additional results from the studies concerning current quality management practice and ability to innovate in Swedish governmental authorities is summarized.

4.1 Summary of appended papers

More details are found in the papers that are presented in the Appendix.

4.1.1 Summary of Paper I


Background

Innovation is currently at the top of many agendas worldwide: not only in the private sector, but also when it comes to increasing quality, efficiency, and effectiveness in public sector. In Sweden, this is reflected in the recent call from the Government for innovation in public management. However, innovation has not traditionally occurred to any significant extent on the strategic level of Swedish public management. Furthermore, governmental administration is a complex system in need of coordination and alignment for this new call to be effectively realized in practice.

Purpose

The purpose of this paper is hence to explore the phenomenon of innovation in the current Swedish governmental administration system. More specifically, the paper explores three research questions:

RQ1: What is the current understanding of what innovation is among the actors within the Swedish governmental administration system?

RQ2: What is the current understanding of the reasons for innovation among the actors within the Swedish governmental administration system?

RQ3: What is the current understanding of how to innovate among the actors within the Swedish governmental administration system?
Methodology
The study presented is based on a qualitative research approach aimed to grasp a broad spectrum of the various understandings and perspectives within the Swedish governmental administration system. We decided to study a part of this that clearly had a mission to innovate. We chose to look at: 1) the Swedish Government, who issued the call for innovation, 2) the Ministry of Foreign Affairs (MFA), the unit that works with international development cooperation, and 3) the executive agency Sida. The data was collected through interviews and document analysis. Various documents were searched in order to identify relevant information providing answers to the research questions.

Findings
Concerning RQ1, the study indicates a notable disparity between the different governmental levels in the understanding of what the concept innovation entails. At the civil servant level, it is more incremental than the definition expressed by the Government that emphasizes radical innovations.

Concerning RQ2, the understanding of why to innovate, the study shows a consensus at all levels that the ultimate objective for innovation is better delivery to the beneficiaries of development assistance, i.e. increased customer value. These results furthermore indicate a consensus within the current Swedish governmental administration system that the purpose of innovation is to strengthen beneficiaries’ own innovativeness. However, opinions appear to be divided on the various levels of the system as to whether the purpose of innovation is also to reduce administrative costs or to create an enabling innovation climate within the agency.

Finally, concerning RQ3, the study indicates that there is consensus at MFA and Sida over the fact that the current work with innovation is not based on a comprehensive strategy.

In sum, the study shows that in many aspects there are a variety of different opinions within the current Swedish governmental administration system as to what innovation is, why innovation is important, and how innovation should be managed or accomplished. It can therefore be logically assumed that there is a need for a more developed dialogue between the different levels in the Swedish governmental administration system in order to reach more of a common understanding and a resulting increased ability to innovate in the system as a whole.
4.1.2 Summary of Paper II


Background
Following in the footsteps of ‘New Public Management’, where quality management and quality control have become widely implemented concepts among public authorities, there is now a subsequent government demand to also be innovative. However, integrating and achieving a balance between improved quality and increased innovation is not an easy task. Previous research indicates a complex and ambiguous relation, raising questions as to how to optimally combine these two approaches organizationally, operationally, and culturally. Is there an ‘edge of chaos’ where there is maximal flexibility for innovation while maintaining sufficient order for quality?

Purpose
The purpose of this paper is to examine the potential integration of innovation and quality management practice within the public sector.

Methodology
To get an understanding of how authorities perceive and manage quality and innovation, this study is based on a case study of two Swedish governmental authorities. Case 1 is the Swedish International Development Cooperation Agency (Sida) and Case 2 is the Lantmäteriet (Swedish Land Survey).

The empirical data collection framed major perspectives on the relations between current quality management practice and innovation. The empirical material consists of documents and interviews conducted with the management and staff of the two organizations.

Findings
The case-organizations have during recent years developed quality management through standardization of processes. Both authorities have today a greater focus on quality management than on innovation. The two cases have overall strategic objectives concerning innovation but no documentation that concretely governs the innovation process. Innovation issues have, to a relatively small extent, been on the agenda of the management. The organizations manage innovation through investigation, informal conversations
and ad-hoc activities. There is an over-preponderance of space to work with exploitation at the expense of a lack of space to work with exploration.

