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# Improving the Service Development and Delivery Processes

For Better Internal Customer Involvement

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A year ago, I was studying hard to do my best in the entrance exam to get a place in the Master's Degree of Industrial Management program. Now a year after, I have done easily ten times as much more work to graduate. Still, this has been by far one of the most educational and memorable years in my whole life, and I wouldn't change it at any price. Most of all, I have been lucky and honored to get to know so many new brilliant people during this year.

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<p>This Thesis focused on improving the service development and service delivery processes of one unit in the case company to take internal customers better into account in these processes. The case business unit serves other business units within the case company as internal customers by offering datacenter, platform and hosting services to the other business units.</p> <p>The Thesis approached the issues identified through the current state analysis using the action research due to the collaborative nature of the research and the need for a change. Research data was collected through interviews, workshops and via validation feedback.</p> <p>The current state analysis revealed a lack of cross-organizational collaboration and insufficient co-creation structures and these were identified as key weaknesses to be tackled. By the guidance from relevant literature and the help of stakeholder suggestions, several specific improvements were proposed to increase co-creation and cross-organizational collaboration within the case company. Furthermore, the improvements help co-create comprehensive solutions to customer needs.</p> <p>The outcome of this thesis is a proposal to improve the current service delivery and development processes. In addition, the study provides a realistic and readily implementable action plan for implementing the proposal. Once the proposed improvements are implemented, they will provide the case business unit with a structured way to improve its customer centricity.</p>	
Keywords	Co-creation, Cross-organizational collaboration, process reengineering

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## Introduction

The telecommunication industry is changing rapidly and service providers are under constant disruption from many angles. Due to this constant change, traditional telecommunications services are fading away one by one forcing IT service providers to search for totally new “not so telco like” business areas, and moving forward to a more IT conglomerate direction. This environment has also made it clear that service providers cannot compete without superior customer service and customer experience anymore. Ernst & Young’s global telecommunications research (2015) revealed that 82% of all service providers believe that customer experience management is their most important priority over the next three years.

The case company have also raised customer perceived quality as its most important strategic aspect in its current production strategy. The case company of this Thesis has invested a lot in its external end customer experiences and how the case company is seen from the external point of view, also focusing its efforts on improving internal communication, collaboration and co-creation, which have been slightly overlooked previously. For this reason, this study focuses on the case company’s internal collaboration and service delivery processes, exploring and identifying improvement areas in the current processes and service delivery.

### 1.1 Business Context

The case company of this Thesis, Elisa, is a telecommunications, ICT and online service company serving 2.3 million consumers, corporate and public administration organization customers. Elisa provides its customers services for communication and entertainment, and tools for organizations to digitalize their operations and improve productivity. In Finland, Elisa is the market leader in its field and is listed on Nasdaq Helsinki with approximately 200,000 shareholders. In 2016, Elisa’s revenue was 1.64 billion euros, and the company employed 4,300 people.

The case company as a whole consists of multiple separate business units. However, this study is exploring only one corner stone business unit which offers datacenter, platform and hosting services to the other business units. Thus, the study focuses on improving the service delivery process, as well as collaboration and co-creation from this point of view.

Presently, each business unit has their own product portfolio, catalog and service offering. Some of these products and services are commercial products as such but some of them are part of multi business unit end-to-end services. By this time, the case company has also acquired smaller startup companies, where some of them have merged with the existing business units, and some of them have become their own business units and even their own brands. All this has led to slight dispersion in the organizational structure and has created challenges in internal service delivery and process development.

## 1.2 Business Challenge, Objective and Outcome

Until very recently, the case company service design and value creation models have been very much company and market centric. This fact has been recognized by the company itself, which has resulted in a new strategy that strongly focuses on the customer needs and customer experience. Previously, the case company has certainly taken its customers into account in its service design, but not in that sense how Service dominant logic (Grönroos, Vargo and Lusch, etc.) sees value creation.

So far, there has been a clear lack of structured collaborative service development and interaction with corporate internal and also with external end customers. Service development has been done internally from the case company viewpoint, and in many cases, has been steered by technical roadmaps, where the main focus has been placed on what can be done in technical terms, rather than what internal or external end customers actually need. In particular, internal customers or different business units are not currently taken into account enough in the existing service development process.

The case company has lately made some changes to its organizational model to better fulfill the internal customer requirements. However, while the fundamental customer centric change has been going on, the case company's internal processes have not yet been modified to meet the new organization needs.

The objective of this study is to make improvements to the current service delivery and development processes. To reach this objective, the study first needs to conduct a thorough current state analysis and identify what improvements are needed and how to fit them into the current organizational model, in order to take the case company's internal customers into account in these processes.

