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Selling IT services for the Finnish public sector

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Abstract

The public sector has become increasingly dependent on information technology (IT) services. However, the tendering process can cause great challenges for both the procuring entity as well as the IT vendor, since this process is rigidly regulated by law. To ensure success in this process, IT vendors need to be able to recognize the most crucial steps in the tendering process and to develop best practices for their sales operations. Therefore, the aim of this thesis was to develop a framework for guiding the efforts of vendor sales teams prior to and during the tendering process.

The framework was based on Osterwalder's Business Model Canvas and was constructed using a constructive research approach combined with participant observation, theme interviews and analysis of customers' tender documents in the public sector. The framework was designed for a specific case company and was taken into use by the case company's sales teams as a sales tool. The framework identified seven focus areas specific to the case company: the tenderer-customer relationship, evaluation criteria for bids, relevant customer references, pricing strategy, special qualifications required from the vendor, the scope of the procured services and the vendor's technical solution.

One benefit of using this framework is that it enables the vendor to assess their chances of winning the bid, thus avoiding the use of time and money on futile tenders. Furthermore, the framework would allow sales team members not only to more effectively direct their sales efforts, but also to improve internal communication. Future work should focus on validating this framework by training the salesforce in using the framework, more widely implementing it and comparing the benefits gained against those of other tools currently used in the case company.

Keywords sales, IT services, public sector, public procurement law, tendering process

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Finally, the time has come to finish this thesis and the whole university degree. What happens next, is still to be explored. But learning from this journey, there is one thing I'm confident about. A great deal of inspiring experiences and adventures lie ahead.

Otaniemi, Espoo, March 2016

Andreas Ahlbäck

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Glossary of used terms

Table 1: Sales and tendering terminology adapted from Jaques (2013) & Finlex (2007)

Bid	The response to an invitation to tender, submitted in written document format by the Supplier.
Contract notice	Publishing a contract notice is a formal way to invite suppliers to tender.
Customer, client	The buying organization.
EOI	“Expression of Interest” is often the first step in the tendering process; buyers ask suppliers to let them know if they are interested in obtaining further information about a specific opportunity. In the public sector, suppliers might need to provide some basic information about their company as part of this stage.
Framework agreement	A process according to which a shortlist of suppliers is pre-selected by a buyer. Under the resulting agreement, if and when the buyer has a specific need, only these suppliers are then invited to tender.
Incumbent	The current supplier; already delivering a product or service for the customer.
ITT	“Invitation to Tender” is the formal document issued by a buyer in which the requirements are set for that opportunity. It contains instructions to potential bidders about how and when they need to submit their written response and costs.
MEAT	“Most Economically Advantageous Tender”, also known as best value. Refers to the process of evaluating bids and selecting the one that offers the best value for money.
PQQ	“Pre-qualification questionnaire” issued by the buyer during a restricted procurement procedure, asking mainly for information on supplier’s finances, governance and experience. PQQ allows a shortlist of suitable suppliers to be drawn up, who are then invited to participate in the next stage.
Proposal	In this thesis, proposal is considered as a sales document written by a supplier to a buyer without formal instructions to follow. The only “proactive sales document.”

Request to Participate	In a restricted or negotiated procedure, as well as competitive dialogue, a supplier candidate must first submit a request to participate, and also enclose all the required documents and information indicated in the Contract Notice published in the Official Journal. If the supplier fulfils the requirements, they will be informed accordingly and granted access to the tendering documents.
RFI	“Request for Information” is somewhat similar to PQQ, measuring the suppliers’ intent to bid. It is often used by buyers to already request some details about the supplier’s proposed solution for this opportunity as well as for shortlisting purposes. Gives also market insight of available products and services. Used before RFP phase.
RFP	“Request for Proposal” means the same as ITT. Both terms are used, but ITT somewhat more popular on public sector.
Seller, Tenderer	The vendor who is bidding for the contract. Also known as supplier candidate. Once the contract is made, tenderer becomes a supplier.
Tender	Same as bid.
Value proposition	Demonstrates the overall benefit of a proposal/bid to customer, and takes cost into consideration.

1 INTRODUCTION

1.1 Research background and motives

Modern information technology (IT) companies sell software, hardware, IT services and consulting services for their customers. They are more service companies aided by products than the other way around. Looking IT service business from customer point of view, the hardware can be leased, software may be purchased as a service (SaaS) and fewer products may be bought for permanent ownership. This example demonstrates the dynamics of current IT market where services and consulting form a great part of delivering value to customers.

The customer segments for IT companies in Finland can be divided roughly to private and public sector. In the private sector, there are practically no rules for choosing a supplier and the choice depends on the procuring company's preferences. In the public sector, there are strict regulations to follow set by European Union (EU) and specified by the Finnish Government on national level (Ministry of Employment and the Economy, 2015). These rules are actualized in the form of Public Procurement Act, that is, the procurement law (Finlex, 2007).

What all this practically means to companies selling IT services in Finland, is that knowing how public procurement works helps to identify how to be competitive in this market. For the customer it is vital to understand procurement law's requirements and guidelines in order to carry out a procurement project in the first place. Moreover, it can benefit the customer that the suppliers understand the rules and are able to construct high quality bids.

Sales is a relevantly new field in business research and is connected to practical work i.e. sales efforts that directly generate revenue. Moreover, an existing business need for better understanding of Finnish Public Sector as a customer and market segment in the case company supported the research motive.

In this thesis, focus is on IT service sales as most empirical data was gained from that area, but also as services continuously form a larger share of modern IT companies' total revenues. A large IT vendor was selected as a case company. The company's core business is in selling hardware, software, technological and business consulting services.

When gaining more understanding of the market and discussing with senior sales executives in the case company, I learned that to be able to succeed on public sector market depends a lot on understanding the procurement law, the customer, the case company's business model and examining how these three things interact.

The purpose of this thesis was to study IT service sales for Finnish public sector clients from the case company's viewpoint, find the most concrete challenges on that area, explore ways and develop solutions to tackle them.

1.2 Research problem

The main research question of this master's thesis is constructed in the following way:

How to compete effectively on public tenders concerning IT services?

The main question is divided into three sub-questions.

- 1) How are IT services bought and sold in Finnish public sector market?
- 2) What are the main challenges of selling IT services for the Finnish public sector?
- 3) Through what kind of approaches sellers of IT services can overcome these challenges?

1.3 Research objectives and scope

The objective of this study is to find new solutions for the case company's business as well as to contribute on sales research on public sector market. This will be done by searching answers to the research questions by doing market research on public procurement environment (buyers, the law and the governing bodies, tenders), conducting interviews with sales executives, and by observing sales teams and participating in sales work. As a concrete deliverable, the aim was to develop a framework for guiding the efforts of vendor sales teams prior to and during the tendering process, in order help sales teams to charge through the jungle of rules and regulations and turn leads to deals.

From academic point of view, sales has been and partially still is rather unorthodox research area. Focusing on a specific market segment (public sector, Finland) and on a specific business area (IT services), is expected to bring new knowledge and input for further research. Businesswise, investigating the public sector market would help to crystallize the key points to focus on during sales cycle, improve sales teams' performance, develop expertise on this field, and result in leaner and

meaner bidding in the case company. Underlying hypotheses are that the current knowledge of the public procurement process is inadequate at the case company, sales operations are not optimized for this market segment, excess work is done, and a clear focus is missing. Clearly, the last underlying hypothesis is that as a result of an updated knowledge of competing in public sector market, better sales performance in the future could be reached.

Scope of the research focuses on IT service business. Business insight is gathered by interviewing sales executives and experts from the case company and from one other IT vendor. Articles and books are studied in the fields of sales and procurement to gain theoretical perspective. Finland's governmental programme, governing bodies and legislation are researched to provide a holistic view of the market.

1.4 Structure of the study

This study is divided into six chapters: 1) Introduction, 2) Literature review, 3) Research approach, 4) Results, 5) Discussion, and 6) Conclusions.

This first chapter introduces and justifies the topic, and presents the research questions of the thesis. Chapter 2 reviews literature and presents the main theories, models and background information relevant to the thesis topic. The literature review focuses on IT services, public procurement, and b2b-sales to give a holistic image of the public sector market where the case company sells IT services. Chapter 3 describes the research methods and data of the study, as well as the data analysis process. Chapter 4 presents the results of the study. Chapter 5 discusses the theoretical and managerial implications of the results. Lastly, the conclusions of the study are drawn in the sixth and final chapter. It also discusses the limitations of the study, and provides suggestions for further research.

2 LITERATURE REVIEW

2.1 IT Services

This chapter pursues to give a general overview of IT services and the business around them. The chapter is divided to two parts. First part explains the concept of IT services, and the second shares insight of the IT market.

2.1.1 Definition

“What is IT?” A good start is to define first what is understood as IT in this thesis. Gartner Inc. is a global leading information technology research and advisory company (Gartner Inc., 2016) and defines IT as the common term for the entire spectrum of technologies for information processing, including software, hardware, communications technologies and related services (Gartner, 2016). The definition gives some idea what IT is. However, what kind of technologies are involved and what kind of information is processed, a more explanatory definition can be provided. Information Technology Infrastructure Library (ITIL) is an industry best practice framework focused on managing IT services. ITIL is suggested to be the most widely accepted IT service management approach in the world (Axelos, 2016). ITIL 2011 edition’s definition of IT gives a more concrete view of IT. The definition is presented in the table below.

Table 2: IT defined by ITIL 2011 (ITIL, 2011)

IT is the use of technology for the processing, storage, or communication of information. The technology typically encompasses computers, telecommunications, applications and other software. The information may consist of business data, voice, images, video, and similar. Information technology is often utilized to support business processes through IT services.

“What are IT services?” In order to establish the concept of IT services, Gartner’s explanation of IT services builds on their previously mentioned description: IT services concern providing business and technical expertise to support organizations create, manage, and optimize (or manage access to) their information and business processes. (Gartner, 2016) Gartner further describes that there exists different categories of service: business process services, application services and infrastructure services. Moreover, IT services market can be divided to segments by the type of skills that are employed to deliver the service; design, build, run. (Gartner, 2016). ITIL’s definition of

IT services builds on the how people, processes and technology come together. ITIL's definition of IT service is presented in the table below.

Table 3: IT service defined by ITIL (ITIL, 2011)

IT service is a service provided by an IT service provider. An IT service is constructed of a combination of information technology, people and processes. A customer-facing IT service is such that directly supports the business processes of one or more customers, and its service level targets should be defined in a service level agreement (SLA). Other IT services are called supporting services, and they are not directly used by the business but are required by the service provider, in order to deliver customer-facing services.

Similar to IT services and overlapping with them, are IT consulting services. For an IT company, it is perhaps needless to separate these two. However, looking it from another party's point of view (as it is often recommended for sales people) such as the customer's or the reader's, defining "IT consulting services" can give a more holistic picture of the IT service landscape.

So, "What are IT consulting services?" ITIL does not define IT consulting services separately. Gartner's definition of IT consulting services is: IT consulting services are advisory services that help customers assess different technology strategies and, thus enable them to align their technology strategies with their business or process strategies. (Gartner, 2016) The key word here being used is "advisory".

Drawing these definitions together, one can broadly say that IT services and IT consulting services are much the same. The main difference seem to lie in IT consulting services emphasizing the advisory approach, in the sense of "how to", whereas IT services not only provide process support but also operational support for applications, infrastructure, end and super users. Considering IT companies, their IT services offering tend to cover both of these advisory and operational aspects. In order to conclude the discussion, ITIL's definitions of the terms IT and IT service are good benchmarks and used in this thesis.

2.1.2 Market outlook

Gartner provided forecasts of the worldwide IT spending forecasts in June 2015. The forecasts are presented in the table below.

Table 4: Worldwide IT Spending Forecast by Sector (Billions of USD) (Gartner, 2015)

Category	2014 spending	2014 growth	2015 spending	2015 growth
Devices	693	2.4	654	-5.7
Data center systems	142	1.8	136	-3.8
Enterprise software	314	5.7	310	-1.2
IT services	955	1.9	914	-4.3
Communications services	1,607	0.2	1,492	-7.2
Overall IT	3,711	1.6	3,507	-5.5

The table shows how IT services is the second largest category after communications services, leaving enterprise software, data center systems, and devices behind. IT services represent over a quarter (25%) of the whole worldwide IT spending, for both 2014 and 2015 forecasts. The market has declined 5.5 percent from 2014, but it was projected to grow 2.5 percent for 2016. (Gartner, 2015) IT services valuing 914 billion US dollars in 2015, it is a market segment that IT companies cannot afford to neglect. Moreover, according to Statista, in 2015 IT spending worldwide reached 3,517 billion U.S. dollars (Statista, 2016).

A blog post of a Finnish IT company Solita gives a good insight on what's happening in the IT market. Jari Niska, the CEO of Solita, wrote about digital business and agile on their website's blog, on 3rd of June, 2015. He explains how a new digital business market has emerged in Finnish markets. This new market partly overlaps with the traditional IT-market and it has brought completely new type of competition along. The current competitors are traditional IT companies, digital agencies, marketing agencies, and traditional management consulting companies. In this market, the players who succeed, operate in an agile manner and innovatively build new digital solutions to clients. Lastly, he states that the most important thing is that the provided solutions and services should be able to streamline customers' business or develop completely new business for them. (Solita Oy and Niska, 2015) Solita is an active player in the public sector and the message of the blog post applies on both private and public sector.

2.2 Public Procurement in Finland

This chapter discusses public procurement in Finland. Understanding the dynamics of public procurement, is essential for IT companies who want to sell their services to the

public customers. The chapter is divided to five parts: defining public procurement, exploring the background and principles of public procurement law, explaining public procurement processes and procedures, presenting two short case examples, and lastly giving a future outlook.

2.2.1 Definition

There are plenty of literature of supply chain management, procurement, purchasing management, sourcing, supplier selection and management, buying of business services, value stream management, and similar topics (Stevenson, 2009; Iloranta and Pajunen-Muhonen, 2012; Kotler and Keller, 2012; Lehtonen, 2008; Axelsson and Wynstra, 2002; Hoover et al., 2001; Porter, 1985). They all circle around the same topic, procurement, approaching with a slightly different angle depending on the author and intended audience.

Procurement is utilization and management of the external resources of an organization. The main goal for procurement is optimizing those external resources. Moreover, organization's operation, maintenance, management, and development require various products and resources as well as different kind of expertise and knowledge outside the company. Procurement seeks to benefit from the possibilities of supplier markets in a way that satisfies its end-customer's needs and maximizes the overall benefit for the company. (Iloranta and Pajunen-Muhonen, 2012, p.53)

Taking on this introduction of procurement, let's then clarify what public procurement and public contracts are. Public procurement can be seen as the activity to establish public contracts. Public contracts are supply, service or public work contracts into which the state, municipalities or federations of municipalities, state enterprises, and other public sector procuring entities, enter with external suppliers. (Ministry of Employment and the Economy, 2015a; EK, 2015b; HILMA, 2015b) In order to establish a public contract, the buyer publishes a contract notice which is a formal way to invite suppliers to tender. The procurement process is carried with a suitable procedure, defined in procurement legislation. (Ministry of Employment and the Economy, 2015a; EK, 2015b; HILMA, 2015b) In responding to an Invitation to Tender (ITT) the supplier sends his bid of the requested set of products and services.

As mentioned, there are three main types of contracts. In brief, works contract focus on design and execution of constructions, supply contracts focus on exchange of goods, and service contracts focus on services. Service contracts can concern for instance computer services, management consulting services, maintenance services and their related services. Moreover, public contract having as its object both products and services is considered as a public service contract if the value of the services exceeds that of the products. Similarly, a public contract having as its object services and works activities (specifically defined works in the legislation) can be considered to be a public service contract. In this thesis, service contracts are considered from the point of view of IT services. (Finlex, 2007; EUR-Lex, 2014)

Lastly, the gross value of public procurement in Finland is estimated to be close to 30 billion euros per year, which is nearing 1/5 of Finland's gross domestic product (EK, 2015b). The online public procurement platform HILMA latest statistics are from 2014 where the combined value of 18 064 contract notices published on their website was 32 113 895 780 € (price estimates given in 80.09 % of the notices). In 2011 the corresponding values were 18 860 notices and 19 090 638 146€ (price estimates given in 85,81 % of the notices). (HILMA, 2015c) These values signals that there has been a significant increase in the market size during the past years. Moreover, Iloranta and Pajunen-Muhonen (2012) also stated that the gross value of public procurement in 2011 was approximately 20 billion euros, which implies that there has been almost a 50% increase in the total procurement value in 2011-2014. Not knowing the accurate value of 2015, the market is considerably large on Finnish scale and seems to be in an evolving phase, providing possibly more opportunities for IT companies as well.

To summarize, Finnish public sector procurement is the purchasing operations of public sector organizations. From seller's point of view, procurement is practically the activity that the buying party, unit or department, practices to acquire its services and products. Public procurement represents a significant part of public expenditure in Finland and is a large national market. This makes it important for the Finnish economy, a relevant market for IT companies, as well as an interesting area to study.

2.2.2 Background and fundamentals of current public procurement law

The previous chapter explained what public procurement is and what public service contracts are. This chapter seeks to explain why the law has taken its current form by reviewing the background and fundamentals of procurement law. Moreover, the chapter explores government's view of Finnish economy and the public sector, and seeks to understand the dynamics of public procurement market. Future outlook chapter (2.2.5) discusses more of the upcoming changes in procurement legislation planned to come into effect by the end of 2016.

