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Competitor Analysis Process

A Proposal for the Critical Power Business

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This study has been the most interesting journey that I have ever experienced in my professional development. On the way, challenging myself at the same time in the academic world as well as in a new field of expertise in business life – not to forget the balancing of workload with my dearest family. However, even though I am responsible of this Thesis report, there are several people on the background who have contributed on the study or given their valuable support to me during my studies. I would like to thank you all, as you made this grade of the study possible.

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<p>This thesis focuses on developing the Competitor analysis process for a Product Marketing organization, which is a part of a global company competing in electrical industry. Increasing competition necessitates the sharpened Competitor analysis practices for which the case organization current tools were not sufficient. Due the lack of integrated systematic process, the case organization was not able to fulfil the operative and strategic needs of Competitor analysis. Therefore, the case organization needed to develop the Competitor analysis process to improve the efficiency and effectiveness of their analysis.</p> <p>This study reviews the crucial elements of Competitor analysis as well as develops the logic for Competitor analysis process for the case company. In this study, the qualitative research methodology and Design research approach were utilized due to specific nature of the research problem and business context. The research problem involves people and develops from practice to theory by exploring of the phenomena. The research design of this thesis includes the description of five predefined stages, three data collection rounds and the specified outcome from each the stages. The data was collected by conducting interviews and workshops as well as exploring the company documentation. In this study, the current state analysis was utilized first to get comprehensive understanding of the current practices in the case organization. This was followed by the theoretical construct creation according to literature and best practice which focused on tackling the identified weaknesses so that to achieve the objective of this study.</p> <p>This Master's thesis revealed the key challenges of the Competitor analysis in the case organization. The challenges were strongly related to the lack of process design and management as well as the uncertainty of Competitor analysis tools, methods and techniques. The challenges were overcome by retrieving the best practice from literature and formulating it into the theoretical construct of Competitor analysis process, which was then utilized for the proposal development. As the result of this thesis, the case organization has broader understanding of Competitor analysis and a robust Competitor analysis process design with the integrated tools.</p> <p>By utilizing the proposed Competitor analysis process, the case organization's related practices are integrated into the overall standardized system, which ensures that all the vital elements are in place to analyse competitors and their offering in current business context. The utilization will expand the Competitor analysis offering, improve the collaboration and transparency of the practices as well as enable solid ground for a continuous improvement of the Competitor analysis. The knowledge gained from this study can be used as a source for future development also for other business units in the case company.</p>	
Keywords	Competitor analysis, Process development, Competitive intelligence, marketing, collaboration

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Acronyms

5Ps	Product, Price, Promotion, Place and People of marketing
BDM	Business Development Manager
BI	Business Intelligence
CA	Competitor Analysis
CAS	Competitor Analysis System
CI	Competitive Intelligence
CPS	Critical Power Solutions organization
CSA	Current State Analysis
CSF	Critical Success Factors
GTM	Go to market
IT	Information Technology
KSF	Key Success Factors
MIT	Market Intelligence Team
PQ	Power Quality
PQED	Power Quality and Electronics Division
RASCI	Responsible, Accountable, Support, Consulted, Informed responsibility matrix
R&D	Research and Development
ROI	Return on investment
RSS	Really simple syndication
RTL	Refuse to Lose tool
SIPOC	Supplier, Input, Process, Output, Customer analysis tool
SWOT	Strengths, Weaknesses, Opportunities, Threats analysis tool
TCO	Total Cost of Ownership
UPS	Uninterruptable Power Supply

1 Introduction

This thesis explores the Competitor Analysis (CA) methods and practices in the case company. This study proposes a new process which gives the organization broader understanding of how to analyze competitors in the electrical industry's power quality markets and how to collaborate in the CA process environment.

Competitor Analysis is a critical part of the case company's product marketing operations and provides vital knowledge about competitors for the sales and support functions. Comprehensive CA is significant aid in order to make grounded strategic and operative decisions in the markets.

1.1 Business Context

The case company is a power management company with 2017 sales of \$20,4 billion. It provides energy-efficient solutions that helps customers effectively manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. The company vision is to improve the quality of life and the environment through the use of power management technologies and services. It employees approximately 96,000 employees globally and sells products to customers in more than 175 countries.

In Finland, the case company has experience in UPS (Uninterruptable Power Supply) manufacturing since 1962. Organization's UPS expertise is solving the most critical challenges in backup power protection. Functions include R&D, Manufacturing, Test Engineering, Product Marketing, Purchasing, Marketing, Sales, Tech and Service Support. Together these functions enable company's Critical Power Solutions business. Manufacturing is based on high variation of standard as well as customized products.

Critical Power Solutions (CPS) organization is a part of Power Quality and Electronics Division (PQED) of the company. The CPS organization is responsible for offering superior customer support, fulfilling customer customization and configuration requirements, marketing products and monitor markets and technology development of the industry. For the CPS one of the most important factors to stay competitive in power management industry is the understanding of competitors, what they are offering compared own product and service portfolio in challenging power quality markets.

1.2 Business Challenge, Objective and Outcome

Presently, in the context of increasing competition, a sharpened competitor analysis is needed for which the current tools of PQED's Critical Power Solutions organization are not sufficient. Competitor analysis process should enable evidence-based conclusions to the company strategy process and customer offering development as well as tactical tools for the daily business.

Presently, the case organization is lacking a broad understanding of Competitor analysis especially what comes to the competitor effective price level compared to customer's real value experience. Product comparison scorecards, called "Battle cards", exist but they are not giving enough perspective for the product pricing process and do not necessarily reveal value of features that the competitors are offering. There are also many discrete market studies and country specific analyses available which are currently requiring too much of effort to utilize and keep up-to-date.

The objective of the study is to propose a *Competitor analysis process*.

The outcome of the Thesis is a Competitor analysis process which can be practically utilized as guideline for the Critical Power Solutions organization. The study will also provide valuable information to broaden CPS organization's understanding of Competitor analysis.

1.3 Structure of the Thesis

This study is conducted by analyzing the current state by utilizing business representative interviews and exploring related materials. This knowledge is then compared to literature and best practice. The proposal builds up from the elements which are developed together with the CPS Product Managers, Business Development Managers and the Market intelligence team. Final proposal for the new Competitor analysis process is documented and presented to the business owners and report of the research written in this thesis.

The thesis report is written in seven sections. Section 1 is the introduction. Section 2 describes the research design and data collection and analysis methods. Section 3 gives insights into the current state of Competitor analysis at the case company and overviews the expectations as well as relevant strengths and weaknesses of the current practices. Section 4 reviews the key concepts from the related literature and benchmarks available

best practice. Section 5 develops and pulls together the proposal elements. Section 6 validates the final proposal and gives recommendations to the case organization for the implementation. Finally, section 7 gives conclusions, summarizes the thesis and evaluates the quality of the research process and outcomes of the thesis.

2 Method and Material

This section introduces the research approach, data collection and analysis methods utilized in this study. It deals, first, with the research approach and then describes the research design for this study, as well as the description of the methods how the study was conducted. It includes also the description of applied data collection and analysis methods.

2.1 Research Approach

Research approach can be defined as a plan and a procedure for the research which is decided according to philosophical assumptions of the researcher. These assumptions originate from the specific methods of data collection, analysis and interpretation which are based on the nature of the research problem, or the researcher's personal experience and the audience of the study. (Creswell 2013: 31) In research, there is always a problem for which the research approach utilizes a broad concept of data gathering, analysis and interpretation methods accordingly. (Kananen 2013: 9-12) Choosing a research approach depends on the actual problem and the existence of any existing theories or models which the explains phenomenon. (Kananen 2013: 26-29).

Fundamentally, the research realms can be characterized by the use of qualitative and quantitative research methods which in the field of business are utilized in research approaches such as a case study, design research, and action research. (Kananen 2013: 12) Theory and practice inducts, deducts or abducts depending on the research method and approach. In qualitative research, research inducts or develops for practice to theory and correspondingly in quantitative research, research deducts or develops from theory to practice. (Kananen 2013: 28-39)

According to Creswell (2013), qualitative research aims at exploring and understanding the relations of individuals and groups in the social or human context. In qualitative research, theories are built and tested mostly inductively, and the data collection utilizes emerging questions and procedures for data analyses of general themes for which the researcher makes interpretations. On the contrary, quantitative research aims at testing theories by analyzing relationships and variables. In quantitative research, the theories are tested mostly deductively, and the assessment is typically based on measurements and numeric data, analyzed utilizing statistical methods. (Creswell 2013: 32) Qualitative and quantitative research can be combined as mixed research methods which collect

and integrate both data forms as well as aim to provide a more comprehensive understanding of the research problem than singles approach itself. (Creswell 2013: 32)

Also, the two main research strategies, qualitative and quantitative, differ in forming questions and seeking responses. In qualitative research, interview questions are typically open and responses descriptive, while in quantitative research questions are more structured which allows for responses to be analyzed as numeric (Kananen 2013: 29)

For this study, a qualitative strategy was selected, coupled with a Design research approach due the business objective and specific nature of the business issue and context. Groundings for this selection are further explained in the end of this sub-section.

According to Kananen (2013: 9-46), Design research applies for practical work and produces suitable solutions for solving problems. It consists of group of different research methodologies that are utilized according to the objective and situation on hand. Regarding a research approach or strategy, the design research combines qualitative and quantitative research methodologies. Design research responds to the development work needs to improve operations in the business context. Design research utilizes abduction from the theory and applies it to practice which aims for a change. In the Design research and Action research, the researcher acts as the organizer in the change. Additionally, in Design research, the researcher participates in an external role, while in Action research he/she are more actively involved in the internal role.

Design research is based on mainly open questions and responses. Risk to Design research is not to be able to differentiate from an everyday problem solving, or to leave the solution at the development work stage. (Kananen 2013: 9-46) Conversion of the development work into a thesis requires documentation, using scientific methods that produce new reliable knowledge. The fundamental questions related to Design research are answering to factors which influence the developed phenomenon and causal relationships within, development or change success, impacts and experiences. (Kananen 2013: 26)

This study embraces characteristics of qualitative research methods combined using the Design research approach. Related business context involves people, groups and specific business problem which needs to be improved. There are no assumptions or intentions to conduct statistical methods or numeric data collection in the study. The researcher is acting as an external consultant for the customer of the research and not operating in the actual business environment. In order to expose the phenomenon, respond to research problem and reach the objective of the study, this inquiry requires open questions and responses. These assumptions guided the selection of the research approach which derives the research design of this thesis, as described below.

2.2 Research Design

The research design of this study and explains the execution stages and their expected outcomes. The research design is presented step-by-step in Figure 1.

STAGE	DESCRIPTION	OUTCOME	DATA
OBJECTIVE SETTING	<ul style="list-style-type: none"> To propose a competitor analysis process/framework 	COMPETITOR ANALYSIS PROCESS	
CURRENT STATE ANALYSIS	<ul style="list-style-type: none"> Collect internal customer expectations Description of current competitor analysis practices +/- of current state 	SUMMARY OF EXPECTATIONS, STRENGTHS AND WEAKNESSES	DATA 1 <ul style="list-style-type: none"> Interviews Workshops Company documents
BEST PRACTICES ON COMPETITOR ANALYSIS	<ul style="list-style-type: none"> Competitor analysis methods and techniques from the relevant literature Concept according to weaknesses and expectations 	CONCEPTUAL FRAMEWORK	
DEVELOPING THE PROPOSAL	<ul style="list-style-type: none"> Developing proposal for the competitor analysis process based on the outcome of current state, conceptual framework and feedback 	PROPOSAL OF COMPETITOR ANALYSIS PROCESS	DATA 2 <ul style="list-style-type: none"> Workshops Stakeholder theme interviews
VALIDATION OF THE PROPOSAL	<ul style="list-style-type: none"> Proposal presentation Stakeholder feedback on the proposal Corrections/additions accordingly to the proposal 	FINAL VERSION OF THE COMPETITOR ANALYSIS PROCESS	DATA 3 <ul style="list-style-type: none"> Management and stakeholder feedback session

Figure 1. Research design of this study.

As shown in Figure 1, the research design of this study includes five main stages and three data collection rounds as well as points to the expected outcome from each stage.

First stage defines the objective and the outcome for the study. The case company has a business challenge in efficient utilization of competitor analysis. This provides the study with the objective scoped for the Critical Power Solution (CPS) organization.

Second stage is the current state analysis (CSA) in order to collect internal customer expectations and get in-depth understanding of the current competitor analysis practices. Outcome of this stage is a summary of expectations, strength and weaknesses of the current competitor analysis practices in CPS organization. The CSA is based on the Data 1 which includes conducting interviews, workshops and reviewing related company documents.

In the third stage, the purpose is to find best practice on competitor analysis from the literature and build up the conceptual framework for building CA, based on, first, the expectations and strength and weaknesses from the CSA, and second, suggestions identified from the available knowledge. Conceptual framework of the study combines

the most relevant selected elements from the search for best practice into own construct for developing the proposal for the Competitor Analysis Process for the case company

In the fourth stage, the proposal developing is developed based on the available knowledge and insights from the previous stages, as well as stakeholder interviews and Data 2 workshop conducted at this stage.

The fifth and final stage validate the initial proposal. Validation is conducted as a trial round by presenting the proposal to the company management and stakeholders in a validation workshop. Feedback from the validation workshop is collected to Data 3 collection. The proposal is then further developed, and additions made accordingly if necessary. Outcome of this final stage of the final proposal for the Competitor Analysis Framework/Process.

2.3 Data Collection and Analysis

This study utilized a variety of data sources conducted in three rounds of data collection. The details of three data collection rounds are described in Table 1.

Table 1. Data collection rounds 1-3.

CONTENT	SOURCE	INFORMANT	TIMING	OUTCOME	
DATA 1 CURRENT STATE ANALYSIS	<ul style="list-style-type: none"> Stakeholder and internal customer expectations Description of current competitor analysis practices +/- of current stage 	<ul style="list-style-type: none"> Quality system documents Stakeholder current state workshops Stakeholder and internal customer interviews 	<ul style="list-style-type: none"> Product Manager 1 Product Manager 2 Product Manager 3 Marketing Manager Key internal Customers x 4 Business Development Manager Market Intelligence team representative 	12/2018 - 01/2019	- SUMMARY OF EXPECTATIONS, STRENGTHS AND WEAKNESSES
DATA 2 DEVELOPING PROPOSAL	<ul style="list-style-type: none"> Developing Competitor Analysis Process/Framework steps Defining roles & responsibilities 	<ul style="list-style-type: none"> Stakeholder future state workshop Stakeholder theme interviews 	<ul style="list-style-type: none"> Product Manager 1 Product Manager 2 Product Manager 3 Marketing Manager Business Development Manager Key internal customer 	02/2019 - 03/2019	- PROPOSAL OF COMPETITOR ANALYSIS PROCESS
DATA 3 VALIDATION /FEEDBACK	<ul style="list-style-type: none"> Stakeholder feedback and improvement ideas on the proposal 	<ul style="list-style-type: none"> Stakeholder feedback review 	<ul style="list-style-type: none"> Company decision maker Data 2 participants 	03/2019 - 04/2019	- FINAL VERSION OF THE COMPETITOR ANALYSIS PROCESS

As shown in Table 1, the study utilizes various types of data sources, such as the company quality system documents, stakeholder and internal customer interviews, workshops and reviews. To have holistic evidence and understanding in each stage of the data collection, business representatives from several functions were involved to provide

their input for the study. Data from the CSA stage is collected into Data 1, proposal development data into Data 2 and validation feedback data into Data 3. Table 2 provides further details of CSA stage data collection Data 1.

Table 2. Details of data collection Data 1.

	Role	Data type	Topic, description	Date, length	Documented
Internal Stakeholders					
1	Internal stakeholders	Workshop	Project kickoff Collecting expectations Tool and process mapping Confirming next steps	13.12.2018 1 h 30 min	Field notes Initial expectations Process map draft
2	Product Manager 1	Face to face interview	Collect expectations for the CA Experiences of current state Defining of existing Competitor Analysis practices Collecting future improvement ideas	31.12.2018 60 min	Field notes & Recording
3	Product Manager 2	Face to face interview	Collect expectations for the CA Experiences of current state Defining of existing Competitor Analysis practices Collecting future improvement ideas	4.1.2019 60 min	Field notes & Recording
4	Product Manager 3	Face to face interview	Collect expectations for the CA Experiences of current state Defining of existing Competitor Analysis practices Collecting future improvement ideas	4.1.2019 60 min	Field notes & Recording
5	Business Development Manager	Face to face interview	Collect expectations for the CA Experiences of current state Defining of existing Competitor Analysis practices Collecting future improvement ideas	9.1.2019 60 min	Field notes & Recording
6	Marketing Manager	Face to face interview	Collect expectations for the CA Experiences of current state Defining of existing Competitor Analysis practices Collecting future improvement ideas	9.1.2019 60 min	Field notes & Recording
7	Internal stakeholders	Workshop	Validate the CSA findings Summarize expectations, strength and weaknesses of the CSA	30.1.2019 1 h 30 min	Field notes Process map Summary table of CSA outcome
Key Internal Customers					
8	Key internal Customer 1: Sales Manager FI	Face to face interview	Collect expectations for the CA Experiences of current state Strength and weaknesses of current CA information and collaboration Collect improvement opportunities	9.1.2019 45 min	Field notes & Recording
9	Key internal Customer 2: Project Manager - Project Development	Face to face interview	Collect expectations for the CA Experiences of current state Strength and weaknesses of current CA information and collaboration Collect improvement opportunities	9.1.2019 50 min	Field notes & Recording
10	Key internal Customer 3: Team Leader –	Face to face interview	Collect expectations for the CA Experiences of current state	14.1.2019 45 min	Field notes & Recording

	Application Engineering		Strength and weaknesses of current CA information and collaboration Collect improvement opportunities		
11	Key internal Customer 4: Sales Director UK	Web meeting interview	Collect expectations for the CA Experiences of current state Strength and weaknesses of current CA information and collaboration Collect improvement opportunities	14.1.2019 60 min	Field notes & Recording
Corporate Support					
12	Market Intelligence team representatives	Web meeting interview	Discuss about the current services provided for the CPS team Review of current CA expectations and improvement ideas from the stakeholders Capture support possibilities for the future of CA	16.1.2019 50 min	Field notes & Recording

As shown in Table 2, in this study 10 business representatives were interviewed, and two workshops facilitated in order to collect expectations, current state information, opportunities for improvement and validate the findings. First interview group consist of key internal stakeholders which contributes on CA within CPS organization. Second interview group includes internal customers for the CA provided by CPS team (Sales teams, Product Development and Application Engineers). Third source includes market intelligence team which has been providing vital market information for CPS team as one of the inputs of CA.

In Data 1 collection, related company quality system documents were also reviewed where applicable. This documentation is basically evidence for the current state and consist of brief description of current CA practices and tool analyses. These documents are listed in Table 3 below.

Table 3. List of internal documentation used in data collection 1, CSA.

	Name/type of document	Volume	Description
1	Competitor analyses MS Power Point	3 p.	Brief description how the competitive information is analyzed with existing tool and findings shared
2	Battle Card MS Excel Workbook	3 pcs	Summarizes own product strengths and weaknesses to the sales and comparison to a one major competitor's product
3	Competitive Matrix MS Excel Workbook	3 pcs	Consolidated competitive data collected into one comparison file including competitor products. Compares competitor products to own offering and is used as an input to a product Battle Cards
4	Market Study report	1 pcs	UPS Hardware Market Index report

The purpose of Data collection 1 was to get understanding of stakeholder expectations, map the current state of CA and collect opportunities for improvement. The interviews in this data collection were conducted face-to-face and through web meetings. Interviews

were conducted in Finnish and English, recorded, validated and translated into English for the field notes. Background information of the study was sent to the interviewees before and the field notes were checked with the informant after the interviews before utilizing in this study. The questions and field notes from the interviews are documented in Appendix 1.