The outcome is a proposal to improve the current service delivery and development processes, based on the holistic view of the case company's current state of service delivery



processes and customer centrality. In addition, the study proposes a realistic and implementable action plan for implementing the proposal, aimed at enhancing the case company's service delivery processes and customer satisfaction in the end.

### 1.3 Thesis Outline

This study is written in six sections. Section 1 is the Introduction. Section 2 covers research methodology, data collection and analysis methods, and builds a research design for the study. Section 3 reports on the results of the current state analysis, conducted from the perspective of the case company's current customer centrality situation in service delivery and development processes. Then, Section 4 explores the relevant best practice and existing knowledge on the service delivery process improvement. After that, Section 5 compares the current state findings to the improvement suggestions from existing knowledge, guided by customer centrality understanding and best practices in internal process improvement. After that, in Section 6, findings are validated with the key stakeholders in the case company and the outcome expanded to the action plan and recommendations for the proposal implementation. Section 7 completes the Thesis with conclusions, managerial implications and Thesis evaluation.

## 2 Method and Material

This section describes the research methods used in this Thesis and overviews the study design and its main steps. First, the selected research approach is discussed. Then, the section continues to research design and data collection.

### 2.1 Research Approach

Action research has been selected to this thesis, as action research has been described to be for researchers who want to improve their organization (Coghlan et al. 2014). In this research approach, the researcher is taking an interactive role and participates in the process among the other stakeholders and also contributes content to the research.

Action research was originally founded around 1950's by Kurt Lewin. This research approach has been known ever since, also by different names and variations by different researchers. But all of these have just been breaded variations of the very same original concept. Action research can be defined as an approach where the researcher and the stakeholders collaborate in the diagnosis of the problem (Bryman & Bell 2011).

The overall idea of action research can be summarized by simply saying that action research is learning by doing. (Kemmis & McTaggart 2005) The focus is on involving stakeholders and making them act as researchers too. This client involvement mainly separates the action research approach from many other research methods.

In action research, both quantitative and qualitative data can be used. But due to the characteristics of collaborative and interactive action research methodology, qualitative data approach is more natural, and therefore action research is in close relationship with qualitative research.

Another characteristic of action research is the iterative cyclical process model, which consists of four different phases; planning, taking action, observing and reflecting the results as shown in Figure 1.

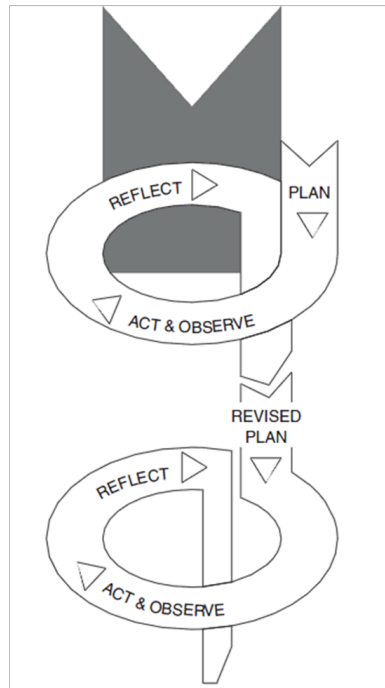


Figure 1. Action Research spiral.

Due to the objective of this study, the intention is to interactively research the current state of the case company's process development, customer experience and customer involvement practices, and eventually find improvements to these existing practices. The researcher needs to be in intensive co-operation with the stakeholders, and collaboratively collect input and the data for further processing, This type of open data and collaboration, requires qualitative data and research methods. Furthermore, the intention to actively participate in research, especially in the implementation phase has influenced the selection of the action research approach to conduct this research. The characteristics of action research makes it the best match with the research objective and design.

## 2.2 Research Design

As seen in Figure 2, the research design consists of four different steps, which follow by each other logically throughout the entire research process. While this research concentrates on only one retention or cycle of these steps, usually more iterative retentions are needed in order to achieve continuous improvement.

The first step of the study consists of setting the objective. The objective relates to the identified business challenge in the case company, which in this thesis focuses on improving the internal service development process. When the objective is identified, the next step is to conduct the current state analysis of the current service development

process. The results identify its current strengths and weaknesses and explore how different key stakeholders are experiencing the current process. Data 1 for the current state analysis is collected qualitatively by interviewing multiple parties involved in the current service development process, such as management and internal customers. Data 1 is also collected from the existing company internal documentation and databases, also by observing the current practices in the service development process. This step results in identifying the strengths and weaknesses of the current service development processes to build a baseline for the next steps in the study.

