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How does managerial leadership influence organizational ambidexterity?

A study of the public sector

Author
Adam Freij
Josefine Olsson

Supervisor
Elin Smith

Examiner
Christer Ekelund
Abstract

Organizational ambidexterity is a widely researched and known phenomenon amongst academics; however there are still research gaps. Most of the studies are in private sector; however, lately researchers have called for more studies in the public sector.

The purpose of this dissertation is to explain casual relationships between different leadership styles and their influence on organizational ambidexterity in public sector organization. The dissertation use a positivistic philosophy and a deductive approach; hence, a cross sectional design is used. The quantitative method chosen was a web based survey, distributed by e-mail to 171 managers operating in waste management and water and sewerage industries in the Swedish public sector.

The findings of the study are that it is not possible to differentiate a higher level of organizational ambidexterity in any public organizational form. Another finding is that organizational ambidexterity can be positively influenced by managerial leadership in the local government administration.

The limitations of this dissertation are that only two industries are included and that the results cannot be generalized for other populations due to a small sample. The implications of this study are that organizational ambidexterity is a concept that is present in the public sector and can be influenced by managerial leadership under certain circumstances.

Keywords: Organizational ambidexterity, LGA, LGC, transformational leadership, servant leadership, authentic leadership
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Adam Freij                               Josefine Olsson
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1. Introduction

This chapter explains the dissertation's background, problem, research question, purpose, and theoretical limitations. The end of this chapter includes an outline of the rest of the dissertation.

1.1. Background

In a world of competition organizations are likely to strive for new ways to find competitive advantage for long-term survival and success (Gibson & Birkinshaw, 2004). This is done by exploiting resources to increase productivity and efficiency with allocating current resources and exploring the environment to search and experiment for new opportunities (March, 1991). An organization being able to balance these two concepts represents the ambidextrous organization (March, 1991; Gibson & Birkinshaw, 2004; Birkinshaw & Gupta, 2013). Most of the organizational ambidexterity studies are in the private sector (Raisch & Birkinshaw, 2008; Tushman & O'Reilly, 2013; Lubatkin, Simsek, Ling, & Veiga, 2006); however, there has been less attention in the public sector.

In order to link organization ambidexterity to public sector organizations it is important to understand the meaning of organizational ambidexterity. Thus, we will introduce two case illustrations of exploration and exploitation. Case one is a company that has a more explorative behavior, while case two has a more exploitative behavior. However, these are two extreme cases of how companies could act if they tried to exclude either exploitation or exploration. Usually a company leans more towards one behavior than the other, but to exclude them entirely is near impossible (March, 1991).

Case 1, explorative behavior: imagine a company that is prone to take risks when it comes to decision making. The explorative company is not afraid of experimentation of new ideas. It also like playing and discovering new innovations, and is always searching for variations and flexibility. This company would be explained as explorative when it comes to allocating resources (March, 1991). Decision making is short and not always fully thought out due to the short-term orientation trying to create tomorrow’s innovations today. This company exists on a market with high competition and that is the reason why this company lays more focus on developing new innovations to create competitive advantage. The case illustration describes a company that is more likely to engage in explorative behavior (ibid, 1991).
Case 2, exploitative behavior: imagine a company with focus on being efficient during their processes and still maintain quality of their work. The explorative company will lay more focus on improving production and resource planning processes and staff competence. The company spends more time refining their own rules and strategies. Decision making in the exploitative company takes longer time considering that every aspect of the proposal must be examined before they execute and implement new decisions. Moreover, the company is also likely to take lower risks and be more cautious when it comes to develop new ideas and will in the long run be able to produce more for a lower cost because of being more efficient. The company operates on a non-sensitive market. This gives opportunities process refinement in order to be more efficient. This case illustrated a company that is more likely to engage in exploitive behavior (March, 1991).

Organizational ambidexterity is according to Gupta and Birkinshaw (2013) the useful way of framing managerial challenges of two competing objectives at the same time. It provides different frameworks and tools for understanding how managers handle competing objectives, who is responsible for those choices and what does the choices entail (Birkinshaw & Gupta, 2013). This definition describes organizational ambidexterity as a very flexible term that can be applied to study almost any issue in an organization (Birkinshaw & Gupta, 2013).

According to Gupta and Birkinshaw (2013) the managers’ capability of managing the content of exploration and exploitation is central for the organization in order to help it. It is the quality of managing that is important and not the manager itself, a manager who lets the two concepts reinforce by themselves will see that their organization would fail because it will be unbalanced between the two concepts (Birkinshaw & Gupta, 2013).

As mention in the first paragraph there is less attention in this field on the public sector (Smith & Umans, 2013). However, throughout the last decade the public sector has taken actions to be more efficient and nowadays the public sector looks more like private companies (Almqvist, 2006) which implies that organizational ambidexterity can be applied in the public sector.

1.2. Problem
Top managers have been shown to play an important role in fostering ambidexterity, as the organizations need managers to make thoughtful decisions about how firms should
handle scarce resources (Boyer & Lewis, 2002), find creative solutions, (Bilton & Leary, 2002) and decide what trade-offs to be made in the decision process (Ibid., 2002). These managerial characteristics corroborate the fact that top managers are very likely to engage in exploitative and explorative activities in the organization (Mom, Van Den Bosch, & Volberda, 2007). There are several studies that point out managers and leaders as crucial for the survival of the ambidextrous organization (O’Reilly & Tushman, 2004; Gibson & Birkinshaw, 2004; Lubatkin, Simsek, Ling, & Veiga, 2006). Even though several studies argue that managers’ drive organizational ambidexterity we found no studies that focused if different managerial leadership styles have a variable effect on organizational ambidexterity.

In addition to shortcomings in the relationship between managerial leadership styles and organizational ambidexterity the majority of the studies focus on the private sector (Adler, Goldoftas, & Levine, 1999; Benner & Tushman, 2003; O’Reilly & Tushman, 2004; Gibson & Birkinshaw, 2004; Mom, Van Den Bosch, & Volberda, 2007; Hill & Birkinshaw, 2012); few studies (Smith & Umans, 2013) have explored organizational ambidexterity in the public sector. However, there are studies that indicate multiple similarities on how private and public sector organizations plan to explore and exploit their resources (Roce & Cray, 2010; Almqvist, 2006; Knutsson, Mattisson, Ramberg, & Tagesson, 2008). Private organizations plan for challenges to be able to face competitors, rulings of regulatory bodies, shift in commercial context including economic activity and changes in interest rates, and shortages of supplies and personnel (Roce & Cray, 2010). On the other hand, this can be compared with public sector organizations that plan to face similar challenges but in different forms, as well as a wide variety of stakeholders with competing agendas, different types of leadership, and the subjective nature of success (Ibid., 2010).

In addition, certain similarities in how the public and private organizations plan to explore and exploit their resources numerous studies indicate that there are public sector organizational forms that follow the organizational structure and governance resembles of organizations in the private sector (Thynne, 1998; Wettenhall, 2001; Smith & Umans, 2013). These studies further support that exploration and exploitation of resources are likely to be present in organization of any sector. Thus, the aim of this study is to focus on two different organizational forms on the Swedish local government level; the local government corporations (LGC) and the local government
administration (LGA). The argument for choosing LGC and LGA is because they are two common government organizational forms present in the Swedish public sector (Smith & Umans, 2013; Larsson & Bäck Henry, 2008). Further arguments for the two local government forms are that LGCs are more likely to: follow the organizational structure of private sector organizations due to a more distinct economic orientation (Wettenhall, 2001); to have higher managerial autonomy (Kosar, 2011). The arguments for choosing LGAs are that these organizations are more likely to: follow a more homogeneous structure with goals and objectives which are harder to evaluate (Smith & Umans, 2013); be more bound to the public unit (Svensson, 2014); have stricter hierarchic levels (Smith & Umans, 2013; Svensson, 2014).

The discussion above has resulted in the research gaps that there is a lack of studies that explain if different managerial leadership styles have a variable effect on organizational ambidexterity in local government organizations. Thus, the following research question:

1.3. Research Question

*How do different managerial leadership styles affect organizational ambidexterity in local government organizational forms?*

1.4. Purpose

The purpose of this study is to try identifying different managerial leadership styles and to explain the causal relationships between managerial leadership styles and organizational ambidexterity in LGCs and LGAs.

1.5. Limitations

This study is limited to only studying managerial leadership styles as an influencer of organizational ambidexterity; we will, therefore, exclude the other possible drivers of organizational ambidexterity in the public sector. The research design is another possible limitation. Using a qualitative design follow-up question would be possible for deeper understanding of the ambidextrous actions and decisions. However, this research design was excluded due to time constraints and lack of generalizability.

1.6. Outline

This dissertation consists of seven chapters. In the first chapter the background and problem is presented, which results in a research question and purpose. This chapter ends with the limitations of this paper. In the second chapter, research philosophy,
approach and design are presented, followed by the choice of method and theory. The third chapter presents a description on the public sector in Sweden and, the fourth chapter presents the ambidextrous organization, managerial orientations and our hypotheses. Chapter five is empirical method and here is research strategy, time horizon, data collection, and sample selection presented. But also operationalization, reliability, validity, generalization and ethical considerations are presented which all are essential concepts when dealing with quantitative research. The sixth chapter is presenting the results from the survey. Finally the seventh chapter is conclusion which presents the summary, theoretical and methodological contributions, ethical implications and finally future research.
2. Research method

This chapter presents the research methods used in this study. In this chapter the research philosophy, research approach, choice of theory and choice of methodology is presented.

The aim of this study is to explain and analyze causal relationships between managerial leadership styles in the public sector and how the managerial leadership styles influence organizational ambidexterity.

2.1. Research philosophy, approach and design

The dissertation will be based on a positivistic philosophy. The positivistic philosophy has the position as “the natural scientist” which prefers working with social reality and drawing law-like generalizations from the end results (Saunders, Lewis, & Thornhill, 2009). In a positivistic view existing theories are used as a strategy for collecting data and developing hypotheses. These hypotheses will then be tested to be confirmed or rejected which will lead to development of theory. Another element of relevance for the positivistic philosophy is the “value-free way”, this way indicates the researcher’s independence and that the researcher does not get affected by the research subject. Furthermore, positivism are quantifiable observations that lead to statistical analysis (ibid, 2009).

The reason why positivism is used in this dissertation is due to the fact that the research will be based on already existing theories. The aim of this study is to explain a causal relationship between managerial leaderships and organizational ambidexterity in LGAs and LGCs. This is made by developing hypotheses and testing them. Another approach is that the intention of the dissertation is to be objective and through the findings draw general conclusions for the public sector.

There are other philosophies to be used for example pragmatism, interpretivism and realism. For instance is realism similar to positivism since it aims to adapt a scientific approach when it comes to developing knowledge, but realism is referring to what you see is true and does not consider the mind. Furthermore, another philosophy to take into account is interpretive philosophy, its view is more critical towards positivism. Interpretive philosophy believes that the world is more complex and cannot be formulated in theories or laws. This approach interacts with the environment in a
subjective way and tries to explain the end results from the collected data. However, we consider that a positivistic philosophy suits this study better as the aim is to be objective and to base the study on existing theories.

When it comes to research approach there are two main approaches, inductive and deductive approach (Saunders et al., 2009), it is also possible to use a mixture of the two which is called abduction. When using a positivistic philosophy a deducting approach is often used since they are similar to each other. The deductive approach is a process that can be distinguished by several steps, for instance: theories, hypotheses, data collection, findings, hypotheses confirmation or rejection and final revision of theories (Bryman & Bell, 2011). This is also called the testing theory where hypotheses based on literature are tested with an aim to explain causal relationships between variables. Since the aim of the study is to explain a causal relationship between managerial leaderships and organizational ambidexterity, we intend to use a quantitative questionnaire for data collection. Many of the characteristics of positivistic philosophy are also present in the deductive approach.