Table 4 provides details about Data 2 collection for the proposal building. Data 2 collection was gathered using the same methods than in Data 1 collection.

Table 4. Details of data collection Data 2.

	Role	Data type	Topic, description	Date, length	Documented
Internal Stakeholders					
1	Internal Stakeholders	Process Development Workshop	Defining of new Competitor Analysis process proposal according to CSA findings and best practices from the literature	18.3.2019 4 h	Workshop design Process steps, Process content description
2	Product Manager 1	Face to face discussion	Developing Competitor Analysis process steps	26.3.2019 30 min	Process steps, Process content description
3	Product Manager 2	Face to face discussion	Developing Competitor Analysis process steps	26.3.2019 30 min	Process steps, Process content description
4	Product Manager 3	Face to face discussion	Developing Competitor Analysis process steps	26.3.2019 30 min	Process steps, Process content description
5	Marketing Manager	Face to face discussion	Developing Competitor Analysis process steps	28.3.2019 60 min	Process steps, Process content description

The purpose of Data collection 2 was to define Competitor analysis process initial proposal, including process steps and their description in respect of purpose, timing, responsibilities as well as supportive tools, methods and techniques. The initial proposal development and content for each step of the process is covered in Section 5.

Finally, Table 5 shows the details of Data 3 collection used in the proposal validation stage.

Table 5. Details of data collection Data 3.

	Role	Data type	Topic, description	Date, length	Documented
Internal Stakeholders					
1	Internal stakeholders and customers	Process Validation Workshop	Stakeholder feedback and improvement ideas on proposal Updated presentation of Competitor Analysis process	25.4.2019 60 min	Workshop design Process steps, Process content description

The purpose of Data collection 3 was to validate the Competitor analysis process initial proposal with the key stakeholders, who participated in the study at the CSA and proposal development stages. The validated proposal and applied procedure is covered in Section 6.

3 Analysis of the Current Competitor Analysis Practices in the Case Organization

This section discusses the results of the current state of competitor analysis in the case company CPS organization. The current state analysis comprises the organizational structure of CA, stakeholder and internal customer expectations, description of the current practices as well as analyzes and summarizes the findings. The results of the current state analysis contribute later to the proposal building and validation stages of the study.

3.1 Overview of the Current State Analysis Stage

In this study, the purpose of the current state analysis is to analyze the competitor analysis practices of the case company. This analysis is based on interviews, workshops and review of the related company documents. In this study, the CSA consists of five parts.

First, CSA focuses on the description of the related organizational structure for conducting of the Competitor analysis. Description of organizational structure includes the providers, support and customer co-creation and illustrates that a clear process for CA in the case company is currently missing.

Second, CSA describes and analyses the existing tools and practices of conducting Competitor analysis. Existing tools and practices are valuable to describe in order to understand the current assets and gaps for the effective CA. The analysis of the existing tools and practices was based on the company internal documentation and SIPOC definition conducted during the interviews. SIPOC acronym comes from the (Supplier, Input, Process, Output, Customer). According to Lunau et al. (2013), SIPOC is an ideal tool of defining processes of certain scope. SIPOC tool can be applied to define which process steps are included and who are the people involved. Applied SIPOC tool describes the dependencies between the process steps and what requirements there are to process each step. Additionally, the owners and customers were documented during SIPOC definition to have a clear description and understanding of each tool. (Example of SIPOC definition from CSA in the case organization can be found from Appendix 3).

Third, CSA investigates the stakeholder and internal customer expectations for the CA tools and practices. The informant expectations were crucial to collect in order to be able to understand specific business needs and managing of the change when building the proposal. The expectations are described and analyzed in three steps: first, the initial expectations from the workshop; second, the key stakeholder expectations, and third,

the internal customer expectations from the interviews. All the CSA interviews and findings are documented in Appendices 1 & 2.

Fourth, CSA focuses on the analysis of strengths, weaknesses and expectations from the current CA tools and practices in the CPS organization. Due to the lack of a clear process how to conduct CA, this part analyses the findings from the current CA by utilizing themes and figures. The strengths and weaknesses were identified based on the interviews, workshops and company documents. The workshop discussed and validated with the key stakeholders the four main findings. For identifying S&Ws, the data were gathered into one data sheet and categorized into five themes and sub-categories (Appendix 4: 1).

Finally, the fifth part summarizes all key findings from previous parts together and presents conclusions from the CSA stage.

3.2 CPS Organizational Structure of Conducting Competitor Analysis

The case company is a major global company in electrical industry. The case organization is Critical Power Solutions organization (CPS) which is a part of Power Quality and Electronics Division (PQED) of the case company. CPS organization operates mainly from a plant located in Espoo. The plant is a manufacturer of uninterrupted power supply (UPS) equipment and related services.

CPS organization consist of Product Management and Marketing, Sales Support, Business Development and functions. CPS organization conducts CA together with Internal customers of CA. The key internal customers of CA are Sales offices and Product Development and Sales Support. Related CPS organizational structure of conducting CA is described in Figure 2.

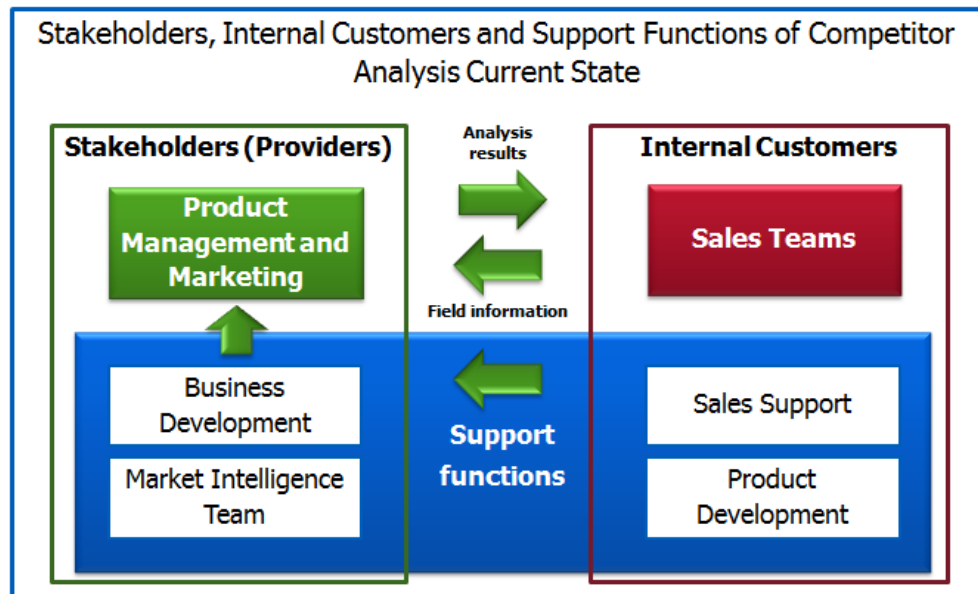


Figure 2. Organizational structure of conducting competitor analysis.

As illustrated in Figure 2, Product Management and Marketing is collecting competitor intelligence information from the field and other stakeholders as well as providing the actual competitor analysis. Sales teams are the key customers of the CA. Sales teams report field information such as competitor price and market movements back to Product Management to be utilized as input for CA.

Business Development, Sales Support and Market Intelligence Team are providing input for the CA as well, including following topics:

Sales Support and Business Development teams are responsible for supporting Sales and Product Management in major sales offers and therefore able to convey similar competitor information than Sales Teams. In addition, Business Development team is constantly monitoring market trends as well as participating on various business forums and fairs from where to absorb and report valuable information for CA.

Market Intelligence Team is an external corporate level function which is currently providing analyses about market shares and development. Market share analyses are requested separately as initiative of Product Management. Market Intelligence Team is capable of providing various market research services for example company profiles, battle cards, manufacturing location maps, product comparisons and financial analysis.

Product Development analyzes competitor technical specifications during product development projects and investigates competitor product features and content as initiative of Product Management. The analysis and investigation results can be utilized as input for CA.

3.3 Existing Tools and Practices of Conducting Competitor Analysis

The following findings were made from the analysis of the existing CA tools and practices which are currently specified or active in the case organization.

Currently, there are four main tools for Competitor analysis and additionally two supporting tools for communications. The two supporting tools for communications are General analysis and Messaging. The four main tools for the actual CA are Competitive matrix, Battle card, Price analyses and Company analyses. These four tools for CA are summarized in Table 6 below.

Table 6. Existing tools and practices of competitor analysis.

TOOL	PURPOSE	OWNER	CUSTOMERs	INPUTS	OUTCOME
Competitive matrix	<ul style="list-style-type: none"> Compares competitor products to own offering by specific power range (Performance, Physical, Features) Provides general perspective what competitors there are against our products Used as an input to a Battle cards Serves as an orientation and data bank for Product Managers 	<ul style="list-style-type: none"> Product Managers 	Current: <ul style="list-style-type: none"> Product Managers BDMs *Potential: Sales Support NPI, Field" Product Managers	<ul style="list-style-type: none"> Competitor's general product specs & Manuals Field reports 	<ul style="list-style-type: none"> Consolidated competitive data collected into one comparison file of competitor products
Battle card	<ul style="list-style-type: none"> Summarizes own unique selling points of a certain product and analyses value proposals, strengths and weaknesses of few major competitor products compared to own offering Utilized to support customer relations and product and service offering. Information can be used to differentiate from the competitors 	<ul style="list-style-type: none"> Product Managers 	Current: <ul style="list-style-type: none"> Sales *Potential: Sales Support	<ul style="list-style-type: none"> Competitor website Competitive matrix Field reports 	<ul style="list-style-type: none"> Value proposition & product theme battle card Summary of unique selling points
Price analyses	<ul style="list-style-type: none"> Analyses if we are competitive in price compared to main rivals 	<ul style="list-style-type: none"> BDM's "Field Product Managers 	<ul style="list-style-type: none"> Product Managers Sales 	<ul style="list-style-type: none"> Sales field reports RTL analysis 	<ul style="list-style-type: none"> TBD "Tool currently under development"
Company analyses	<ul style="list-style-type: none"> Collect and analyze general company information about the competitors (services, marketing, financial, etc.) Forecast to sales and for strategy input competitive market development of major rivals 	<ul style="list-style-type: none"> Marketing Manager 	<ul style="list-style-type: none"> Sales PQED Strategy input 	<ul style="list-style-type: none"> Market share report Web sites Annual reports, Field notes 	<ul style="list-style-type: none"> High level summary of main competitors strengths, weaknesses and market trend

As described in Table 6, *Competitive matrix* serves as a consolidated data collection bank which compares competitor products to own offering according to performance, physical and features categories. Data is collection based on available competitor production specifications and field reports addressed to Product Managers. Competitive matrix is created during a new product launch project and data is applied in Battle card preparation. Competitive matrix and Battle card tools are owned by the Product Managers. After the creation of Competitive matrix, the data in the tool is no longer updated regularly. Product Managers and Business Development Managers (BDMs) are currently the only customers of the Competitive matrix. However, the tool has potential of serving other internal customers of CA for example Sales Support or Product Development.

Battle card tool summarizes unique selling points of a certain product family and analyses competitor value proposals, strengths and weaknesses compared to product corresponding characteristics. A Battle card provides valuable information for Sales which is currently the main customer for the tool. Tool is utilized to support customer relations, product and service offering. Information from the Battle card is used to differentiate from the competitors. Battle cards are updated annually and announced during sales UPS trainings.

The Company analyses tool is used to analyze general company information about the competitors. Company information consist of key facts, services, marketing and financial data. The Company analyses is owned by Marketing Manager. The Company analyses tool provides a high-level summary of the main competitors, their strengths and weaknesses as well as indicating market trend. Summary serves as a forecast aid to sales and utilized for strategy input presenting competitive market development of major rivals.

The Price analyses tool is inadequate for the business needs and it is currently under development. The purpose of the tool is to provide competitive intelligence and analysis of pricing compared to main rivals. Owner of the Price analyses tool could be either BDM or field Product Manager. Currently Price analyses are made separately (Ad-hoc) for major sales offers. These ad-hoc price analyses are based on sales field reports and RTL (Refuse to Lose) analyses. RTL and Price analyses have a close relationship on each other.

Additionally, Communicative tools of *General analysis* and *Messaging* are used to convey competitive information to sales. General analysis is provided by the Product Managers, during sales UPS training webinars among the battle card introduction. General analysis objective is to ensure that the audience is aligned and aware with the current Competitor Analyses available. Messaging tool is owned by the Marketing and it objective is to provide tactics against the competitive messaging. Although the Messaging tool has been specified, it is not currently active in the case company.

Together with the stakeholders, existing CA tools were mapped according to operative and strategic meaning as well as regularity of activity. The mapping was made to understand, how the current tools are standardized and connected as well as how comprehensively the tools cover operative and strategic meaning. The results of the mapping are shown in Figure 3 below.

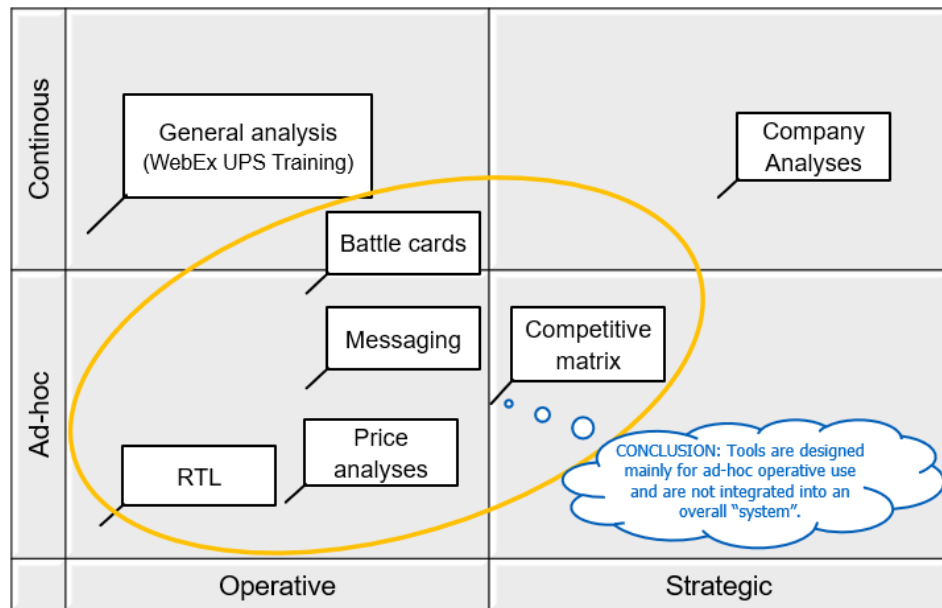


Figure 3. Current state of competitor analysis tool positioning.

As shown in Figure 3, the Competitive matrix tool is positioned in the middle, since the tool content is created during the new product launches and could offer insights for operative as well as strategic utilization. Currently, the Battle cards are located close to upper left quarter, because the tool is communicated continuously to Internal customers during the General analysis sales trainings and serves as operative tool for the sales. Price analysis and RTL forms current Price analysis tools, which are separately tailored to a certain project purposes. Therefore, Price analyses tools are positioned in the lower right quarter.

As seen from this compassion in Figure 3, the Company analyses tool is the only tool positioned in the upper left quarter. Thus, the Company analyses tool is the only one designed for strategic purpose and the only one that is updated on regular basis.

3.4 Analysis of Strengths and Weaknesses of the Competitor Analysis Tools and Practices

The analysis of the strengths and weaknesses was done according to four categories: Tools, Process and collaboration, Information and Result of CA. The findings were sorted into four topics: Strengths, Weaknesses, Capability opportunities and Opportunities for improvement. These four topics are discussed below.

3.4.1 Strengths

Strengths of the current CA tools and practices are related to *Battle card tool* and *technical understanding of the product features*. In addition, *a good market share information* is available from different market segments and areas.

Battle cards are clearly seen as the most beneficial for tool the CA since Internal customers have utilized the Battle card tool, and it is valuable asset as sales aid among other marketing tools. Battle cards, for example, make a good aid to the Total Cost of Ownership (TCO) tool, which is presenting value of company products and services for customers. Battle cards are updated annually and shared during General analysis UPS sales trainings. Feedback has been received from the tool feasibility and it has gone through several improvement cycles.

Strength is that we have product tailored Battle Cards for the major competitors which provides information how our products variates from the competitors (Team Leader – Application Engineering, Appendix 2: 3)

Also, *technical understanding of the products* is currently very strong. Competitive matrix is created during each product launch and offers good foundation for technical comparison. With this knowledge, the organization is capable to understand how the competitors have solved technical challenges right after the new product releases. Strong technical understanding is providing differentiation capabilities and have led to success in sales.

We have good information available regarding the market shares as well as product efficiency comparisons and analysis against the competitors (Project Manager – Product Development, Appendix 2: 3)

This success has been based on *specific technical intelligence* and *features that a competitor has been lacking* in individual customer case or being able differentiate and fulfill customer special technical needs in certain market area.

3.4.2 Weaknesses

Weaknesses in the current CA tools and practices are associated mainly with *the scope and feasibility* of the current CA tools, as well as with *the lack of process for executing CA*. According to the results, the Competitor matrix tool is seen as too heavy to maintain on up-to-date, and it is currently only utilized by the Product Managers for orientation and *ad-hoc* queries of technical comparisons.

Competitor matrix tool content is not up-to-date. The tool works currently only for the orientation to the topic and the results are not utilized. (Product Manager 2, Appendix 1: 2)

As the results from the CSA show, the current CA tools are *not currently providing extensive enough competitor information* and there is *too much weight on the product features*. Especially *the price and company level comparisons are not available* and reaching the internal customers of CA. In addition, the tools are *not offering CA information in in compact and visual format* which is desired by the internal customers.

Additionally, the current process of CA is not clear to all stakeholders and internal customers, and *its execution variates* depending on subject and objective of CA. In addition, *performance metrics for the CA process are currently missing*.

Collaboration in CA is not active enough to share information, get feedback and prioritize activities. Information, collecting, storing, sharing and deployment is not efficient and flow consistent enough. According to the interviews, *Internal customers are uncertain if the available CA information is still valid*.

We should have process in place of collecting and storing CA information so that it can utilized as well as to have more collaboration projects with the Product Development team (Product Manager 3, Appendix 1: 4)

In relation to CA, the organization is also lacking good understanding of commercial value factors broad enough for competitive markets. In other words, there is *not enough CA information available to be able to prioritize offerings and focus resources* on where the company is competitive enough to win. On the other hand, while the information is not always up-to-date and transparency to the tools is missing, the organization is not able to fully trust the results of CA.

3.4.3 Capability and Improvement Opportunities

Capability opportunities, according to the stakeholders, are related in the internal customers of CA. *Sales teams can provide competitor price information and strategic movements from the market field* as well as root causes of lost sales deals can be shared through CRM 360 tool. *Sales could also participate more actively on the development of CA tools*.

Product Development is capable of analyzing more competitor products and provide feedback of CA assumptions when they actualize in development projects. Sales Support could convey input for CA, if process would be in place and data management improved. Improved collaboration in CA could be achieved by involving internal customers more closely and allocating of external resources on contributing CA.

Opportunities for improvement objects according to CSA findings are related to all four categories. First, the leverage of the CA tools could be improved by implementing data management and collaboration cloud service which would replace discrete data sheets on local drives. CA tools could include price vs. value chart "value curve" and offered price iteration to find optimal price level as well as a data bank for price information and sharing. Competitive matrix should be evaluated and improved to have more benefits against the efforts of maintaining the data.