Many of the respondents comment that the well-governed quality management processes may hinder the innovativeness since there is a lack of space for trying other solutions to problems and a certain fear of making mistakes. The leeway for innovation is perceived as small, especially by middle managers and civil servants. The space is perceived as limited because the authorities have a duty to carry out decisions taken at a higher governmental level and are tightly controlled and governed by laws and regulations. The incentives for risk-taking are weak in both organizations. This is because risk taking is not seen as leading to the results or objectives that have been formulated for specific working processes. The result is a public sector with a culture and structure that allows exploitation but not exploration. The results of both case studies are in line with Borin’s (2001) analysis of the existence of a less fertile ground and weak incentives for innovations in the public sector.

Both cases emphasize that innovation and quality management may be handled side by side and that it is necessary to identify exactly where quality management and innovation management strengthen or hinder each other.

4.1.3 Summary of Paper III

Background
A frequent topic in quality management initiatives is measurement. It is argued that proper measurement is a prerequisite for an organization’s ability to continuously improve. Simply put, without understanding “where you are”, and later “what you got” as a result of your interventions, it is difficult to learn. In other words, you become unable to complete the improvement cycle, generally known as the PDCA-cycle (Plan, Do, Check, Act).

Purpose
The paper aimed to contribute knowledge about and new perspectives on the measurement of innovation quality in service organizations.
Methodology
A literature review of the phenomenon of innovation quality was conducted. This review was conducted using a search strategy based on a scoping search of electronic databases combined with a pearl-growing search, i.e. starting with the most relevant articles, and from there developing the research.

In addition, in order to contribute knowledge and new perspectives on the measurement of innovation quality in service organizations, interviews and a desk study were conducted at a Swedish central agency: The Swedish International Development Cooperation Agency (Sida).

Findings
The results of the literature review support the notion of previous research, namely that most research on innovation quality measurement focuses on manufacturing organizations. It can also be noted that a large number of articles are related to the medical field in particular.

The results of the empirical work according to the case shows that planning of monitoring and evaluation of the innovation process has to be done early in the innovation process. By defining the concept of innovation and the development of three types of quality indicators, innovation can be evaluated:
- The output achieved by the innovation in relation to customers or beneficiaries.
- The innovation process, i.e. how the innovation process affects the organization that hosts the innovation process.
- The innovation’s level of novelty.

A suitable method to work in order to strengthen the organization’s ability to innovate is to develop a cyclical learning process in which the innovation management can be strengthened in loops. This can conveniently be done by the PDCA cycle.

4.1.4 Summary of Paper IV
Background
Defining “quality” as being inversely proportional to variability, and “quality improvements” as being the reduction of variability in processes and products, might now be a thing of the past. Even so, the history of the quality movement, with its strong focus on the elimination of deviations, continues to influence the thought and practice of modern quality management. However, we believe it is time for a more profound approach in both thought and practice when it comes to deviations, and especially when it comes to operational deviations in the service sector. From an organizational perspective, deviations do not per se have to be a foe, in some cases it is actually a much needed constructive friend and a basis for learning.

Purpose
The aim of this paper is to elaborate conceptually and practically on the subject of how exploitation (being the traditional focus on quality management) and exploration (being a traditional focus of innovation management) could be integrated into the management of deviations and operations within service organizations.

Methodology
This is a concept paper developed in discussion between the authors. The development of these concepts was done by a juggling of ideas and by testing different models to a fictitious reality.

Findings
The concept of deviance is often used within Quality Management, referring to some sort of deviation from what is “normal”. The traditional focus on deviance assumes that the deviance is negative and refers to behaviours that involve nonconformity or underconformity to normative expectations. The traditional perspective puts the focus on behaviours that violate the norms resulting in negative evaluations. Heckert and Hechert comment that the concept of positive deviance is marginalized in the literature by the focus on negative deviance and the absence of comprehensive conceptions of deviance.

Research on constructive deviance has however increased in recent years and is described in several research papers. The concept of constructive deviance is described as behaviours that depart from the norms of the reference group in such a way that the behaviour benefits the reference group or contributes to a higher objective.
One of the more prominent contradictions between quality management and innovation management is the view on deviation. Quality management and innovation management in this case have almost opposite assumptions on whether deviations should be increased or reduced in order to fulfil the goal of a successful organizational system.

