Intuition – the inevitable side to decision making

A study of the public procurement process

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Industrial and Management Engineering, master's level
2018

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Acknowledgements

This master thesis is written by Agnes Erdmark and Lisa Forssberg as the final part of the authors’ education in Industrial Management and Engineering with a master in Industrial Marketing, at Luleå University of Technology.

We are very thankful for all the help, support and advice given to us by our supervisor Sambit Lenka at Luleå University of Technology. The engagement and very thorough advisements have helped us to push ourselves and create something of value. We would also like to thank the examiner Maria Ek Styvén who has answered all of our questions and too, provided helpful feedback.

We would also like to thank our supervisors at Skanska, Daniel Nilsson and Anna Zimmer, who has contributed with their insights and expertise within the researched area, and who has supported us with valuable knowledge and contacts at the STA. Another person at Skanska who we would like to acknowledge is Annhelen Tångemar, who has planned interesting events and helped us gain a better picture of Skanska. Of course, we are also thankful for the respondents’ time and effort to participate in this research, for being understanding of the authors’ limited knowledge within the area and for contributing to the field.

Last but not least, we would like to thank our families, friends, and opponents for their endurance in talking hours and hours about this very interesting area which we have researched. Insights have been gained throughout the entire work, and for this we are thankful and curious in what’s to come after this.

Gothenburg 2018-05-31

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Abstract

Public procurement is one of the most important functions of the government, and the decision-making process for the public buyers is filled with complex evaluation criteria and restrictions by the law. The purpose of this study has been to study the decision making done by public procurers and investigate whether they act completely rational in their decisions, or if there is any intuitive dimension affecting them. The purpose has also been to research which intuitive factors that exists in the public procurement context, and to what extent these affect the outcome of the decisions. An extensive literature review has been conducted, which was then used as a foundation for the data collection. Interviews have been held with employees at the public organization Trafikverket, or the Swedish Transport Administration. All interviews have been transcribed and analyzed with the help of a thematic analysis, which led to the resulting findings. Intuitive factors found in the literature were how the public buyers perceived the contractors brand, what their perception of tender value were, their personal experiences and their emotions. The data collection yielded some similar findings and some new. Emotions and experience were found to be of great importance when deciding, and the new findings includes that the contractor perception as well as the public buyers’ communication had a significant impact. Due to the limited number of respondents and the single case study company, more research needs to be done in order to establish that these are in fact common intuitive factors in public procurement and thus to be able to generalize the findings.
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1. Introduction

Public procurement is the term for describing when a public company enters a partnership with another organization (Djankov, Ghossein, Islam & Saliola, 2017). It is also a term pertaining public-private contracts and is one of the most important functions of the government (Thai, 2001). This because it is through public procurement that the government can ensure that public resources are used in the most efficient way (Djankov et al., 2017). To ensure that public resources are used in the best way possible, the public sector needs to follow a number of regulations such as the law of public procurement and prescribed processes (Constantino, Dotoli, Falgario & Fanti, 2011). According to the authors, public procurement must be completely transparent and without subjectivity.

Public procurement shares some characteristics with private procurement in terms of high monetary volumes and the complexity of the purchase (Grewal et al., 2015). Both types of procurements involve many stakeholders, and the larger the procurement the more the people are involved (Grewal et al., 2015). The people involved in a buying process are usually referred to as the buying center, where different people obtain different roles, rules, and goals (Gomes, Fernandes & Brandão, 2016). The people of the buying center usually come from different functional areas, implying that they also have different experiences and backgrounds, making it even more difficult to reach a consensus buying decision, when evaluating procurement criteria (Gomes et al., 2016).

The public procurement process is usually both long and filled with different criteria (Thai, 2001). The process also needs complete transparency and becomes even more complex in terms of the regulations and rules involved (Thai, 2001). This because it is the taxpayer’s money that is to be spent, not the public sector’s. Public procurement is in most cases done through auctions (Bichler, Davenport, Hohner & Kalagnanam, 2006), or more specifically reverse auctions (Setia & Speier-Pero, 2015), meaning that there are many suppliers competing for one bid from a public actor. The bidding is in reversed auctions a way to decrease the tender price, as there are many sellers and only one buyer. The suppliers have
one chance to submit one offer and compete with this offer in the auction (Setia & Speier-Pero, 2015).

From the supplier side, winning the tender is highly important, as it accounts for high monetary volumes (Sedita & Apa, 2015). However, winning the tender is becoming increasingly difficult as there are multiple bidders and all are meeting the criteria set by the public sector. Traditionally, the public sector has used price and lowest bid as the main criteria (Waara & Bröchner, 2006). This is currently shifting as EU directives imply for criteria concerning quality to become more important (Bergman & Lundberg, 2013). Quality as a criteria concerns many aspects, such as keeping to deadlines, technical parameters, safety, environment and the quality of the offer made (Ochrana & Hrnčířová, 2015). By including more criteria has created challenges both for the supplier and buyer side, since more criteria mean longer and more complex decision-making processes due to the more extensive evaluation part (Bergman & Lundberg, 2013).

The decision-making process has always been of great interest when it comes to buying behavior, due to its complexity (Igarashi, Boer & Pfuhl, 2017). Understanding how this process is done and what influences it in complex situations is considered to be of great relevance to the marketing field. The buyer side, or the public buyer, have always been thought of as completely rational when selecting suppliers, but recent research establishes that the public agency is no more rational than any other human being (Rajala & Tidström, 2017). This means that there is more to the decision-making process than previously assumed.

Decision-making is a process affected by two main parts, the rational and the intuitive dimensions (Kaufmann, Wagner & Carter, 2017). The rational decisions need measurable proof, such as a price or cost (Thai, 2001). In public procurement, where transparency, cost certainty, and well-based decisions are crucial, these rational parameters are efficiently used (Raymond, 2008). The intuitive part consists of both cognitive and affective factors (Kaufman et al., 2017). The cognitive decision-making dimension gives room for all previous experiences, skills, knowledge, and training to form a decision through a mental process including all these elements (Burke & Miller, 1999). The process is influenced by what is usually referred to as cognitive factors which are for example reading, mathematics, and reasoning (Xiao, Koritziky, Johnson & Bechara, 2013). The affective decision-making dimension, on the other hand, is an emotional process, evaluating based on gut-feeling and
more unexplainable factors such as mood or attitudes (Burke & Miller, 1999). Further, affective decision-making is one of the most important social functions, which enables humans to make long-term successful decisions (Xiao et al., 2013).

It is argued that rational parameters should be the only ones present in the decision making process in public procurement (Kemp, Borders, Anaza & Johnston, 2017), but it has become evident that intangible and intuitive parameters are present in the process as well (Rajala & Tidström, 2017). Thus, it has become clear that intuitive factors have a great influence on the decisions made (LaPlaca & da Silva, 2016). However, there is still little research made about these intuitive parameters and how they affect decisions in public procurement (Leśniak, 2015; Lynch & de Chernatony, 2004).

1.1 Research problem
Because of the fact that it is people who make the supplier selection decisions, and that people make decisions based on more than simple logic (Kemp et al., 2017), the area of decision-making in an organizational context proposes a great challenge (Igarashi et al., 2017). The criteria used to select suppliers will inevitably be characterized by subjectivity, preference and previous experience of the decision makers and the decision-making process is one of the most complex to understand because it is filled with uncertainty (Dziadosz & Konczak, 2016).

Limited research has been conducted towards understanding the emotional, social and psychological influence, in other words, the intuitive side, that the people of the procurement decision process are affected by (LaPlaca & da Silva, 2016). Considering the importance and societal influence of public procurement as well as the rising interest among researchers for social science in the context of management and industries, this study brings relevance by exploring intuitive factors influence when it comes to decision-making in organizational buying.

Research within the perception of value and brand provides some insight into what might be considered as intuitive influencers (Romaniuk & Nenycz-Thiel, 2013); (Sweeney & Soutar, 2001), but there is little research proving this in the context of public procurement. The intuitive dimensions of cognitive and affective decision-making behavior also appear in
organizational buying research in form of experience as a tool for decisions and emotions as a guide, but little research is done in public procurement process (Kemp et al., 2017).

Thus, intuitive decision-making is fairly unexplored when it comes to the B2B market, and even less explored in the context of public procurement (Kemp et al., 2017). Previous research has evidently established that intuitive factors are present in all types of decision-making, even in the organizational context, but more focused research on what types of intuitive factors that exists and influences organizational buying is still understudied. This leads to the aim of the study that is to explore what intuitive factors that exist in public procurement and how the intuitive factors influence decision-making in public procurement supplier selection, where the process traditionally has been seen as rational and without the influence of intuitive factors.

RP: How is the public procurement decision-making process affected by people's intuition?

To establish a clear structure in this thesis, the research problem has been broken down into more narrow research questions.

RQ1: What are the intuitive factors influencing decision making in public procurement?

RQ2: How do intuitive factors affect the individual decision-making process in public procurement?

1.2 Case Study Company

Every year, the public procurements in Sweden stand for about 634 billion Swedish crowns, making it a substantial part of investments in the Swedish market (Konkurrensverket, 2018). Many different suppliers competing for tenders by the public sector exists, one of the major ones being the case company of this master thesis: Skanska. Skanska is one of the leading project development and construction groups in the world, with a home market in Sweden and other Nordic countries (Skanska, 2018). The company operates in four different areas: Construction, Residential Development, Commercial Property Development and Infrastructure Development. The case study is done within Skanska Industrial Solutions, or SIS, where the biggest customer is the public organization called the Swedish Transport
Administration (STA). SIS main areas of work include necessary basic products with associated services to the community: concrete, asphalt and rock crush, road service and machine rental.

Skanska is competing against a number of companies with similar competence for tenders by the STA, but are currently only getting a small market share of the tenders. The STA has up until now based their decision-making in public tenders mainly on price, giving the tender to the supplier proposing the lowest price. This is currently changing, making room for the parameter of quality in the tender propositions. As the quality and all that quality pertains such as environment, safety, communication, and competence, is going to be equally important as price in the evaluation, Skanska now stands before the challenge of understanding the decision-making process when evaluating quality. The people involved in the procurement process at the STA are equally faced with this challenge, as quality is not as easy to evaluate as price. Understanding how decisions are made in the evaluation process and the intuition of the people involved have established the foundation for this master thesis.

