Understanding Innovation as an Approach to Increasing Customer Value in the Context of the Public Sector

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ISSN 1652-8948,
Mid Sweden University Licentiate Thesis 113
ISBN 978-91-87557-95-8
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Printed by Kopieringen, Mid Sweden University, Sundsvall, Sweden, 2014
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ABSTRACT

We live in a society that is constantly developing. New challenges and new opportunities emerge all the time. Fortunately, human beings have a fantastic ability to adapt and find new solutions in new situations, i.e. to be innovative. Not just individuals but also organizations need to make room for innovative development. Organizations need to work on how to develop new products, services and processes. At the same time, each organization needs to work on improving the quality of existing activities. Previous research has shown that high value for the customer, i.e. that which often constitutes the goal of quality work, is achieved by the organization working in parallel on developing existing products, services and processes while at the same time driving innovative development forward. How organizations cope with the balance between these two perspectives has been researched and written about considerably when it comes to manufacturing companies. On the other hand, however, there is a lack of documented knowledge regarding how best to balance these two perspectives in the service sector in general and the public sector in particular. This thesis has been written with a view to contributing to existing knowledge about how innovation can be understood as a possible way of increasing customer value within the public sector. It seeks to create insight into how innovation is perceived as a phenomenon in order to increase value for the customer and into how innovation work relates to other aspects of current quality practices within the Swedish public sector. It has also been written with a view to contributing greater understanding to how some of the quality movement’s tools can increase innovation capacity in the public sector.

To fulfil this aim, a literature study and case studies have been performed. The case studies have been performed in Sweden at Lantmäteriet (Swedish Land Survey) and The Swedish International Development Cooperation Agency, (Sida). One of the case studies also included the Swedish Ministry for Foreign Affairs and the Swedish Government. Three research reports have been written between 2012 and 2014, and these form the basis of the thesis.

The research findings give examples of organizations whose quality work focuses closely on systematic measurement and control of the work process and much less on innovatively developing new ways of increase customer value. The findings also show that there are a number of obstacles which the public administrations studied face to combine quality work with a greater ability to work innovatively. Given that innovative development is an important strategy for increasing customer value, the study indicates that some of the existing quality work is an obstacle to achieving greater customer value in the public sector.
At the same time, there are tools and values in the quality movement that can improve the organization’s ability to innovate. The quality movement’s core values and tools, such as systematic cyclical learning, can constitute important tools with which to create favourable conditions to improve innovative ability. This underlines the need for identifying where quality work strengthens and hinders innovation processes respectively. The research findings also stress the need to radically improve the work on innovative processes in the public sector in order to achieve the overarching goals of public administration more effectively.

Key words: Innovation; Customer value, Organizational ambidexterity; Exploration and Exploitation; Leadership in the public sector; New Public Management.
SAMMANFATTNING


Resultatet av forskningen ger exempel på organisationer som i sitt kvalitetsarbete har ett stort fokus på systematisk mätning och kontroll av arbetsprocesser och betydligt mindre på att innovativt utveckla nya sätt att öka värdet för kunden. Resultatet av forskningen visar också att det finns ett antal hinder för de studerade offentliga förvaltningsarna att kombinera det pågående kvalitetsarbetet med en ökad förmåga att arbeta innovativt. Givet att innovativ utveckling är en viktig strategi för att öka kundvärdet indikerar studien att delar av befintligt kvalitetsarbete utgör hinder för att nå ökat kundvärde inom offentlig sektor.

Nyckelord: Innovation; Kundvärde, Organisatorisk simultankapacitet; Exploration och Exploitation; Ledarskap i offentlig sektor; New Public Management.
ACKNOWLEDGEMENTS

First of all I want to thank my supervisors, Professor Dr. Håkan Wiklund and 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.

A special thanks goes to the Sociological Department at Uppsala University who allowed me to study methods courses under their auspices. It was good to be back at the institution where I began my studies 25 years ago. In the same way, I give my thanks to the Stockholm Business School at Stockholm University for allowing me to attend courses together with your graduate students.

Many thanks go also to the government agency Sida that allowed me to interview staff and management at different levels. You have kept the doors open for my research. Similarly, many thanks to Lantmäteriet who gave me access to internal processes regarding innovation. Thanks also to the Ministry for Foreign Affairs for opening your doors and contributing interviews to the research presented in this thesis.

A special thanks to Gary Watson and colleagues who helped me with the language editing in the process of writing the research papers as well as this thesis.

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


1. INTRODUCTION

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

1.1 Background

The challenges that exist in today's society require new forms of quality management based on great flexibility and agility (William et al. (2006). Also 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. 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. Likewise 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. However, the noted importance of creativity, innovation and flexibility 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 control with boundaries within which the work can be improved, i.e. prevention of big changes, or breaking through into new levels of performance, i.e. what Juran calls breakthrough.

The importance and challenge of balancing a) control and conformance to performance standards with b) breaking through into new levels of performance, i.e. innovations, is a key factor for the organization's ability to achieve the overall objectives (e.g. Duncan, 1976; Milé, 2002; Cole, 2002; Gibson & Birkinshaw, 2004; Prajogo & Ahmed, 2007; O'Reilly & Tushman, 2013). One can also reverse the argument and say that previous research provides evidence that an organizational imbalance between those two comes at a cost (e.g. Benner & Tushman, 2002; Mitchell & Singh, 1993; Wang & Li, 2008). Also the results from a survey of the Swedish Quality Management Academy (2012) show that there is a need to develop the capacity for dynamic quality by making organizations not only "lean" but also "agile". The survey states that quality management needs to take inspiration from other related phenomena such as innovation. Those statements
imply that the phenomena of quality and innovations are deeply interlinked with each other.