4.1.5 Summary of Paper V

Background
Juran (1964) arguing that all managerial activities should be directed at holding the resulting gains, i.e., control, alias prevention of change or breaking through into new levels of performance.

The organizational capacity of managing and actively balancing these two strategies at the same time can be related back to an article published in 1991 by March, who argued for organizations to both work with development of existing operations and develop new products. March (1991) argued that organizations which failed to deal with these two perspectives risked being left behind and being ousted. March used the terms "exploration" and "exploitation" to describe these two basic strategies or perspectives. The capability to simultaneously perform exploration and exploitation is referred to as "organizational ambidexterity" and has developed into a distinct research field.

Furthermore, the main focus of the research on organizational ambidexterity that actually has been implemented has primarily been on the private sector. There is evidently a need to extend the empirically-based knowledge of how organizational ambidexterity can be enabled in the public sector. It is also interesting to consider how the empirically identified enabling factors for organizational ambidexterity relate to the quality movement's core values. Could it, among the core values, be tools and perspectives enabling or counteracting organizational ambidexterity?

Purpose
The purpose of this paper is to empirically explore enabling factors for organizational ambidexterity in the public sector.
Methodology
Two studies have been conducted in Sweden. One was carried out in the organization Region Halland (Organization 1) and the other in Region Jämtland Härjedalen (Organization 2). The selection of respondents was based on a structured selection of people who have experience from the development of explorative ideas and projects and who have insight and are responsible for maintaining a high degree of exploitation in the organization. A total of 24 interviews were conducted: twelve in each organization. The analysis in this study was done partly by identifying the individual enabling factors but also by proposing rich pictures of the interactions between those factors in order to see how they may interrelate.

Findings
The findings can be visualized in pictures, as seen in Figure 4.1 and 4.2. In the figure the arrows indicate how the respondents express different enabling factors’ influence on each other. The study indicates that it is above all important to create leeway for exploration in order to achieve organizational ambidexterity in the public sector.

We can also conclude that empirically there seems to be evidence that some of the quality movement values, tools and ideas can be considered important for achieving organizational ambidexterity in public sector. It seems as though two values are more important than others in order to achieve organizational ambidexterity. First it regards the organization’s ability to organize themselves so they have a good understanding of user needs and situation, i.e. to have the user as a starting point in the processes. The second quality movement core value that, according to the results, is important for organizational ambidexterity is a committed leadership.
Figure 4.1 A rich picture of enabling factors for organisational ambidexterity derived from Case 1.
Figure 4.2  A rich picture of enabling factors for organisational ambidexterity derived from Case 2.
4.1.6 Summary of Paper VI


**Background**

In order to balance both incremental and radical development, there is a particular need for a greater ability to manage radical innovative development. Furthermore, Brorström (2015), Birken et al. (2015) and Piening (2011) argue that a problem when trying to achieve radical innovative development is the tendency for innovative initiatives taken in public administration to have difficulty moving on from idea generation to implementation. In other words, the innovation process often stops after idea generation. Previous researchers have identified enabling factors for innovations in public administration. They have also noticed that there is a general lack of empirical research on factors for the specific step of moving from idea generation to implementation.

**Purpose**

The aim with this study is therefore to contribute to the knowledge about which of the previously identified enablers for innovation, that are perceived as important in the specific process step of moving from ideas to implementation of innovations, are important in a public administration context.

**Methodology**

In order to fulfil the aim of this study, data have been collected through interviews with 21 officials and managers involved in urban planning and responsible for different initiatives aimed at driving radical innovative development processes. The selection of respondents is based on the idea that learning should be based on knowledge among those who work daily with these issues. Data collection has been done via semi-structured interviews. The 21 interviewees work in five municipal administrations in four different cities; Kisumu in Kenya, Manchester in the United Kingdom, Los Angeles and Santa Monica in USA and Auckland in New Zealand.

**Findings**

The analysis shows that the respondents’ experiences are strikingly similar regardless of their different urban contexts. In total, the analysis identified five common perceived factors which the respondents highlighted as essential in order to move from idea to implemented innovations. These five factors are:
a) A committed and hands-on leadership,
b) internal as well as external networking, 
c) innovation processes alternately organized as a separate project, and as part of the standard operating procedures, 
d) a system understanding including understanding of how the parts contribute to a shared vision and 
e) communication of achieved tangible (not necessary substantial), short-term results.