Public procurement procedures must be executed in accordance with national procurement legislation and the directives of the European Union. The main purpose of the procurement regulation is to increase the efficiency of the use of public funds, but also to enhance the competitiveness of European businesses. Procurement regulation covers primarily different phases of the tendering procedure, drafting of the contract documents, advertising and concluding of public contracts. The ministry of Employment and the Economy is responsible for the preparation of public procurement legislation in Finland. (Ministry of Employment and the Economy, 2015a; EK, 2015b; HILMA, 2015b)

Procurement regulation pursues to secure free movement of goods, services, capital and people (or labour) within EU. These four are the fundamental freedoms laid down in the Treaty establishing the European Union, to guarantee the functioning of EU internal market. (Ministry of Employment and the Economy, 2015a; Europa.eu, 2015) In addition to the national legislation and the EU directives, Finnish contracting authorities comply with the World Trade Organisation Agreement on Government Procurement (GPA). (Ministry of Employment and the Economy, 2015a)

The main principles of the public procurement regulation are

- transparent and efficient tendering and
- equal and non-discriminative treatment of tenderers.

Public contracts must be primarily tendered in an open and efficient manner, and the suppliers participating in the bidding competition (or tendering process) must be treated equally and non-discriminatively. The principle of transparency, requires that the public

contracts are widely distributed. Providing sufficient information to companies in an equal manner is of great importance in enabling efficient tendering in public contracts. In addition, competition for public contracts opens up opportunities for contracting authorities (buyers) to make as economically efficient purchases as possible. The second point, principle of equality and non-discrimination require equal treatment of tenderers and awarding the contract based on prechosen selection criteria. (Ministry of Employment and the Economy, 2015a; EK, 2015b; HILMA, 2015b)

Ministry of Employment and the Economy summarizes public procurement's benefits by stating that transparent and equal tendering procedures open up opportunities for companies and service providers to offer their products and services to the public sector even more than before (Ministry of Employment and the Economy, 2015a) What even more than before precisely means, is hard to say, but the overall message is that the current form of procurement law should offer better sales opportunities for companies. However for the buyers and IT companies, the law also means a detailed procurement process to follow.

Public contracts shall be awarded based on either one of the following criteria:

- The most economically advantageous tender.
- The lowest price.

If the contract is awarded on the basis of the most economically advantageous tender, tenders are measured against prechosen criteria. When using the lowest price, the choice is more straightforward. (Ministry of Employment and the Economy, 2015a) In practice, this means public contracts are awarded to the supplier who has the lowest price or to the one with the most desired quality and price combination.

The section above explored the background and fundamentals of procurement law. Next, let's take a look at the current situation of the Finnish economy as well as the public sector, and see what actions government has decided to take on them. This insight should provide information of the market dynamics of public procurement. Finnish government's view of the country's economic situation can be found in the governmental programme. The governmental programme is created by the government parties when new government is formed. The programme analyses the current economic situation and sets the strategy for the upcoming four year parliamentary term.

The governmental programme also shares an overview of public sector's situation as well as future plans concerning it. (Valtioneuvosto, 2015a; 2015b)

The previous government was led by ex-prime minister Alexander Stubb who succeeded Jyrki Katainen on 2014 for the rest of parliamentary term 2011-2015. In 2014 Stubb renewed the programme for the rest of 2011–2015 parliamentary term but kept the objectives of Katainen's programme valid. In both of this term's programmes, aim was set to create an open, fair and confident Finland (Valtioneuvosto, 2015a; 2015b). The priorities listed in the programme were: reducing poverty, inequality and social exclusion, consolidating public finances and promoting sustainable economic growth, employment and competitiveness. In fewer words, growth and employment were the main themes. (Valtioneuvosto, 2015a)

The current government for parliamentary term 2015-2019 is led by the head of Finnish Center Party Juha Sipilä who is the new prime minister in Finland since May 29th 2015. Prime Minister Sipilä has stated that Finland cannot be led in the current way adding that running a country is much like running a business and would encourage it (Tiessalo and Pohjanpalo, 2015; Toivonen, 2015). In the latest governmental programme, "Finland, land of solutions", the following vision is laid out: "Finland 2025 – built up together" (Valtioneuvosto, 2015b). Some of the strategic objectives are that in public finance the revenues and expenditures will be in balance, and Finland's competitiveness will be built on high expertise, sustainable development and open-minded innovations based on experimentation and digitalisation. This vision includes such operative actions as finding common solutions together and regulating less. (Valtioneuvosto, 2015b)

In order to understand the motives behind the strategies, let's see how the government sees Finnish economy at the moment. The current economic landscape of Finland is summarized in 2015 governmental programme in the following way.

- Regardless its many strengths, Finland is in a spiral of decline: unemployment is high, economic growth has faded, competitiveness has deteriorated and is 10-15 per cent weaker than that of key competitor countries.

- Exports are dragging, social security and job markets have been unable to reinvent themselves despite the requirements of changing forms of work, entrepreneurship and industrial structure.
- Expertise is not being converted into innovations and innovations are not commercialised. Finland is losing its expertise-based competitive edge.

Obviously, Finland is struggling with its economy and competitiveness. The programme also sheds light on the reasons behind this economic turmoil. It states that there are various reasons, but following factors are affecting it at least.

- The faith in future is shaken by difficulties in making decisions on the structural changes needed to redeem the situation.
- Entrepreneurship and creativity are inhibited by rigidities, which are also cramping initiative and participation.
- Moreover, due to excessive regulation and administration, Finland has lost its agility and competitiveness. (Valtioneuvosto, 2015b)

Let's revise. Finland has major economic issues at the moment. Above presented factors give brutal but quite honest explanations for the current economic situation. The actions government has decided to take on them, however, seem justified. These actions are described as strategic objectives which can be summarized as growth and employment, finding common solutions and regulating less, improving agility and competitiveness. From the perspective of public procurement, these objectives probably have an impact on public sector organizations' operations as well as on the procurement regulation to some degree. Fortunately, finding common solutions, regulating less, improving agility and competitiveness seem like good elements that can support establishing successful supplier-customer relationships.

2.2.3 Procurement process and procedures

Public procurement process can be divided into sixteen steps. These steps are shown in the following list (see table 5).

Table 5: General steps in public procurement process (Ministry of Finance, 2010)

Steps
1. Planning and preparation of procurement, choosing how to execute it
2. Defining the subject matter for procurement and drafting an acquisition proposal if needed
3. Selecting the procurement procedure
4. Sending a contract notice
5. Evaluating the suitability of supplier candidates in restricted and negotiated procedures
6. Drawing up the invitation to tender (ITT) and sending it
7. Receiving and opening of bids
8. Evaluating the suitability of suppliers in the open procedure
9. Checking if the bids are compliant with the ITT
10. Evaluating and comparing the bids
11. Making the contract award decision
12. Informing of the contract award decision
13. Making a contract or placing an order
14. Monitoring the contract or delivery
15. Handling of invoices and making the payment
16. Monitoring of allowances

These steps aim to give a comprehensive view of all the things a public organization operator should take into account when planning acquisitions. However, it can be simplified in the following manner to give a shorter overview of the main phases.

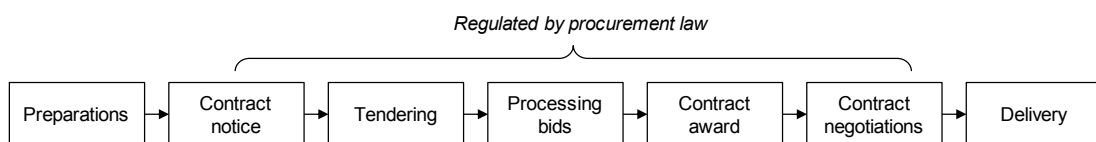


Figure 1. Overview of public procurement process, adapted from general steps in public procurement process (Ministry of Finance, 2010)

As mentioned earlier, there are different types of procurement procedures. Each of the procedures are for different kinds of purposes. The procedures listed in the table below apply to the procurement of both national and EU contracts with some additional specifications. For national contracts, there are only additional specifications for negotiated procedure and for direct award. For EU contracts, there are additional specifications for all others except open, restricted, dynamic purchasing systems, and electronic auctions. (Finlex, 2007) The procedures available and their characteristics are listed in the table below.

Table 6: Public procurement procedures (Ministry of Finance, 2010)

Procedure	Noteworthy
Open	Single-staged, clear, starts with a contract notice, no possibility for negotiation, suits basic acquisitions
Restricted	Two-staged, starts with a contract notice, no possibility for negotiation, suits acquisitions that have a need to limit the amount of supplier participants and there are clear reasons for doing so, generally for long-term goods or services acquisitions
Negotiated	Two-staged, is started with a contract notice, negotiation possibility, requires that the requirements for negotiated procedure set in the procurement law are fulfilled, a complex acquisition in question
Direct award	Single-staged, no contract notice, negotiation possibility with one or several suppliers, always requires that the requirements for direct award set in the procurement law are fulfilled
Competitive dialogue	Multi-staged, is started with a contract notice, intended for especially complex acquisitions which have as a contract award criteria the most economically advantageous tender, where the contracting authority can't objectively estimate in advance the legal or financial terms or technical aspects of the procurement scope, and where the contracting authority wants to negotiate on the execution of the procurement
Design contest	A procedure, where the purpose is to acquire a plan, selected by a jury, with or without the award of prizes
Framework agreements	An agreement between one or more procurement units and one or more suppliers, the purpose of which is to establish all the terms regarding future acquisitions or leaving part of those terms open. Starts usually with an open, restricted or negotiated procedure
Dynamic purchasing systems	Completely electronic procurement process for conventional purchases (goods) that are generally available on the market
Electronic auction	An auction procedure, utilizing an electronic platform for presentation of downward revised prices or new values concerning certain elements of tenders. Used after the procurement unit has made an initial evaluation of the tenderers and processed the tenders according to its chosen procurement procedure. Is not suited for procuring of public works contracts or contracts involving intellectual performances such as service contracts.

The content, nature and quality of the contract will determine what kind of procurement procedures are most appropriate to use, for the procurement unit, in making the acquisition. There are also differences among the procedures depending on whether the contract value is below or above EU thresholds. Primarily, open procedure

and restricted procedure are to be used, but in under certain circumstances defined by law, negotiated procedure, competitive dialogue, or design contest can also be used. The use of dynamic purchasing systems and electronic auctions is regulated by a separate law, which came into effect on 1.10.2011. (PPAU, 2015a) Here the most generally used procurement procedures and their process-steps are presented (Ministry of Finance, 2010). The processes are described from procurement unit's point of view.

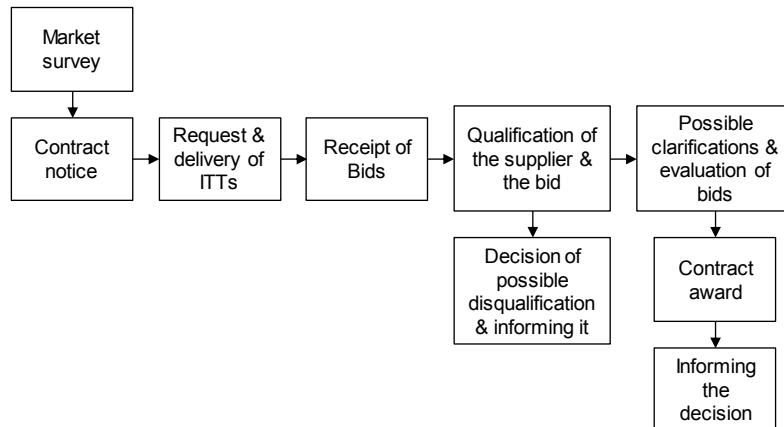


Figure 2. Open procedure, adapted from Ministry of Finance (2010)

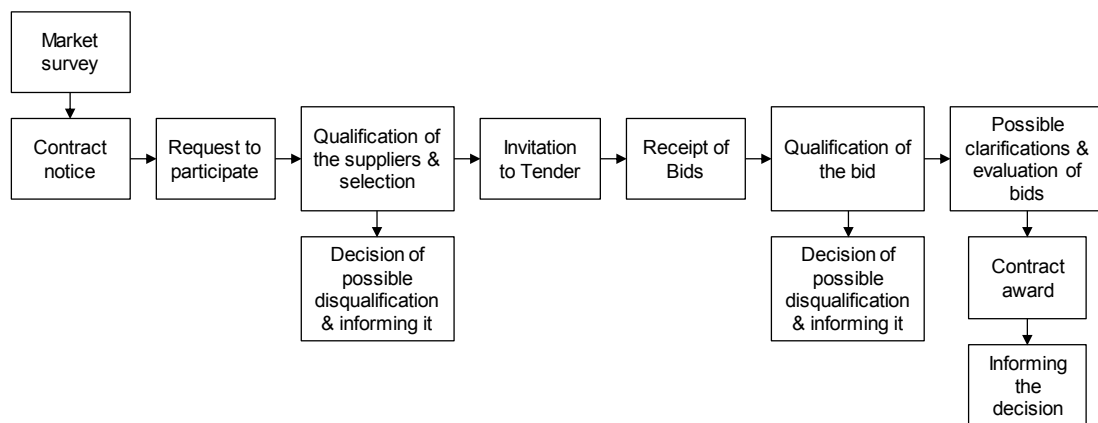


Figure 3. Restricted procedure, adapted from Ministry of Finance (2010)

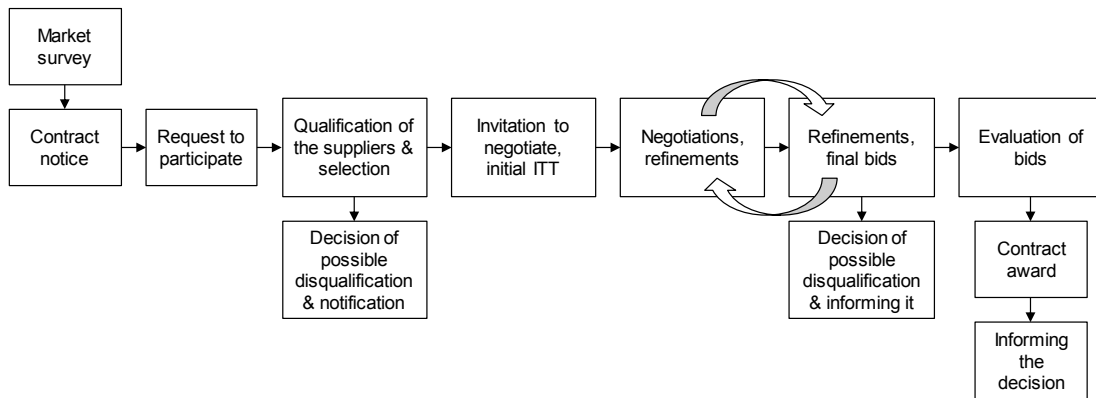


Figure 4. Negotiated procedure, adapted from Ministry of Finance (2010)

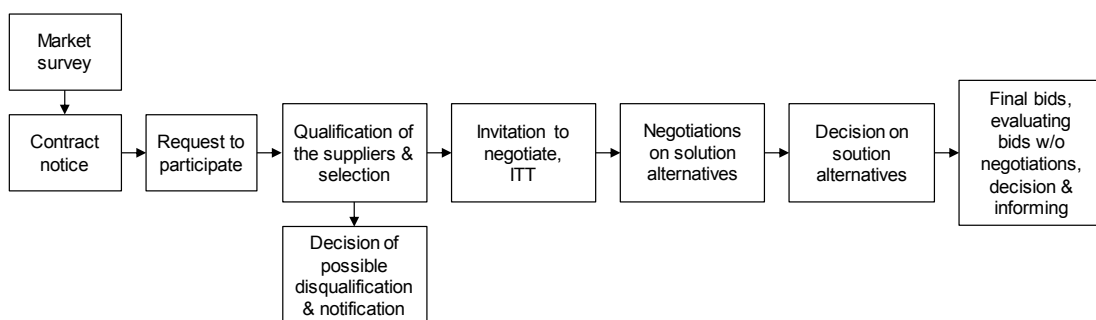


Figure 5. Competitive dialogue, adapted from Ministry of Finance (2010)

Thresholds mean the estimated largest possible value of a single contract. The value determines partly whether national or EU procedures are applied. National thresholds determine the scope of application for the public procurement law. Contracts below the threshold do not have to follow the law. Contracts below the EU threshold values determine, which contracts have to be tendered on EU-level and have to follow the Section II of Finnish procurement law (contracts above the EU threshold). EU thresholds are revised every two years whereas national thresholds can only be revised by changing the national legislation. (Ministry of Employment and the Economy, 2015c; PPAU, 2016). In the following table are presented the national and EU threshold values for Public Contracts (see table 7).

Table 7: National thresholds from 1.6.2010 (Ministry of Employment and the Economy, 2015c)

Contract type	Threshold
Service contracts	30 000 €
Supply contracts	
Concessions	
Design contests	
Health, social, and employment education services under joint purchasing agreement	100 000 €
Works contracts	150 000 €
Works concessions	

Table 8: EU thresholds from 1.1.2016 (Ministry of Employment and the Economy, 2015c)

Contract type	Central Government authorities	Other contracting authorities
Service contracts	135 000 €	209 000 €
Supply contracts		
Design contests		
Works contracts	5 225 000 €	5 225 000 €
Works concessions		

For IT service contracts, the EU threshold is often exceeded. These contracts awarding follow EU's procurement processes and must include suppliers around the whole Europe to the tendering process.