The next step is to review existing literature related to the thesis objective and findings from the current state of service development process. This step focuses on exploring literature from service design and service development frameworks, process development, customer experience and collaboration, for identifying the most commonly known frameworks and best practice for collaborative and co-creative service development process. The relevant best practice and suggestions from literature are merged into the conceptual framework for the next phase of the study, building the proposal.

Next, the study continues to proposal building phase. Initial proposal for the improved service development process is created in collaboration with the key stakeholders, who are working with the service development process, and with internal customers who should take more part of the service development process in future. For building the proposal, the researcher and the stakeholders reflect on the findings from the current state analysis and draw ideas identified from existing literature, as well as retain the strengths of the current process and complement the current process with the improvement areas, to eventually create the proposal for the improved service development and delivery processes.

Figure 2 below shows the research design for this study.

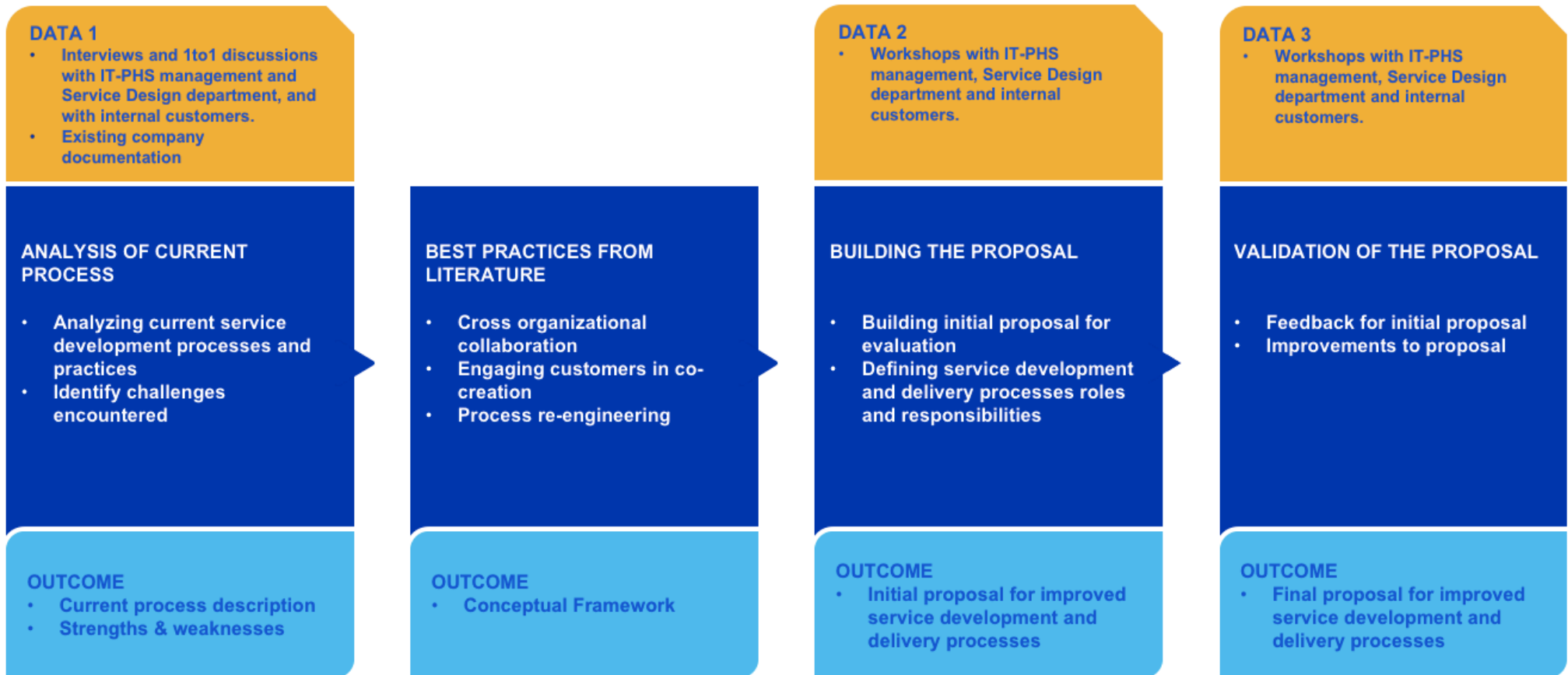


Figure 2. Research design of this study.

As seen in Figure 2, the final step is to validate the proposal by seeking key stakeholder feedback for the proposed improvement collected in workshops and interviews with the key stakeholders. The outcome of this is the final proposal of the improved service development process for the case company's internal customers, which takes better account of the internal customers actual needs and wishes.