Three of these factors confirm what previous research has already identified as success factors for innovation, namely: a) committed and hands-on leadership, b) internal as well as external networking and c) innovation processes alternately organized as a separate project, and as part of the standard operating procedures. The two other success factors have, to our knowledge, not been explicitly described in previous literature as enabling factors for going from idea generation to implementation of innovations.

**Customers or citizens?**
Customer value has become an established concept both in the quality movement and other scientific disciplines. However, the term customer is not always accepted or the best when we talk about value for the users of public sector services. Many of the respondents who participated in interviews under the research forming the basis for this thesis objected to the term “customer”. Respondents have rather talked about citizens than customers. That is why the final research paper (paper VI) in this thesis is about citizens’ value instead of customer value. It is a change of term but does not mean a change in the meaning of the concept. The quality movement term “customer value” is in paper VI equated with the term “citizen value”.

**4.2 Summary of additional results from the studies**
The studies have, in addition to what has been elaborated and presented in the attached papers, also shown that the need for improved ability to innovate in the public sector has not only been identified by researchers. In recent years, both the political leadership and managers in the public sector have been increasingly emphasizing the importance of innovation to fulfil public sector missions. Innovativeness is apparently “on the agenda” as an important issue in many countries’ government agencies as well as regional authorities and municipalities. Bason (2010) writes for example that today we see that: “public leaders around the world are demonstrating how a significantly more conscious and
systematic approach to creating innovative solutions can effectively address some of our most pressing societal challenges” (p. 4).

An example of this can be seen in the European Union, in terms of the European Public Administration Network, an informal network of public administration Directors-General that has started an Innovative Public Services Working Group (IPSG). The IPSG mission is to contribute to improving the quality and efficiency of European public services (European Public Administration Network, 2013).

As stated earlier, this agenda has not gone unnoticed by the Swedish Government who clearly emphasizes the development of both quality and innovations. The Swedish Government (2009) explains e.g. in its public management policy bill in 2009 that: "A systematic quality assurance is an important part of each agency’s efforts to develop its business" (p. 31). The Government says in the same policy bill that the target for public management policy is an innovative and collaborative government administration that is fair and effective, has a high degree of quality, service and availability and thereby contributes to Sweden’s development and effective EU work (Swedish Government, 2009). The Government emphasizes that the public sector must be innovative and develop their delivery to fulfil customer needs. This is also emphasized by the fact that the Government in 2011 appointed a committee with the purpose to study and make suggestions on how agencies can be more innovative (Swedish Government, 2011).

Meanwhile, it is interesting to note how critically the committee assesses the issue of how well these ambitions for increased innovativeness are currently managed within government agencies. In 2012, the committee carried out an investigation into how agencies work with quality and innovation. The investigation reported on how the authorities are working on quality, but also stated that it is more difficult to describe how the authorities are working with innovation. On the whole, the report stated that it is difficult to get a clear picture of how Swedish authorities are working with innovation and the innovation perspective does not appear to any significant extent in strategic plans (Swedish Government, 2012).

In its final report, the committee came to the conclusion that the focus on the control and reporting of individual units can counteract renewal. The investigators write: “Our survey states that around half of the agency managers believe that resources and the external monitoring and review, precludes renewal to a fairly or very high degree. Four out of ten believe that the external framework precludes renewal
to a fairly or very high degree. In a comparative study between Norway, Denmark, Iceland and Sweden “political obstacles” (e.g., resources and laws) are considered to be the biggest obstacle to innovation in all four countries, and of the Swedish respondents, six of ten specify that this is an obstacle” (Swedish Government, 2013, p. 100).

In 2014, Sweden got a new government with a different political orientation to their predecessors. However, the new government also underlines the importance of public sector being innovative. An example of this is that the new Swedish Government (2016) gave a mandate to the Swedish Agency for Public Management and explained that public management should focus on being more strategic in order to meet the government’s goal of an innovative and collaborative public sector.
5. CONCLUSIONS

The first part of this chapter reconnects the research to the research questions. Thereafter a reconnection to the research purpose is presented.