Second, CA process and collaboration could be improved with definition of tools, process, roles and responsibilities and increased involvement of all resources. The definition would increase field information flow and efficiency and enable development of CA. Resource involvement could be improved by linking of Market Intelligence team and CPS more closely in order to receive market information continuously and to expand resources for executing CA.

Third, information efficiency could be improved by finding enhanced ways to obtain information about the competitors. Information flow from the field and data management and sharing of market information to front offices should be improved as well. Backlog histogram of recorded activities of CA would help on internal customers to follow-up information flow.

Finally, result of CA could be improved by providing of business and market wide analysis to achieve more extensive understanding from the competitors. Analysis should include for example pricing, value creation and vertical company analyses. Improved CA would provide deeper understanding of competitor market behavior and strategic movements. In addition, results could be improved by receiving an intelligence notice from competitor product releases to be able to conduct CA proactively.

3.5 Key Stakeholders and Internal Customer Expectations

According to the results from the CSA, the expectations for CA relate to: (a) the process, (b) tools, (c) collaboration and (d) product of CA. Expectations variate according to informants depending also on the position that they work and aspect of their capability and needs for CA.

3.5.1 Initial Expectations from the First Workshop

During the initial CSA workshop, expectations regarding CA were collected from the Product Management and Marketing team participants. Participants expect *to have a broad understanding of how to conduct competitor analysis* and achieving business benefits from the CA practices. Additionally, *CA practices should provide real-time information about relevant competitors* from the field (Sales) to CPS.

According to participants, a set of CA tools is currently utilized by CPS organization, however at the moment, results of CA cannot be collected sufficiently enough. Along with the improved efficiency of CA, a *Competitor value/price comparison to own products and services should be implemented*. (Appendix 1: 1)

3.5.2 Key Stakeholder Expectations

As the results from the interviews show, Key stakeholders expect *to have a light process of CA which continuously produces and shares quality up-to-date information about the competitors*. Moreover, *to be able to evaluate regularly the purpose and effectiveness of the CA tools and process*.

To have light enough program of CA which includes all essential elements and provides the most important insights from competitors in visual format. (Marketing Manager, Appendix 1: 4)

According to the interviews, *CA tools need to be structural, light and efficient to support CA practices*. *Data for the tools should be processed efficiently in collaborative environment* empowered by modern IT technology tools. *Data sources and content should be defined as well as to have systematic way of collecting and sharing information*.

As an outcome of CA, *key stakeholders expect comparison analyses of product specification, pricing, and sales arguments*. Comparison analyses should include strengths and weaknesses, company capability, focus on the markets and product portfolios.

Value of CA should originate from the whole market environment and include for example front end capacity and organizational capability of the competitor. (Business Development Manager, Appendix 1: 1)

Additionally, key stakeholders expect to have conclusions and insights of CA in summary format such as visual differentiation and charts. As the results from the interviews show, conclusion and insights should be utilized in strategic planning as an input and provide better understanding of where the case company is able to success in competitive markets.

3.5.3 Internal Customer Expectations

According to the interviews, *internal customers of competitor analysis expects to have CA tools available which justifies pricing and customer related decisions. CA tools should provide estimated price and cost information of competitor products as well as describe market positions and conditions. The description includes success factors and grounded assumptions of lost sales deals. CA information should be provided in summary level such as current battle cards and ensure up-to-date data. This data should available as aid for sales operations.*

To have tools available which guides and justifies pricing and other customer related decisions (Team Leader – Application Engineering, Appendix 2: 1)

As an outcome of CA, *internal customers expect to have knowledge about the competitors in the markets as well as understanding of product offering and technical capability. This knowledge could consist of resources, capabilities, strengths and weaknesses and differentiation opportunities. With help of the knowledge, internal customers would be able to forecast and have transparency of competitor strategies as well as to good understanding of own position in the markets.*

Expectations for CA are related to marketing key elements 5Ps (Product, Price, Promotion Place and People.) We should have deep down analysis of CA information drilled down to 5Ps of marketing". (Sales Director UK, Appendix 2: 1)

As the results from the interviews show, *Product Development as internal customer of CA is expecting to have a broad enough understanding of the competitors in summary to be able to provide information about technical performance of competitor products. Summary should include estimated price and cost information as well as knowledge about the competitive differentiation opportunities. Summaries of CA should be available*

as input for decision making and especially provide understanding of features and services for which customers are willing to pay. *Product Development* also expects to execute collaborative competitor product validation and teardown investigation projects as initiative of the Product Management. (Appendix 2: 1)

3.6 Summary of the Expectations, Strengths and Weaknesses

This sub-section provides a summary of the key expectations, strengths and weaknesses identified during the current state analysis in Section 3. In the summary, expectations, strengths and weaknesses are divided into competitor analysis tools, process and result categories. Categorization provides an illustrative comparison of CSA findings. Summary of the CSA findings is presented in the Figure 4 below.

Summary of Current State Analysis		
Expectations for CA	Strengths	Weaknesses
<ul style="list-style-type: none"> • TOOLS: <ul style="list-style-type: none"> • Easy to use, efficient tools (operative & strategic) • Extensive competitor information analysed in summary format • Summaries with good visual appearance • PROCESS: <ul style="list-style-type: none"> • Systematic way to collect and share information • Clear responsibilities • Up-to-date information • Active collaboration between stakeholders • RESULTS: <ul style="list-style-type: none"> • Ability to justify pricing and other customer related decisions • Knowledge about competitive differentiation opportunities • Understanding of customer value creation better via CA • Ability to forecast competitor movements in the markets • Ability to focus resources where competitive 	<ul style="list-style-type: none"> • TOOLS: <ul style="list-style-type: none"> • Battle cards • Sales web and TCO • Extensive product feature comparison data bank • Various tools exists to support conducting of CA • PROCESS: <ul style="list-style-type: none"> • Battle cards and company analyses are updated • Sales trainings of CA • Some good examples of CA collaboration projects • RESULTS: <ul style="list-style-type: none"> • Technical understanding of own products • Market share information available 	<ul style="list-style-type: none"> • Partly insufficient tools for competitor analysis <ul style="list-style-type: none"> • Tools are designed mainly for ad-hoc operative use and are not integrated into an overall "system" • Competitor matrix is too complex • Collaborative cloud tools are not fully implemented • Price/value analysis tool is not active currently • Missing of integrated systematic process for competitor analysis <ul style="list-style-type: none"> • Unclear field reporting responsibilities • Lacking of CA performance/ effectiveness metrics • CA information flow & storing • Lacking of active collaboration and transparency in CA activities • Analysis results are not fulfilling the business expectations <ul style="list-style-type: none"> • Inadequate focus in competitor analysis on issues which are important for the end-customer • Company profiling is too narrow • Too much weight on the products in CA

CONCLUSION: Current CA practices are not fully meeting the business expectations and requirements

Figure 4. Expectations, strengths and weaknesses of current competitor analysis.

As shown in Figure 4, the *key strengths* are Battle cards and extensive product feature data bank immersed into the Competitive matrix as well as introduction of various potential tools for CA. The process of executing Battle card tool is performing currently. As a result of the process, Battle cards are able to reach internal customers and their operative needs related to products. Currently, the tools are able to provide technical analysis and market share information to internal customers.

Key weaknesses are related to inadequate tools and missing of integrated systematic process of conducting CA practices. Results from the current CA practices are not fully meeting the business expectations and requirements. Tools are mainly focusing on product feature analysis and unable to provide CA regarding important to internal customers as well as in-depth company analyses. Currently the tools are not integrated to overall system and not aligned to a common CA process. Field reporting process and responsibilities are unclear to key stakeholders and internal customers. In addition, key stakeholders are unable to measure the performance of CA practices due the lack of process indicators.

The expectations of the key stakeholders and internal customers relate to having more productive and comprehensive tools, which are providing summary of CA. The tools are expected to be a part of a systematic process with clear responsibilities. The process should deliver broad knowledge and understanding of competitors as well as enable grounded decisions and forecast market movements. In addition, the process is expected to reveal differentiation opportunities in competitive markets.

As seen from these results, it can be concluded that the expectations and weaknesses are providing more evidence of the necessity of developing an organization specific process of Competitor analysis. Presented key weaknesses and stakeholder expectations are selected as guidance factors of finding best practices and concepts from the literature as well as to be utilized later on as valuable source on developing the proposal. Literature findings of this thesis are presented in the following Section 4.

4 Best Practice and Relevant Literature on Competitor Analysis

This section explores Competitor Analysis (CA) knowledge and best practice from literature focusing on the challenge areas identified in the current state analysis. Section starts by discussing some basics of Competitive Intelligence (CI) since it is closely discussed with CA in many literature sources. The second part deals with the components that need to be considered when organizing CA process. The third part overviews suitable CA tools, methods and techniques which could be beneficial for the actual proposal development. At the end, this section formulates the conceptual framework for conducting the thesis that merges four selected parts from relevant literature.

4.1 Introduction to Competitor Analysis

In a business, the word 'competitive' means that a contest is occurring between two or more parties. Competition between companies typically relates to achieving sustainable winning performance and beating the competitors who are working towards the same or similar goals in competitive field. According to Fleisher and Bensoussan (2015: 4-5), in order to succeed in competition, a firm need to develop its competitive strategy.

Competitive strategy aims at maximizing the value of the capabilities and aids to differentiate from rivals. Developing a competitive strategy requires perception of how the business is going to compete, definition of the goals and what policies needed to carry out those goals. (Porter, 2004, p.xxiv-47) According to Czepiel and Kerin (2012: 42), competitive marketing strategies are strongest either when they position a firm's strengths against competitors' weaknesses or choose positions that pose no threat to competitors. Porter (2004) even believes that the central aspect of the company's strategy formulation originates from the competitor analysis.

According to Hussey and Jenster (2003), competitor analysis typically addresses certain strategic questions in order to pursue the overall goal of developing a competitive advantage. Competitor analysis also affects the way that strategic issues are addressed and is able to support operational activity. Operational activity could be, for example, providing sales benefits from analysis of the company product offering compared to the competitor's product respectively. Competitor analysis offers understandable information, which is up-to-date to those stakeholders who are expecting to use it. (Hussey and Jenster 2003: 96)

Thus, according to Jenster and Solberg Søylen (2009: 197), competitor analysis (CA) is the most important intelligence report and almost every organization needs to obtain information the about the characteristics and activities of the main competitors.

4.1.1 Scope of Competitor Analysis

Institute of Management Consultants (IMA 1996) suggests three types of intelligence gathering to understand the scope of the competitor analysis. The relationship between these types is presented in Figure 5 below.

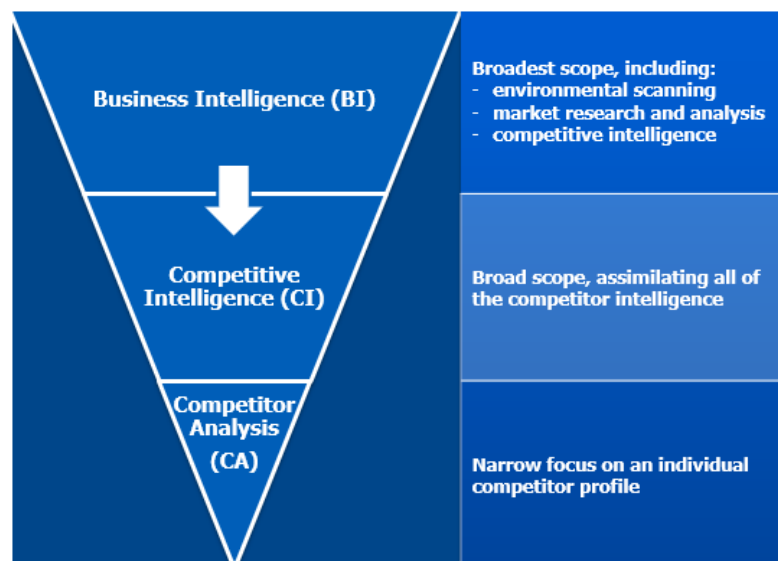


Figure 5. Levels of intelligence gathering (adapted from IMA 1996: 1-2 and Jenster and Solberg Søylen 2009: 135)

As seen from Figure 5, Competitor Analysis is at the bottom of the inverted pyramid since it has the narrowest focus on an individual competitor profile. According to IMA (1996), a competitor profile means consolidated information from the specific competitor at a specific time. It includes typically the overview from the competitor, market, product lines, operations, technology and financial performance. The analysis could also reflect competitor strengths and weaknesses in various aspects.

Next, Competitive intelligence (CI) is placed in the middle of the pyramid since it has a broader scope of competitor analysis. CI includes all components of competitor intelligence. According to Wolter 2011: 202, Competitive Intelligence supports the market analysis when considering the key questions of what the short and long-term trends impacting the industry are, and how these trends will impact the business. It also reflects

on how the competitors will likely to respond to these trends, e. g., how the market responds to changes in price, distribution or service.

On the top of the pyramid is the broadest degree of intelligence gathering “Business Intelligence” (BI) which assimilates environmental scanning, market research and competitive intelligence. (IMA 1996) However, Jenster and Solberg Søylen (2009: 135) argue that nowadays BI usually is merged into the CI, thus meaning technology of tools and software for analysis utilized by executives and managers to analyze and monitor overall business.

According to Jenster and Solberg Søylen (2009: 197), understanding of what the Competitor Intelligence (CI) analysis means usually depends about the organization and function. For example, sales managers are usually offer comparisons of pricing, conditions, service and quality. Marketing managers are seeking answers on market share, brand positioning, advertising, distribution and product comparisons. In research and development function, perspective might be on critical technologies, patents and innovations. Correspondingly, manufacturing could be looking for the manufacturing base, economies and supply chain performance analysis. At the executive and corporate level, a company intelligence analysis may include benchmarking of financial figures, leverage, technological platforms, vertical integration, geographical coverage and operations.

Hussey and Jenster (2003: 4-11) describe the scope of Competitor Analysis (CA) in three dimensions: decisional, customer/market and product/technological. Decisional dimension decides on which organizational level CA is conducted and on what purpose. CA purpose might be at the strategic, tactical or operational level depending on the direct impact to the firm. Customer/market dimension defines the market scope of the analysis and sets the boundaries for the inquiry takes place. Finally, the product and technological dimension sets the limits within the industry by which critical activities are related to certain products and services.

According to Fleisher and Bensoussan (2015: 26-27), it is crucial for the business and competitive analysis to understand the scope of analysis. To help its understanding, scope of the analysis can be divided to competitors, environment, technology and decisional categories.

This thesis approaches CA at the individual competitor level and takes broader aspects of CI into account for the actual proposal development. Other limitation to the thesis literature selection originates from the current activities of CPS organization that relate to the operational and tactical level of CA.

4.1.2 Porter's Competitive Strategies

When discussing competitive strategy, two things need to be considered: the five forces that shape the industry level competition, and the three generic competitive strategies.

Firstly, according to Porter (2008), *five forces* need to be adapted to the industry analysis in order to understand industry competition and profitability. Defending against the competitive forces and shaping them in beneficial for the company is crucial to firm's strategy. The Porter's five forces are illustrated in Figure 6 below.

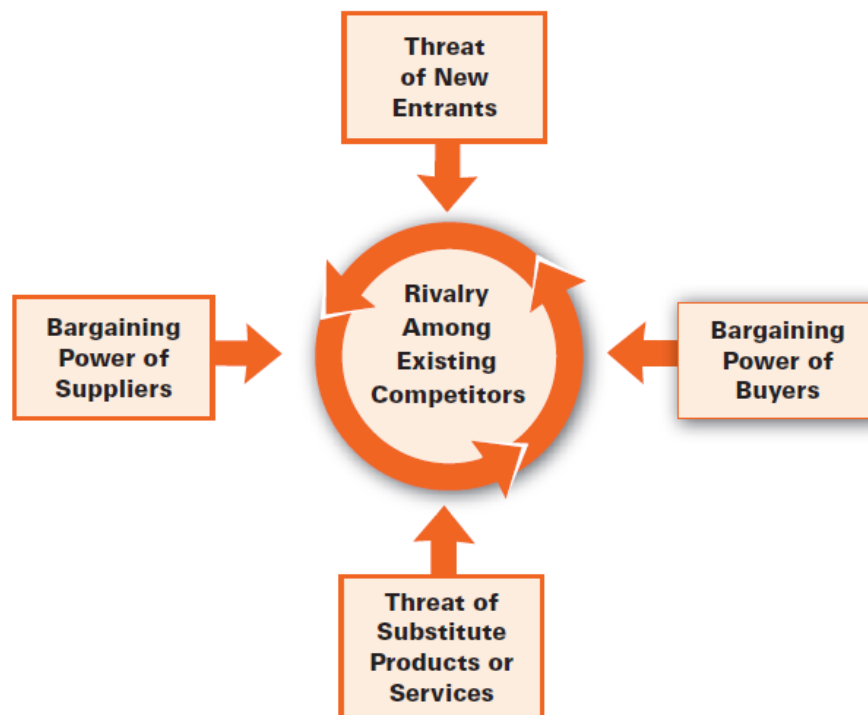


Figure 6. Porter's five forces (Porter 2008: 80).

As seen from Figure 6, *the New entrants* are influencing competition by competing with new capacity to gain market shares and give pressure to pricing and costs. This is keeping the market profit levels low and pressuring on investments. Most powerful threat is coming from diversifying companies that have the existing capabilities. Barriers to entry should be assessed by the focal firm in order to defend markets from new entrant without sacrificing profitability.

Next, *the Suppliers* are affecting competition by capturing more value with higher prices and shifting cost to other participants in industry. Powerful suppliers are able to cut firms profitability by several reasons, for example by offering differentiated products or being more concentrated than the industry that it sells to.

Also, *the Buyers* are influencing competition by forcing down the prices, capturing more value and requiring higher quality and service. Buyers are powerful if they possess high negotiating leverage to other industrial participants on pricing.

Importantly, *the Substitutes* are affecting competition by introducing similar function as a rival product to markets by different means. Substitute's products or services cuts the profit potential from the markets if the focal firm is not able to offer distance its performance from the substitute.

Finally, *the Rivalry among existing competitors* limits the profitability from the markets if the degree of competition intensity and basis are high on for example in pricing or product development. Rivalry is especially destructive if company decides to compete in price cuts which are easy to match by a competitor. Rivalry can also have positive affect on profitability if competitors are serving different market segments with different offering mix. Firm can take strategic steps to shift the nature of competition to positive turns on profitability. (Porter 2008: 80)

Secondly, Porter (2004: 35-39) describes three potential *generic competitive strategy* approaches for outperforming other competitors in industry. These strategies and their dimensions are illustrated in Figure 7 below.

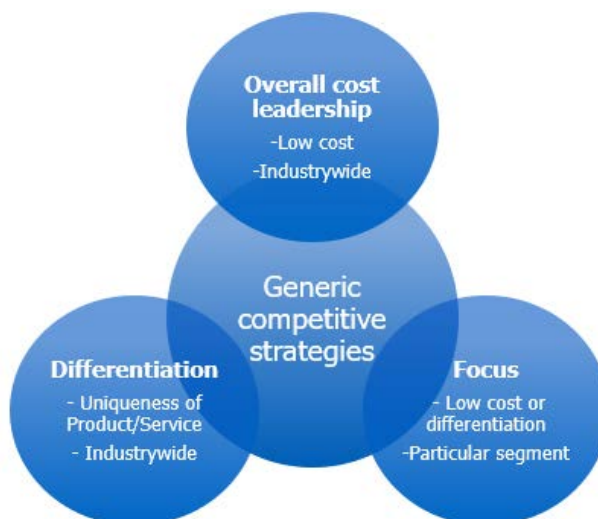


Figure 7. Generic competitive strategies (adapted from Porter 2004: 34-39).