HILMA – Electronic notification channel for contract notices in Finland

HILMA is a free, electronic advertising channel in which procuring entities can advertise their public contract notices. Their website is at www.hankintailmoitukset.fi. The service is maintained by the Ministry of Employment and the Economy. For companies, HILMA provides real-time information about ongoing procurement procedures and information on upcoming procurements. (HILMA, 2015a) Contracts exceeding the national and EU thresholds are announced in HILMA. The difference is, that contracts exceeding the EU thresholds, the contract notice published in HILMA is forwarded to be published in the Supplement to the Official Journal of the European Community (S series) and the TED (Tenders electronic daily) database. Contracts below the national threshold can be made without public tendering as they don't have to follow the procurement legislation. (HILMA, 2015a; TED, 2015)

Tenders Electronic Daily (TED) – EU public procurement notices

TED is dedicated to European public procurement and it provides free access to business opportunities. TED database is updated 5 times a week with around 1,500

public procurement notices from the European Union, the European Economic Area and beyond. Moreover, information about every procurement document is published in all of the 24 official EU languages. All notices from the EU's institutions are published in complete format in these languages.

2.2.4 Case examples

Hansel's framework agreements for IT consulting services 2015-19

Hansel is a state-owned non-profit limited company, which acts as the Finnish government's central purchasing body. To illustrate what procurement of IT services can be in practice, here below is an example of framework agreements for IT-consulting 2015-2019 that Hansel invited tenders for (Hansel Oy, 2015a). Note that, regardless of the name “consulting”, the services cover both operational and advisory services. The scope was divided to the following subareas that each had an individual framework agreement.

1. Project management services and integration services
2. Definition services and architecture services
3. Application/software development and maintenance
4. Solution development and maintenance
5. Testing services
6. Information security, auditing and anticipation
7. Technology and infrastructure development services

The customers for the agreements included ministries, parliament, Finnish government, government agencies, institutions and other procurement units. Hansel's customers are defined in the law for ‘Hansel Oy’ limited company (1096/2008). (Hansel Oy, 2015b)

The suppliers or supplier groupings chosen for framework agreements in each section were chosen 15th of April, 2015. For sections 1.-4., 12 suppliers were selected for each. For sections 5.-7., six suppliers were selected for each. The framework agreements allowed for a comprehensive acquisition of IT consultancy services for Hansel's customers use. Contract periods for these framework agreements are 01.06.2015–31.05.2019, and customer specific contracts made during framework agreement contract periods can be extended to 31.05.2021. The framework agreements

were planned to come into force at the beginning of June 2015 and accomplished it. The previous similar IT consulting framework agreements have been made on 2011 and 2007. (Hansel Oy, 2015b; 2015c; Hansel Oy, 2011)

Biggest advantages of such framework agreements are that once they are established, the IT company gets practically a list of clients with whom they can start discussions, and the customers have the possibility to purchase their services with lighter procurement processes.

A large public IT services project

Apotti is a customer and patient information database service project ongoing in Greater Helsinki area with an approximate total contract value (TCV) of EUR 430 million. It is a cooperative project including the local governments of Helsinki, Vantaa, Kirkkonummi, Kauniainen (highlighted in the table below), as well as the Hospital District of Helsinki and Uusimaa (HUS). The rest of the HUS-district's local governments (see the 20 un-highlighted ones) can also later participate in the procurement via a procurement company KL-Kuntahankinnat Oy which creates a framework agreement of the procured services in Apotti. (HUS, 2016; Apotti, 2016a)

Table 9: 24 municipalities form the joint authority of HUS, four engaged in Apotti (HUS, 2016)

Askola	Järvenpää	Lohja	Raasepori
Espoo	Karkkila	Loviisa	Sipoo
Hanko	Kauniainen	Mäntsälä	Siuntio
Helsinki	Kerava	Nurmijärvi	Tuusula
Hyvinkää	Kirkkonummi	Pornainen	Vantaa
Inkoo	Lapinjärvi	Porvoo	Vihti

The four municipalities (Helsinki, Kauniainen, Kirkkonummi, Vantaa) and HUS compose a procurement pool, which KL-Kuntahankinnat is also a part of (see figure 6). KL-Kuntahankinnat's role is to represent the 20 municipalities that belong to the Hospital District of Helsinki and Uusimaa (HUS) and did not participate in the procurement project. KL-Kuntahankinnat negotiates a framework agreement through which the municipalities can purchase the services later on without a separate bidding process. (Apotti, 2016a)

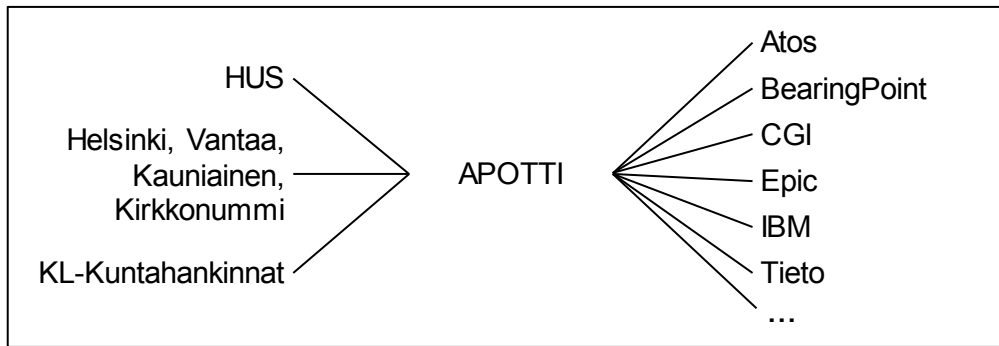


Figure 6. Apotti's 1st phase: Public customers (left), scope of procurement (middle), IT companies (right)

Apotti's procurement was carried out through negotiated procedure. During the first phase, the potential service providers submitted their participation applications before the deadline 4th of November 2013. The complete list of tenderers was: Atos IT Solutions and Services Oy, BearingPoint Finland Oy, CGI Suomi Oy, ChipSoft ZIS B.V., CompuGroup Medical Sweden Ab & CGM SYSTEMA Deutschland GmbH, Epic, IBM Finland Oy Ab, Indra Sistemas S.A and Affecto Finland Oy, InterSystems Corporation, Tieto Healthcare & Welfare Oy. (Apotti, 2016a)

In December 2013, Members of the procurement pool chose six service providers for the negotiations. However, of these six providers, both IBM Finland Oy and InterSystems Corporation decided not to leave an individual bid in February. The four providers that gave a bid after the negotiations round were: Atos IT Solutions and Services Oy, CGI Suomi Oy, Epic Systems Corporation, Tieto Healthcare & Welfare Oy. (Apotti, 2016a)

In the last phases of the procurement project, the remaining providers were CGI Finland Oy and Epic Systems Corporation. On 17th of August 2015, the programme bureau proposed that Epic Systems Corporation will be selected as the supplier. The decision was based on the scores they received on evaluating the solution's quality and price criteria. Quality criteria consisted of the solution's usability, functionality, scale, openness and maintenance as well as provider's ability to implement. In the selection, quality criteria weighted 60% and price 40% of 100% total. (Apotti, 2016a)

During the procurement, CGI Finland Ltd. appealed on three different occasions to Market Court regarding the contents of Epic's bids or decisions made in the procurement process. The third and latest appeal was rejected by Market Court on

21.3.2016. On that date, Apotti received permission to proceed to the next phase, which is contract negotiations with Epic Systems Corporation, and then continuing to the execution phase and finally to commissioning stage. (Apotti, 2016b)

This case included IT services as well as hardware and software products. It is a good demonstration how extensive and challenging the procurement of public IT contracts can get and what kinds of troubles they might face. For instance, for some reason 20 municipalities of 24 did not participate in the procurement process. Perhaps they did not see Apotti as a smart investment and were not willing to buy to services, or they simply did not want to spend resources on the procurement project itself. Moreover, the procurement started in November 2013 and almost 2,5 years later, there is still things to do before the delivery phase can start.

2.2.5 Future outlook

Public procurement legislation in Finland is reforming on 2016. One main objective of reforming procurement legislation is to simplify the procurement procedures. Moreover, additional objectives are to make the bidding procedure easier for small and medium sized enterprises (SMEs), to update the national threshold values, and to develop a supervision mechanism for public contracts. On the background of the reform are the new EU directives concerning public procurement given in April 2014, which the national legislation must take into account. The new directives reformed almost entirely the current regulation concerning public contracts. The new rules aim to provide 1. increased direct purchase possibilities for municipalities, 2. better consideration of employment, social, and health aspects, as well as other quality factors and 3. promote innovation and environmental points. (Ministry of Employment and the Economy, 2013a; Ministry of Employment and the Economy, 2013b)

2.3 Business-to-business sales

This chapter is divided to three parts. First part defines business-to-business sales. Second part presents different models and frameworks related to sales and sales work. Third part introduces vendors of IT services, buyers in public sector and other key operators involved in Finnish public procurement.

2.3.1 Definition and elements

Salespeople link a company to its customers. For many of its customers, the salesperson is the company and brings back valuable information about the customer to the company. (Kotler and Keller, 2012, p. 584; Jobber and Lancaster, 2009, p.4). Creating bids and selling are often team efforts and emphasize that salespeople can leverage the knowledge and expertise of co-workers instead of working in isolation. Moreover, team work is fundamental in bigger organizations and on more complex deals. (Kotler and Keller, 2012, p.220) Lastly, salespersons must be skilled in researching, writing, and presenting bids and proposals (Kotler and Keller, 2012).

If a supplier wishes to sell to the public sector, they are going to have to compete for the work by bidding for it. In public sector contracts, suppliers are often required to enter into pre-contract competitions in order to secure new work, and more and more often this is done via a written submission. The buyer gives instructions in the form of a tender document that the supplier must follow in order to create its bid. The bid explains the buyer what a supplier can do to meet the stated requirements, and on what cost. Moreover, the private sector is becoming more sophisticated in its procurement processes, and it is likely that suppliers are required to write bids or proposals in order to secure a contract. (Jaques, 2013)

2.3.2 Models and frameworks as sales tools

Jobber and Lancaster (2009) provide a view of the characteristics of modern selling. They argue that today's salesforce require a wide array of skills to compete successfully; simple presentational and closing skills don't quite do the trick anymore. They characterize the modern selling skills in six categories, presented in the figure below. (Jobber and Lancaster, 2009, pp. 5-6) These six elements are originally presented in the article "The evolution of the seven steps of selling", published in 2005 the Industrial marketing management journal (Moncrief and Marshall, 2005). The basic idea appears to build on that of Kotler's six steps of selling (Kotler and Keller 2012, p.582-583) but takes perhaps one step closer to the customer needs with the skill approach. "

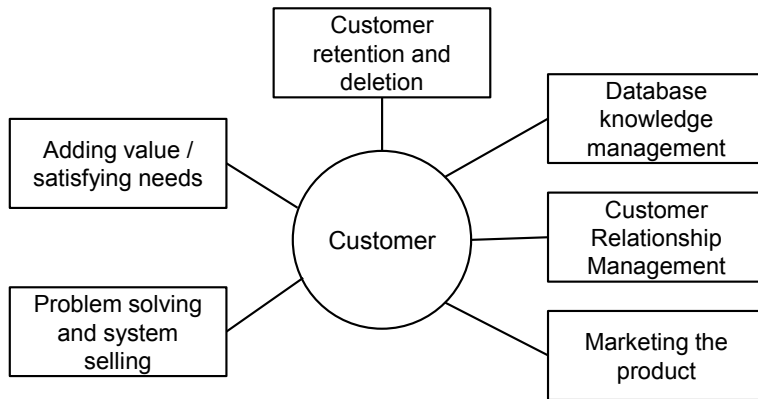


Figure 7. The characteristics of modern selling (Jobber & Lancaster, 2009, pp. 5-6)

The model provides only information on useful skills. From public sector sales perspective, it is rather general and does not provide much concrete focus areas for salespeople. However, such areas as customer relationship management and marketing the product are always important. Let's look at another model, Osterwalder's Business Model Canvas (BMC) and see what value it could bring. The term business model describes the rationale of how an organization creates, delivers, and captures value. Definition of BMC is a shared language for describing, visualizing, assessing, and changing business models. (Osterwalder and Pigneur, 2010)

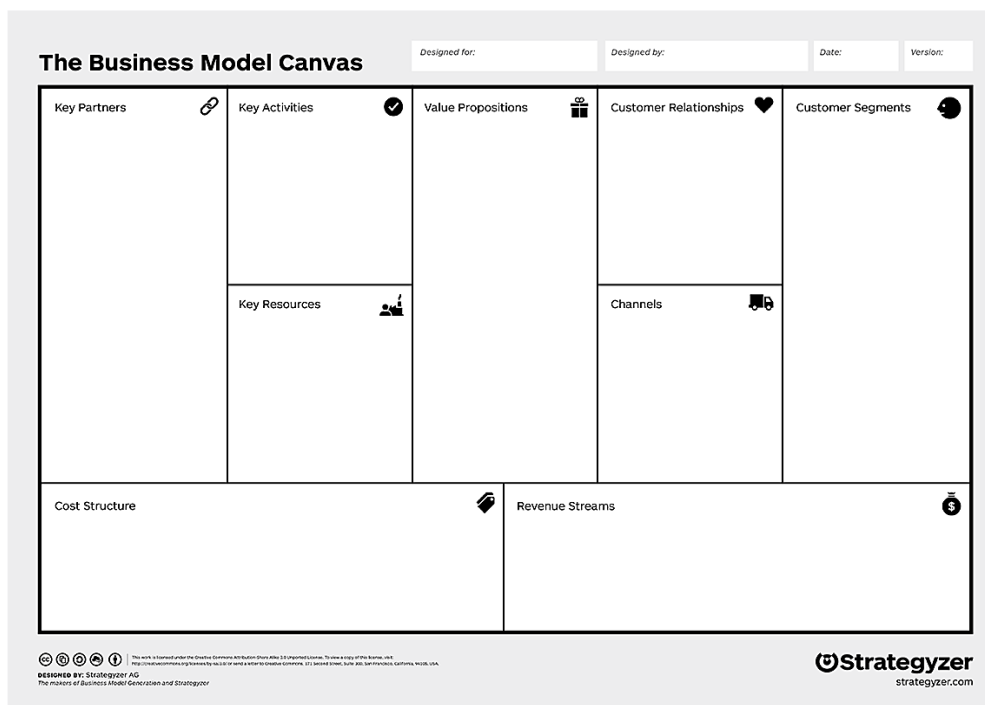


Figure 8. Osterwalder's Business Model Canvas (Strategyzer, 2016)

The rationale behind the BMC is that the starting point for any good discussion, meeting, or workshop on business model innovation requires a shared understanding of what a business model actually is. Thus a business model concept is needed, which everybody can understand, a concept that facilitates description and discussion. It is crucial to start from the same point and talk about the same thing. The challenge lies in that that the concept must be simple, relevant, and easily understandable, avoiding not to oversimplify the complexities of how enterprises function. It is also suggested that BMC can assist in aligning companies' information systems and business goals. It can help Chief Information Officers (CIOs) quickly grasp how a business works without getting stucked in operational details and help to align the company's IT and key business processes. (Osterwalder and Pigneur, 2010)

From IT sales perspective, applying the BMC can support in understanding the customer's business and their real needs, which could help to create solutions for the customer's problems. BMC as well as the Characteristics of modern selling model can provide some support for a sales person focused on public sector. However both of the models still lack the context of public sector and IT services, as they have been created for more general purposes.

One relevant question for a salesperson to think is "What is the customer actually buying?" Procured products and services can be categorized by using Kraljic's matrix (1983). In 1983 Peter Kraljic published an article in Harvard Business Review "Purchasing must become supply management" after which he has been considered as the father of strategic segmentation. The article gave new perspectives to the risks of procurement and supplier relationships and in minimizing them. He categorized procured products and services according to their relative importance and by the complexity of their supplier markets and introduced a matrix that serves as an excellent basis for analyzing any procurement strategy. That model is presented in the table 10 with minor adjustments made by Iloranta and Pajunen-Muhonen (2012).

Table 10: Management of supplier markets (x-axis) and Cost effect of procured product or service group (y-axis) (Iloranta and Pajunen-Muhonen, 2012)

High	Volume products and services	Strategic products and services
Low	Routine products and services	Bottleneck products and services
	Easy	Difficult

The matrix is primarily a tool for the buying party helping to categorize procured products and services but equally effective for the selling organization to use for deepening understanding of the customer's need. For instance, when selling bottleneck products and services, the supplier have more power to negotiate on the price and contract compared to volume products and services, where competition is tough and buyer has the upper hand. IT services have a great range of variety and they can be categorized in each of the boxes presented in the matrix, depending on the business case and customer need.

In every sales case, regardless of the services or products provided, the vendors have to sell their ideas (or solutions) by demonstrating what value it brings to the specific customer in question. This promise is usually in the form of a value proposition. In order to develop compelling customer value propositions, business marketers need to gain understanding how business buyers conclude to their valuations (Kotler and Keller, 2012). There exists many methods for researching customers which can help understanding the customer better and providing more personalized propositions. However, for creating compelling value propositions, there principles providing a solid basis.

First, value claims are to be clearly substantiated by concretely specifying the differences between the company's (supplier) offerings and those of competitors, focusing on the most relevant things to customer. Second, the supplier should document the value delivered by showing cost savings or added value that existing customers have actually captured by using the supplier's offerings. Third, the supplying company should ensure that the method of creating a customer value proposition is well implemented within the company by providing training and rewarding employees. (Kotler and Keller, 2012).