5.1 Reconnecting to the research questions

This chapter describes how the research presented in this thesis responds to the three research questions.

5.1.1 Research question 1

RQ 1. What is the current understanding of innovation within Swedish governmental agencies?

The results from the case study indicate a notable disparity between the different governmental levels in the understanding of what the concept of innovation entails. The definition of innovation as expressed by the Swedish Government appears, for example, to be open for radical innovations. On the other hand, the results also show that MFA and the Sida management have a relatively focussed idea of what innovation means in terms of new methods, new financing tools and collaboration with new actors. In comparison, on the civil servant level the results show that the definition of innovation is more incremental.

The research displays that the various descriptions of the purpose of innovation resulting from the case study can be summarized as:

• Increase customer value
• Reduce administrative costs
• Enable an innovation climate in the organization
• Strengthen beneficiaries’ own innovativeness

The results also indicate a consensus at all levels that the ultimate objective for innovation is better delivery to the beneficiaries of development assistance, i.e. increased customer value. These results furthermore indicate a consensus within the current Swedish governmental administration system that the purpose of innovation is to strengthen beneficiaries’ own innovativeness. However, this understanding appears to be divided on the various levels of the system regarding whether the purpose of innovation is also to reduce administrative costs or to create an enabling innovation climate within the agency.
Furthermore, the results of the research indicate that in the case organizations there is currently no strategic planning for how to manage innovation. Furthermore, several of the respondents in the research express the opinion that the recent trend of standardization of work processes has reduced the leeway for innovation.

Another result of interest in relation to this research question is that some of the respondents emphasize that innovation shall take place in consultation with the target groups involved in the development. This view is clearly supported in previous research and seems to be important for achieving a good ability to innovate.

5.1.2 Research question 2

RQ 2. How is the relationship between current quality practice and innovation perceived in Swedish governmental agencies?

The results of the document studies show initially that there appears to be a significant emphasis on systematization and organization of the exploitative perspectives, at the expense of the explorative perspectives. For instance, 94% of the major Swedish agencies (with more than 300 employees) report that they systematically work with quality management but that planned innovation management did not occur to any significant extent.

The empirical findings from the case-organizations also show that they recently have developed their quality management practices through, for example, the standardization of processes. Both Sida and Lantmäteriet, have, according to the results, a currently stronger focus on their control systems than on innovation.

Many of the respondents comment that the well-governed quality management processes may actually hinder innovativeness since there is a lack of space for trying other solutions to problems and a certain fear of making mistakes: current quality practices may hinder innovation. Exploitation and exploration management do have almost opposite assumptions on whether deviations should be increased or reduced in order to fulfil the goal of a successful organizational system, as schematically visualized in Figure 5.1.
However, the empirical findings show also that there is a common understanding that the organizations do need management and strategies not only for the current quality practice but also for innovation. Both cases in the study answering the RQ2 emphasize that innovation and the current quality practices may be handled side by side and that it is necessary to identify exactly where the current quality practice and innovation strengthen or hinder each other.

The results of the research appear to confirm the notion that it is a challenge to obtain organizational ambidexterity in the Swedish public sector.

5.1.3 Research question 3

RQ 3. How can Organizational Ambidexterity be managed in the public sector?

The research behind this thesis provides an empirically grounded view of enabling factors for organizational ambidexterity in the public sector and thereby complements a relatively unexplored field. The analysis of the empirical material has resulted in nine key enabling factors. These are further described below.
In order to deepen the answer to research question 3, the research goes deeper in the description of enabling factors in three of these nine key enabling factors, see factor 7-9 below. The reason for deepening these three factors is that information has emerged during the research process indicating the importance of these factors. This meant that the deepening process of these factors already begun before the comprehensive study of enabling factors for organizational ambidexterity was carried out. This does not mean that these three factors necessary would be more important than the other six identified enabling factors.

The nine enabling factors are:

1. **Organize for good understanding of user needs and situation**
   It is important that both explorative and exploitative processes have the user as their starting points. It is important that the user perspective influences the management team, directly or by analysis and studies. This is the case both in processes aiming to develop exploration as well as exploitation.

