Paresh Naik

Developing a Customer Value Proposition for yourKONECRANES Service to Support New Equipment Sales Unit.

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It gives immense pleasure in writing this section after going through the splendid journey of this thesis study in Industrial Management Master's Program. The program allowed me to engross the best practices from modern industrial management theories and enabled me to apply it to real business challenges. The program helped in realizing recent days business settings and its essential elements in building the business practices.

The successful journey of this study would not have been possible without the support of great people around me during the last year. I want to take this opportunity to acknowledge all those people who have been my great support and strength in completing this journey.

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Paresh Naik
Vantaa
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Author	Paresh Naik
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The thesis focuses on developing a customer value proposition for the yourKONECRANES service offered by the case company. The case company had a challenge in utilizing the yourKONECRANES service benefits in new equipment sales. Accordingly, the study was intended to develop a Customer Value Proposition (CVP) to support the new equipment sales unit by connecting the yourKONECRANES benefits with the most critical aspects of customer needs in new equipment sales.

The thesis study was carried out by following applied action-based research. The research analysis follows a systematic, logical approach in identifying the weaknesses and solutions for the challenges. The research utilizes the data from thematic interviews with key sources in the case company. The study also analyses the case company reference documents related to the service. The collected data was crystallized by involving the key stakeholders in the case company, the discussion with key stakeholders and their feedback in a workshop was documented and analyzed in developing a proposal. The developed proposal was further internally validated with decision-makers in the case company. Thus, the developed proposal for a CVP with rigor ensures the quality of the proposal.

The developed proposal identifies four critical elements of a CVP. The first element defines the value drivers in utilizing the yourKONECRANES service and reveal the customer value-in-use. The second element describes the yourKONECRANES service benefits with the next best alternatives available for a customer. The third element identifies the resonating factor for a customer in realizing the yourKONECRANES benefits. The fourth elements quantify the savings to develop a functional relation between the resonating factor to the customer value-in-use. Consequently, the CVP was defined by embedding these four elements together to support new equipment sales in communicating the yourKONECRANES service benefits to a customer.

Implementing the CVP for yourKONECRANES service will provide an additional tool for the equipment sales unit in differentiating its equipment offering in the market space. It has the potential to influence a customer to purchase from the case company instead of its competitor. The proposed CVP is one step forward in achieving that goal.

Keywords	Customer Value Proposition (CVP), Remote Monitoring Service, Industrial Internet.

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1 Introduction

The revolution of digitalization and industrial internet is providing an immense opportunity for the industries to serve their customer. Most of the companies are focusing on differentiating their product and service offering through digital services. The industrial products are becoming intelligent, smart and can be connected through the platform of the industrial internet. The industrial internet is bringing together intelligence machines, advanced analytics and people are connected at work. However, it is vital to understand the customer need and to realize the value of the analytical data that can help the customer in their process.

At Konecranes, the Industrial internet has a vital role in achieving its vision. The lifting company has stated "*We know in real time how millions of lifting devices perform. We use this knowledge around the clock to make our customers' operations safer and more productive.*" In delivering its vision, the case company has developed its products and services to provide life cycle care in real time for their equipment. With the help of sensors technology and industrial internet has enabled the gathering of the equipment operating data. The operating data collected from the equipment is further utilized in optimizing the equipment operation and addressing the equipment service and maintenance needs based on actual usage of the equipment. The collected operating data from the equipment further shared with a customer through the yourKONECRANES.com, which is an online customer portal.

This thesis explores the customer value propositions for yourKONECRANES service offered by the case company in new equipment sales. The focus would be to develop the sales and marketing efforts in utilizing yourKONECRANES full benefits in offering its products for new equipment sales in the industrial equipment business unit.

1.1 Business Context

The case company Konecranes is a world-leading group of Lifting equipment supplier. The lifting equipment supplier is serving a broad range of industrial customers, including manufacturing and process industries, shipyards, ports, and terminals. The Finnish multinational company has a history of over 80years and is present in 50 countries. The company has three business areas as service, industrial equipment, and port solutions. The focus of the thesis study is limited to industrial equipment sales.

1.2 Business Challenge, Objective, and Outcome

Most of the Konecranes lifting equipment has a provision in its products to connect via the industrial internet and provide remote monitoring data to the customer and Konecranes. Remote monitoring data can be visible for the customer through the “your KONECRANES” customer portal. The yourKONECRANES portal gives a holistic view of the operating status of the lifting equipment installed at a customer site. The collected operating data from the equipment are analyzed and computed to provide key performance indicator of the equipment based on the actual usage of the equipment. The key performance indicators are critical for customer operations. Based on the actual usage of the equipment the yourKONECRANES provide recommendation and actions needed for the customer. The portal highlights the recommended service and maintenance actions for the customer based on the facts for actual usage of the equipment. After executing the service, service history and observation from field service technician is also available for the customer on the yourKONECRANES customer portal. The transparent-view to the equipment operating data and the service data through yourKONECRANES enable the customer to make fact-based decision to improve the productivity and efficiency of the customer operation.

The case company currently uses the “yourKONECRANES” full potential in its service business unit related to the existing install base. However, using the full potential of “yourKONECRANES” benefits as a differentiator to support new equipment sales has not been adequately exploited. The potential yourKONECRANES service by of utilizing Industrial Internet and remote monitoring data in the sales and marketing efforts of new equipment sales need to be explored.

Thus, the objective of this thesis is:

> to develop a customer value proposition (CVP) which takes full advantage yourKONECRANES service benefits to support new equipment sales of Konecranes lifting equipment in its total offering.

Accordingly, the expected outcome of the study is a customer value proposition for your-KONECRANES service in new equipment sales unit.

1.3 Outline of the Thesis Report

The thesis report is written in a total of seven sections. The current first section introduces the context of the thesis study and elaborates the business challenge, objective and outcome of the thesis. The second section illustrates the approach for the thesis research design and executed the data collection plan. The third section explores from the literature review in understanding the concept of CVP, and it establishes a conceptual framework for a CVP with its elements from the literature review. The fourth section provides findings from the current state analysis of existing yourKONECRANES service logic and current value proposition. The fifth section describes the stages in building the initial proposal for a CVP for yourKONECRANES service based on the findings from current state analysis and conceptual framework. The sixth section reports the result of validation and feedback collected for the initial proposal for CVP from key stakeholders in the case company. The seventh and final section summarizes the objective, context, and result of the thesis study. It also provides a recommendation for the next practical steps in implementing proposed CVP. Finally, the section concludes with the thesis evaluation criteria and credibility of the thesis research.

2 Method and Material

This section explains the methodology and approach for the research work for this thesis study. First, the research approach is described, which is followed by the research design and the data collection plan adopted for the study. And the final section describes the evaluation criteria for the research work.

2.1 Research Approach

Generally, in research, there are two main types of strategies, basic research, and applied research (Saunders et al. 2012). The basic research is used based on the theoretical analysis which can enhance the existing knowledge. In such an approach, relatively minimum attention is given to its practical implementation in resolving the problem. On the other hand, in applied research, focuses on practical application to address various issues.

Also, research strategies can be divided by the type of data they utilize: qualitative and quantitative research. The qualitative data is an outcome from the personal interviews, which can be documented in the form of texts and quantitative data is a statistical outcome from a survey. Often qualitative information is abundant in practice (Haslam & McGarty 2003) relatively easy to interpret the participant opinion. However, in quantitative data, it is considerably challenging to track richness of the detail (Okely 1994). In applied research, a popular strategy is a mixed, or blended, research, which uses both, qualitative and quantitative methods. The research can be either purely based on qualitative results, or based on quantitative results, or it can also be a combination of both termed as “blended” or “mixed methodology” (Kananen 2017: 20 & 25)

In mixed research, especially in business research and organizational studies, there are two popular research approaches to undertake the applied research, case study, and action research. Recently, there has appeared a third type of research approach, design research. As Kananen (2017) defines that the key feature of design research (or the applied action research) is its concern with organizational issues, implementing of changes and working with the improvement of the existing process. “The design research approach produces functional and practical solutions” *(*Kananen 2017: 20). Design research usually triggered by the need for change (Barab and Squire 2004). Design research can be conducted in an organization to improve its operations, which can be related to the product, process, services and business situations (Kananen 2017: 21). Thus, design research based on qualitative or quantitative research, or it can be a combination of both research data is used in their methodologies.

In this study, in the context of the business challenge and objective of this study, design research method is chosen for the study. As this study is addressing the business challenges in an actual business context, hence design research was considered a suitable approach. This study also embraces the qualitative method as its primary method, with extensive use of field interviews and analysis of the existing documents.

The next sub-section describes the design research and methodology for the study.

2.2 Research Design

As described in section 2.1 this thesis study follows applied research based on the elements of the design approach. The study was conducted in five phases with three separate data collection phases. The data collection follows a qualitative research methodology. Figure 1 represents the five phases of the research design for the study. Furthermore, it shows the input data collections and the outcome at the relevant stage of the study.

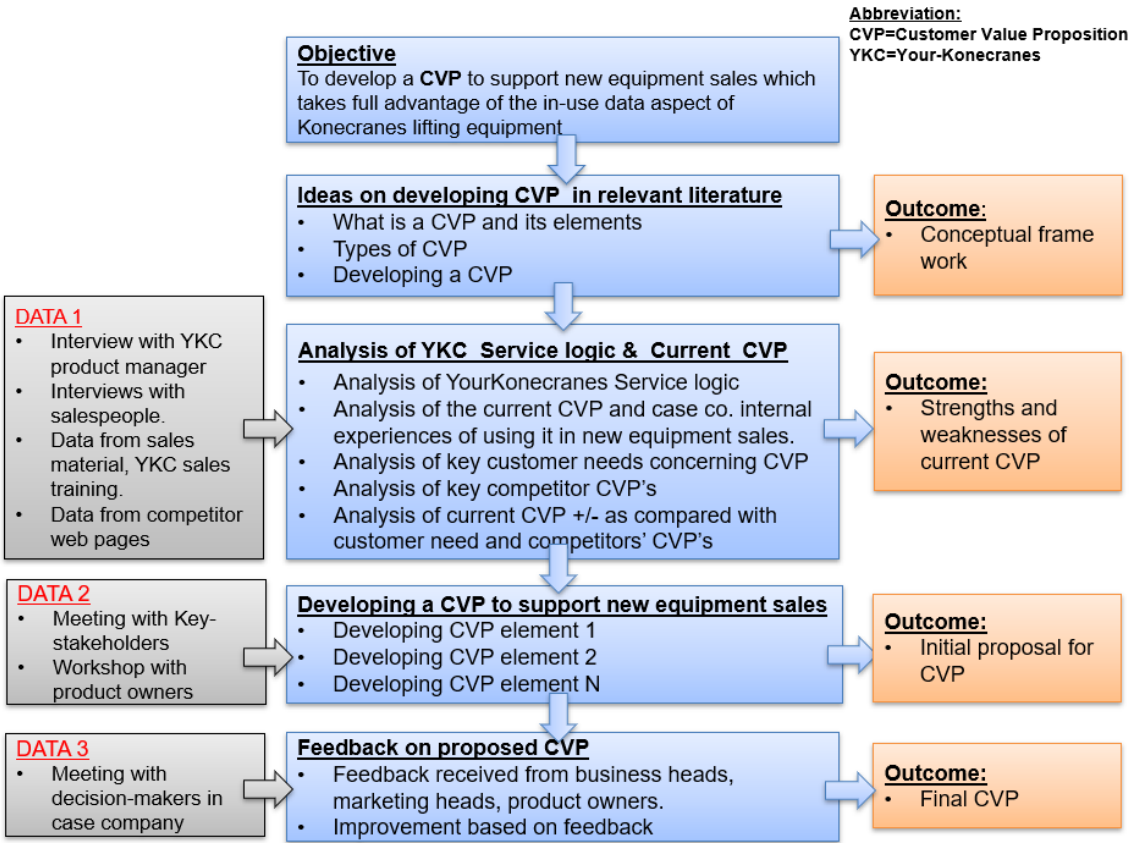

Figure 1: Research design phases for the study.

As shown in Figure 1, the first phases of the research design involve identifying the business challenge and objective for the study. The second phase consists of literature research in identifying the elements for the customer value proposition (CVP). In the con-

text of industrial business marketing, relevant literature, business journals, and best practice reviewed. The outcome of the phase is the conceptual framework. The conceptual framework utilized in the third phase which is the current state analysis for the business challenge. The objective of the current state analysis was to obtain an insight into the strength and weakness of the current CVP of the service logic. The outcome of the current state analysis further utilized in the next phase of developing the CVP, which results in the initial proposal for the CVP. The initial proposal was validated to develop the final proposal for the CVP.

2.3 Data Collection and Analysis

As shown in Figure 1, Input data collected at three different phases of the research design. Data-1 gathered during the current state analysis. Data-2 while building the initial proposal and Data-3 during the feedback and validation phase. The summary of data collection from Data 1 to 3 with the outcome in each stage of the data collection is as presented in Table 1.

Abbreviation:
CVP=Customer Value Proposition
YKC=Your-Konecranes

	CONTENT	SOURCE	INFORMANT	TIMING	OUTCOME
DATA 1 CURRENT STATE ANALYSIS	• Description of YKC Service logic • Description of the current CVP. and. Internal experiences using it. • Identifying key customer needs concerning CVP • Analysis of key competitor CVP's • Analysis of current CVP +/-	- Stakeholder theme interviews - Recording from YKC sales training - YKC sales Material. - YKC Web-portal	- YKC product manager - Sales Heads. - Sales Directors - Sales Managers - Sales Engineer	FEBRUARY-MARCH	Strengths and weaknesses of current CVP
DATA 2 BUILDING PROPOSAL	• Developing CVP element 1 • Developing CVP element 2 • Developing CVP element N	- Stakeholder 1to1 meetings. - Stakeholder workshops	- Marketing Heads - Business Heads - Product owners	MARCH	**Initial** proposal for **CVP**
DATA 3 FEEDBACK	• Improvement ideas to initial proposal	- Stakeholder 1to1 theme meetings	- Company decision maker - Data 2 participants	APRIL	**Final** proposal for CVP

Table 1: Summary of data collection

As shown in Table 1 the study utilizes triangulated data from Interviews, workshops, discussion with internal stakeholders in the case company, as well as observations from company internal documents and competitor information as a source of data for the analysis. Table 2 below further shows the details of interviews, workshops and discussion and their methodology for the documentation during the data collection phase.

Table 2: Details of interviews, workshops, and discussions in Data1-3.

	Participants / role	Data type	Topic, description	Date, length	Documented as
	Data 1, for the Current state analysis (Section 4)				
1	Respondent 1: Product manager	Online Training	Introduction to yourKONECRANES (YKC) Portal and sales process	17th January 2019, 90 min	Field notes and recording
2	Respondent 2: Product manager	Face to face Interview	The case company current service logic for YKC service. Description of current CVP.	25th Feb 2019, 60 min	Field notes and recording
3	Respondent 3: Vice President: Sales-1	Skype interview	Understanding the YKC sales strategy in new equipment's sales in the current set up. Internal experience in offering the YKC service in new equipment sales. Competitor information.	25th Feb 2019, 40min	Field notes and recording
4	Respondent 4: Sales Director-1	Skype interview	Understanding the experience in promoting the YKC Service offering, sales pitch and current tools utilized in offering the YKC service. Understanding the customer value driver, competitor Information.	26th Feb 2019, 60min	Field notes and recording
5	Respondent 5: Sales Director-2	Face to face Interview	Understanding the awareness about YKC service in new equipment's sales. Customer value, YKC offering in new equipment in the current set up.	28th Feb 2019, 50min	Field notes and recording
6	Respondent 6: Vice President, IC CTO Sales	Skype interview	Understanding the YKC sales strategy in new equipment's sales, sales pitch and tools utilized in offering the YKC service.	28th Feb 2019, 30min	Field notes
7	Respondent 7: Sales Director-3	Skype interview	Understanding the sales pitch and current tools utilized in offering the YKC service. Understanding the customer value driver, competitor Information	1st March 2019, 48min	Field notes and recording
8	Respondent 8: Sales Manager-1 ETO sales	Skype interview	Understanding experience in promoting the YKC Service offering, sales pitch and current tools utilized in offering the YKC service. Understanding the customer value driver, competitor Information	4th March 2019, 47min	Field notes and recording
9	Respondent 9: Sales Director-4	Skype interview	Understanding the experience in promoting the YKC Service offering, sales pitch and current tools utilized in offering the YKC service. Understanding the customer value driver, competitor Information.	4th March 2019, 40min	Field notes and recording
10	Respondent 10: Sales Engineer- 1	Skype interview	Understanding the awareness about YKC service, sales pitch, YKC offering in new equipment in the current set up.	5th March 2019, 25min	Field notes and recording

11	Respondent 11: Sales Director-5	Skype interview	Understanding the experience in promoting the YKC Service offering, sales pitch and current tools utilized in offering the YKC service. Understanding the customer value driver, competitor Information.	6th March 2019, 35min	Field notes and recording
12	Respondent 12: Regional Sales Manager -1 CTO sales	Skype interview	Understanding the experience in promoting the YKC Service offering, sales pitch and current tools utilized in offering the YKC service. Understanding the customer value driver, competitor Information.	12th March 2019, 43min	Field notes and recording
13	Respondent 13: Sales Manager -2 CTO sales	Skype interview	Understanding the awareness about YKC service, sales pitch, YKC offering in new equipment in the current set up.	12th March 2019, 45min	Field notes and recording
14	Respondent 14: Senior Vice President, Ind. Cranes	Skype interview	Understanding the YKC sales strategy in new equipment's sales in the current set up. Internal experience in offering the YKC service in new equipment sales. Competitor information.	13th March 2019, 42min	Field notes and recording
15	Respondent 15: Sales Manager ETO sales	Skype interview	Understanding the awareness about YKC service, sales pitch, YKC offering in new equipment	4th March 2019, 30min	Field notes and recording
	Data 2, for Proposal building (Section 5)				
16	Participants: Product owner Marketing head: VP, Marketing & Sales Excellence. Director, Sales Support.	Face-to-face discussion	Discussion on key findings from CSA; And further actions with Proposal building	14th March-2019, 60 min	Field notes
16	Participants: YKC and TRUCONNECT Product Owners	Workshop/ discussion	Proposal building	29th March-2019 120 min.	Field notes
17	Participant: Product Owners	Skype Meeting	Proposal building	1st April 2019 30 min	Field notes
	Data 3, from Validation (Section 6)				
13	Participants: Business Head; SVP; Industrial cranes Marketing head: VP, Marketing & Sales Excellence YKC Product manager.	Face-to-face discussion / Final presentation	Validation, evaluation of the Proposal	11th April 2019. 60 min	Field notes

As shown in Table 2, qualitative data for the research was collected in three rounds. The first round was, collecting Data 1 for current state analysis of understanding the yourKONECRANES service logic and internal experience of utilizing existing CVP in new equipment sales. The data for yourKONECRANES service logic gathered from the online sales training for yourKONECRANES portals and face to face discussion with the yourKONECRANES product manager. The feedback for internal experience in utilizing existing CVP in the new equipment sales gathered from theme interview with new equipment salespeople across three regions in Europe, Asia, and the Americas. The topic covered in the theme interview was analyzing the experience in promoting existing value proposition yourKONECRANES service in new equipment sales, tool utilized in demonstrating the yourKONECRANES benefits, understanding new-equipment customer needs and expectations, competitor information collected during Data 1. A theme interview with the sales people was conducted either through a face to face discussion or through Skype call. Data 1 was documented in the form of field notes and recording.