The STA and the Competition authority

The Swedish Competition Authority (SCA) exists to make sure that there exists competition in the market (Konkurrensverket, 2018). According to the SCA, public procurement must be done in compliance with certain provisions and procurement rules, set by the EU. The EU directives are similar across all EU countries and are based upon openness and objectivity. The SCA also states that contracting authorities cannot choose suppliers based on loyalty to any previous suppliers and that the chosen supplier must be the one who offers the best product or service to the best condition (Konkurrensverket, 2018). The best product or service in the best condition is only further described as the most favorable terms.

The Swedish Transport Administration (STA or Trafikverket) is an authority who by law strives to purchase goods, services, and contracts in competition. An example of a law that affects the public procurement process is the Public Procurement Act (PPA). This law is based on EG-directives regarding procurement, and all public procurement in EU needs to follow these directives. The law states that all suppliers will be treated in an equivalent and non-discriminatory manner and that the process of choosing a supplier must be transparent. STA procures and orders products and contracts for approximately SEK 40 billion each year.
in order to develop and manage the transport system for road and rail traffic. The Public procurement process at the STA it is roughly described in figure 1.

Figure 1: Public procurement process in STA

The first step in the procurement process is identifying a need. This could be for goods, a service or a contractor that arises within the STA. The need is then defined in a specification. The specification is the collected basis that describes what will be procured, what requirements the supplier must meet and how the tenders will be evaluated. After this, the STA advertises the procurement in a public database at their webpage. Then it is time for the possible suppliers to send in their offers, where it is of high importance that they respect the time limits for applying. No offers sent in after the deadline can be used.

After receiving offers from suppliers, all offers are evaluated in regard to the criteria in the specification. When the decision is made, an assignment message is sent out to all of the bidders where it is stated who won the procurement. A contract is then signed with the winning supplier. The very last step of the procurement process is then the follow-up. This is done continuously throughout the contract period.
2. Literature Review

This chapter contains literature regarding organizational buying and the decision-making influencing parts. Relevant literature is presented within the context of organizational and public procurement to give the reader an understanding of the affecting elements in order to provide a basis for the research problem.

2.1 Organizational Buying Behavior

Organizational buying behavior (OBB) is the process of decision-making in order to conclude a purchase with regards to many variables (Rajala & Tidström, 2017). According to the authors, the view of OBB has changed from being regarded as a linear process where you begin with identifying a need with the goal of completing the purchase, to a more complex and dynamic process. Further, organizational buying is considered to be a very complex task (Grewal et al., 2015). The procurement process is becoming increasingly important from a strategic point of view, as it accounts for large investments both in economic terms and competence (Grewal et al., 2015).

Due to the high monetary volumes, there is often a complicated and technical nature of the considered offerings (Grewal et al., 2015). This usually makes the purchasing-situation time consuming, since bargaining and negotiations may be involved. The authors mean that as the purchasing process in a B2B context is extended, and it is also harder to specify the functional relationship between the supplier's marketing efforts and the buyer’s responses. Further, the B2B buyers are often most interested in satisfying their total need rather than buying any specific product, which can make it hard for both the buyer and the seller to determine which offer that fits the buyer best (Grewal et al., 2015).

Buying in the context of B2B differs in many ways from consumer buying (Grewal et al., 2015). According to the authors, organizations make their purchases to be able to meet the needs of their end users. Further, there is more than one person involved in the purchase decision process, and there are many influencers and stakeholders involved as well. The purchasing decision is made by a group embedded in a network of both individual and organizational relationships called the buying center (Grewal et al., 2015). OBB also differs between industries.
For example, industrial procurement differs from reseller procurement in the area of branding, where the industrial purchase becomes part of the buyer’s brand image and production process (Glynn & Brody, 2016). This implies that in terms of industrial supplier selection, the perception of a brand image could play an important part in the decision-making of the buyers (Glynn & Brody, 2016).

Organizational buying research has recognized different influencers, such as environment, organization and individual characteristics, in other words, intuitive factors (Rajala & Tidström, 2017). The authors conclude that in terms of individual characteristics, the influence on the buyer-supplier relationship is high. The buyer-supplier relationship is a delicate balance between competition and cooperation, which must be handled through good relationships (Rajala & Tidström, 2017).

2.2 Public Procurement

The term public procurement is used for public contracts and public-private partnership and is an important part of ensuring that public resources are used efficiently (Djankov et al., 2017). Public procurement is in many cases done through auctions (Bichler, Davenport, Hohner & Kalagnanam, 2006). Specific to public procurement is the use of reverse auctions (Setia & Speier-Pero, 2015), meaning that there are many suppliers competing for one bid from a public actor, where the supplier who offers the best possible tender for the lowest price, wins the tender. The suppliers have one chance to submit one tender that will be evaluated by the public procurers. The authors suggest that reverse auction is an efficient way of allocating resources in the best way possible. It is also claimed that the design of the reverse auction is an important aspect in winning the tender - design meaning the price visibility, transparency and cost certainty shown through IT-communication (Setia & Speier-Pero, 2015). Further, transparency is one of the most crucial parts of public procurement, as well as being one of the most complex variables to achieve (Thai, 2015). This due to ever-changing environments, markets, technological inventions etc. Transparency is also a core value of establishing correct value for money and is created through reducing the sense of absent information on rules and practices (Raymond, 2008).
Traditionally, the public sector uses the lowest bid as the award criterion for contracts (Waara & Bröchner, 2006). According to EU directives, however, the tender which has the lowest price combined with the preferable quality is to be rewarded as the bidding winner (Bergman & Lundberg, 2013). The authors state that using both price and quality in tender evaluation is of preference in long-term success, but also provides more difficulties in the decision-making process for the buying center, as quality evaluation opens for more intuitive judgment, including more than rational parameters such as price.

Value for money is the basis for all public procurement, where the perceived value benefits will determine the outcome of the auctions (Raymond, 2008). Value perception has long been disputed, but some researchers mean that it is an evaluative judgment depending on the person’s experience (Morin, 2001); (Sánchez-Fernández and Iniesta-Bonillo, 2007). However, there are still more to be understood in how people make these value judgments (Sánchez-Fernández & Iniesta-Bonillo, 2007), thus more to be understood in evaluation in public procurement.

2.3 Buying Center

A purchase decision in a B2B context often involves several stakeholders (Gomes et al., 2016). All organizational members who are involved in the purchasing decision are called the buying center (Naumann, McWilliams & Lincoln, 2015). In the buying center, there are several different roles that the participants can occupy, see Table 1.

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginners</td>
<td>Defines the purchase situation and initiate the process</td>
</tr>
<tr>
<td>Users</td>
<td>Those who are able to use the product</td>
</tr>
<tr>
<td>Buyers</td>
<td>Can commit the organization to spend money.</td>
</tr>
<tr>
<td>Deciders</td>
<td>Have authority to choose between offers from potential products and sellers.</td>
</tr>
<tr>
<td>Influencers</td>
<td>Those who add information or restrictions in the buying process.</td>
</tr>
<tr>
<td>Gatekeepers</td>
<td>Can control the flow of information in the buying process.</td>
</tr>
</tbody>
</table>
Each individual in the buying center also called the decision-making unit (DMU), can occupy several roles, and one role can be occupied by several individuals (Gomes et al., 2016). Further, it is stated that in the DMU, the members often are affected by a wide variety of intuitive factors such as previous experiences and backgrounds, and a consensus is needed for a unified group decision (Gomes et al., 2016).

Each member of the DMU is likely to bring importance to different criteria regarding the decision in order to evaluate and process information in different ways (Gomes et al., 2016). Even though the decision making takes place in a formal group context in the buying center, it is a process of several purchasing decisions made by individuals, thus the decision making is made by people on an individual level (Lynch & de Chernatony, 2004). At this individual level, the people's’ decision-making can be influenced by affective as well as cognitive factors, even in an organizational context (Lynch & de Chernatony, 2004).

2.4 Decision-Making Process in Public Procurement

Igarashi et al. (2015) explain the process in public procurement as a linear process of decisions, see figure 2.

![Figure 2: Decision-making process (Igarashi et al., 2015)](image)

The process of supplier selection is a multi-criteria and multi-stage process, involving a complex DMU. The process in public procurement is needed to be completely transparent and decisions must be argued and explained (Igarashi, de Boer & Michelsen, 2015). Further, the decision-making process is defined as one of the most important parts of a successful company, but the process is filled with uncertainty (Dziadosz & Kończak, 2016). The authors also claim that the decision makers’ analysis of the criteria will inevitably be characterized by both intuitive and rational factors such as subjectivity, preference and previous experience of the decision makers.
It is argued that the members of the buying center are not always making rational decisions in their procurement process (Rajala & Tidström, 2017). This because of the rapidly changing and emerging markets, as well as the impact of having many individuals with different goals, rules, and traditions. Researchers in several fields have agreed that the initial response to any environment is affective, and that emotional effects often guides an individual’s subsequent behavior in the given environment (Monroe, Rikalac & Somevuoric, 2015). Also, there exists a multi-level relationship between companies, on individual levels, organizational, relational and industry levels (Rajala & Tidström, 2017). These relationships must be understood and analyzed, in order to understand the buying behavior between companies (Rajala & Tidström, 2017).

The public procurement decision process usually needs to take multiple variables and evaluative criteria into account (Thai, 2001). The author state that public procurement systems commonly have two different goals: the procurement goals and the non-procurement goals. The procurement goals are for example cost, quality, timeliness and minimizing risk. The non-procurement goals, on the other hand, include parameters such as sustainability, green procurement, and social goals. Decision-making in public procurement is, because of these parameters, complex as there are tradeoffs between the procurement and the non-procurement goals (Thai, 2001).