As seen from Figure 7, *the Overall cost leadership* strategy is requiring efficient facilities, cost-down activities and tight cost control, on the other hand it requires usually high relative market share and effective supply chain. However, by having a low-cost position in the industrywide, the firm can defense its markets against the other competitors as well

as powerful buyers and suppliers. A low-cost position defends the firm against the all competitive forces.

Next, *the Differentiation* strategy focuses on creating unique products and services in industrywide. Differentiation creates defensive asset against the all five forces and it can be acquired in without low-cost position. By achieving differentiation, the firm is able to have higher margins and loyalty of the customers.

Finally, *the Focus* strategy enables firm to focus either low-cost or differentiation or both to certain object, such as individual buyer, market, group or segment. By focusing its resources, the firm is capable of serve target more effectively and efficiently, leading to gain market share and good returns from particular segment. (Porter 2004: 34-39)

As seen from above, Porter's five forces and generic competitive strategies present the key fundamentals of CA. Together these strategies provide a firm ground of understanding the industry-level competitive aspects that impacts the rivalry in the markets as well as sets the ground for the CA tools design. Without the understanding of all these factors, Competitor analysis might remain incomplete and not providing enough diverse knowledge for aid of the decision making.

4.1.3 Approach to Competitor Analysis

According to Hussey (2007: 216), industry and competitor analysis can be linked and seen described as overall step-by-step process leading to competitive advantage. This a step-by-step process is built around strategic information sources which contains series of analysis steps done in a logical order. Hussey's approach to competitor analysis is presented in Figure 8 below.

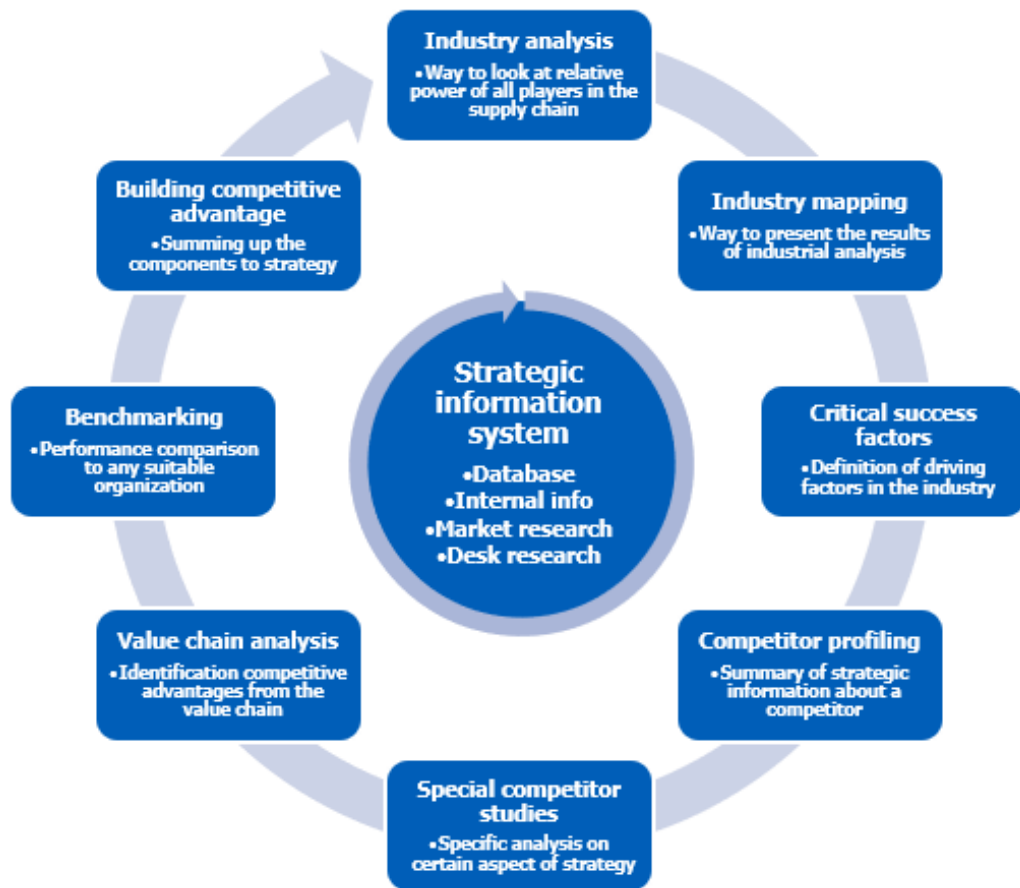


Figure 8. Step-by-step approach for CA (adapted from Hussey 2007: 215-218).

As described in Figure 8, the step-by-step approach consist of eight steps, starting form industry analysis and aiming to achieve sustainable competitive advantage. Strategic information system is in the middle and feeding vital information to each analysis steps from different information sources.

As seen from Figure 8, *Industry analysis* and mapping are the first two steps. The purpose of the industrial analysis is to see the relative power of all players in the supply chain referring to Porter's five forces. *Industry mapping* is the analytical way to present the competitive positions from the industrial analysis.

Critical success factors define the key driving factors where to focus in order to success in the industry. Critical success factors can be derived according to the industry analysis and included in the competitor profiling. *Competitor profiling* is a summary of strategic information, including key figures that means the most to the focal company. Competitor profiling can be utilized as a valuable tool for competitor analysis.

Special competitor studies are conducted for specific reason to focus and narrow down the scope of analysis to certain strategic aspect or competitor. These studies can be

used as input for value chain analysis. *Value chain analysis* aims to identify competitive advantage opportunities from the whole value chain.

Benchmarking compares the defined competitive advantage sources to any relevant organization to gain direction on development of competitiveness. Finally, *building competitive advantage* is summing all of the approach components together to be utilized on strategic planning to gain sustainable competitive advantage. (Hussey 2007: 215-249)

This approach to competitor analysis provides the comprehensive set of CA tools described in logical sequence which can be applied to the development of CA process. However, this end-to-end approach is so extensive including the industrial analysis and benchmarking, that only some of the components can be adopted for the proposal development. Proposal development requires elements from the organizing and supportive methods, hence, organizing CA is discussed next.

4.2 Organizing the Competitor Analysis

Organizing competitor analysis might be more difficult than identifying the needs for it. This is related to the fact that companies are often of different sizes, forms, and may be organized over several industries. Achieving a more systematic and continuous process for CA requires some expenditure and effort from the workforce. For example, Jenster and Solberg Søylen (2009: 198) firmly believe that - without top-management and corporation decision, commitment and support - CA will be only remain at the level of reactive *ad-hoc* inquiries for urgent purposes.

There are various organizing approaches for conducting effective competitor analysis and developing competitor analysis system to support the CA process. The most relevant of them are discussed below.

4.2.1 Steps to Ensure Effective Competitor Analysis

According to Jenster and Solberg Søylen (2009), the presented step-by-step approach for CA can be used as a guide to define six steps to ensure effective competitor analysis.

The first step needs to *collect and assess a storage of regular external sources of information*. Before external data scanning, it is vital to define and ensure information sources for CA. In order to make the data scanning effective, would be beneficial to find and centralize the right staff for the task for example in information department.

The second step focuses on *conducting market research to fulfill information storage*, established in the first step. Usually, market research includes surveys, subscriptions of marketing audit services, etc. Most of the organizations have specialized staff for these surveys and they could provide valuable asset in order to have an understanding of strengths and weaknesses of the players in the market.

The third step is *to collect and coordinate internal sources of information from the company records thought-out the organization*. It is important to define what information is available internally because the priorities may change in CA information requirements. Information acquired may be formal or informal. Informal information is typically harder to obtain. Knowledge for it, may come from front offices, which might be the first function to react, if something is happening in the markets or with the competitors. In order to ensure a continuous flow of the informal information, the organization should discuss competitor information on regular basis in meeting at all levels and passing the relevant information. Some organizations may find the competitor newsletter useful for disseminating the information.

The fourth step is the *regular analysis of information*. Analysis of information includes the tasks of industry mapping, competitor profiling and initial interpretation. These are the tasks of processing raw information from various sources into capitalized intelligence. According to Jenster and Solberg Søylen (2009: 198-199), this analysis should make an active process for providing insights and strategic value to the organization.

The fifth step is to *make decision and strategies which arise from the analysis*. Decisions should happen in strategic or tactical context in order to make sense for the effort of conducting CA. To ensure the consideration of CA information in the strategy process or decision making, the organization should make its CA analysis accessible and up-to-date. The analysis results could be shared in management meetings, periodical competitor meetings and strategy workshops. These methods can be applied in all levels of management in the organization.

The final step relates to *coordinating the competitor analysis activity to sources which are identified to end-users of CA and conduct special external studies if required*. Coordination requires authority to initiate and make sure that activities are done and call for cross-functional teams from research and development, manufacturing, purchasing and accounts to make regular analysis, for example, of competitor cost. (Jenster and Solberg Søylen 2009: 198-199)

To sum up, these six steps provide a more in-depth insight into existing competitor analysis practices and ensure effectiveness and systematic approach of a competitor analysis process. Process itself is based on the generic CI cycle and strengthen the implication to the need of competitor analysis system to support the CA process. Therefore, the competitor analysis system is discussed next.

4.2.2 Developing the Competitor Analysis System

As discussed in Section 4.1, the ultimate goal of Competitor analysis is to develop a competitor's profile from which the focal company is able to forecast competitor likely response to changes in industry or environment.

Fleisher and Bensoussan (2015:10-11) argue that the Competitor analysis is based on the generic intelligence cycle. Intelligence cycle represents the steps needed to process the actual analysis. According Wolter (2011: 191), CI cycle should have a single-minded objective to develop the strategies and tactics necessary to transfer the market share profitably and consistently from specific competitors to the company.

In order to achieve both CA and CI goals, a *background system should be in place to manage data collection and analysis process efficiently*. According Wolter (2011: 191), developing a Competitor analysis system (CAS) can be applied as guideline of organizing standardized CA process. The CAS can be based on the competitive intelligence cycle (CI cycle) which is presented in Figure 9 below.

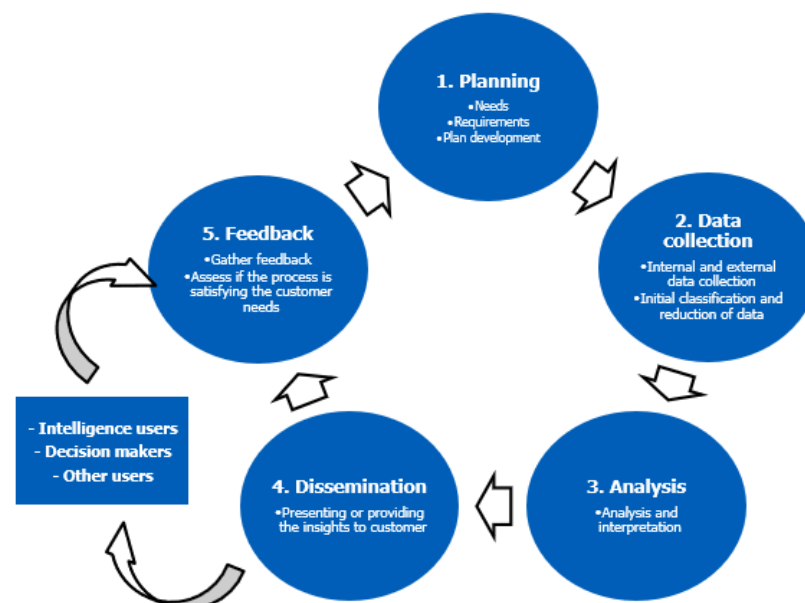


Figure 9. Competitive intelligence cycle (adapted from Fleisher and Bensoussan 2015:11 and from Wolter 2011: 194).

As seen in Figure 9, generic intelligence cycle includes five steps: planning, data collection, analysis, dissemination and feedback. First, in the Planning step, requirements and needs are gathered as a plan. In the second step, data is collected from internal and external sources and initially sorted before the analysis step. In the third step, the actual analysis and interpretation is conducted. The fourth step is dissemination which means presenting or providing insights also to the customers of the process. Finally, the fifth step is gathering feedback from the customers and assessing if the process is satisfying their needs. Customers of the intelligence system receive the analysis results in step four and provide feedback in step five.

Wolter (2011) introduces the competitor analysis system (CAS) refined the from competitive intelligence cycle. The structured CAS is a ten-step model which has the key goals of detecting competitor threats, eliminating or lessening surprises, enhancing competitive advantage by lessening reaction time and finding new business objectives. The CAS model is introduced in Figure 10 below.

Steps of developing a Competitor Analysis System		Stages of the CI cycle
Step 1	Identifying Competitors	1. Planning and Direction
Step 2	Definition of Core Issues	
Step 3	Responsibility Matrix	
Step 4	Identifying users	
Step 5	Fixing sources and ways of obtaining data	2. Data Collection & Evaluation
Step 6	Processing data and Evaluation	
Step 7	Standardizing Analysis	3. Analysis
Step 8	Setting-up a reporting system	4. Dissemination
Step 9	Security of performance of actions	
Step 10	Checking feedback and internal communication	

Figure 10. Steps of developing a competitor analysis system. (Adapted from Wolter 2011: 195).

As seen from Figure 10, the first stage of the CI cycle “planning and direction” consists of four steps. Step 1 relates to identifying competitors and potential competitors. Step 2 represents definition of the core issues or critical success factors for setting the competitor analysis focus. Core issues are often only a fraction of overall question in the industry, however, very useful when the time resources are limited. Step 3 focuses on the definition of responsibilities in respect of the whole system. Finally, the users of CA knowledge are identified in Step 4. | According to Wolter (2011: 195), there must be an

owner responsible for the overall system as well as definition of the users or customers in order to narrow down the data collection requirements.

The second stage of the CI cycle represents data collection and evaluation. It is divided into two steps. In Step 5, the data sources need to be defined according to analysis which are to be performed. The step questions are: how and where information can be obtained, as well as a description of the tools and methods that are utilized for the data collection. In Step 6, the objectivity, validity and accuracy of the data is evaluated. After the evaluation, the data is assembled into a building blocks, such as data bank or tables to be utilized as foundation for the actual analysis.

Third stage of CI cycle - and Step 7 in developing CAS - is a standardized process which describes intelligence production and recommendations for activities. The goal for this stage is to utilize effective analysis tools according to the user requirements. According to Wolter (2011: 195-197), in order to ensure the process effectiveness and delivery time, only the most critical information should be found and analyzed. Timing of the analyses should be bound to major events in the markets. Since value for the company is generated from the product and moreover from the control of market information such as customer preferences, comparative prices and product data, they should also become the topics considered for the analysis.

The final stage - and the most important one of the CI cycle - is "dissemination". Successful dissemination ensures that the analysis intelligence is shared to decision makers and others who may benefit from it. This stage consists of three steps. In Step 8, a reporting system should be generated considering users that were defined in Step 4. The step questions are: who needs the information, what the provided information includes and how do the users wish to use it? It also includes the definition of limitations for access as well as frequency and urgency deliverables. Step 9 focuses on securing the performance that the deliverables are share accordingly. The final stage ends at Step 10, which is for checking feedback form the users of intelligence and deciding on the internal communication forums for the CI agenda. (Wolter 2011: 195-207)

Jenster and Solberg Søylen (2009) analyze one practical case for the intelligence implementation, on the example of listing the objective steps to implement intelligence in Swedish National Financial Management Authority (ESV). Looking at the IT system of this organization, the case identifies the following seven steps shown in Table 7 below.

Table 7: Intelligence implementation in practice (adapted from Jenster and Solberg Søylen (2009: 155-156))

Identified in the project	Suggested by employees
1.Create a continuous flow of market signals	It's important to stress that environmental information does not have to take a great deal of time
2.Monitor news and market information	Use the internal knowledge
3.Acquire methods and tools for structuring and analyzing market signals	Create knowledge database where it is easy to find by individuals with specific knowledge and experience
4.Store profiles on the players in the market	Use email for delivering the information
5.Use intranet for presenting the information	Use intranet for presenting the information
6.Create a knowledge base to capture knowledge and experience	
7.Use available information on the internet in more efficient way	

As seen from Table 7, the objectives identified in the project are quite aligned with the CI cycle. In this case, IT systems plays a critical part of the practical implementation of information storing, flow and dissemination. In addition, it can be concluded that a successful implementation requires easy access and employees with specific knowledge and experience from the CA.

In summary, CI Cycle and CAS model provide sufficient guidance for defining a competitor analysis process, its standardization and implementation. The CAS model can be considered as one organizing element for the CA process among the Steps to ensure effective Competitor analysis and the Generic intelligence cycle.

Importantly, both the CAS model and other models of CA discussed in this section begins with the identification of competitors, hence, this topic is discussed next.

4.2.3 Competitor Identification

Accurate and complete identification of competitors is vital for fully effective CI. According to Christopher (2015: 283), analysts should never assume that those named by clients or other parties provide them with a comprehensive and reliable list of rivals. According to Porter (2004: 49-50), existing competitors should be examined before conducting any further analysis. In addition, it may be essential to include potential competitors in able to keep them in scope of any major changes in industry.

Bergen (2002: 157) argues that identifying competitors is a key anticipating task for managers who are conducting competitor analysis. With proper identifications and analysis, an accurate domain can be developed for strategic interactions and increase managerial awareness of competitive threats and opportunities.

In respect of competitor analysis system (CAS), Wolter (2011: 196) states that the competitor identification helps to focus on the following analysis. It supports the delivery of intelligence and the limiting a number of competitors will lead to best result in analysis.

Bergen et al. (2002) introduces a 2-step competitor identification model for conducting competitor analysis. This model helps to create competitor awareness both in identification and CA perspective. The first step in the model maps the competitive terrain and the second step creates a framework for CA. The first step of the 2-step model is presented in Figure 11.

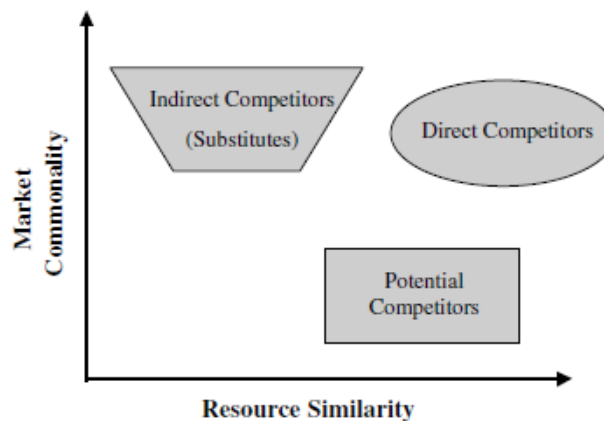


Figure 11. Mapping the competitive terrain (Source: Bergen et al. 2002: 160).

As seen in Figure 11, there are two dimensions in mapping the competitive terrain: market commonality and resource similarity. Market commonality illustrates the degree of similar customer needs, while resource similarity maps the degree of structural base of the firm's resources. Firms can be mapped according to these dimension to three groups: the direct, potential and indirect competitors. Direct competitors have similar customer and resource base. Potential competitors have resource similarity, but at the moment they are operating in different markets. Indirect competitors are creating value for the same customer segment; however, they have different resource base and might offer substitute products or services. (Bergen et al. 2012: 159-162)

The second step of the model evaluates the competition and predicting rivalry. For example, if the two firms have high resource equivalence, they do or can address the same

market needs equally well. The second step, a framework for competitor analysis, is presented in Figure 12 below.