However, it appears that achieving a balance between on one side control and conformance to performance standards and on the other developing new products, services or processes is a challenging task (e.g. Ng, 2009; Goh, 2002; Cole, 2002; Clifford, 2001). Previous research shows that it can be difficult to balance these two perspectives (e.g. March, 1991; Andriopoulos & Lewis, 2009).

This makes it interesting to increase the knowledge of how the balance looks like and is managed in different organizations. Previous research on how the balance is managed by the current quality practice has traditionally focused on the private sector. But much of the research literature today clearly states that theories about current quality practice and innovation, well established in the private manufacturing sector, cannot simply be transposed to the service sector and hence neither to the public sector which is dominated by the service sector (e.g. Howells, 2000; Hsieh et al., 2002; Lagrosen, 2003; Hipp and Grupp, 2005; Nährinder, 2005). There is therefore a need to clarify the relationship between current quality practice and the ability to innovate within the public sector.

1.2 Purpose and Research Questions

The purpose of this thesis is to contribute to existing knowledge of how innovation can be understood 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 what innovation is, as well as why and how it should be achieved within the Swedish public sector?

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

RQ 3. How could the ability to innovate in the Swedish public sector be improved through quality tools?
1.3 Structure of the Thesis

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

Chapter 1 The background to and the purpose of this thesis.

Chapter 2 The theoretical framework. A selection of relevant theories are described and discussed.

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 along with 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.

As illustrated in Figure 2.1, the chapter is structured so that it first describes the development of the quality movement. The chapter describes core values and the quality movement’s relation to customer value and provides some critical perspectives. This is followed by a second subchapter describing theories about quality management as a matter of control and breakthrough. This subchapter describes theories about innovations, organizational ambidexterity and core elements from the quality movement that can be used in order to increase organizations’ ability to innovate. The third subchapter describes theories about the public sector. It deals with current quality practice and ability to innovate in the public sector.

![Figure 2.1 Illustration of the theoretical framework and the order in which the different theoretical perspectives in this chapter are described.](image)
2.1 The Quality Movement

There are numerous definitions of the quality concept. One of the quality movement's 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 lies in continual small 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.

2.1.1 The development of Quality Management

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

**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 Bergman & Klefsjö, 2010, pp. 97).

These eras have of course been interpreted differently through the quality movement's history. Some interpretations are presented below.

**Quality inspection**

Dale et al. (1994) describes 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
“There will have been some development from the basic inspection activity in terms of sophistication of methods and systems and the quality management tools and techniques which are employed” (Dale et al., 1994, p. 6).

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.

Quality assurance
“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” (Dale et al., 1994, p. 8).

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.

Quality development
In Yong & Wilkinson’s (2002) description of the quality movement’s development, they describe 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:

First phase: 'Japanization' and quality circle.
Second phase: Company-wide quality.
Third phase: Catering for the customer.
Fourth phase: Into the public sector.

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 now existing current quality practice in the public sector emerged.
2.1.2 Core values

The values are generally considered as the basis of Quality Management (Lagrosen, 2006; Ingelsson, 2013; Åslund, 2013). However, the definitions of the values vary between different researchers even if the similarities are striking. Bergman and Klefsjö (2010) have chosen to describe the values as a cornerstone model that describes well the core values. Lagrosen & Lagrosen (2003) also note that these values accurately describe several other writers’ opinions on core values.

![Illustration of the core values as cornerstones according to Bergman & Klefsjö (2010, pp. 38)](image)

2.1.3 Quality and customer value

Another idea that has come to characterize the quality movement is emphasized by another of the quality movement’s proponents, Shewhart. He notes that quality is ultimately about satisfying the desires that people have (Shewhart, 1931). The purpose of satisfying people’s desire has more recently been described as raising customer values. 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, cited in Woodruff, 1997, p. 141).


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, cited in Woodruff, 1997, p. 141).


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, cited in Woodruff, 1997, p. 141).

Van Nasution et al. (2011) argue that customer value can simply be conceptualized as a comparison between the weight 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 identified with 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 product’s 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 Criticism of Quality Management

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 the quality movement 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 and 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 continual improvement and stepwise refinement then 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 continual 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

Juran (1964) emphasized that quality is improved through the balance of the two states: control and 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 also 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.

2.2.1 Innovation

Long before the concept was articulated, humans were innovative. Human inventiveness distinguished us from the other inhabitants of the planet. We developed methods to communicate and exchanged ideas with other people. We tamed fire and invented the wheel. Schumpeter (1934) explains that the term innovation may not have been used extensively, but the processes that we now regard as innovative were also previously perceived as being important. 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).

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).

Innovation as a phenomenon is however a relative concept related to several other concepts. Damanpour and 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) points 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 definition 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 2.6. 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 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 2.6  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. In this thesis, the following definition of innovation is used:

“Innovation is the multi-stage process whereby organizations transform ideas into new products, service or processes, in order to achieve increased customer value.”

There are not only several definitions of innovation. There are also numerous theories that attempt to describe the process of innovation. 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 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.