2.5 Decision-Making – The Rational Side

Decision rationality is defined as “the extent to which the decision process involves the collection of information relevant to the decision, and the reliance upon analysis of this information in making the choice” (Kaufman et al., 2017, p. 83.). The definition of rationality is further supported by research claiming that rational thinking is the reasonable process of decisions (Cert & Wilcockson, 1996). The authors also propose that rational decisions might have cultural antecedents, where for example western society connects rationality with science.

Further, researchers elaborate on rationality in terms of procedural rationality, where such a process starts by defining relevant and logic decision criteria, followed by gathering information and finally analyzing the result before making a final decision (Kaufman et al., 2017).
An organizational buyer is often thought of as a rational person, with the ability to make completely rational decisions when it comes to selecting suppliers (Rajala & Tidström, 2017). The use of rational analysis is in many organizations the norm when it comes to the decision processes (Sadler-Smith & Shefy, 2004). Research within purchasing theory often characterizes the decision-making buyer as analytical and logical (Kaufman et al., 2017). The process is described as rational with commonly used information-gathering and analysis of criteria (Kaufman et al., 2017). The authors also suggest that the majority of supplier selection theory is divided into the rational activities of selection criteria and decision models.

Rational parameters are important and commonly used when making decisions in the context of public procurement (Raymond, 2008). The most fundamental rational parameter is cost, which is computable and trackable, making logic and analysis of costs a rational way of procurement decision-making (Simon, 1979). In organizational buying, the term cost certainty is commonly used (Setia & Speier-Pero, 2015). The authors propose that the higher the cost certainty in tender bidding, the higher the likelihood of that tender becoming the winning offer. Another financial supplier evaluative criterion is delivery timeliness (Riedl, Kaufmann, Zimmermann & Perols, 2013; Thai, 2001). Timeliness of delivery pertains the time accuracy in the tender, which is considered to be a fundamental rational decision-making parameter (Kharchuk & Matviyishyn, 2012). Timeliness is one of the most important criteria for the decision-makers in public procurement, being evaluated on details of past projects and time performance (Charles, Ryan, Castillo & Brown, 2008).

Researchers support the rational organizational buying perspective further by looking at public procurement (Bergman & Lundberg, 2013). Rational choices are used in the scoring of criteria that in many ways this is creating an inflexible problem-solving situation for the decision-makers (Bergman & Lundberg, 2013). This is moreover discussed by researchers as a problem where focusing too much on rational decision-making and analyzing criteria, could create confusion (Kaufman et al., 2017). Focusing on details of big data is said to make the buyer “only to see the trees, and not the forest” (Kaufman et al., 2017, p. 91).

### 2.6 Decision-Making – The Intuitive Side

In several rapidly changing social and professional situations, there is a high complexity and uncertainty in taking decisions (Dunn et al., 2010).
Some research mean that organizational buying, therefore, can be difficult for the buyers to evaluate (Casidy, Nyadzayo, Mohan & Brown, 2018). Complex decision making is highly connected with intuition (Matzer, Baiom & Mooradian, 2007). This is further supported by other researchers who claim that key decisions are within these circumstances strongly shaped by intuition and automatic judgment of the options at hand (Dunn et al., 2010). The ability to make effective decisions based on intuition varies a lot, which can make the intuitive decision making a powerful tool to complement rational analysis, or it can lead to costly mistakes (Dunn et al., 2010).

The intuitive decision-making often happens unconsciously and is described as a person's ability to recognize patterns (Matzer et al., 2007). Intuition is a complex and developed form of reasoning based on years of experience and learning, as well as on facts, patterns, concepts, procedures, and abstractions stored in one’s head (Matzer et al., 2007). Further, intuition is defined as “a non-sequential information processing mode, which comprises both cognitive and affective elements and results in direct knowing without any use of conscious reasoning” (Sinclair & Ashkanasy, 2005, p. 357). Intuitive factors that are influencing the decision-making process in a B2B context are experience (Burke & Miller., 1999; Matzer et al., 2007), emotions (Burke & Miller., 1999; Nicholas, 2004); (George & Dane, 2016); (Schwarz, 2000); (Sayegh, Anthony & Perrewé, 2004), value perception (Sweeney & Soutar, 2001) and brand perception (Kim & Hyun, 2010; Michell, King & Reast, 2001; Cretu & Brodie, 2007; Brown, Zablak, Bellenger & Johnston, 2011).

2.6.1 Experience

Many organizational buyers use experience-based information in their decision-making process (Stenroos & Makkonen, 2014). This could consist of for example customer references, referrals, word-of-mouth, and reputation. All of these factors commonly involve an external source sharing this information, without any monetary reward (Stenroos & Makkonen, 2014). The expertise, knowledge and neutral judgment offered by such sources is critical input when making complex decisions in organizational buying, and is shown to be very appreciated by buyers.

In a study regarding decision-making by top managers, results from interviews showed that fifty-six percent of the respondents based their intuitive decisions on experience (Burke and Miller, 1999).
The experience, in this case, was formed by previous successes and failures, collected both from the respondent’s personal and professional life which were then used in their decision-making process. Experience-based decision making is supported by other researchers, who claim that experience is an individual cognitive framework, shaped by referent past events (Maitland & Sammartino, 2015). The more experience a person has, the better is the ability to recognize patterns and retrieve information from long-term memory (Maitland & Sammartino, 2015). Other researchers claim that the more extensive experience the decision maker possesses, the more patterns will be familiar and acknowledged where more recognized patterns will make the intuitive decision-making better (Matzer et al., 2007).

2.6.2 Emotions
When making a decision, our emotional memory unconsciously allows us to learn from mistakes (Sayegh, Anthony & Perrewé, 2004). Some researchers mean that without emotional signals, the thought process will be affected and we get stuck in the present, and will not be able to learn from past experiences (Sayegh et al., 2004). When experiencing a similar scenario as previously experienced, our memory is triggered by an experience-based emotion. This means that even if an individual may not recall being in a similar situation, he or she will unconsciously remember the emotion connected to the similar previous situation. This phenomenon is often recognized as a “gut feeling”, and guides the decider by using the emotional memory without recollecting details of the past (Sayegh et al., 2004). Other researchers have found that emotion plays an important role in intuitive decision making and a majority of top managers claim that their intuition is based on feelings and emotions (Burke & Miller, 1999).

Research shows that emotions are most prominent in the decision-making in the selection phase, where the uncertainty is the highest (Nicholas, 2004). Decisions on some occasions are linked with knowledge, but that people usually cannot express any deep reasons for their decision (Nicholas, 2004). Emotional influence in decision-making is further elaborated in research when it comes to the state of mind of the subject (George & Dane, 2016); (Schwarz, 2000). A person in a positive, or happy, emotional state will tend to believe in positive outcomes of the decision, while the opposite will be for a negative or sad person (George & Dane, 2016); (Schwarz, 2000).
It is also suggested that the emotional state of mind, while only being a brief emotional moment, will affect the decision-making process far longer than the emotion is experienced (George & Dane, 2016). Both mood-congruent, as well as feelings, are often a basis of judgment, which further influences the decision-making (Schwarz, 2000). In addition to this, the affective state influences which strategy of information processing the decision maker are likely to adopt (Schwartz, 2000). Research has shown that individuals that are in a good mood are more likely to rely on pre-existing knowledge and pays relatively little attention to the details in hand (Schwartz, 2000). This since a positive affective state reflects a benign environment which allows relying on routines. An individual who is in a bad mood, however, are more prone to adopt a systematic processing strategy with a bigger focus on the details at hand than relying on previous knowledge and experience since a negative mindset often occurs in a problematic situation (Schwartz, 2000).

However, it is argued that the emotional memory and response is necessary even in a rational decision analysis, and it is proposed that the emotional response is the key element in intuitive decision-making strategies (Sayegh et al., 2004).

2.6.3 Value Perception and Value for Money

Value for money (VFM) is the core principle governing public procurement (Raymond, 2008), and is popularly defined as a combination of the 3 E’s: Economy, Efficiency, Effectiveness (McKevitt, 2015). Economy concerns the number of resources in terms of both quantity and quality, efficiency pertains the service versus cost paradox and effectiveness concerns the actual output of the intended achievements. VFM is one of the core principles when it comes to evaluating the ROI of a public procurement (Raymond, 2008). VFM is a way to secure the best possible result and outcome for the tax-paying citizens and entails a large responsibility for the officials in the procurement position (Raymond, 2008). VFM also takes into account the relevant costs and benefits for the customer throughout the entire procurement process. Except for price, VFM includes a consideration of technical capabilities, personnel competence, environmental and sustainable benefits (Raymond, 2008).

VFM is a key to long-term success, and researchers state that in the new world of quality, the only thing that matter is delivering customer value (Sweeney & Soutar, 2001). The perceived value can be regarded as the customer’s overall judgment of a product or a service, based on the perceptions of what is promised and what is given (Sweeney & Soutar, 2001).
When making this type of assessment, there is often a trade-off between quality and price which have different and differential effects on the customers perceived value for money. Some people perceive the value as high when the price is low, while others are looking for a balance between quality and price (Sweeney & Soutar, 2001). Different customers weigh these parameters differently, and in this way, it affects the decision-making process (Sweeney & Soutar, 2001).

Further, it is important to understand that perceived value is different from customer satisfaction since a value perception can be generated without purchasing or use a product or a service, which implies that a buyer at an organization is making an assessment of the perceived value from the very start of the decision-making process (Sweeney & Soutar, 2001).

### 2.6.4 Brand Perception

When the targeted buyers learn about a product and as a result of this store the information in their memory, the product is branded (Kim & Hyun, 2010). This influences the customers thinking, feeling and doing with respect to the product, and also how the brand is perceived. In this way, it also affects the buyer’s decision-making process (Kim & Hyun, 2010). Further, a branded product is stated to be of higher value to the customer than an unbranded due to the brand equity (Kim & Hyun, 2010). A high brand equity makes the targeted buyers behave positively towards the product, and will, for example, pay more for the product, purchase it repeatedly and engage in positive word-of-mouth (WOM) (Kim & Hyun, 2010); (Michell, King & Reast, 2001).