Data 2 collected during the initial proposal development stage. At the first step, the outcome from the current state analysis from Data 1 was presented to the key stakeholders in the case company in face to face discussion. The feedback and actions needed in developing the initial proposal were collected during the face to face discussion. In the second step, a workshop was conducted to co-create the initial proposal. During the workshop possible solution to overcome the weakness of the current state analysis and elements in defining the CVP discussed. In the third step feedback collected during the workshop was crystalized again in the second phase with the participants from the workshop.

In Data 3, the initial proposal presented and discussed with Key stakeholders and decision-maker in the case company. The feedback and improvement suggestion collected on the initial proposal during the face to face discussion.

The qualitative data as listed in Table 1 were analyzed using a thematic analysis.

Also, secondary data in the form of documents listed in Table 3 below were analyzed for the current state analysis.

Item No	Name of documents	Description
A.	The YourKONECRANES demo web portal	Online web portal in analyzing the data available for a customer on the yourKONECRANES.com
B.	yourKONECRANES_flyer	Marketing leaflet for external use.
C.	yourKONECRANES-sales presentation	Training material in guiding the sale.
D.	Remote service brochure	TRUCONNECT Remote service marketing leaflet for external use.
E.	Life cycle care in Realtime-Infographic	Marketing leaflet for external use.
F.	Service Handbook	The internal document, reference material regarding the Service business.
G.	Competitors web pages	Analyzing the competitor CVPs related to remote monitoring service.

Table 3: Secondary Data for Current state analysis

As listed in Table-3, the items from A to F were available from the case company. Item G, competitor information, was analyzed from a respective competitor webpage. The competitor was mainly identified based on the feedback from new equipment salespeople.

The secondary data as listed in Table 3 were analyzed using content analysis.

As depicted in Table 2 and Table 3, the primary data collection was established for current state analysis in determining existing yourKONECRANES service logic and the internal experience of using the existing CVP of yourKONECRANES in the new equipment sales unit.

In the next step, in the context of the thesis objective, the ideas of developing CVP is explored through a literature review and described in the following Section 3.

3 Ideas on Developing a Customer Value Proposition in Literature

In the context of the objective of this study, this section explores the concept of building the customer value proposition (CVP) from the existing knowledge in the literature. The following section is written in five sub-sections. The first subsection explores the concept of customer value with the growing interest of servitization. The second subsection elaborate idea of a customer value proposition (CVP). The third subsection analyzes different dimensions in developing CVP. The fourth subsection describes the elements of CVP. The fifth and final subsection presents the result from the synthesis of the literature review in terms of a conceptual framework.

3.1 Concept of Customer Value

In the recent two decades, Industries were searching for competitive advantage beyond product quality and increasing its focus towards superior customer value delivery (Woodruff & Robert 1997:139). For industries, Customer value has evolved as a fundamental business block in business to business marketing.

In today's business to business context, the modern-day manufacturer have shifted their strategies from merely offering a product to delivering a product with various complimentary services for its products in terms of maintenance, condition monitoring, life cycle care approach. Traditional manufacturing firms are transforming from product manufacturing firms to be a service firm (Vargo & Lusch 2004:15). Further, with the advancement of new technology such as the Internet of things (IoT), Industrial internet, big data, sensor technology, and computing power has enabled manufacture to monitor, analyze and manage their product in real time. With the advancement of technologies in the era of industrial 4.0 is adding new dimensions to trending "servitization" business. One of the fundamental elements of the servitization business is value proposition (Frow & Payne 2011; Payne & Frow 2014). Servitization in practice is defined to be fundamentally "about changing the seller product-based value propositions to a customer and service-based proposal" (Kwesi and Holmlund 2108:36) and thus creating value to the customer.

According to Anderson & Narus (1998), customer value is defined as the specified value perceived by the customer in utilizing the supplier product and service. However, while evaluating the value the customer and the supplier must consider the total lifetime cost of the product & service rather than just the initial acquisition cost. In this regard, the supplier must be aware of customer operations in which the supplier product and service would add the benefits that a customer value or would value. (Anderson & Narus 1998: 53)

In general, many customers are aware of their requirement but do not necessarily have an understanding of what it cost for them to have those requirements fulfilled. This lack of understanding of the customer must be utilized by the supplier and demonstrate the specified value to the customer and help them to make wise purchasing decisions. In a business-to-business context, the value is more often the worth in terms of the monetary value of the technical, functional and social benefit that the customer perceives in exchange for the price they pay. (Anderson & Narus 1998: 54)

A successful player in the business market has developed customer value model. The customer value model demonstrates the cost and also the benefits that the supplier would bring the added value to the customer's business. In building the customer value model, the supplier first needs to list out the value elements. The value elements can be anything that influences costs and benefits the customer in their business. While building these benefits, the supplier must consider the entire life cycle of the product & service offer in question. Once all the value elements identified, then it is necessary to compare the functional and performance of supplier offering with the alternative option available for the customer. (Anderson & Narus 1998: 55). The supplier's efforts pay off when they assess customer value and do the business based on value delivery. (Anderson & Narus 1998: 65).

Understanding further how to build useful customer value model in an industrial market and it's delivery in terms of a customer value proposition explored in the next subsection.

3.2 Customer Value Proposition (CVP)

The origins of the value proposition can be traced from 1980's in a project undertaken by McKinsey and company. Initially, as a concept, it is introduced by Bower and Garda (1986) and later Lanning and Michaels (1988) elaborated the theory and defined the value proposition in terms of the benefits offered to a customer group and the price a customer pay for it (Lanning and Michaels 1988: 3). Their concept is presented as a value delivery system involving three distinct steps in it. Figure 2 shows these three separate steps: choose the value, provide the value and communicate the value.

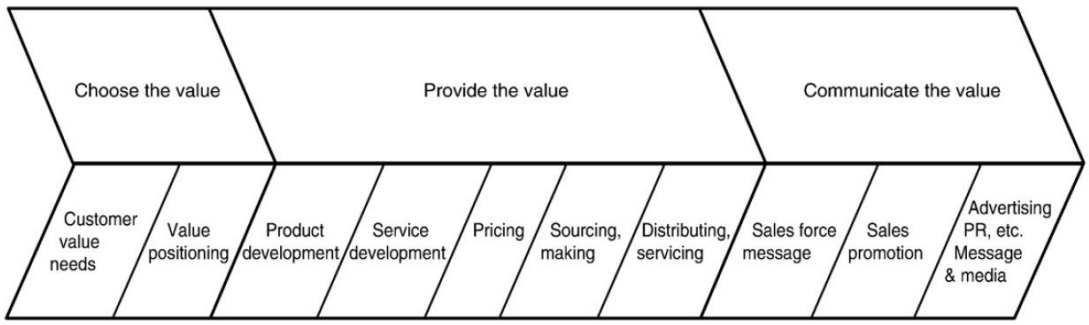

Figure 2: McKinsey & Co's value delivery system. Based on Lanning and Michaels (1988).

As shown in Figure 2 the value delivery system emphasizes understanding the needs formulating the value needs and further communicating the value. The concept of value delivery also trigged the organizations to formulate and implement the value proposition based on which they will compete in their market space (Ballantyne et al. 2011: 203).

The concept of value proposition further evolved and gained its strategic importance and was recognized to be a key element in business strategy. Scholars in business practice such as Webster (2002) refers to the value proposition as a firm's single most fundamental element of "organizing principle" (Webster 2002: 61). Kaplan and Norton (2001) claim the value proposition is the "essence of strategy." And Hammonds (2001) debates that the business needs to start their strategies based on the differentiated value proposition. Kumar and Reinartz (2016) refer to business being about "creating value" (Kumar & Reinartz 2016:36). A carefully developed value proposition provides the foundation for a supplier to aiming to build a long-term customer relationship (Payne & Frow 2014: 214).

Similarly, the definition of the customer value proposition has evolved over the years (Payne et al. 2017: 469). Enlarging the definition of CVP has three viewpoints. The CVPs which are primarily supplier defined reflecting the value-in exchange, the CVPs which are transactional which shows the significance of the customer experience and CVPs that supplier and customer have co-created mutually which emphasis on value in use dimensions. (Payne et.al 2017: 471). Based on this, Payne et al. (2017: 472) formulate the definition of CVP as follows:

> "A customer value proposition (CVP) is a strategic tool facilitating communication of an organization's ability to share the resources and offer superior value package to a targeted customer."

On a similar line, Anderson et al. (2006) refer to the customer value proposition as the strategic tool used by the supplier to communicate how they intend to provide the value to the customer. Thus, CVP has a positive impact on customer perceptions and which in turn result in customer satisfaction. The CVP will help a customer in setting the appropriate expectations of the excellent value benefit against cost they need to sacrifice from the supplier market offering (Egger and Ulaga 2002). Clearly articulating value benefits which the supplier brings to the customer objective may increase the certainty of customer judgment based on the value benefit rather than price only (Chandrashekaran et al. 2007).

The value literature has evolved over the years. The focus of value delivery has changed from resource exchange and value in exchange for resource integration and value in use (Eggert et al. 2018: 81). Eggert et al. (2018) in their literature emphasize looking at customer value from two complementary perspectives, namely value in exchange and value in use as shown in Figure 3: Alternative view of value in use (Eggert et al. 2018: 83).

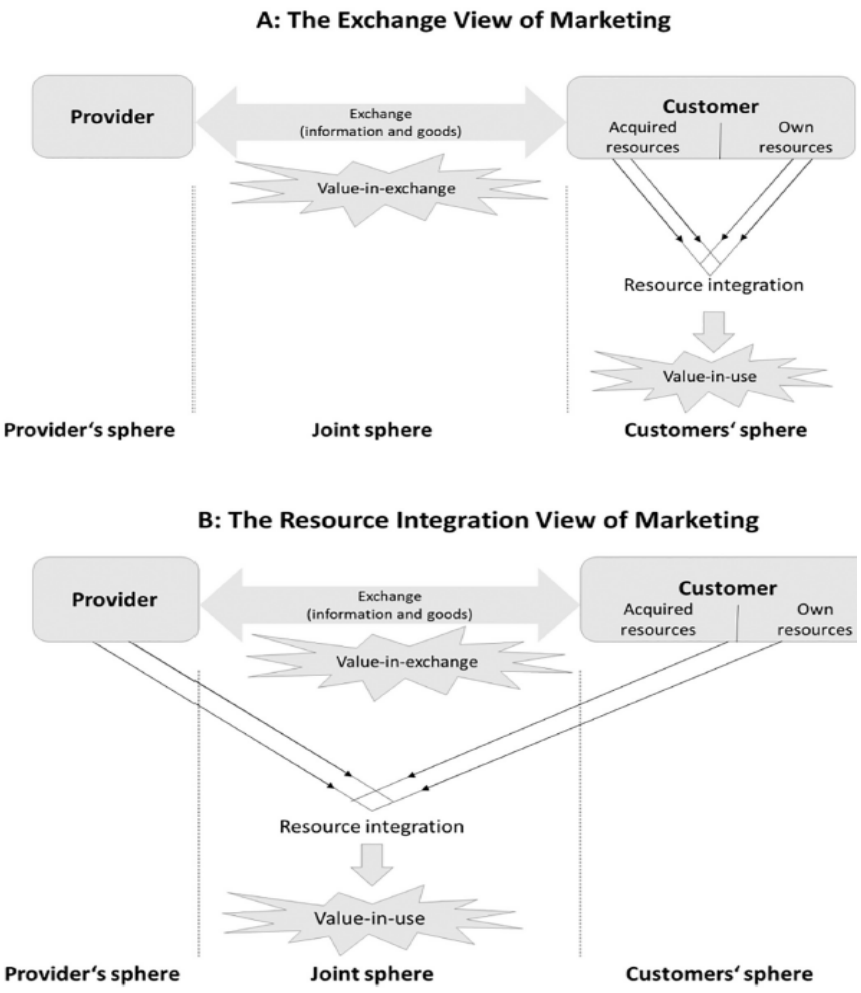

Figure 3: Alternative view of Value in use (Eggert et al. 2018: 83).

As shown in Figure 3, in Type A: The Exchange View of Marketing, the provider facilitates the product and services with potential value. In this perspective, value is determined by the provider and value is exchanged with a customer and its provider marketing job is to understand and identify the potential value and communicate with a customer. In this value in exchange view, the actual value in use is perceived when a customer utilizes the provider acquired resource and integrates with their resources. Thus, the value in use occurs within the customer sphere (Grönroos, & Voima, 2013: 137). However, in the resource integration perspective, marketing value cannot be delivered to the customer; instead, the customer determines the value in use (Vargo & Lusch, 2004: 7). In this perspective value is perceived and determined by the customer and value is co-created with resource integration. And it is the responsibility of the marketing department to facilitate the value creation together with a customer. Thus, in this perspective the resource integration and value in use shifts from the customer sphere to a joint sphere as shown in Figure 3 Type B: The Resource Integration view of Marketing (Eggert et al. 2018: 83).

With the development of service-dominant logic (Vargo & Lusch 2004) and emergence of interest in servitization (Smith et al. 2014 & Kowalkowski et al. 2017) scholars emphasise that the value cannot be embedded nor exchanged with the customer in a business transaction but co-created together with integration of resources and activities within the seller & buyer stakeholder network and within the ecosystem where the provider and customer are operating (Frow & Payne 2011). A further shift of value exchange to value in use perspective deepens the understanding of customer value in the business market (Eggert et al. 2018: 82).

To understand the different dimensions, developing a customer value proposition is elaborated in the next subsection.

3.3 Development of CVP

In business literature, scholars have defined different dimensions for developing the CVP (Payne et al. 2017: 469). In the business-to-business context, Anderson et al. (2006) have pointed out three approaches to CVP development; all benefits, favorable benefits, and the benefits that resonate with customer objectives. Similarly, in the consumer market space, Rintamäki et al. (2007) point out four dimensions of CVPs, economic, functional and symbolic. Besides, a CVP can be defined at different levels such as at the supplier firm level, customer segment level and individual customer level (Payne et al. 2017:479). Formulating a CVP at supplier level reflects the firm's existence in the market

space, the value that the firm can create to a customer. Formulating a CVP at the customer segment level reflects the significance of the firm's offering among the customer industries. And adopting CVP at the individual level is targeting individual customer needs and requirements. Thus, while formulating a CVP one must take into account the industry, market and competitive environment (Payne et al. 2017: 483).