Indirect Competitors	e.g. Peapod vs. Albertsons	e.g. Wal-Mart vs. Albertsons
Potential Competitors	e.g. Canadian Safeway vs. Albertsons	(e.g. none)
Direct Competitors	e.g. Lunds/Byerly's vs. Albertsons	e.g. Kroger vs. Albertsons
	Low	High
	Resource Equivalence	

Figure 12. A framework for competitor analysis (Source: Bergen et al. 2002: 162).

In Figure 12, the identified competitors groups are listed in y axis and the resource equivalence in x axis. According to Bergen et al. (2002: 163-166), in the right side of the matrix the degree of competitive threat increases from bottom to up dynamically since indirect competitors with the resource equivalence high, pose the greatest threat over time.

Corresponding on the left-hand side, the biggest threat comes from the direct competitors, when the focal company is less capable to fulfill the customer needs with existing resources. This is how the left side of the matrix reveals the opportunities for cooperation and managers should seek win-win opportunities with direct competitors with resource equivalence to defend their market shares. (Bergen et al. 2002: 163-166)

To sum up, competitor identification is the point where to start CA. It is a vital task to narrow down the scope of CA and gives managers a clear picture of players in competitive markets. Categorizing techniques make a useful way to obtain this information to the foundation of competitor analysis process.

4.3 Competitor Analysis Tools, Methods and Techniques

The relevant key Competitor analysis tools, methods and techniques are needed in addition to the fundamentals and organizing practices for conducting Competitor analysis efficiently and effectively.

4.3.1 Competitor's Response Profile

Porter (2004) introduces *Competitor's response profile* as a framework and ultimate objective for conducting competitor analysis. According to Porter (2004), all the steps made in CA should lead the way to understand the competitor's likely response to strategic movements as well as industry and environmental chances. Porter's model is presented in the Figure 13 below.

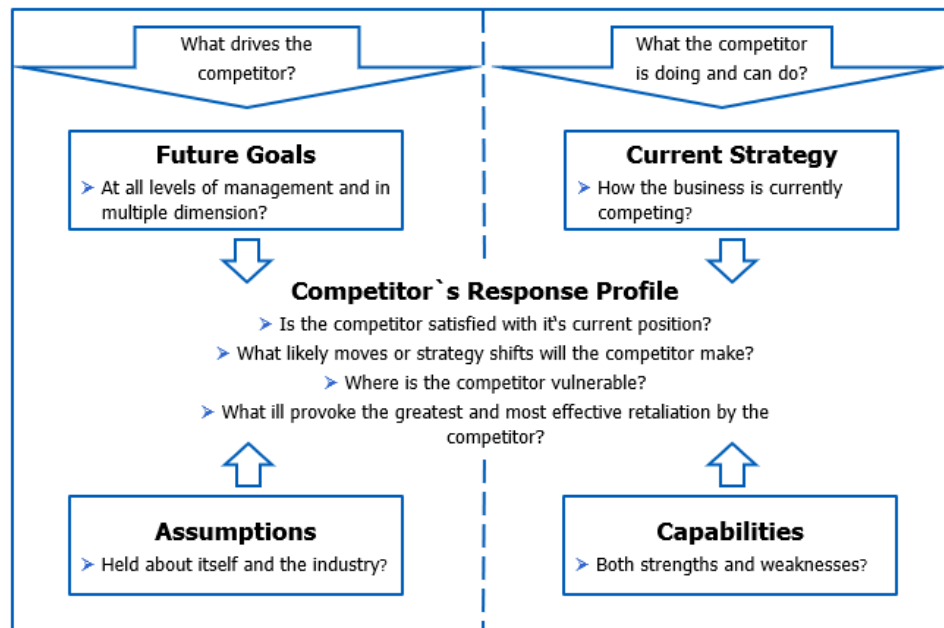


Figure 13. Competitor response profile and components of CA (adapted from Porter (2004: 49).

As seen in Figure 13, the model is divided into two parts. The part on the left represents the content which drives the behavior of a competitor. This side includes the components of the competitor's future goals and assumptions. These components might be hard to analyze. However, they contain valuable information about the competitor's future likely moves. The part on the right represents the current situation of a competitor and includes the current strategy and capability components. These components are usually in the focus of companies and at least initially understood. Together with the understanding of all four components of the model, the firm can have prediction about competitor's response profile in the middle. (Porter 2004: 49)

The *future goals* is the first component of the four components. Having the knowledge about future goals of a competitor, the firm can understand how satisfied the competitor is with financial performance or position in the markets. In addition, knowing the future goals, the firm can provide prediction about the competitor's responses to strategic changes as well as how serious the competitor is on its strategic moves. (Porter 2004: 50-51)

The *assumptions* component contains the information on the competitor's assumptions about itself, as well as the competitor's assumptions about the industry and the other companies in it. Knowing the competitor's assumptions may help the firm to see where competitors are vulnerable and understand their strategic moves better. Assumptions can be interpreted by mapping the competitor's leadership background as well as by looking back the history of financial performance, marketplace and success of a competitor. (Porter 2004: 58-61)

The *current strategy* component includes the knowledge of how the competitor is currently competing. By understanding the current strategy, the firm is able to see the competitor's key operating policies through-out every function and business unit. The current strategy can be identified by analyzing the competitor's key operating policies and how they reflect the competitive strategy. There lays always uncertainty if the firm's conclusions correct or not. Even though the strategy may be either implicit or explicit, one always exists in one form or another. (Porter 2004: xxv, 63)

Finally, the last component *capabilities of* contains the information about the competitor's strengths and weaknesses within the key business value chain and financial areas. The first three components will influence the probability, timing, nature and intensity of competitor's reactions, and the strengths and weaknesses will determinate the ability to make strategic moves as well as deal with the environmental or industry changes. (Porter 2004: 63-65)

According to Czepiel and Kerin (2012: 56-58), the Competitor's response profile helps to analyze the present and potential competitor moves and responses. In order to achieve this intelligence, all components need to be considered in the analysis to be able to think like the competitor. The most important approach in the analysis is to calculate financial results in respect of the competitor's strategic actions.

Other approach is to analyze the competitor's reactiveness to competitive moves. This can be analyzed from product contribution revenues and profits against the strategic importance of the product, relative sizes, cash positions, distribution coverage, and the relative number of sales force. (Czepiel and Kerin 2012: 56-58)

Summing up, in the approaches for the Competitor's response profile definition, the main points practically relate to the calculation of relative financial implications and the analysis of past effectiveness of the competitor's marketing mix elements. As implication of Competitor's response profiling, a focal company is able to predict the rival response to certain change in the market.

4.3.2 Company Analysis

According to Jenster and Solberg Søylen (2009: 85), the purpose of the company analysis is to provide information about how the focal organization is performing in the markets scoped within industry. Such analysis should help to understand the big picture of the competitor's product-to-market efforts and their success as well as the sustainable competencies that create competitive advantage. Company analysis insights are mostly used to support strategic planning together with industrial analysis, moreover, they can be utilized as synergy for competitive decision making.

Company analysis may contain competitor information about the firm's goals, market shares, financial statements, culture, focus in markets, as well as the strengths and weaknesses. Information for company analyses can be retrieved from several internal sources and analyzed by different methods. Possible information sources and analysis method are described in Table 8 below.

Table 8. Information sources and common methods for company analysis (Source: Jenster and Solberg Søylen 2009: 87).

Plans and strategies	Efficiency parameter	Responsible department
Financial	Capital, People, etc.	Accounting/Finance
The marketing plan	Sales, Market share, etc.	Marketing and Sales
Production plans	Production, Service level	Production
HRM strategies	Staff turnover	HRM
IT plans	Infrastructure, security, up-time	IT
Facilities contracts	Office space, off balance sheet risks	Legal
Research & development	Technology, projects, timelines	R&D
Acquisitions	Capital, strategic fit	Business Development
Analysis type/Company function	Qualitative	Qualitative/Quantitative
Marketing	Focus group Trend analysis SWOT Rational Choice Theory KSF Deep interviews	Questionnaires'/Benchmarking, Forecasting, Game theoretical approaches
Finance	SWOT Rational Choice Theory	Questionnaires'/Benchmarking, Ratio analysis, cost analysis
Production	SWOT KSF	Questionnaires'/Benchmarking, cost analysis

As seen from Table 8, there could be various information sources for conducting company analysis. Information could be retrieved more efficiently when utilizing other departments know-how on the analysis. Performing the company analyses can be handled by

different methods and research approaches. Jenster and Solberg Søylen (2009: 89-90) believe that the choice of the methodology should be based on the firm's situation and objective for the analysis. One popular example is the method which follows generic intelligence cycle introduced in Section 4.2.2. with specific information sources and themes. Another popular example is the SWOT analysis that defines Strengths, Weaknesses, Opportunities and Threats; or the analysis of key success factors (KSF).

On the down side, Jenster and Solberg Søylen (2009: 87-88) argue that in many cases, the company analyses might be very time and resource extensive, therefore it might be wise to *outsource information gathering to an outside consultant or a special function inside the company*. Jenster and Solberg Søylen (2009) believe that the outsourcing of company analysis information gathering might be less expensive and more efficient way to have feasible results from the analysis.

To sum up, the Company analyses method is often utilized as a tool for conducting competitor analysis. However, it analyzes the companies mostly on a high level and suitable mainly for strategic input purposes, similarly to Porter's five forces. Company analyses information can be adapted by sales as well as other internal customers. Also, it may be used as input for other more suitable tools for operative use, such as the competitor profiles which are discussed next.

4.3.3 Developing Competitor Profiles

According to Fleisher and Bensoussan (2015: 76), Competitor profiles contain general information about the firm's rivals in the marketplace and can be utilized as valuable aid for field sales personnel, marketing and sales managers as well as other internal customers who contribute their development. Competitor profile Information can have more value for decision making, if it is combined with other strategic value outputs of Competitor analysis.

Competitor profiles could contain information about the critical success factors, refined financial ratios, implications of the current and future capabilities, probabilities on actions against strategic changes, and recommendations how to respond in certain competitive cases.

According to Fleisher and Bensoussan (2015: 77), competitor profiling can be carried out in several layers of the organization by addressing the competitive landscape and related activities throughout the value chain. To have benefits for the organization, the

Competitor profiles should be actively updated and future driven – otherwise, with passive updates, a competitor profile is just historical documentary with no analytical value and it cannot be utilized as aid for decision making. As one possible approach, active competitor profiling can be achieved more efficiently by utilizing automated web sourcing or spidering methods and use of RSS (really simple syndication) feeds to review news and publications.

Hussey and Jenster (2003: 97-103) also discuss the content of Competitor profiles and their practical implementation. According to them, there could be several elements of competitive information adapted on the competitor profile. These elements should be presented visually on the A3 or equivalent sheet in order to assimilate information at a glance.

In Competitor profiles, the competitive information may include financial, product, market, strategic and organizational intelligence regarding the target competitor as well as critical success factor (CSF) comparison to the firm's ratings. The suggested elements for a competitor profile are described in Table 9 below.

Table 9. Competitive information for competitor profiles (Adopted from Hussey and Jenster 2003: 99-103).

Competitor profile elements	Description
Financial results	Selected figures that gives fact about competitor recent financial history.
Product analysis	Selected products and their sales, direct costs, contribution and market share information.
Marketing and sales activity	Information how the competitor influences the market. Sales force and promotional activities.
Sources of competitive advantage	List of which competitor activities provide value to customer.
Importance of the activity to whole group	Address if there are indications of responsive aggressive attack by the group level.
Scope of internal operations	Statement of global operations and predicted behavioral accordingly
Key factors	Selected key facts about the competitor. Locations, number of factories, R&D location, top management.
Apparent strategy	Assumption what the competitor is currently focusing on.
Strengths and weaknesses	List of key strengths and weaknesses and implications accordingly.
Organizational philosophy	Analysis of how the competitor runs its operations.
Personnel policies	Analysis of how the competitor is managing staff in strategic respective.
Critical success factors	Comparison of critical factor ratings and scoring.

As seen in Table 9, there can be extensive competitive information consolidated into a one Competitor profile. Information can include the same components as in the Competitor response profile, nevertheless it gives more comprehensive insights on any one of them.

Hussey and Jenster (2003: 103) argue that a by-product is that the Competitor profiles make a good way of ensuring that all information is analyzed and recorded in the way that the assessment is always up-to-date. In this visualized form, the content should be reviewed regularly by the relevant managers who have competence in Competitor analysis.

To sum up, Competitor profiles are widely recognized as a tool for CA and their features match internal customer needs for having broader CA information available about the competitors. Competitor profiles can be important as one of main or supportive tools, and can be further extended with other tools, such as competitive battlecard, for example. They are discussed next.

4.3.4 Competitive Battlecards

The purpose of competitive battlecards is to aid the company and especially its sales personnel to beat the rivals on sales situations. Battlecards provide insights of market key points and detailed product comparisons to major rivals. The knowledge is used to educate and remind sales personnel about the competition and empower them to create competitive barriers and differentiate from the competitor's product and services.

By utilizing mobile technology platforms for sharing the battlecards, the firm might be able to improve the availability of them as well as reach the sales force in a critical moment when the competitive information is needed to win the sales deal. Additionally, battlecard updates are then instantly available and automatization of data can implement to the application.

Battlecard contains a comparison data which can include, for example, differentiated or segmented product or service features, pricing, strengths and weaknesses as well as total cost of ownership (TCO) and return on investment (ROI) data in respect of the objective item. According to Fleisher and Bensoussan (2015: 76-77), this data should rely on the appropriate competitor analysis, which ensures the quality of the Battlecards.

As seen from this description, competitive Battlecards can be included into a set of tools for conducting competitive analysis. As the sales force requires tools that could provide a fast and reliable competitive comparison on the product level, the Battlecards address

these requirements and thus can be utilized for conducting Competitor analysis. Other tools can relate, for example, to analysis of strategic value, but these practices need a separate discussion how to adapt them as a tool for CA. This discussion is conducted next.

4.3.5 Strategic Value Curves

Sheehan and Bruni-Bossio (2015) introduce an interesting tool called the strategic value curve analysis which is based on the Kim and Mauborgne's (2005) strategy canvas. Strategy canvas is a diagnostic and action framework tailored for the Blue ocean strategy. The Blue ocean strategy implies driving the costs down rather than driving value to the customers and integrates holistically the firm's functional and operational activities. This can be utilized as the aid to strategy canvas which captures the current state competition in the marketplace. (Kim and Mauborgne 2005: 109-112)

Strategy canvas offers a rich visual description of the firm's competitive landscape and can be applied to the strategic value curves analysis (Sheehan and Bruni-Bossio 2015: 318). The tool monitor, diagnose and repair issues to the firm's customer value proposition and its delivery. Visual impression of the tool is shown in Figure 14.

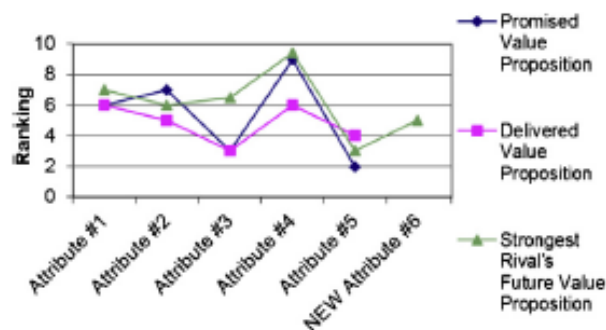


Figure 14: Strategic value curves for value propositions (Source: Sheehan and Bruni-Bossio 2015: 320)

As seen from Figure 14, the diagnostics show the visual look of comparing the promise, the delivered, and the strongest rival's future value propositions. According to Sheehan and Bruni-Bossio (2015: 323), the tool is easy to employ, and it is visual, customer centric and externally focused. Downside of the tool is that it does not diagnose the efficiency of the processes that deliver the customer value proposition.

Ballesteros et al. (2010) conducted a research on utilizing value curves in the project management environment in construction projects using similar approach. Graphic analysis of the strategy canvas captured three curves in the chart which compared value

factors between the project consultancy, the construction firm and the promoter. This example emphasizes that the value curves can be applied to several purposes.

To sum up, there are various strategic value curve applications available. Some of those are applied to the practical utilization of Competitor analysis. Figure 15 shows an example of the competitive heat map and the relevant value curves.

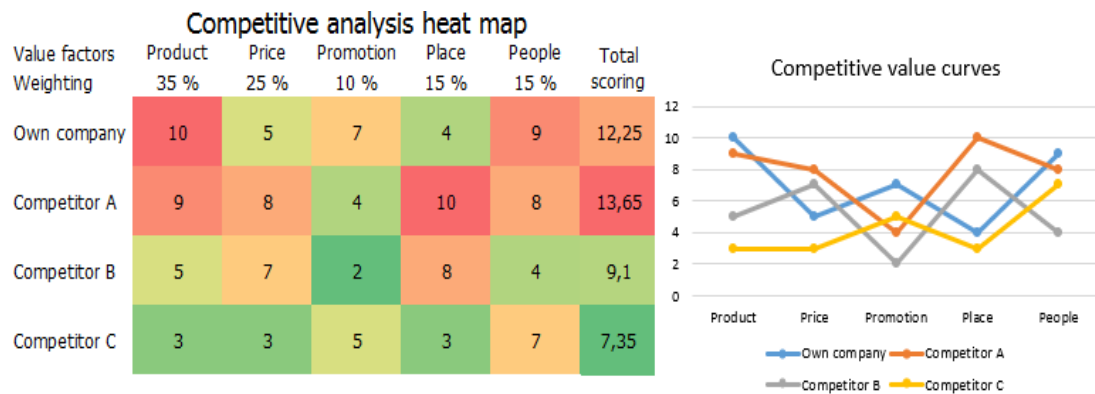


Figure 15. Example of competitive heat map and value curves (Idea adapted from PropelGrowth 2019 website).

As shown in Figure 15, the example contains the heat map chart which includes the focal company level with the selected value factors. Here, in the example, these value factors are the marketing 5Ps (Product, Price, Promotion, Place and People) compared on the scale 1-10 to the main competitor's A-C. Scoring each value factor plots the value curves on the right side. From the value curves, it can be easily diagnosed that competitor A is very strong in competitive pricing and the focal company has the most competitive products in the marketplace.

As seen from these practical examples, companies often seek more visual tools for Competitor analysis which would facilitate comparison of competitive factors between main rivals. The strategic value curves can be applied to conduct such analysis since this tool is highly visual, informative, multi-dimensional and can be applied to strategic as well as operative utilization of Competitor analysis.

4.4 Conceptual Framework of This Thesis

This section provides a summary of the selected elements picked up from relevant literature and related best practice and suitable to conduct Competitor analysis. The conceptual framework consists of three main elements. These elements were carefully se-

lected based on the Thesis objective and – merged together – these elements, synthesizes the theoretical construct for approaching the Competitor analysis process in this Thesis. The conceptual framework of this thesis is shown in Figure 16.