Moreover, brands help to create positive and meaningful associations that increase both feelings of confidence and loyalty to the organization (Romaniuk & Nenycz-Thiel, 2013) and the brand image plays an especially powerful role in industrial markets where it is hard for the companies to differentiate their product by quality (Michell et al., 2001; Cretu & Brodie, 2007; Lynch & de Chernatony, 2004). Further, the brand image is also valued as a key visible asset since it is hard to imitate and raise barriers to competitive entries (Michell et al., 2001).

A corporate brand does not only help the organization to differentiate themselves from competitors, it also helps to communicate improved value and benefits to the organizational buyers (Brown et al., 2011).
Research further shows that even though organizational buyers focused a lot on the price, they prefer branded products (Brown et al., 2011). This since it gives a mental satisfaction that they are buying a quality product or service from a known and reliable source. Further, the corporate brand image perception is even more important when a buyer needs to identify new subcontractors where the risk is perceived as higher (Brown et al., 2011). The main role of a brand is to attract interest and provide the trust with regards to capacity, reliability, and competence. Consequently, in the context of organizational buying, the influence of brands reduces risks attached to the decision (Brown et al., 2011).

2.7 Frame of Reference

To provide a structured picture of the literature review section on decision-making in the context of public procurement, a frame of reference was developed, see figure 3. The figure describes the dimensions of decision-making, as well as the factors which are found in each dimension. The factors are specific to public procurement decision-making and the triangular arrows show which factors that influence the dimensions.

![Frame of Reference for decision-making in public procurement](image-url)

Figure 3: Frame of Reference for decision-making in public procurement
3. Methodology

The methodology chapter aims at describing the purpose of this research, the strategy and approach as well as how the data were collected and analyzed. The chapter also contains a section regarding the reliability and validity of the research.

3.1 Research purpose

To create an organized way of describing the research purpose, there exists three different approaches; the explanatory, exploratory and descriptive approach (Hut, 1992; Saunders, Lewis & Thornhill, 2007; Agee, 2009). The approach should be selected based on the objective of the research (Hut, 1992) and a study can rely on one or a combination of approaches (Saunders et al., 2007). Explanatory research is suitable for when trying to establish causal relationships between different variables (Saunders et al., 2007). The authors mean that explanatory studies are conducted based on a situation or a problem, in order to explain these relationships. The exploratory approach is preferable when seeking new insights into a problem, looking for new patterns (Saunders et al., 2007) or evaluate findings from a new perspective (Hut, 1992). Exploratory research is also well suited for studies where flexibility is needed and the direction of the study might change when reaching new insights (Saunders et al., 2007). There exist three different ways of bringing new insights to a problem area which are: searching for literature, interviewing experts or conducting focus groups (Saunders et al., 2007). Descriptive approach is used to portray an accurate picture of people, events or situations (Saunders et al., 2007). When conducting descriptive research, one must have a detailed understanding of the problem before collecting data.

The research problem in this study is highly connected to social sciences, with little prior research in the area of intuitive decision-making. The area of intuition in public procurement is almost absent in contemporary literature, and the research aim is to reach new insights within this area. Because of this, the research approach is of exploratory purpose.

3.2 Approach

While a deductive research is testing hypothesis, an inductive research is exploring an area (David & Sutton, 2007), and aims to build new theory (Saunders et al., 2007).
Inductive methods are explorative and try to find explanations to what is happening in different situations by using the collected data in the research (David & Sutton, 2007). When the research neither follows the patterns of pure induction or deduction, an abductive approach is taken (Kovács & Spens, 2005; Dubois & Gadde, 2002).

Abductive research aims to understand something in a new way, and works through interpreting or re-contextualizing a phenomenon with a contextual framework (Kovács & Spens, 2005). By taking an abductive approach, new insights about an existing phenomenon can be gained by examining it from a new perspective (Kovács & Spens, 2005) where the data collection and theory building phases is overlapped in a learning loop (Spens & Kovács, 2006). The aim of an abductive process is thereby to suggest new theories (Spens & Kovács, 2006). In this study, an abductive approach was taken since previous research in the area have been done, but not in this context or with this focus. The phenomena of focus is intuition, and through the abductive approach the research aims at understanding intuition in the unexplored area of public procurement.

3.3 Research Strategy

Case studies are a way doing research through studying a key part of a phenomenon (Merriam, 1998). Case studies can be done on individuals, groups, companies or events and rest on the existence of social behavior micro-macro links (Merriam, 1998). Case study design can be applied when the focus of the research is to study \textquotedblleft how\textquotedblright{} and \textquotedblleft why\textquotedblright{} questions and there are contextual conditions that influences the phenomenon one is studying (Baxter & Jack, 2008). It is suggested that case study methods are appropriate when studying for example decision-making behavior since it both include individuals\textquoteleft{} behavior and contextual influences (Baxter & Jack, 2008).

Since the research in this thesis was aimed at studying decision-making of individuals in the specific context of public procurement, the case study approach was chosen as the most suitable study. The case study approach was also preferable as the research problem is a \textquoteleft how\textquoteright{} problem.
3.4 Literature search

To investigate the research question, an exploratory literature study has been done. By investigating what other researchers have done, a holistic view of the subject was gained and relevant insights regarding the study were obtained. The literature research incorporated only peer-reviewed journal articles, reports and reviews that were found on Scopus and Google Scholar. Keywords used in the search field were: “Organizational buying behavior”, “decision-making process”, “public procurement”, “intuition in decision-making”, “brand perception”, “value for money”, “emotional decision-making” and “rational decision-making”. Searches were then categorized by the number of citations and then scanned by headings to assess relevance to the research.

3.5 Data collection

To gain knowledge about a research problem, both primary and secondary data can be used (Saunders et al., 2007). Primary data is when the data that is collected specifically for the research while secondary data, on the other hand, is collected for other purposes (Saunders et al., 2007). In this study, primary data was collected by interviews with buyers and other people involved in procurement in public organizations. The interviews were individual semi-structured interviews, where the questions were based on the literature review. The main aim of the interviews was to investigate if the decision-making in public procurement was affected by intuition, and how the intuitive factors found in the literature review influenced the decision-makers. The interviews were held both by face-to-face meeting as well as by Skype for Business. In total, 7 interviews were held, see table 2, and out of the 7 interviews, 1 was held directly and 6 over skype.
Before conducting the interviews, a sample of generic questions were sent out a week in advance to let the respondents know what type of questions would be asked and to give them time to think about their answers. The respondents were also asked to set aside at least one and a half hour to make sure that the interviews would not be rushed through.

For the interviews, an interview guide was conducted see Appendix 1. This was used as a support to make sure that all areas of interest were discussed and also to get a nice flow during the interviews. During the interviews however, side steps were done through out to adapt the questions to the respondents’ knowledge and experience in the area. Several follow-up questions were also asked to gain a deeper insight or to clarify. The questions at the beginning of the interview were more generic in order to avoid steering the respondents’ answers. These were followed by more detailed questions that were based on the literature review presented in chapter 3. Some respondents were keener to speak than others, resulting in some interviews with more or less participation. When the respondents weren’t very talkative, the researchers asked more questions. All interviews were recorded and later transcribed in order to be able to better analyze the data. During each interview, both of the researchers attended in order to conduct a good discussion at a later stage of this research report.

In addition to the interviews, secondary data was also collected at websites and documents published by public organizations or the government.
This was done in order to investigate guidelines for public procurement and gain a better understanding of the law of public procurement. By collecting secondary data, we also obtained an understanding of the problem at hand which proposed a foundation for preparing the interviews.

### 3.6 Sample selection

In qualitative studies, the sample selection is an important part (Robinson, 2014). This is proposed to be done in a four-step process: Defining a sample universe, Decide on a sample size, Devise a sampling strategy and finally Source the sample. The sample universe refers to the study population, which can be developed through inclusion and exclusion criteria (Robinson, 2014). The sample size affects the generalizability, or external validity, of the research where a larger number of participants usually creates higher generalizability. Sample strategy refers to how the researcher can select cases for inclusion, and the sourcing is the act of contacting and reaching the samples chosen in the previous steps (Robinson, 2014).

For this study, the sample universe was selected as people who work with the public procurement process at the Swedish Transportation Administration (STA), and are involved in the decisions in the process that affects the outcome of the public procurement. The sample size was set to a minimum of five respondents, resulting in seven respondents in the end. In total, 22 people were contacted. For the sampling strategy, the convenience strategy was chosen, which is a commonly used sample strategy when not having possibilities to reach specific targets (Robinson, 2014). With the limited number of contacts and number of people who have participated in procurement involving more than price, this was the only possible strategy. Five respondents had more or less experience in evaluation and decision-making including more than the lowest price-criteria. The additional two respondents had no experience in evaluation based on more than the lowest price, but contributed with insights from their perspective. The final step of sourcing the respondents was done with the help of contacts at Skanska and the STA. Contact was established by emailing and calling the contacts, followed by setting up meetings over Skype or face-to-face.
3.7 Data analysis

3.7.1 Thematic Analysis

For the data analysis, the thematic analysis method was used. Thematic analysis is a widely used method when doing qualitative research that requires high flexibility (Braun & Clarke, 2006). The analysis is used to identify, analyze and report patterns though organizing and describing the data set (Braun & Clarke, 2006). Theoretical thematic analysis is driven by the researcher’s theoretical interest in the matter with a focus on the research question (Braun & Clarke, 2006). Due to the abductive nature of the research approach, theoretical thematic analysis was therefore used. Additionally, the Gioia Methodology (Gioia, Corley & Hamilton, 2013) influenced the analysis, making sure that all patterns discovered were given equal relevance, even if no theoretical similarities were found. This was an important addition to the thematic model, as the abductive approach allows for new discoveries to be made as well.

For the analysis, a step-by-step approach was taken, including 5 steps in total (Braun & Clarke, 2006). The first step included a thorough transcription of all semi-structured interviews followed by reading though the interviews several times, making individual side-comments and familiarizing with the collected data. A search for patterns of relevant information was begun in this stage, and discussed between the researchers.

The second step was a development of initial codes, where all interesting and relevant quotes were cropped into a separate table which was the first part of organizing the data. The codes chosen were thought of as interesting data, either connected strongly to the literature review or providing new insights. The quotes were copied from the transcriptions and changed to a minimum to stay true to the meaning of the phrases.