2. **A management team that realize and can communicate the need for exploration**
   It is also important to have a management team that realizes the need for organizational ambidexterity. The management team is seen as the supportive factor underpinning other positive contributors so they can be concretized.

3. **Dialogue**
   Another important perspective is a good dialogue between various key stakeholders. The main stakeholders that need to be part of the dialogue seems to be the following: 1) The management, 2) those who work with exploratory development, 3) those dealing with exploitation as well as 4) employees and 5) customers, which are supposed to use the developed or new products, services and processes.

4. **Ambassadors**
   Ambassadors for novel products, processes or services are pointed out as very important enablers in the process of taking innovative ideas from idea generation to be implemented. The ambassadors, as an enabling factor, are closely related to the above mentioned enabler; dialogue. The ambassadors are individuals who promote exploratory elements and support incorporation of those elements into existing work processes.
5. **A culture that allows mistakes**
Management must allow employees to take risks and possibly make mistakes. The exploration process needs a forgiving culture. Also this enabling factor is closely related to the dialogue factor. It is through dialogue the management can develop a permissive culture in which employees feel empowered and not afraid to make mistakes.

6. **Budget for exploration and exploitation**
There is also a need for a specific budget for the exploratory activities as well as for the exploitative activities.

7. **A system view**
Another enabling factor is that the employees have a holistic approach with a common vision and with an ample understanding of a system approach. Also in this case the dialogue is described as essential for success in achieving a holistic approach and a system view. One method for achieving this may be to seek to integrate “deviations from standard processes” into the management. This could be done through a systemic model of Ambidextrous Deviation Management (ADM). This is done by allowing everybody to participate in explore AND exploit as a learning organization. The design is proposed where the ADM become part of everyday life as well as being transferred to the front line, thus involving the first-hand customer insights in the process. See Figure 5.2.
Ambidextrous Deviation Management, as a new way of integrating exploration and exploitation in service organizations. The Ambidextrous Deviation Management work standard incorporates a unique mix of the regular standardized steps, in which deviations are to be reduced, together with explorative steps (step 3 and 8 in the figure), where employees are actually encouraged to deviate, experiment and explore in order to bring unique and customized solutions to the service customer and enable an increased continuous double-loop learning and new innovative solutions to the organization.

8. **Focus on implementing innovations**

In order to develop the explorative part of the organisational ambidexterity there is a particular need to move from idea to implementing innovations. Too much focus is often on idea generation and too little on the implementation. The empirical study behind this thesis identifies five enabling factors for taking innovations from ideas to implementation in the public municipality context. These five enabling factors are presented in Figure 5.3.
The Innovation Process

Five enabling factors for taking innovations from ideas to implementation in the public municipality context:

1. A committed and hands-on leadership
2. Internal as well as external networking
3. Innovation processes alternately organized as a separate project, and as part of the standard operating procedures
4. A system understanding including understanding of how the parts contribute to a shared vision
5. Communication of achieved tangible (not necessary substantial), short-term results

Figure 5.3 The white arrow indicates enablers stressed by interviewees as the most significant factors for moving from idea generation to implementation of innovations, which in turn increases the ability to explore.

9. Incentives for both exploration and exploitation

Objectives and measurement of results for both exploration and exploitation are seen as an enabling factor for achieving organizational ambidexterity. The results behind this thesis also show that the prevailing opinion among the respondents is that above all, it is necessary to work on exploration in order to achieve organizational ambidexterity in the public sector, i.e. that the balance can be achieved when exploratory abilities are developed. Therefore, factors that support exploration are often raised as key enablers for organizational ambidexterity. Only when the organization formulates objectives and evaluates explorative activities in a similar way as one today manages exploitative ones, can both be considered as equally important. This need could be addressed in the quality movement tool the PDSA-cycle which creates good conditions for a cyclical learning process. Evaluation of innovation quality can through the
PDSA-cycle contribute to a learning process and thereby strengthen the organization’s ability to be innovative and thereby develop its capacity to be ambidextrous. Figure 5.4.