As a last point in this chapter, let's have a look at one essential framework regarding processing and evaluation of bids. When a company is considering which supplier to select, they tend to use a vendor analysis framework to compare suppliers' capabilities. This is also known as a supplier-evaluation model. With such model the buying center specifies and ranks desired supplier attributes to support the selection process. (Kotler and Keller, 2012, p.220). For the IT vendor, this is a critical tool to understand as they aim to maximize the evaluation points of their bids. In public sector, there is no specifically defined vendor analysis framework, and the procuring entity usually defines it. However, the example below gives an idea what elements are included in a vendor analysis framework such as price and supplier reputation.

Table 11: An example of Vendor Analysis, adopted from Kotler and Keller (2012)

Attributes	Weighting	Rating scale			
		Poor (1)	Fair (2)	Good (3)	Excellent (4)
Price	.30				x
Supplier reputation	.20			x	
Product reliability	.30				x
Service reliability	.10		x		
Supplier flexibility	.10	x			

Total score: $30*4 + .20*3 + .30*4 + .10*2 + .10*1 = 3.3$

The choice of the attributes and their relative importance depend greatly of the buying situation. Kotler and Keller (2012, p.220) present illustrative buying situations where the choice and relativeness of the attributes can vary. For routine-order products, delivery reliability, price, and supplier reputation are important. In the case of procedural-problem products, such as a copying machine, the three most important attributes are: technical service, supplier flexibility, and product reliability. For political-

problem products that raise rivalries in the organization, such as the selection of a computer system, the most important attributes include all those presented in the table: the price, supplier reputation, product reliability, service reliability, and supplier flexibility. (Kotler and Keller, 2012)

2.3.3 IT vendors, public buyers and other operators in public IT service market

In Finland there are many vendors in the IT services market. Finnish information technology magazine 'Tietoviikko' publishes annually a list of 250 biggest Finnish IT companies. In the following list, a brief description is given of big global, Finnish, and Indian IT companies to help provide an overview of the Finnish IT market. The Finnish ones were picked from Tietoviikko's list as service or consultancy providers. The global and Indian ones were listed in Wikipedia either in "List of the largest information technology companies" or in "List of IT consulting firms".

- Big global companies with over 100 000 employees include such players as: **Accenture, Atos, CapGemini, CGI, Cognizant, HP, IBM,** and **Fujitsu**. Also the enterprise software giants **Microsoft, Oracle,** and **SAP** offer IT services and consultancy to some extent. (Wikipedia, 2016a; 2016b)
- Finnish companies include small, medium and big companies, such as: **Aditro, Affecto, Descom, Digia, Futurice, OpusCapita, Reaktor, Siili, Sofigate, Solita, Tieto, 3 Step IT.** (Tivi, 2015)
- Indian players competing in the IT vendor market are such as: **HCL Technologies, Infosys, Tata Consultancy Services (TCS), TechMahindra, Wipro** (Wikipedia, 2016a; 2016b)

Let's then have a look at the procuring entities in the public sector – the buying organizations or customers that is. Finland is a constitutional republic, and its public administration has been organized around the following organs and institutions:

- Highest organs of Government
- State administration
- Municipal self-government
- Independent judiciary

- Other self-government
- Indirect State administration.

These organs and institutions have sub-organs and sub-institutions, which each have their position in public administration. The following diagram illustrates the position of these different organs and institutions and how they are linked to each other. The top part includes Finland's highest organs of government: Parliament, the President of the Republic and the Government. (Suomi.fi, 2015)



Figure 9. Diagram of the public administration (Suomi.fi, 2015)

Ministry of Finance lists the key operators in the public procurement in their Handbook on Government procurement 2010 (Ministry of Finance, 2010). These operators are the following: Ministry of Employment and the Economy, The Public Procurement Advisory Unit, The Ministry of Finance, The Ministry of Defense, Hansel Ltd., The Market Court. Furthermore, appeals against the rulings issued by the Market Court can be lodged in the The Supreme Administrative Court (Ministry of Employment and the Economy, 2012; Ministry of Finance, 2010)

From IT perspective, there is one important player missing from the list, Valtori. Valtori is Finnish Government's ICT centre. Valtori was only founded on 2014, and it is fair to assume for that reason it was not mentioned in the handbook in 2010. Brief introductions are given next of Valtori, Ministry of Employment and the Economy, Public Procurement Advisory Unit, and Hansel Ltd. Whereas Ministry of Employment and the Economy has a key role in setting the procurement legislation, the three others have key role in the tendering of IT services.

Ministry of Employment and the Economy

The Ministry of Employment and the Economy is responsible for the operating environment of entrepreneurship and innovation activities in Finland, securing the functioning of the labour market and workers' employability, as well as for regional development. The ministry divides its authority on eight key areas and one of those areas is the functionality of markets, promotion of competition and consumer policy. That area concerns public contracting matters. Moreover, the ministry is led by two ministers: Minister of economic affairs and Minister of justice and employment. The ministry employs 470 people and their offices are situated in Helsinki. (Ministry of Employment and the Economy, 2015b)

Public Procurement Advisory Unit

The Public Procurement Advisory Unit is a joint project of the Ministry of Employment and the Economy and the Association of Finnish Local and Regional Authorities. The unit serves both municipal and State authorities as well as other public procurement units by providing them with free advice on the public procurement law, the application of the law, and good practices in procurement. In addition the unit advises on the significance of strategic leadership for the provision and acquisition of services. (PPAU, 2015b)

Hansel Ltd.

Hansel is a state-owned non-profit limited company, which acts as the Finnish government's central purchasing body. Their services include: 1. inviting tenders for products and services, 2. establishing framework agreements based on the tendered items, and 3. offering tender consultancy services to their customers. They state as their purpose as to reduce public expenditure by increasing productivity in central government procurement. On 2014, Hansel had 76 framework agreements and 400 suppliers chosen for those agreements. Total value of procurements done through the framework agreements was 715M€. Computers and peripherals represented the 3rd largest group (54M€) of the framework agreements and technical ICT consultancy 4th largest (40M€). Hansel employs 80 experts. (Hansel Oy, 2014a)

Valtori – Finnish government's ICT centre

Government Information and Communication Technology (ICT) Centre Valtori is a service centre operating under the administration of the Ministry of Finance. It was

established in 2014. During their first year of operation, the ICT operations of 30 agencies and other government institutions were transferred (or centralized) to them. (Valtori, 2016) Valtori can be understood as a consolidation company of government's ICT services, with an aim to improve the efficiency of government's ICT services. Valtori's operating principle is providing sector-independent ICT services for central government administration. Sector-independent ICT services mean services which can be produced and organized without any significant sector-specific expertise being required. Such services are based on commonly available hardware and software solutions and technologies. Not included as 'sector-specific' ICT services, are services and solutions customized for specific customers. (Valtori, 2016)

As final part of this chapter, a concrete overview of public sector organizations is given next in the format of tables. These tables illustrate who are the potential public customers and buyers of IT services who have to follow public tendering process. The tables are arranged in categories according to the previously show diagram of public administration (see figure 9).

Table 12: Existing 12 ministries in Finland (Valtioneuvosto, 2016)

Central government: the 12 ministries	
Prime Minister's Office	Ministry of Education and Culture
The Ministry for Foreign Affairs	Ministry of Agriculture and Forestry
Ministry of Justice	Ministry of Transport and Communications
Ministry of the Interior	Ministry of Employment and the Economy
Ministry of Defence	Ministry of Social Affairs and Health
Ministry of Finance	Ministry of the Environment.

Table 13: Agencies and public bodies, not exhaustive list (Suomi.fi, 2015)

Central government: agencies and public bodies	
Finnish Tax Administration	Technical Research Centre of Finland
Finnish Customs	Geological Survey of Finland
Finnish Patent and Registration Office	The Bank of Finland
Statistics Finland	Social Insurance Institution of Finland
Population Register Centre	Financial Supervision Authority
National Board of Education	Finnish Transport Agency
National Institute for Health and Welfare	Finnish Transport Safety Agency

Table 14: State local administration, not exhaustive list (Suomi.fi, 2015)

State local administration: general entities
Local Police
Prosecutor
Enforcement office
Local Register Offices

Table 15: Finnish regions (Suomi.fi, 2015)

Regions and Municipalities: the 19 regions	
Åland	Ostrobothnia
Central Finland	Päijät-Häme
Central Ostrobothnia	Satakunta
Häme	South-West Finland
Kainuu	South Karelia
Kymenlaakso	South Ostrobothnia
Lapland	Southern Savo
North Karelia	Tampere Region
Northern Ostrobothnia	Uusimaa
Northern Savo	

Table 16: Other self-government associations and organizations, not exhaustive list (Suomi.fi, 2015)

Other self-government: associations and organizations	
The Finnish Broadcasting Company YLE	Evangelical Lutheran Church of Finland
Parliament of Åland	Orthodox Church of Finland
The Government of Åland	17 Universities across Finland

Table 17: State majority-owned companies (Prime Minister's Office Finland, 2015)

The State's business activities: the 44 State majority-owned companies		
A-Kruunu Oy	Gasum Oy	Suomen Rahapaja Oy
Alko Oy	Governia Oy	Suomen Teollisuussijoitus Oy
Altia Oyj	Hansel Oy	Suomen Viljava Oy
Arctia Shipping Oy	HAUS Kehittämiskeskus Oy	Tapio Oy
OHY Arsenal Oy	Kemijoki Oy	Teknologian tutkimuskeskus VTT Oy
Boreal Kasvinjalostus Oy	Leijona Catering Oy	Teollisen yhteistyön rahasto Oy (Finnfund)
CSC-Tieteen tietotekniikan keskus Oy	Meritaito Oy	Terrafame Group Oy
Finavia Oyj	Motiva Oy	Tietokarhu Oy
Fingrid Oyj	Neste Oyj	Vapo Oy
Finpro Oy	Nordic Morning Oyj	Oy Veikkaus Ab
Finrail Oy	Patria Oyj	VR-Yhtymä Oy
Finnair Oyj	Posti Group Oyj	Yleisradio Oy
Finnpilot Pilotage Oy	Raskone Oy	
Finnvera Oyj	Solidium Oy	
Fortum Oyj	Suomen Erillisverkot Oy	
Gasonia Oy	Suomen Lauttaliikenne Oy	

2.4 Theoretical framework

This last chapter of the literature review presents the theoretical framework and explains it to conclude earlier discussion. The theoretical framework aims to visualize the construction of the theoretical literature review part and illustrate the empirical focus of the study.

The theoretical framework presented below aims to visualize through what steps IT service contracts are established between an IT company and a public organization. These contracts are above national threshold level 30 000€ which is why they must comply with the rules of public procurement law and tendering process between the two organizations must be carried through processes and procedures defined by law. IT service contracts are not one-off sales transactions of goods, they are long-term relationships where value is continuously created through services.

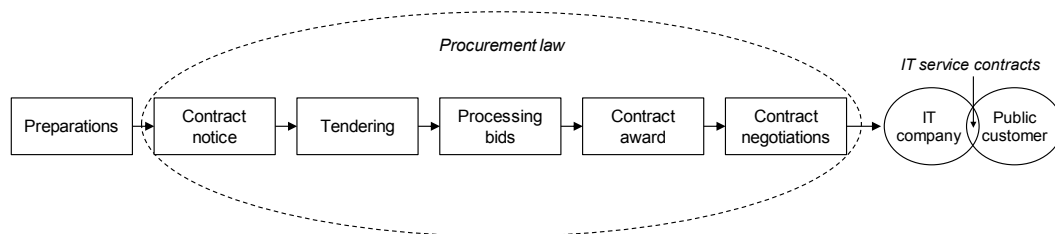


Figure 10. Theoretical Framework

IT service contract is a business relationship, where the value is created in the interaction of the customer and the IT vendor, thus, it is visualized as a shared area of those two parties. The established relationship has had to follow principles, processes and procedures of procurement law. The steps leading to this situation have been preparations, contract notice, tendering, processing bids, contract award, and contract negotiations (as illustrated in the figure 10). From these steps, the only step not controlled by a strict procurement law is the preparations. All the other steps the procurement law regulates. From sales perspective, the preparations step and actions before that are the phases where a vendor can influence the customer freely and try to form competitive advantage for future procurements. The procurement law focuses only on the tendering process, not actions preceding it. The end result of a tendering process, illustrates the delivery situation, the goal for sales efforts.

From future development perspective, the renewal of public procurement law seeks to make the tendering process more efficient and lighter, save money and time for all the parties involved, and in the end enable better supplier-customer relationships.

3 RESEARCH APPROACH

This chapter explains the chosen research approach. The chapter is divided into three sections. The first section introduces and justifies the selected research methods. The second section presents the data and its collection process. The third section discusses how the data was analyzed.

3.1 Research methods

This study utilized qualitative methods to collect and analyze data. Qualitative data's strengths have been claimed to be in discovery and developing hypothesis, testing hypotheses, and illuminating quantitative data. (Miles and Huberman, 1994, p.10) On general level, qualitative research generally examines people's words and actions in narrative and descriptive ways to closely represent the situation as experienced by the participants. In comparison, quantitative research is based on observations that are converted into discrete units that can be compared to other units by utilizing statistical analysis (Maykut and Morehouse, 1994).

Qualitative researchers value context sensitivity, which means understanding a phenomena in all its complexity and within a particular situation and environment. In contrast, quantitative researchers work to eliminate all of the unique aspects of the environment, to generalize the results to the largest possible number of subjects and experiments. (Maykut and Morehouse, 1994) However, it is also suggested that qualitative and quantitative research approaches should be seen as supportive approaches, not as competing orientations. (Hirsjärvi, Remes, and Sajavaara, 2008) Furthermore, if considered that quantitative research deals with numbers and qualitative with meanings, it should be noted that the numbers and meanings are always depended on each other. In fact, when measuring something, there is always a qualitative and a quantitative side to it. (Hirsjärvi, Remes, and Sajavaara, 2008)

Process-wise, qualitative data analysis is a continuous iterative enterprise rather than a straightforward sequence seen more in quantitative research. This gives a qualitative researcher a more pioneering position and more fluid way of operation. (Miles and Huberman, 1994, p.10) Additionally, a qualitative study has a focus, but in the beginning that focus is broad and open-ended, allowing the discovery of important meanings (Maykut and Morehouse, 1994).

One major feature in well collected qualitative data is that it focuses on naturally occurring, ordinary events in natural settings; we gain a strong perception on what “real life” is like. (Miles and Huberman, 1994; Hirsjärvi et al., 2008) That perception is supported by the fact that the data is collected in a close proximity to a specific situation, which is called local groundedness. Another advantage of qualitative data is in its richness and holism, giving a strong potential for revealing complexity as it provides thorough descriptions. (Miles and Huberman, 1994).

Qualitative data’s above-mentioned characteristics strongly support the possibility to understand nonobvious, underlying issues. Finally, collecting the data over a sustained period of time makes it powerful for studying any process. It offers the option to find out how and why things happen as they do. (Miles and Huberman, 1994)

Qualitative data is usually in the form of words rather than numbers. It can appear also as still pictures and video, but in this thesis the focus was on the words. The words are collected through observation, interviews, and documents. Such data isn’t usually immediately applicable for analysis but require processing. For instance, tape recordings need to be transcribed and corrected and field notes have to be corrected, edited and typed up. (Miles and Huberman, 1994, p.10)

Data collected in fieldwork is inevitably influenced by our own implicit concepts. In addition, they can be affected by our feelings and personal perceptions of the situation. Processing field notes is itself problematic as well, they are observations that the researcher was able to put into words. Or in the case of tapes, they can be transcribed differently depending on the person. To conclude, qualitative data can appear simple at first, but it contains a good deal of complexity, requiring plenty of attention and self-awareness from the researcher. (Miles and Huberman, 1994, p.9-10)

Due to the nature of this thesis, choosing qualitative research methods served it best, as they allowed the discovery of challenges and development of solutions in a specific situation and environment, provided a fluid way of operation, and gave possibility to iterate on collected data as the study proceeded. Methods used for qualitative data collection included observations, interviews, which provided primary data collected in close proximity, and market research of secondary data to support the primary data. The data collection in this thesis was done on a time period of 22 months

to study the sales and procurement process to understand how and why things happen as they do.

3.1.1 Constructive approach

Empirical research methods used in this thesis were influenced by constructive approach (Kasanen, Lukka and Siitonen, 1993). The essence of constructive approach research is in following the rather classic situation-problem-solution-evaluation pattern (Hoey, 1983). Reason for choosing this approach was that it was practical enough to solve real-life business challenges, yet had an academic background. Furthermore, the topic of this thesis formulated when doing hands-on sales work at the case company, a large IT firm. Thus the research problems were more derived from every day business challenges rather than sales research journals. Selecting constructive approach supported the business nature of this thesis.

Constructive approach is a research procedure for producing constructions, entities, which provide solutions to explicit problems. It is problem solving through the construction of models, diagrams, plans, organizations, or similar. (Kasanen et al., 1993). A central part of constructive approach is to tie the problem and its solution with accumulated theoretical knowledge, as illustrated in the figure below (Kasanen et al., 1993).