The third step was initiated when step two was entirely finished, where all the codes were analyzed and clustered into themes. To create themes, the researchers used visual aid to create mind-maps and initial thematic maps to understand the connection between different codes and creating overarching themes out of the codes. In accordance with the Gioia methodology, the thematic maps included a cycling between the data and the literature to look for similarities and to see if there had emerged any new concepts.
Step four included revising the initial themes, revising the mind map and going through the codes again to ensure that the themes developed were catching the most relevant information and covering all the codes. At this step, subthemes were also developed further categorizing the codes.

Step five was done through finalizing the thematic map and identifying the final themes, subthemes and codes.

3.8 Credibility

3.8.1 Reliability

The reliability of a research refers to the consistency of the findings (Saunders et al., 2007). If analysis and data collection are done with high reliability, this means that if other researchers were to replicate the analysis and data collection, they would yield similar results. This implies for high transparency and clearly described procedures (Yim, 2004). There exists a couple of threats when it comes to reassuring high reliability (Saunders et al., 2007). These threats are participant errors, participant bias, researcher errors and researcher bias.

To establish a high reliability, the same interview protocol was used for all respondents. The interviews were recorded, transcribed and then analyzed to make sure that there would be no misunderstanding, mishearing or any other uncertainties. The recordings and the transcriptions are preserved in a folder for reference in the future. In addition to this, the research has been overlooked by a supervisor at the Luleå University of Technology to support the analysis.

Since the study was to understand intuitive influences that might be acting on an unconscious level, participant error was difficult to avoid. The respondents are required to make the procurement decisions based upon the law of public procurement meaning that there is no room for subjectivity. Subjectivity in the form of personal judgment and thus a reliance on the intuitive side is something that the law of public procurement is trying to prohibit, which meant that the respondents sometimes referred to the law as a stopping device in answering the questions honestly. To avoid this in the best way possible, the respondents were informed that their participation would remain confidential and no names will thus be mentioned.
The interpretation of the data could also be a source of reliability threat, as the answers sometimes were not clear and leading questions were asked in order to establish the meaning of the answers.

3.8.1 Validity
Validity refers to the match between data and reality, and if the collected data shows the reality (David & Sutton, 2007). Further, validity can be divided into three different parts, internal, construct and external validity. Internal validity is only relevant in explanatory case studies, where the researchers are trying to determine if there are any causal relationships between different events or variables (Yin, 2009). Construct validity shows how correct the researchers operational measures have been for the research (Yin, 2009), while external validity shows how well your collected data show reality for the bigger population in the current sample selection (David & Sutton, 2007). The external validity is often referred to as generalizability (David & Sutton, 2007).

The construct validity of the research done was ensured through a couple of steps. The questionnaire was developed with support from a supervisor at Luleå University of Technology, who helped to increase the reassurance that the questions would relate to the study. The supervisor also approved the sample size and selection of respondents. Respondents had experience from different projects, also increasing the validity of the research. To establish further validity, the confidentiality agreement was used, making sure that the answers gotten actually reflect the respondent's decision-making processes. The expertise of the supervisors at Skanska also increased the validity, as they could provide contacts with relevant experience in the procurement process as well as go through the questionnaire and make sure that the language was adapted to the sample group. The supervisors at Skanska affirmed the questionnaire in terms of accuracy, flow and importance. However, one threat to this thesis’ validity could be the translation of the questionnaire and results. Interviews were held in Swedish, and later translated into English. This means that the researchers’ knowledge of the English language and translation between Swedish and English could be inadequate which in turn would have led to misinterpretation of the transcriptions. To minimize this risk, the researchers used dictionaries whenever uncertainty arose regarding correct translations. The researchers were able to answer the research questions with a sturdy base in the data collection section. All results have been derived from quotes stated by the respondents throughout the interviews, and key conclusions match the results of the analysis.
The connection between the data and emerging findings has been clearly illustrated in the results section, where translated quotes are directly connected to the findings and the thematic map.

Interval validity was not relevant in this study as it was of exploratory purpose, and causal relationship between variables was not in focus in the research. External validity or generalizability for the research was established through choosing a representative public procurement organization, as well as interviewing employees with different roles and areas of expertise, common in most public organizations. However, due to the single case study company, the specific law of the public procurement act and the specific industry where the type of procurement takes place, the generalizability of the research has room for improvement.

3.9 Ethical considerations

The interviews were confidential to keep conflicts regarding the irrationality of purchasing decision away from the respondents. The law of public procurement states that a procurement must be done according to a number of rules, which might be difficult to assess with regards to intuitive factors.

To be able to get more realistic answers, the decision about confidentiality was therefore made. All respondents were informed about the resulting report and presentations associated with the master thesis. The respondents were also encouraged to raise any concerns that they might have and they were promised full control over their contribution to the research.
4. Results

This chapter aims to present and analyze the findings from the interviews. The structure is based on a thematic map with themes, sub-themes and codes identified, see Figure 5, made according to the thematic analysis method presented in chapter 3. Following in the results chapter are more detailed descriptions of what the codes mean and an explanation of the thematic map.

For the results, a thematic map was assembled in accordance with the methodology chapter. The thematic map, see figure 5, is presented in terms of codes, sub-themes and themes.

![Thematic map](image)

*Figure 5: Thematic map*
By analyzing the interviews held with representatives from the STA, some main trends were identified. From several of the answers received during the interviews, it was clear that there are ongoing changes within public procurement. From the traditional procurement where only price was evaluated, the STA has now started to evaluate other factors such as quality. This makes it harder for the employees at STA to remain objective when evaluating tenders. Still, there is only a small amount of buyers and project leaders that have worked with this new way of evaluating tenders, and the experience in this area is thus limited. The transition towards a more advanced evaluation model is also a big challenge when it comes to the legislation and the law of public procurement (PPA). Several of the respondents mention how they need to make decisions based on the law, even if they have a feeling or the knowledge that the winning tender is far from the best. The following parts of this chapter are divided by the Themes identified in the Thematic-map in figure 5, were the sub-themes are presented with representative quotes.

4.1 Experience

The impact which experience had on the respondents’ decision-making was one of the most consistent themes amongst all respondents. Experience proved to be an important side in many parts of decision-making, providing what the respondents believed to be a positive tool to make good decisions. The impact of experience is presented in sub-themes and codes as well as representative quotes in table 2-4.
### Table 2: Codes and representative quotes for the sub-theme people interaction

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>“That is why I strongly believe in cooperation and communication. I think that all communication with the other part is good. To be annoyed at each other is not good for anybody”</td>
<td>Cross contract interaction</td>
</tr>
<tr>
<td>R1</td>
<td>“On the other hand, we are all human. If I call you, and you never answer, then of course I will wonder why they never answer. That would be really strange”</td>
<td>Cross contract interaction</td>
</tr>
<tr>
<td>R7</td>
<td>“It’s all about having the right people on the bus. We, the orderer, must have people who like to cooperate.”</td>
<td>Peoples’ level of cooperation in projects</td>
</tr>
<tr>
<td>R2</td>
<td>“Then the thing is that the trickiest part in all projects is to handle the people, hence the importance of interaction and communication so there won’t be a lot of problems after writing a contract.”</td>
<td>Peoples’ level of cooperation in projects</td>
</tr>
<tr>
<td>R7</td>
<td>“It could all depend a lot on which project leaders that the STA has, because there is a lot to corporation and concurrence”</td>
<td>Peoples’ level of cooperation in projects</td>
</tr>
</tbody>
</table>

### Table 3: Codes and representative quotes for the sub-theme risk inclination

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4</td>
<td>“If you make a decision you need to know what the consequences can be. If the risk, or if you consciously take a risk or... well, I think you are easier to make a decision.”</td>
<td>Understanding of consequences</td>
</tr>
<tr>
<td>R7</td>
<td>&quot;... but I know what will happen! Then I get another security when evaluating of I dare to do it or when it's not worth doing it simply. &quot;</td>
<td>Understanding of consequences</td>
</tr>
<tr>
<td>R4</td>
<td>“Sometimes, the more experience you have the braver your decisions will become!”</td>
<td>Understanding of consequences</td>
</tr>
<tr>
<td>R4</td>
<td>“You try to stay within the lines, but sometimes you should also try to think outside of the box... ()... It could be that you’re thinking in old patterns, and you should look beyond that too.”</td>
<td>Thinking outside the box</td>
</tr>
</tbody>
</table>
Table 4: Codes and representative quotes for the sub-theme areas of expertise

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R7</td>
<td>“I have a background in studying the law at Uni, I am a certified buyer and I have seen so many business models that I trust my own experience and knowledge.”</td>
<td>Legal background from studies or work</td>
</tr>
<tr>
<td>R7</td>
<td>“I have a sense of security in the law. This makes me see more opportunities than the average might. I think, basically, that everything is possible as long as it is stated in the tender documents, how to proceed with its tender evaluation and similar.”</td>
<td>Legal background from studies or work</td>
</tr>
<tr>
<td>R6</td>
<td>“Well, of course it has an impact when I have so many years of experience in the industry. It gives a security. I have worked in big projects in other places too...”</td>
<td>Participation in different types of projects</td>
</tr>
<tr>
<td>R1</td>
<td>“Just to point out, I have never done anything under 5 billion SEK, so those are some pretty large projects and are the ones where you use evaluation models. You could have worked for like 40 years with this and only evaluated based on lowest price because you’ve bought like pens or whatever.”</td>
<td>Participation in different types of projects</td>
</tr>
<tr>
<td>R7</td>
<td>“Well, if I compare myself to project leaders, I have 20 years of experience in public procurement, and I have done it in I don’t know how many industries...Something like 50 different industries.”</td>
<td>Participation in different types of projects</td>
</tr>
</tbody>
</table>

**People Interaction**

Experience with the way people interact was believed to be of high importance for a successful project, thus a pillar in deciding amongst different contractors. Within people interaction, the success was believed to derive from good cooperation. One of the respondents expressed:

“It’s all about having the right people on the bus. We, the order side, must have people who like to cooperate.” - R7

The respondent went on explaining that the first move towards a successful project, is not to focus on the results, but to put the right people in the right place. With the “right people”, the respondent meant people who are cooperative and who are well suited in cooperative environments. Cooperative skills were further supported by another respondent, saying:
“Then the thing is that the trickiest part in all projects is to handle the people, hence the importance of interaction and communication so there won’t be a lot of problems after writing a contract.” - R2

The respondent elaborated in terms of the human factor to any project, claiming that successful decision-making needs to consider the most important part: the people. Side by side with cooperation the second code was found, which was communication. Many respondents emphasized the importance of cross contract interaction in compliance with cooperation, stressing that the two need one another to work efficiently.