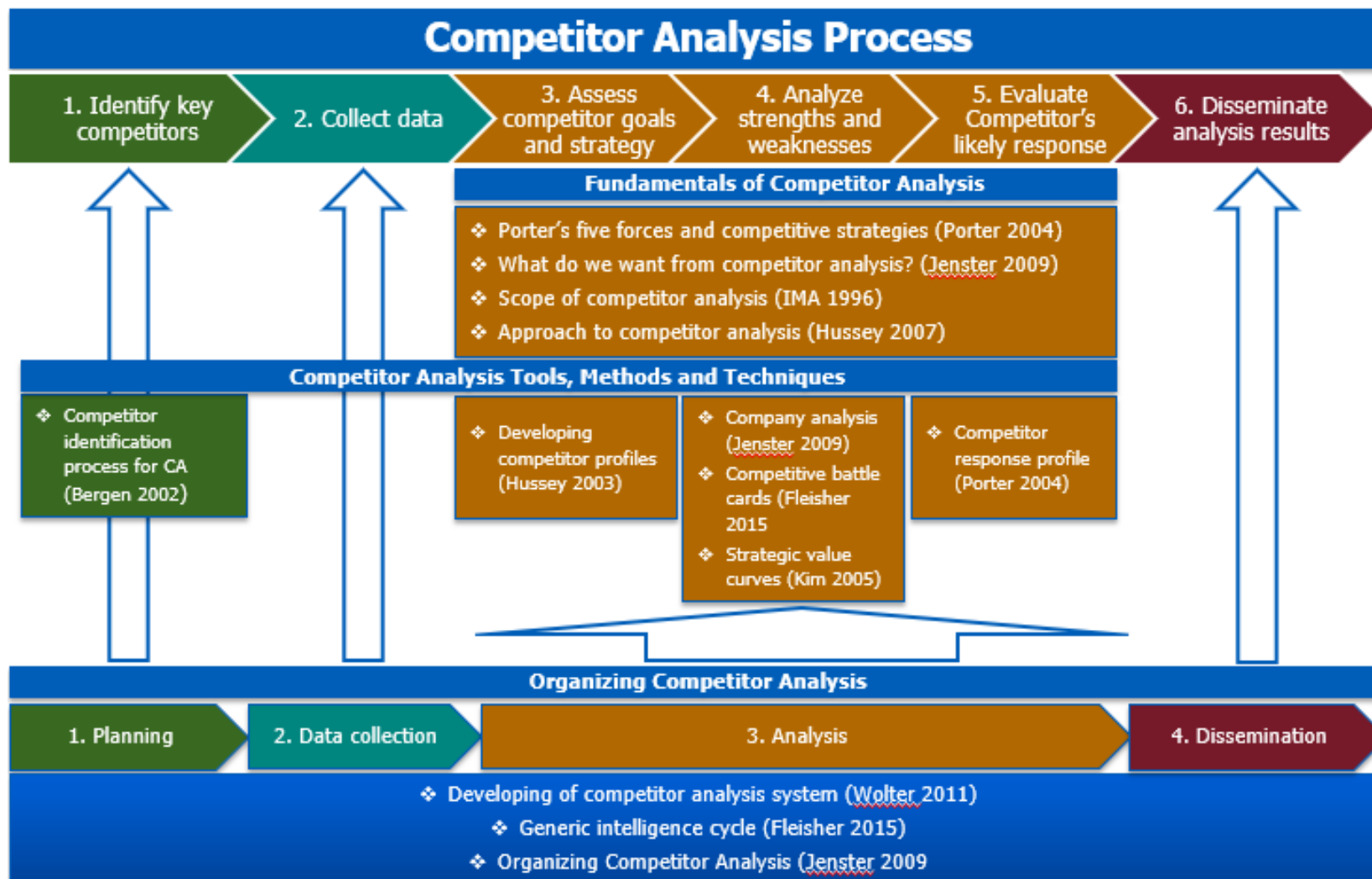


Figure 16. Conceptual framework of this thesis.

As seen from Figure 16, there are three elements selected for the conceptual framework for conducting Competitor analysis. These elements include, first, the fundamentals of Competitor analysis, second, they relate to the necessary organizing methods, and third, they point to the supportive tools, methods and techniques that can be used for conducting Competitor analysis. Together these elements formulate *the six Competitor analysis process steps* starting from the competitor identification up to dissemination of analysis results. In order to conduct the Competitor analysis process, supportive tools and data processing system are also included in the design.

The first element, *fundamentals of competitor analysis*, sets the understanding and general approach for Competitor analysis as well as narrows down the extensive scope of theoretical background. The understanding is based on Porter's five forces and competitive strategies as well as the purpose for Competitor analysis as discussed in related literature. This approach to Competitor analysis illustrates the generic step-by-step process which leads to competitive advantage. In addition, the approach to Competitor analysis - together with the scope of intelligence gathering - guides and limits the selection of organizing methods and supportive tools. Thus, this element makes a prerequisite for creating a feasible process for competitor analysis and emphasizes especially the selection of analyze steps for the Competitor analysis process.

The second element, *organizing competitor analysis*, introduces four steps to ensure the effective competitor analysis, generic intelligence cycle and development of competitor analysis system. This element also frames the importance of competitor identification, which is the first step of any competitor analysis. The implementation of a Competitor analysis process and design for a data processing system also originate from this element. This element is a mandatory requirement to be able to design and implement a sustainable standardized system for CA and include the most crucial CI cycle steps of *identification, data collection and dissemination* to the actual CA process.

Finally, the last element, *competitor analysis tools, methods and techniques*, equips the Competitor analysis process with a feasible CA toolkit to support the identification and analysis steps. The CA toolkit includes five valuable tools for the assessment, analyze and evaluation steps (steps 3-5 in the CA process). The five tools are *competitor response profile, company analyses, competitor profile, battle cards* and *applied strategic value curve*. All these tools provide inputs to each other and thus can be aligned. This element is very important since it standardizes the analysis process step procedures and ensures the quality of and right context of CA outcome.

In the end, the extensively reviewed related literature and best practice findings did not show any evidence of a ready-made existing model for the CA process which can be applied straight to the business context of this thesis. Hence, the presented model for CA process proposal was synthesized as the conceptual framework for next steps in this thesis. The next stage is building the initial proposal, and it is discussed step by step in next Section 5.

5 Developing a Competitor Analysis Process for the Case Company

This section incorporates the results of the current state analysis (from Section 3) and suggestions identified from literature (and merged into the conceptual framework in Section 4) into the initial proposal for CA process for the case company. First, the section provides an overview of the proposal development stage to explain the logic of its design. Second, this section deals more in depth with each steps of proposal development. Third, the section presents the initial proposal for Competitor analysis process and summary of relevant design components.

5.1 Overview of the Proposal Development Stage

As a result of CSA, multiple strengths and weaknesses were identified from the current Competitor analysis practices in the case organization. Additionally, business expectations, capabilities and ideas for improvement opportunities were collected in order to gather encompassing guidance for proposal development.

After the extensive data analysis and two CSA workshops with the informants, the findings were summarized into larger categories and grouped according to the main three topics: tools, process and results of CA. The main issues identified from these topics, were: (a) partly insufficient tools for competitor analysis, (b) missing of integrated systematic process for Competitor analysis, and (c) analysis results are not fulfilling the business expectations. On the other hand, the analysis showed that the case organization have several practices in place which generate value for the business or have potential for development. However, without consistency with activities and integration into a systematic process, the current CA practices are not efficient nor effective enough to meet business expectations of CA.

In the next stage, the identified issues were used to carry out a literature study of available CA best practice. Potential knowledge and best practice were found from literature in order to correct the main issues, and which were merged into the conceptual framework of this thesis. Accordingly, the conceptual framework incorporated three main elements which are: (a) fundamentals of competitor analysis, (b) organizing competitor analysis and (c) competitor analysis tools, methods and techniques. With the synthesis of these elements, the six steps for conducting the Competitor analysis process were formulated including supportive tools and data processing system, thus creating the key input for proposal development.

The initial proposal was developed in a future state workshop together with CPS organization key stakeholders and identified design gaps fulfilled with group discussions. Future state workshop was planned together with the author and Marketing Manager of the CPS organization, who is the key decision maker in the proposal validation stage. The design and workflow of the future state workshop is documented in Appendix 5.

In the future state workshop, first the study objective and then key findings from the CSA stage were recapped by focusing on the identified key issues. Next, the conceptual framework was thoroughly presented, discussed and more elaborated with the participated key stakeholders. After the presentation, key stakeholders approved the conceptual framework as a construct for the initial CA process and a basis for proposal development.

After the agreement to utilize the conceptual framework for proposal development, participants were divided into two teams. Both teams started their assignments to develop a Competitor analysis process, including the tools and the system definition. Team assignment goal was to define the purpose for each process step, when and by whom to be conducted and select the appropriate tools, methods and techniques according to CSA and conceptual framework. Once the teams were ready with their assignments, the initial proposal drafts were presented to the whole group and discussed more in depth. After the discussion, the initial proposals drafts were merged together, and practical examples created for each of the process step. Finally, the process content was documented and the unified with the participants.

5.2 Initial Proposal Development (Based on Data 2)

The initial proposal of the CA process follows the logic of six steps identified in the conceptual framework, accompanied by the related tools and the overall system definition guideline. The outline of the proposed CA process is described in Figure 17.



Figure 17. Initial proposal of CA process steps.

As seen from Figure 17, the process consists of six main steps. The first step is about identification of competitors, the second step collecting data, the third step assessing competitor's goals and strategy, the fourth step analyzing competitor strengths and weaknesses, the fifth step evaluating competitor's likely response, and finally, the sixth

step dissemination of the Competitor analysis results. The development of these 5 steps as well as their content and alignment are described below.

5.2.1 Developing Process Step 1

Identify key competitors makes step 1 of the proposed CA process. The process content of step 1 includes the definition of purpose, responsibilities, timing and related tools, methods and techniques. The definition details of step 1 in CA process and practical example of utilization are described in Table 10.

Table 10. Process step 1 definition and practical example.

Data 2 process definition table: Step 1 - Identify key competitors	
Purpose / what	Define key competitors for the analysis
When	Yearly - when market share data available Ad-hoc - when market change
By whom	Market Intelligence Team - based on market data Marketing Manager/Product Managers - in case of market change
Tools, methods and techniques	Market study reports Market intelligence gathering
Practical example of competitor categorization and identification sources	Direct competitors: <ul style="list-style-type: none"> - From market study reports Potential competitors: <ul style="list-style-type: none"> - Small players already partly in the market. - A company who yet don't have PQ in their portfolio but could fit in the strategy. - New "Chinese" competitor entering market with money. Indirect competitors: <ul style="list-style-type: none"> - General improvement in the mains quality. - Resiliency created in different level (e.g. software). - Traditional UPS customers start accepting energy storage solutions as back-up.

As seen from Table 10, the purpose of step 1 is to define key competitors for the basis of CA and develop an accurate domain of direct, indirect and potential competitors. Natural timing for the identification, is the time when annual market share data is available. This data provided by the Market Intelligence Team (MIT) based on market study reports and acquired intelligence about relevant competitors. In case of a critical market change, Marketing Manager or responsible Product Manager is to update the analysis of competitor identification.

The practical example is based on the CPS organization definition of categorize and identify sources for the direct, potential and indirect competitors. As the example shows, there are several sources to pay attention in order to increase managerial awareness about competitive threats and opportunities. After all relevant competitors are identified, the data need to be collected for the actual analysis steps.

5.2.2 Developing Process Step 2

Collect data is step 2 of the proposed CA process. The purpose of step 2 is to acquire accurate data about the identified competitors. Data should include the information regarding the competitor strategy, product information and launches as well as pricing. Details of step 2 definition are described in Table 11.

Table 11. Process step 2 definition and practical example.

Data 2 process definition table: Step 2 – Collect data	
Purpose / what	Get accurate data of competitors <ul style="list-style-type: none"> - Company strategy, product information, product launches and pricing
When	Yearly - mass update Continuous - quarterly feedback from sales and BDM's
By whom	Market Intelligence Team Business Development Managers (BDM) Sales Product Managers (PM)
Tools, methods and techniques	Competitive matrix on-line Collaboration site with feedback loop and discussion Analysis templates
Practical example of data collection system parameters	Fixing sources and ways of obtaining data <ul style="list-style-type: none"> - Source of data - How & where - Tools/methods Processing data and evaluation <ul style="list-style-type: none"> - Product management and PLM to define feasibility of the data. - How to use the rumors that cannot be validated?

As seen from Table 11, the timing of data collection is standardized into one major update and continuous quarterly feedback. According to the definition, data is acquired yearly by several functions in a collaborative mass update. To keep the data accurate and up-to-date for the whole year, continuous feedback is to be received from the sales and BDMs quarterly.

In order to succeed in collaboration, gathering feedback, as well as ensure efficient data flow and management of CA information, a modern collaborative CA site is required. The site could additionally include an on-line version of the legacy tool Competitive matrix and the tailored analysis templates for reporting competitive information for the CPS organization.

Additionally, Table 11 shows a practical example of the data collection for CA system parameter definition. The definition includes the description of feasible data sources, the ways of obtaining and processing data, and evaluation of the acquired data credibility.

Once the CA system parameters are defined and step 2 is followed, accurate data can be collected for the basis of the Competitor analysis and the information for the CA tools to keep them up-to-date.

5.2.3 Developing Process Step 3

Assess competitor goals and strategy makes step 3 of the proposed CA process. It is the first step of the actual analysis stage. The purpose of this process step 3 is to understand the strategy and aligned goals of the main competitors. The analysis could focus on understanding the competitor's customer segment and go to market (GTM) strategies and their unique value proposals, the key focus areas in customer demand, and the key messages of marketing. Details of process step 3 definition are described in Table 12 below.

Table 12. Process step 3 definition and practical example.

Data 2 process definition table: Step 3 – Assess competitor goals and strategy	
Purpose / what	To understand the strategy of the main competitors <ul style="list-style-type: none"> - Segments - Go to market (GTM) - Area focus - Messaging
When	Yearly - After key competitor identification
By whom	Market Intelligence Team BDM's and PM's refine the Competitor profiles together
Tools, methods and techniques	Competitor profiles Market intelligence - Outsourced process internally
Practical example of the tool content	Company overview Global presence SWOT analysis Product & solutions portfolio Key factors Apparent strategy

As seen from Table 12, the timing of step 3 is after the key competitors are identified. To start executing the actual Competitor analysis after the competitor identification, the managers need to pull the relevant data for the analysis purposes collected in step 2. In order for CPS organization to be able to conduct the strategic level competitor analysis, they need support from the Market intelligence team for intelligence gathering and providing the analysis materials.

Competitor profiles was selected for the CA tool of step 3. The tool is capable of providing valuable company level competitor information in a summary format. The Competitor

profile format should be aligned with the purpose of the step and co-created together in collaboration with the Market Intelligence Team.

The practical example of the tool content illustrates the topics which could be included into the Competitor profiles tool analysis output. Purpose of the tool is to get understanding of the competitor profile in general and their apparent strategy and goals. The tool results could be used as input for the upcoming analysis steps.

5.2.4 Developing Process Step 4

Analyze strengths and weaknesses is step 4 of the proposed CA process. The purpose of step 4 is to understand the overall strength of the profiled main competitors and their products by utilizing competitor analyses. The competitor analyses provide valuable CA information for the strategic planning as well as sales functions decision making. Details of process step 4 definition are described in Table 13.

Table 13. Process step 4 definition and practical example.

Data 2 process definition table: Step 4 – Analyze strengths and weaknesses	
Purpose / what	Understand the overall strength of our main competitors. <ul style="list-style-type: none"> - Company strength - Product profiles
When	Yearly
By whom	Company: Marketing Manager Products: Product Managers
Tools, methods and techniques	Company analysis Battle cards Price/value chart
Practical example of the tools content	All the tools can be utilized to sales force and relevant internal customers of CA to have comprehensive understanding of competitive strengths and weaknesses on decision making. <ul style="list-style-type: none"> - Company analysis provides a high-level comparison of competitor's market trends and main strengths and weaknesses - Battle cards provides a summary of unique selling points of products comparison to selected main rivals offering - Price/value chart provides a visual comparison of selected competitors price and value factors scoring compared to own level.

As seen from Table 13, step 4 in the competitor analyses are performed on a yearly basis for the profiled main competitors and their related products. Marketing Manager is responsible of analyzing the companies and Product Managers analyzing products. This analysis step consists of three CA tools: Company analysis, Battle cards and Price/value chart.

The practical example of the tool content describes the definition for the three CA tools. Company analysis provides a high-level comparison of the competitor's market trends

and their main strengths and weaknesses. The Company analysis tool is used as the main input for strategic planning process of the divisional level of the case organization PQED. The battlecards provide a summary of the unique selling points of products comparison to the selected main rivals offering. Price/value chart provides a visual comparison of the selected competitors price and value factors scoring the compared to own level. All these CA tools serve the needs to form a comprehensive understanding of competitive strengths and weaknesses in sales as well as other CA customers.

With the gained knowledge from analysis steps 3 & 4, CPS organization will have enough assets to evaluate the competitor's likely response to marketplace changes.

5.2.5 Developing Process Step 5

Evaluate competitor's likely response is step 5 of the proposed CA process and the last step of the actual analysis stage. The purpose of step 5 is to provide conclusions from CA to be able to predict the competitor moves against market changes as well as their most likely response to certain competitive activity. Details of the process step 5 definition are described in Table 14.

Table 14. Process step 5 definition and practical example.

Data 2 process definition table: Step 5 – Evaluate competitor's likely response	
Purpose / what	Conclusion of CA where the market or competitors are moving. What will change and what would be a competitor's response? <ul style="list-style-type: none"> ○ Price change ○ New product launch ○ New product feature
When	Yearly
By whom	Marketing Manager, BDMs and PMs
Tools, methods and techniques	Competitor response profile
Practical example of utilization	Annual CA providers assessment to create/update competitor response profiles, based on the CA knowledge gained from the previous analysis steps.

As seen from Table 14, step 5 analysis is conducted as yearly assessment in collaboration with CPS organization's key stakeholders and providers of CA. As a result of the analysis, Competitor response profiles are created for the main competitors by utilizing gained knowledge from the previous steps of the CA process.

The created Competitor response profiles are the ultimate product of CA and can be utilized as input to strategic planning as well as a proactive tool for the operative tactical planning in the sales functions.

Step 5 finalizes the actual analysis stage and ensures that CPS organization has enough understanding of the competitors and their products to be able predict, act and react in any competitive situation.

However, there is no point for having done all this effort, if the Competitor analysis results and tools are not delivered to the actual customers of CA knowledge. The delivery for the customers can be ensured by conducting the next and final step of the developed CA process – Disseminate of the analysis results.

5.2.6 Developing Process Step 6

Disseminate analysis results is step 6 in the proposed CA Process. The purpose of the step is to distribute CA information and collect feedback from the sales as well as other internal customers. When CA information is distributed successfully, and feedback received regularly from the audience, the Competitor analysis process and analysis quality can be continuously improved. Details of process step 6 definition are described in Table 15.

Table 15. Process step 6 definition and practical example.

Data 2 process definition table: Step 6 – Disseminate analysis results	
Purpose / what	Distribute the CA information and collect feedback from the sales functions and other internal customers of CA.
When	Continuous
By whom	Product Managers
Tools, methods and techniques	Same tools than in step 2. Collect data
Practical example of tool utilization	Collaboration site with CA publications, feedback loop and discussion. Includes performance metrics for CA process <ul style="list-style-type: none"> ○ Usage rate of CA knowledge ○ Quality rating for the CA publications ○ Success stories and relevant sales metrics

As seen from Table 15, step 6 is an ongoing process loop which ensures active collaboration among the providers and customers of CA. The process step is managed by Product Managers. Product Managers are utilizing the same tools as in step 2 data collection.

Analysis results can be more efficiently distributed when a modern IT technology-based collaboration site is in place for CA publications, with instant feedback and active discussion on the current CA topics. The site design should include monitoring metrics for usage rate of CA knowledge and other equivalent process performance metrics.

In addition, the successful dissemination can be ensured if the CA results are shared and explained in management meetings, periodical competitor meetings and strategy workshops. These methods can be applied at all levels of management in the organization.

5.3 Summary of the Proposed Competitor Analysis Process

This section provides a summary of the proposed Competitor analysis process with content and related components.