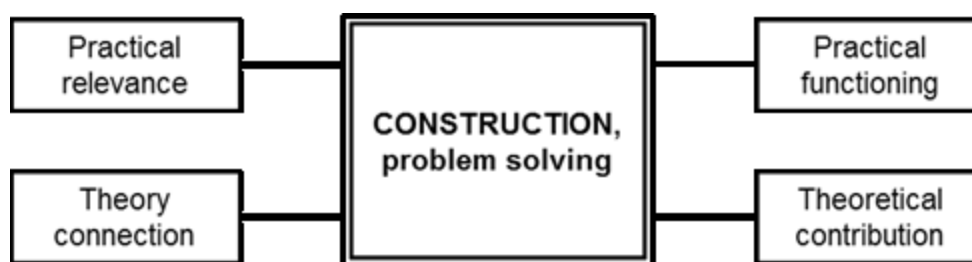


Figure 11. Elements of constructive research as defined by Kasanen et al. (1993)

The research process of constructive approach can be divided into six phases, the order of which may vary from case to case. In this thesis, the process follows the order Kasanen et al. (1993) presents in their article:

1. Find a practically relevant problem which also has research potential.
2. Obtain a general and comprehensive understanding of the topic.
3. Innovate, construct a solution idea.
4. Demonstrate that the solution works.

5. Show the theoretical connections and the research contribution of the solution concept.
6. Examine the scope of applicability of the solution.

The third phase, innovation, is the core element of a successful constructive research. If the researcher is not able to produce any new solution to the studied problem, then there is little sense going on with the study (Kasanen et al 1993). According to Kasanen et al. (1993), the practical functioning of any new construction cannot be assessed prior to its implementation. Therefore, the theoretical justification and testing of the innovation (the constructed solution) comes typically after the innovation phase. Thus, the fourth phase is demonstration. In order to test the pragmatic adequacy of a construction and demonstrate it works, the researcher must gain market-based validation and try several attempts of application (Kasanen et al 1993).

For market based validation, there are so called market tests. The produced constructions are seen as products that compete in the market of solution ideas. In order to validate the constructions, Kasanen et al. (1993) propose the following market tests:

- Weak market test: Has any manager responsible for the financial results of his business unit been willing to apply the construction in his effective decision making?
- Semi-strong market test: Has the construction become widely adopted by companies?
- Strong market test: Have the business units utilizing the construction systematically produced better financial results than those which are not applying it?

In this thesis, the practical relevance of the study is linked to everyday sales work of an IT company. The focus was to produce practical functioning solutions, constructions, to solve challenges in selling IT services for the public sector. Eventually, this meant constructing a solution that helps sales teams perform better results in public sector sales. Weak market tests were chosen to gain validation for the constructed solutions and demonstrate their practical functioning. Managers of business units and sales executives were chosen as the test audience. Semi-strong market tests and strong

market tests were disregarded because it appeared they would require a great deal of time, effort and marketing from the researcher himself, which was not possible at the time. Theory connection is demonstrated in the theoretical framework that describes the current knowledge of IT service sales to public sector customers. The theoretical contribution is to provide new knowledge on sales in the domain of IT business and services.

3.1.2 Participant observation

According to Maykut and Morehouse (1994), major methods of data collection used in qualitative research are participant observation, in-depth interviewing, and document analysis. Through surveying and interviewing one can find out what people think, feel and believe. These methods tell how the persons observe what is happening around them. What they don't tell, is what is really happening. Through observation, we can gain information on do the persons really act as they say they do. (Hirsjärvi, Remes, and Sajavaara, 2008) The main advantage of observation is its ability to produce direct data of people's, groups' or organizations' action and behavior. Observation's most criticized aspect is that the observer might have a distracting effect on the situation, or even change the course of events. Being aware of the distractive effect, helps the researcher to take actions to minimize it. (Hirsjärvi, Remes, and Sajavaara, 2008)

Observation methods are numerous. However on high-level, they can be divided to two categories: systematic and participant. In systematic observation, the observer is an outsider to the observed situation and operates in a systematic manner. In participant observation, the observer participates in the action of the studied group and acts in a more free and adaptive manner. It can be roughly generalized that systematic observation is used more in quantitative research and participant observation in qualitative research. (Hirsjärvi, Remes, and Sajavaara, 2008)

Participant observation is a method where the researcher attempts to enter the lives of others, suspending as much as possible his or her own way of viewing the world. The task consists of listening carefully and observing what is going on among people in a certain situation, organization or culture, to get a deeper understanding of them and the setting. Participant observer begins with a broad focus of inquiry. Through the ongoing process of participation and observation in a given setting,

recording what is seen and heard, and analyzing that data, significant aspects of the setting begin to emerge and provide a clearer focus. (Maykut and Morehouse, 1994).

Participant observation method was used in this thesis. The purpose was to find which challenges the public sector as a market segment seem to create for sales teams and find ways to solve them. The method supported other research methods in validating the challenges and producing prototypes of possible solutions. Participant observation was conducted in more supportive roles rather than leading positions, which allowed to minimize the distractive effect and take a more observing role.

3.1.3 Theme interviews

Hirsjärvi and Hurme (2010) suggest an easy to comprehend categorization of different interview methods used in academic research. These are unstructured interview, theme interview, and structured interview. (Hirsjärvi and Hurme, 2010) Maykut and Morehouse (1994) divide these respectively to unstructured interview, interview guide, and interview schedule – moving from unstructured to structured format. These two different divisions have similar approach in dividing the interviewing methods from unstructured to more structured ones.

Structured interview is one extreme, where predetermined series of questions are asked in a specific order. Unstructured interview is the other extreme, which is a completely free-format interview, where the researcher has a topic or topic area in mind and the discussion happens freely, allowing also side-tracking within the topic. Theme interview is the intermediate form of these two methods. In theme interview, it's typical that themes of the interview are known but the specific format and order of questions are missing. (Hirsjärvi, Remes, and Sajavaara, 2008) On practical terms, the theme interview does not limit respondents to a set of predetermined answers thus enabling discovery. In addition, according to Maykut and Morehouse (1994), there is an essential commonality across the differently structured interview methods: the questions used are open-ended and designed to reveal what is important to understand about the studied phenomenon.

The interviewing method used in this research was theme interview. Theme interview served well this research, which aimed for discoveries and had an iterative approach on data collection and analysis.

3.1.4 Market research

The third research method applied in this thesis was market research. In academic terms, it practically means studying secondary data: information that already exists and is accessible. Hirsjärvi et al. (2008) point out that most often the researcher collects his own data set. This type of empirical data contains direct information of the research subject, and is thus called primary data. It is also possible to get access to data collected by others, called secondary data. (Hirsjärvi, Remes, and Sajavaara, 2008) A b2b market research company explains in one of their online publications that an experienced “desk researcher” (market researcher) can quickly and inexpensively find data from multiple sources to answer many of the questions that have already been asked (Hague and Wilcock, 2015). Hirsjärvi et al. (2008) add that for solving every problem, it isn’t necessary to collect the data from the start by your own. In fact, when collecting data in general, one should pursue an economical and appropriate solution. (Hirsjärvi, Remes, and Sajavaara, 2008)

Today, there are vast amounts of data available and large share of it is easily accessible, thanks to internet. The challenge lies in knowing what to look for and how to find it, rather than there would be no data available. Moreover, as the research topic concerns public and legislative matters, there is (and has to be) information available of the regulations, market data, and development projects. Market research was especially useful in obtaining a general understanding of the thesis topic’s environment and in providing insight to the current market setting.

3.2 Research data

The topic of this thesis formulated when participating in sales work and observing sales teams efforts to create tenders for both public and private sector clients. The research lasted 22 months and exploited available data with the three different qualitative research methods: observation, interviews, and market research.

Participant observation data was collected by observing sales teams and participating in their sales work of creating bids for new and existing customers, in contract drafting and negotiations phases (final phases preceding a deal), and customer presentations. 10 theme interviews were conducted with experienced sales professionals. Market research focused on public procurement market. In addition, informal

discussions of the thesis' topic were held on weekly basis with colleagues, managers or support function employees to test and get feedback on the topic, connect the knowledge gaps and develop potential solutions further. Utilizing these three different research methods assured a significant research problem and thorough answers.

This enabled multiple iterations on potential research problems and provided in the end a problem area in public sector sales that both sales executives and practitioners could understand, validate and comment on with suitable professional experience. Moreover the topic being closely tied to the researcher's own job at the case company, gave a chance to reflect on the empirical findings and analyzed academic theories. Such constructive approach ensured practical relevance for the research as well theory connection. For instance, one week was spent on studying b2b sales and public procurement law, the following week the gained knowledge was put to test when working on a tender for a public sector customer. This process happened numerous times causing both great "aha" moments as well as "forget your hypothesis" type of moments. Both were valuable for the thesis. The collected research data is presented in the table below.

Table 18: Collected qualitative research data

Amount	Data	Activity
50	Case company's bids	Read through
25	Invitation to Tenders from customers	Read through
20	Websites related to Finnish & EU public procurement	Read through
20	IT market research reports	Read through
20	HILMA or TED contract notices	Read through
20	Informal discussions with sales professionals	à 15 minutes
15	Bids created and delivered to customers	Participant observation
9	Theme interviews with 7 persons	à 60 minutes
3	Testing rounds of a constructed framework	Feedback, 1-5 pers.
3	Governmental programmes	Read through
1	Pilot interview	60 minutes

The research data collection timeline is illustrated in the picture below. Observation and participation in the bidding work was continuously done during the whole 22 months' time, contract drafting and contract negotiations on few occasions. First interview was a pilot interview to understand more on the studied topic (at that time it was "bid projects" in general) and it was conducted in October 2014. The nine other interviews were carried out in March and May 2015.

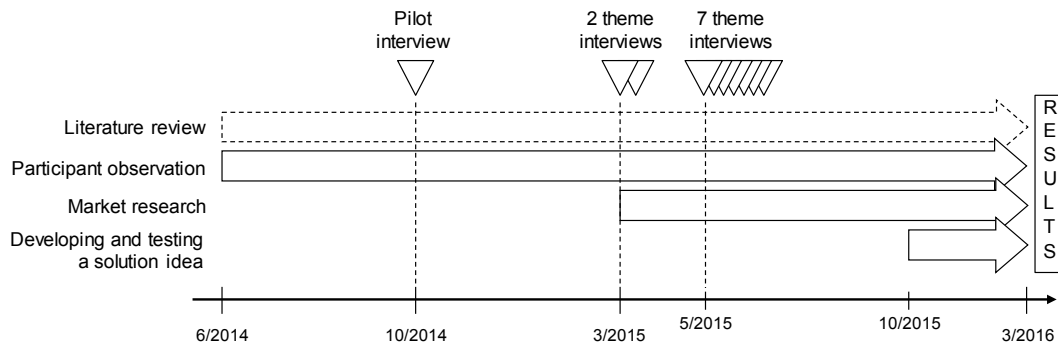


Figure 12. Research data collection timeline

As can be seen in the timeline, it is divided into five entities. These entities are following. Literature review, explained in chapter two earlier. Participant observation: sales work and discussions with sales professionals. Market research: Bids, ITT's, contract notices, websites, IT market research reports. Theme interviews: one pilot interview with Person H, three theme interviews with Person A, and theme interviews with persons B-G (6). Developing and testing of a solution: based on the findings from the previous parts, a solution idea or framework is developed and tested.

3.2.1 Observation and participation in b2b sales

Observing and participating in b2b sales work consisted of creating 15 bids, contract drafting and negotiations phases (final phases preceding a deal), and customer presentations. The total contract value (TCV) of bids varied between 1M-60M€. The sales work concerned all possible tendering/procurement phases: Expression of Interest (EOI), PQQ, RFI, ITT/RFP, Statement of Work (SOW). Whereas EOI is in the very beginning, the contract negotiations phase was the last stage before signing a deal, held at customer premises face-to-face with the customer. Seven of the tenders were created for the public sector and eight for private companies. The tenders being such large in scope and monetary value, they demanded a sales team to create them. The different industries these bids were created included energy, retail, industrial companies, small and medium sized companies and other industries.

3.2.2 Interviews of sales professionals

In total of ten interviews were conducted for eight people. The first one was a pilot interview, three theme interviews were held with one public sector sales expert (Person A), and then six other persons were interviewed. The interviews lasted between 45 and

75 minutes and were conducted face-to-face except for one on the phone. All the interviews were recorded and transcribed afterwards using bullet points and direct quotes. This process provided a holistic view on the collected data. The pilot interview was done in English and the nine theme interviews in Finnish. The transcriptions were done with the language used in the interview.

In the pilot interview, the thesis topic concerned ‘bid projects’ and the questions related to defining what are bid projects, what is sold in them, how the bid teams and process is organized in the company (confidential) and how to improve the process. After gaining new ideas out of the interview, the thesis topic was rethought upon to find a more clear focus. Additionally, aim was to define a topic of which the results could be discussed openly. This resulted to discussions with managers, executives and colleagues. Finally after three sessions with a public sector sales executive (Person A), public sector sales was chosen to a thesis topic due to its better focus and more beneficial nature for the company in terms of explorative work and research findings.

The interviewees were experienced sales professionals from different divisions of the company. Furthermore, one interview was done with another IT vendor’s experienced public sector sales specialist to provide external viewpoint. Due to confidentiality issues, the transcribed interviews cannot be provided in Appendices.

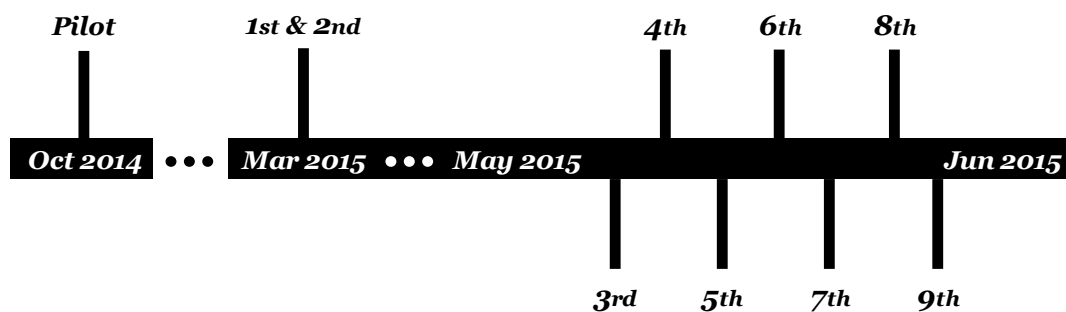


Figure 13. Timeline of theme interviews, including the pilot interview

The interviews were conducted between October 2014 and June 2015. Combining the experience of the interviewees, it totals 500+ sales cases (bids, proposals, proof of concepts) for the public sector alone, and 1200+ for private and public sector in total. Interviewed persons profiles are given in the table below (see table 19).

Table 19: Interviewed persons

Person	Role	Work years	Specialties & experience	Public bids (in total)
A	Sales executive and Public sector partner, Consulting services	20-25	IT and strategy consulting, Procurement law	50-60 (100+)
B	Business development executive, Outsourcing services and Public sector sales	20-25	Procurement law, framework contracts	100-110 (200+)
C	Key account manager, Continuous services	10-15	Technical IT expertise, Delivery	30-40 (40)
D	Vice President, Public sector sales and business systems (15-20	Public sector sales, Digitalization	100-110 (150+)
E	Public sector sales, Healthcare clients and Local governments	30-35	Software, hardware, consulting and services	100-110 (250+)
F	Client executive, public sector clients	20-25	IT and strategy consulting	60-70 (200+)
G	Bid manager, Sales process specialist	20-25	Sales process expertise	20-30 (100+)
H	Executive consultant, Private and Public sector sales	20-25	IT and strategy consulting	20-30 (50+)

The interview structure consisted of four parts: interviewee's background, open questions, closed questions, and summarizations. The interview structure similarly followed the research themes: How is public procurement process organized, what are the challenges in selling IT services to public customers, and what could be possible solutions. A question set was used to ask the same base questions from all interviewees, some additional questions were propose if needed. Regarding the answers challenges and solutions, they were divided to categories related to process, challenges, and solutions. In the middle part of the interviews were more specified questions with proposed solutions. They were to test our assumptions and iterate on them directly.

3.2.3 Studying public sector market

The secondary data studied and utilized in this thesis included tenders, contract notices, bids, market research reports official statistics, market research reports, legislation, government reports and statistics, project reports, financial statements, news and articles. Some of those were presented in the literature review such as excerpts of publicly available meeting memos of legislation and directives renewal, excerpts of Finnish governmental programmes, and information of public sector IT project Apotti. In addition to these, secondary data was collected by visiting multiple websites of

companies, public sector customers, and procurement-advisory to get a better view of the public sector market.

3.2.4 The constructive research process

Here is summarized how this thesis utilized the constructive approach's research process to define the research scope and collect relevant data.

1. A practically relevant problem area was sought through observation and participation in sales work, discussing with colleagues, and reading academic literature as well as market data (tenders, contract notices, bids, market research reports). The problem area was found after 10 months and was together defined with a public sector sales partner in two interview sessions.
2. A general and comprehensive understanding of the topic was gained through theme interviews, participant observation and market research
3. Challenges were identified as well as success factors that help to solve those challenges. Based on the findings, a framework was constructed.
4. The framework was taken to further development and sought to demonstrate it works through weak market tests. Third phase and fourth phase were repeated many multiple times to iterate a better working solution.
5. The theoretical connections and research contribution of the framework were analyzed and presented here in the Discussions chapter.
6. Lastly, the developed solution's scope of applicability was examined and discussed with executives, and presented here in the Discussion and Conclusions chapter.