**Risk Inclination**

One particular part within experience was the respondents risk inclination. Whether the respondent was more or less inclined to make a risky decision within public procurement, depended mainly upon the respondent’s understanding of the possible consequences. Some respondents claimed that the more experience you have, the better you will be able at predicting the consequences.

Risk-taking was also influenced by the willing to think outside the box. It was suggested that employees at the STA prefer working in structured ways, following clear work descriptions and models, and that this may have created a difficulty in letting new information in. One respondent suggested that as an employee at the STA, you should try to think in new patterns and not be stuck in old ways.

**Areas of Expertise**

A very influential part in the respondents experience was their areas of expertise. Many respondents expressed a bigger certainty in their decision-making due to their experience and understanding of different business, industries, and types of projects. One of the respondents said:

“Well, of course it has an impact when I have so many years of experience in the industry. It gives a security. I have worked in big projects in other places too...” -R6

Other respondents said similar things, expressing that their many years in the business gave them a more thorough understanding.
Experience within types of projects appeared to be of high significance, as larger projects generated more knowledge. A particular area of expertise which had provided help during decision-making was the area of law. One respondent claimed:

“Too people with no university studies within law, this might seem very bureaucratic and problematic, and then you stick to the procurement models that we have. But to step outside of these might seem very uncomfortable to some colleagues.” - R7

Since public procurement is clearly restricted by the law of public procurement (PPA), a background in law gave a better understanding of these restrictions. Experience within the administrative court of appeal and university studies within the area of law were especially helpful in the decision-making process.

4.2 Contractor perception

For participants in this study, contractor perception was one theme found in all of the interviews. Many respondents highly evaluated the commitment from the contractors together with a strong brand, and said that they were able to see their efforts put into the tenders, more clearly shown in table 5-6.
Table 5: Codes and representative quotes for the sub-theme experienced competence

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>“...sometimes it may be that the contractor has written things that we have not captured in our model, and then we will not evaluate it for example…”</td>
<td>Level of tender completion and need for supplement</td>
</tr>
<tr>
<td>R1</td>
<td>&quot;... and it is the case that, as a buyer, there is no obligation to ask for additions or advances from the contractor…”</td>
<td>Level of tender completion and need for supplement</td>
</tr>
<tr>
<td>R7</td>
<td>“You notice that they have not done their reading, they have missed this. That doesn’t work, it’s not professional.”</td>
<td>Level of tender completion and need for supplement</td>
</tr>
<tr>
<td>R6</td>
<td>“In a bid that wins a tender, they have delivered the documents and the information we have asked for, if it is a strong offer I am unsure about, but they simply meet our requirements.”</td>
<td>Level of tender completion and need for supplement</td>
</tr>
<tr>
<td>R4</td>
<td>“…it's important - a good presentation is a good offer. So that also plays an important part.”</td>
<td>Tender presentation quality</td>
</tr>
<tr>
<td>R2</td>
<td>“…When they come and make a presentation, you feel and see that they have their roles that are intended for the project. I can say that there has been a very big difference between different companies that have come in…”</td>
<td>Tender presentation quality</td>
</tr>
<tr>
<td>R1</td>
<td>“Sometimes you will have a presentation or interviews or something, and that will be part of the evaluation as well”</td>
<td>Tender presentation quality</td>
</tr>
</tbody>
</table>
Table 6: Codes and representative quotes for the sub-theme brand perception

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4</td>
<td>“If the company has done bad projects or has gotten bad publicity or something... It affects your thoughts, definitely.”</td>
<td>Bad publicity</td>
</tr>
<tr>
<td>R2</td>
<td>“The more you hear about a company or the more you see about a company is both positive and negative. So it affects, on different levels of course depending on where you are.”</td>
<td>Bad publicity</td>
</tr>
<tr>
<td>R5</td>
<td>“Some companies brands are quite week right now because of shenanigans they’ve been up to”</td>
<td>Bad publicity</td>
</tr>
<tr>
<td>R2</td>
<td>“...or you have experience that they have not really lived up to what they promised before, maybe then you may tend to score lower than the higher. And vice versa.”</td>
<td>Previous project results</td>
</tr>
<tr>
<td>R7</td>
<td>“Well brands are... I mean, the difference between <em>company 1</em> and <em>company 1</em> is really big! The difference between <em>company 2</em> and <em>company 2</em> can also be really big. The same goes for the consultant business; <em>company 3</em> could do a great job in Stockholm and not at all good in Gothenburg. So there are no guarantees.”</td>
<td>Previous project results</td>
</tr>
<tr>
<td>R2</td>
<td>“It could be times when you just hear, like, did you hear about <em>company</em> and how they acted in that contract in Gothenburg, and that’s on a completely different level, so to speak. But I definitely believe that it affects you, it affects everybody. This is something you notice when some contractors are stigmatized by certain project leaders, because they’ve had some bad experiences.”</td>
<td>Previous project results</td>
</tr>
</tbody>
</table>

**Experienced Competence**

Tender completion and experienced competence were mentioned as common denominators of a successful tender, meaning that no supplementing was needed. By completion, some respondents also mentioned that many contractors sometimes put in other information then what was originally asked for by the STA in their tenders. The employees at the STA are forbidden by law to evaluate anything that they have not specifically asked for in the tender, which instead leads to them literally throwing away any additional information not inquired for. The same goes for tenders where the qualification requirements are not completed, even if it is obvious that the contractor have these qualifications. Completion was further a quality reassure for some respondents, meaning that the procurers at the STA were able to see if there...
had been enough time spent in developing the tender, thus if the contractor has done their best when creating the tender. Another part to competence perception was the other part of tender evaluation: the tender presentation quality. One respondent expressed:

“At many points, we have really noticed that they have exerted themselves - which matters a lot for the tender” - R4

When the contractors held presentations, the respondents claimed that it was easy to hear if they had put a lot of effort into it. It was suggested that it was during these presentations that you as a procurer could tell if the contractor really understood the project, it’s risks, and was competent enough to win the tender. Poorly delivered presentations with incompetent people who didn’t connect to the submitted tender and who couldn’t answer the STA’s questions were thought of as a weak tender.

Brand Perception
Another part to contractor perception, was brand perception. The perception of the brand was in all interviews claimed to be non-existing in the decision-making process due to the law of public procurement (PPA) stating that you need to treat all companies equally. However, some indications were found towards the brands influence on a person’s decisions as an inevitable factor always present on an unconscious level. As one of the respondents expressed:

“The more you hear about a company or the more you see about a company is both positive and negative. So it affects, on different levels of course depending on where you are.” - R2

Other respondents expressed similar views, with a focus on the negative side or bad publicity, saying that it shouldn’t affect you and you do your best not to let it affect you. However, it can be hard to remain objective in all cases. Another indication towards the brand perceptions effect on the procurers’ decision-making was received from information regarding how the tenders are treated. When evaluating the tenders, some parts of the STA have begun disguising them, leaving the company name out. The indication here lies in the question why you would need to disguise a brand if it has no effect. Further, many respondents commented on this procedure as unnecessary, as it was easy for experienced procurers to recognize
certain methods and reference assignments, thus knowing which brand the tender belonged to.

Partly influencing the respondents’ brand perception were their own direct work with the company, making them base their perception on their own experiences. For instance, one respondent expressed:

“... for example, I am negotiating the building-stage, and we have a contractor who has left the construction site in **city***, and now we have some discussions about the complex of problems and why they saw it necessary to leave the site. This affect my way of looking at the contractor you know, and with my experience it’s pretty easy to hear if they are talking shit or if they are correct” - R2

Other respondents expressed similar views, stating that contractors who don’t keep to their original tenders or contractors who have performed badly of course will affect their opinion of their organization. One respondent also stated that there had been clear differences between teams from the same company, and that the brand image thus is was scattered amongst the STA.

**4.3 Communication**

Communication is a theme that emerged from the respondent’s answers on what they believe affects their decision-making process. This includes communication and information gathering both internally in the organization (STA) as well as externally, as shown in table 7-8.
Table 7: Codes and representative quotes for the sub-theme internal corporate communication

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R4</td>
<td>“We try to analyze tender, but then if we are unsure we could look for information in other places too. It could be someone who knows someone who confirms something with a colleague.”</td>
<td>Discussing with colleagues</td>
</tr>
<tr>
<td>R6</td>
<td>“Then I turn to my procurement group, where we have experience-meetings every now and then, where we discuss experiences that could help someone else. Then there is also tips you want to share and time for other questions, such as the new legislation and such... and then we discuss until we reach a conclusion or if that’s not possible, someone or some people work on it until the next meeting. “</td>
<td>Discussions with members of the DMU</td>
</tr>
<tr>
<td>R6</td>
<td>“If you are unsure you always have a legal expert close by, if it is not something you can look up by yourself”</td>
<td>Asking legal counselors for advice</td>
</tr>
<tr>
<td>R7</td>
<td>“Project leaders have different experiences, skills and personalities too, and have a possibility to influence the group, more or less”</td>
<td>Discussing with the project leaders</td>
</tr>
</tbody>
</table>

Table 8: Codes and representative quotes for the sub-theme external communication

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R7</td>
<td>“We are all only human, so we are influenced not only by our profession but by our partners, children and all possible thing you have around you. It can affect you, in my opinion. Of course, you try to avoid it, but it surely could affect you.”</td>
<td>Getting affected by family and friends</td>
</tr>
<tr>
<td>R6</td>
<td>“Foreign contractors usually shows up with projects from, well Hong Kong and whatever, and that isn’t completely easy. I would sit and Google these projects and see what they are and at the same time send for a confirmation to China or wherever I can send it. “</td>
<td>Searching for information on the internet</td>
</tr>
</tbody>
</table>

**Internal corporate communication**

When something is unclear, or if advice is needed in order to make a decision, communication with other people in the internal corporate communication was often used as help for the respondents. Depending on the issue different people were involved. Some of the respondents described how experiences are discussed and shared amongst each other in order
to make a better decision. One respondent even used to have “experience” meetings where the procurement group got together to talk and help each other.