Similarly, Anderson et al. (2006) note that the process of developing and communicating the value proposition involves three alternative ways, as shown in Table 4. Firstly, it lists all value benefits, which require supplier knowledge in their own market offering. However, most often the customer has an alternative option, and hence the supplier must be able to differentiate themselves in terms of the favorable points of difference. But in the competitive environment for a supplier to focus only on the favorable points of difference is not enough. For a supplier to create a successful value proposition, the focus needs to be on the few points of difference of supplier service benefits which resonate the most to the target customer.

VALUE PROPOSITION:	ALL BENEFITS	FAVORABLE POINTS OF DIFFERENCE	RESONATING FOCUS
Consists of:	All benefits customers receive from a market offering	All favorable points of difference a market offering has relative to the next best alternative	The one or two points of difference (and, perhaps, a point of parity) whose improvement will deliver the greatest value to the customer for the foreseeable future
Answers the customer question:	"Why should our firm purchase your offering?"	"Why should our firm purchase your offering instead of your competitor's?"	"What is *most* worthwhile for our firm to keep in mind about your offering?"
Requires:	Knowledge of own market offering	Knowledge of own market offering and next best alternative	Knowledge of how own market offering delivers superior value to customers, compared with next best alternative
Has the potential pitfall:	Benefit assertion	Value presumption	Requires customer value research

Table 4: Alternative ways to convey a value proposition (Anderson et al. 2006: 93)

In this respect for the supplier, it is necessary to gather the knowledge and understanding in terms of supplier offering as it can provide superior value to the customer in comparison to next best alternatives in the market (Anderson et al. 2006: 93).

Further, Osterwalder et al. (2014) refer to the value proposition canvas as a tool in developing the CVP. It has two sides for analyzing customer value proposition, “Customer profile and Value maps.” These two sides need to be aligned and fit together to create a strong customer value proposition, as shown in Figure 4: Value proposition canvas (Osterwalder et al. 2014: 3).

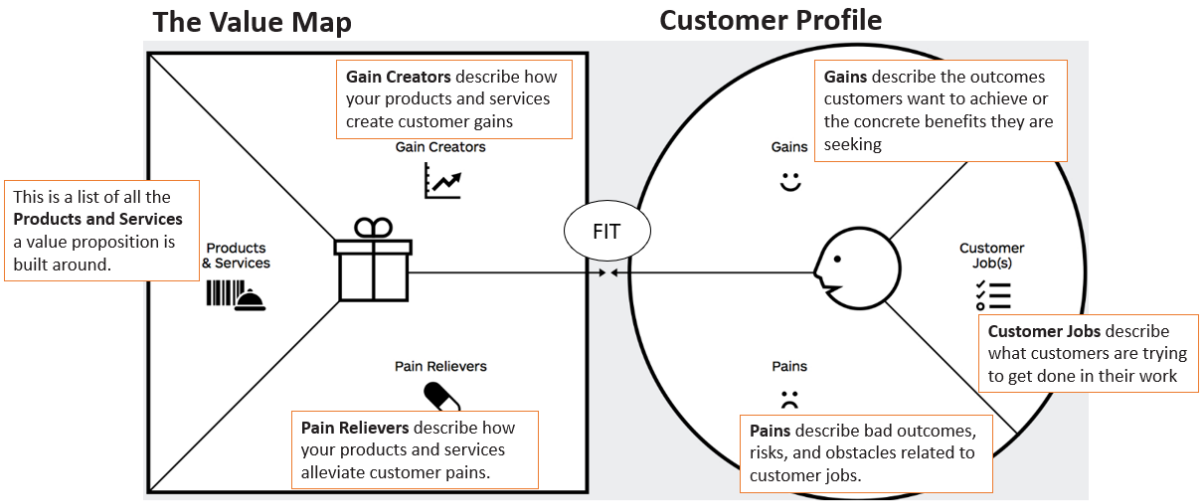

Figure 4: Value Proposition Canvas (Osterwalder et al. 2014,7)

Under the customer profile, there are three elements. First, a supplier needs to identify what the essential jobs that a customer wants to perform are. Second, a supplier needs to understand the desired outcome or benefits the customer wishes to gain out of these jobs. And the third and essential step is further to realize what the obstacles, pain points that the customer is facing in achieving the desired outcome are (Osterwalder et al. 2014: 9).

Similarly, under the value map, there are three elements. First, the supplier identifies all the products and services and their benefits that the supplier can offer to the customer. However, all defined benefits may not have a significant influence on customer jobs (Osterwalder et al. 2014: 29). For strong value propositions, a supplier must focus on those benefits which help in relieving the pain points of the targeted customer. Thus, the second element of the value map includes “pain reliever” (Osterwalder et al. 2014: 31). And the third element is the “gain creators” which influence the targeted customer to realize the possible functional, social, emotional and economic gains that the customer can desire by using the supplier products and services (Osterwalder et al. 2014: 33).

The customer value and its elements were further explored from literature. The CVP elements elaborated and discussed in the following subsection.

3.4 Elements of a Customer Value Proposition

As per one of the surveys made by Frow and Payne (2012), out of 200 companies many of them use the term value proposition in their every discussion. However, less than 10% of the companies formally develop, communicate and use the value propositions in differentiating it offering to its customer. In this regard, this section explores essential elements in building a strong customer value proposition.

3.4.1 Value in Use and Value in Exchange

For a supplier, it is not enough if they identify the potential value benefits they can offer to the customer. Instead, it is necessary to identify the critical value driver which the targeted customer values the most (Patala et al. 2016: 148). Thus, while defining the value proposition it is necessary to understand what customer considers to be valuable (Smith, Maull and Ng 2014). Realizing the customer value in use of product & service enables manufacturers to develop the value proposition that aligns towards customer objectives in achieving their own goals (Macdonald et al. 2011). Further Skålen and colleagues noted that “service innovation must be conducted, and value proposition must be evaluated from the perspective of the customer value creation, the service that the customer receives” (Skålen et al. 2015: 156).

Macdonald et al. (2016) highlight the importance of value in use in the domain of value co-creation. A value in use is defined as “all the value that the customer perceived as consequences arising from a business solution that facilitate or hinder achievements of customer objective” (Macdonald et al. 2016: 98). Accordingly, a business solution is developed from the joint integration of resources and process between both supplier and customer to create collective and individual value in use. Furthermore, the researcher highlights the value proposition itself is co-created through the resource integration process between the supplier and customer (Macdonald et al. 2016:114).

3.4.2 Value Benefits

As discussed in section 3.4, a supplier might have many benefits in terms of functional, economic, social or environmental benefits in its offering to its customers. However, for the supplier, it is necessary to have an understanding of how these value elements are in comparison to the competitor or next best alternative available for the customer (Anderson et al. 2006: 94). Accordingly, it is necessary to group these value elements in three types, i.e. Points of parity, Points difference and Points of contention. Points of parity refers to the same performance and functional benefits offered by the next best alternative. Points of difference refers to elements that determine the positive or negative impact on supplier offering in terms of the next best alternative. And the points of contention refers to the conflicts of opinions in which the supplier may refer to the performance and functional benefits as points of difference and on the other hand customer claims those to be points of parity. (Anderson et al. 2006: 94).

3.4.3 Value Communication

Effective communication of value to the customer in the business markets has critical roles in the business to business market (Anderson & Narus 1998:54). In this regard, the value proposition has evolved as a strategic tool that facilitates communicating the value (Payne et al. 2017: 483). Communication of value as a fundamental marketing strategy is more than operational advertising. It is a value statement constituting the firm's core strategy decisions (Lehmann & Winer 2008). Value statements describe the impact that the supplier can have on the customer's industrial segments. It is a general statement utilized by the supplier to generate customer interest (Payne & Frow 2014: 219). Strategically communicated value towards the targeted customer enhances the firm's position among the best alternative available for the customer. Hence it increases the firms' ability to achieve a superior result (Morgan 2012: 111). In communicating the value proposition, a supplier needs to focus on a compelling points of difference which resonates with targeted customer business priorities (Anderson et al. 2006: 94). The value benefits communicated to a customer must be expressed to the customer business goal and linked to their key performance indicators such as increasing revenue, minimizing the cost of ownership, increasing the efficiency and including return on investments (Vistek et al. 2012, Töytäri & Rajala 2015: 105).

3.4.4 Value Quantification

Anderson et al. (2006) note that most of the value propositions claim to be savings and benefits to the customer however fail to demonstrate it. Maybe supplier offered service benefits provide superior value to the customer process but if supplier's inefficiency in quantifying the value benefits results in the customer looking those benefits as a marketing gimmick (Anderson et al. 2006:91). Value quantification requires determining the functional relationship between the selected resonating value benefits and the key performance indicators in terms of increasing revenue, minimizing the life cycle cost and thereby reducing the cost of ownership, increasing operating efficiency, minimizing the lower time which overall influence on the return on invested capital (Töytäri &, Rajala 2015: 107)

The value proposition usually starts with the value statements which can be measured both in terms of value generated to customer and revenue of the supplier. In demonstrating values the supplier must keep in mind to answer at least four questions. First how much financial or an economic benefit the customer can perceive. Second, the timeline in perceiving such benefits must be kept in mind. Third, defining the risk involved in realizing the benefits must be considered as well as how value can be measured reflecting on the value in return (Payne & Frow 2014: 219).

Among the industries, there are different tools and best practices utilized in demonstrating the value benefits. One such example is "value word equations." It expresses benefits in terms of words to differentiate the functionality and performance supplier offering to next best alternative. Further, the savings achieved from superior functionality and performance from the supplier offer must be quantified with the help of a simple mathematical formula to determine financial return and savings that the customer can perceive (Anderson et al. 2006: 96). From the industry best practice, Rockwell automation uses the "value cases histories" wherein it documents the savings that their existing customer had with the supplier offerings and uses it to demonstrate the value with next potential customer (Anderson et al. 2006: 97). On the same line, SKF premium bearing manufacture displays the benefits in terms of how their product creates superior value by minimizing the customer process downtime thereby increasing the customer productivity and efficiency ultimately saving the customer money (Andreas et al. 2018: 80). As per the survey made by Hinterhuber (2017), the firm's capability of value quantification considerably and positively influences the firm performance. Thus, value quantification plays a crucial role in communicating the value proposition.

3.5 Conceptual Framework of This Thesis

This section refers to a synthesis of the literature review as discussed in Section 3. The result is presented in the form of a conceptual framework for building a customer value proposition. The conceptual framework for a CVP is built upon four crucial elements which are identified from the literature review as shown in Figure 5: Conceptual Framework in building customer value proposition (CVP).

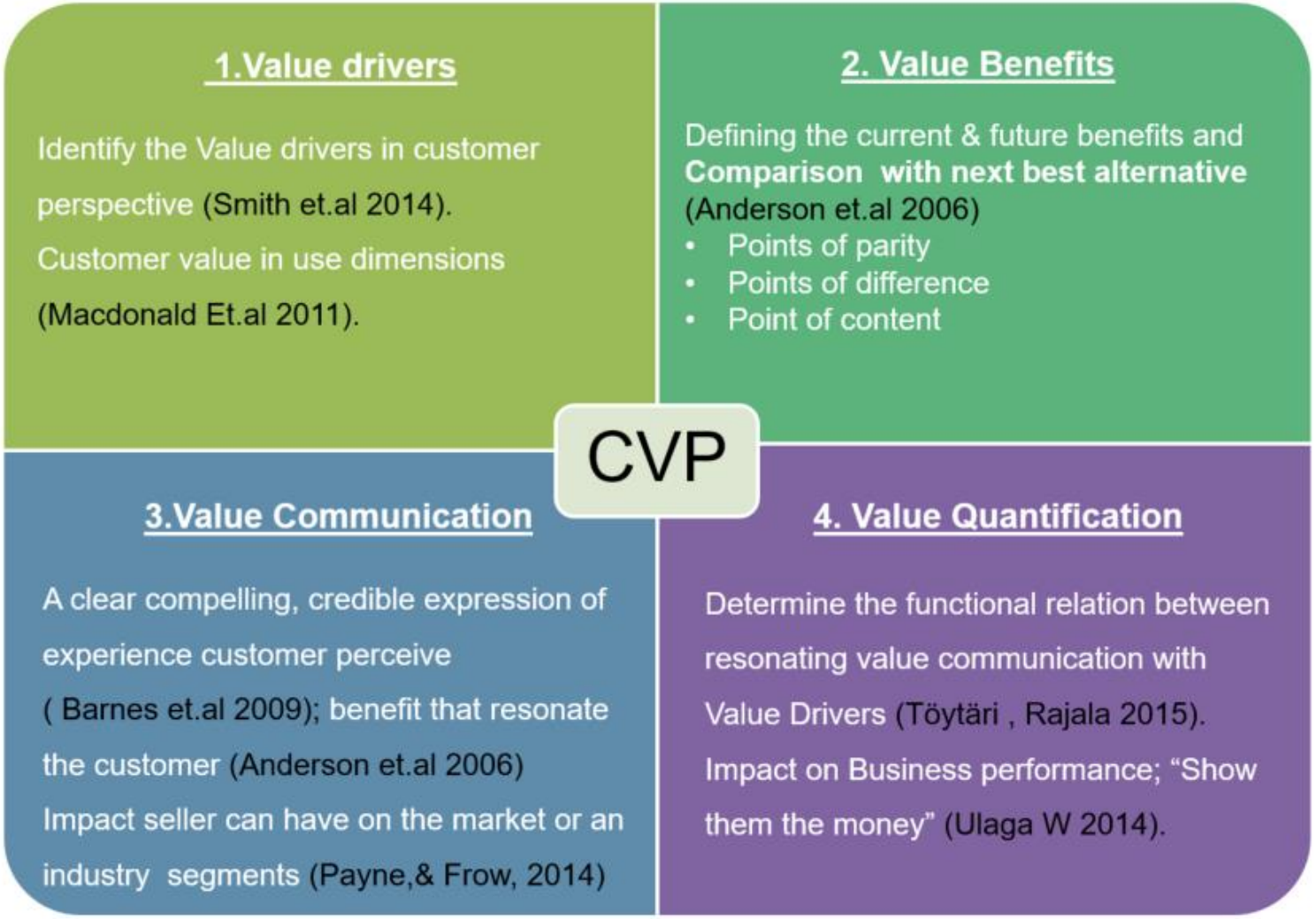

Figure 5: Conceptual framework in building Customer Value Proposition (CVP)

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The first element is about defining the Value driver. It determines the factors that the offered service can influence. It establishes the impact that the customer can perceive by utilizing the service. It addresses customer challenges, or the pain points that can be improved or lowered by the supplier offered service. For the supplier, this element clarifies in understanding the customer segment that benefited from the offered service. Thus, the element helps to realize the benefits of the service looking from the customer perspective.

The second element is about defining the Value benefits. It is about realizing all the benefits that the offered service can offer to the targeted customer. And a comparison of these benefits in terms of the next best alternative available for the customer in the market space. The comparison is measured by dividing them into three categories, points of parity, the points of difference and point of contention as discussed in subsection 3.4.2.

The third element is about defining Value communication. It presents the marketing strategy in a way that it resonates with a customer. It creates a positive impact in communicating value from the offered service in getting customer attention. However, in determining the resonating factor in value communication, it needs to be noted that the defined resonating factors are measurable, transparent and credible for a customer.

The fourth and the last element is about quantifying value benefits in a way that the customer can trust the promise that the supplier is making in terms of value communication. It defines the supplier value model in quantifying the economic, social and functional benefits that customer can perceive. Quantifying the value also helps the customer in setting their appropriate expectations that the customer can recognize by utilizing the supplier offered product and services.

The conceptual framework and its elements of CVP are further utilized in analyzing the current state analysis of the existing yourKONECRANES service logic and its value proposition. The following Section 4 elaborates the Current state analysis.

4 Analysis of Current yourKONECRANES Service Logic and Value Proposition

This section describes the current state of yourKONECRANES service logic and internal experience in utilizing its benefits in the new equipment sales. This section contains seven subsections, starting with a brief overview of how the current state analysis is carried out and finishing with a summary on the current CVP strength and weaknesses concerning customer needs and the peer competitor CVPs.

4.1 Overview of the Current State Analysis Stage

The current state analysis was carried out in four phases. In the first phase, a detailed description of service logic was realized by going through sales material, leaflets, presentations and sales training. In the second phase, yourKONECRANES service current customer value proposition was captured by one to one discussion with the product owner. In the third phase, a series of the theme interviews were conducted with new equipment salespeople in industrial equipment business across EMEA, APAC, and the Americas region. An interview template, found in Appendix 1, was utilized for the theme interview. During the theme interview with salespeople in new equipment sales, their awareness about the yourKONECRANES service, internal experience in promoting yourKONECRANES service benefits in the new equipment sales pitch, tools used in demonstrating yourKONECRANES service benefits in the sales pitch, a new equipment customer needs and expectations from the yourKONECRANES service, competitor information in offering similar service was collected. During the fourth and last phase competitor data and competitor CVP in offering similar service was analyzed. Data collected during all four phases were condensed to realize the strength and weakness of current CVP with customer needs and competitor CVP were analyzed.

The next subsection describes the first phase of the current state in understanding the yourKONECRANES service logic.