2.2.2 Organizational ambidexterity

As previously stated (see chapter 2.1) there is a rather strong consensus within the quality movement that the overall goal of quality management is about increasing customer value. The question is how to best reach that goal. Ng (2009) states that improved customer value can be achieved through two strategies referred to as quality improvement and innovation improvement. See Figure 2.4.

![Figure 2.4](image)

**Figure 2.4** Innovation and quality have a common overall objective; to improve customer value. (Inspired by Ng 2009).

**Exploration and exploitation**

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. Other researchers have identified the need for exploration and exploitation but also the need for 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. The ability of an organization to handle both exploration and exploitation is referred to as organizational ambidexterity (O’Reilly & Tushman, 2013).

According to Taylor & Greve (2006) and Wadhaw & Kotha (2006), exploration is created by variety and experimentation and a curiosity for testing new ideas. It’s about generating novel recombinations of knowledge. Exploitation, on the other hand, is created by refinement, efficiency, convergent thinking and continuous improvement of products (e.g. March, 1991; Wadhaw & Kotha, 2006).
However, achieving organizational ambidexterity on the operational level is not an easy task (e.g. Ng, 2009; Goh, 2002; Cole, 2002; Clifford, 2001). Previous research indicates a complex and ambiguous relation, raising questions as how to optimally integrate or balance these two organizationally, operationally, and culturally. Figure 2.5 clearly shows the obvious contradictions between exploitation and exploration and thereby also the tricky challenge of accomplishing organizational ambidexterity in practice.

[Figure 2.5: The two types of logic related to organizational ambidexterity, in terms of exploitation and exploration. (Inspired by Magnusson, 2003, p.45).]

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, while strictly following all norms may inhibit employees from finding innovative ways of solving workplace problems. However, earlier research shows that there is usually a striking overemphasis on continual 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 continual 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 relation between quality management and innovation

A number of previous researchers have emphasized that the balance between quality improvement and innovation improvement is important, (e.g. Gibson & Birkinshaw, 2004; Brown & Duguid, 2001; Andriopoulos & Lewis, 2009). But researchers have also noted that current quality practices may adversely affect the organization's ability to innovate and it can be noted that in several scientific studies the two perspectives of exploration and exploitation are described as opposites to each other. Andriopoulos & Lewis summarize (2009), for example, the need for both balance and conflict by stating that: “Achieving exploitation and exploration enables success, even survival, but raises challenging tensions” (p. 696).

Ng & Ang (2011) state for example that quality management is generally about conformance to standards while innovation is about breaking new ground and that it is unclear how organizations actually integrate quality and innovation into a coherent and powerful strategic package. Likewise, Steiber & Alänge (2013) identify the dilemma for organizations to manage Total Quality Management (TQM) while maintaining an innovative culture. One may possibly consider that quality improvement and innovation improvement 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 conflicting relation

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. Williams et al. (2006) argue that TQM discourages innovation. They say that TQM encourages the standardization process and therefore, hinders innovation. The focus on achieving working routines aiming at zero defects can result in a slower development of new products or services, since innovation 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 innovation (e.g. Tidd & Besant, 2011; Kim & Marbougne, 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 innovation processes.

Prajogo & Sohal (2001) summarize previous research on how the incremental quality management negatively affects innovation. In their research, they look at TQM and its relation to innovation.
They identify and list six perspectives on the negative relationship between TQM and innovation:

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 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.


A synergetic relation
Several research results show that quality management positively reinforces the possibilities to develop innovation in an organization. Flynn et al. (1994) and Baldwin & Johnson (1996) express the opinion that the implementation of a TQM system could foster the innovation process in companies and that elements common in TQM, such as continual improvement and customer focus contribute to an enabling environment for innovation. Martinez & Martinez (2008) also find clear evidence that TQM promotes innovation 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.

Flynn et al. (1994) and Baldwin & Johnson (1996) argue that the implementation of a Total Quality Management system could foster the innovation process in companies and that elements in TQM, such as continual improvement and
customer focus contribute to an enabling environment for innovations. Martinez & Martinez (2008) also find clear evidence that TQM promotes innovation within companies. Byrne et al. (2007) express the opinion that Lean Six Sigma enables companies to produce breakthrough innovations that cause profound improvements in their business performance. And it creates an organizational climate in which innovation has become expected.

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 innovate 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 innovate. Hoerl and 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 innovation. 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. 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. They believe that the conflict is to be found most of all in three perspectives. These are:

- Interpretation of standardization,
- the role of variation,
- the perception of and the use of liberated capacity.

2.2.3 Core elements from the quality movement as tools for improved ability to innovate
Steiber & Alänge (2013) see opportunities to synergetically combine current quality practice with improved ability to innovate by concluding that core elements in the TQM concept, e.g. importance of a strong culture, employee empowerment, the primary role of visible leaders and a total approach, all contribute to innovativeness. Similarly, Prajogo & Sohal (2001) conclude that some of the best practices of innovation management could be recognized as TQM elements. In general the core TQM values described by Hellsten & Klefsjö (2000) and Bergman and Klefsjö (2010) are identified as possible tools for increasing innovativeness. Further, a cyclical development process is highlighted as an important method for creating a learning process where experiences are used to develop a sustainable
work with innovation. Dahlgard-Park & Dahlgard (2010) formulate the process thus: “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).

Albury (2011) further argues that a critical part of creating conditions for innovations is to develop systems for incentives and risk taking. This is especially important in the light of what Van der Panne et al. (2003) conclude through a literature review, namely that tentatively only 20 per cent of innovations are viable and sustainable. Brown & Osborn (2012) state that, by their nature, innovations carry significant risks – such as the failure of the innovation, its non-adoption by the producers or users, or its inability to be sustainable in the long term.