### 2.3 Data Collection and Analysis

In order to create a comprehensive picture from the business units current customer centricity according to process development and delivery processes. One to one interviews and general workshops were conducted during the current state analysis. Interviews included people from the case business units own personnel, but even more important, customer satisfaction surveys were conducted to the case company's internal customers. Interviews included seven internal interviews with business unit top management, service managers and specialists, to get an view how business unit sees its own position and actions in the case company's inter business unit collaborative sphere. Internal customer interviews included ten interviews from three different other business unit. The interviews are found in Appendix 1.

The data in this Thesis project was collected using qualitative research methods conducted in three data collection rounds. Data 1 was collected for better understanding of the current state of the process, and also to obtain concrete insight and substantial evidence for conducting later phases of the thesis. Second, in Data 2 round, workshops were conducted to build the initial proposal. And third, in Data 3 round, data input covered executive validation and further developments to the improved service development process. Appendix 1 provides details of Data 1-3 collections.

An overview of Data 1-3 is illustrated in Table 1.

Table 1. Overview of Data1-3 collection (data plan).

	CONTENT	DATA SOURCE	INFORMANT	DATE	OUTCOME
<b>DATA1</b>  <b>CURRENT STATE ANALYSIS</b>	Current process description and analysis  +/-'s	1. Internal documentation from internal databases (Apaja and Atlas)  2. Stakeholder interviews (with Service Delivery Managers, Development Managers)  4. Workshop with stakeholders  3. Customer interviews (internal customers)	<ul style="list-style-type: none"> <li>• The Business unit board (includes 8 participants)</li> <li>• Head of Service Design (1)</li> <li>• Service Delivery Managers, Development Managers (6)</li> <li>• Internal customers /business units (6)</li> </ul>	January 2018	<p>Map of the current service development process</p> <p>Summary of strengths and weaknesses</p> <p>Selection of the focus area(s) for improvement</p>
<b>DATA2</b>  <b>BUILDING PROPOSAL</b>	Workshops with the case business unit management, Service Design department and internal customers  1to1 discussions	1. Stakeholder interviews (with Service Delivery Managers, Development Managers)  2. Workshop with stakeholders  3. Customer interviews (internal customers)	<ul style="list-style-type: none"> <li>• The Business unit board (includes 8 participants)</li> <li>• Head of Service Design (1)</li> <li>• Service Delivery Managers, Development Managers (6)</li> <li>• Internal customers /business units (6)</li> </ul>	March 2018	Initial proposal
<b>DATA3</b>  <b>PILOT / FEEDBACK</b>	Improvement ideas for initial proposal		<ul style="list-style-type: none"> <li>• The Business unit board</li> <li>• Data 2 participants</li> </ul>	March / April 2018	Final Proposal

As seen in Table 1, Data for this study was collected in three data collection rounds. Initially, Data 1 gathers information of the case company's current service development processes and practices from the process-related key stakeholders and customers. The first data collection was conducted by interviewing the key stakeholders individually and then arranging workshops, where stakeholders can share their views and understanding of strengths and weaknesses of the existing process. Interviews were conducted as one-to-one meetings, using an open-end interview design. According to Turner (2010), a standardized open-ended interview design includes structured question wording where one of the principals is to ask all interviewees the same questions. This open-endedness and predesigned question wording allows the interviewees to fully express their viewpoint and, on the other hand, it gives the interviewer also the possibility to ask probing questions to obtain even more insight and elicit rich answers. In this study, all interviews were held in the case company's headquarters and were recorded and field notes were taken. The questions for interviews can be found in Appendices 1 and 2.

Interviewing just the case business unit's own people would only describe the problem from one angle and would not produce the whole picture. Therefore, an external consultant company was ordered to conduct a customer survey. The survey focus was to investigate how other business units are experiencing and seeing the case business unit actions, and how the case business unit is producing its services in corporate inter business unit context. External consultancy company was used to ensure the total independence and integrity of the survey. Idea was to avoid researchers possible own assumptions, opinions and relationships to interviewees to influence the customer survey content, and furthermore misleading of interviews to some presumed direction.

Additionally, Data 1 for the current state analysis also included the case company's existing documentation such as process descriptions and the documents related to customer experience. Table 2 shows the list of the internal documents used in this study.



Table 2. Internal documents used in the current state analysis, Data 1.