Both the positivistic philosophy and the deductive approach are based from theories in order to develop hypotheses which this dissertation intend to do. We intend to analyze the collected data to confirm or reject the hypotheses accorded to the deductive approach. However, we also aim to make general conclusions in the public sector which require a high number of applicants (Saunders et al., 2009). A qualitative research is possible but since we aim to study causal relationships between managerial leaderships and organizational ambidexterity, a quantitative research is preferred.

There are five different types of research designs: experimental, cross-sectional, longitudinal, case study and comparative design (Bryman & Bell, 2011). Considering the fact that the aim of the study is to generalize the causal relationships between managerial leaderships and organizational ambidexterity in the public sector; a cross-sectional research design is used; and quantitative questionnaires is chosen as method. A cross-sectional design is also called survey design and aims to collect data from questionnaires or structured interviews, in more than one case, with several variables, at a single point in time, which then are analyzed to discover patterns or correlations (ibid). Usually is quantitative research used in cross-sectional design, however, a qualitative research can also be used. One reason for using a cross-sectional design in
this dissertation is that the aim is to focus on more than two variables that influence organizational ambidexterity at one specific time. The use of quantitative questionnaires is more common in a cross-section design than a qualitative research (ibid). Due to the time limitation it is preferable for a cross-sectional research design since we only look at data from one specific point in time.

According to Saunders et al (2009) research design is depending on the research question. Further, Saunders et al (2009) argue that are three common research designs: exploratory, descriptive and explanatory. This dissertation aims to find causal relationships between managerial leadership styles and organizational ambidexterity. This means that explanatory design will suit our dissertation, since explanatory design aims to explain causal relations or correlations between variables. It means that the other research designs exploratory and descriptive will not be used since they do not aim to explain causal relationships (ibid, 2009). Therefore, an explanatory research design is appropriate in the dissertation.

2.2. Choice of theory
Considering that public sector organizations always are dealing with decisions of allocating scarce resources, theories of organizational ambidexterity in the private sector are most likely to be applicable to companies in any sector (Smith & Umans, 2013). Therefore, the underlying theories for this dissertation are the results from studies that introduce management theory, strategy theory and different leadership theories (Mintzberg, Ahlstrand, & Lampel, 1998; Karake, 1995; Northouse, 2013).
3. Public sector

This chapter presents the public sector in Sweden. The aim of this chapter is to give a description of the public sector in Sweden.

The public sector in Sweden is relatively large there are 290 municipalities and 20 county councils standing for 20% of the GNP (Knutsson, Mattisson, Ramberg, & Tagesson, 2008; Westlund, 2014). The Swedish public sector can be divided into two different tiers below the central administration of the country. The upper level of administration is called counties that all have their own county council. The lower tier of administration is the municipalities. The mission of the Swedish county councils and municipalities are the following:

Municipalities and county councils may themselves attend to matters of general concern which are connected with the area of the municipality or county council or with their members and which are not to be attended to solely by the state, another municipality, another county council or some other body (Larsson & Bäck, 2008, p. 213)

The Swedish municipalities and county councils are responsible for society services. Some of the services (Healthcare, elderly care, school, water and sewers, urban planning and construction issues, social services, fire department, public transportation, waste disposal etc.) are bound by law to exist in every municipality whilst others are optional (Energy, culture, housing, tourism etc.) (Westlund, Kommuns & landsting, 2009). The services described are generally run under two types of public organizational forms; local government corporations (LGC) and local government administration (LGA). Both organizational forms are constructed for public purposes.

The municipalities are controlled by elected politicians, meaning that the citizens have an opportunity to influence and control the municipalities to carry out their missions (Sveriges kommuner och landsting, 2013). Another name for the selected politician assembly is district council. The district council has control and takes decisions in municipalities and has the highest degree of power. Some of the decisions are: the municipal budget and how much tax the residents of the municipality must pay, decides which committees should be selected, selects members and deputies to the municipal government and council and appointing auditors to examine municipal operations. Every four years the citizens can decide which city council that will represent the municipality (ibid, 2013). 

15
The local government organizations in the municipalities are controlled by the Local Government Act. This act contains detailed rules for the local authority and it controls the municipalities (Larsson & Bäck Henry, 2008). For example in there is a clause regulating what the local authorities are allowed to do. Moreover, another rule in the Local Government Act is that local governments are not allowed to own companies that aim for profit (ibid, 2008).

This is one of the most important acts for the municipalities but there are also other laws that they have to take into consideration, for instance social services and school law (Sveriges kommuner och landsting, 2013). Further, municipalities must follow the frames from Swedish Parliament and the government. Other than that they have the authority to take decisions on their own.
4. Literature Review

The aim of this dissertation is to explain the casual relationships between managerial leaderships and organizational ambidexterity. Thus, the following chapter presents the different theories used in this dissertation. First this chapter will introduce strategic theory, followed by management theory and finally theories for our leadership styles. In this chapter the hypothesis will also be developed.

4.1 Strategic management

Strategic management is a relatively young field of study, constantly a target for reconceptualization and relabeling (Nag, Hambrick, & Chen, 2007). The subjects of the field overlap with several other fields including economics, marketing, finance, sociology, and psychology (Ibid., 2007). Thus, this overlap makes the definition of strategic management broad and complex. For instance Mintzberg (1987) argue that strategy requires several definitions, five in particular. The five definitions argued for are: strategy as a plan, ploy, pattern, position, and perspective; these strategies suggest why organizations do need strategies and why they don’t (Mintzberg, 1987). In addition to five different definitions Mintzberg, Ahlstrand, and Lampel (1998) put strategies in ten different schools of strategic management. These schools can be differentiated into two categories: the first one category is the prescriptive schools (the Design, the Planning, and the Positioning) and these schools are more focused on how strategies should be formulated rather than how they form. The second category is the descriptive schools (the Entrepreneurial, the Cognitive, the Learning, the Power, the Cultural, and the Environmental); they are more concerned with describing how strategies are made. The last school is configuration. This school is described by Mintzberg et al (1998) as follows:

People in this school, in seeking to be integrative, cluster the various elements of our beast – the strategy – making process, the content of strategies, the structure of the organization and its context – into distinct stages or episodes, for example, of entrepreneurial growth or stable maturity. Sometimes these are sequenced over time to describe the life cycles of organizations. But if they settle into stable states, then their strategy making processes have to describe the leap from one state to another. And so, another side of this school describes the process as one of transformation, which incorporates much of the huge literature and practice on how to achieve “strategic change”. (Mintzberg et al, 1998, p. 6-7)

Mintzberg et al (1998) point out that the great amount of literature regarding strategic change suggests practice on numerous types of change programs. These programs propose how to combine different methods to “turn around” or “renew” an organization.
Despite strategies suggesting strategic change, organizations do not always have to change everything. In fact, an integrated balance between the best of the new and the most useful of the old can be a lot more effective than to exclude one of them (Mintzberg et al, 1998). It is, therefore, important for companies to look for exploitative innovation, for small improvements to their existing productivity and efficiency with allocating resources; and at the same time engage in explorative innovations to be able to search and experiment for new opportunities (March, 1991). An organization that excels balancing these two concepts represents the ambidextrous organization (March, 1991; Gibson & Birkinshaw, 2004; Birknshaw & Gupta, 2013).

As mentioned above organizational ambidexterity refers to finding the balance of exploring and exploiting resources. O’Reilly and Tushman (2004) illustrate (Table 4.1) characteristics of both explorative and exploitative businesses. The explorative business sets strategies for innovation and increase growth of the business. These strategies are achieved through firm behaviors categorized by, experimentation, risk taking, speed and flexibility. On the other hand, the exploitative business sets strategies that intend to reduce costs and increase profit, which is related to firm behavior categorized by efficiency, low risk, quality and customers (O'Reilly & Tushman, 2004). Too much focus on exploration might build tomorrow’s business at the expense of today’s (Gibson & Birknshaw, 2004). On the other hand, too much exploitation might work in the short run but allocating all resources on exploitative innovation will make it difficult to plan

<table>
<thead>
<tr>
<th>Alignment of:</th>
<th>Exploitative Business</th>
<th>Exploratory Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic intent</td>
<td>cost, profit</td>
<td>innovation, growth</td>
</tr>
<tr>
<td>Critical tasks</td>
<td>operations, efficiency, incremental innovation</td>
<td>adaptability, new products breakthrough innovation</td>
</tr>
<tr>
<td>Competencies</td>
<td>operational</td>
<td>entrepreneurial</td>
</tr>
<tr>
<td>Structure</td>
<td>formal, mechanistic</td>
<td>adaptive, loose</td>
</tr>
<tr>
<td>Controls, rewards</td>
<td>margins, productivity</td>
<td>milestones, growth</td>
</tr>
<tr>
<td>Culture</td>
<td>efficiency, low risk, quality, customers</td>
<td>risk taking, speed, flexibility, experimentation</td>
</tr>
<tr>
<td>Leadership role</td>
<td>authoritative, top down</td>
<td>visionary, involved</td>
</tr>
</tbody>
</table>

Table 4.1 The Scope of the Ambidextrous Organization

for the future (Benner & Tushman, 2003). However, if companies manage to find a well-balanced position between exploitation and exploration several studies have shown positive association with increased sales growth, (Auh & Menguc, 2005; Han & Celly, 2008; Umans, 2013), subjective ratings of performance (Gibson & Birkinshaw, 2004), innovation (Adler, Goldoftas, & Levine, 1999), and firm survival (Hill & Birkinshaw, 2012; Tushman & O'Reilly, 2013). Thus, organizational ambidexterity research is important for the development of strategic management as a field of study.

4.2. Organizational ambidexterity in the public sector

Recently public sector organizations have implemented models of leadership and management from the private sector (Almqvist, 2006; Adolfsson & Solli, 2009). This change is called New Public Management (NPM) and has made the public sector resemble organizations in the private sector (Polliss, Van Thiel, & Homburg, 2007). Patients have become customers and like other organizations Sweden’s public organizations strive for constant improvements in efficiency and quality (Adolfsson & Solli, 2009) The idea of NPM is that the public sector should move away from how they previously formulate rules to be more focused on management for instance goal setting and goal achievement. In addition NPM stress organizations to have less focus on ”input” (resources) and instead focus on “output” (achievement), what you can achieve. Thus, as the public sector has implemented models of leadership and management from the private sector organizational ambidexterity could be argued to be present in public organizations as well.

Studies have shown that the public sector is not homogenous and that it is possible to distinguish different organizational forms (Smith, 2012). Two forms present are local government corporations (LGC) and local government administrations (LGA). There are several differences when the municipality chooses to operate in LGCs rather than LGAs. One difference is that both public (Local Government Act) as well as private (Companies Act) laws must be considered (Sveriges Kommuner och Landsting, 2006). A second difference is LGCs to have a more dominating economic orientation over the otherwise dominating social welfare orientation. This is due to the fact that LGCs are created to make sure for a streamlined business whereby a good economic structure is of great importance for the organizations long term survival (Thynne, 1998; Hill & Birkinshaw, 2012). Thus, the importance of a good economic structure makes it difficult for the organization to prioritize social welfare objectives over profits. (Thynne, 1998;
Sveriges Kommuner och Landsting, 2006) A third difference is that there are observers believing that the underlying attraction for LGCs is the desire of organizational leadership, both governmental and private sector, to get maximum autonomy in its policy and operations (Kosar, 2011). On the other hand, the organizational form of the LGA is more bound to the public unit, which results in higher political involvement and stricter hierarchic levels (Smith & Umans, 2013; Svensson, 2014). This implies that LGAs managers cannot achieve the same autonomy as the managers in LGCs (Smith, 2012).