4.2 Analysis of YourKONECRANES Service Logic

This section provides the analysis of yourKONECRANES service logic and its utilization at Konecranes. YourKONECRANES is a customer portal offered by Konecranes to its customer. The yourKONECRANES portal gathers the information related to equipment usage and operating data. The data is computed to provide the various Key performance indicators (KPI's) of the equipment to a customer. The KPI's provide a holistic view to a single crane or an entire fleet of cranes installed in a plant. The KPI's derived from analyzing the usage data of the equipment to help the customer to enhance their business in terms of managing their assets and future planning with their operations.

The yourKONECRANES services can further be extended when a customer has the maintenance agreement with Konecranes for the equipment. With maintenance agreement the yourKONECRANES portal gathers data related to equipment service history, inspection report, service report, service associated findings. Besides, the yourKONECRANES portal also records spent on the equipment in terms of maintenance service, spare parts, etc. With the insights drawn from gather data Konecranes offers consultative services which can help customer to optimize their operations and further enhances the customer decision making in terms maintenance planning, modernization, upgrade the equipment during the life cycle of the crane.

The outline for yourKONECRANES service is as presented in Figure:6 Outline YKC service.

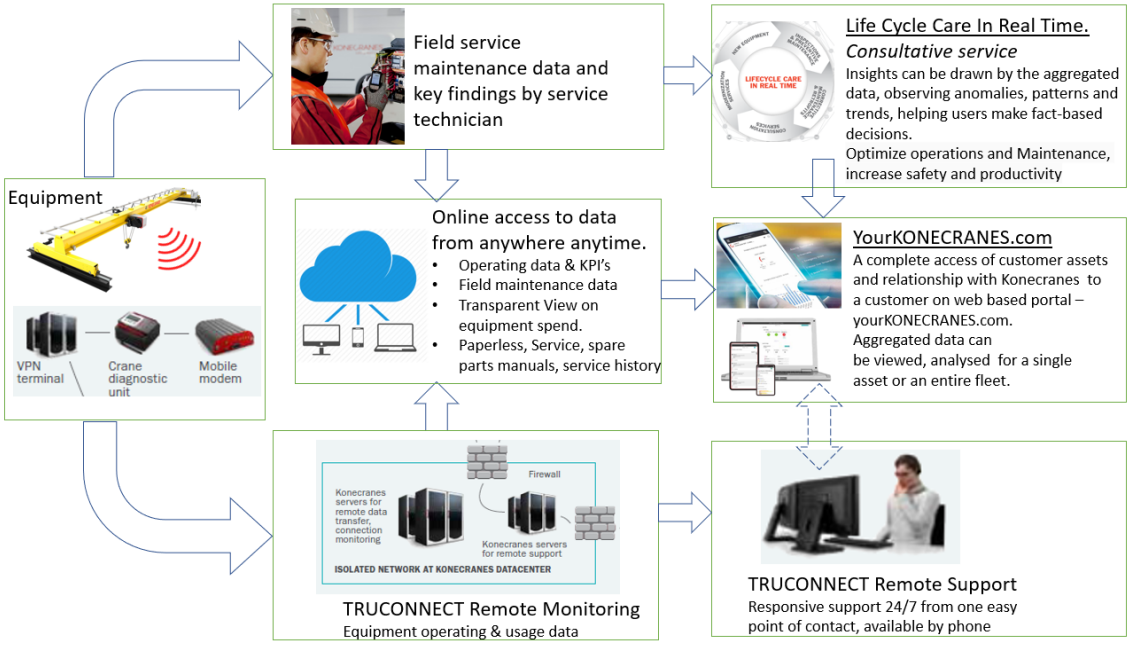

Figure 6: Outline for yourKONECRANES Service

As shown in Figure 6, the portal mainly collects data from two sources. First, TRUCONNECT remote monitoring data is collected through the sensors mounted on the components and second the field service inspector after each service visit feeds the field service maintenance data and key findings into the system. The data collected through TRUCONNECT remote monitoring device provide the equipment operating status and usage information. The usage data such as work cycles, running time, motor starts, brake life, brake conditions are collected. The collected data are computed to provide the Key Performance Indicators (KPI'S) which are significant for the customer operations. When a customer has TRUCONNECT remote monitoring or maintenance agreement with Konecranes, they get access to the online customer portal yourKonecranes.com. From the online portal customer can have a transparent view to equipment usage data and maintenance data including access to service requirements for single crane or fleet of cranes supplied the case company in the customer plant.

If there are any safety critical or operational critical alerts occurs those data are sent to customer representatives through a text message or e-mails. The critical alerts include overloads, emergency stops, overtemperature of motors which are crucial for the equipment operating conditions. The customer can analyze the faults and alerts details by login into the yourKonecranes.com and get further insights and recommendations. Based on the criticality of alerts there is a provision that the customer can also reach out to 24/7 remote support service to minimize the possible downtime with equipment. Usually, the contact to remote support occurs when troubleshooting for problem requires high level for technical expertise. The remote support experts also help to identify the need for corrective on-site maintenance actions and spare parts.

If the customer has a maintenance agreement with Konecranes, then the field service inspector or technician enters the inspection and maintenance data into the system through the mobile-enabled device. The mobile-enabled technician can also access to the equipment maintenance history, usage, operating history, spare parts, and service manuals which are also visible for a customer through the yourKONECRANES portal. Field service technician then enters his or her observation from the service visit following risk and recommendations methods using MAINMAN tool utilized by the field service technician.

Once a service visit is completed then the service representative conducts a business review with the customer. The business review is a part of a consultative sales approach

in terms of life cycle care service offered by the service business unit. During the business review based on the findings from remote monitoring data and service data, the visit review, safety review, risks, and recommendations are presented to the customer. The customer can access all the information collected from remote monitoring data and maintenance data, service history through the yourKONECRANES portal. Besides, the customer can also follow the service spending in terms of repair and spare parts cost on the equipment through the portal. The customer can further decide future course actions based on the insights from the equipment usage, findings, and recommendations from the service representatives. This provides the customer with an asset management tool in providing a transparent view to all the equipment related data through the yourKONECRANES portal for the entire lifting equipment installed at the customer plant.

4.3 Analysis of Current CVP

In the current scenario at Konecranes YourKONECRANES portal is utilized as one of the fundamental building blocks of consultative sales approach in terms of life cycle care service offered by the service business unit. This section explores the benefits offered by the yourKONECRANES portal and its current value proposition. The information was gathered from sales training, sales material, and discussion from YKC product manager.

The yourKONECRANES portal enables a customer to get insights from the equipment operating and usage and maintenance data. The usage data, maintenance data and asset details are linked together in yourKONECRANES portal providing access to a customer in giving a transparent view for the events and activities over any selected time intervals. The combined usage and maintenance data in real-time was viewed, analyzed and shared for a single asset or entire fleets. Thus, allowing for asset management for the whole of the installed cranes in the customer plants.

Insights can be drawn by observing the anomalies, patterns, and trends, helping the customer to make fact-based maintenance decisions. The anomalies are shown as faults for example overload, overheating of motors. These events considered as abnormal and it prompts as an action to identify the cause for the abnormal events. By following the patterns help to unravel relationships between different variables. For example, excessive overloads, emergency stop indicates the need for operator training by which abnormal usage to the equipment can be avoided. This helps in reducing downtime due to human error and the risk of safety incidents.

Similarly, frequent overheating of the motor may indicate needed changes in the equipment or process. Further following trends over time can help customer to prioritize the actions and investments. Analyzing the data over time support the development of predictive maintenance. With a consultative approach, Konecranes service representative can guide the customer with decision making. The service representatives can share the findings, provide the recommendations and discuss possible actions needed in optimizing the various aspects of the customer operations and maintenance activity.

For customer access to the yourKONECRANES portal provide a transparent view to see the crane usage and operating data along with maintenance data information in one place. A customer can monitor and plan his maintenance activity based on the priorities. A customer can view risk and service recommendations from the collected data at any time. The portal also allows a transparent view to the equipment and service spends and maintenance spend in terms of repair and spare parts. For Konecranes, by connecting data, machines and people it helps to deliver the equipment lifetime care in real time.

4.4 Internal Experience in Using Current CVP in the New Equipment Sales

This section explores internal experience of using current CVP of yourKONECRANES service in new equipment sales in the industrial equipment business unit. The findings were from the theme interview with salespeople responsible for new equipment sales at Konecranes Industrial equipment business unit. The quote highlighted in this section has mainly are those where the same or similar message came through from more than two interviewees.

In the new equipment business unit yourKONECRANES is promoted in its sales pitch at a certain extent. However, it observed that awareness of yourKONECRANES among the sales unit is not at a reasonable level. There is also a need to sell the idea of yourKONECRANES internally among the new equipment sales unit. As per one of the interviewee:

> “[redacted]”.

There is a gap in understanding its benefits and promoting it as a differentiator in the sales pitch of new equipment sales. In many cases, yourKONECRANES is assumed to be a service product offered by the service unit.

“[redacted]

It also observed during the interview that the reason to consider it as a service product due to the operating model behind the sales process. It seems to be there is no clear guideline or understanding between ownership and responsibility of a product during the execution of service benefits offered by the yourKONECRANES service.

Currently, in the new equipment sales, yourKONECRANES service and its benefits are available to a customer in two packages. The basic package includes TRUCONNCET remote monitoring data, and an advanced package includes services from TRUCONNECT and equipment maintenance contract. As per the experience from the new equipment sales, real benefits of YourKONECRANES in customer perspective realized when yourKONECRANES includes a complete service package, remote monitoring data plus maintenance data. As per the interviewee:

“[redacted].”

However, it was observed that the sales force in new equipment business are not equipped with tools where they can confidently offer complete service package. As per another interviewee:

“[redacted]”.

It also seems to be equipment sales do not have enough authority to sell the yourKONECRANES service to make the needed promise to the customer. As informed by one interviewee:

“[redacted]”

[redacted].

Similarly, in many cases, the equipment sales promote the yourKONECRANES, but they are not selling the services to a customer. That is in some sense not motivating enough for new equipment sales to promote it as a real differentiator in their sales pitch. One interviewee defined the current process of promoting yourKONECRANES service as follows:

“[redacted]

The above findings reflect there is an internal barrier in terms of promoting the yourKONECRANES service among the new equipment sales. Hence, there is need to make the process simple to sell yourKONECRANES service among the new equipment sales instead of just promoting it in the new equipment business unit.

Further to get an understanding the customer’s actual needs and get insight to know whether the current CVP of yourKONECRANES service address to those points was discussed among the new equipment sales unit and the findings are presented in the next subsection.

4.5 Identifying Key Customer Needs Concerning CVP

The current value driver for the YourKONECRANES service triggered from two directions. One is from a customer perspective and second is the technology or industrial driver. In terms of customer perspective offered service provides a transparent view to the asset’s usage and maintenance history. Insights are drawn from the collected data by observing the patterns, anomalies, and trends which allow the customer to make informed, fact-based maintenance decisions. In terms of technology, the offered service is triggered by the industry driver which is to integrate machines with sensors and industrial internet which enable the gathering of the data and analyze it to improve the efficiency of equipment operations.

However, when it comes to actual customer needs with yourKONECRANES service, most of the customers are not interested in technical details like which parameter is monitored and followed. The resonating focus for a customer is to understand whether the offered service will reduce the cost of operation for the equipment. One of the interviewees highlighted the need as follows:

“[redacted].”

Currently, there are not enough facts and reference available with new equipment sales to demonstrate the benefits which are of customer interest. In most of the case, the customers are interested in realizing the value in use like for example reducing the cost of operations or lifetime cost of the equipment or reducing the cost of ownership. In many cases making the customer realize the monetary benefits is beneficial to get premium value for the offered equipment. One of the interviewees described it as follows:

“[redacted].”

Similarly, from the sales unit, it was identified that customer needs are mainly related to understanding in improving the reliability, availability, and safety of the equipment. An interviewee described this in the following way:

“[redacted]”

When it comes to safety, a customer does realize that by monitoring the safety parameter for example brake life, overloads help them to improve safety level but how significant that value for the customer is difficult to realize. In many cases for a customer in smaller segment expects that Konecranes as service provider monitor these safety parameters and inform to the customer if any actions are needed. One of the interviewees described it as follows:

“[redacted].”

In the current process cranes installed at customer base are not monitored continuously by Konecranes. When there are any safety critical alerts or production critical event oc-

curs then the alert message first sent to customer representatives. The customer depending on the faults and alarm will get the guidelines for the risk and recommendation. Then the customer can decide to send the service request to the Konecranes local service branch if needed. Otherwise, if there is a service maintenance agreement the field service inspector during the service visit can access to these operating data faults and alarms, and those are highlighted to the customer to realize.

As per the information from the sales unit, there are also specific customer segment, where the customers need is to integrate the data collected from yourKONECRANES to their plant-level monitoring system so that customer need not log in to the individual portal for the different equipment in the plant. One of the Interviewees described the customer need as:

> "[redacted]."

An alternative option for the customer, there is a commercially available PLC manufacturer, who can provide a platform to integrate different PLC controlled equipment installed in the plant allowing them to monitor the operating status of all the equipment from one system.

Thus, as a summary from the above discussion customer needs are realized by lowering the cost of ownership, lifetime cost and total ownership cost of the equipment. And, by increasing the availability and reliability of the equipment in use. Further to get insights from what the next best alternative solution customer can have from the market was studied by going through the competitor CVP which is discussed in the next subsection.

4.6 Analysis of Key Competitor CVPs

The salespeople identify the key competitors in the market during theme interview. The information related competitors CVPs in offering the services similar to yourKONECRANES collected from an internet source. Three main peer competitors were identified in the market promoting the remote monitoring data collection and easy access to the collected data. The competitors CVP and the feature details are listed in Table 5: Competitors CVPs and feature details.

Table 5: Competitors CVPs and feature details (Source: Competitor web pages)

Key Competitor	CVP related remote support service	Feature details
Competitor-A	**Manage and control your cranes wherever you are**: Core Box makes it easy to control all the information necessary to work safely, efficiently and productively in a world connected by 3G / GPRS, Wi-Fi and USB	Real time access to crane information. With mobile app connect to the crane via WIFI or 3G/GPRS. The easiest way for Competitor-B Service professionals. Service professional help to detect possible fault help to resolve the problem without any unexpected charges and travel expenses.
Competitor-B	**Smart Link**: The software allows diagnosis and remote access in real time with our cranes.	A tool for obtaining relevant operational data, which helps reduce operational risks, optimizes workflows and enables strategic planning of the maintenance of facilities.
Competitor-C	**Digital transparency for intelligent manufacturing**. You can gain the greatest possible benefit from your data, e.g. better facility management, less downtime with predictive maintenance or increasing occupational safety.	Remote condition monitoring (RCM) enables wireless data transmission of operating data recorded by the SMC, to a global server via a GSM connection. Authorized persons can access this operating data worldwide. It is possible to retrofit all crane systems equipped with SMC, back to the first generation

According to Competitor-A, the collected operational data will allow the equipment to work safely, efficiently and productively. The customer can access the collected data through a mobile app. The mobile app will also help the customer to connect service adviser who can successively help them to detect the faults and possibly resolve the problem, without any unexpected charges and travel expenses.

Competitor-B claims that in their equipment there is provision to remotely access equipment operating data that will also allow the diagnosis. Monitoring the operating data will help improve the operational risk, optimize the workflow and enables strategic maintenance planning.

Similarly, Competitor-C has recently launched a service this year wherein they are making a promise in providing digital transparency for intelligent manufacturing. And the possible customer gains from the remote condition monitoring service are better facility management, less downtime with productive maintenance or increasing occupational health.

In all the three-peer competitor analyses it was understood that the data collected by each of the competitor systems are mainly operational data from equipment usage collected from the control system. There was no reference to field data collected for the

analysis. It was also not clear about the responsibility of monitoring the equipment performance parameter, whether it is by the customer or service provider. From the market analysis and feedback from the sales unit, it was understood that all the three competitors are mainly product supplier and do not have extensive service resource for the after-sales maintenance service of the equipment. However, there is no denying that to keep up in the competition there is a need for analyzing the benefits of yourKONECRANES service offering as a differentiator from the competitor CVP. As one of the interviewees put this:

> "[redacted]"

Thus, there is a need for clear, credible expression in building the CVP for yourKONECRANES service which differentiates in terms of competitor offers. The need is further explored in the next subsection by analyzing the current CVP of yourKONECRANES service strength and weakness with customer needs.

4.7 Analysis of Current CVP Strength and Weakness Related to Customer Needs

In understanding the current CVP strengths and weaknesses, the value proposition canvas was utilized as a tool as described in section 3.3. Value mapping of yourKONECRANES benefit and customer profile was analyzed based on the feedback and data from the interviewees. Points related customer profile was collected mainly from the new equipment sales interviewees. And the value map was visualized from the current sales material of yourKONECRANES.com and discussion with product owners. The result of the value proposition canvas for the current CVP is as shown in Figure:7 YKC Value mapping v/s Customer profile.