3.3 Data analysis

The data analysis process is illustrated in the picture below. The illustration is high level demonstration of the data analysis steps. Answers for the three key themes (research questions) were sought through the three different qualitative methods. Gained findings were then analysed and utilized to construct a framework.

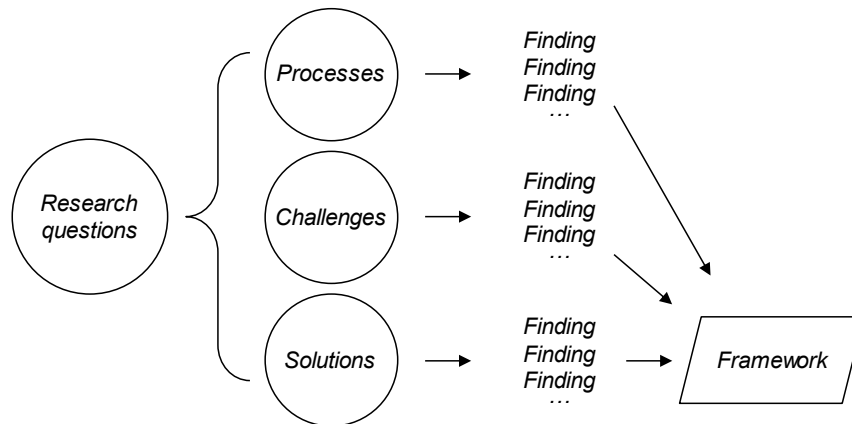


Figure 14. Data analysis process

Participant observation's main role was to question the findings made in the interviews and provide additional viewpoints. Notes were made during participating in the sales work, and they were used to come up with questions for the theme interviews, as well as used as topics to have short discussions with sales team members to understand their work, problems and attitudes better. Moreover, participant observation was used to test the constructed framework's functionality. The framework was built to solve sales teams' most relevant issues. The framework was tested with weak market tests in order to validate the construction's usefulness and it was utilized on three real sales cases. The gained results were presented to managers and received feedback was used to further develop the construction. Market research provided understanding of the context of public sector customers, sales work, and public procurement. The theme interviews had a more thorough analysis process, which is presented separately on the following chapter.

3.3.1 Interview analysis

When analyzing the theme interviews, the data was reorganized to find common or differing views around the three themes concerning research questions: process, challenges, and solutions. Regarding the pilot interview, the data was utilized in the extent where it provided answers to the themes of the theme interviews. Data from both the theme and pilot interviews were translated to English.

The translated interviews were analyzed by first glancing them through collectively, and making notes of key points of the interviewee's insights. Then they were analyzed one-by-one more thoroughly looking for main challenges they had

brought up (in the open questions), or if they had agreed with some of the suggested challenges (the closed questions). After this phase, solutions they had emphasized were looked and written down. For both challenges and solutions, when writing them down, it was simultaneously considered if they could fall into a certain theme. Some of them did rather conveniently. Some did not, and for those new themes were created or considered renaming an existing theme. If the challenge or solution was not seen as one of the key points the interviewee addressed during the interview, it was left out from the results. Analysis of the interview data was an iterative process, which formulated solid themes in the end, and majority of the answers fitted those themes.

Note, we had already identified or made assumptions of six challenges with Person A, whom with we had had three sessions discussing public procurement's challenges and possible solutions. In the interview question set, those challenges were presented in its latter part and their validity was tested with other interviewees. Many did not agree with those challenges, had other challenges in mind, or found it difficult to evaluate them. Some did agree with certain challenges, but usually had also brought them up themselves in the beginning of discussion.

However, the interviewees did either reformulate the challenge or suggest an even more important one. As the interview progressed and was summarized in the end by the interviewee, it could be identified what were the key points the interviewee kept addressing in his message. Thus the emphasis was put on the challenges and solutions the interviewees addressed most. On a general level, the six challenges were seen as good input for more holistic interview discussions than if they'd been done without them.

Prior to and in the beginning of the interviews, the topic of the master's thesis and objectives were explained to the interviewees. However, when answering, the interviewees did not define the challenges or problems to be related to a specific IT service, software, hardware or similar product area. The answers of the interviewees explained the general challenges they have encountered in sales with public sector clients, regardless the requested scope of products/services. Even though some of the challenges were more specific than others, they mainly related to procurement law and process, customer relationship, buyer's expertise and similar themes.

4 RESULTS

In this chapter the findings of the study are presented. First, market research, participant observation and theme interviews aimed to answer the first research sub-question about how IT services are bought and sold in Finnish public sector market. Here pilot interview contributed by adding a general sales perspective of bidding. The combined findings of all these four sources are presented.

Second, pilot interview, theme interviews and participant observation aimed to provide data to answer the second sub-question about the main challenges of selling IT services for the Finnish public sector. Here findings from all interviews and observation are presented.

Thirdly, pilot interview, theme interviews and observation together, sought to answer the third sub-question through what kind of approaches sellers of IT services can overcome these challenges? Here findings from the interviews and observation are presented. Moreover, a constructed and tested solution idea is presented last.

4.1 Public procurement process

Market research revealed that information about Finnish public procurement processes can be found from multiple websites, for instance from the sites listed in the table below. However, these websites provide extensive amount of information, requiring quite a lot of effort from the reader to take in, or they provide only brief explanations of some basic principles. For the reader, it is rather difficult to try get a view of the big picture. For instance, there are poor illustrations explaining the procurement process. Moreover, there are outdated statistics for instance on Public Procurement Advisory Unit's website that tell the value of public contracts in 2008 (31 billion euros) but don't provide newer statistics (PPAU, 2008).

Academic literature provides good explanations and moderate visualizations on the processes (see Cova, Ghauri, and Salle, 2002; Iloranta et al., 2012; Artto et al., 2006) but it faces the trouble of keeping up to date with the renewals of legislation and directives. And in all fairness, as the world runs through the internet nowadays, an easy to understand information package of Finnish public procurement should be available

online to everyone. In the table below are listed some of the main websites explaining Finnish public procurement and its processes.

Table 20: Websites explaining Finnish public procurement

Public procurement advisory unit	www.hankinnat.fi
Contract notices in Finland	www.hankintailmoitukset.fi
Ministry of employment and the economy, public procurement	www.tem.fi/kuluttajat_ja_markkinat/julkiset_hankinnat
Finlex, procurement law	www.finlex.fi/fi/laki/alkup/2007/20070348
Hansel, the government's central purchasing body	www.hansel.fi
Information package of public procurement by Hansel	https://www.hansel.fi/media/cms_page_media/23/Tietopaketti%20Hanselin%20kilpailutuksiin%20osallistuville.pdf
Ministry of Finance, Government procurement	http://vm.fi/hallintopolitiikka/valtion-hankinnat
Ministry of Finance, Government's procurement handbook	http://vm.fi/julkaisu?pubid=4201

The two highlighted sources actually had the best descriptions of the steps processes and even some illustrations in Finnish. Their descriptions were translated to English, visualized better, and presented earlier in the literature review.

Market research also provided an interesting perspective related to the public procurement process topic, shared by the market court. The market court publishes statistical data of appeals on public procurement matters per year to market court. In 2015, Finnish market court received 905 cases in total and solved 934. Of the received cases, 524 (57,9%) were appeals on public procurement matters, making them the biggest group of the received cases. 561 appeals were processed and solved on 2015. The average processing time was 5,7 months per appeal. In 2014, 591 appeals were received and 611 were solved. In 2013, 532 appeals were received and 495 were solved. (Markkinaoikeus, 2016) That is a lot of cases, about 1,43 appeals per day (in 2015) and taking in consideration that each one takes on average around half a year to solve. This means many procurement projects get stuck and become much longer due to appeals. In the case of IT services, six months is a long time. It costs for the buyer, for the seller, and the offered solutions might have to be updated. Concluding this facts, it is fair to state that there is room for improvement on the public procurement process and legislation in general.

The theme interviews provided insight of the procurement process from sales peoples' perspective. In the beginning of the theme interviews, the interviewees were asked to introduce themselves and then to give a brief description of the public procurement process. Their profiles were summarized in the research approach chapter. For the second question, the results are presented here. 6 out of 7 salespeople seemed to have at least a high-level view of procurement process. The seventh person is from sales support, and quite naturally her knowledge and focus was more on internal company processes. The descriptions varied among the following perspectives: detailed overview of procurement process and procedures (Persons A and B), two-phased tendering by RFI and RFP (Person C), sales strategy and customer relationship (Person D), simplified procurement law approach (Person E), comprehensive sales lifecycle approach (Person F), and internal process view (Person G). From these perspectives, three are presented here below to give an overview of different approaches.

Person B – Detailed overview of procurement process and procedures

Structure or phasing of public procurement is the following

1. Preparation phase of the invitation to tender (ITT)
2. In short, the contract notice is being published in HILMA, which starts the public procurement process with the end result of supplier contract. You should keep in mind that this is the culmination point, the starting shot for the process.
3. From here onwards, the procurement unit is bound by the public procurement process. The different types of procurement processes are:
 - Open procedure: a contract notice has been published in HILMA and the related documents/files are openly available for everyone or sent separately upon request
 - Restricted procedure: a set of supplier candidates are chosen from enrolled supplier applicants based on specific selection criteria and the tender documents are shared to the chosen candidates
 - Negotiated procedure: a participation request is sent to supplier candidates and the candidates submit participation application. Based on the applications, the procurement unit chooses candidates to proceed on the next round.

- Traditional negotiated procedure
- Competitive procedure

Person D – Sales strategy and customer relationship

On high level, the work is divided to two parts:

- Key Account Management (KAM) activities in the customer accounts
- Competitive bidding process and bid work
 - An own dedicated team that can carry out the bid work
 - Possibly borrowing a KAM-person who knows about the customer account
 - Another extreme are ‘windshield cases’, those that come as a surprise and you have weaker background information. It is impossible to keep on track of every public sector organization’s needs.
- The emphasis is on which customer organizations are the most important and who the most important persons there are. That way you can stay up to date of the upcoming projects that fit your business and you can get to work on those in advance.

Person F – Comprehensive sales lifecycle approach

1. In big purchases there is a non-formal information gathering phase: the customer discusses with supplier representatives in seminars and other occasions
2. Market consultations phase: customer tells to suppliers what they want to hear and suppliers prepare presentations accordingly
3. RFI-phase: with comprehensive documentation, a detailed description of the specifications for suppliers to answer in their tenders. How to answer, schedules, non-disclosure agreements (NDAs), who can answer, etc.
4. RFP-phase: can take half a year from the RFI
 - Negotiated procedure (to a limited number of supplier candidates)
 - Open procedure
 - Restricted procedure: Kind of an intermediate form, the buyer has tried to limit who can bid that is for instance supplier candidates’

revenues have to be over €10M/year, and they must have delivered similar size of projects in Finland. Trying to exclude “surprise-suppliers” within the limits of public procurement law

5. After the RFP is sent to supplier candidates:
 - There can be discussions on further definitions
 - The customer makes a decision with a set of selection criteria
 - Appeal period
 - Contract negotiations
 - Delivery phase

Compared to the findings of the above presented theme interviews, in the pilot interview, the executive consultant (Person H) was asked about what are the processes of “bid projects”. His description was distinctively different, due to the fact that the question did not specify is private or public sector in question and concentrated more on the IT company’s sales strategies to come up with a solution. He answered:

There is. To summarize. Five steps are:

1. Trying to understand the client issues
2. Identifying a high level solution to fix the problem
3. Client feedback on high level solution, client’s funding for the project (real intent to buy)
4. Doing detailed solutioning including prices, cost, location, resourcing, everything
5. Presentation and selling

Bid project team may be five people but when you’re crafting the solution it can include 200 people. (Person H)

This clear summarization tells two things. The seller has to put effort to understand the client’s needs and seek to validate those and high-level solutions for them. Secondly, as the customer gives feedback, the seller adjusts his bid accordingly and then invests time and resources to create a detailed and competitive solution.

There were three additional findings made through the participant observations. **The procurement processes in the private and public deals participated were remarkably similarly structured.** Especially the in bigger private deals there was

similar processes and rules. Most notable difference was that with private customers the supplier could propose “something” better than the customer had asked (outside of scope) and even bend the rules to some degree, whereas with public customers the response had to answer exactly to the customer’s requirements with content and format, otherwise “you were out”.

Not many sales professionals know public procurement processes, procedures, or law that well. Surprisingly often, the only persons that knew about how the procurement process is set by law and what it practically means to a specific sales case, are the few experienced public sector partners or specialists. The others seem not to remember much about the basics, such as the open procedure, the restricted procedure, the competitive dialogue procedure, and the negotiated procedure. Here’s an example. The interviewees were asked how it affects another supplier’s bidding possibilities if there is an incumbent supplier who doesn’t have to price the migration and transition costs into their solution as they have executed and charged those phases already in the past. The question itself was a trick question, as the procurement law should forbid and eliminate these kinds of inequalities in the evaluation of bids and ensure equal tendering. After hearing the interviewees answers, they were asked that did they know that giving such price advantages to the incumbent supplier is forbidden by the law, four persons out of seven (57%) did not know or remember that. That is again why one purpose of this thesis is to provide an information package of public procurement basics, and to share it to salespeople.

Certain basic elements were found in many invitation to tender documents. These elements were scope, schedule, references, (technical) solution, pricing, evaluation criteria, and special requirements (for IT vendors to qualify to bid).

Drawing the findings together presented on how the Finnish public procurement process is organized, let’s provide a summarization. The process is in place but there is a lack of crisp and clear information available, yet it can be found in many sources, for instance in the format of legal text. The process is far from crystal clear to the interviewed sales professionals except for few public sector experts. Lastly, the upcoming renewal to the legislation (discussed in the literature review) and the market court appeals seem to indicate that there sure is demand for a clearer and better functioning procurement process and legislation.

4.2 Main challenges of selling IT services for the Finnish public sector

In the table below, there are listed the main challenges that were identified in the theme interviews, presented in most agreed to least agreed order. There are only challenges that two or more persons agreed on. Some challenges that were only presented by one person included: inadequate skills and experience of salespeople, local public sector sales people are limited, public administration operates slowly, difficult for salespeople to focus on sales opportunities materializing years ahead, IT market have always had decreasing prices, all previous procurement law reforms have resulted to more strict legislation, security regulations se limitations for cloud and global resources, difficult to survive alone and without partners anymore, pure play Indians as new competitors in the IT market.

Table 21: Themes of challenges identified in the interviews

Themes	A	B	C	D	E	F	G	Total (n=7)
Price as dominating evaluation criterion and difficulties in judging quality	x	x	x	x	x	x		6
Public procurement law – formal, detailed, complex, strict	x	x	x	x		x		5
Use of general terms and conditions for IT procurement, JIT and IT2010	x	x			x	x		4
Buyers' low subject matter expertise, format goes over substance, real need poorly described	x	x		x		x		4
Buyers' fear of market court	x		x	x				3
Buyers' inexperience in public procurement		x		x				2
Tendering made too difficult for buyer			x	x				2
Use of rigid discussion mechanisms	x			x				2

To illustrate these challenges, here are quotes presented from the two most agreed challenges.

Price as dominating evaluation criterion and difficulties in judging quality

“One challenge is tenders with over 50% weighting on price. In these cases, other quality factors hardly matter anymore. From seller’s point of view, it’s an important evaluation criterion when deciding are there any chances to win that deal.” (Person A)

“There are two options as the main decision criteria for awarding contracts: the lowest price or the overall most economic advantageous tender (MEAT). There

have been improvements in this area of the legislation in the past five years. However, for instance in a negotiated procedure, the two suppliers who make it to the last round as finalists, they have both passed the high level of quality requirements, being at similar level quality-wise, thus making it (again) a pure price competition. However, it is easier to appeal on a quality based decision than lowest price based decision which is more absolute.” (Person E)

“Tenders with over 40% weighting on price is still too high. This means that only 60% is left for other evaluation criteria. An example case from this spring was when all suppliers ended within 2 percentage points (p.p.) variance in quality criteria. In these situations, where the differences in quality are so minor, the price is the determinative criteria. Also, judging quality of different suppliers is challenging – for instance, how to define that one supplier gets 30 p.p. more in quality than the other. Generally, tenders end up in a price competition as equal competitors are only left.” (Person F)

“Too big weight on price as an evaluation criterion is often a problem. It is rarely a matter of straightforward delivery where there’s no difference among suppliers. Often customer however sees it that way. But an even greater problem is the evaluation criteria of quality. Increasingly often the quality points of the tenderers get piled up, all the tenderers receive either full or very high points. This phenomena dilutes the significance of quality points more than the actual weighting of price and quality. This is mainly due to the difficulty of choosing the factors for evaluating suppliers’ experience and delivery capability. Comparing the suppliers on quality criteria is especially difficult. Another reason is the client’s caution in scoring, they do not dare to make big differences among suppliers as they’re worried of market court.” (Person D)

Public procurement law – formal, detailed, complex, strict

“General challenge is that public procurement law defines the procurement process in a very detailed manner. There exists many rules one just has to know, such that cannot be found logically. Formal errors often result to supplier’s disqualification from the bid competition, due to the very formal and strict nature of the process. Moreover, skilful buyers might know how to take advantage of law’s difficulty by ruling out unwanted suppliers from the competition. From

Nordic countries, Finland and Sweden are similar in their procurement laws. Finland had around 500 appeals to market court last year [2014]. In Denmark, they had 1/10 of these appeals, even though public procurement has somewhat bigger role there. They reason is that they have remarkably lighter procurement process, that is, they've interpreted the EU-directives in a lighter manner.” (Person B)

“The invitation to tender has to be extremely well made for the procurement process to be successful. It is highly demanding for a civil servant to compile an invitation to tender to which suppliers agree to answer, which won't be appealed on, and which won't fail in the appeal procedure. As the procurement law is what it is, this requires expertise. Moreover, the current process places much emphasis on price and computable values, which makes the process inflexible and risky. In principle, it is the customer's internal problem that the tender is well made. There can be other procurement experts providing consultation for the customer, for instance the city's procurement office collaborating with the procuring office.” (Person C)

“The biggest pitfall is definitely the formalities of public procurement law. The supplier might not remember to fulfil an insignificant technicality (such as submitting the proposal in a double-sealed envelope) and thus get dismissed from the competition.” (Person F)

A common pitfall for suppliers who are not so accustomed to public sector is the strict compliance of procurement law in the customer organizations. A seller used to private customers can't understand why he gets discarded from the public procurement process due to a minor formality flaw. Smaller IT companies have told that even though the procurement law makes the competition more equal, it is still depressing due to the formality of it. Countless amounts of companies have given the public procurement only one try: they've been discarded due to a minor formality flaw or matter that has taken their evaluation points down or resulted to a total disqualification. They do not have enough of experience and understanding on public procurement law. Furthermore, despite the supplier would see that their offered solution isn't exactly what the customer asks, but better, one cannot win the competition with such proposal. Even though the customer would see the

same that it is a better solution, the strict procurement process obliges them to evaluate it based on the evaluation criteria given on the invitation to tenders. ‘Don’t make a formality flaw or you’re out.’ (Person D)

In the pilot interview, the executive consultant (Person H) was asked about what are the biggest challenges in bidding. Note that the question did not specify is private or public sector in question. His answer again emphasized elements of sales strategy.