One way to manage systems for incentives and risk-taking and to make decisions based on facts is to create opportunities to evaluate innovations and innovation processes. Dahlgard-Park & Dahlgard (2010) identify that when working with evaluation in relation to innovations, 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. Dahlgard-Park & Dahlgard (Ibid.) suggest four factors as important for creating increased ability to innovate, i.e. four factors that can be used for evaluating ability to innovate. These are: 1) People, who practice. (2) Care of Customers. (3) Constant Innovation. (4) Leadership, which binds together the first three factors. Dahlgard-Park & Dahlgard (Ibid.) further stress the importance of first focusing, and thus evaluating, soft perspectives such as personnel and culture, before focusing on the hard values such as structure and economy.

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. Managing the effectiveness of the innovation process requires a balanced set of innovation metrics related to all innovation drivers, i.e. leadership, culture and people participation together with innovation results, such as time to market and usability.

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 and 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.

2.3 The Public Sector

This subchapter describes the current quality practice in the public sector and the ability to innovate in the public sector.

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 sector administration 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 how the current quality practice looks like Lagrosen (2003) note that the service sector does not apply as many accepted methodological quality management tools as in 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). Also Lagrosen (2003) notes 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

As noted above, New Public Management (NPM) has characterized the development of management in public administration in recent years. The common attributes of NPM are listed in Table 2.1.

Table 2.1 Characteristics of the New Public Management (Gruening 2001).

<table>
<thead>
<tr>
<th>Undisputed characteristics (identified by most observers)</th>
<th>Debatable attributes (identified by some, but not all, observers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget cuts</td>
<td>Legal, budget, and spending constraints</td>
</tr>
<tr>
<td>Vouchers</td>
<td>Rationalization of jurisdictions</td>
</tr>
<tr>
<td>Accountability for performance</td>
<td>Policy analysis and evaluation</td>
</tr>
<tr>
<td>Performance auditing</td>
<td>Improved regulation</td>
</tr>
<tr>
<td>Privatization</td>
<td>Rationalization or streamlining of administrative structures</td>
</tr>
<tr>
<td>Customers (one-stop shops, case management)</td>
<td>Democratization and citizen participation</td>
</tr>
<tr>
<td>Decentralization</td>
<td></td>
</tr>
<tr>
<td>Strategic planning and management</td>
<td></td>
</tr>
<tr>
<td>Separation of provision and production</td>
<td></td>
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<tr>
<td>Competition</td>
<td></td>
</tr>
<tr>
<td>Performance measurement</td>
<td></td>
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<tr>
<td>Changed management style</td>
<td></td>
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<tr>
<td>Contracting out</td>
<td></td>
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<tr>
<td>Freedom to manage (flexibility)</td>
<td></td>
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<tr>
<td>Improved accounting</td>
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<td>Personnel management (incentives)</td>
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<tr>
<td>User charges</td>
<td></td>
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<tr>
<td>Separation of politics and administration</td>
<td></td>
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<tr>
<td>Improved financial management</td>
<td></td>
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<tr>
<td>More use of information technology</td>
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It can be noted that the above table does include some of 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 the public sector and that increased innovation has to be part of that development (e.g. Albury, 2011; More & Hartley, 2008; Brown & Osborne, 2012). Maybe that’s an explanation as to why the research on innovation for many years has been intense within the private sector but less attention has been paid to the public sector. Windrum & Koch (2008) note for example, that “precious little research has been conducted on public innovation” (p. 3). But does it matter in which sector research on innovation 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. One of the biggest differences between the public and private sector lies in what Lee et al. (2012) disclose, namely 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 incitement 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 in the public sector than in the private sector.

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 a lot of negotiation and working with 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 developing. Customers who make demands have different requirements according to Albury (2011).

Furthermore, 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 (Borins, 2001).

These differences between public and private sectors motivate Cunningham & Kempling (2009) to argue that there is a need for a better understanding of the specific conditions for innovation 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 focussed on end-user driven innovation.

That there is a need to increase the knowledge about conditions for an improved ability to innovate in the public sector may depend on what Ettile & Rosenthal (2011) describe, namely that innovation has arrived relatively recently in the service sector. Nählinder (2007) also argues that research on innovation in the service sector is quite limited and that research on innovation in the public sector is even more limited. It may depend on what Nählinder describes in her research, namely that innovation studies in the public sector is a young research area. This is 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 2.7. 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).
Figure 2.7 Incitement for working with innovations in the public sector, according to Albury (2011).

We can further see that Moore & Hartley (2008) clarify the relation between innovation and the quality movement 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). In Sweden, much in line with Moore & Hartley’s (Ibid.) 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 Summary of the Theories

The theory chapter has explained that strategic work with innovation, alongside the current work with quality, is an important way to achieve high customer value. There can be some contradictions between the current quality practice and organizations’ ability to innovate. Meanwhile, there are certain core values and tools provided by the quality movement which, if used correctly, can be valuable to increase the organizations’ ability to innovate.

Furthermore, the chapter describes that there is a relatively new interest in innovation in the public sector. The public sector is often considered to be a far less fertile ground for innovation than the private sector. However, most researchers seem today to be in agreement that there is a need to develop the public sector and that increased innovation has to be part of that development.
3. RESEARCH DESIGN

This chapter describes the research approach, methods, cases, and data collecting techniques and concludes with a discussion about reliability, validity, and generalization.