![Figure 5.4](image)

**Figure 5.4** The cyclic process of evaluating innovation quality in order to achieve increased ability to innovate.

### 5.2 Reconnecting to the research purpose

The purpose of this thesis is to develop existing knowledge of how organisational ambidexterity and innovation can be understood and developed as an approach to increasing customer value in the context of the public sector. The results from the research behind this thesis indicate that the current quality practice in the Swedish public sector to a large extent relates to and supports exploitation, but not exploration. The empirical findings give examples of organizations that have a large focus on systematic measurement and control of the work process, i.e. exploitation and significantly less on exploration. An inhibition of increased customer value is indicated in the studied organizations’ current emphasis on exploitation at the expense of exploration. The research contributes also with the knowledge that the current quality practice is perceived as preventing the organization’s ability to explore. The research indicates that the current quality practices in the public sector is perceived as focusing on the standardization of work processes, development of control systems and on development of existing procedures, creating a management model with neither time nor organisational leeway for the question of what could be done quite differently.
The research behind this thesis empirically identifies a number of enablers the public organization may need to work actively with in order to develop organizational ambidexterity. These identified enablers are presented in Figure 5.5.

Through this study empirically highlighted enablers for ambidexterity:

1. Organize for good understanding of user needs and situation
2. Leadership with insight about the need for exploration
3. Dialogue
4. Ambassadors
5. A culture that allows mistakes
6. Budget for exploration and exploitation
7. A system view
8. Focus on implementing innovations
9. Incentives for both exploration and exploitation

**Figure 5.5** The white arrow indicates enablers, which increases the ability to combine exploration with exploitation and thereby raise value for customers.

The research indicates that some core values and tools from the quality movement can serve as enablers for organizational ambidexterity. This applies to the organization's ability to organize itself so it has a good understanding of user needs and situation, i.e. to have the user as a starting point in the processes. It applies also to the quality movement core value that a committed leadership is important for achieving quality. It also applies from a holistic system perspective.
In addition to these enablers, the research shows that enablers for organizational ambidexterity consist of committed leadership expressed through good dialogue, specific budgets for both exploration and exploitation and development of a culture in which employees feel that they are allowed to make mistakes. A good dialogue is also essential both internally and with external stakeholders. There is a need to focus on the implementation of innovations and it is important to clarify incentives for work on exploration as well as for work on exploitation. Finally, the empirical data also shows that an enabling factor is to get different professions involved in explorative processes. This can be achieved by working through ambassadors who can promote the explorative processes.
6. DISCUSSION AND FUTURE RESEARCH

In this chapter, a broader discussion is presented based on the findings. The chapter includes implications for practice, a methodological discussion as well as suggestions for future research.

The results of the research presented in this thesis indicate that the public sector has a significant emphasis on systematization and organization of the exploitative perspectives, at the expense of the explorative perspectives. It contributes to the awareness that the public sector has the needs that More & Hartley (2008), Madjar et al. (2011), Zhang & Bartol (2010), Albury (2011), Brown & Osborne (2012) and Valdera et al. (2013), put their finger on: to develop the explorative perspectives. The studied cases in the research behind this thesis have developed their quality management practices through standardization of processes and control, which is in line with what Becket (2000) and Hsieh et al. (2002) describe as operations which are influenced by New Public Management.

The research shows also that there can be a notable disparity between the different governmental levels in the understanding of what the concept innovation entails. If, assuming Nählinder’s (2005) and Brow & Osborn’s (2012) definitions of innovation, it can be noted that many respondents’ descriptions of innovations would not even be considered as such. This result implies that the innovation process is at risk of developing according to the unwanted pattern described by Howard (2012), namely just continuing with the old processes with minimal changes, but calling it innovation and thereby failing to make the more exploratory progress needed to achieve organisational ambidexterity.

The current quality practice is experienced to reduce the leeway for exploration, preventing ambidexterity. This is in line with previously identified conflicts between management for exploration and exploitation, e.g. March (1991), Williams et al. (2006), Sing & Smith (2006), Cole & Matsumiya (2008) and Lund Stetler (2015). The research also shows that there are many public organizations that do not work with standardized quality tools in their quality work. This is in line with what Lagrosen & Lagrosen (2003) also noted. The research behind this thesis shows at the same time that some of the core values of the quality movement can be a well-functioning platform for development of the ability to explore and thereby achieve organisational ambidexterity. This is aligned with some previous scholars’ findings, e.g. Martinez & Martinez (2008) and Johnstone et al. (2010) who argue that quality values and tools can contribute to management of exploration and thereby to organizational ambidexterity. Thus,
the challenge within public organizations is to develop the current quality practice with quality movement values and tools identified as enablers for organizational ambidexterity.