First, understanding the client; we are going with the mindset they only want what we have. Second, understanding the competitive landscape; who else is bidding, what are their strengths, and where are we at. Third, matching customer’s expectation with the company’s expectation; customer wants low price and the company wants to make profit Fourth, differentiation of the solution; how is our solution better than other IT vendors’. (Person H)

Lastly, there was one additional finding made through the participant observations. **Gaining understanding of the sales opportunity is time consuming and organizing a sales team needs attention.** The invitation to tender (ITT) documents in public sector can be highly specific descriptions of over 200 pages with many attachments, which makes it time consuming to go them through thoroughly. After the ITT materials are received, it takes decent amount of time to get an understanding of the sales opportunity, get the sales team organized and performing. Ideally, all sales team members should read the materials carefully so that they could act as a dynamic team. However, this seem to rarely happen. Why? Lack of time, people are busy on parallel work projects, many read only the part that concerns their responsibility area, and similar reasons. It feels that the real reason, or root cause, lies in the complexity and amount of the tender documents the buyer has prepared to make sure they don’t make any mistakes. However, preparing long and heavy documents packages again result to inconsistent messages and make the supplier’s job harder to identify the customer’s needs.

4.3 Solving the challenges

In the table below, there are listed the main solutions that were identified in the theme interviews, presented in most agreed to least agreed order. There are only solutions that two or more persons agreed on. Some solutions that were only presented by one person

included: better training for buyers, strict adherence of rules and format, competitive sales strategy, framework agreement, equal benefits in customer-supplier relationship, local and global references, financing capability, Proof of Concept (PoC) or pilot projects to demonstrate capability, delicate ear to what's happening on the market, fast reaction, a temporary monopoly, validating the sales potentiality of contract notices.

Table 22: Themes of solutions identified in the interviews

Themes	A	B	C	D	E	F	G	Total (n=7)
Educating and guiding the client before tendering starts, influencing on the tender's content, terms and customer's plans	x	x	x	x	x	x	x	7
Customer relationship is the key	x		x	x	x	x	x	6
Partnerships and ecosystem	x	x		x	x	x		5
Strict adherence to procurement processes, accurate bid work and response to the ITT		x	x	x			x	4
Dedicated salespeople with public sector expertise		x				x	x	3
Qualitative advantage - A temporary monopoly in a technological field	x				x	x		3
Having a visible brand and good reputation as a supplier on the market	x			x			x	3
Understanding customer's need, finding the thread for the bid		x		x				2
Making public procurement easier for the buyer		x		x				2

To illustrate these solutions, here are quotes presented from the two most agreed solutions among the interviewees.

Educating and guiding the client before tendering starts, influencing on the tender's content, terms and customer's plans

Understanding the customer's need and before the procurement starts, the client has to be educated and guided on the objective of the procurement, of the execution of the tendering process, and regarding the content of the invitation to tender. Sales have to be very upfront in public sector to be able to influence on the upcoming invitation to tender. You must know the customers and their needs. You have to influence on customer's plans of the tender, on the tender itself and choice of procurement procedures. When the tender is shared in public, you must strictly answer on what is requested there. You cannot expand your bid, as opposed to private sector. (Person B)

It's the sellers' job to guide and educate the customer. To bring up formalities that are contradicting with the purchase and that the buyer hasn't noticed themselves. Two-way discussion before RFI and in the RFI-phase. You must know the customer, be in active contact, and see what's coming, so that you can bring up things at the right time. (Person F)

Good relationships matter especially for getting notified early of upcoming contract notices and be able to influence on those before the RFI-stage. (Person C)

We try to be involved in projects at an early stage. As a result, in addition to implementation projects, we have many services in consulting, service design and project definition. This is intended to clarify, or even to influence, the customer's needs and the formation of a solution. Procurement law and thereby the practice limit the discussion between customer and supplier candidates. In practice, the negotiated procedure is the only option to have a natural discussion on the customer needs and that way further fit their needs together with supplier's delivery capabilities. We seek to stay on top of upcoming competitive bidding cases of existing customers. In practice, the customer organizations are so large that there will always come cases into the 'windshield', to HILMA, the information service of public procurement. (Person D)

Customer relationship is the key

Customer relationship is perhaps the most important thing of three mentioned problem areas (contract terms, price and quality weighting). It is key to even get an opportunity to negotiate the price's weight 'right' and provide an understanding to the client that the terms of purchase are reasonable. 'How are the relationships built, on what level, and how are they being maintained. 3Rs: relationships, relationships, relationships. (Person A)

All sales are about customer relations. If you have a good client relationship, 'a reliable supplier for a long time', you can likely influence on the content of upcoming invitation to tenders more easily. As a new supplier, you can get in to smaller bids/deals with good references and gain customer's trust that way. Pricing-wise, it's good to consider is it an 'investment' so to say. (Person G)

The trust between a supplier and a customer is definitely one of the most important things. If there is a trust and a proper perception of supplier's capabilities, then the supplier can influence on the matters (discussed in this interview) affecting the invitation to tender. If there is no customer relationship, then the supplier is at the mercy of the customer in a sense. Another important aspect is to have relationship to the right persons. The persons don't always have to be CxO level, a subject matter expert or a project manager might be just as important. The CxO level relations are important in creating long-term relationships and in maintaining them. Lastly, the customer often defines the procurement terms on group level, they are not always specified for IT procurement. In these cases, the influencing possibilities are weak. (Person E)

“Good customer relationships are extremely important but not solely enough. If the relationship is existing only in the CxO level, no deals are made. One has to approach through both top management and employee level. These discussions meet up in the middle management level, where the pressure comes from the top ‘this is what we need’ and from the lower level comes directions ‘this is how it is done’. If there is only pressure from one direction, the initiative might fail. With only CxO relationships, you get business trips abroad and travel expenses bills. Good relationship to CxO level advances extensions of current deals, additional sales, but it is not necessary on new engagements. However, the old rule of thumb surely holds true, that acquiring a new customer is approximately six times as expensive as maintaining a current one.” (Person F)

In the pilot interview, the executive consultant (person H) was asked about how a “bid project” should be organized to be effective. Note that the question did not specify is private or public sector in question. His answer emphasized the importance of roles and attitudes of the team members.

There needs to be a strong leader, who can identify client needs, and deliver that understanding to the team. You have to be pragmatic, that is the second issue. The third area is understanding risks, for instance what are the risks of delivering that. A good risk manager is needed. An innovative financier is also needed or a pricer. Lastly, the most important thing is that we're bidding to win, not bidding to participate. (Person H)

Lastly, there were three additional findings made through the participant observations. **Attitude and skills for a winning bid.** In the 15 different bids participant observation was conducted, observations of team performances proposed that key attitudes and skills for the team members.

Table 23: Observed attitude and skills for a winning bid

Attitude	Skills
Taking responsibility of your own area	→ Adequate to take on the role
Courage to make decisions	→ Failure toleration
Will to learn new things	→ Know how to learn

Ideal team would be a small and dynamic team that can operate in an agile manner. Each team member takes responsibility of the area assigned to them, seeks advice when needed but has the courage to make decisions themselves. After all, you are the subject matter expert of your area in that team, and the output doesn't have to be perfect. Usually 80% will do to make progress as Pareto has taught us. This comes to the third point. Each member must be ready to learn new things and broaden their knowledge. The easiest route is to throw your hands up and say someone else who knows better should do this. The effect, your team of ten is now 20 and starts to get out of hands.

As discussed in the previous chapter of challenges, **Scrum project management framework could be one solution for better project management and eventually to better sales results.** Scrum theory was founded in 1995, and it is based on empirical process control theory, which claims knowledge comes from experience and making decisions based on what is known. Scrum utilizes sprints to accomplish something and has an iterative approach to reach faster concrete outcomes. (Scrum, 2014) Especially the sprint aspect and other best practices used in Scrum, could bring the type of agile operation and faster progress needed in more effective sales performance.

Taking ownership and studying a few new things can get you quite far. To conclude, let's share an example. In University, when the student teams are assigned a business case to solve, what do they do? Each member takes a role and focus area, studies that and shares the knowledge with others. The outcome is collaboratively created solution to a problem that they did not have previous experience of solving.

Examining the elements of this type of team work, it could be stated that responsibility, courage and learning, play a major part in it.

4.4 Constructed solution idea – Sales Canvas

After analyzing the findings from theme interviews, participant observation and market research, one thing seemed to be clear: participating in a public tendering process is hard work, time consuming, and expensive. Moreover, evaluating to which tenders to participate and bidding for them in a professional manner as well as influencing early through customer relationships, are essential to success. A framework was constructed to take into account the most common challenges that a sales organization could try to tackle in their everyday operations and include some of the presented solution approaches. This construction was a framework named as Sales Canvas.

Sales Canvas aimed to take the elements behind a best practice framework and apply them to selling. The idea for the Sales Canvas was taken from Osterwalder's Business Model Canvas' (BMC) layout and structure (Osterwalder and Pigneur, 2010). BMC seeks to help businesses reinvent themselves, which is not the purpose of Sales Canvas. However, the visual look and the one-pager summarization aspect of the BMC makes it an excellent tool for communication and finding competitive solutions for customers' problems. The Sales Canvas took the idea of a communication tool and tailored a canvas to come up with a value proposition for a single sales opportunity. This effort aimed to combine different business research fields and especially present a new framework within the field of sales research.

The constructed framework was tested with weak market tests in order to validate its usefulness. First it was tested with a real sales case. After that it was shown to colleagues and senior managers to get feedback, and adjusted based on the development suggestions and gained user experience. After improving the construction, it was presented to five executives responsible of public and financial sector sales. The construction received good feedback. After the meeting, the framework has been tested on two more sales cases in its current format. In the meeting, the construction was decided to be taken into use for sales people doing business with those sectors. At this point, it was proven that the solution works to some extent.

In the latter feedback meeting, it was also pointed out that with minor adjustments, the Sales Canvas could be applicable for financial sector sales opportunities as well. Financial and public sector have many similarities in their conservativeness and strict regulations even though financial clients are from private sector. Thus, the scope of use for the developed construction being primarily in public sector could be extended to financial sector through some adjustments and testing.

The framework itself is a process improvement tool specifically designed for do three things:

1. A one-pager that summarizes the key points of a public customer's ITT for easier opportunity validation.
2. A communication tool to get everyone on the same page in sales teams to reach better results.

In addition to these points, it seems there could be use for it in identifying sales opportunities and mapping them down in advance. Moreover, the framework could be used in training sales trainees to learn how to analyze invitation to tender documents and map them down, which managers could then evaluate with them together. Here below is presented the framework itself in its current form.

Sales Canvas		Sales opportunity name		XX-Oct-2015
				Iteration #
Customer	Schedule	Scope	Customer relationship	Technical Solution
Evaluation criteria	Special requirements		References	
Unique value proposition		Pricing		

Figure 15. Constructed framework – Sales Canvas

The boxes in the canvas were chosen based on the findings brought up in the theme interviews, such as customer relationship, evaluation criteria, pricing. Some of the boxes were copied from the BMC as mentioned earlier, such as (unique) value proposition, customer, and solution, as they were fit for sales purposes as well. Thirdly, important elements presented in (customer's) invitation to tender documents were included to the canvas, such as special requirements, references, scope, technical solution and schedule. The selection of what was included in the canvas and where they were derived from, is demonstrated in the figure below.

Sales Canvas		Sales opportunityname			XX-Oct-2015
					Iteration #
Customer ITT, BMC, findings	Schedule ITT	Scope ITT	Customer relationship findings	Technical Solution ITT, BMC	
Evaluation criteria ITT, findings	Special requirements ITT, BMC, findings		References ITT		
Unique value proposition BMC, findings		Pricing ITT, BMC, findings			

Figure 16. Elements of the Sales Canvas

In the following table (see table 24) is provided the need (why), the solution (how), and the two possible use cases (what) for Sales Canvas. Now, it is fair to say that the framework needs more testing and iteration in order to develop it to a professional and valuable framework which can eventually be adopted by broader audience and to bring proof of its support on successful sales.

Table 24: *What, how, and why of Sales Canvas*

WHAT	A one-pager that summarizes the key points of a public customer's ITT for easier opportunity validation. (1)
	A communication tool to get everyone on the same page in sales teams to reach better results. (2)
HOW	Makes it easy to show and discuss the ITT's key points and decide is it worth bidding for our company. (1)
	Clarifies the opportunity big picture for all sales team members. (2)
WHY	Bidding is hard work, expensive, and time consuming, and public sector is not an easy client to sell to. Especially due to the strict public procurement law. (1)
	Choosing most potential sales opportunities from the start and assuring sales teams have a mutual understanding of the opp., help you to ensure that you're bidding to win! (2)

5 DISCUSSION

5.1 Theoretical implications

The literature review painted the colourful picture of two players, public customers and IT (service) companies, who buy and sell according to the rules of public procurement law. Literature review explored the characteristics of these buyers and sellers, the goods being exchanged (IT services), and the procurement law. The literature framework provided the scope for the thesis study. The empirical part explored known and silent rules of public procurement, crucial business challenges to be solved, and solutions to achieve better IT service business relationships. Empirical part focused on deepening understanding of the theoretical framework and seeking solutions within it. In the figure below, high level summary of results is provided.

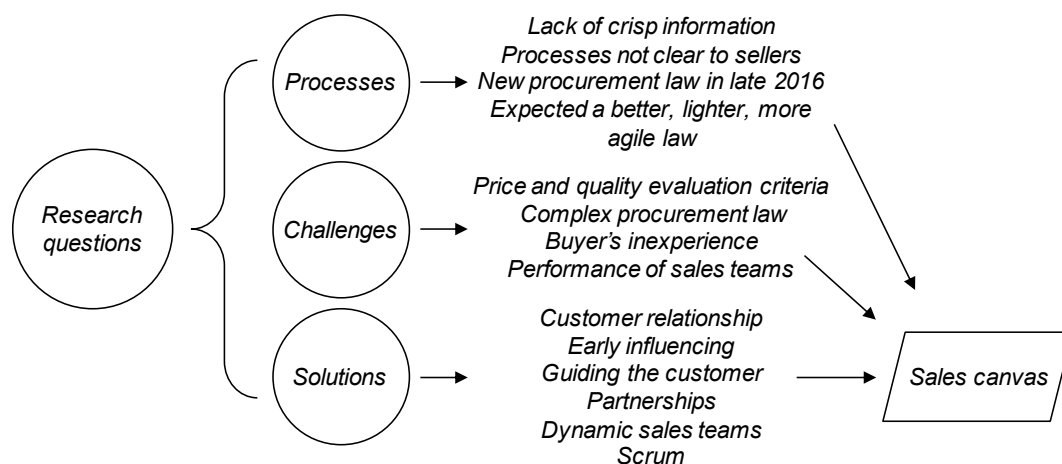


Figure 17. Summary of results

The results gave insight on how selling for these clients is experienced in the case company. The constructed solution, Sales Canvas, was developed with a highly specific market in mind. The framework is made for guiding the efforts of vendor sales teams prior to and during the tendering process. Due to the specific setting's needs, there was not found any fitting tools in the academic literature.

However, numerous sales tools and frameworks can be found from literature, but those tend to be for more general purposes. Sales Canvas' contribution to sales research aims to be a working solution for a specific problem, which can then be modified to answer more general or other specific needs. Estimating the framework's usefulness for

other settings is difficult at this point and it would require testing and development in those settings. The theoretical contribution was in providing new knowledge on sales in the domain of IT business and services.