3.1 Overview of the Research Process

The research process has constantly been in progress from 2012 to 2014, resulting in this thesis as seen in Figure 3.1. This thesis is based on three papers and a "Cover". The research process started in 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 an analysis of where empirical data could be collected was started.

![Figure 3.1](image)

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 has been submitted for publication in the journal Total Quality Management and Business Excellence. The third paper (Paper I) was based
on empirical data collected during 2012 and 2013 and has in 2014 been submitted for publication 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. Finally, the “Cover”, was written in 2013 and 2014.

Research Question number one is answered in Paper I, question two in Paper II and question three in Paper III. Figure 3.2 illustrates the relation between the research questions, case studies and research papers.

![Figure 3.2](relation-between-research-questions-case-studies-and-research-papers.png)
The research carried out in order to answer 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 done through two case studies at Sida and Lantmäteriet (Swedish Land Survey), the government agency which maps the country, demarcates boundaries and guarantees secure ownership of Sweden’s real property. The third research question was finally developed with empirical material gained through a case study at Sida.

3.2 Method

The research questions of this thesis aim to build knowledge about the phenomenon of innovation in public organizations. The research is furthermore focused on “how” and “what” questions. The research questions are hence of such a nature that a qualitative research approach has been chosen as preferable. The research is conducted through case studies and a literature review.

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) och 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). Laverty (Ibid.) expresses it means that questions to respondents, such as "what is your experience" is important in this research tradition.

Laverty (Ibid.) state that the hermeneutic 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 comunity does therefore write about a heremeneutic phenomenological research tradition. It is in this heremeneutic phenomenological traditionen the research behind this thesis is done.

Alvesson & Sköldeberg (2008) describe that research moreover 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) argue 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). See Figure 3.4.
The research forming the basis for this thesis has followed an abductive method 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 individual's experience of the situation. In sum, the research behind this thesis is carried out from a hermeneutic phenomenological and abductive approach.

3.2.2 Case study

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 thesis is based on “how” and “what” questions. 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. For that reason the empirical data collection forming the basis for this thesis is carried out through case studies.

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 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 thousands of different shades of red, but we call them all red. Similarly, a case may contain thousands of different descriptions of reality, but we can nonetheless call it a case.

Flyvbjerg explains in Denzin & Lincoln, (2011) that a case study approach is not so much a methodological decision as a choice of what is to be studied. Flyvbjerg explains that the chosen case to be studied can be studied in several different ways. For example by a hermeneutical, analytical, qualitative or quantitative method. A Mix of different methods can also be used. This opinion is in line with Gerring (2007) who suggests that case study can be seen as an approach with many different sub-approach opportunities. For example Gerring (2007) writes: “Case studies may employ a great variety of techniques – both quantitative and qualitative – for the gathering and analysis of evidence. This is one of the intriguing qualities of case-study research and lends that research its characteristic flexibility” (p. 33).

Yin (2008) and Gerring (2007) furthermore state that in case studies the data collection methods are not routinized. The data collection can be done through a single source or through a variety of sources and methods. If the latter is the case, this implies that the analysis process has to be based upon different types of collected information acquired through a variety of sources and data collection techniques.

Denzin & Lincoln (2011) argue that in general it seems that mixing methods in research has become a popular research method. They believe that this approach is also controversial and raises several important questions. Questions such as whether mixing methods research misappropriate design and procedures from other approaches to research or if the mixing research confuses design because there are too many opportunities.

Selection
The research presented in this thesis is based on data collection from multiple sources. Yin (2008) points out that several researchers who have gone before in the development of case study as a method believe that the method of using a single source of data collection is not an appropriate technique in a case study. The strength of the case study as a method lies in the fact that it may use 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 and properly carried out. The empirical data forming the basis for answering the research questions in this thesis have mainly been collected by studying the cases presented below.

In order to answer RQ 1, the research was carried out with two separate cases, namely Sida and Lantmäteriet. These were selected because they represent prime examples of the group of major authorities (more than 300 employees) and they are dealing with innovation perspectives more actively than most Swedish authorities.

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 agency should work innovatively. This formulation was found in the instructions to Sida (Swedish Government 2010). Therefore, Sida is an organization that has been in focus for empirical data collection. Sida administrates 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 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 is also interesting from another perspective. The agency has for several years been asked by the Government to improve the control of the financial resources it handles. After several tough conflicts 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 in recent years been driven by an agenda focusing on higher innovativeness in parallel with another agenda focusing on control and process alignment.

Lantmäteriet maps the country, demarcates boundaries and manages the Swedish land property register. The organization has just under 2 000 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.

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 RQ1.

Finally, because of the above-mentioned explicit request from the Government for Sida to work innovatively, Sida was chosen as the case in order to answer RQ 3.

**Interviewees and documents**

The empirical material consists of documents and interviews conducted with management and staff from the selected organizations. The interviewees were program officers, middle and top management in the organizations included in the empirical material. 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. This 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 and ten respondents for Paper III. 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’ interpretation and understanding 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 the ability to innovate.

Documents which are part of the empirical data collection 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.

**Empirical data collection**

The data collection has been based on empirical data collection through semi-structured respondent interviews. 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 agency’s 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.

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

3.3 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.

3.4 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 case. In this research the compilation topic has been dealt with by first collecting data through different data collection techniques and then making a joint 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 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.
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 has been 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.