With these differences it would be relevant to distinguish local government forms when studying organizational ambidexterity in the public sector. We argue that organizational ambidexterity is higher in LGC due to the higher economic orientation in the organizational form. Since LGCs are more economic oriented they should be more likely to explore and exploit resources in order to maintain good economic structure and long-term survivability. (Thynne, 1998; Auh & Menguc, 2005; Hill & Birkinshaw, 2012). Thus, laying down profits in LGCs for societal objectives is not always an option (Thynne, 1998). On the other hand, LGA are more bound to its societal objectives (Sveriges Kommuner och Landsting, 2006) and would not ultimately aim to balance exploration and exploitation since increased performance might not be the most preferred organizational outcome (Thynne, 1998; Sveriges Kommuner och Landsting, 2006). Our first hypothesis is thus:

\[
H1. \text{Organizational ambidexterity is higher in the local government corporation compared to the local government administration.}
\]

4.3 Management
What is management? Some of the most common terms to define management are processes of organizing resources, directing activities and achieving organizational objectives. Merchant and Van der Stede (2012) have broken down the broad field of management to three smaller elements (functions, resources and processes). In the first element the primary management functions are introduced. They are product development, operations, marketing/sales and finance. The second element mentions the main resources managers must work with. The resources are: people, money, machines and information. The third element is called process and includes: objective setting, strategy formulation and management control (Merchant & Van der Stede, 2012).
When it comes to managers managing, it includes all elements, but leans more toward process element. It is a process that contains: the objectives, strategy and achievement at the same time handling the functions and resources available for the managers. It means that managers have to handle several things at once. This indicates that managers’ characteristics and choices are of importance for the organization. In the upper echelon theory, Hambrick and Mason (1984) mentions that managers’ characteristics and choices influence organizational outcomes.

The upper echelon theory means that the characteristics of top-level management are determinate by strategic choices. Hambrick and Mason (1984) looked at several propositions that they had developed and came up with the idea that organizational outcomes can be anticipated from the managers’ background. The explanation for this idea is that managers from their background are connected to their results from previous organizations. For instance, often a manager gets its position because of previous background as a manager, since their choices show if they were successful or unsuccessful. This means that the upper echelon theory focuses on different characteristics by the top managers and their strategic choices (Karake, 1995). Further, Child (1972) was the first one to root the theory when he in his research mentions that managers’ decisions and choices affect the organizational outcomes. One definition of the theory is:

The essence of this theory is that strategic decisions represent “weak situations” in that available stimuli are often complex and ambiguous. In such situations, the choices of decision makers can vary widely, thus allowing them to insert aspects of themselves (e.g., leadership qualities) into such choices (Waldman, Javidan & Varella, 2004. P. 356).

One reason why managers’ decisions can vary widely is that it can depend on what type leadership qualities they have (Waldman, Javidan, & Varella, 2004). Managers can be related to leaders, since leadership is often defined as a process that influences a group of people to work against common goals (Northouse, 2013). This definition can be applied to managers, since managers often want their employee to achieve organizational objective in an organization. Other researcher claims that leadership is one of the most important features influencing efficiency and performance in an organization (Rainey & Steinbauer, 1999). Under decades of years several different leadership styles have been developed, each one has been shown to have different impacts in organizations (Northouse, 2013; Yukl, 2013). For instance a leader can lay their focus on organizational objectives, the followers, teams, their own qualities which
results in different outcomes for organization. Efficiency, effectiveness employee satisfaction are some outcomes from different leaderships styles (ibid, 2013).

Since different leadership styles have impact on managers decision and actions we will further look at how different leadership styles influence organizational ambidexterity in the public sector. The next section describes leadership and its influences on organizations. It further explain what types of leadership will be considered to have an influence on organizational ambidexterity.

4.4. Managerial leadership and organizational ambidexterity

Leadership is strongly connected to success in organizations and is often referred to as something positive. Leadership is a broad concept which can be defined in many different ways both as a process and trait (Northouse, 2013). Trait focuses on the qualities you have as a person and process about interaction between the leader and followers (ibid, 2013). Moreover, leadership can be described by changes and development, but also the ability to see the big picture and to make the employees enthusiastic. Leadership studies often highlights the leaders ability to listen, communicate and their clearness (ibid, 2013).

Rainey and Steinbauer (1999) argue that leadership is one of the most important features in the public sector that influence efficiency and performance. Other researcher has an interest in looking at the relationship between the leadership focus and organizational outcomes (Barling, Weber, & Kelloway, 1996; Krishnan, 2005). The results were positive to the relationship between leadership focus and organizational outcomes. This shows that a strong and focused leadership will have an influence on organizational outcomes e.g. leadership can lead to greater efficiency or great effectiveness. Great efficiency seeks to reduce costs, increase speed in decision making. Great effectiveness seeks to improve decision making for greater performance (Lubatkin, Simsek, Ling, & Veiga, 2006).

As mention before leadership is a broad concept which has led to development of different forms of leadership (Northouse, 2013; Yukl, 2013). Today there are many forms of leadership and we cannot include them all in our dissertation, but we will pay attention to process definitions of leadership, thus, these three forms: transformational-, servant- and authentic leadership. We excluded team leadership. The reason for excluding it, is that this type of leadership is difficult to measure due to the fact that you
need teams that have to evaluate the leader (Northouse, 2013) which would be too time consuming for this bachelor dissertation.

Transformational leadership is a process that aims to transform and motivate the followers. Transformational leadership stands for one third of the research in its field (Northouse, 2013). Emotions, values, ethics, standards and long-term-goal are some core values in transformational leadership. This type of leadership seeks to make the followers accomplishing more than they thought they could do. The leader in this process is often seen as charismatic or visionary. In conjunction with this, the charismatic leadership is mention. Charismatic leadership is considered similar or synonymous with transformational leadership. Transformational leaderships can be applied in any situations for example in a specific situation to influence a small number of followers to influence whole organizations (Northouse, 2013). The large flexibility could be one reason to its popularity in research.

Researchers claim that there is a relationship between transformational leadership and outcomes in an organization (Krishnan, 2005; Barling et al., 1996). Studies often show a positive effect on the organizational outcomes of transformational leadership, since transformational leader first priority is towards organizational objectives (Stone, Russel, & Patterson, 2004). Yuki (2013) in the other hand says “to understand how leaders influence organizational processes and outcomes, it is necessary to include aspects and outcomes of strategic management […]” (p. 327). Transformational leadership includes both features from exploration and exploitation that make it possible to relate it to organizational ambidexterity (Nemanich & Vera, 2009).

Since transformational leadership can be applied in any organization and has a positive relation to organizational outcomes (Barling, Weber, & Kelloway, 1996; Krishnan, 2005) it is possible to relate it to organizational ambidexterity through transformational leadership qualities (Nemanich & Vera, 2009). According to Nemanich and Vera (2009) transformational leadership aims to increase self-confidence and willingness among the followers, which are central qualities for exploration in order to be creative and be experimented. Transformational leadership also shows to have an impact on exploitation, as there is evidence that transformational leadership has a positive effect on innovative performance of teams (ibid, 2009). Further Rainey and Steinbauer (1999) also mention that transformational leadership has an influence on performance in the
public sector. Therefore, it is very likely that transformational leaderships will have a positive influence on organizational ambidexterity.

With the relationship between transformational leadership and organizational ambidexterity it would be relevant to distinguish if transformational leadership is higher in LGC or LGA. We argue that transformational leadership will be higher in LGCs due to the higher managerial autonomy allowing managers to set up goals that will increase the efficiency and performance in LGCs (Kosar, 2011). On the other hand, managers trying to exert transformational leadership in LGAs may be held back by the strict hierarchical structure and higher political involvement of LGAs (Smith & Umans, 2013; Svensson, 2014). Moreover, there is a significant connection between performance and finding the balance of exploration and exploitation (Gibson & Birkinshaw, 2004) therefore, managers in LGCs should be more likely to foster ambidexterity. Thus, the following hypothesis:

\[ H2a. \text{Transformational leadership is strongly positively connected to organizational ambidexterity in local government corporations.} \]

\[ H2b. \text{Transformational leadership is weakly positively connected to organizational ambidexterity in local government administrations.} \]

Servant leadership orientation considers the followers as the most important and that the leaders’ role is to serve them. It also focuses on helping others in order to accomplish shared goals at the same time facilitating individual development, empowerment and collective work that consider health and long-term welfare for the followers (Yukl, 2013). Servant leader has to focus on the followers need and help to become healthier, wiser and accept their responsibilities. In order for the servant leader to understand the followers it need to know the followers needs and how to service them. It means that the servant leader must listen to the followers and help them. As a servant leader you cannot be dominant against the follower instead you gain their confidence by being open and honest (ibid, 2013).

In some aspects servant leadership looks a lot like transformational leadership, since servant leadership share some of the same aspects in transformational leadership like empowerment (Stone, Russel, & Patterson, 2004; Liden, Wayne, Zhao, & Henderson, 2008; Sendjaya, Sarros, & Santora, 2008; Smith, Montagno, & Kuzmenko, 2004). Even
if they look the same in some aspects there are a difference between them, the main difference is the leaders focus. In transformational leadership the focus is on organizational outcomes while in servant leadership the focus is on people (the followers) (Stone et al., 2004). Studies about servant leadership focus on how servant leaders influence followers and organizations (Farling, Stone, & Winston, 1999; Searle & Barbuto, 2011) Several studies shows that servant leadership has an impact on organizational performance (Stone, Russel, & Patterson, 2004; Smith, Montagno, & Kuzmenko, 2004), due to followers will to repay the leaders service. They often do that by better work performance which leads to better performance for the organization (Russell & Stone, 2002).

The research about the effect servant orientation has is limited, however, there are some studies that have shown positive outcomes in organizations, such as more commitment, self-efficacy and organizational citizenship behavior (Yukl, 2013). Russell and Stone (2002) developed a model that shows that servant leadership influence the employees’ attitudes and work behaviors which have an influence on organizational performance. However, there are some negatives to consider when it comes to servant leadership. One negative effect is when the employee welfare is more important than financial performance. If an organization faces a difficult time it may have to cut expenses to remain profitable which might lead to conflicts for the servant leader in order to balance the competing preferences of owners and employees. In the public sector it is less conflicts between financial performance and employee welfare, but it does not mean that in difficult times they may also have cut their expenses (Yukl, 2013).

Since servant leadership has similarities to transformational leadership, it is likely to also have an effect on organizational ambidexterity in the public sector organizations. The reason is that servant leadership handle both explorative and exploitive decisions, explorative features are taken from the transformational leadership like empowerment and influence the followers to take risks, while focus in explorative is on serving the followers, meaning be there for the followers and help them in specific situations, knowing their needs (Stone et al., 2004). Servant leadership first priority is serving the followers, then organizational objectives and finally their own interest (ibid, 2004).

Moreover, we argue that servant leadership will have a stronger effect on organizational ambidexterity in LGCs than in LGAs due to the more dominating economic orientation
in LGCs over a social welfare orientation in the LGAs. With a more dominating economic orientation LGCs should be encouraged to use their employees as tools or resources to achieve goals. This would in some scenarios encourage LGC leaders to handle both explorative (empowerment and risk taking) and exploitative (serving others and see to employee needs) decisions in order to maximize financial and non-financial goals. On the other hand, organization with a more social welfare orientation should give priority that their employees feel a social security and that social welfare goals are being achieved. Thus, encouraging leaders to empower employees to take risks to achieve goals may not be as preferable in the LGAs.

\[ H3a. \textit{Servant leadership is strongly positively connected to organizational ambidexterity in local government corporations.} \]

\[ H3b. \textit{Servant leadership is weakly positively connected to organizational ambidexterity in local government administrations.} \]

\textit{Authentic leadership} has its focus on whether the leadership is genuine and "real" (Northouse, 2013). Literature indicates many different definition of authentic leadership due the different ways it can be conceptualized. Northouse (2013) suggest that on way of defining authentic leadership is to look at intrapersonally, developmentally, and interpersonally perspectives. Northouse (2013) explains that the intrapersonal perspective focuses on the leader and the leader’s self-knowledge, self-regulation, and self-concept. Further, he argue that this perspective emphasize a leader’s life experiences and the meaning the leader attaches to those experiences. The developmentally perspective suggests that authentic leadership is composed of four components: self-awareness, internalized moral perspective, balanced processing and relational transparency (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). Moreover, Walumbwa et al. (2008) argue that these four behaviors can be learned and developed over time by the authentic leader. On the other hand, the interpersonal perspective suggests that authentic leadership is created by leaders and followers together as a collective process (Eagly, 2005).