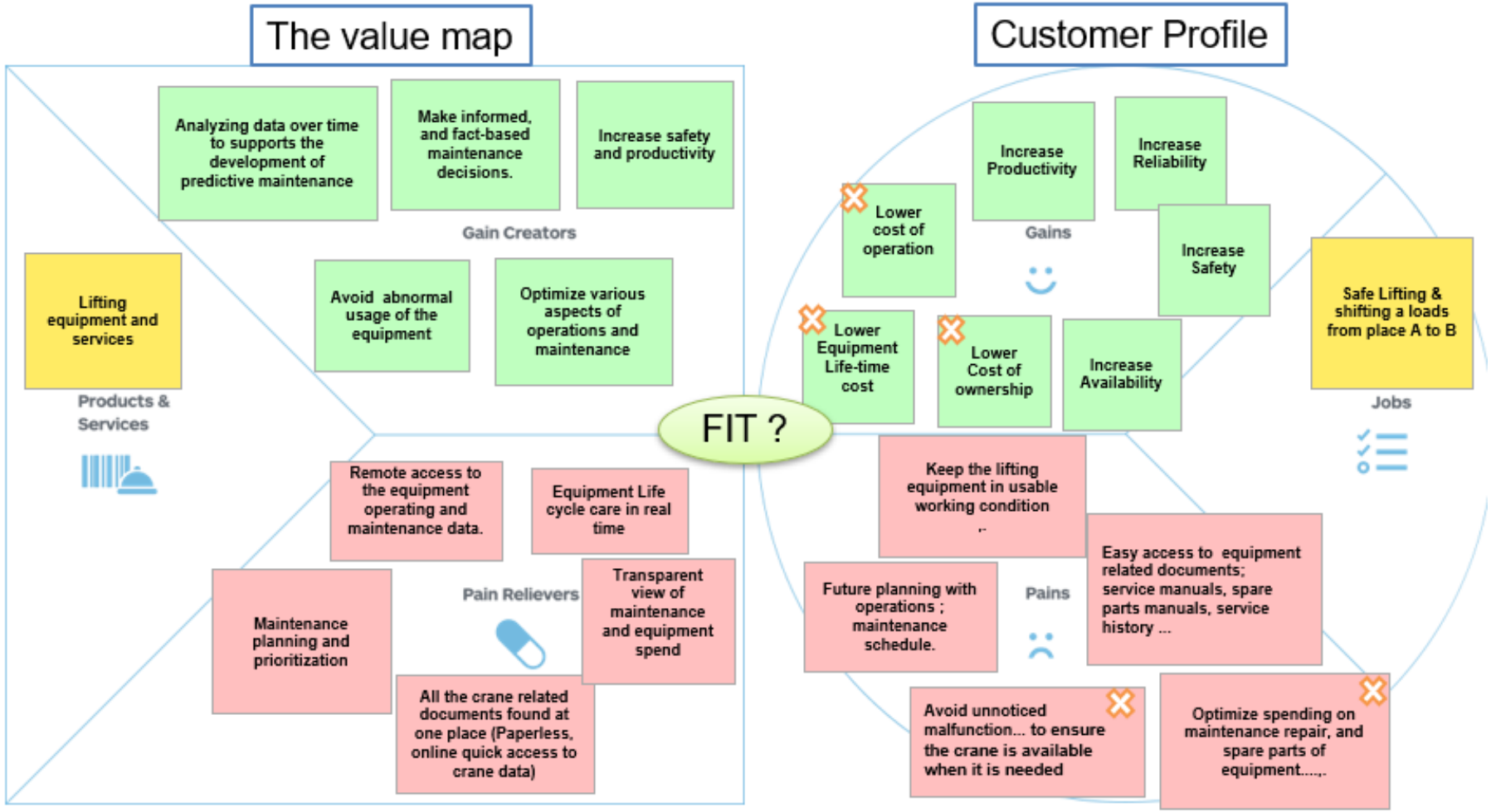

Figure 7: YKC Value mapping v/s Customer Profile

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The fit between the value map and customer profile was analyzed. As depicted in Figure 7, Under the customer profile, the job that customers want to perform is a safe lifting and shifting of a load from a place-A to place-B. In utilizing the lifting equipment, the pain point customer has is to ensure that lifting equipment is available in a usable working condition whenever it is needed for the use. The customer wants to avoid any unnoticed malfunction which can harm the customer process. If there is any requirement for maintenance and repairs, then the planning for the maintenance schedules are done in advance. In performing the maintenance activity, a customer wants easy access to equipment related documents such as service manual, spare parts manuals, service histories. Also, a customer wants to optimize the spending on the equipment maintenance and repair cost to ensure equipment operating cost are in according to usage.

From a customer perspective, yourKONECRANES as service can create gain when the service is realized in terms of increasing the availability, reliability, productivity, and safety of the equipment. And the benefit ensures lower the cost of operation, cost of ownership and reduce the lifetime cost of the equipment.

Similarly, the case company Konecranes offered product & service mapped under “The Value Map” of Figure:8. The value mapping is mainly done with the focus on yourKONECRANES service benefits. Accordingly, the product and the service provided by the case company was listed as lifting equipment & service which address the customer lifting needs of the load. The case company offers remote access to the equipment operating and maintenance data under the platform of yourkonecranes.com to address customer pain points for the equipment usable working condition. As a pain reliever, the yourKONECRANES platform provides customer access to follow the equipment maintenance related activity and access to equipment related documents including a transparent view to equipment repair and maintenance spending. Besides, the case company’s extensive offer for lifecycle care consultative service for lifting equipment was noted under pain reliever. As discussed in Section 4.3 the yourKONECRANES service benefits listed under the gain creator of the value map as the service offers a customer to make fact-based maintenance decisions, help in avoiding the abnormal usage of the equipment and also to optimize the various aspect of the equipment operation and maintenance activity to ensure safety and productivity.

The result of analyzing the fit between the value map and customer profile shows that the main strength of the yourKONECRANES service is the systematic and transparent approach which allows the customer for their asset management with the installed lifting

equipment in their plant. However, from the customer perspective, they expect that the Konecranes as a service provider monitors the operating status of the equipment and makes sure the lifting equipment is available for the customer use when they need it in performing their core business. Also, the gain creator for the customer is to realize how yourKONECRANES service will help them to lower the equipment operating cost, cost of ownership and reduces the lifetime cost of the equipment. In Figure 8, under customer profile, the tags marked with X are those that the current CVP of yourKONECRANES does not address these issues and communicate in a way that the customer would realize the benefits of the service. It was also realized that the new equipment sales in the case company do not have enough facts and reference cases to demonstrate and quantify the yourKONECRANES benefits in a way that the customer would realize the possible gains and impacts it can create in their core business. In terms of communicating value benefits, there is a need to define a clear and credible expression to draw customer attention.

4.8 Summary of current CVP strength and weakness with customer needs and competitor's CVP

In line with the elements of the conceptual framework as described in Section 3.6, the yourKONECRANES current CVP strengths and weaknesses along with customer needs and that with competitor CVPs are summarized in Table 6.

	CURRENT CVP vs CUSTOMER NEED		CURRENT CVP vs COMPETITOR CVP	
	Strengths	Weaknesses	Strengths	Weaknesses
Value Drivers	**Content Availble only for Evaluator**			
Value Benefits				
Value communication				
Value Quantification				

Table 6: Summary of current CVP +/- as compared with customer need and competitors' CVP

As can be seen in Table 6, in terms of customer needs and yourKONECRANES strength is about Konecrane's competence in utilizing the technology and industrial internet to integrate machines with sensors to enable gathering of data and analyzing it to improve the efficiency of equipment operations. However, the downside is that the current CVP does not explicitly address the drivers of customer needs which are lowering the cost of operation and increasing the availability and reliability of the equipment. In terms of value benefits, the service offers the customer the ability to make fact-based maintenance decisions. However, for a customer to realize these benefits, it must be linked to monetary benefits or to reference cases where an existing customer has realized the benefits. A clear, credible expression in communicating the value which can impact customer business or industrial segment is missing. In the current sales pitch, the value benefits of yourKONECRANES service are not quantified. In terms of quantifying the value, there is an internal barrier. The barrier is due to the gap between the ownership and responsibility of the yourKONECRANES product features between the two business units. If the new equipment sales unit sells the full benefits of the yourKONECRANES service, then they need to make promises to the customer on behalf of another business unit which is an internal barrier in the current situation.

In comparison to competitor CVP as realized in Section 4.6, there are competitors in the market who can provide the operating data which is similar to TRUCONNCET remote monitoring report available through the yourKONECRANES service. Still, there is a technical difference with competitor features in providing operating data. However, most of the people in new equipment sales are not fully aware of those differences in the way to make the customer realize the difference in comparison to competitor offers. It is a challenge in the equipment sales mainly when the scope of yourKONECRANES service benefit is limited in providing only operating data.

The strength of the yourKONECRANES can be realized with the fleet view. If there are a large number of equipment installed in the same plant, then the yourKONECRANES portal gathers the information of all the lifting equipment in one place and provides a holistic view of entire fleets in the plant. Also, the main core strength of the yourKONECRANES in terms of competitor CVP is about is providing the facts based on the combined data from the remote monitoring data plus field maintenance data, which none of the competitors are currently able to offer. However, the current limitation with the product is so that the data cannot be integrated with the customer plant-level system if needed. Some of the customer segments expect that the data should be integrated into their own plant-level system so that they can monitor all the process equipment in one

system. In the market, very few competitors can currently offer such a solution by using a commercially available PLC solution to integrate the operating data to the customer plant-level system.

Overall, from the result of the current state analysis, it was realized that one of the critical weakness is the necessity to clarify among the industrial equipment business unit in terms of the communicating yourKONECRANES service benefits. In this respect first, it is necessary to align yourKONECRANES service benefits together with the customer needs in the new equipment sales. Second, it is essential to clarify the yourKONECRANES benefits in terms of competitor offers. Third, it is necessary to communicate the service benefits in such a way that customer realizes the impact that the yourKONECRANES service can have on their business. By keeping the focus on these three elements, the next section describes the development of customer value proposition to help in communicating the yourKONECRANES service in the new equipment sales of industrial equipment business unit.

5 Building Proposal on Developing CVP to Support New Equipment Sales

This section describes the development of the CVP for yourKONECRANES service to support the new equipment sales unit in the industrial equipment division of the case company Konecranes. The outcome of the current state analysis and conceptual framework from the literature was utilized in building a proposal for the CVP using Data 2, as given in section 2.3.

5.1 Overview of the Proposal Building Stage

The outcome from the current state analysis was first presented to the marketing, business heads and product owner of the case company. Based on the CSA result during the discussion, it was agreed that to explore the full potential yourKONECRANES service benefits in the new equipment sales it is essential to lay down the value propositions of yourKONECRANES service. The value proposition shall help to realize yourKONECRANES service benefits in terms of customer needs and differentiate it from competitor offering in the new equipment sales. In the second step at the strategic level, it was discussed with responsible business heads of the case company to work on an operating level strategy to execute in communicating the value proposition in the new equipment sales unit. Issues such as training needs, defining the scope of service and clarifying ownership of the offered service in the new equipment sales was discussed at a strategic level together with responsible stakeholders in the company. However, the scope of this thesis was limited in defining the customer value proposition for the yourKONECRANES service in the new equipment sales.

For the development, a CVP workshop was conducted together with the yourKONECRANES product owner and product owner of TRUCONNECT remote monitoring service. During the workshop the outcome from the current state analysis was utilized in defining the CVP. Accordingly, the focus was on three areas. First, realizing the customer needs in the new equipment sales in terms of yourKONECRANES service. Second, identifying the differentiator for yourKONECRANES service offering compare to competitor offers. Third, determining customer value dimensions which resonate the most among the customer in realizing the yourKONECRANES service benefits. Besides, for the workshop, the conceptual framework as defined in section 3.5 was utilized as a tool in co-creating the CVP and defining its elements. Feedback and opinion during the workshop were noted to determine the initial proposal for CVP for yourKONECRANES service.

The development of CVP for yourKONECRANES service in new equipment sales follow the same logical steps as defined in section 3.5 of the conceptual framework. The first element identifies the customer value drivers and customer value-in-use dimensions. The second element explores the value benefits and its comparison with the next best alternative available for the customer in terms of competitor offers. The third element identifies value communication dimensions, which are clear, credible and resonate among the customer. And the fourth element quantifies the value communication dimensions to help the customer in realizing the benefits and setting the expectations with offered service. The following subsections further explore each of these four elements of the CVP.

5.2 Developing Value Drivers

The objective of this element was to understand the customer needs in terms of value drivers. The value drivers are those which the target customer value the most in perceiving the offered service. In perceiving the value from the offered service customer sets an expectation. The customer expectations are the benefits that a customer realize by utilizing the service taken into use in their process. And hence the objective of the element was also to identify the customer value-in-use dimensions that set the customer expectations.

Input for the customer needs was identified from the salespeople during Data 1 collection. The inputs from Data 1 are used during the workshop at Data 2 stage. Input for value drivers and value in use in dimensions which resonate the most among the informant was listed in Table 7: Customer Value driver and Value in Use.

Informant Statements related to customer needs & expectations.	Informant	Group
Content Available only for Evaluator	Respondent 3	Value in use
	Respondent 4	Value driver & Value in use
	Respondent 5	Value driver
	Respondent 7	Value driver & Value in use
	Respondent 8	Value driver & Value in use
	Respondent 9	Value driver
	Respondent 15	Value driver & Value in use

Table 7: Customer Value Drivers and Value in Use

As highlighted in Table 7, the underlined texts are the value drives which are noted by the informant. The value drivers common among the customer were identified to include safety, availability, productivity, and reliability of the equipment. Similarly, customer value-in-use dimensions were determined to be as cost of ownership, operating cost and lifetime cost of the equipment. These parameters were discussed during the workshop at the DATA 2 stage.

During the workshop discussion, each of the value drivers noted above can be enhanced by utilizing the yourKONECRANES service benefits. For example, monitoring safety parameter such as overloads, hoist operating conditions, brake operating conditions, overheating of motors will enhance the safety level of the equipment. If any safety and production critical issues occur in the equipment, then the customer will be notified with alerts. When the issues are addressed promptly, it will influence the availability of the equipment. Following the trends and patterns of the equipment usage and maintenance data through yourKONECRANES enhance the reliability of the equipment. Analyzing the data over time will empower the customer to make schedule maintenance planning instead of an emergency shutdown which will improve the overall productivity of customer operations. As a consequence, these benefits will help to influence equipment operating cost, cost of ownership and lifetime cost of the equipment. For example, when an overload occurs and is notified, the first step is to identify the cause. Identifying the cause early on will help in avoiding unnoticed abnormal usage of the equipment. Avoiding abnormal usage of the equipment will result in reducing the cost of spare parts. Hence, the customer is able to realize the benefits in terms of reducing the cost of ownership.

Thus, value drivers for the yourKONECRANES service are identified as the increase in equipment safety, availability, productivity, and reliability. Accordingly, customer value-in-use in perceiving these benefits are realized to be lowering the cost of ownership, operating cost and lifetime cost of the equipment.

5.3 Developing Value Benefits

The objective of this element was to identify yourKONECRANES service benefits as a differentiator to the next best alternative available for a customer in the market. Input from the competitor CVP as described in section 4.6 was discussed during the workshop. And as mentioned in section 3.4.2, yourKONECRANES value benefits are listed under three dimensions as points of parity, points difference and points of contention. The points of parity refer to the benefits of the service which can be offered by a competitor. Points difference refers to the differentiator of the offered service that are not provided by any other competitors in the market. And the third dimension points to contention where there is a difference of opinion between the supplier and the customer in determining the benefits as either point of parity or point of difference. Accordingly, yourKONECRANES service benefits and its value dimensions are listed in Table 8: Value benefits and its dimensions.

Value Benefits	Value Dimensions
Monitoring usage Data; running time, motor starts, work cycles, emergency stop counter, overload counter. Safe Working Period, motor temperature, Brake monitoring, Operating data acquisition, remote access to operating data, remaining service life.	Points of parity
Provide holistic transparent view to operating status for a single crane or entire fleets of cranes installed on the customer plant on one page. Also, bundling equipment operating data and field service maintenance data together. Combined data enables users to make fact-based decisions. Provide access to monitor and plan equipment maintenance activity, service recommendations.	Points of Difference
A systematic approach to analyzing operating data. Paperless online access to all the equipment related documents, service manuals, spare parts manuals, service histories including maintenance and equipment spend trends as well as asset-level spend is transparently visible in yourKONECRANES.com	Points of contention

Table 8: Value benefits and its Dimensions

As depicted in Table7, the equipment operating and usage data such as working cycles, brake monitoring, running time, overload counter, emergency stop counter, motor status, remaining safe service life of components including remote access to the operating data of the equipment are claimed to be offered by a competitor in the market. Even though there is a technical difference in analyzing the data compared to yourKONECRANES service, it is challenging for the customer to realize the benefits. Thus, when the scope of yourKONECRANES service is limited to providing the equipment operating, and usage data was recognized to be a dimension under the point of parity.