The proposed CA process and its definitions are based on the knowledge gained from the current state analysis and suggestions from literature and best practice merged into the conceptual framework of this thesis. By utilizing both CSA and conceptual framework the study ensures a solid ground for development work to solve the main issues and reach the objective of this thesis. The proposal development and definitions for the main steps of CA process were guided and facilitated by the researcher of this Thesis and co-created with the key business stakeholders from CPS organization. Additionally, the Sales, Product Development and Sales Support gave their valuable input at the CSA stage to ensure that internal customer expectations and issues are covered.

The initial proposal consists of six CA process main steps as well as process definitions for each step described in the sections above. Taken together, the process main steps and definitions describe the design of the proposed CA process in a summary format.

The summary of the proposed Competitor analysis process is illustrated in Figure 18.

	1. Identify key competitors	2. Collect data	3. Assess competitor goals and strategy	4. Analyze strengths and weaknesses	5. Evaluate competitor's likely response	6. Disseminate analysis results
Purpose /what	<ul style="list-style-type: none"> Define key competitors for the analysis 	<ul style="list-style-type: none"> Get accurate data of competitors <ul style="list-style-type: none"> Company strategy Product information Product launches Pricing 	<ul style="list-style-type: none"> To understand the strategy of the main competitors <ul style="list-style-type: none"> Segments GTM Area focus Messaging 	<ul style="list-style-type: none"> Understand the overall strength of our main competitors, not just product strength <ul style="list-style-type: none"> Company strength Product profiles 	<ul style="list-style-type: none"> Conclusion of CA where the market or competitors are moving What will change and what would be a competitor's response? 	<ul style="list-style-type: none"> Distribute the information and collect feedback
When	<ul style="list-style-type: none"> Yearly - when market share data is available Ad-hoc when market change 	<ul style="list-style-type: none"> Yearly - mass update Continuous quarterly feedback from sales and BDM's 	<ul style="list-style-type: none"> Yearly - After key competitor identification 	<ul style="list-style-type: none"> Yearly 	<ul style="list-style-type: none"> Yearly 	<ul style="list-style-type: none"> Continuous
By whom	<ul style="list-style-type: none"> Market Intelligence Team - based on market data Marketing Manager/PM in case of market change 	<ul style="list-style-type: none"> Market Intelligence Team BDMs Sales PMs 	<ul style="list-style-type: none"> Market Intelligence Team BDMs and PMs 	<ul style="list-style-type: none"> Company: Marketing Manager Products: PMs 	<ul style="list-style-type: none"> Marketing Manager, BDMs and PMs 	<ul style="list-style-type: none"> PM
Tools, methods and techniques	<ul style="list-style-type: none"> Market study reports Market intelligence 	<ul style="list-style-type: none"> Competitive matrix on-line Collaboration site with feedback loop and discussion <ul style="list-style-type: none"> Analysis templates 	<ul style="list-style-type: none"> Competitor profiles Market intelligence 	<ul style="list-style-type: none"> Company analysis Battle cards Price/value chart 	<ul style="list-style-type: none"> Competitor response profile <ul style="list-style-type: none"> Management assessment based on the CA knowledge of the main competitors 	<ul style="list-style-type: none"> Same tools than in step 2. Collect data

Figure 18. Initial proposal for the Competitor analysis process.

Figure 18 describes the initial proposal for the Competitor analysis process, including the purpose of each step, timing, responsibilities as well as relevant tools, methods and techniques.

In Figure 18, the legacy CA tools are colored in green and new CA tools in orange. This illustrates the volume of broader understanding of CA elements that the proposal introduces for CPS organization. In addition, the process illustrated in Figure 18, incorporates the relevant input from the key stakeholders (from Data 2 collection) into a beneficial format which can be easily applied as a practical process guideline for the proposed CA process.

Step 1 focuses on identifying the direct, potential and indirect competitors in the marketplace. The step is initiated by the yearly market share report released by Market intelligence team. In case of a market change, CPS organization's product marketing managers conducts an update for the identified competitors.

Step 2 is for collecting competitive data as input for actual Competitor analysis. The step requires a definition of data sources and responsibilities to acquire the data for analysis. The data is collected yearly as mass update and quarterly from the Sales offices. The collected data is entered to the collaborative CA site and further processed for the analysis and product related data to Competitive matrix on-line version.

Step 3 is for assessing the competitive strategy and goals of the main competitors. This step can be conducted after the relevant players are identified in the marketplace and the data for the analysis is collected and up-to-date. The data and analysis basis are provided by Market intelligence team and further refined by Product Managers. As the result of the analysis step, Competitor profiles are created of the identified main rivals.

Step 4 is for analyzing competitor's strengths and weaknesses. The step is conducted yearly after the Competitor profiles are created. The analyses in this step integrates several important tools, such as Company analysis, Battlecards and Price/value analysis. Marketing manager is responsible of Company analysis and Product Managers for Battlecards and Price/value analysis. Together these tools provide visual summary comparisons of the main rivals and the case company at company and product level as well as in aspect of key competitive factors.

Step 5 is for analyzing of step three and four analysis results in order to create the Competitor's response profiles, which are then utilized to predict competitor most likely response in a case of competitive change in the markets. The step is conducted yearly as a management assessment of the Competitor analysis. The assessment is done in co-

creation of Marketing Manager, Product Managers and Business Development Managers and provides valuable insights for the competitive decision making.

Finally, step 6 is for dissemination of the analysis results. The step ensures a distribution of the CA information to the customers or end-users of CA and collects feedback accordingly. The step should be continuously active managed by the Product Managers and utilizes the same tools and in Data collection 2.

Next section discusses the results from validation by utilizing the findings of Data collection 3. It also presents the final proposal with action plan how to proceed with the implementation.

6 Validation of the Proposal

This section reports on the results of the proposal validation and points to further developments to the initial proposal, presented in Section 5. First, this section provides an overview of the validation stage procedure. Second, it discusses validation feedback and suggestions for further developments from the stakeholders. It ends with the final proposal and action plan for implementation.

6.1 Overview of the Validation Stage

The purpose of this stage was to evaluate the initial proposal feasibility for a practical utilization and collect feedback for further implementation. The evaluation was conducted by organizing a cross-functional validation workshop, which was selected as the validation procedure according to research approach and fit for the tight time limitations of this study and the business representatives at this stage.

The validation workshop was facilitated by the researcher and it involved the key stakeholders of the CSA stage, providing their input from Product Marketing, Business Development, Sales, Product Development and Sales Support organizations. Together, the cross-functional team evaluated the initial proposal and gave their valuable feedback for the further implementation. The design and workflow of the validation workshop is documented in Appendix 6.

In the workshop, the team reviewed first the study progress, then CSA key findings, followed by presentation of the conceptual framework. After the orientation to the basis of this study and results so far, the initial proposal and its development work was introduced. The introduction included the development stage procedures, developed CA process main steps as well as its content definitions and ongoing actions for the implementation.

Once the initial proposal was introduced, the team divided into pairs, which started to evaluate the initial proposal feasibility step by step in aspect of practical implementation. The evaluation was done in pairs by making comments on the developed process step definitions which were printed and paper and hang on the wall of the event place. After the pairs were evaluated all the process steps, the findings were presented to the whole team, discussed more and decided whether to be included for the final proposal. The evaluation results of the validation workshop are documented in Appendix 7.

6.2 Feedback Received and Further Developments to the Proposal

In the cross-functional validation workshop, the key stakeholders went through and commented all of the proposed process steps of CA process and their content definition for purpose, timing, responsibilities as well as tools, methods and techniques. The received feedback was then analyzed and the impact evaluated in respect of the proposal feasibility and change requirements. All the validation feedback data is documented in Appendix 7 (Data 3) and the impact to the proposal are described in Table 16.

Based on the given feedback and discussion of the findings, the final proposal was validated by the key stakeholders with only minor adjustments and approved for further implementation by the Marketing Manager of CPS organization. The validation feedback impact (Data 3) and suggested further developments for the proposal are presented in Table 16 below.

Table 16. Validation feedback impact and improvements for the proposal.

Process step	Feedback received/Improvements for the process			
	Purpose/what	When	By whom	Tools, methods, and techniques
1. Identify key competitors	No changes	No changes	No changes	No changes
2. Collect data	No changes	No changes	Include R&D product analysis into the data sources and R&D as provider /Include R&D	No changes
3. Assess competitor goals and strategy	Segment focus by competitor and which features are needed in which segment /Include features	No changes	Sales are conducting this step analysis and some data can be provided by them /Include sales	No changes
4. Analyze strengths and weaknesses	No changes	No changes	No changes	R&D Analysis of competitor units is required for the tools /Add R&D competitor product analysis as tools
5. Evaluate competitor's likely response	No changes	No changes	No changes	No changes
6. Disseminate analysis results	No changes	No changes	No changes	No changes
Overall process	Process owners for overall process and each of the process step need to be defined into the RASIC responsibility matrix			

As seen from Table 16, the green cells are not requiring any changes for the proposal. The yellow cells describe the received feedback and additions or corrections for the proposal correspondingly. The content of the yellow cells is discussed below.

In step 2, R&D is one of the data sources and responsible of collect data from competitor products that have been assigned to them by CPS organization. Therefore R&D was included to data collection responsibilities.

In step 3, there were one minor correction and one addition for the proposal. Firstly, the segment focus should specify of which features are needed in which segment. This is important for the business context, since a certain feature availability might open significant opportunities in sales to gain market share. Secondly, the sales offices are conducting some competitor goals and strategy analysis within their market areas. This analysis information can be utilized as one input for the Competitor profiles. Therefore, these changes were made for the proposal.

In step 4, R&D is conducting technical and value analysis for the competitor products. Therefore, a R&D product analysis method was added as one of the methods utilized in this step.

Additionally, during the validation workshop, the cross-functional team agreed that process owners should be defined for the overall process and for the each of the process steps. This information would be logical to document into the RASIC responsibility matrix with other process responsibilities.

At the end, the team approved the proposal as a new Competitor analysis process for CPS organization and related stakeholders. Two related key stakeholder's comments are cited below.

This systematic Competitor analysis process enables predictability -- documented track record. (Product Manager, Appendix 7)

This project has been a success and currently we have already started to implement the proposed Competitor analysis process. (Marketing Manager)

Next, the final version of the Competitor analysis process is presented below after the corrections and further developments from validation.

6.3 Final Proposal for the Competitor Analysis Process

The final proposal for the Competitor analysis process is illustrated in Figure 19. The explanations of the process content can be found from Section 5.3.

	1. Identify key competitors	2. Collect data	3. Assess competitor goals and strategy	4. Analyze strengths and weaknesses	5. Evaluate competitor's likely response	6. Disseminate analysis results
Purpose /what	<ul style="list-style-type: none"> Define key competitors for the analysis 	<ul style="list-style-type: none"> Get accurate data of competitors <ul style="list-style-type: none"> Company strategy Product information Product launches Pricing 	<ul style="list-style-type: none"> To understand the strategy of the main competitors <ul style="list-style-type: none"> Segment focus and features GTM Area focus Messaging 	<ul style="list-style-type: none"> Understand the overall strength of our main competitors, not just product strength <ul style="list-style-type: none"> Company strength Product profiles 	<ul style="list-style-type: none"> Conclusion of CA where the market or competitors are moving What will change and what would be a competitor's response? 	<ul style="list-style-type: none"> Distribute the information and collect feedback
When	<ul style="list-style-type: none"> Yearly - when market share data available Ad-hoc when market change 	<ul style="list-style-type: none"> Yearly - mass update Continuous quarterly feedback from sales and BDM's 	<ul style="list-style-type: none"> Yearly - After key competitor identification 	<ul style="list-style-type: none"> Yearly 	<ul style="list-style-type: none"> Yearly 	<ul style="list-style-type: none"> Continuous
By whom	<ul style="list-style-type: none"> Market Intelligence Team - based on market data Marketing Manager/PM in case of market change 	<ul style="list-style-type: none"> Market Intelligence Team BDMs Sales PMs R&D 	<ul style="list-style-type: none"> Market Intelligence Team BDMs and PMs Sales 	<ul style="list-style-type: none"> Company: Marketing Manager Products: PMs 	<ul style="list-style-type: none"> Marketing Manager, BDMs and PMs 	<ul style="list-style-type: none"> PM
Tools, methods and techniques	<ul style="list-style-type: none"> Market study reports Market intelligence 	<ul style="list-style-type: none"> Competitive matrix on-line Collaboration site with feedback loop and discussion <ul style="list-style-type: none"> Analysis templates 	<ul style="list-style-type: none"> Competitor profiles Market intelligence 	<ul style="list-style-type: none"> Company analysis Battle cards R&D product analysis Price/value chart 	<ul style="list-style-type: none"> Competitor response profile <ul style="list-style-type: none"> Management assessment based on the CA knowledge of the main competitors 	<ul style="list-style-type: none"> Same tools than in step 2. Collect data <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <ul style="list-style-type: none"> Existing tools New tools Validation add </div>

Figure 19. Final proposal for the Competitor analysis process.

As seen from Figure 19, there are only four additions (high-lighted in yellow) from the cross-functional validation workshop that were included into the final proposal for the Competitor analysis process. Otherwise the process content remains the same as was described in the initial proposal in Section 5.3.

6.4 Action Plan for Implementation

After the validation of the Competitor analysis process, CPS organization co-defined an Action plan for its implementation. The action plan is shown in Table 17.

Table 17. Action plan for implementation.

Process step	Action	Responsibility
Step 1. Identify key competitors	Specify CA data requirements and forms for Market Intelligence.	Marketing Manager
Step 2. Collect data	Define specifications and initial layout design for the Competitor analysis site for collaboration	Product Manager
Step 2. Collect data	Create a RASCI matrix for the required competitive intelligence and sources. Include main responsibilities for data collection.	Marketing Manager
Step 3. Assess competitor goals and strategy	Define the content for competitor strategy information (e.g. Competitor PQ strategy, key metrics, market share...)	Marketing Manager
Step 5. Evaluate competitor's likely response	Specify a goal for the analysis step outcome and what CA information can be pulled in from previous competitive analysis steps 3 & 4.	Marketing Manager

As seen from Table 17, the actions listed above point to specific CA process steps and relate to further definition of process specifications, which are to be considered before implementation is done.

In Step 1, Market Intelligence Team provides annual information for CPS organization of direct, potential and indirect competitors in the marketplace based on market data analysis. In order to execute, MIT needs a data requirement specifications and report forms for implementation.

In Step 2, CPS organization needs to establish a new Competitor analysis site for the collaboration to ensure, successful Data collection and Dissemination of the Competitor Analysis results, as well as improve the transparency of CA practices. As prerequisite for the site creation, CPS organization needs to define a specifications and initial layout design for the development. Additionally, Step 2 requires creation of a RASCI matrix for

competitive intelligence and sources, which reflects the main responsibilities for Data collection.

In Step 3, the Competitor profiles requires the definition of competitor strategic information to be analyzed. The definition could include the information regarding of the competitor PQ strategy, key metrics and market share.

In Step 5, CPS organization needs to agree on the ultimate goal for the competitor's likely response profiling and decide which data is needed from the previous analysis steps 3 and 4. This step needs careful consideration, since it is completely new to CPS organization. Moreover, it is crucial in order to predict proactively the competitor's responsive moves in case of a market change.

Next, the study proceeds to conclusions.

7 Conclusions

This section summarizes the key findings of this study and suggests further steps for the case organization. Afterwards, the section provides an evaluation of the Thesis.

7.1 Executive Summary

This thesis focused on developing the Competitor analysis process for CPS organization, which is a part of a global company competing in electrical industry. Increasing competition necessitates to sharpen its Competitor analysis (CA) practices for the current tools were not sufficient. Due the lack of integrated systematic CA process, the case organization was not able to meet all operative and strategic needs. Therefore, CPS organization needed to renew the Competitor analysis process, which would guide what competitor information to collect and analyze from the company's market segment, so that to improve the effectiveness of the existing CA analysis.

In this study, the qualitative research methodology and Design research approach were utilized due to the nature of the business challenge and context. The business challenge was dressed by involving the stakeholders in co-creation on the proposal and by exploring the phenomena based on theory and practice. The study started by drafting a research design of five predefined stages, three rounds of data collection and specifying the intended outcome from each the stages. The data for this study was collected by conducting the stakeholder interviews and workshops as well as exploring the company documentation.

In this study, in order to propose the Competitor analysis process for the case organization, the current state analysis was utilized, first, to get in-depth understanding of the current practices in the case organization. This was followed by literature search for best practice by focusing on the identified weaknesses and the objective of this study.

From the analysis of the current CA practices in the case organization, this Master's thesis revealed the key challenges in the current Competitor analysis, namely: (a) Partly insufficient tools for Competitor analysis, (b) Missing of integrated systematic process for competitor analysis, and (c) Analysis results are not fulfilling the business expectations. These challenges were strongly related to the lack of a clear CA process as well as the uncertainty about the CA tools, methods and techniques. The current CA tools were

mainly focusing on product feature analysis and unable to provide a broad enough analysis and profiling about the competitors. Also, the existing CA practices and responsibilities were unclear to the stakeholders and internal customers.

The remedies to these challenges were searched from best practice and literature. The most relevant tools and concepts from literature were selected and merged into the conceptual framework for a Competitor analysis process, based on recommendations from literature. These ideas were then utilized for the proposal development. The conceptual framework selected best practice for both Competitor analysis and Intelligence gathering, as well as suggested to utilize the Competitor analysis system for organizing the practical implementation of the CA process.

Based on these inputs, this Thesis proposed a new and robust Competitor analysis process with the integrated tools tailored for CPS organization. The new Competitor analysis proposed to conduct CA in 6 steps, with relevant tools for each step, namely: (a) Identify key competitors, (b) Collect data, (c) Assess competitor goals and strategy, (d) Analyze strengths and weaknesses. (e) Evaluate competitor's likely response, and (f) Disseminate analysis results. Together these steps ensure that the relevant competitors are identified, data collected, analyses performed, and the results distributed to end-customers and users of CA as well as enabling a feedback loop for improvements. The actual Competitor analysis steps (c) to (e), integrates selected CA tools such as: Competitor profiles, Company analysis, Battle cards, Price/Value chart and Competitor response profile. The tools are covering operative, tactical and strategic competitive analysis business needs and when utilized, providing valuable aid for the decision making in all levels of the organization.

By utilizing the proposed Competitor analysis process, the CPS organization's CA practices can become integrated into the overall standardized system, which ensures that all the vital elements are in place to analyze competitors and their offerings in the current business context.

The utilization will help to strengthen the current CPS organization's offerings, it will improve the collaboration and transparency of the CPS organization's practices, as well as enable sustainable ground due to better competitor knowledge.

This study has contributed to a broad knowledge and understanding of Competitor analysis for the case organization. The gained knowledge from this study, can be utilized as a source for future development and shared as best practice reference to other business units in the case company.

7.2 Managerial Implications and Recommendations

This study has developed the proposal which will help to tackle of the most critical issue for any company - the knowledge of their competitors. The case organization already have some CA practices, but they suffered from a lack of consistent, systematic approach, lack of diversity of the CA tools, and lack of clarity about the roles and responsibilities when gathering information about competitors. The proposal suggests how to tackle all these critical weaknesses and consists of (a) the new CA process, (b) system definition requirements and (c) tailored toolkit for each process step. To achieve full implementation of the proposed CA process, the researcher would recommend the following steps to be taken up by the CPS organization, for which the approval of the management is needed:

1. Finish the Competitor analysis system definitions
2. Design and establish the collaborative CA SharePoint site or equivalent
3. Involve internal customers and support functions on the implementation; appoint the role(s) of a CA analysis-responsible person(s).
4. Ensure management support to communicate the implementation at all stages to stakeholders
5. Collect feedback from the implementation and improve continuously.

Firstly, it is vital for CPS organization to finish the Competitor analysis system definitions, especially the RASCI matrix and data sources. This will set a foundation for the full implementation and practical utilization.