3.5 Validity, Generalization and Reliability
The following sub-chapters describe the studies' validity, generalization and reliability.

3.5.1 Validity

By listening to the interviewees an image of the respondent’s view of the research topic was obtained. But the interviews don’t provide an image of how clear or volatile the respondents’ opinions are. It could quite possibly be that other answers would have been received if the respondents were asked the same question one week later. The person could for example have talked with a colleague about the topic during the week and thereby changed his or her opinion.

To achieve 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 by combining written material and interviews, and by including different staff categories in the cases. The document studies have furthermore been based on a broad amount and spectrum of documentation whereupon the researched phenomena have been described from different perspectives.

In the database the various types of material were considered as equivalent. This means that 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 case 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. This has been an important issue in order to achieve validity in the data collection.

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 sought not to influence the interviewees’ opinions in the interview situations.

### 3.5.2 Generalization

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 any respect if it is to be useful. (Generality is something Yin (2008) calls the 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 study is carried out on a small number of cases. Despite this, research findings can be relevant to other similar organizations. Which organizations can then be considered similar? Similar perspectives and policy directives often govern public organizations in one country. Perspectives and directives are created by similar political winds and contexts. There are therefore many similarities between public organizations at different levels and also between different countries in the Western world. As a consequence, the results of this thesis are generalizable and relevant to a broader spectrum of public organizations.

The research results were presented in November 2014 at a workshop about urban development at municipal level. The participants at the workshop, development managers from five Swedish cities. Stockholm, Göteborg, Malmö, Lund and Borås, perceived the findings as valid for the situation on municipal level (e.g. Bergendorff 2014; Pavic 2014). Their perception contributes to the view that the findings can be generalizable within the public sector.

3.5.3 Reliability

Pyräkylä and 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 shall 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 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 three 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 will be 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

Palm, K., Lilja, J. and Wiklund, H., (2014), Agencies, it’s Time to Innovate! Exploring the current understanding of the Swedish Government’s call for innovation. Accepted for publication in International Journal of Quality and Service Sciences.

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 administration. 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 latter choice was based on the fact that Sida, unlike most other agencies in Sweden, has clearly been requested in its official instruction to work innovatively (Swedish Government, 2010). 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. The analysed documents were documents concerning the call for innovation on the different organizational levels. The selection of respondents was based on the principle of getting information from people affected by the call from the Government. The interviews were semi-structured.

Inspired by Holme and Solvang (2010), the interviews were summarized in interview printouts. Some important sections of the interviews were transcribed verbatim, while other passages of the interviews were summarized. The interview printouts, together with documents, subsequently formed the basis for a thematic analysis inspired by Brown and Clarke (2006), Silverman (2010) and Ritchie et al. (2013). The thematic analysis was done in three steps. In the first step, the information was categorized based on the three 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.

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.

Furthermore, parts of Sida’s management and Sida civil servants think that the recent business development to increase the standardization of work processes has created poorer preconditions for working with innovation. The results of the study also show that the innovation process appears to follow a top-down perspective, and Sida civil servants commented that they have little opportunity to influence the development of how innovation shall be managed.

The Government together with some civil servants emphasizes that innovation shall take place with the target groups involved in the development. A perspective that is strongly supported in previous research (e.g. Dadfar et al., 2013; Høerup, 2010; Lee, 2012; Bommert, 2010).

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. Data from the cases are collected and analysed by a ‘replication logic’, i.e. the case studies were designed and carried out in a similar way in order to achieve comparable data. The cases are thus two governmental authorities. Case 1 is the Swedish International Development Cooperation Agency (Sida) and Case 2 is the Lantmäteriet (Swedish Land Survey). These two were selected because they represent large authorities (more than 300 employees) and they deal with innovation perspectives more actively than most other authorities.
The empirical data collection was based on five questions. The questions frame five major perspectives on the relations between current quality management practice and innovation:

1. What is the organization’s current quality management practice?
2. How does the organization work with innovation?
3. How does the organization view the fact that the Government has demanded that the authorities should work more innovatively?
4. What are your views on the relation between quality management and innovation?
5. Are there contradictions between current quality management practice and development of an enabling environment for innovation?

Questions 1, 2 and 3 create a contextual understanding and questions 4 and 5 explore the core of the research question in this paper. Question number 5 can be seen as a supplementary question to number 4.

The empirical material consists of documents and interviews conducted with management and staff of the two organizations. The interviews were semi-structured and were carried out during the period February to May 2013. The interviews were held both individually and in groups.

Findings

In 2011, the Government appointed an inquiry into the status of innovation and quality in the public sector. According to this inquiry, 94% of the major Swedish authorities (more than 300 employees) report that they systematically work with quality management. The inquiry concluded that it is very difficult to measure quality management practice due to different interpretations of the concept. Eighty per cent of the organizations that declared that they work with quality management said that they do not work with an established quality model or quality assurance framework such as ISO or Common Assessment Framework. The inquiry also found that planned innovation management did not occur to any significant extent within authorities (Swedish Government, 2012).

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 a 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 actual situation is similar to Prajogo & Sohal’s (2001) and Castillo-Rojas et al.’s (2012) analysis of how on-going quality management negatively affects innovation. This is because they perceive the regulatory requirements for legal certainty as a barrier to innovativeness.

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.