Since the STA needs to follow the PPA, the employees working with procurement always have a legal counselor close by. This to both support and make sure that no rules are broken. The legal counselor is so forth a person that many asks for advice, both when it comes to creating the project specifications and in the decision-process. During the interviews, it also became clear that the project leader can influence the decision-making process. One respondent meant that the project leaders have different experiences, skills and personalities which all more or less can influence the group. Another respondent said that when it comes to the evaluation, and how to use the evaluation model, it is the project leader you should contact. Further some project leaders at the STA have an introduction meeting where the evaluation process are discussed. This since it is important to follow the model presented when advertising the project. The respondent meant that these meetings are of high importance to make sure that everyone in the DMU knows what to do and how to evaluate the tenders.

**External Communication**

Another type of communication that affects the judgement of members in the DMU was found to be external communication. External communication in this case includes interactions with someone outside of work. This could for example be family, friends or other interactions in your personal life. As one respondent pointed out, that since we are all only human, we are influenced by more than our profession.

Another source of information that is classified as external communication is the internet. Several respondents meant that it could be in good use when feeling insecure and an extra check was needed. A tool that often was mentioned is “Transq” which is a prequalification system with validated information about the STA’s suppliers. Further, Google was mentioned as used source, mainly to validate tenders from new suppliers or foreign contractors. It was brought up by the respondents that it was important that the information given on a company’s web-page is in line with what they are offering in their tenders. However, to send in a tender with a summary of what is said on the webpage is not appreciated by the DMU.
4.4 Emotions

During the interviews, emotions was a topic where the respondents talked about subjectivity in an objective way and how that could improve the decision making. A lot of efforts are made by the STA in order to minimize or exclude emotions to play a part in the evaluation and decision making process, which implies that emotions are an affecting factor in the decision-making process in public procurement. As two of the respondents formulated it:

“We are subjects, and thus we are subjective.” -R7

“It is important not to give any, or to not have any personal input in the evaluation, but still, we are all humans” -R1

The fact that we all are humans and that it is impossible to be completely objective was something that the majority of the respondents agreed upon. However, respondents with less experience to procure based on other factors than just price meant that there is no room for subjectivity in public procurement, and that if it by all means would be used, you would not be doing your job properly.

To the theme emotions, two sub-themes were identified. These were gut-feeling and experience-based emotions, which are presented together with codes and representative quotes in table 9-10.
Table 9: Codes and representative quotes for the sub-theme gut-feeling

<table>
<thead>
<tr>
<th>Gut-feeling</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>“You connect better with some people, at some level, and then they may get some kind of unaware advantage in the procurement... and it’s impossible not to get affected by that in some way. It’s just like that”</td>
<td>Connecting better with certain individuals</td>
</tr>
<tr>
<td>R2</td>
<td>“And then maybe people on our side knows, it could be both positive and negative, they might have worked with this individual before and thinks this person is great or they think they’re idiots.”</td>
<td>People who give good impressions</td>
</tr>
<tr>
<td>R2</td>
<td>“Some people you trust immediately, while it with others can take half a year to realize that this person may not be completely stupid after all.”</td>
<td>People who give good impressions</td>
</tr>
</tbody>
</table>

Table 10: Codes and representative quotes for the sub-theme experience-based emotions

<table>
<thead>
<tr>
<th>Experience-based emotions</th>
<th>Representative quote</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>R5</td>
<td>“I can see things that I may think will go wrong”</td>
<td>A feeling of knowing what you get</td>
</tr>
<tr>
<td>R2</td>
<td>“This thought or feeling that you know what you have, you know. Usually it is a contractor you have worked with previously for example, or an individual you have worked with. The funny thing is that between times it is not that they think that these individuals are great or that this contractor is great, it more that they know what they will get…”</td>
<td>A feeling of knowing what you get</td>
</tr>
<tr>
<td>R4</td>
<td>“...but still you know that, depending on the situation, I have sometimes said no to things I do not believe in”</td>
<td>A feeling of knowing what you get</td>
</tr>
<tr>
<td>R2</td>
<td>You will meet the contractors a couple of times and then you will know if they know what they are talking about and if they can clarify how they intend to produce something 6 months faster than everyone else. So it is based on if they can give a reasonable explanation, and then you buy it!</td>
<td>A feeling of reliance</td>
</tr>
<tr>
<td>R4</td>
<td>Does this feel relevant or reasonable, what they have presented? So it’s not just empty words, so to speak.</td>
<td>A feeling of reliance</td>
</tr>
</tbody>
</table>
**Gut Feeling**

When discussing emotions with the respondents several pointed out that a feeling or an instinct, in other words a gut-feeling, sometimes could affect the decision-making in large projects. This feeling could for example emerge from the impression they had gotten from when a supplier in person presented their tender. Further, some respondents also pointed out that you sometimes just get a better connection with some people. This could also affect the evaluation process where many of the respondents meant that a good or a bad feeling about someone definitely could influence the scoring of the different tenders. Important to point out however, is that this mainly affects when a tender is “between” two scores, this since the person making the evaluation still needs to follow the evaluation model that was set in advance.

An issue that was pointed out several times during the interviews was that the evaluation model sometimes could be hard to understand completely, both for the companies sending in tenders as well as for the employees in the DMU at the STA making the evaluation that results in a decision. This implies that there are, in many evaluation processes, room to make your own assumptions and evaluate based on how you interpret the model. In other words, this leaves room for subjectivity and to use your gut-feeling.

“You assign grades based on the model that’s described…()...However, it can be very difficult to assimilate or understand if there is not much written in the grading model” -R1

In other words, this leaves room for subjectivity, but in a structured way. Further, this also implies that depending on whom the individual are that will make the evaluation, it will probably be done in different ways. Many of the respondents have brought up the issue of being bias when evaluating a tender, which they connected to the previous experience of the individual making the evaluation. The respondents mean that a person with great experience in for example communication often tend to put more effort in evaluating this than for example cooperation.

**Experience-Based Emotions**

During the interviews, it became clear that emotions are strongly connected to experiences. Experience-based emotions can also affect the decision-making in public procurement due to the fact that people tend to choose what they know from before rather than the inexperienced.
This even if the experienced alternative only did just fine and did not exceeded any expectations. The buyer wants to know what they get and the feeling of making a safe decision further seem to be widely spread in the industry. One respondent also said:

“Well this industry is somewhat impregnated by the fear of anything new, including new contractors.” -R2

The experienced-based emotions can also be connected to the combined experiences in the DMU. If someone in the group had an experience with a company or a specific individual it is likely that this will affect the evaluation process. This especially when evaluating added values.

“It should be known that historically and occasionally still I am afraid, added values are used to pick the one supplier you want for the job.” -R2

While good experiences can lead to benefits for the contractor, bad experiences could lead to future setbacks. Several of the respondents meant that previous experiences affect how they feel about a contractor, and in some cases also certain individuals. The respondents meant that if you have worked with someone and they did not work as agreed upon for example, the DMU would probably give this tender lower score. Sometimes, even if it is very rare, some tenders gets discarded due to bad experiences and strong feelings that this will not work out the next time either.

Another finding within experienced based emotions was the feeling of reliance. Due to the respondents’ experiences within the field of public procurement, they claimed that they had a feeling of knowing whether a contractor was trustworthy and had reasonable tender propositions. Some respondents said that it was clear if there existed substance for what was presented in the tender or not, and that it was easy to spot how the tender would work out in practice. One of the respondents who used the principle of “lowest price” when procuring stated:
“... sometimes you can see that a contract will create problems, maybe due to many speculations in the tender. But legally there is no reason to discard the tender.” -R5

The respondent meant that there are several cases where they have chosen a tender that they know will be bad, or at least not the best, in order to follow the PPA, and mentioned that the possibility to not always procure using “lowest price” in many cases would be beneficial. This respondent also mentioned that experience would affect the decision-making process, if it was allowed.
5. Conclusions

The final chapter includes the findings to the research questions established in the thesis background chapter. The results from the analysis will be discussed as well as the theoretical and practical contribution which the findings brings. Some discussion about future research and the limitations to the research will also be included.

5.1 Answering the research questions

This research was done with the aim of answering the following research questions:

RQ1: What are the intuitive factors influencing decision making in public procurement?
RQ2: How do intuitive factors affect the individual decision-making process in public procurement?

These questions have been researched based on existing literature and conducting in-depth interviews with decision-makers at a public procurement organization. New findings within the area of intuitive factors affecting public procurers have been found, further proving that public buyers are in fact not more rational than any other human being (Rajala & Tidström, 2017).

Research Question 1

Intuitive factors found to influence decision making in public procurement based on the interviews were how the procurers perceived the contractor, the procurers own professional experiences, their emotions connected to the people involved in the projects and their emotional experiences, and their communication. Comparing the results to the frame of reference e.g. the new findings and the old, some similarities were found as well as some new within intuitive factors, that affect public procurement, which is illustrated in figure 6.
Previous researches have pointed out that individual experience and emotions affects decision making, as well as the perceived value and contractor brand. As visualized in figure 6, emotions and experiences were both found in previous literature and further proven in this master thesis. Perceived brand was part of the contractor perception theme found as part of the thematic analysis, together with more variables. Value perception was not proven to be an evaluative factor in the decision making process, but instead a factor that was decided upon in the mandatory tender evaluation criteria. Tenders who passed the mandatory criteria were considered to be of value. New findings which have emerged from the analysis were the themes of communication and contractor perception. Communication includes all communication, both with humans and machines, which influenced or helped decision-makers to find more information. This theme was not researched in the literature review, either because it has not been studied in the context of being an intuitive factor before or because the researchers of this thesis did not search for the right words in the databases. Finally, the contractor perception was partly a further proof of the brand’s impact on decision-making, as well as more specifics in reference to the tender proposition and the presentation quality.