The different perspectives are important to understand the different viewpoints of authentic leadership. This broad definition gives rise to different approaches to authentic leadership. This dissertation will be limited to discuss practical approach called: Robert
Terry’s authentic leadership approach (1993) which has its core focus on the actions of the leader, leadership team, or organization in different situations. The moral premise of the approach is to strive to do what is right to be “true” in yourself, in your organization and in the world. The aim of Terry’s framework is to serve as a guide to these actions.

Terry (1993) suggests two core leadership questions that must be addressed. The first one is what is really going on? And the second on is what are we going to do about it? To answer these two questions Terry designed an authentic action wheel to (1) locate the problem and (2) select a strategically correct response to the problem. To locate the problem Terry (1993) categorized the various employee concerns into six areas: mission, power, structure, meaning, existence, and resources. Each area suggest different approaches to the various employee concerns for example, if the employees are raising questions about structure of the organization the wheel suggests that the leader should focus on systems, policies and procedures. With this said, the authentic action wheel is used to help managers find different possible solutions to complex issues (Terry, 1993).

As Robert Terry’s authentic leadership approach (1993) is mainly about framing problems and strategically come up with solutions, we argue that when leaders use the authentic action wheel they are likely to face situations where they have to make trade-offs on how to allocate resources. In these situations the authentic leaders strives to do what is right for yourself, your organization and the world therefore, it should be most likely for these leaders to foster organizational ambidexterity. This since organizational ambidexterity is positively associated with, firm survival (Hill & Birkinshaw, 2012; Tushman & O’Reilly, Organizational Ambidexterity: Past, Present, And Future, 2013), increased sales growth, (Auh & Menguc, 2005; Han & Celly, 2008; Umans, 2013), innovation (Adler, Goldoftas, & Levine, 1999), and subjective ratings of performance (Gibson & Birkinshaw, 2004).

Furthermore, we argue that authentic leadership will have a stronger effect in LGCs than in LGAs due to the fact that authentic leaders always strive to take the right decisions which in LGAs can be sacrifice the balance of exploitation and exploration in order to achieve the societal objectives. On the other hand, LGCs have greater responsibility for the results and cannot make loss without immediate consequences (Sveriges Kommuner och Landsting, 2006), therefore, it may be that authentic leaders
in LGCs might disregard on what is right in favor for increased profits. Thus, the following hypothesis

\[ H4a \text{ Authentic leadership is strongly positively connected to organizational ambidexterity in local government corporations.} \]

\[ H4b. \text{ Authentic leadership is weakly positively connected to organizational ambidexterity in local government administrations.} \]
5. Empirical method

Chapter five is empirical method and here research design is discussed. The chapter continues with data collection, sample selection, operationalization, reliability and validity. The chapter ends with a discussion about generalization.

5.1 Research strategy, time horizon, data collection and sample selection

An important part of the dissertation is the research strategy. Saunders et al. (2009) argue for seven different research strategies: experiment, survey, case study, action research, grounded theory, ethnography and archival research. The research strategy chosen for this dissertation is the survey strategy. Survey strategy aims to find out who, what, where, how much and how many. It is also associated to a deductive approach and is a common strategy in business and management studies (Saunders et al., 2009). We intend to use a quantitative questionnaire for data collection which is often associated with survey strategy (ibid, 2009). Our intention is to collect data from organizations in the public sector using a positivistic view and a deductive approach. It also aims to explain casual relationships between variables, objective and with intention to generalize.

When it comes to time horizon it refers to the question; what do I want my research to be? A snapshot or changes over time? Saunders et al. (2009) mention two time horizons cross-sectional and longitudinal. Cross-sectional means that you study one particular phenomenon at a given point in time while the longitudinal study changes over time. Cross-sectional is commonly used when there are time constraints (Saunders et al., 2009). In this dissertation a cross-sectional will be used, since we have a limited time for this dissertation. Further, our aim is to study how managers’ leadership styles influence managerial decisions and actions, it is assumed that decisions will be the same regardless what day we do our study.

The choices of what type of data collection that will be used should be in line with your research question. There are two main types of data collection methods: primary- and secondary data. As the name indicates primary data is especially collected for a certain study while secondary data is data from previous studies (Saunders et al., 2009). This dissertation will use primary data since there is no previous data that can use in our dissertation. Our primary data will consist of a questionnaire which will be sent out to managers in companies in the public sector.
Moreover another important aspect to consider is the *sample selection*, in almost every study you have to make selection. In some studies it is possible to collect and analyze information from every case or group member, but this often time consuming and could cost a lot of money. Therefore, many studies chose a specific population. Population is not necessary humans it can be companies, time perspectives and so on (Saunders et al., 2009). In our case the population is LGA and LGC organizations in the public sector.

Saunders et al (2009) mention two types of sampling techniques: probability or representative sampling and non-probability sampling. In this dissertation a probability sampling technique is used, since it is associated with the survey strategy. In the probability sampling techniques there are different ways to select the data, these are simple random, systematic, stratified random, cluster and multistage. This dissertation will use systematic sampling. Systematic sampling means that you systematically select your sample, and the dissertation will look at two types of organization forms in the public sector. Using a systematic sampling we can make sure that both organizations form are represented in the dissertation.

Our population is the public sector in Sweden and more specifically organizations operating in waste management and water and sewerage industries. A web survey is sent out by e-mails to 171 managers working in organizations in waste management and water and sewerage industries. The reason is because of limited time we have focused on one area and not all of them since it will be time consuming collecting all those e-mails. Another reason is that both LGA and LGC exist in waste management and water and sewerage industries. The e-mails in our dissertation are taken from previous project about LGA and LGC.

**5.2. Operationalization**

The operationalization explains how the hypotheses are going to be measured. This is an important aspect to increase the dissertations reliability and validity (Bryman & Bell, 2011; Saunders et al., 2009). This section clearly defines how we go from the theoretical concepts to the empirical measurements. The dependent and independent variables are being measured by a Likert scale going from one to seven. The Likert scale is used since the survey seeks to capture leaders’ perception of the organization and their own behavior. The control variables are measured through close end questions.
Further, this section describes how organizational ambidexterity, the leadership styles, and the different control variables are being measured.

5.2.1. Dependent variable (organizational ambidexterity)
This study has organizational ambidexterity as dependent variable, which is operationalized into two behaviors, exploration and exploitation. The statements about exploration and exploitation are borrowed from Lubatkins et al. (2006) study and contains six statements for each behavior, giving us 12 statements in total (Lubatkin et al., 2006). The respondents will be asked to rate the statements on a 7-point Likert where 1 = Disagree and 7 = Totally Agree.

Exploration measurement is how managers handle explorative decisions like: adaptability, new products breakthrough innovation. The respondents will be asked to rate the statements below about how likely the organizations are to allocate their resources towards explorative activities (Lubatkin et al, 2006):

- Looks for new technical ideas by thinking "outside the box".
- Builds success on the ability to explore new technology.
- Create products or services that are innovative for the company.
- Looking for creative ways to satisfy customer needs.
- Aggressive investment in new market segments.
- Actively focus on new customer groups.

Exploitation measurement is how managers handle exploitive decisions like: “refinement, choice, production, efficiency, selection, implementation, execution” (March, 1991 p. 71). Similar to the measurements of exploration the respondents will be asked to rate the statements below about how likely the organizations are to allocate their resources towards exploitative activities (Lubatkin et al, 2006):

- Commit themselves to try to improve quality and reduce costs.
- Continuously improves the reliability of their products and services.
- Increasing automation in their organizations.
- Continuous research on existing clients is satisfied.
- Fine-tunes what it can to keep their current customers happy.
- Penetrates deeply into the existing customer base.
5.2.2. Independent variables

This dissertation has three leadership styles: transformational-, servant- and authentic leadership and they will be described below.

5.2.2.1. Transformational leadership

Transformational leadership is operationalized into the attributes that distinguish transformational leadership and the measurement is called Global Transformational Leadership scale (GTL) measurement (Carless, Wearing, & Mann, 2000). The measurement is a short and practical instrument for transformational leadership and therefore, only has one question measuring each behavior. The GTL measurement has captured the most essential behaviors for transformational leadership and the GTL measurement is considered to have high reliability and validity. GTL measures how followers see their leader and not how the leaders see themselves. Our study focuses on how organizational ambidexterity is influenced by different leadership styles. This leads to the fact that this research seeks to capture managers’ perceived behavior rather than managers’ behavior from an employee perspective. Therefore, the statements from the GTL were modified in this study to make it possible for managers rather than employees to answer the survey. The modification affects the reliability and validity of the measurement, since the original statements where intended for followers.

The transformational leadership is divided into seven behaviors each is measured by one statement (Carless, Wearing, & Mann, 2000). GTL is a short measurement as it only has one statement measuring every part. Using an already established measure will create greater reliability and validity to our findings. Due to the modifications that allow managers themselves to answer the statements we cannot rely on the GTL:s reliability and validity. However, since the statements have a basis in the already established GTL measurement, assumptions can be made that the statements have some reliability and validity to measure managers’ transformational leadership. Transformational leadership will be measured by a 7-point Likert scale where the respondents are asked to answer statements from their role as leaders. The intention for the results is to sum it together and a high score indicates high influence of transformational leadership and a low score indicates low influence of transformational leadership.

The first behavior measured in the transformational leadership is vision: which aims to capture if the manager has a visionary sight for the organization and its followers. It
further aims to measure if managers, can develop plans (images) for the future of the organization and if the manager is able to share those plans to the followers (Carless et al., 2000). This behavior is measured by the following statement:

- I think I communicate a clear and positive vision of the future.

The second behavior is *staff development*, meaning managers ability to encourage personal development among followers. By giving followers tasks that challenge themselves, will in the end result in new skills for followers. This would lead to more effective followers (Carless et al., 2000). This behavior is captured through the following statement:

- I treat my employees as individuals by supporting and encouraging them to develop.

The third behavior is *supportive leadership*. According to Carless et al. (2000) this behavior aims to capture managers’ ability to give positive feedback to followers when accomplishing goals and achievements. By being supportive, managers express confidence which influence followers to be effective and successful in achieving organizational goals. It is very essential that managers supports and motivate followers when difficult and challenging goals are ahead (Carless et al., 2000). The behavior is measured by the following statement:

- I give encouragement and recognition to my employees.

The fourth behavior is *empowerment*, meaning involving followers in decision making. This lays focus on managers’ skill to share power and information with followers. Manager involves followers in problem-solving, decision making at the same time encourage the followers to be independent. As a manager it is of importance to create an environment involving trust, respect, open communication and cooperation (Carless et al., 2000). Empowerment is measured by the following statement:

- I promote trust, commitment and cooperation among employees.

The fifth statement is regarding *innovative and lateral thinking*, which means that effective leaders use innovative and unconventional strategies to achieve the organizations goals. This refers to managers’ willingness to take risks in order to achieve their vision. The manager encourage follower to think laterally and give them
challenging tasks to develop innovative ways to solve problems (Carless et al., 2000). Innovative and lateral thinking is measured by the following statement:

- I encourage new approaches to problem solving.

The sixth behavior is *lead by example* and is referring to role modelling. This means that managers want to be a leader it is of importance to communicate his/hers believes and values for followers (Carless et al., 2000). This behavior is measured by the following statement:

- I convey my values and act along these.