The empirical findings show however that there is a common understanding that the organizations need management and strategies not only for quality management but also for innovation. 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. This is in line with what March (1991) describes as the need for balance between exploration and exploitation and Andriopoulos and Lewis’s (2009) statement “Achieving exploitation and exploration enables success, even survival, but raises challenging tensions” (p. 696). An important step in the identification of where quality management and innovation management strengthen or hinder each other was taken by Steiber and Alänge (2013) who stressed that the main differences between quality management and innovation seem to be the overall management focus, and on concrete design of organizational structure and management processes.
4.1.3 Summary of Paper III


Background
A frequent topic in quality management initiatives is measurement. The old saying “you get what you measure” is then used to reinforce interest in measurement. With this rhetoric, 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). This general logic of organizational learning is hard to argue against. It also illustrates the critical importance of finding “the right” organizational measurements that capture the quality of the desired result.

Purpose
The paper aimed to contribute knowledge about and new perspectives on the measurement of innovation quality in service organizations.

Methodology
The first questions raised, given the aim of the paper are: – what is quality when it comes to innovation, how is quality in innovation currently “measured”, and what are the insights from previous research on these topics? In order to answer these initial questions, 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. (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”,

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“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.

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).

The main question in the empirical study of Sida’s work on innovation related to the officials’ and managers’ perception and definition of the phenomenon of Innovation Quality. The methodological approach to the empirical study at Sida was mainly qualitative and carried out in the form of a desk study of innovation-related internal reports regarding innovation perspectives, and semi-structured interviews. The interviews were done orally or via e-mail with ten staff at Sida head office and at embassies. Sida constantly rotates its staff between head office and the embassies and the majority of the interviewees had recent experience from working both at head office in Stockholm and at embassies in Asia, Latin America or Africa.

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.

Concepts and indicators have to be designed in context. It is not possible to rely on ready-made definitions.
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. Also the work with evaluating innovation may be done by the PDCA-cycle. An evaluation perspective will thus strengthen the conditions for ability to innovate. See Table 4.1.

Table 4.1  A cyclic process of evaluating innovation quality, inspired by the PDCA cycle.

<table>
<thead>
<tr>
<th>Five-step model in the cyclic process of measuring innovation quality</th>
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<td><strong>First step</strong></td>
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<td><strong>Second step</strong></td>
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<td><strong>Third step</strong></td>
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<tr>
<td><strong>Fourth step</strong></td>
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<tr>
<td><strong>Fifth step</strong></td>
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In this third paper the improvement cycle is described as the PDCA-cycle. Deminger who launched this cyclic model came later to describe it as a PDSA cycle; Plan, Do, Study, Act. This was because Deminger perceived that “Study” was a better concept than “Check”. In this summary of Paper III the improvement cycle is described in accordance with the PDCA cycle used in the paper. However, in subsequent chapters the cycle is described as the PDSA cycle because Deminger’s use of “Study” instead of “Check” seems to be more appropriate for what should be processed in the third step in the cycle.
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 emphasize 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 state that 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).
5. CONCLUSIONS

The first part of this chapter summarizes the conclusions that have been drawn in relation to the three research questions. Thereafter the results obtained through the research are linked to the specific research questions.

5.1 Reconnecting to the Research Purpose

The purpose of this thesis is to contribute to existing knowledge of how we can understand innovation as an approach to increasing customer value in the context of the public sector. The results from the case studies of this thesis indicates that the current quality practice in the Swedish public sector to a large extent relates to and supports exploitation, but not exploration. The cases in the study gives examples of organizations that have a large focus on systematic measurement and control of the work process and significantly less on breakthrough. 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 innovate. Given that innovation indeed is an important strategy for increasing customer value, an inhibition of increased customer value can be seen in the studied organizations’ current emphasize on exploitation at the expense of exploration. This obviously emphasizes the need of radical development of the exploration processes in order to better fulfil the public sector’s objectives.

In order to improve the ability to innovate in the public sector the results of this thesis can now only provide some initial thoughts, to be elaborated in the research to come. Some public organizations’ quality management practice adversely affects their ability to innovate. Meanwhile, there are quality movement tools and values that can increase the organization’s ability to innovate. Quality Movement core values can be important tools for creating favourable conditions for increased ability to innovate. As part of this, the improvement cycle, generally known as the PDSA-cycle (Plan, Do, Study, Act) can be used as a basis for increasing learning, evaluation and to create a basis for decisions and thereby raise the ability to innovate in a recurring loop. This, in combination with a clearer definition of the concept of innovation and developed quality indicators for innovation, can provide enabling conditions and create important incentives for a stronger focus on innovation within the context of the public sector.
5.2 Reconnecting to the Research Questions

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

5.2.1 Research question 1

RQ 1. What is the current understanding of what innovation is, as well as why and how it should be achieved within the Swedish public sector?

The results from the case studies 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, the 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 good ability to innovate.

5.2.2 Research question 2

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

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 authorities (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.

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 this study 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 also a challenge to obtain organizational ambidexterity in the Swedish public sector.
5.2.3 Research question 3

RQ 3. How could the ability to innovate in the Swedish public sector be improved through quality tools?

The results of the case studies show that one possible way to improve the ability to innovate is to work in a cyclical learning process and create clearer incentives for innovative work by, for example, developing methods to evaluate innovations. In order to create such incentives is it furthermore probably crucial for the organization to develop a plan for how innovation evaluation results shall be collected, analysed and used. If done properly, the organization will be better equipped for an effective PDSA-cycle that could enable a learning process concerning innovation and thereby strengthen the organization’s ability to innovate. The feed-forward process could then preferably include both information about enabling factors, barriers in the innovation process, and information about innovation quality of innovation output. The cyclic process of measuring innovation quality in order to achieve higher ability to innovate could then be illustrated as seen in Figure 5.1.