Research Question 2
All intuitive factors had different levels of effect on the individual’s decision making. All respondents expressed their effort in trying not to be affected by anything but rational
parameters, but many also followed these statements by saying that they were just human beings, thus subjectivity is impossible to entirely exclude. Some respondents followed very narrow restrictions and clear models, making it more difficult to include their intuition in the decisions. However, many of these respondents claimed that this was negative, and that their intuition would have led to better decisions with much better project results. The respondents who instead expressed that they had a bigger freedom in their work were very satisfied with being able to use the intuitive factors since they believed it to help them in their decisions as well as giving better results for everyone, both the contractor, the STA and the final customer: the public.

Intuitive factors have in previous research been proven to play a great part in the decision-making in a B2B-context, where the DMU could be highly affected by for example brand perception and previous experiences. Due to laws and regulations, public procurement should not be affected by intuitive factors since they need to work in a transparent and non-discriminatory way. As several of the respondent said, every company should have the same opportunity to win a tender, regardless of what has happened in history or what the perception of the company is. However, this study shows that several intuitive factors do affect the decision-making in public procurement. The intuitive factor, with the highest influence found, was experience. Experience highly affects the overall perception of a company, and in many cases the STA tries to exclude these companies by the design of the evaluation model. When procuring based on more than just price, this especially affects since there are more room for subjective evaluation. Further, if someone in the DMU has a personal bad experience with a contractor, the negative WOM from this person seem to affect the evaluation of other members of the DMU. The study also shows that the members of the DMU tend to give lower scores to companies who earlier have caused them problems. An interesting find is that it is clear that it is people that are affecting people, which is recurrent in the majority of the identified intuitive factors.

Another factor that both consciously and unconsciously affects the decision-making in public procurement is contractor perception. Both how competence and brand is perceived affects the decision-making by being included in the evaluation. The brand perception is by several of the respondents argued not to affect the evaluation, but still, many of the answers in the interviews indicates that brands with low brand equity also tend to get lower scores.
Summarized, when making an evaluation, you unconsciously get affected by the brand which in turn affects the scores of the tender. A factor that several of the respondents continuously evaluated in tenders and presentations was how competent the people working with the tender seemed, which also appeared to affect the scoring of tenders.

Communication was also a factor that has been proven to affect decision-making. To ask for advice by colleagues, look something up on the Internet or just hear what others have to say about something truly seemed to have an impact on the evaluation. This could especially be if the individual making the evaluation feels unsure or lack competence and experience in the area. This implies further that people affect people. Intuition is further highly connected with emotions, which also is one of the factors that in a high extent can affect decision-making. Many of the respondents said that getting a gut-feeling about something often helped them to make a better decision. Other feelings such as a feeling of knowing what you get affected the result of the procurement. When it comes to emotions, the conclusion is that many buyers want to minimize the risks when making a purchase. Therefore many weight in their feelings when making the evaluation.

5.2 Theoretical contribution

This research has added to the emerging discussion about establishing a connection between industrial buying behavior in the context of public procurement and social sciences with a focus on decision-making behavior. This connection has been getting more and more attention during the latter years (LaPlaca & da Silva, 2016), becoming an important part in optimizing sales and understanding another dimension in industrial buying behavior. The research done has also added more to what intuitive factors are and how they affect decision making, based on previous literature regarding intuition (Kaufman et al., 2017). Intuitive factors found in the literature compared to the ones found in the interviews are close but not entirely the same, creating more intuitive factors to add to previous literature as well, see figure 6. The corresponding intuitive factors, though found in both literature and the results, have different sub-categories or codes creating new findings within previously existing intuitive factors as well. The research has given more substance to previous research within different irrational factors influencing public procurement, such as brand perception, experience and emotions. The intuitive parameter of communication has not been discussed in the literature review of this report, thus a new parameter in this research. However, the
researchers of this thesis have not specifically searched for communication as an influential factor, making it impossible for the researchers to state that this is in fact a newly found intuitive parameter.

Another new finding was the sub-theme of risk inclination, as a part of the experience of the respondents. Risk inclination was found to have a substantial impact on decision-making, as it made the respondents more or less willing to go for something unknown. Thus, risk inclination is an important factor that adds to the existing literature and previous research about intuition.

Since this has been one of the first glimpses of how intuition affects the process of public procurement, the theoretical contribution is of importance and has brought forth a new dimension in how the public buying process can be studied in the future. It has proven that there are in fact intuitive factors that affect the decision making in public procurement, despite the PPA and the requirement to keep all decisions objective. It has also proven that intuitive factors not only exists, but have a significant impact of how decisions are made and the result of these decisions. The research is a bridge from industrial buying behavior to social sciences, where research in decision-making behavior could provide industrial buyers with important knowledge in future procurement.

5.3 Practical implications
This research will be handed over to the supervisors at Skanska, as well as presented to the board of directors at Skanska Industrial Solutions. The practical implications here, lies in how the supervisors and board of directors at SIS perceive the results, and if they want to move on with these in the organization. Moreover, the practical implications on this research could have both an effect on the contextual situation studied, the public procurement, but also other forms of industrial buying behavior. This because the parameters studied and found, are present in most buying situations.

For public procurement at the STA, there are beliefs amongst many employees that the quality criteria will become more important in the future and will further on be a part of the total evaluation. The intuitive parameters found will with certainty play a bigger part when
the quality criteria reach this stage in the evaluation, where there will be more freedom for intuitive parameters to become an inevitable part of the individual decision-making. One important aspect to the entire research in the context of public procurement is the Public Procurement Act (PPA). The PPA exists to increase competitiveness and make sure there is no corruption amongst the actors in the market. Using your intuition is in some cases not in line with the law, making it difficult to argue for a decision even though it is clearly the right decision to the procurers. The PPA must be followed, making the use of intuition and the intuitive parameters found difficult to embrace on a managerial level. From the analysis, it was understood that the more knowledge you have about the PPA and the law in general, the more freedom you have in your decision making as you grasp the implications as well as understanding of what is up for individual interpretation in the PPA.

5.4 Limitations

There are a few limitations to this study that needs to be taken into consideration. Firstly, the researchers have had a limited time working on the thesis, meaning that some parts that may have needed more attention might have been overlooked. Secondly due to the case study approach in this research, only one representative organization was chosen for collecting the data, making it difficult to claim that the findings are entirely generalizable to all types of public procurement. Public procurement in different countries can vary, and the PPA is based on EU-directives. This makes the study limited to EU members, and perhaps only Sweden, where the study was conducted.

5.5 Suggestions for further research

Much of what has been found in this research is indications towards what might influence decision-making behavior in public procurement. Due to the importance of the study, the amount of resources dedicated to public procurement every year, and the limitations of the study, it is suggested that more elaborate research is to be done in the future. Observational research, both participation and non-participant, is something that is recommended to get a more accurate picture of what the decision making process really looks like. This type of research is recommended because of its accurate contribution to qualitative studies with its focus on social sciences. Further, a larger sample selection of public organizations could be included in future studies, to get more generalizable results.
Because laws, thus the Public Procurement Act, are different in different countries it is of recommendation to keep the sample selection to one country, or countries with very similar legislative nature.

Due to the lack of research within this field, it is also of recommendation to further investigate what intuitive factors that exists in the decision making process in public procurement, and how they affect the decisions. The researchers of this thesis believe that procurement based on more than just lowest price will be done in a higher extent in the future, creating opportunities to interview additional people with experience within these types of projects. The sample selection should be considered to be segmented by amount of experience and type of project, since there could exist differences between these segments. The researchers could see some differences in the respondents’ answers which could indicate that people in larger projects, with more experience and with a higher strategic position in the organization used their intuition to a greater extent. However, the sample selection was too small to be able to state this as a result, making it a recommendation for further research instead.
References


Thai, K. (2001) "Public procurement re-examined", *Journal of Public Procurement, 1*(1), 9-50


Appendix 1

Questionnaire

- What do you work with?
- How long have you worked at the STA?
- Could you tell us a little bit about the tender evaluation process in general?
- Where do you turn to for help if you are unsure about a decision?
- What factors do you believe affect your decision-making process?

Experience

1. What is your specific role in the procurement process?
   - How long have you been working with public procurement/procurement?
   - How do you think that your experience within this business has helped you to make decisions in the tender evaluation process?
   - Can you tell us about any specific experiences that might have helped you in your decision-making? For example, if you have experienced any successes or failures that have influenced how you evaluate a tender?

2. Do you ever use other sources than the supplier to search for information needed to make a decision? For example customer references? Supplier reputation?
   - How do you collect external information?

Tender evaluation process & Value For Money

3. What do you evaluate in a tender?
   - What parts are you looking particularly at?

4. How does the work process look like for you when you are evaluating a tender based on more than just price?
   - How are these new quality parameters evaluated?
   - Quality is not as easy to evaluate as price, due to that it is more complex - what difficulties have you encountered when it comes to this new criterion?

5. Is there anything that you have noticed that distinguishes a strong/really good tender?

6. How do you evaluate criteria such as sustainable benefits in tender biddings?
   - Do you think your own opinion/your company’s values/your boss’ on sustainable issues impact your decisions in tender evaluation?
Brand Perception

7. How would you say that the brand image influences your trust in the quality of the tender?

8. How would you say that the brand image influences your trust in the capacity of the tender?

9. How do you evaluate the reliability of the suppliers? Definition reliability: trustworthy, delivers on time, delivers what’s promised

Emotions

10. Have you ever decided in the evaluation process of a tender based on your gut-feeling?
    - If so, how often would you say that you let your gut-feeling leads you in your professional decisions?

11. How do you think that your mood affects your decision-making?

12. How are you affected by the risks that could be associated with a supplier?

Final Question

13. Do you have any questions for us or something that you would like to add?