The last behavior is *charismatic leadership*. Transformational leader is considered to be closely or synonyms to charismatic leadership (Northouse, 2013). A manager with charismatic skill is considered trustworthy, highly competent and respectful. It is through these attributes followers are inspired and motivated to achieve organizational goals (Carless et al., 2000). Charismatic leadership is measured by the following statement:

- I instill respect and pride to others by being able.

5.2.2.2. Servant leadership

Servant leadership is operationalized by the servant leadership questionnaire (Liden et al., 2008) into seven behaviors. The seven behaviors are from a model that Liden et al (2008) created. The parts represent behaviors that are essential for servant leadership. The questionnaire measures how the followers see their leader. As this dissertation seeks to capture how managers perceive themselves the statements have been modified to measure perception of managers’ behavior in a similar way as the transformational leadership questions. With this modification we cannot assure that the measurement will give high reliability and validity.

The servant leadership questionnaire is divided into seven behaviors each measured by four statements giving us 28 statements in total. This measurement has four statements measuring the same thing in order to create higher validity and reliability. Higher validity and reliability are created when there are several questions/ statements measuring the same thing (Bryman & Bell, 2011; Saunders et al., 2009). Servant leadership will be measured by a 7-point Likert scale where the respondents are asked to
answer statements from their role as leaders. The intention for the results is to sum it together and a high score indicates high influence of servant leadership and a low score indicates low influence of servant leadership.

The first set of statements measures a managers emotional healing. Emotional healing tries to capture if the manager is sensitive to personal matters and their well-being. It also involves managers’ ability to identify and address problems. In other words, the emotional healing statements aims to find out if managers are available to their followers, and whether they stand by them and support them. Below are the statements that measures emotional healing:

- Employees seek help from me when they have a personal problem.
- I care about employees' well-being.
- I take the time to talk with my employees on a personal level.
- I can recognize when my employees are feeling down bad without asking them.

The second set of statements measures if the manager is creating value for the community. It means that the manager tries to create value to the community by being involved in local activities and volunteer for community service in order to give back to the community. Manager also tries to get the followers involved in these activities. Creating value for the community is measured by the following statements:

- I emphasize the importance of giving back to the community.
- I am always interested in helping people in the community.
- I am involved in community activities.
- I encourage others to volunteer in the community.

The third set of statements is measuring the conceptual skills. Conceptual skills refer to managers’ ability to understand the organizations, meaning, goals, purposes, complexity and missions. Conceptual skills also refer to how managers deal with several problems at once. Below are the statements measuring conceptual skills:

- I can tell if something work related is going wrong.
- I am able to think through complex problems.
- I have a thorough understanding of the organization and its goals.
- I can solve work problems with new or creative ideas.
The fourth set of statements is measuring *empowering*. It refers to managers’ ability to give freedom to the followers. This is a way for managers to share power and control by giving the followers freedom to handle difficult situations which increases followers’ confidence. Empowering is measured by the following statements:

- I give others the responsibility to make important decisions about their own jobs.
- I encourage others to handle important work decisions on their own.
- I give others the freedom to handle difficult situations in the way they feel is best.
- If my employees need to make important decisions at work, they do not need to consult with me.

The fifth set of statement is about *helping subordinates grow and succeed*. This behavior refers to managers knowing the followers professional and personal goal. As a manager you try to help the followers in order to accomplish their professional and personal goals. Servant leadership priorities are followers’ career and development and as manager you help and support them as the followers grow and succeed, to reach their fullest potential. Helping subordinates grow and succeed is measured by the following statements:

- I make my employees career development a priority.
- I am interested in making sure that my employees reach their career goals.
- I provide my employees with work experiences that enable them to develop new skills.
- I want to know about my employees career goals.

The sixth set of statements is about *putting subordinates first* and is a sine qua non for servant leadership. This means that managers’ actions and words clearly are in line with followers concerns and priorities, including followers’ interests and success before their own interests. Putting subordinates first is measured by the following statements

- I care more about others’ success than my own.
- I put others’ best interests above my own.
- I sacrifice my own interests to meet others’ need.
- I do what I can to make others’ job easier.
The seventh and last set of statements is *behaving ethically*, meaning doing the right thing in the right way. This is connected to the ethical standards in servant leadership which includes being open, honest, and fair to followers. As a servant leader you do not compromise when it comes to ethical principles. Behaving ethically is measured by the following statements:

- I hold high ethical standards.
- I am always honest.
- I would not compromise ethical principles (right and wrong) in order to meet success.
- I value honesty more than profits.

5.2.2.3. Authentic leadership

The measurement of authentic leadership is borrowed from Walumbwa, Avolio, Gardner, Wernsing & Peterson (2008). Walumbwa et al. (2008) divide authentic leadership into four behaviors measuring self-awareness, internalized moral perspective, balanced processing and relational transparency. Each behavior is measured by four statements giving us 16 statements in total. Authentic leadership will be measured by a 7-point Likert scale where the respondents are asked to answer statements from their role as leaders. The intention for the results is to sum it together and a high score indicates high influence of authentic leadership and a low score indicates low influence of authentic leadership.

The first behavior is measuring *self-awareness*. Self-awareness refers to personal insights and is a process which aims to capture how individuals perceive themselves, by knowing their strengths and weaknesses. It also seeks to capture if the manager reflect over their core values, emotions, identity, motives and goals. Self-awareness is measured by the following statements:

- I can list my three greatest weaknesses.
- I can list my three greatest strengths.
- I seek feedback as a way of understanding who I really am as a person.
- I accept the feelings I have about myself.

The second behavior is the *internalized moral perspective*. It aims to capture if managers use their internal moral standards and values to improve their control over
their behaviors instead of allowing outside pressure control them. Internalized moral perspective is a self-regulated behavior since managers can control the influence from others. The internalized moral perspective is measured by the following statements:

- My actions reflect my core values.
- I do not allow group pressure to control me.
- Other people know where I stand on controversial issues.
- My morals guide what I do as a leader.

The third behavior is *balanced processing*. This behavior refers to managers’ ability to analyze information in an objective way, and whether managers’ explore other possibilities (opinions) before making a final decision. Managers handling balanced processing is seen as a manager who is open about their own perspective and stay objective in others perspective. Balanced processing is measured by the following statements:

- I seek others’ opinion before making up my own mind.
- I listen closely to the ideas of those who disagree with me.
- I do not emphasize my own point of view at the expense of others.
- I listen very carefully to ideas of others’ before making decisions.

The fourth and last behavior is *relational transparency*. This behavior refers to managers being open and honest to others and whether you are able to share positive and negative aspects of yourself to others. In other words managers have to communicate openly and be real in their relationships. Relational transparency is measured by the following statements:

- I openly share my feelings with others.
- I let others know who I truly am as a person.
- I rarely present a “false” front to others.
- I admit my mistakes to others.

### 5.2.3. Control variables

There are five control variables in this dissertation and they are age, gender, work experience as manager, education and organizational size. The first control variable measures the age of the CEO. The intention of this control variable is to measure if age
has an influence on manager capabilities to foster organizational ambidexterity and if age affects what type of leadership a manager practice. The second measurement is gender. This measure indicates if there is a difference between men and women in their leadership practice. Both age and gender are demographic characteristics that according to Pelled (1996) indicate high visibility which lead to better turnover. Further, Umans (2013) claims that age and gender diversity can have an effect on the reflection of allocated resources observed in ambidextrous orientation of an organization.

The third control variable measures how many years of work experience the participant has and if work experience is a factor leading to different leadership styles. Because more experience in the industry could lead to stronger influence of both exploration and exploitation (Smith & Umans, 2013). The fourth control variable measure education and if education is a factor influencing different leaderships. Education indicates high job-relatedness and, high visibility. High job-relatedness can lead to better turnover and task performance (Pelled, 1996). The last control variable is organizational size, and it is measured how many employees the organizations have. This variable can be used to explore if economics of scale, give larger firm an advantage over smaller firms (Carmeli, 2008). On the other hand, organizational size can also be associated with difficulties processing information (Tushman & Romanelli, 1985).

Below are the questions measuring the different control variables:

- Please state your age?
- Please state your gender?
- Please state your experience as manager?
- Please state your highest educational level?
- Please state how many employees there are in the organization?

5.3 Reliability, validity and generalization

In quantitative studies it is important to take reliability into account. Reliability refers to if the data collection, techniques or analysis process will yield consistent results and also that similar tests give similar results (Saunders et al., 2009). There are four threats that can affect the dissertation reliability and they are: subject or participant error, subject or participant bias, observer error and observer bias. Subject or participant error means that the participant of the survey may have different opinions depending on what day it is. Subject and participant bias refers to the interviewee telling the interviewer
what the interviewer might want to hear rather than how it really is. Observer error is about observers interpreting the information in different ways. The last threat is observer bias which refers to that interpretation may be different for different observers (Saunders et al., 2009).

Bryman and Bell (2011) argue that there are three fundamental meanings of the term reliability: stability, internal reliability and inter-observer consistency. Stability means that you can test the stability of a measure with a test-retest method. The internal reliability refers to that there could be a lack of coherence in multiple item measures. Inter-observer consistency means great involvement from subjective judgment (Bryman & Bell, 2011).

In our dissertation we will use primary data from managers, which can lead to subject or participant error. This refers to that managers’ attitude can differ depending on what day they answer the questionnaire. It may also be so that the managers answer what they think we want to see, which can lead to subject and participant bias. The last two threats deals with interviews or observations and since we have a quantitative study, there will be no observer threats.

The concept validity is also essential in studies. Validity indicates whether your measures really measure the desired concept. Further, Bryman and Bell (2011) mention four types of validity: measurement, internal, external, and ecological validity. These types of validity can be measured by five different factors; face, concurrent, predictive, construct, and convergent validity. However, Saunders et al (2009) says that there are six threats that can affect the validity: history, testing, instrumentation, mortality, maturation and ambiguity about causal direction.

In order to create higher validity we need to have all of the things in mind that can affect validity. For instance the questions used in the questionnaire are already used measurement which gives higher validity and reliability to the dissertation. The questions also need to be clear so that the respondent answer it in his/her way and not the way that they think we want.

5.4. Generalizations and ethical considerations

Another important concept to consider is generalizability. It means that the results from one study can be applied for a whole population (Bryman & Bell, 2011). In order to
draw general conclusions it is important that you have a high number of respondents (Saunders et al., 2009). Since this study uses a deductive approach it is possible to create a higher internal validity which increases the ability to generalize the results. We intend to send the questionnaire to all organizations operating in waste management and water and sewerage industries in the public sector in Sweden. If the respondents are many relative to the total of the e-mails sent out, it is possible to generalize the results in the public sector. However, if the respondents are lower it will be hard to make reliable generalizations.

The last concept to consider is ethical considerations. The method used in this dissertation is a web survey distributed by e-mails to managers operating in waste management and water and sewerage industries in the public sector in Sweden. Due to the limited time, the survey was sent out, without managers’ approval. In the mail that was sent out, the purpose of this dissertation was explained and that they could decline to participate in the survey by unsubscribe from the email. The e-mail also contains contact information if they had any questions about the survey and that collected information will be handled confidentially. The questions in the survey were developed in a way that will not be considered harmful to the participant. Our supervisor went through the survey before it was sent out to, in order to minimize harmful and personal question that the participant can see as offending.
6. Analysis

In this chapter the outcomes of the survey are presented. The chapter starts with descriptive statistics of the respondents, and dependent, independent and control variables. Then the results of the correlation, independent t-test and multiple linear regression tests are presented. The chapter ends with a summary of the results.

6.1. Descriptive statistics

To provide a better overview, this chapter starts by presenting descriptive statistics of the empirical findings. Firstly, the distributions of respondents, response rate, gender and age are presented. Secondly, descriptive statistics of the dependent variables are presented. Thirdly, descriptive statistics of the independent variables are presented. Finally, descriptive statistics of the control variables are presented.