The main differentiator for the yourKONECRANES service benefits is about providing a holistic view to the equipment operating status of the single or entire fleet of cranes on one page over the yourkonecranes.com. Providing a comprehensive view of the entire fleet of cranes enable the customer easy access to asset management of entire fleets of cranes installed in the customer plant. The transparent holistic view for the entire fleets of cranes allows the customer to prioritize a lifting equipment operating and maintenance activity. Providing a comprehensive view of the entire fleet of cranes was not offered by any competitors. Also, yourKONECRANES service bundles equipment operating data and field service data together. By combining both data, it allows the customer to make fact-based maintenance decisions. Access to the service calendar of the equipment allows the customer to follow service activity in the past and plan the future service needs for the equipment based on the facts and service recommendations. Thus, the point of a differentiator for yourKONECRANES service is realized as the fleet view showing the operating condition for the entire fleet of cranes installed at the customer plant. Also, the combination of operating and field service data allowing a customer to make fact-based maintenance are realized to be points of difference.

The third dimension under the points of contention shows that the case company feels that there are technical differences for a systematic approach in analyzing the operating data of the equipment and that providing the key performance indicator of the equipment on yourKONECRANES.com is rather different compared to the competitors. However, customer realizing these differences is challenging. Similarly, the whole IT infrastructure behind the yourKONECRANES service in providing the paperless online access to all the equipment related documents such as service manuals, spare parts manuals, service histories including a transparent view to the spending on the maintenance and service repair of the equipment through yourKONECRANES provide the benefits for the customer. However, there is a difference of opinion in how much customer value paper-

less online access to all equipment related to documents brings. Thus, points of contention are realized at this stage as a systematic approach to analyzing the operating data and paperless online access to all equipment related documents.

5.4 Developing Value Communication

The objective of this element is to identify the factors which resonate the most among the customer in communicating the value benefits. The factors which are a clear, credible and compelling expression of the experience customer perceive in understanding the yourKONECRANES service benefits. Accordingly, based on the discussion during Data-2 workshops and information provided by the product manager during Data 1 stage, yourKONECRANES service benefits are listed and grouped to corresponding resonating factors as listed below in Table 9: Value communication and its resonating Factors.

Service Benefits	Resonating Factor
Abnormal usage of the equipment can be avoided by following the safety and production related alerts. For example, frequent overloads, emergency stops, excessive starts can be eliminated by training the operator.	**Avoid Abnormal usage**
Providing a transparent view for forecasting of maintenance scheduling and predictive planning. Enabling predictive maintenance is less expensive than an emergency shutdown.	**Minimize the downtime**
Early detection of component failure enables preventive maintenance. Preventive maintenance is less expensive than on call maintenance.	
The unnoticed malfunction has a prolonged effect on other components	**Avoid unnoticed malfunction**
Improving the safety and productivity of customer operations by connecting people and machines in real-time operating conditions.	
Leverage the big data analytics by combining remote condition monitoring and field inspection data.	**Big Data analytics**
Follow the trend of operation condition and equipment inspection & service history.	
Access to consultative service will enable to improve the operating efficiency of the equipment during the equipment lifetime. The consultative approach helps to guide decision-making based on the finding from operating condition and equipment inspection & service history.	**Access to consultative service**

Table 9: Value communication and its Resonating Factors

As listed in Table 9, there are five resonating factors noted in communicating the value benefits to the customer. The first resonating factor identified was to avoid abnormal usage of the equipment. The remote operating data is collected if there are any abnormal conditions during the usage of the equipment. For example, equipment is used for lifting bigger capacity loads than the nominal design capacity. Frequent overloads will result in safety-related issues. Similarly, frequent usage of emergency stops which are not necessary can be monitored. Frequent usage of the emergency loads results in the faster wearing of the components than the normal usage. Through yourKONECRANES portal trends and patterns for the emergency stops and overloads can be followed. The portal will allow identifying the sequence of occurs and route cause for abnormal usage. Thus, the consequence of the abnormal usage of the equipment can be avoided.

The second resonating factor was identified to minimize downtime. The yourKONECRANES service will allow the customer to follow the service requirement. The service need can be based on the actual usage of the equipment. The transparent view of the service needs will allow the customer to schedule the predictive maintenance planning well in advance to avoid any consequences from the emergency shutdown. Similarly, if any components faults occur which ultimately result in component failure, that can be notified well in advance through the yourKONECRANES portal. The production-related alerts on the portal will be allowing the customer to make preventive maintenance decision and to avoid any outrage due to on-call emergency shut down. Thus, resulting in minimizing the downtime.

The third resonating factor identified in the value communication is avoiding unnoticed malfunction. The alerts can be sent to the customer through text message or e-mail whenever there are any safety and production related issues occurs. Through the yourKONECRANES portal, the customer can further follow details of alerts and further the risk and recommendations from the alert. With prompt actions with notified alerts, the unnecessary prolonged effect on other components can be avoided. Thus, avoiding the unnoticed malfunction results in improving the safety and productivity of customer operations.

The fourth resonating factor identified in the value communication is big data analytics. yourKONECRANES service allows to bring together the equipment operating data and field service data. The data which are collected over time is analyzed to help the customer make fact-based decisions. Following the trend of operating conditions equipment and equipment maintenance and service, history enables to optimize the operation and maintenance activity.

The fifth and the last resonating factor identified in value communication is access to consultative service. The consultative service will guide the customer in making the decisions based on the findings from the equipment operating and filed service data. Access to consultative service will enable to improve the operating efficiency of the equipment during the equipment lifetime and further to optimize the customer operations.

5.5 Developing Value Quantification

As discussed in section 3.4.4, the capability of quantifying the benefits offered by the service has a positive impact on the success of the value proposition. Thus, the objective of this element is to bridge the functional relationship between the resonating factors described in the value communication to the Value drivers. The functional relationship is defined in terms of quantifiable savings that a customer can perceive. The resonating factors related to value communication in section 5.4 and its corresponding savings which are quantifiable are listed in Table 10: Quantifiable savings.

The resonating factor for Value communication	Quantifiable savings.
Avoid abnormal Usage	Savings on spare parts costs
Minimize the downtime	Savings from minimizing the unplanned downtime cost and Increase output.
Avoid unnoticed malfunction	Saving from avoiding expensive repair & maintenance cost and increase safety.
Big data analytics	Savings from optimized spending on service maintenance & repair cost.
Access to consultative service	Savings from increasing operating efficiency

Table 10: Quantifiable savings

As listed in table 10, the first savings from avoiding abnormal usage of the equipment. It can be quantified in terms of saving form spare parts. As discussed in section 5.4, abnormal usage results in the unnecessary wearing of the components which ultimately reduce the lifetime of the components than normal usage. Thus, avoiding the abnormal usage of the equipment can result in saving on the spare parts.

The second savings is to minimize downtime. It can be quantified by showing the impact that equipment downtime can have on customer output. The savings can be realized by minimizing the unplanned downtime of the equipment. The yourKONECRANES portal allows early forecasting of maintenance scheduling and planning. Thus, allowing for predictive and preventive maintenance needs of the equipment based on the actual usage conditions. In general, predictive and preventive maintenance is less expensive compared to emergency on-call maintenance.

The third saving is from avoiding unnoticed malfunction. Unnoticed malfunction will have a prolonged effect on other components. The prolonged impact can damage other components and ultimately result in an expensive repair and more significant replacement parts. Thus, early prompt action to unnoticed malfunction results in savings from minimizing the repair, maintenance cost, and spare part cost.

The fourth saving is achieved from big data analytics. Big data analysis enables the customer to minimize the cost of unnecessary ongoing maintenance and repair cost. Spending on equipment service repair and maintenance cost can be compared with the actual usage of the cranes and customer needs. For example, overheating of motor or an over usage of the equipment indicate the demand for the upgrading the equipment to fulfill a customer process instead of excessive spending on repair and maintenance cost. Thus, insights drawn from analyzing big data from equipment operating data, maintenance data and spending on service and repair will enable the customer to optimize the expenditure on the service and maintenance cost.

The fifth saving is achieved from customer access to consultative service. The consultative service provides recommendations to customer to make equipment capital expenditure planning on a fact-based justification. The consultative service provides various insights drawn from operating data and maintenance findings. The consultative service helps the customer to uncover critical issues which need more in-depth technical expertise. The advisory in consultative service uses advanced technology to identify improvement opportunities of customer operations and ultimately to achieve savings from increasing operating efficiency.

To further demonstrate quantifiable savings in terms of financial gains that a customer can perceive from yourKONECRANES service the benefits were analyzed. An example case was used to make the comparison between the traditional on-call maintenance service and the preventive maintenance service offered though yourKONECRANES was analyzed.

The analysis was done in three steps. In the first step, the sequence of occurrence in traditional on-call maintenance and the impact it can have on the crane availability was analyzed. In the second step, how the situation with traditional on-call maintenance and its negative consequences can be improved with the benefits from yourKONECRANES preventive maintenance service were analyzed. In the third step, the financial impact for the customer was compared between the on-call maintenance and yourKONECRANES preventive maintenance service was analyzed. The mathematical formulas were used to get the graphical output for the result of the analysis. First, the result of the traditional on-call maintenance service trend is shown as in Figure 8: On call service maintenance trend.

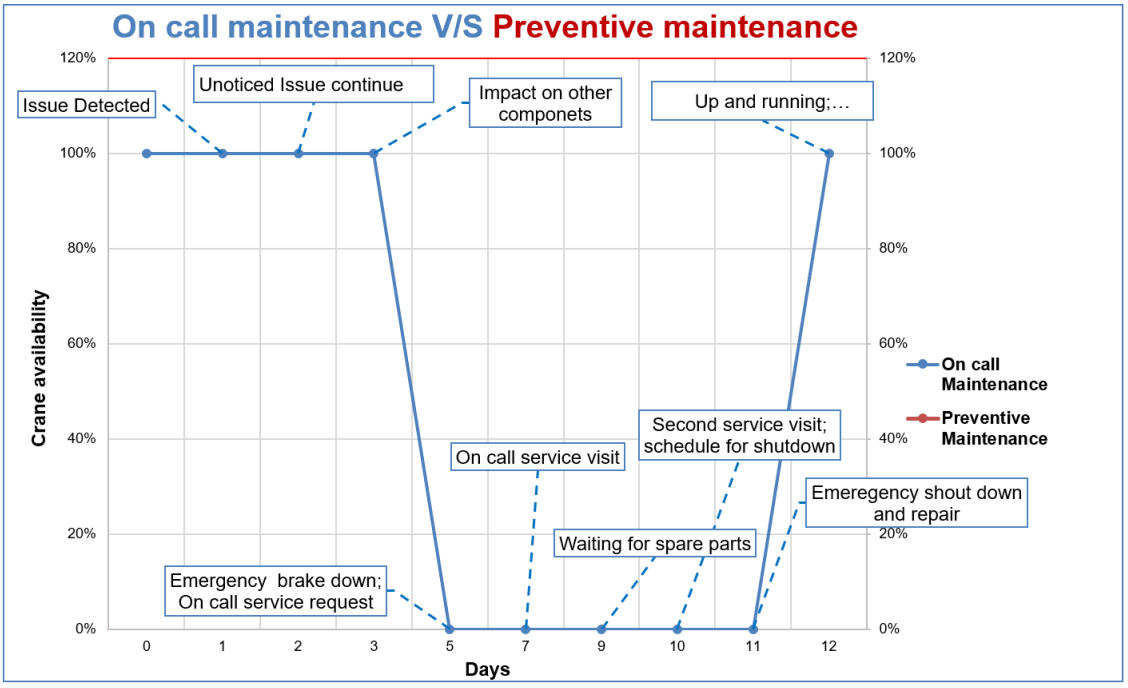

Figure 8: On call service maintenance trend

As presented in Figure 8, Crane availability is drawn along the vertical axis and days along the horizontal axis. In the example case, it was assumed that the issue was detected on day-1. The unnoticed issue continues during day 2. The unnoticed malfunction had a prolonged effect on other components to continue to create damages on day 3. After a certain time on day 5, equipment emergency brake down happens to result in a sudden decrease with crane availability as zero. After the emergency brake customer makes an on-call service request. Typically, it will take a day or two to service person to make the on-call service visit. During the on-call service visit, the service person makes the field inspection and orders the required spare parts for a repair. It takes a few days more to get the spare parts. Once the service spare part is received, the service person

makes the second visit at the site to agree on shutdown repair planning. After the emergency shutdown repair is done during day 11 and the equipment is assumed to be up and running on day 12.

In the second step, it was analyzed how the situation of an on-call service repair can be improved with yourKONECRANES preventive maintenance service. The typical sequence of occurrence during the yourKONECRANES service was noted similar to the on-call service repair service as shown with a red-line in Figure 9: yourKONECRANES preventive maintenance service trend.

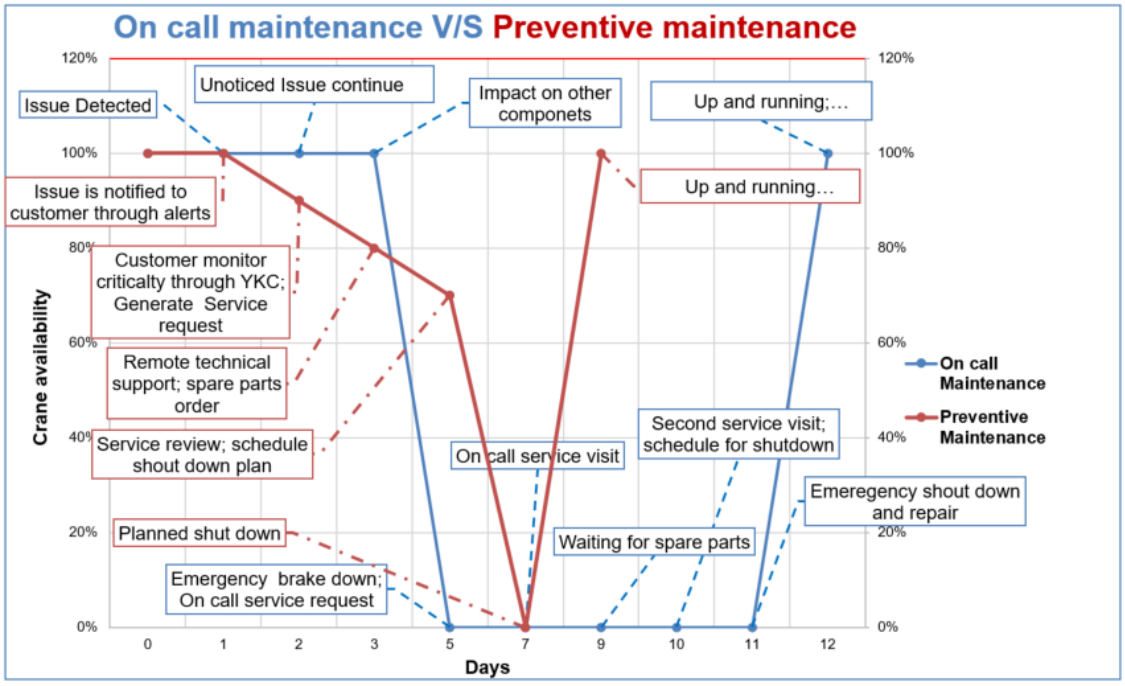

Figure 9: yourKONECRANES preventive maintenance trend

As shown in Figure 9, in the case of yourKONECRANES preventive maintenance service, when the issue is detected, it will then be notified to the customer by sending the alerts through e-mail or text message. The customer can further monitor the criticality of the issue following the recommendation through the yourKONECRANES portal. If needed, they can generate the service request to Konecranes service personnel. There is also a provision that the remote technical support person can access equipment data remotely. Also, the remote professional support person can analyze the issues and order the spare parts by analyzing the sequence of issue detected. And typically, when the service personnel visits the customer site, they have pre-information related to the problem detected, and they are rather in a good position to make a scheduled maintenance plan compared to an on-call maintenance plan. Thus, in the example case, it was assumed that planned shutdown for the repair is done at day 7 and the equipment up and running on day 8. As a result, in the example case customer can increase the availability

of the crane by three days in the case of yourKONECRANES preventive maintenance service compared to on-call maintenance service.

Though the example case was considered in the ideal conditions, the trend between the preventive maintenance service and on-call maintenance service in most of the cases will be as presented in Figure 9. Further, the comparison between the two approaches in terms of customer gain can be realized by increasing the crane availability by minimizing the cost of downtime.