Secondly, it is necessary to ensure the data collection and dissemination of CA for which the collaborative CA SharePoint site or equivalent are needed. This will work as a channel for discussion and feedback on the CA topics, improve the data flow and transparency of whole CA practices.

Thirdly, there should be several stakeholders involved into implementation and continuous development of the CA process. The stakeholder involvement is vital for the change management perspective and on meeting requirements of the internal customers and end-users of Competitor analysis. Ideally, there should be appointed the role(s) of a CA analysis-responsible person(s), in the best of scenarios - the CA-owner.

Fourthly, it is necessary to ensure a steady communication of the CA process implementation to all stakeholders. This will improve the acceptance of the new CA process from

the workforce, encourage to raise initiatives, and decrease a possible change resistance. For this end, management support when communication the CA process implementation is needed.

Fifthly, the developed CA process enables the implementation in stages. To increase the stakeholder involvement, it would be important to collect feedback at all stages of implementation. This would help continuous development and therefore improve the quality and robustness of the CA process in CPS organization.

In order to have benefits form this study, CPS organization *must* implement the proposal in practice. If the system and tool definitions are finished, the proposal would easier continue to the practical utilization and only then the current state issues would be practically solved.

7.3 Thesis Evaluation vs. Objective

This study focused on the key elements of Competitor analysis and Competitive intelligence and shows the logic and implications of how a Competitor analysis process can be developed by adapting these elements into an integrated system.

With the successful implementation of the process, the case organization would be able to analyze competitors in an organized way and ensure a systematic offering of valuable insights as input for the strategic and operative decision-making among, especially for sales and other stakeholder organizations.

During the research process, the study revealed the limitations of available best practice concepts of Competitor analysis process itself, hence the developed process design is synthesis of Competitor analysis and Intelligence gathering theories applied in respect of case organization business context. The research process demonstrated that this study can be repeated, and a tailored Competitor analysis process designed according to an organization specific business needs.

The proposed CA process was designed to meet the objective of this Thesis, according to CPS organization's business needs. To understand how the proposal for the CA process fits the key issues in the CPS organization, a summary of key points was done in Table 18. Table 19 checks the fit of the CSA weaknesses against the proposed CA process points.

Table 18. The fit of the proposed CA process with the CPS organization's needs.

Current state issues	Proposed CA Process
1. Missing of integrated systematic process for Competitor analysis.	➤ Includes an integrated systematic process for Competitor analysis.
2. Tools are designed mainly for ad-hoc operative use and are not integrated into an overall "system".	➤ Includes regularly updated tools for strategic and operative needs.
3. Inadequate focus in Competitor analysis on issues which are important for the end-customer.	➤ Proposed CA process ensures the feedback collection from the end-customers and collaborative IT technology tools to enable active discussion on important topics.
4. Company profiling is too narrow.	➤ The Competitor profiles tool is included into the proposed CA process to expand company-level knowledge.
5. Too much weight on the products in CA.	➤ The proposed CA process includes various tools that are covering other competitive characteristics than products only.
6. Unable to measure the performance of CA practices due the lack of process indicators.	➤ Process indicators can be included in the design. Data collection process step introduces tools that enable the performance measurements. However, this should be separately defined in the CA system definition.

As seen from Table 19, there are six key points in the proposed CA process that address the CPS organization's needs. The proposed CA process steps suggest a systematic process for CA which integrates all the included elements together and resolve the majority the identified key issues that CPS organization is currently facing when doing CA. As addressed in "Managerial Implications" in section 7.3, the proposal for the CA process will still require further definition of the system specifications, as well as definition for the new CA tools from CPS organization. These steps would need to be done next.

7.4 Thesis Trustworthiness and Credibility

When conducting research, results and conclusions should be correct, reliable and credible. For ensuring the credibility of research work, science has two key concepts reliability and validity. Reliability ensures consistency of results and measures the quality of work. Validity planning and evaluation means making sure that research objects are correct and aligned with the objective of the overall study. According to (Kananen (2013: 176-183), in Design research, credibility criteria is applied from qualitative and quantitative research based on relevancy for the actual study.

Trustworthiness of the qualitative research is referred in science to four criteria: credibility, transferability, dependability and confirmability. This quality criteria can be addressed by different provisions made by the researcher. (Shenton 2004: 72-73) Since this study used the qualitative Design research approach, the above criteria were applied accordingly with applicable provisions or methods when conducted.

7.4.1 Criteria 1: Credibility

Credibility concepts of natural science are reliability and validity. Reliability means the consistency of the results that can be obtained, and validity ensures that correct objectives are researched. In qualitative research these quantitative research concepts cannot be directly applied. Hence credibility of qualitative research study can be addressed with assessability which corresponds to documentation in aspect of design research. Credible documentation can be ensured by selecting data collecting, analysis and interpretation methods as well as recording all research work activities. Consistency of interpretation can be confirmed by another researcher conclusions from the data or involve related informants to read and validate the text and interpretations which adds credibility of the research. Saturation is the one aspect of credibility which is met when enough quantity of observation units or in many qualitative cases persons are interviewed to be adequate. (Kananen 2013: 188-191)

According to Shenton (2004: 73), credibility issues can be addressed for example by adoption well recognized research methods, familiarizing the participating organization culture, description of the research background and researcher experience, triangulation with the use of different types or sources, peer and informant reviews regarding collected data and interpretation.

In this study, credibility is ensured by an appropriately designed data collection and selected analysis methods. These methods consist of comprehensive cross-functional interviews and workshops which are documented in the field notes, process maps and design descriptions. All collected data and interpretations were checked and validated by each of the interviewed informants. The researcher was also familiarized with the organizational culture and introduced the background of the study as well as own experience to the informants. Triangulation methods were applied to data collection and analysis.

7.4.2 Criteria 2: Transferability

Transferability in science correspond to consistency of the research in equivalent cases which requires well aligned research approach and object so that the results can be applied and compared in other case based on the situation and initial assumptions of the study. The researcher's responsibility is to provide accurate as possible initial description of the business context and assumptions. In design research the primary subject for benefits is the objective organization and benefits to science only another matter. (Kananen 2013: 191-192)

In qualitative study, the results must be understood in particular characteristics of the objective organization or geographic area where the research field work was conducted. If the research can assess the opportunity to apply same methods in different environments to repeat the study could be a great value. Consistency can be achieved when providing background data of the study context and detailed description of the phenomenon. (Shenton 2004: 69-71)

In this study, detailed description of the objective and business context were set and specified from the beginning. Tools and methods were applied from other studies with similar objective. Conceptual framework of the study was built to provide a clear construct for understanding the theoretical background of the studied phenomenon. The study was conducted to address the business needs and gain business benefits of the case organization and not for the subject of extending science knowledge.

7.4.3 Criteria 3: Dependability

Dependability means reliability of study. If the research work would be repeated in the same context, methods and participants, similar results would be obtained. Dependability of the study can be achieved by using of overlapping methods for example group and individual interviews. Processes within the study should also be documented in detail enough in order to future researcher repeat the work. This can be achieved when describing what was planned and executed, detailed description of the field work and reflective evaluation of research process effectiveness. (Shenton 2004: 71-72)

In this study, in the planning stage, the business context and problem were used as foundation for to the definition of study objective and plan. The research stage included CSA with thoroughly documented field notes and research of best practice from literature, consolidated into the conceptual framework of the study. Development stage built the actual solution for the business problem and was validated with feasible methods.

7.4.4 Criteria 4: Confirmability

Confirmability in qualitative research addresses the issue of the researcher's own influence to the conducted study. Text and figures are products of interpretation and always impacted by researcher personal identity, values and beliefs. This confirmability issue can be resolved by keeping open mind and willingness to consider alternative explanations of the findings. Additionally, the researcher should be aware about the personal influence and impact to the actual study so that the reader can derive its presence from the report. Good practices are to provide biographical details about the author and interest to actual study and demonstrate the extent that are approached with open mind. (Denscombe 2010: 301-304) According to Shenton (2014: 72-73), the confirmability issue can be addressed by admitting researcher's beliefs and assumptions and with the aid of triangulation to reduce the impact of researcher. Audit trail is also one method to ensure the traceability of collected data leading to proposal or recommendations during the path of the research by using visual diagrams of the interpretation process.

In this study, confirmability is ensured by the fact that the researcher works in another department in the organization and is not representing any of the stakeholders or customers of the study. Finally, this study utilizes visual diagrams and triangulation in any stage where required to demonstrate the confirmability.

The next immediate step is implementation.

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Field Notes from the Key Stakeholder Interviews at CSA stage (DATA 1):

Question	Product Manager 1	Product Manager 2	Product Manager 3	Business Development Manager (BDM)	Marketing Manager
Initial Expectations	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>				
Experiences					
<p>1. What are your expectations for a Competitor Analysis?</p>	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<p>2. How you have participated in Competitor Analysis?</p> <ul style="list-style-type: none"> - Estimated hours spend yearly? - Reviews? 	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3. Can you tell an example of a Competitor Analysis success?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
4. Can you tell an example of a Competitor Analysis failure?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Existing Competitor Analysis practices (Described separately using SIPOC tool)					
5. Competitive matrix	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
6. Battle card	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
7. Price Analyses	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
8. Company Analyses	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9. CA Inputs & Field reports	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
10. Is there some practice that you would leave out from the current CA and why?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11. Is there some new practice that you would like to include in a future CA and why?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

12. How the performance of CA is measured currently?					
Future improvements					
13. What you would like to improve in current Competitive Analysis practices?					
14. What kind of process/guideline you would see beneficial in order to improve current in Competitor Analysis?					

Field Notes from the Internal Customer Interviews at the CSA stage (DATA 1):

Question	Key internal Customer 1: Sales Manager FI	Key internal Customer 2: Project Manager – Product Development	Key internal Customer 3: Team Leader – Application Engineering (AE)	Key internal Customer 4: Sales Director UK
<p>1. What expectations you have for the Competitor Analysis provided by CPS team?</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>2. How these expectations are currently fulfilled?</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>

<p>3. How you have participated/contributed in Competitor Analysis?</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>4. What elements of CA that you see valuable in your field of expertise/projects and why?</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>
<p>5. What you could provide as input for Competitor Analysis?</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>	<p>[REDACTED]</p>

	[REDACTED]		[REDACTED]	[REDACTED]
6. What are strengths in the current CA information?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
7. What are weaknesses in the current CA information?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
8. How you would measure the success of CA?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

9. How you would improve current CA?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
10. Other that you would like to share?	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Example of SIPOC definition at CSA stage (DATA 1):

SIPOC of Competitor Analysis - Battle cards												
	Suppliers	Co-Supplier	Inputs (Materials, requirements)	Start	Process step	Stop	Output 1	Customer	Communication Tools	Strengths (+)	Weaknesses (-)	OFI's
1	Product Manager	None	Competitor website, Competitive matrix, Field notes	New product launch/major feature introduction	Collect data	Finished battle card	Data for battle card	Product Manager	Files and folders	Commonly recognized tool used as sales aid	Contains only one or couple main competitors in comparison	Product Development technical investigation results of competitor products could be included
2	Product Manager	None	Data for battle card		Consolidate data to the battle card standard form		Released battle card	Sales teams	Sales web intra	Not always updated according to new products of rivals		
3												
4												
Main Supplier/ Responsibility			Product Manager									
Customers			Sales teams, (Sales Support?)									
Purpose			Summarizes own product strengths and weaknesses to the sales and comparison to a one major competitor's product. Is utilized to support customer relations and product and service offering. Information can be used to differentiate from the competitors. Includes competitor value proposals and how we respond to them.									

1 (1)

Example of Data Analysis at CSA stage (DATA 1):

DATA 1 CSA STAGE			
OUTCOME: SUMMARY OF EXPECTATIONS, STRENGTHS AND WEAKNESSES			
Reported	Theme	Category	Comment
Business Development Manager	OFIs	Collaboration	
Key internal Customer 1	Capability	Collaboration	
Key internal Customer 1	OFIs	Collaboration	
Product Manager 1	Expectations	Information	
Business Development Manager	Expectations	Information	
Marketing Manager	Expectations	Information	
Business Development Manager	Weaknesses	Information	
Key internal Customer 1	Weaknesses	Information	
Key internal Customer 1	Capability	Information	
Key internal Customer 1	Capability	Information	
Key internal Customer 1	Weaknesses	Information	
Marketing Manager	Expectations	Process	
Marketing Manager	Expectations	Process	
Marketing Manager	OFIs	Process	
Product Manager 1	Weaknesses	Process	
Business Development Manager	Weaknesses	Process	
Business Development Manager	OFIs	Process	
Marketing Manager	Weaknesses	Process	
Marketing Manager	Strengths	Process	
Marketing Manager	OFIs	Process	
Product Manager 1	Expectations	Process	
Product Manager 1	Expectations	Process	
Business Development Manager	Expectations	Process	
Marketing Manager	Expectations	Process	



Company confidential

1 (1)

Design of the Future State Workshop (DATA 2):

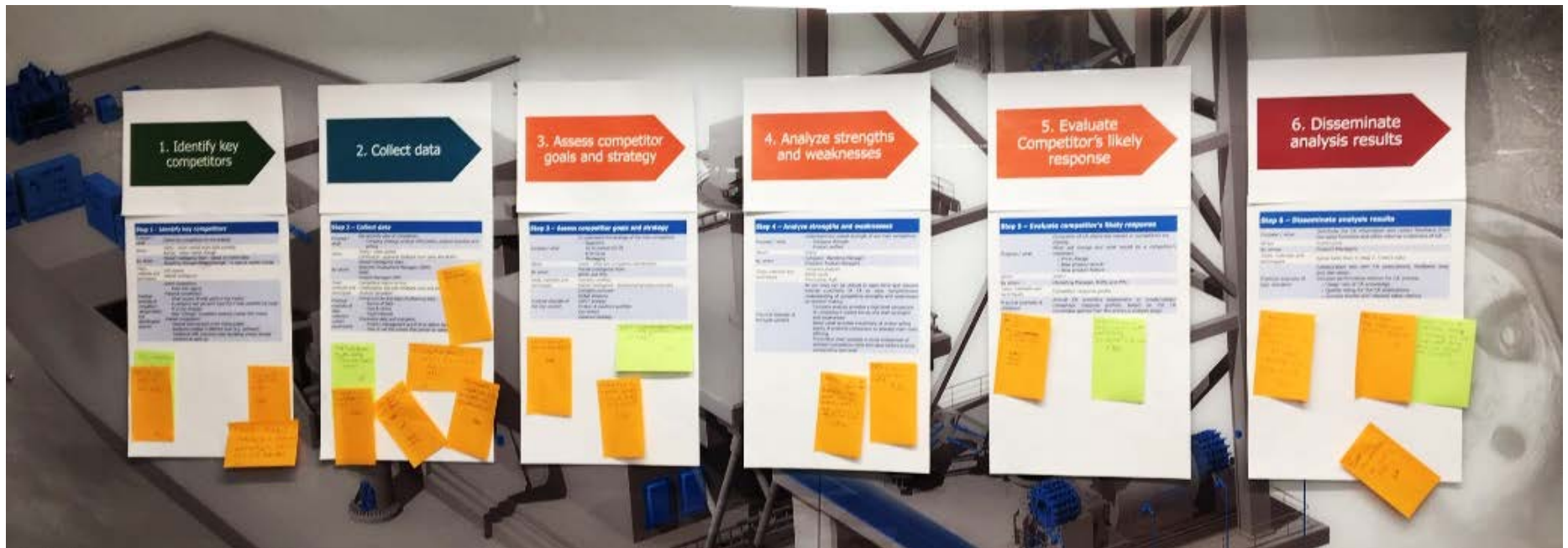
Time	Topic	Purpose	Topic Leader	Output
12:00 – 12:15	Introduction and SPACER	Review of the event structure and main goals	Henri & Teppo	<ul style="list-style-type: none"> • Common understanding of event goals and flow • Expectations
12:15 – 12:30	Summary from the CSA	Recap of current state key findings	Henri	<ul style="list-style-type: none"> • Discussion and notes
12:30 – 13:00	Summary from literature	Best practice from the literature (process, tools & system)	Henri	<ul style="list-style-type: none"> • Discussion and notes
13:00 – 14:00	Team work assignment Part I	<ol style="list-style-type: none"> 1. Share assignments 2. Split into 2 teams 3. Start developing a new concept 4. Initial presentations of the concept idea 	Henri and team leaders	<ul style="list-style-type: none"> • Initial presentations of the idea and work progressing • Collect feedback
14:00 – 14:15	Coffee break			
14:15 – 15:30	Team work assignment Part II	<ol style="list-style-type: none"> 1. Continue development 2. Finalize and present the future state concept proposals 	Team leaders	<ul style="list-style-type: none"> • Final presentations of the concept proposal • Collect feedback
15:30 – 16:00	Actions and next steps	How we continue on developing the process steps for CA Process proposal?	Henri & Teppo	<ul style="list-style-type: none"> • Agreement about the next steps • Action plan

1 (1)

Design of the Validation Workshop (DATA 3):

Time	Topic	Purpose	Topic Leader	Output
10:30 – 10:35	Introduction and AGENDA	Review of the event purpose and agenda	Henri & Teppo	<ul style="list-style-type: none"> • Common understanding of event purpose and event flow
10:35 – 10:40	Project background and stages	Presentation of the project scope and main stages	Henri	<ul style="list-style-type: none"> • Understanding of project scope and execution
10:40 – 10:45	Summary of the CSA	Presentation of the current state key findings	Henri	<ul style="list-style-type: none"> • Understanding of current key issues
10:45 – 10:50	Summary from literature	Presentation of the Conceptual Framework	Henri	<ul style="list-style-type: none"> • Understanding of the proposal source concept
10:50 – 11:00	Proposal presentation	<ol style="list-style-type: none"> 1. How the proposal was developed 2. New process main steps 3. Process step definitions 4. Current on-going actions 	Henri	<ul style="list-style-type: none"> • Understanding and insights of the proposal • Make notes!
11:00 – 11:25	Proposal validation	<ol style="list-style-type: none"> 1. Divide into pairs 2. Review the process on the wall and brainstorm to test 3. Make notes on post-its 4. Present your findings 	Teamwork	<ul style="list-style-type: none"> • Validated and improved proposal
11:25 – 11:30	Actions and next steps	How we continue on implementing the new process?	Henri & Teppo	<ul style="list-style-type: none"> • High-level action plan

Validation Workshop Findings (DATA 3):



2 (2)

Reported	Step #	Step description	Category	Comment
Key internal customer 1	1	Identify key competitors	Positive feedback	Company confidential
Key internal customer 1	1	Identify key competitors	Question	
Marketing Manager	1	Identify key competitors	Comment	
Key internal customer 2	1	Identify key competitors	Comment	
Product Manager 1	2	Collect Data	Positive feedback	
Product Manager 2	2	Collect Data	Addition	
Product Manager 3	2	Collect Data	Question	
Key internal customer 2	2	Collect Data	Comment	
AE Team Leader	3	Assess competitor goals and strategy	Question	
Product Manager 4	3	Assess competitor goals and strategy	Correction	
Product Manager 2	3	Assess competitor goals and strategy	Addition	
Product Manager 4	4	Analyze strengths and weaknesses	Addition	
Key internal customer 3	4	Analyze strengths and weaknesses	Comment	
Product Manager 3	5	Evaluate competitor's likely response	Comment	
Product Manager 4	5	Evaluate competitor's likely response	Positive feedback	
Product Manager 3	6	Disseminate analysis results	Positive feedback	
Product Manager 3	6	Disseminate analysis results	Question	
Product Manager 3	6	Disseminate analysis results	Comment	
Key internal customer 1	6	Disseminate analysis results	Comment	