6.1.1. Respondents

The population of this study is 171 organizations operating in waste management and water and sewerage industries in the public sector in Sweden. These organizations are distributed into two types of organizations LGA and LGC. Of the 171 organizations 49 replies were received. Table 6.1 shows the frequencies of total numbers of response and valid questionnaires.

For the survey we used the tool Survey Monkey, the survey was open for a week and a reminder was sent out after four days. This could be one explanation for the large number of non-responses. Of the 50 respondents nine were excluded for the reason that the questionnaires were not valid, which leads to a valid respondent rate 24 percent (41 valid questionnaires). The response rate is not sufficient enough to be able to analyze the data as a large sample.

Table 6.1 Responses and non-responses

<table>
<thead>
<tr>
<th>Response frequency</th>
<th>Numbers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>Blocked emails</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sample Selection</td>
<td>168</td>
<td>100%</td>
</tr>
<tr>
<td>Bounced emails</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Recipients that unregistered</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Non-responses</td>
<td>111</td>
<td>66%</td>
</tr>
<tr>
<td>Number of responses</td>
<td>50</td>
<td>30%</td>
</tr>
<tr>
<td>Disqualified surveys</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>Valid surveys</td>
<td>41</td>
<td>24%</td>
</tr>
</tbody>
</table>
Our population is public sector organizations divided into LGAs and LGCs. After the classification of the public sector it shows that both LGA and LGC have fewer than 30 respondents’ indicating a small sample (Pallant, 2010). Table 6.2 shows that LGA and LGC are distributed somewhat evenly in the two organizational forms.

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td>25</td>
</tr>
<tr>
<td>LGC</td>
<td>16</td>
</tr>
</tbody>
</table>

The respondent of this dissertation are CEO or head managers. In LGA 56 percent of the respondents are men and 36 percent are women. In the LGCs there are according to the result 100 percent males. The table 6.3 shows how many from each sex is represented in the survey.

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td>Male</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>System</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGC</td>
<td>Male</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 6.4 shows the respondents’ age in LGA and LGC. The mean value for LGA is 52,67 years and the mean in LGC is 52,19 years.

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td>24</td>
<td>34</td>
<td>63</td>
<td>52,67</td>
</tr>
<tr>
<td>LGC</td>
<td>16</td>
<td>39</td>
<td>65</td>
<td>52,19</td>
</tr>
</tbody>
</table>

6.1.2. Dependent variable

There is no widely accepted measure for organizational ambidexterity and different studies operationalize the construct in different ways (Exploration X Exploitation versus Exploration + Exploitation versus Exploration – Exploitation) (Birkinshaw & Gupta, 2013; Auh & Menguc, 2005). In this study we have decided to focus on organizational ambidexterity as product of exploitation and exploration, and organizational ambidexterity as the difference between exploration and exploitation. We have excluded
the organizational as a sum of exploration and exploitation since it yields similar results as the product in the regression and correlation analysis.

Table 6.5 Organizational Ambidexterity

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Org Ambidexterity</td>
<td>41</td>
<td>13</td>
<td>41</td>
<td>22.57</td>
<td>7.294</td>
</tr>
<tr>
<td>Difference Org Ambidexterity</td>
<td>41</td>
<td>-4</td>
<td>1</td>
<td>-1.05</td>
<td>.990</td>
</tr>
</tbody>
</table>

6.1.3. Independent variables

The independent variables in this dissertation are transformational leadership, servant leadership, and authentic leadership. Each variable is measured by a seven point Likert scale. The results of each leadership are summed together and a high score indicates a high influence of the specific leadership whereas, a low score indicates a low influence of the specific leadership. Table 6.6 presents descriptive statistics of the different leaderships in LGAs and LGC.

Table 6.6 Descriptive statistics Independent variables

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government administration Transformational leadership measure</td>
<td>25</td>
<td>24</td>
<td>49</td>
<td>40.48</td>
<td>5.084</td>
</tr>
<tr>
<td>Servant Leadership Measure</td>
<td>25</td>
<td>4</td>
<td>184</td>
<td>153.36</td>
<td>34.318</td>
</tr>
<tr>
<td>Authentic Leadership Measure</td>
<td>25</td>
<td>57</td>
<td>101</td>
<td>84.96</td>
<td>11.901</td>
</tr>
<tr>
<td>Local government corporation Transformational leadership measure</td>
<td>16</td>
<td>35</td>
<td>47</td>
<td>41.06</td>
<td>3.473</td>
</tr>
<tr>
<td>Servant Leadership Measure</td>
<td>15</td>
<td>120</td>
<td>186</td>
<td>158.33</td>
<td>15.412</td>
</tr>
<tr>
<td>Authentic Leadership Measure</td>
<td>16</td>
<td>18</td>
<td>101</td>
<td>85.38</td>
<td>19.418</td>
</tr>
</tbody>
</table>

Transformational leadership was measured by letting the respondent answer seven statements measuring seven different behaviors. The Cronbach’s alpha for transformational leadership of the LGAs is 0.914 and the Cronbach’s alpha of the LGCs is 0.727 both values are acceptable (Pallant, 2010).
Table 6.7 Cronbach's Alpha Transformational Leadership

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government administration</td>
<td>.914</td>
<td>7</td>
</tr>
<tr>
<td>Local government corporation</td>
<td>.727</td>
<td>7</td>
</tr>
</tbody>
</table>

Authentic leadership was measured by 16 statements measuring four behaviors. The Cronbach’s alpha for authentic leadership of the LGAs is 0.887 and the alpha value for LGCs are 0.746 both values are acceptable (Pallant, 2010).

Table 6.8 Cronbach's Alpha Authentic Leadership

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government administration</td>
<td>.887</td>
<td>16</td>
</tr>
<tr>
<td>Local government corporation</td>
<td>.746</td>
<td>16</td>
</tr>
</tbody>
</table>

Servant leadership was measured by 28 statements measuring seven different behaviors. The Cronbach’s alpha for the LGA is 0.922 and for the LGC is 0.897 both acceptable values (Pallant, 2010).

Table 6.9 Cronbach's Alpha Servant Leadership

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local government administration</td>
<td>.922</td>
<td>28</td>
</tr>
<tr>
<td>Local government corporation</td>
<td>.897</td>
<td>28</td>
</tr>
</tbody>
</table>

Due to the fact that we modified the statements for transformational leadership and servant leadership in order for them to be answered by managers, it was previously not possibly to confirm the reliability of the variables. However, after the reliability tests of the three leadership styles the conclusion is that the statements are measuring the three leadership styles that were intended.

6.1.3 Control variables

Previous descriptive statistics of the control variables gender and age have already been presented in section 6.1.1. This section will present descriptive statistics of the remaining control variables.

Industry is used as a dummy variable. As seen in table 6.10 the dummy variable is divided into six different categories.
Table 6.10 Descriptive statistics of industry

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>4</td>
<td>16,0</td>
</tr>
<tr>
<td>Water</td>
<td>8</td>
<td>32,0</td>
</tr>
<tr>
<td>Waste and water</td>
<td>8</td>
<td>32,0</td>
</tr>
<tr>
<td>Water and energy</td>
<td>1</td>
<td>4,0</td>
</tr>
<tr>
<td>Waste, water and energy</td>
<td>2</td>
<td>8,0</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>92,0</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>8,0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100,0</td>
</tr>
<tr>
<td>LGC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>2</td>
<td>12,5</td>
</tr>
<tr>
<td>Water</td>
<td>5</td>
<td>31,3</td>
</tr>
<tr>
<td>Energy</td>
<td>1</td>
<td>6,3</td>
</tr>
<tr>
<td>Waste and water</td>
<td>5</td>
<td>31,3</td>
</tr>
<tr>
<td>Waste and energy</td>
<td>1</td>
<td>6,3</td>
</tr>
<tr>
<td>Waste, energy and water</td>
<td>2</td>
<td>12,5</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100,0</td>
</tr>
</tbody>
</table>

The control variable highest level education is used as a dummy variable. This variable is used to divide managers’ highest level of education into three groups: elementary school, high school, and university. As seen in table 6.11 the majority of the managers have had university as their highest level of education.

Table 6.11 Descriptive statistics of highest level of education

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>1</td>
<td>4,0</td>
</tr>
<tr>
<td>High School</td>
<td>6</td>
<td>24,0</td>
</tr>
<tr>
<td>University</td>
<td>18</td>
<td>72,0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100,0</td>
</tr>
<tr>
<td>LGC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>1</td>
<td>6,3</td>
</tr>
<tr>
<td>High School</td>
<td>2</td>
<td>12,5</td>
</tr>
<tr>
<td>University</td>
<td>12</td>
<td>75,0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>93,8</td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>6,3</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Year as manager is used as a dummy variable. As seen in table 6.12 the dummy variable is divided into 8 categories to reduce the size of the table.
Sector experience is used as a dummy variable. The aim of this variable is to capture whether the managers have had experience in other sectors before their current employment. The variable is coded into three categories: Public sector experience, private sector experience and experience from both sectors.

### Table 6.13 Descriptive statistics of sector experience

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td>8</td>
<td>32,0</td>
</tr>
<tr>
<td>Private sector</td>
<td>7</td>
<td>28,0</td>
</tr>
<tr>
<td>Both private and public sector</td>
<td>9</td>
<td>36,0</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>96,0</td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>4,0</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>100,0</td>
</tr>
<tr>
<td>LGC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector</td>
<td>4</td>
<td>25,0</td>
</tr>
<tr>
<td>Private sector</td>
<td>6</td>
<td>37,5</td>
</tr>
<tr>
<td>Both private and public sector</td>
<td>6</td>
<td>37,5</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Number of employees is used as a dummy variable. As seen in table 6.14 the variable has been categorized into four categories in order to minimize the table.
Table 6.14 Descriptive statistics of number of employees

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGA</td>
<td>1-9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>10-19</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>20-49</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>50 &lt;</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>25</td>
</tr>
<tr>
<td>LGC</td>
<td>1-9</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>10-19</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>20-49</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>50 &lt;</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16</td>
</tr>
</tbody>
</table>

6.2 Bivariate analysis

Spearman’s rho provides correlation coefficients that indicate the strength and direction of the linear relationship between small sample variables (Pallant, 2010). The correlation coefficients indicate whether there is a positive or negative relationship between variables whilst the numeric value shows the strength of the relationship. The correlation coefficients for the different organizational ambidexterity measures in this study are presented in table 6.15 (LGA) and in table 6.16 (LGC).

Table 6.15 Descriptive data of variables used in analysis of LGAs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Product Org Ambidexterity</td>
<td>22.94</td>
<td>8.138</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Difference Org Ambidexterity</td>
<td>-1.05</td>
<td>.659</td>
<td>.404*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transformational Leadership</td>
<td>40.48</td>
<td>5.084</td>
<td>.778**</td>
<td>.334</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Authentic Leadership</td>
<td>84.96</td>
<td>11.901</td>
<td>.331</td>
<td>.096</td>
<td>-571**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Servant Leadership</td>
<td>153.36</td>
<td>34.318</td>
<td>.692**</td>
<td>.049</td>
<td>.700**</td>
<td>.560**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sum All Leadership</td>
<td>270.8</td>
<td>47.58589</td>
<td>.621**</td>
<td>.183</td>
<td>.762**</td>
<td>.865**</td>
<td>.857**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Age</td>
<td>52.67</td>
<td>8.122</td>
<td>.051</td>
<td>-.186</td>
<td>.041</td>
<td>-.268</td>
<td>.096</td>
<td>-.127</td>
<td></td>
</tr>
<tr>
<td>8. Public sector experience</td>
<td>.3333</td>
<td>.48154</td>
<td>-.019</td>
<td>-.013</td>
<td>.058</td>
<td>-.045</td>
<td>-.064</td>
<td>-.032</td>
<td>-.454*</td>
</tr>
<tr>
<td>9. Both sector experience</td>
<td>.2917</td>
<td>.46431</td>
<td>-.099</td>
<td>-.319</td>
<td>-.279</td>
<td>-.146</td>
<td>-.020</td>
<td>-.113</td>
<td>-.250</td>
</tr>
</tbody>
</table>

Note: *p < 0.05; **p < 0.01; ***p < 0.001

The correlation matrix of the LGAs shows a significant positive relationship between product of organizational ambidexterity and transformational leadership and servant leadership. The correlation matrix also shows a significant relationship between servant leadership and transformational leadership and authentic leadership.
The correlation matrix of the LGCs shows no significant positive relationships between leadership styles and organizational ambidexterity measures.