5.2 Managerial implications

The results suggest the following managerial implications. First, analysis of how sales work done prior the tendering procedures at the moment would be useful, as large share of the findings pointed to influencing or consulting customers before they have started an official tendering process.

Second, regarding the findings presented on what are the main challenges in selling IT services for the Finnish public sector, here's a brief summarization. There was definitely general criticism on the procurement law's strictness, amount of detail, and complexity. Secondly, price as dominating evaluation criterion created problems as well as the difficulties in judging quality. Moreover, the use of general terms and conditions such as JIT and IT2010 were not warmly welcomed by everyone, but for some they did not seem to be that big of a problem. Fourthly, buyers' inexperience was brought up several times in different forms. What all these challenges have in common is that they pointed out external problems. On that account, the participant observation did bring up challenges in the seller's internal operations, finding areas that the sales party could have a more immediate impact on. Gaining understanding of the sales opportunity takes time and organizing and managing a sales team was found to have some challenges.

Lastly, taking into account the empirical study's findings, the Sales Canvas was developed. Sales Canvas could be used for guiding the efforts of vendor sales teams prior to and during the tendering process. Testing the tool and evaluating its benefits as well as the case company to try out new things to evolve as a business, would be the main purposes.

Furthermore, there could be potential for Scrum-type of project management in bidding activities. Scrum as project management framework has been applied to many types of projects outside software development, and could bring efficiency to bidding activities with its hands-on approach.

6 CONCLUSIONS

6.1 Conclusive remarks

The purpose of the Master's Thesis was to answer the research questions and to produce new scientific knowledge. The answers to this thesis' research questions are examined and discussed throughout the thesis, especially in 'Results and Discussion' chapters. To summarize them, here are short answers to all of these questions. The new scientific knowledge emerges throughout the thesis.

The answer to the main research question 'How to compete effectively on public tenders concerning IT services?' is provided through the three research sub-questions.

How are IT services bought and sold in Finnish public sector market? IT services exceeding 30 000€ in total contract value are tendered in accordance to Finnish procurement law, Act on Public contracts (30.3.2007/348) (Finlex, 2007). The law is strict and complex, and does not seem to support efficient tendering of IT service contracts. Moreover, the legislation has become more strict and detailed during the last reforms. The 524 appeals to market court on public procurement matters seem to also indicate that there is demand for a clearer and better functioning legislation. A reformed procurement legislation is set to come into force in late 2016.

What are the main challenges of selling IT services for the Finnish public sector? External challenges were evaluation criteria used for price and quality factors, too complex procurement law, and buyers' inexperience in tendering of IT services. Regarding internal challenges in the case company, it was identified that there is room for improvement in the sales efforts and project management during tendering process.

Through what kind of approaches sellers of IT services can overcome these challenges? IT vendors need to be able to recognize the most crucial steps in the tendering process and to develop best practices for their sales operations. This thesis developed a framework for guiding the efforts of vendor sales teams prior to and during the tendering process. The framework identified seven focus areas specific to the case company: the tenderer-customer relationship, evaluation criteria for bids, relevant customer references, pricing strategy, special qualifications required from the vendor, the scope of the procured services and the vendor's technical solution. The framework

was based on Osterwalder's Business Model Canvas (Osterwalder and Pigneur, 2010) and was constructed using a constructive research approach combined with participant observation, theme interviews and analysis of customers' tender documents in the public sector. The framework was designed specifically for the case company and was taken into use by the case company's sales teams as a sales tool.

One benefit of using this framework is that it enables the vendor to assess their chances of winning the bid, thus avoiding the use of time and money on futile tenders. Furthermore, the framework would allow sales team members not only to more effectively direct their sales efforts, but also to improve internal communication.

Moreover, IT vendors require thorough expertise of the legislation in order to know how to influence the procurement scope at the right time and be competitive in this market. Also, there could be potential for Scrum-type of project management in bidding activities to improve the internal project management.

The significance of these results are considered as three things. Firstly, the findings relate to a specific case company and the public sector as their market segment. Thus, there is no proof of the findings significance for other IT vendors. Second, the developed framework has to still bring proof of achieving greater results. However, as in the case of Business Model Canvas, proof of achieved financial (quantitative) benefits can be difficult to provide. Measuring the value of such frameworks is not straightforward, and has to take also qualitative factors into account. Thirdly, thinking in a broader scope, how can one create and evaluate frameworks that are to improve knowledge workers' thinking and performance, or a process, if only scientifically proven methods are accepted. Perhaps, there is demand for other type of development processes as well, other than scientific.

Lastly, there is also a societal aspect to this research. Finland – the land of lakes, forest and regulations – is in an economic spiral of decline and has lost a fair share of its competitiveness. Perhaps this thesis can also demonstrate that the manner in which Finland is being regulated at the moment, does not serve the country's economy, and especially the functionality of markets and promotion of competition.

6.2 Limitations and suggestions for future research

After studying public procurement from multiple sources such as the legislation itself (Finlex: Acts and Decrees concerning public contracts), descriptions by Ministry of Employment and the Economy (website), and explanations by Public Procurement Advisory Unit (website), getting a comprehensive understanding of all the regulation concerning public procurement has been challenging at least. Thus, there probably are knowledge gaps of the law's rules that were not recognized in this thesis, or possible mistakes in interpreting the law, which could affect some parts of this research. However all effort was taken to ensure that the basics and overall conception of public procurement of service contracts would be correct, and possible mistakes would concern more detailed statutes. Moreover, the framework in this thesis was based on the researcher's empirical findings which are subjective to some extent and thus represent the researcher's best possible interpretation of the research environment and phenomena.

Future work should focus on validating this framework by training the salesforce in using the framework, more widely implementing it and comparing the benefits gained against those of other tools currently used in the case company. Moreover, other directions would be to study how IT companies find the new procurement law 2016 after it has come to effect. Also, studying how buyers' find the procurement of public service contracts would provide valuable information to be compared against the seller's views explored in this research.

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Appendix A: Pilot interview question set

Question set used in the pilot interview.

1. What is a bid project?
 - a. Do you usually call them 'bid projects' or proposals...?
 2. What is sold in Application Management Services (AMS) bid projects?
 3. What are the processes of bid projects?
 - a. Do bid projects have some kind of agreed internal processes to follow?
 4. How a bid project team is usually organized?
 - a. Would you say it is usually organized in "war room" –way of working?
 5. In how many bid projects have you been involved in?
 6. What has been the duration of these bid projects?
 7. How are the proposals presented to customer?
 8. What are the biggest challenges in bid proposals?
 9. How should a bid project be organized to be effective?
 10. Open comments?
 11. Theories to consider?
-

Appendix B: 2nd iteration of interview question set

Questions were edited after the pilot interview. These questions were sometimes used when observing sales people to test how the questions worked and to understand more of the minds of those persons. Some new questions were also suggested by senior colleagues.

1. What is your current role at the company?
 2. In how many bids have you worked on?
 3. How is the public procurement process organized?
 4. What are the most challenging aspects from bidding perspective and common pitfalls for the supplier?
 5. How to be agile in largely regulated market segment and win the deals?
 6. How to win the deals for Finnish (tax paying) suppliers and not losing for foreign suppliers?
 7. How to compete effectively on public tenders?
 8. What would be fruitful to focus on research?
 9. Open comments.
-

Appendix C: 3rd iteration of interview question set

Questions were reformed after having three sessions with a sales executive, the public sector partner of the case company (Person A). The scope of the thesis was narrowed to IT services sales for public sector in Finland. Language changed to Finnish due to the planned interviewees.

1. Asiakkaan laatimat sopimusehdot ja niistä neuvotteleminen
 - a. IT2000 ja IT2010 sekä JIT (Julkisen hallinnon IT-hankintojen ehdot) ovat yleisiä IT-hankintoja koskevia ehtoja. Miten koet näiden ehtojen hyödyllisyyden IT-hankkeiden kannalta?
 - b. Toimittajat käyttävät joskus torjuntaliitettä IT-ehtojen torjumiseen ja muutoksien ehdottamiseen. Miten hyvänä näet tämän keinon?
 - c. Millä keinoin voi neuvotella asiakkaan laatimista yleisistä sopimusehdoista?
 - d. Onko asiakkaan sopimusehdot yleensä realistisia?
 2. Tarjouspyynnön muutoseikat vs. asiasisältöön ja ostajien osaaminen
 - a. Millä tasolla ostajien osaaminen on IT-hankinnoissa?
 - b. Tuntuuko muutoseikat ajavan tarjouspyynnössä/sopimusehdoissa asiasisällön edelle?
 - c. Miten alan toimijat (IT-talot) voivat vaikuttaa ostajien ammattitaitoon?
 3. Hinnan ja laadun merkitys tarjouspyyntöjen painoarvoina
 - a. Miten suhtaudutte tarjouspyyntöihin, joissa hinnan painoarvo tarjousten arvostelukriteerinä merkitsee yli 50%?
 - b. Kuinka suurena näettä laadun painoarvon hintaan verrattuna?
 - c. Miten toimisi ratkaisuna, että toimittajan yrittää riittävän aikaisessa vaiheessa mallintaa ongelmaa ja sen ratkaisua yhdessä asiakkaan kanssa (business problem and solution)?
 4. Suhteiden merkitys hankinnassa
 - a. Miten suhteiden merkitys näkyy julkisen sektorin hankinnoissa asiakkaan ja toimittajan välillä?
 - b. Kuinka tärkeässä roolissa näet suhteiden merkityksen julkisella sektorilla, jossa hankinnat ovat hyvin säännösteltyjä?
-

- c. Ovatko hyvät suhteet avain sille, että päästään neuvottelemaan hinnan painoarvoista arvostelukriteerinä ja hankinnan ehdoista?
 5. Olemassaoleva toimittaja vs. uusi toimittaja
 - a. Miten eroaa tarjouksen kannalta oletko olemassa oleva toimittaja vai yrittämässä voittaa nykyisen toimittajan?
 - b. Jos olet nykyinen toimittaja, onko ongelma määriteltävä ja ratkaisu suunniteltava uudestaan, hinnoittelua myöten? (Ikään kuin olisi uusi toimittaja)
 - c. Asiakkaan on kilpailutettava IT-toimittaja uudestaan sopimuksen päätyttyä. Mitä keinoja on jos asiakas haluaa pitää nykyisen toimittajan?
 - d. Miten näet esimerkiksi hinnoitteluedun saavuttamisen migraation ja transition kustannuksilla, jotka nykyisellä toimittajalla on käytännössä nolla jos heidän sopimusta jatketaan?
 6. Emme ole yksin – kilpailijakentän muuttuminen ja huomioiminen
 - a. Miten IT-toimittaja pärjää nykyään yksin markkinoiden kilpailussa? Täytyykö hakea liittoumia muiden alan toimijoiden kanssa?
 - b. Uuden tyyppinen kilpailu – offshore-toimittajat tekevät tarjouksia suoraan halvemman kustannustason maista, kuten Tata Consultancy Services. Miten koet nämä haasteena paikalliselle toimijalle? Mitä paikallinen toimija voi vastata tähän haasteeseen?
 - c. Oletko törmännyt käsitteeseen Pure Play Indians?
 - d. Voidaanko laadullisiin tekijöiden painoarvoihin vaikuttaa tarjouspyynnöissä?
 - e. Onko teknologisen monopolin tavoittelemine toimiva ratkaisukeino tarjouskilpailuijen voittamisessa?
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Appendix D: 4th and final interview question set

Final version of the question set was created by changing the questions to be more open, adding questions related to research questions and by adding a question of interviewee's background. The questions were once more checked through with the public sector partner in the case company and used when conducted the seven theme interviews (6 internal and 1 external).

Kysymyspatteri: IT-palvelujen myynti julkiselle sektorille Suomessa

1. Mikä on nykyinen roolisi yrityksessäsi ja kuinka monta vuotta olet ollut alalla? Kuinka monta IT-palvelujen myynticasea/tarjousta olet kaikkiaan tehnyt tai ollut mukana tekemässä? [haastateltavan taustatietoa]
2. Miten julkinen hankintaprosessi on organisoitu? (Kuvaile lyhyesti pääpiirteittäin) [voidaan testata haastateltavan tietämys aiheesta sekä varmistaa yhteisymmärrys]
3. Mitä näkisit olevan julkisen hankinnan haasteita myynnin kannalta ja yleisiä kompastuskiviä palveluntarjoajalle? Mitä olisivat näiden haasteiden ratkaisutavat?
4. Olemme tunnustaneet kuusi haastetta IT-palvelujen myynnissä julkiselle sektorille ja ratkaisut niihin. Miten samaa mieltä olette näiden kuuden haasteen ja ratkaisun kanssa? Antakaa lyhyt kommentti ja arvio asteikolla 1-5 tai EOS. (1=täysin eri mieltä, 2=jokseenkin eri mieltä, 3=ei samaa eikä eri mieltä, 4=jokseenkin samaa mieltä, 5=täysin samaa mieltä, EOS = En osaa sanoa)
 - a) Asiakkaat käyttävät IT-alan sopimusehtoja JIT tai IT2000/IT2010 ja vaativat toimittajaa noudattamaan niitä. Ehdot eivät ole kohtuullisia ja monelle toimittajalla niiden noudattaminen ei ole kannattavaa liiketoimintaa.

Ratkaisu:

- i) Torjuntaliitettä käytetään IT-ehtojen torjumiseen ja muutoksien ehdottamiseen
 - ii) Yritetään neuvotteluissa muuttamaan ja löytämään yhteinen malli. (Esim. "usein hankinnoissa vastaan tuleva haaste, mutta ratkaisu tulisi toteuttaa näin...". 4 = jokseenkin samaa mieltä)
- b) Tarjouspyyntöjen muutoseikat ajavat monesti asiasisällön edelle ("lakitekstimäisyys") julkisella sektorilla ja ostajien osaaminen on riittämätöntä.

Ratkaisu:

- i) IT-talojen tehtävä myyjänä on valistaa ja opastaa ostajia/asiakasta hankkeen ja tarjouspyynnön suunnitteluvaiheessa, jotta

Tabtotila:

- ii) Lopullinen tarjouspyyntö vastaisi mahdollisimman hyvin asiakkaan tarvetta eikä olisi kompastuskiviä.
- c) Ne hankkeet, joissa hinnan painoarvo on selvästi yli 50%, ei muilla laadullisilla kriteereillä ole juurikaan merkitystä.

Ratkaisu

- i) Riittävän aikaisessa vaiheessa asiakkaan kanssa ongelmaa ja sen ratkaisua mallintamassa (business problem and solution). Näin voidaan tuoda laadullisien seikkojen tärkeys asiakkaalle tietoon ajoissa.
- d) Suhteiden kautta vaikuttaminen hankkeiden sisältöön

Ratkaisu:

- i) Panostaminen tähän osa-alueeseen tärkein
 - (1) Ihmisten tunteminen
 - (2) Oman organisaation esilletuominen aina oikeanlaisessa valossa kaikissa tilanteissa
- ii) Asiakassuhteiden rakentaminen, suhteet riittävän korkealla tasolla asiakkaan johdon kanssa ja suhteiden ylläpito

Tabtotila

- iii) Avain sille, että päästään edes neuvottelemaan hinnan painoarvo ”oikein” ja asiakkaalle ymmärrys siitä että hankinnan ehdot asialliset
- e) Olemassa oleva toimittaja vai nykyisen toimittajan voittaminen

Ratkaisu

- i) Jos olet nykyinen toimittaja, on määriteltävä ongelma ja suunniteltava ratkaisu uudestaan, hinnoittelua myöten – ikään kuin olisi uusi toimittaja. Näin on vertailukelpoinen ja kilpailukykyinen kilpailijoiden ratkaisujen kanssa.
 - ii) Asiakkaan ”pakko” kilpailuttaa sopimusajan päätyttyä –tapaus
 - (1) Nykyisellä toimittajalla etuja ja keinoja. Esimerkiksi migraation ja transition kustannukset, ovat osa vertailuhintaa, jolloin nykyisellä toimittajalla etulyöntiasema kun ei tarvitse hinnoitella jo tehtyä migraatiota ja transitiota tarjoukseen
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- (a) Hankintalaissa mainittu, että kilpailuttamisen tulisi olla tasa-arvoista ja poistettava tällaiset kustannukset toimittaja-arvioinnista. Onko tällaista tullut vastaan?
- f) Kilpailijakentän muuttuminen ja huomioiminen: 1. On entistä hankalampaa pärjätä yksin ja 2. Uuden tyyppinen kilpailu – esim. Pure Play Indians (myydään globaaleja resursseja/palveluja suoraan Intiasta, ilman paikallista myyntikonttoria)

Ratkaisu

- i) Liittoumat muiden toimijoiden kanssa – Ekosysteemi-ajattelu
 - ii) Hyvät suhteet asiakkaaseen oltava olemassa. Asiakkaan haluttava meidät ja pidettävä toimittajan palveluista.
 - iii) Hankinta rakennettu siten, että pelkällä hinnalla ei pärjää
 - iv) ”Ratkaisupyynnöt” rakennettu niin, että meidän ratkaisu antaa parhaat mahdolliset laatu-pisteet
 - v) Laadullinen etu – Tilapäinen monopoli jollain teknologia-osa-alueella
5. Miten kilpailla menestyksellisesti julkisen sektorin tarjouskilpailussa? (kiteytys aiemmista asioista)
6. Miten voisi toimia ketterästi säännöstellyllä julkisen sektorin markkina-segmentillä? (ketterä = agile, ketterät menetelmät, innovatiivisella tavalla toimiminen)
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