![Figure 5.1](image)

**Figure 5.1** The cyclic process of evaluating innovation quality in order to achieve increased ability to innovate. In the third step some innovations will be identified as interesting and worth developing further while others will be discarded. In the fifth step some of the results, found by the evaluation of innovation quality, will be used to re-define the definition of innovation or the indicators while other results will be fed back into the innovation process in the organization.
Processing innovation through the main steps increases the scope for learning and evaluating innovation and thereby contributes to higher ability to innovate.

5.3 Implications for Practice

For many who work with quality the aim is to increase value for the customer. Today’s customers shall experience a high value of the goods and services offered. However, tomorrow’s customers must also experience a high value, in whatever new context they find themselves. We do not know in what ways but we do know that it will be different. 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. Today, many organizations in the public sector are poorly suited to quality management that equally involves exploration and exploitation.

This thesis provides knowledge about the status concerning capacity to innovate in the public sector. Thus, the thesis creates opportunities for public organizations to reflect over their quality management processes, both exploration and exploitation, and consider how a possible skewed balance may affect their ability to create a context-specific, sustainable, long-term quality work aiming increased customer value. The thesis also suggests that innovation should be managed through a cyclical learning process based on the PDSA cycle and thereby develop stronger ability to innovate and facilitate breakthrough.

Based on what emerges from this thesis, the public sector can increase customer value by working with the following five points and thereby increase their ambidextrous ability:

- In the specific context, define what should be classified as an innovation and what should be seen as development of existing products, services or processes.
- For stakeholders, clarify the purpose of improved ability to innovate.
- In the innovation process, involve customer and employees who work close to the customers.
- Analyse if, and possibly how, the actual quality practices might hinder quality management in the long run, i.e. restrict an increased ability to innovate. These obstructions should ideally be eliminated.
- Create a learning process for the innovation management based on the PDSA-cycle.
6. DISCUSSION AND FUTURE RESEARCH

In this chapter, a broader discussion is presented based on the findings in addition to suggestions for future research as well as a methodological discussion.

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 have developed their quality management practices through standardization of processes and control, which is in line with what Becket (2000), Hsieh et al. (2002) describe as operations which are influenced by New Public Management.

The research that forms the basis for this thesis also shows that the current quality practices may hinder innovation and that the trend of standardization of work processes and control has reduced the leeway for innovation. At the same time we see that there are many public organizations that do not work with standardized quality tools in their quality work. It may be that the interpretation of how to achieve quality, i.e. how to conduct quality management differs between the public sector and the knowledge in the quality movement. The research presented in this thesis does not analyse the correlation between the TQM movement and ability to innovate. This thesis does not contribute with knowledge to ascertain whether Prajogo and Sohal’s (2001) identified negative relationship between TQM and innovation applies or not. But it contributes with the knowledge that the organizations’ perception of the own current quality practice is perceived as preventing the organization ability to innovate.

The research shows also that there is a notable disparity between the different governmental levels in the understanding of what the concept innovation entails. If assuming Nählinde’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 failing to make radical changes.
The thesis shows that employees in the public sector are experiencing problems with how the current quality practice hinders the work of innovations but at the same time emphasizes that innovation and the current quality practices might 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. In previous research there are clear indications that many of the basic values of the quality movement can be a well-functioning platform for development of the ability to innovate. This leads to the conclusion that there is a need to clarify which specific components within quality management impact positively and negatively on an organization’s ability to innovate. One important area to look closely at is what Johnstone et al. (2010) note, namely that one of the more prominent contradictions between traditional quality management and innovation management is the view on deviation.

An idea which seems to have permeated quality management from the early days of the quality-paradigm is that high quality is ensured by low deviation in processes and products. In contrast, a contribution to high ability to innovate is flexibility and acceptance of high deviation, as argued by e.g. Georgsdottir and Getz (2004) and Williams et al. (2006). Interestingly, quality management and innovation management may then seem to 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 6.1.

![Figure 6.1](image)

**Figure 6.1** A simplified visualization of possible contradiction between how management concerning deviations relates to the assumptions of a successful organizational system in traditional quality management versus innovation management.
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 quality and innovation. The research presented in this thesis is based on a small number of cases in the Swedish public sector at governmental level. It would have been useful if the empirical material had also been collected from other public organizations such as municipalities.

It would have strengthened what Yin (2008) calls the external validity. However, the research has focused on some cases that can provide generalizable knowledge and that it was possible to manage within the framework for the research.

Another challenge has been the selection of individual respondents within the selected case. Large organizations and complex issues are difficult to get explained and understood by 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.

Another important perspective, not concerning the selection but 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. This means that the described findings in this research could possibly be different if the research were replicated at a later time.

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.
6.1 Future Research

This thesis has focused on exploring how public organizations balance current quality practice with improved ability to innovate in order to increase customer value. The research provides answers but also raises new questions. Questions that have to be answered in order to develop public organizations’ service ability to improve customer value. It is of utmost importance to continue to build the collective knowledge about the factors that prevent the public sector from being ambidextrous. Equally important are those factors which can strengthen the public sector to become ambidextrous. Continued research could therefore be focused on the following question:

What precludes public organizations from being ambidextrous and how can public organizations become more ambidextrous?
REFERENCES


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