In the third step, yourKONECRANES benefits in terms of customer financial gain were analyzed by evaluating crane downtime and repair cost between the on-call maintenance repair and yourKONECRANES preventive maintenance repair. The mathematical formulas were used on an Excel spreadsheet to analyze the downtime and repair cost as presented in Appendix 2. The analyzed result of the financial difference between the two approaches is as shown in Figure 10: Downtime cost analysis

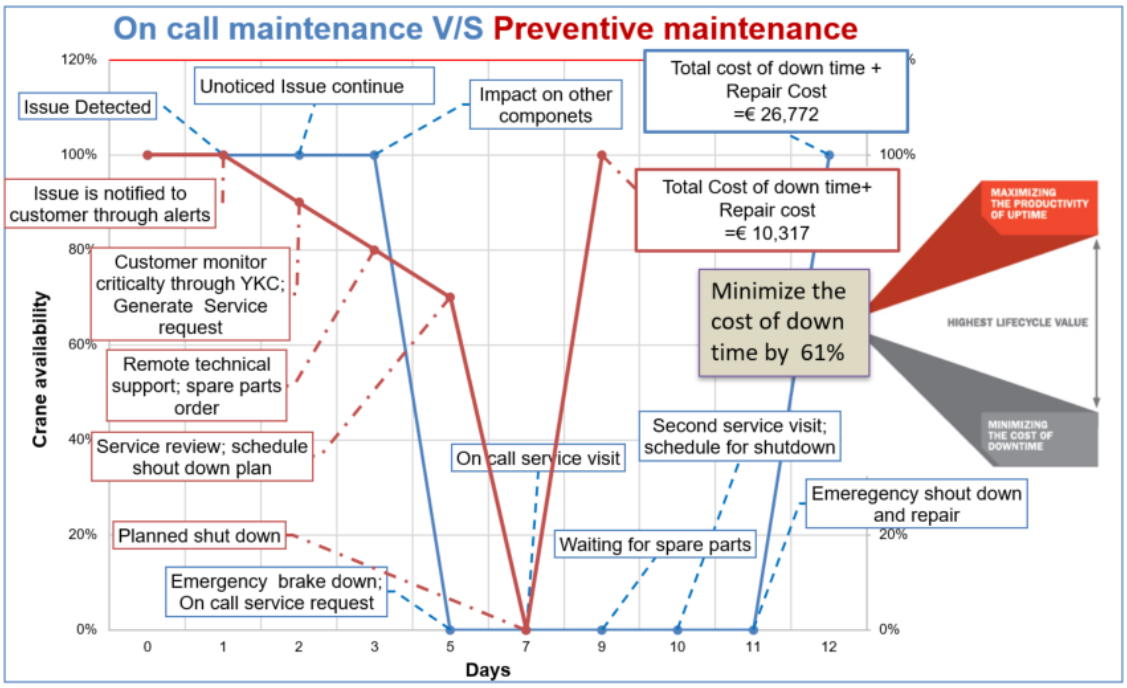

Figure 10: Downtime Cost Analysis

As presented in Figure 10, in the example case the total cost of downtime and repair cost for the on-call maintenance repair at the end of day 12 was € 26,772. And in the case of yourKONECRANES preventive maintenance service, the cost of downtime and repair cost at the end of day 9 was € 10,317. Thus, in the example case, the customer could be able to reduce the cost of downtime by about 61%, which will help a customer in perceiving the yourKONECRANES service benefits by quantifying the value benefits in terms of maximizing the productivity uptime and minimizing the cost of downtime.

Accordingly, the example case utilizes the savings from the avoiding the abnormal usage of the equipment, saving from minimizing the cost of downtime and saving from reducing the damage from unnoticed malfunction to quantify savings for the customer. Thus, the analysis of the results bridges the functional relationship between the resonating factors described in the value communication to the quantifiable savings that a customer can perceive.

5.6 Summary of Proposed CVP

This subsection summarizes the proposed CVP with its elements as analyzed in Section 5. The proposed CVP was delivered by utilizing the conceptual framework work as described in Section 3.5. The proposed CVP is as shown in Figure 11: Summary of Proposed CVP.

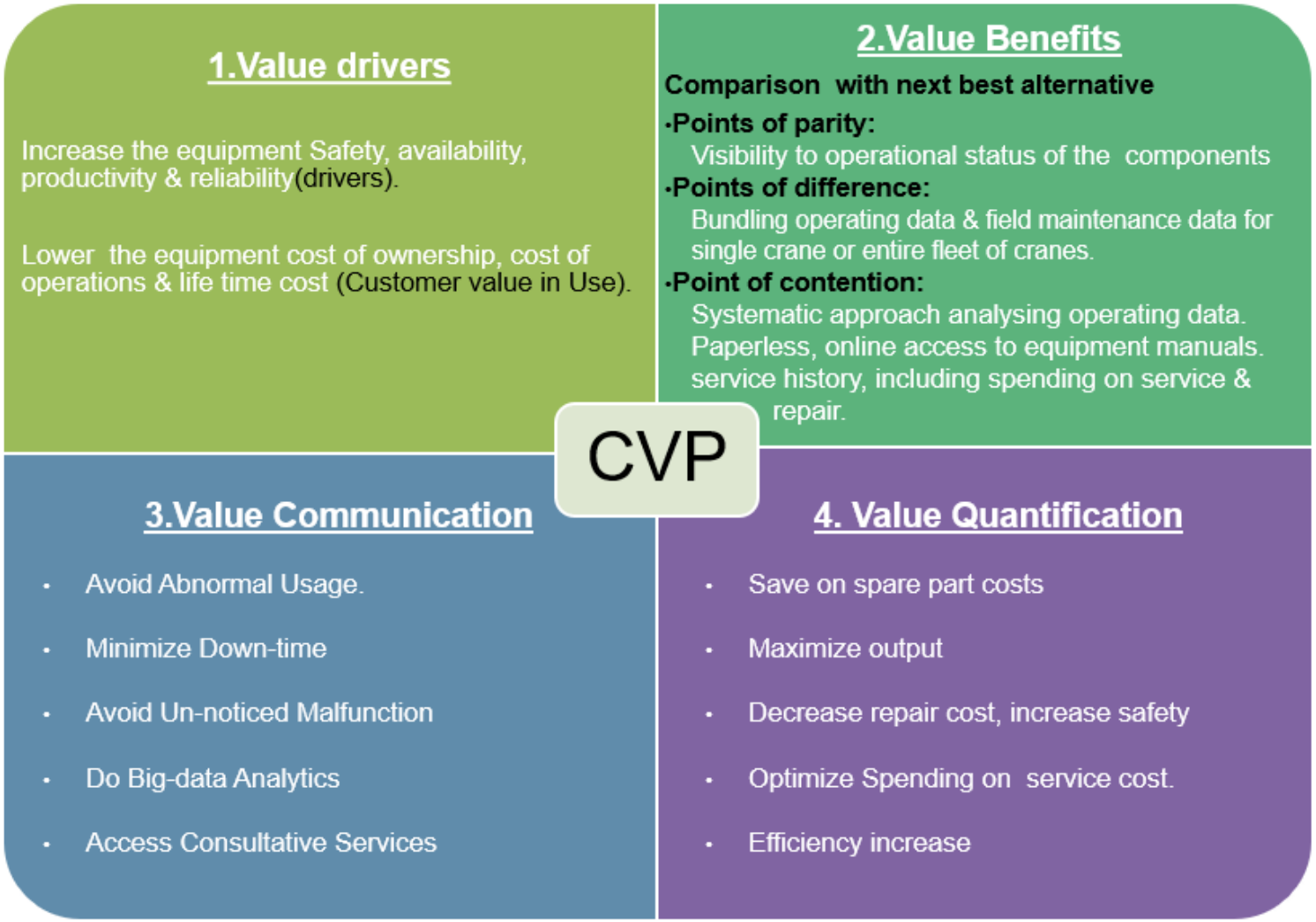

Figure 11: Summary of Proposed CVP

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The proposed CVP follows the four logical elements as shown in Figure 11. The first elements define the value drivers. The Value drivers are the ones, which the customer values the most in perceiving its benefits. The value drivers are identified from the feedback from the salespeople during Data 1 and the result of the discussion from the workshop during Data 2. Accordingly, the value drivers for the yourKONECRANES service are identified as equipment safety, availability, productivity, and reliability. In realizing these drivers, a customer set an expectation in terms of gain by utilizing the service on use. Similarly, from the analysis of Data 1 and Data 2, customer value-in use was defined as lowering the equipment cost of ownership, cost of operation and lifetime cost of the equipment.

The second elements define the yourKONECRANES service benefits in terms of differentiator by comparing its benefits to the next best alternative available for a customer in the market. Accordingly, based on the analysis of competitors CVPs the comparison was made on three dimensions as points of parity, points of difference and points of contention. The points of parity define the benefits which are offered by other competitors in the markets. As a result of the analysis, the point of parity was identified as the visibility to the operational status of some of the core components of the equipment. The second dimension points of difference define the core differentiator of yourKONECRANES service which none of the other competitors are able to offer. From the results of the analysis, points of difference for yourKONECRANES service are its ability to offer benefits by bundling the equipment operating data and field maintenance data for a single crane or entire fleets of cranes installed in the customer site. Thus, allowing the customer easy access to asset management of entire fleets of lifting equipment installed at the plant. The third dimension points of contentions define the points where there is a difference of opinion between the customer and supplier in terms of defining benefits as points of parity or points of difference. From the result of analysis points of contentions were defined as the systematic approach to analyzing the operating data and paperless, online access to equipment manuals, service history, including spending on the equipment spending and repair.

The third element defines the value communications. It presents clear and credible expressions which resonate among the customer in terms of experiencing the yourKONECRANES service benefits. From the result of the analysis, resonating factors are noted as avoiding abnormal usage of the equipment, minimizing the down of the equipment, avoiding the unnoticed malfunction in the equipment, doing big data analytics from the collected data and accessing the consultative service.

The fourth and final element of CVP defines the quantifiable savings from the yourKONECRANES service. It bridges the functional relationship between the resonating factor identified in the value communication to the value drivers. The functional relationship defined in terms of savings that a customer perceives by utilizing the yourKONECRANES service benefits. The savings are defined keeping in mind those that can be quantifiable. Accordingly, from the result of the analysis, five quantifiable savings were identified to the corresponding resonating factors specified in the value communication. Accordingly, the first saving in terms of the spare parts is achieved by avoiding abnormal usage of the equipment. The second saving is achieved by maximizing the output by minimizing the equipment downtime. The third savings are achieved by decreasing the repair cost and increase safety by avoiding unnoticed malfunctions in the equipment. The fourth savings are achieved in terms of savings from ongoing service and repair cost by analyzing the big data for equipment usage. The fifth savings are achieved by optimizing the operating efficiency of customer operations by accessing the consultative service.

Thus, the proposed customer value proposition (CVP) for yourKONECRANES service was defined by integrating all four elements, i.e., Value Drivers, Value Benefits, Value Communications, and Value Quantification. The proposed value proposition was further presented to the internal stakeholders in the case company for validation and feedback. The result of the discussion is described in the next section.

6 Validation of the CVP Proposal / Feedback on the Proposed CVP

This section reports the result of the validation and feedback collected on the proposed CVP from Konecrane's internal key stakeholders. The key stakeholders and decision-makers participated in the discussion are presented in Data 3 of Section 2.3. The section ends with the final proposal for a CVP.

6.1 Overview of the Validation Stage

The purpose of this stage was to validate the proposed CVP developed in Section 5. The validation was carried out in two steps. In the first step, the proposed CVP was evaluated by comparing the relevance of the outcome from the proposed CVP to the weaknesses identified in the current state analysis. Accordingly, the focus area from the current state analysis was on three areas. The first focus area was identifying the customer needs in the new equipment sales and accordingly align yourKONECRANES service benefits together with the customer needs. The second focus area was to clarify the yourKONECRANES benefits in terms of competitor offering in the new equipment sales. And the third focus area was communicating the benefits of yourKONECRANES service in such a way that a customer realizes the impact that the yourKONECRANES service can have on their business.

In the second step of validation, the proposed CVP was presented to the key stakeholders and decision-makers in the case company. During the discussion, the feedback was collected for the practical implementation of the proposed CVP. Based on the final feedback, the CVP for the yourKONECRANES service in the new equipment sales was developed.

6.2 Validating the Proposed CVP.

In the first step of validation, the proposed CVP was evaluated by comparing the proposed CVP to the weaknesses identified in the current state analysis as presented in section 4.8. Accordingly, Table 11 summarizes the comparison of weaknesses identified in the CSA to the relevance of the outcome from the proposed CVP in terms of customer needs and competitor CVPs.

	Weakness Identified during CSA	The Relevance of Outcome from Proposed CVP
In terms of customer needs	Content Avaible only for Evaluators	Proposed CVP address the issue by developing the functional relationship between the yourKONECRANES service benefits with customer value in use.
		Proposed CVP provides the facts in realizing the customer monetary benefits by utilizing the yourKONECRANES service.
		Proposed CVP elaborate clear and credible expression by identifying resonating factor for the customer to understand the power of the data collected in the YKC portal.
		Proposed CVP quantify the customer savings which can be utilized in a sales pitch to make the customer perceive the benefits from the service.
In terms of competitor CVPs		Proposed CVP clarify the focus of Yourkonecranes service benefit as a differentiator with competitor offers.
		The limitation is addressed separately under product development. Hence, not considered part of the proposed CVP

Table 11: Comparison of Weakness Identified in CSA to Outcome from Proposed CVP

As shown in Table 11, In terms of customer need four weaknesses were identified. The first component of weaknesses was that the customer in new equipment sales are interested in knowing how the offered service will benefit them in terms of lowering the cost of operation and increasing the availability. The proposed CVP addresses the issue by developing a functional relationship between the yourKONECRANES service benefits with customer value in use. The functional relation is defined in terms of increasing the equipment safety, availability, productivity, and reliability to lowering the equipment operating cost, cost of ownership and lifetime cost.

The second component of weaknesses was that the new equipment sales did not have facts in demonstrating the yourKONECRANES value in terms of customer monetary benefits. The proposed CVP provides the facts in realizing the customer financial benefits. The facts demonstrate the savings by reducing spare parts cost, avoiding expensive repair, savings by maximizing the productivity output and improving the overall efficiency of customer operation.

The third weakness had to do with making the customer realize the power of data available on the yourKONECRANES portal. The proposed CVP elaborates with credible experience of yourKONECRANES benefits that a customer can perceive by accessing the data from the yourKONECRANES portal. The credible experience is defined in terms of avoiding the abnormal usage, minimize the downtime, avoiding unnoticed malfunction, and KPI's drawn from the big data analytics of equipment usage.

The fourth weakness was that the customer benefits were not quantified in the sales pitch. The proposed CVP crystalizes the quantifiable savings from the service benefits. Also, a tool in defining the approach to quantify customer savings is presented. The tool can be utilized in a sales pitch to make the customer perceive the benefits of the service.

In terms of competitor CVPs, two weakness was identified. The first understanding the yourKONECRANES benefits when the scope is limited to operating data. The proposed CVP clarifies the focus of yourKONECARNES service benefit as a differentiator with competitor offers. The service benefits are compared under three dimensions in terms of the points parity, points of difference and points contention. When the yourKONECRANES scope is limited to operating data, the difference of yourKONECRANES benefits is noted in terms of fleet view. The second weakness was data integration to the customer system which was considered as a current limitation with the yourKONECRANES product and it will be addressed separately under product development. Hence, it is not considered part of the proposed CVP.

In the next step, the feedback was collected from the key stakeholders in the case company which is reported in the next subsection.

6.3 Feed Back Received from Key Stakeholders.

In the second step of validation, the proposed CVP was presented to key stakeholders in the case company. The case was presented initially going through the objective of the thesis and approach to research design. Subsequently, details form the current state analysis, inputs form the new equipment salespeople, and competitor CVPs were discussed. Later the ideas for developing the CVP and its elements were presented. Further, the logical steps in the proposed CVP and approach to quantify the customer value proposition was presented. Finally, at the end of session feedback related to proposed CVP and its practical implementation was discussed. Accordingly, as per the feedback from the marketing head:

> **"**Excellent approach in addressing the business challenge, the outcome from the CSA were similar from another business discussion within the company. There are very good practical elements in the CVP. The result from Value quantifying tools matching with Konecranes life cycle care result in "highest life cycle value" that is how it should be. As said by Mr….. we can implement the result of the value quantification in marketing material with one or two practical examples as reference" (VP, Marketing & Sales Excellence).

A similar comment was received from the Business Head:

> "Overall good work, Value quantification tool can be further discussed with the R&D team, they probably verify the result with some practical example. We need to develop more of those reference case from existing yourKONECRANES service customer" (SVP; Industrial cranes).

6.4 Summary of Final Proposal

As the feedback received from the key stakeholders were all positive, there were no changes needed to the initial proposed CVP. The constructive comments received from the stakeholders were related to evaluating the value quantification tool with the R&D team in the case company and further need for development with a practical customer case. However, executing value quantification tool was the next possible step in the project which will be discussed in section 7.2.

Thus, based on the feedback received from the key stakeholders in the case company, there were no changes made to the initial proposal for the CVP. The final for CVP will remain the same as described in section 5.6.

7 Conclusions

This section summarizes the objective, context, and result from the thesis study. It also provides recommendations for the next practical steps in implementing the proposed CVP. Finally, the section concludes with the thesis evaluation criteria and closing words.