The hypotheses will not be tested based on Spearman’s rho, but instead on the basis of a t-test for the first hypothesis (H1) and multiple linear regressions for latter hypotheses (H2a-H4b). The significant level for testing the hypotheses in this dissertation will be set at 5 percent.

6.3 Independent T-test

The t-test is used when comparing values on continuous variable for two groups or on two occasions (Pallant, 2010). In this study an independent t-test is used as the aim is to find out if there is any difference in organizational ambidexterity in LGAs and LGCs. Before the t-test can be conducted it is necessary to control that both organizational ambidexterity measures are normal distributed. This can be seen in table 6.17 and 6.18.

Table 6.16 Descriptive data of variables used in analysis of LGCs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Product Org Ambidexterity</td>
<td>21.98</td>
<td>5.942</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Difference OrgAmbidexterity</td>
<td>-1.05</td>
<td>1.385</td>
<td>.571*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Transformational Leadership</td>
<td>41.06</td>
<td>3.473</td>
<td>.356</td>
<td>.224</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Authentic Leadership</td>
<td>85.38</td>
<td>19.418</td>
<td>-.217</td>
<td>-.451</td>
<td>.614*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Servant Leadership</td>
<td>158.33</td>
<td>15.412</td>
<td>.075</td>
<td>-.331</td>
<td>.323</td>
<td>.215</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Sum All Leadership</td>
<td>289.6667</td>
<td>19.86262</td>
<td>.038</td>
<td>-.389</td>
<td>.480*</td>
<td>.550*</td>
<td>.809**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Age</td>
<td>52.19</td>
<td>70.739</td>
<td>.015</td>
<td>.347</td>
<td>-.212</td>
<td>-.464</td>
<td>-.335</td>
<td>-.507*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Public sector experience</td>
<td>.2500</td>
<td>.44721</td>
<td>-.250</td>
<td>-.188</td>
<td>-.348</td>
<td>-.126</td>
<td>-.309</td>
<td>-.425</td>
<td>.094</td>
<td></td>
</tr>
<tr>
<td>9. Both sector experience</td>
<td>.3750</td>
<td>.50000</td>
<td>-.392</td>
<td>-.364</td>
<td>-.212</td>
<td>.394</td>
<td>.220</td>
<td>.426</td>
<td>-.028</td>
<td>-.447</td>
</tr>
</tbody>
</table>

Note: *p < 0.05; **p < 0.01; ***p < 0.001

Asymp. Sig. (2-tailed)

The correlation matrix of the LGCs shows no significant positive relationships between leadership styles and organizational ambidexterity measures.

Table 6.17 Sample K-S test Product Org Ambidexterity

<table>
<thead>
<tr>
<th></th>
<th>Product Org Ambidexterity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>41</td>
</tr>
<tr>
<td>Normal Parametersab</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td></td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td></td>
</tr>
</tbody>
</table>

Note: a. Test distribution is Normal.

b. Calculated from data.
The sample K-S test on Product of Organizational ambidexterity shows that the variable is normal distributed, it is therefore, possible to conduct an independent t-test on this variable.

Table 6.18 Sample K-S test Difference Org Ambidexterity

<table>
<thead>
<tr>
<th>Difference Org Ambidexterity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>41</td>
</tr>
<tr>
<td>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>-1.05</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.990</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>0.106</td>
</tr>
<tr>
<td>Positive</td>
<td>0.049</td>
</tr>
<tr>
<td>Negative</td>
<td>-0.106</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>0.679</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.746</td>
</tr>
</tbody>
</table>

<sup>a</sup> Test distribution is Normal.
<sup>b</sup> Calculated from data.

The sample K-S test on Difference of Organizational ambidexterity shows that the variable is normal distributed, it is therefore possible to conduct an independent t-test on this variable.

The results on the independent t-test of product of organizational ambidexterity and difference of organizational ambidexterity are presented in table 6.19 and in table 6.20.

Table 6.19 Independent t-test product organization ambidexterity

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>LGA</th>
<th>LGC</th>
<th>95% CI for Mean Difference</th>
<th>t-value</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>22.94</td>
<td>21.98</td>
<td>-3.493, 5.428</td>
<td>.439</td>
<td>38,212</td>
</tr>
<tr>
<td>SD</td>
<td>8.138</td>
<td>5.942</td>
<td>.439</td>
<td>38,212</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>25</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note *p < 0.05

There is no statistically significant mean difference in the product measure of organizational ambidexterity between LGAs and LGCs.
Table 6.20 Independent t-test difference organization ambidexterity

<table>
<thead>
<tr>
<th>Organizational form</th>
<th>LGA M</th>
<th>SD</th>
<th>n</th>
<th>LGC M</th>
<th>SD</th>
<th>n</th>
<th>95% CI for Mean Difference</th>
<th>t-value</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-1.05</td>
<td>.659</td>
<td>25</td>
<td>-1.05</td>
<td>1.385</td>
<td>16</td>
<td>-0.769, 0.654</td>
<td>0.013</td>
<td>19.409</td>
</tr>
</tbody>
</table>

*Note* *p < 0.05

There is no statistically significant mean difference in the difference measure of organizational ambidexterity between LGAs and LGCs.

The result of the independent t-tests indicates that there is no support for hypothesis H1 thus, *p > 0.05* in both organizational ambidexterity measures.

### 6.4 Regression

Multiple regressions are used to explore the relationship between one dependent variable and a number of independent variables (Pallant, 2010). It allows the exploration of correlations and the interrelations between different variables. The reason for using this technique is that it allows testing of an entire model and how each variable contribute to it. Moreover, another important reason of using multiple regressions is that it is possible to include control variables within the model (Pallant, 2010).

In order to be able to allow independent and control variables to be entered simultaneously into the model a multiple linear regression is applied (*ibid*, 2010). The technique is according to Pallant (2010) not suitable for small sample however, literature is vague concerning the number of cases needed for a multiple regression. A guideline mentioned by Tabachnick and Fidell (2007) is the approximate formula: \(N > 50 + 8m\) (where \(m\) = number of independent variables). Further, if the dependent variable is skewed more cases are needed. This study does not include any skewed dependent variables however, the sample size is not sufficient to meet the criterion of Tabachnick and Fidell (2007) formula. But since the sample is not too far off the sample size suggested by Tabachnick’s and Fidell’s (2007) formula it is still possible to use a multiple regression. Moreover, when using multiple regressions as an analyzing technique there is a risk that different independent variables correlate with each other which causes multicollinearity (Pallant, 2010).
Before the regression test began, all control variables were controlled and the variables with little scientific and theoretical relevance were excluded from the analysis. The control variables left in the regressions are age and sector experience.

The hypotheses tested are:

- **Hypothesis 2a.** Transformational leadership is strongly positively connected to organizational ambidexterity in local government corporations.
- **Hypothesis 2b.** Transformational leadership is weakly positively connected to organizational ambidexterity in local government administrations.
- **Hypothesis 3a.** Servant leadership is strongly positively connected to organizational ambidexterity in local government corporations.
- **Hypothesis 3b.** Servant leadership is weakly positively connected to organizational ambidexterity in local government administrations.
- **Hypothesis 4a.** Authentic leadership is weakly positively connected to organizational ambidexterity in local government administrations.
- **Hypothesis 4b.** Authentic leadership is strongly positively connected to organizational ambidexterity in local government corporations.

However, due to covariance between the different leaderships it is not possible to test each leadership for itself. In order to create a significant model that can test our hypotheses for the product of organizational ambidexterity measure, the sum of all leaderships was used since all leadership styles covariates with each other. In order to create a significant model that can test our hypotheses for the difference of organizational ambidexterity, measure it was necessary to sum authentic leadership and transformational leadership due to covariance, whilst servant leadership was kept as a separate variable. Furthermore, as the regressions are conducted on small samples the interpretations must be made with caution.

### 6.4.1 Product of organizational ambidexterity measure

The result of the multiple linear regressions conducted on the dependent variable Product of organizational ambidexterity is presented in table 6.21 and in table 6.22.
When testing the model on the dependent variable product of organizational ambidexterity 25.7% of the variance is explained by independent and control variables. When checking for individual contribution of variables, one can see that it is only All leaderships that make a significant statistically contribution at the p < 0.01. This statistically contribution indicates that there is a significant relationship between organizational ambidexterity and leadership in LGA.

When it was not possible to construct a significant model of the dependent variable product of organizational ambidexterity in LGCs thus, there is no support that leadership affects organizational ambidexterity in LGCs.

Note: †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001
6.4.2 Difference of organizational ambidexterity measure

The result of the multiple linear regression conducted on the dependent variable Difference of organizational ambidexterity is presented in table 6.23 (LGAs) and in table 6.24 (LGCs).

Table 6.23 Difference of organizational ambidexterity measure in LGAs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Std. B</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Servant Leadership</td>
<td>-.003</td>
<td>.013</td>
</tr>
<tr>
<td>2. Transformational and Authentic leadership</td>
<td>.011</td>
<td>.015</td>
</tr>
<tr>
<td>3. Public sector experience</td>
<td>-.340</td>
<td>.309</td>
</tr>
<tr>
<td>4. Both sector experience</td>
<td>-.512</td>
<td>.331</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.852</td>
<td>1.535</td>
</tr>
<tr>
<td>F-value</td>
<td>1.113</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>.019</td>
<td></td>
</tr>
<tr>
<td>VIF value highest</td>
<td>2.276</td>
<td></td>
</tr>
</tbody>
</table>

Note: †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001

It was not possible to construct a significant model for the dependent variable difference of organizational ambidexterity in LGAs, thus, there is no support that the sum transformational and authentic leadership or servant leadership affects organizational ambidexterity in LGAs.

Table 6.24 Difference of organizational ambidexterity measure in LGCs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Std. B</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Servant Leadership</td>
<td>-.040†</td>
<td>.020</td>
</tr>
<tr>
<td>2. Transformational and Authentic leadership</td>
<td>-.057†</td>
<td>.028</td>
</tr>
<tr>
<td>3. Public sector experience</td>
<td>-1.370†</td>
<td>.751</td>
</tr>
<tr>
<td>4. Both sector experience</td>
<td>-1.217†</td>
<td>.598</td>
</tr>
<tr>
<td>Constant</td>
<td>13.448*</td>
<td>4.461</td>
</tr>
<tr>
<td>F-value</td>
<td>4.885*</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>.526</td>
<td></td>
</tr>
<tr>
<td>VIF value highest</td>
<td>1.393</td>
<td></td>
</tr>
</tbody>
</table>

Note: †p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001

When testing the model on the dependent variable difference of organizational ambidexterity 52.6% of the variance is explained by independent and control variables. When checking for individual contribution of variables, one can see that servant Leadership, transformational and authentic leadership, public sector experience, and both sector experience contribute statistically at the p < 0.1. However, as the significant
level for testing the hypotheses is set at 5 percent there is no support that servant leadership and transformational and authentic leadership affects organizational ambidexterity in LGCs.

6.5 Summary of analysis

This summary will reveal the findings from the analyzes. To test the hypotheses in this research an independent t-test and a multiple linear regression technique has been chosen. The t-test is suitable for the first hypothesis as the aim is to compare continuous variables for two different groups. The multiple linear regressions is suitable for hypotheses H2a-H4b as the models consists of multiple independent and control variables that need to be tested simultaneously. This part will start with a summary of the correlation test, followed by the independent t-test and finally the multiple regressions.