Some enablers, which have been empirically identified in this research as important for organizational ambidexterity, have also been previously identified by scholars as enablers for innovations (e.g. Damanpour et al., 2006; Steiber & Alänge, 2013; Brorström, 2015). On the whole, a large number of factors contributing to an enabling environment for innovations have been identified by previous researchers. The research behind this thesis contributes to the process of empirically sorting out which - out of a wide range of enabling factors for organizational ambidexterity or innovation - may be the most important factors for organizational ambidexterity.

6.1 Implications for practice

For many who work with quality the aim is to increase value for the customer. Today’s customers must experience a high value from the goods and services offered. However, tomorrow’s customers must also experience a high value, in whatever new context they find themselves. Thus, it becomes important to adapt to tomorrow’s customers, the organization’s circumstances and the context that will apply then. Quality management therefore needs to develop on-going processes along with new tools and new processes adopted for tomorrow’s needs and context. The organization must be ambidextrous. To achieve ambidexterity in the public sector, above all the development of the capacity to manage exploration is needed.

Consequently, there is a need for public administration both to analyze the current quality practice and see what constitutes obstacles and opportunities for organizational ambidexterity and also compare the current quality practice with a broader palette of values and tools from the quality movement which scholars have shown can serve as enablers for organizational ambidexterity.

This thesis creates opportunities for public organizations to reflect over their quality management processes and consider how a possible skewed balance may affect their ability to create a context-specific, sustainable, long-term quality work aiming at increased customer value.
6.2 Methodological choices and consequences

The research has had to deal with some methodological challenges. The biggest challenge concerned the selection of cases to be studied and selection of respondents to be interviewed. The public sector is large and consists of many organizations. The methodological question was where to get the best empirical material. There is a wide range of approaches in how public services are organized and how public service organizations work with exploration and exploitation. The research presented in this thesis is based on a small number of interviews in some public organizations. The empirical data have been collected from various public organizations at state, regional and municipal level. The empirical data were mainly gathered in Sweden but were complemented with empirical data from some additional countries in order to contribute to a stronger external validity.

Another challenge has been the selection of individual respondents within the selected cases. It is difficult to get large organizations and complex issues explained and understood when using only a few respondents. However, the selection has been made in order to provide satisfactory construct validity, but a larger sample of respondents would have further strengthened the validity of the results. It is worth noting that the document studies have been very valuable in the general understanding of the topics.

However, the research results seem to be valid and reliable as the reaction to the presented research materials often has been recognition of the presented conclusions. Employees in public administration comment that the presented research visualizes feelings and opinions they recognize. Throughout the research, results have been communicated in various seminars and workshops with employees in public administration at municipal, regional and state level.

Another important perspective, still concerning validity is that the research has also been made of a phenomenon in constant change. The cases included in the study are complex and ever-evolving organisms. This means that the studied reality is changing at such a pace that it constantly produces new perspectives, new questions and new answers. The truth is constantly undergoing a process of change.

Finally, we have another important perspective effecting validity: the impact the interviewer has on the interviewees. The data collection has been more like conversations than interviews. Even if the interviewer has sought not to influence the interviewees’ opinion in the interview situation, he has inevitably
affected both the respondent and then the interpretation and analysis of the interview responses.

### 6.3 Future research

As previous scholars have noted, the concept of exploitation is more difficult to define and describe compared to the concept of exploration. Therefore, it would be useful to deepen the study of how the concept “exploitation” best can be explained in the public context.

It is also of utmost importance to continue to build collective knowledge about the factors that prevent the public sector from being ambidextrous. It is equally important to build collective knowledge about the factors creating an enabling environment for the public sector to become ambidextrous. In this context it is also important to consider how “quality movement enabling factors for exploration” better can be utilized in the current quality practice.

Finally, by deepening the knowledge of how system thinking in general (and specifically Soft Systems Methodology) can be used as a tool in order to analyze the needs and opportunities for organizational ambidexterity in public sector, important new knowledge would be generated contributing to increased value for citizens.
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