7.1 Executive Summary

The case company Konecranes is a Finnish multinational company providing of lifting equipment solution for of wide range of industrial customer including, manufacturing and process industries, shipyard, ports, and terminals. The case company is continuously utilizing the technologies to improve the efficiency and performance of its lifting equipment solutions. Accordingly, by using the industrial internet technology in the lifting equipment provided by Konecranes has provision to connect remotely and collect the operating data of the lifting equipment. The collected data is shared with the customer through the yourKONECRANES online portal. The yourKONECRANES portal also collects data from the field and maintenance service of the equipment offered by the case company. The customer can access the combined data which are analyzed and computed to show the Key performance indicators (KPI's), facts and recommendations for the equipment used. The KPI's and the fact-based recommendations are considerable in improving the safety and productivity of the customer operation.

In the current situation, yourKONECRANES and its benefits are fully utilized in the Konecranes service business unit. However, the yourKONECRANES and service benefits have not been fully explored and utilized in the new equipment sales of Industrial equipment business unit. Thus, the objective of the thesis was to develop a customer value proposition (CVP) to support the new equipment sales unit.

The thesis study was carried out by following applied action-based research method utilizing the qualitative data. The research method followed four logical steps. The first step was to understand the best practice and available knowledge in the literature to understand the elements of CVP. The second step was to analyze the current state analysis to capture strengths and weaknesses in the current CVP regarding customer need and competitor CVPs. The third step was to develop the initial proposal based on the strengths and weaknesses identified in the current state analysis. And the fourth step was to validate the proposed CVP with key stakeholders and decision-makers in the case company and to develop the final proposal for CVP based on the feedback and improvement suggestions.

The current state analysis was conducted initially by analyzing the yourKONECRANES service logic and its current CVP. It was followed by a discussion in a theme interview with new equipment salespeople in analyzing the internal experience of utilizing the current CVP in the new equipment sales pitch. In the process, the competitor CVPs were also analyzed. In the current state analysis qualitative data collected by interviewing the yourKONECRANES product manager and about 15 participants from the new equipment sales unit. The outcome of the current state analysis was crystallized in identifying the strengths and weaknesses of the current state analysis in terms of new equipment customer needs and competitor CVPs.

In the next step based on the strengths and weaknesses identified in the current state analysis, the initial proposal for the CVP was developed. The initial proposal for the CVP was developed in a workshop by co-creating it with concerned product owners in the case company. The yourKONECRANES product owner and TRUCONNECT product owners from service business unit participated in the workshop. The feedback from the product owners during the workshop and input from the new equipment sales received during the current state analysis were used in developing the initial proposal for the CVP.

The Initial proposal for CVP embraced four key elements. The first element defines the value drivers. The drivers are the components, which a customer values the most in obtaining the service. In obtaining the service, a customer sets an expectation in the form of gain from utilizing the service in use in a customer process defined as the value-in-use. From the analysis of the discussion and feedback from the new equipment salespeople, a customer value driver for yourKONECRANES service in new equipment sales is identified as increasing the safety, availability, productivity, and reliability of the equipment. Accordingly, the customer value in use in utilizing the yourKONECRANES service is defined as minimizing the cost of operation, cost of ownership and reducing the lifetime cost of the equipment.

The second key element of the CVP was defining the yourKONECRANES value benefits in terms of other alternatives available for a customer in the market. From the analysis of competitor CVPs, the Value benefits are defined under the three dimensions as Points of parity, Point of difference and Points of contention. The benefits under the point of parity are the ones which are offered by the other competitor in the market. The benefits under the points of difference are the core differentiators which are not provided by any other competitor in the market. And the benefits under the points of contention are the benefits, where there is a difference of opinion between the service provider and customer in categorizing the benefits under the points of parity or points of difference. Accordingly, yourKONECRANES service benefits under points of parity include visibility

to the operating data of the equipment. The yourKONECRANES service benefits under the points of difference were defined as the visibility to the facts by bundling the equipment operating data and field service data for entire fleets of cranes installed in the customer plant. The service benefits under the points of contention are proposed as the systematic approach in analyzing the operating data of the equipment and the paperless online access to equipment related documents such as service manuals, spare parts manuals, service history including spending on the service and repair of the equipment.

The third key element of the CVP is defining the value communication. The value communication describes the clear, credible expressions which resonate with a customer in perceiving the service. The credible expressions for the yourKONECRANES service are defined based on the analysis of the discussion with product owners during the workshop and based on the analysis of yourKONECRANES service logic. Accordingly, credible expressions for the yourKONECRANES service benefits under the third element of CVP are defined as avoiding abnormal usage of the equipment, minimizing downtime, avoiding unnoticed malfunctions, doing big data analytics and accessing consultative service. However, for the successful value proposition defining the service benefits in terms of words are not enough. Thus, the fourth element of the CVP was defined as the value quantification. The value quantification quantifies the savings in determining the functional relationship between the credible expressions in the value communication to the customer value drivers. Accordingly, credible expression defined in the value communication relates to the quantifiable savings in the fourth element of the CVP. Thus, value quantification was defined as avoiding the abnormal usage result in the spare part costs, minimizing downtime result in maximizing output, avoiding unnoticed malfunction resulting in a decrease in repair cost and increase safety. Doing big data analytics can optimize the spending on service and repair cost and access to the consultative service results in increasing the efficiency of customer operations. Thus, embedding together the four elements, the value drivers, value benefits, value communication, and value quantification defines the initial proposal for a CVP for yourKONECRANES service to support new equipment sales.

In addition to the CVP proposal, a quantification tool was introduced in the form of an Excel spreadsheet. The spreadsheet provides an approach to demonstrate yourKONECRANES service benefits in terms of customer savings. The spreadsheet contains the result with an example case in which a customer saving can be realized by minimizing the cost of downtime to maximizing the output.

The initial proposal for the CVP framework was presented to key stakeholders in the company for feedback and improvement suggestions. The key stakeholders in the case

company had well accepted the initial proposal, and hence no changes were made to the initial CVP proposal. The final CVP remained the same as the initial proposal. However, during the same discussion, constructive comments were given on the quantification tool which is discussed in Section 7.2.

Implementing the CVP for yourKONECRANES service benefits will provide an additional tool for new equipment sales unit in differentiating its equipment offering in the market space. It can potentially influence the customer decision in landing the sales contract to the case company against its competitor. The proposed CVP will be one step forward in achieving that goal. As a next step, in reaching that goal, the following subsection elaborates the next practical measures and recommendations in implementing the proposed CVP.

7.2 Recommendations for Managerial Implementation.

The main objective of the study was to develop a CVP for yourKONECRANES service to support new equipment sales in the case company. The study outcome meets the objective of the study by developing a CVP. Furthermore, an approach to value quantification tool was introduced with an example case to enrich the CVP structure in terms of value quantification. In the next steps, the tool and its results can be evaluated with an actual customer case. The result from an actual existing customer case will further add concrete evidence in making a new customer realize yourKONECRANES benefits.

Also, the following are the two recommendations from the study for further managerial implication. These recommendations are based on the observation during the discussion with new equipment sales unit. The case company may further explore the following points in support of utilizing the full benefits of yourKONECRANES service in new equipment sales.

The first recommendation was to clarify the ownership and responsibility of yourKONECRANES product features when the new equipment sales unit makes the yourKONECRANES service contract with the new equipment customer. It seems that there is an internal barrier within the two business units which hinder in utilizing the full benefits of yourKONECRANES in the new equipment sales. The internal barrier needs to be clarified to support the full utilization of yourKONECRANES service benefits in the new equipment sales.

The second recommendation was to simplify the sales process in selling the yourKONECRANES feature with different product platform available in the industrial equipment business unit. A wish from the new equipment sales unit is to make sales configurator

capable of defining the yourKONECRANES product features and its availability according to different product platform selected in the sales configurator. Thus, the configurator helps in determining the scope and pricing of the yourKONECRANES features to a new equipment customer.

The next subsections describe the evaluation criteria for thesis research and analysis approach in terms of its credibility, reliability, and relevance in meeting the initial objective.

7.3 Thesis Evaluation

The objective of the thesis was set at the initial phase of the study by rigorous discussion and understanding the business challenge from the key stakeholders in the case company. Accordingly, the business challenge was to explore the full utilization of yourKONECRANES service benefits in the new equipment sales as a differentiator in the market. The yourKONECRANES as a product has been developed and evolved over the year in the case company, and its benefits were fully utilized in the service business unit of the case company. However, there were challenges in utilizing the benefits of yourKONECRANES value-added benefits in the new equipment sales. In this respect, the first step was to address the challenge by looking at the yourKONECRANES benefits with a customer need in new equipment sales. Thus, the objective of the thesis was set to be as developing a customer value proposition (CVP) looking at the perspective of new equipment customer needs. A CVP will help in aligning the yourKONECRANES benefits with customer needs in the new equipment sales. Also, the CVP support to clarify new equipment sales unit in communicating the yourKONECRANES benefits in way customer perceive its benefits. For the case company, once a CVP is laid down then in the next step, it will be necessary to address the challenge by looking at the operative level in delivering the promises of yourKONECRANES benefits to its customer. However, the focus of this study was set to be limited to developing a CVP for yourKONECRANES to support new equipment sales. The outcome of the study meets the objective of the thesis by developing a CVP for yourKONECRANES. It could have been excellent if the developed CVP was evaluated with actual customer case. Unfortunately, evaluating the developed with customer case was not carried out in the study. However, to ensure the quality of the thesis research work was evaluated within an academically approved manner.

The result of the academic research is typically evaluated through four main criteria validity, reliability, relevance and logic. In the next subsection describe briefly about the

main principles of these four criteria. At the same time, trustworthiness and credibility of the analysis and outcome of this study are evaluated through these four criteria.

7.3.1 The validity of the Study

The validity of the research analysis evaluates the extent to which the result of the study reflects the original objective of the study. It also refers to the approach to the analysis of the results of data and observations that reflect the intent of an investigation. The importance of validity in research is to make the reader clear that the rigorous researcher approach towards the research and the data collection is transparent (Quinton & Smallbone 2006: 126). In this study, the validity of the research work was ensured by linking the best practice from the literature to the business process. At first, the peer review from the literature was conducted to address the business challenge and objective. Second, the result of the literature review was further utilized to map the current state analysis (CSA) of the business challenge. Third, the interviews, observations, and the internal documentation review during the CSA was used as evidence to develop the proposal of the intended objective of the study. The data collected in each of these phases was utilized for the triangulation to ensure the results the meet the expected outcome of the study.

7.3.2 The Reliability of the Study

The reliability of the research can be evaluated by determining whether the same results could be achieved if the investigation was conducted by a different (Shipman.1997). In this study to ensure the reliability of different data resources used; for example, informants utilized for the data collection are the key stakeholders has different roles in the business process. The collected data is grouped, categorized and crystallized by a discussion with relevant stakeholders in the company. And finally, the desired output of the study is co-created with the best knowledge available in case company to ensure the reliability of the result.

7.3.3 The relevance of the Study

The relevance of the research refers to research objective is formulated for the purpose, in business research i.e.is to address the business challenge (Quinton and Smallbone 2006). In this study, the research objective and expected outcome are formulated after peer review with key stakeholders and decision makers in the organization, which signifies the relevance of the study.

7.3.4 The logic of the Study

Finally, the logic refers to the approach to and coherent steps taken to address the business challenge. In this study, the research design (section 2.2) describe the logical steps and the interconnection between them to arrive the desired outcome of the study. The conceptual framework form literature review connected in reviewing the current state analysis. Identified weakness in the current state analysis was connected in developing the initial proposal. The initial proposal was peer-reviewed with key stakeholder in case company to conclude the final proposal.

7.4 Closing Words

The increased competitive situation in the industrial environment had put pressure for an equipment supplier to differentiate themselves with the other alternative options available for a customer. In this context, the case company wants to differentiate its lifting equipment offering against its competitors. In this effort, the case company developed various value-added service by continuously utilizing advanced technology to bring benefits to its customer. In this journey, yourKONECRANES service was invented to provide the benefits to its service business unit customer. However, yourKONECRANES and its service benefits could be utilized in other business units within the case company. In this regard, communicating the yourKONECRANES service benefits in new equipment sales unit had to be reinvented in the perspective of fulfilling the needs of new equipment customer. The outcome of this study enables the case company in realizing the customer value proposition for yourKONECRANES service in new equipment sales. The proposed CVP for yourKONECRANES service benefits will provide an additional tool for new equipment sales unit in differentiating its equipment offering in the market space. It can influence on the new equipment customer decisions in granting the sales contract to the case company against its competitor. The proposed CVP will be one step forward in achieving that goal.

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Appendix 1: Research Interview Template for Sales People (DATA-1 & 2)

Topic: Current state analysis.

Information about the informant (Interview 1)

Table 1

Details	
Name (code) of the informant	*Informant 1A*
Position in the case company	
Date of the interview	
Duration of the interview	
Document	Field notes

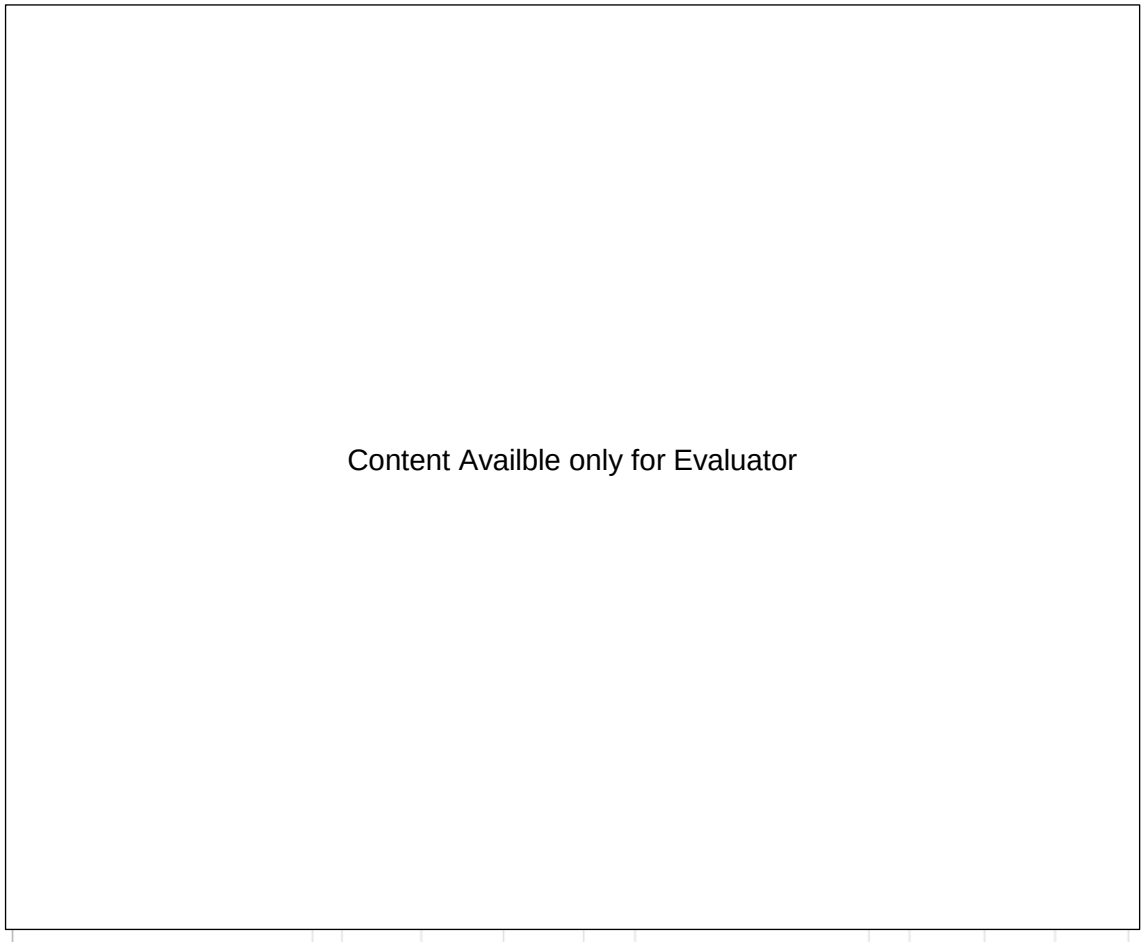
Field notes (Interview 1)

About You Konecranes service (YKC).
1. Awareness of Your Konecranes Service & its Benefits
2. How do you see the customer benefits (customer value in use) with YKC service?
3. Does YKC service add superior value in differentiating our product among other competitors in the market?
4. Does any of our competitor can offer similar or same service as YKC to our customer?

5. Can our customer able to identify the benefits of the YKC service?
6. Can we able to demonstrate customer economic benefit with the use of YKC service?
7. How easy or difficult to demonstrate the YKC value to the customer?
8. Does our sales team have enough tools to demonstrate the YKC service during the sales phase? What are the tools currently utilized to demonstrate the value?
9. How do you see the current sales process in offering YKC service in new equipment sales?
10. What is customer expectation with YKC; remote monitoring service? Any concern related to YKC service?
11. What is that your customer value the most (value drivers) when it comes to the crane in general?
12. Any other comments which are not listed above. Wishes related to improvement?

Appendix 2: Screenshot of the spreadsheet for downtime cost analysis.

Topic: Value Quantification.

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