In LGAs organizational ambidexterity measured as a product was proved to significantly correlate with transformational and servant leadership whereas organizational ambidexterity measured a difference was not proven to significantly correlate with any leadership style. Moreover, the correlation matrix shows a covariance between the different leadership styles making it difficult to analyze each leaderships influence on organizational ambidexterity. In LGCs there are no leadership styles that correlates with organizational ambidexterity there is however, covariance between the different leadership styles in this organizational form as well. The covariance could be explained by a similarity of the different leadership styles as there are previous researches have pointed out similarities mainly between servant and transformational leadership (Northouse, 2013). Further, when we were collecting data we received comments claiming that it was hard to distinguish some statements from one another which might also contribute to the covariance between the different leaderships. Another possible explanation for the covariance can be that the questions modified for measuring transformational and servant leadership may not be suitable for the managers to answer themselves as they measure how the managers act towards their employees, which might be difficult for the managers to determine.

The first hypothesis was tested by an independent t-test. The test did not prove any statistical difference in the level of organizational ambidexterity between LGAs and LGCs which was not in line with our expectations. One can only guess why the results
did not support our hypothesis, as there are studies that prove a higher level of organizational ambidexterity in LGCs in the same organizations (Smith & Umans, 2013). One possible explanation could be that previous studies have been skeptical about the usefulness of performance and efficiency measures as organizational outcomes in public sector organizations (Propper & Deborah, 2003).

Due to the covariance between the different leadership styles it was not possible to find any support for Hypotheses H2a-H4b. One possible explanation for the covariance between the leadership styles could be the fact that some respondents did experience the statements very similar to each other. If the respondents cannot distinguish the statements from the different leadership styles one may question the validity of the survey.

If one disregard the validity problems, it was possible to find a significant positive relationship in LGAs between all leaderships and organizational ambidexterity when using the dependent variable product of ambidexterity measure. Our interpretation of the result is that a more leadership in LGAs increases organizational ambidexterity. This result was not in line with our expectations since all our hypotheses regarding LGAs proposed that leadership styles would be weakly connected to organizational ambidexterity. A suggested explanation could be that managers in LGAs may be more likely to have scarce resources that must be allocated in the best way to fit explorative and exploitative purposes. Another possible explanation could be that LGA may have a wider variety of stakeholders with competing agendas. Thus, allocating resources in a balanced way between exploitative and explorative causes may be of greater importance than in LGC.
7. Thesis Conclusion

The last chapter will discuss the findings from the previous chapter. Moreover, the empirical methodological and theoretical contributions are presented. Finally the last section presents ethical implications and suggestions to future research within the field of this dissertation.

7.1 Summary of the dissertation and its findings

This study aims at answering the following research question: How do different managerial leadership styles affect organizational ambidexterity in local government organizational forms?

Previous studies have shown that organizational ambidexterity is present in the public sector. More specific that LGCs are more ambidextrous than LGAs and that there is a difference in managerial capability of fostering organizational ambidexterity depending on organizational form (Smith & Umans, 2013).

The results from the quantitative survey sent to public sector managers operating in Swedish waste management and water and sewerage industries indicate that there is no significant difference in the level of organizational ambidexterity between the organizational forms of LGA and LGC which results in no support for hypothesis H1. Further, we were not able to find any support for hypotheses H2a-H4b due to covariance between the different leadership variables.

Even though none of our original hypotheses are supported there are still findings that should be of interest. There are significant results in table 6.21 that the dependent variable product of organizational ambidexterity is affected by leadership styles in LGAs. The result show that the higher the leadership is the higher the organizational ambidexterity is. The whole model is significant at p < .01.

7.2 Practical relevance and theoretical contributions

The aim of this study was to fill the academic gap that there is a lack of studies that explain if different managerial leadership styles have a variable effect on organizational ambidexterity in local government organizations. Prior quantitative studies concerning organizational ambidexterity has to a large extent had their focus on the private sector (Adler, Goldofas, & Levine, 1999; Benner & Tushman, 2003; O'Reilly & Tushman, 2004; Gibson & Birkinshaw, 2004; Mom, Van Den Bosch, & Volberda, 2007; Hill &
Birkinshaw, 2012); few studies (Smith & Umans, 2013) have explored organizational ambidexterity in the public sector. Also, there has not been any research exploring the relationship of specific leadership styles and organizational ambidexterity. Therefore, this research has some academic importance

Proposing that organizational ambidexterity is a possible organizational outcome, previous studies have been skeptical about the usefulness of performance and efficiency measures as organizational outcomes in public sector organization as there is a lack of evidence (Propper & Deborah, 2003). This study is a small step towards understanding the variables influencing organizational ambidexterity in public organizations.

For practical reasons, the results of the study and the conclusions drawn can be of value for LGAs in Swedish waste management and water and sewerage industries as there were statistically significant results indicating that leadership styles have a positive relationship with organizational ambidexterity. The other results imply that in order to draw general conclusion about ambidexterity in public sector organizations this study needs to revised and tested in other contexts.

7.3 Critical review
The main critique to this study is the small sample numbers of LGAs and LGCs. There were 25 respondents in LGAs and 16 respondents in LGCs which could not represent the whole population of managers in Swedish LGAs and LGCs. Therefore, it is not possible to make general conclusions about managers in public sector organizations.

Another problem regards the survey statements. This critique comes from survey comments from managers claiming that it was hard to distinguish some statements from one another which might have contributed to covariance between the different leadership styles.

7.4 Ethical implications and future research
The findings in this dissertation have no ethical implication on organization ambidexterity as there are no results that could be perceived as offensive.

This dissertation is of an explorative nature, and future research should continue to explore the link of managerial leadership styles and organizational ambidexterity, potentially use different leadership measures or find common factors between the leadership styles that influence organizational ambidexterity.
Future research should also be conducted on a larger scale, including more managers and a wider range of industries for more generalizable results to see if it would yield similar results as the small samples in this dissertation.

Moreover, future research could also test models in other countries besides Sweden, to compare if public sectors in different countries yield similar results or whether cultural difference between managers affects the results.
References


**Appendix 1 Survey questions**

*Kontrollfrågor urskilja LGA och LGC*

Jag är VD för:

*Kontrollfrågor*

Vänligen ange din om du har haft erfarenhet från (Publik sektor, Privat Sektor, Båda)

Vänligen ange om du är (man/kvinna)

Vänligen ange din ålder

Vänligen ange din hur lång erfarenhet du haft som chef?

Vänligen ange din högsta utbildningsnivå (Grundskola, Gymnasie, Yrkeshögskola, Universitet/Högskola)

Vänligen ange hur många anställda det finns i organisationen

**Organizational Ambidexterity**

Vänligen bedöm hur följande påståenden speglar företagets inriktning de tre senaste åren med hjälp av en 7-gradig skala där 1 = instämmer inte alls till 7 = instämmer helt

*Explorative orientation*

1. Letar efter nya tekniska idéer genom att tänka ”utanför boxen”
2. Bygger framgång på förmågan att utforska ny teknik
3. Skapar produkter eller tjänster som är innovativa till företaget
4. Letar efter kreativa sätt att tillfredsställa kundernas behov
5. Genomför aggresiva satsningar på nya marknadssegment
6. Aktivt riktar in sig på nya kundgrupper

*Explorative orientation*
1. Förbinder sig att försöka förbättra kvalitet och sänka kostnader
2. Kontinuerligt förbättrar tillförlitligheten på produkter och tjänster
3. Ökar automatiseringen i sin verksamhet
4. Ständigt undersöker om befintliga kunder är nöjda
5. Finjusterar det som är möjligt för att behålla sina nuvarande kunder nöjda
6. Fördjupar sig i den befintliga kundbasen

**Authentic Leadership**

Vänligen besvara följande påståenden som en ledare med hjälp av en 7-gradig skala där
1 = instämmer inte alls till 7 = instämmer helt.

**Self-Awareness**

1. Jag kan lista mina tre främsta svagheter
2. Jag kan lista mina tre främsta styrkor
3. Jag söker feedback för att försöka förstå vem jag verkligen är som person
4. Jag är bekväm med den jag är

**Internalized moral perspective**

1. Jag agerar efter mina värderingar
2. Jag påverkas inte av grupptryck
3. Jag har oftast en tydlig åsikt vid kontroversiella problem
4. Min moral guidar mig i vad jag gör som ledare

**Balanced processing**

1. Jag söker andras åsikter innan jag bestämmer mig
2. Jag lyssnar noga till idéer från dem som inte håller med mig
3. Jag försöker inte framhäva min egen synvinkel på bekostnad av andras
4. Jag lyssnar noggrant till andra idéer innan jag fattar beslut

**Balanced processing**

1. Jag är öppen med mina känslor gentemot andra
2. Jag låter andra veta vem jag verkligen är som person
3. Jag visar mitt rätta jag för andra

4. Jag erkänner mina misstag för andra

Servant leadership

Vänligen besvara följande påståenden ärligt med hjälp av en 7-gradig skala där 1 = instämmer inte alls till 7 = instämmer helt.

Emotional healing

1. Anställda söker hjälp från mig när de har ett personligt problem
2. Jag bryr mig om anställdas välmående
3. Jag tar mig tid att prata med de anställda på en personlig nivå
4. Jag lägger märke till om mina anställda mår dåligt utan att fråga dem

Creating value for the community

1. Jag försöker vara en tillgång för företaget
2. Jag är intresserad av att hjälpa andra
3. Jag försöker vara involverad in företagets olika aktiviteter
4. Jag försöker uppmuntra anställda att ställa upp för företaget

Conceptual skills

1. Jag är bra på att se om något arbetsrelaterat håller på att gå fel
2. Jag är bra på att tänka igenom komplexa problem
3. Jag har en god förståelse för organisationen och dess mål
4. Jag försöker lösa problem genom nya och kreativa idéer

Empowering

1. Jag ger andra ansvar för att ta viktiga beslut i deras arbete
2. Jag uppmuntrar andra att ta svåra och viktiga beslut själva
3. Jag ger andra friheten att ta svåra beslut på ett sätt som passar dem själva bäst
4. Mina anställda behöver inte alltid rådfråga mig vid viktiga beslut

Helping subordinates grow and succeed
1. Jag lägger stor vikt vid att mina anställda ska utvecklas
2. Jag hjälper anställda att uppnå sina mål
3. Jag förser mina anställda med intressanta uppgifter så de kan utveckla nya erfarenheter
4. Jag är intresserad av andras karriärmål

**Putting subordinates first**

1. Jag bryr mig mer om andras framgång än min egen
2. Jag ser till andras intresse framför mina egna
3. Jag offrar mina egna intressen för att vara behjälplig för andras behov
4. Jag gör vad jag kan för att förenkla andras arbete

**Behaving ethically**

1. Jag reflekterar över mina beslut för att kunna agera rätt ur ett etiskt perspektiv
2. Jag är alltid ärlig
3. Jag kompromisser inte etiska principer (rätt och fel) för att nå framgång
4. Jag värderar ärlighet högre än ekonomiska vinster

**Transformational leadership**

Vänligen besvara följande påståenden ärligt med hjälp av en 7-gradig skala där 1 = instämmer inte alls till 7 = instämmer helt.

1. Jag anser att jag kommunicerar en klar och positiv vision om framtiden
2. Jag behandlar mina anställda som individer, genom att stödja och uppmuntra dem att utvecklas
3. Jag ger uppmuntran och erkännande till mina anställda
4. Jag främjar tillit, engagemang och samarbete bland anställda
5. Jag uppmuntrar nya tillvägagångssätt i problemlösning
6. Jag förmedlar mina värderingar och handlar utefter dessa
7. Jag ingjuter respekt och stolthet till andra genom att vara kompetent