	<b>Name of the document</b>	<b>Pages/other content</b>	<b>Description</b>
A	Case company's 'Process walk instructions and workbook'	32 pages	Documentation from process descriptions to process development
B	Process modeling options	29 diagrams	The case company way for process modeling
C	Process model training	24 diagrams	The case company way for process modeling
D	Process model	5 diagrams	The case company way for process modeling
E	Collaboration for improvement core process	12 diagrams	Corporate customers, collaboration for Improvement
F	Collaboration for Improvement-core process	10 pages	Corporate customers, collaboration for Improvement
G	Solution Sales and contracting process	10 pages	Corporate customers solution sales and contracting detailed process description
H	Sales Core process presentation and training	18 diagrams	Sales core process presentation and training material
I	Sales Process flow charts	2 diagrams	Sales Process Flow charts
J	Service and Offering Development Process	12 diagrams	Detailed description of service and offering development process
K	Service and Offering Development - core process	12 pages	Description of service lifecycle management of individual service from idea to service shutdown and service portfolio management of all services within the process.
L	Service and offering process flow	9 diagrams	Detailed diagrams of the case company's service and offering process flow
M	Service Assurance process map	3 diagrams	Service Assurance – Process map
N	Standard delivery core process ver 2.9	10 pages	Standard delivery core process detailed description
O	Customer Service - Core process ver2	15 pages	The customer service core process is detailed description
P	Customer understanding and attraction of interest - core process	8 pages	Detailed description of customer understanding and attraction of interest.

As shown in Table 2, these documents were analyzed for better understanding the existing development processes as well as stakeholders' roles and responsibilities.

In the second phase, Data 2 was collected to gather suggestions from the stakeholders for building the initial proposal for the improved service development process. Data was collected during one-to-one meetings and interviews with the case company key stakeholders related to the process. The informants included internal customer representatives, head of service design department and development managers, and also business unit management. A general workshop was also conducted to share ideas and thoughts for better internal customer involvement in the current service development process. All interviews were conducted, as in the first phase, using the standardized open-ended interview design. All data were analyzed using Thematic content analysis. The questions for interviews can be found in Appendix 2 and 3.

In the third phase, Data 3 was collected as feedback for the initial proposal for improved service development process. Feedback was gathered in one general workshop, with internal customers and key stakeholders from the business unit top management. After feedback, final adjustments were made and the final proposal was constructed for implementation.

The next section describes the Current State Analysis of the service development and delivery processes in the case company as well as discusses the analysis findings.

### **3 Current State Analysis of the Service Development and Delivery Processes**

This section discusses the results of the current state analysis of the service development and service delivery processes in the case company, discussed especially from the perspective of their customer centricity. The section starts with an overview of the case organization's organizational model, as it needs to be understood in order to comprehend the meaning of this study. After introducing the organizational model the study continues by describing the existing processes. Furthermore, it continues by identifying strengths and weaknesses of these processes and current practices and summarizes the key findings for building a solution later on in the study.

#### **3.1 Overview of the Current State Analysis Phase**

The current state analysis was conducted and the data was collected in three different phases. First, the case company's existing literature of processes and process development was reviewed. Then, internal individual interviews with customers were held and the last part was a generic workshop within the service design department, where the existing processes were analyzed and discussed using a white board.

The data collection for the current state procedure started with the case company's existing documentation on service development and service delivery process. Although this study concerns only one business unit and its processes, the process development documentation related to the case company in general and other business units was also analyzed, according to availability.

In addition to the internal documentation, one-to-one interviews were conducted with the production unit's personnel and management. The focus was to gather the internal view of the current state of the processes regarding their customer centricity, and how the production unit's customer and supplier relationships with the other case company's business units are currently seen. Also, an internal workshop was conducted with the production units' personnel where the existing service development and service delivery processes were mapped and their strengths and challenges were discussed.

For analyzing the internal customer point of view, the data from the customer satisfaction survey that the case company conducted via an external consultant company was used. This survey was carried out with the case company's internal customers (business units).

The details of the findings from the current state analysis are described in the following subsections.

### 3.2 Organizational Structure and the Case Business Unit

The case company consists of multiple business units where each have their own customer bases. One business unit could serve for instance enterprise customers while some other business unit serves individual consumer customers. Although all business units share the same common corporate strategy, they all have their own strategies including business targets and customer relationship management.

In this study, the case Business unit is the IT Platform and Hosting Services. This business unit differs slightly from the other external business units that come into contact with the customers, as it is producing datacenter and hosting services internally in the case company. In other words, it has customers from both the other business units (internal customers) and external customers (enterprise and individual consumer customers). Moreover, its services are mainly focused internally on the company's other business units, but some services are also produced directly to external enterprise customers. The position of the business unit in the organizational structure of the case company is shown in Figure 3 below.

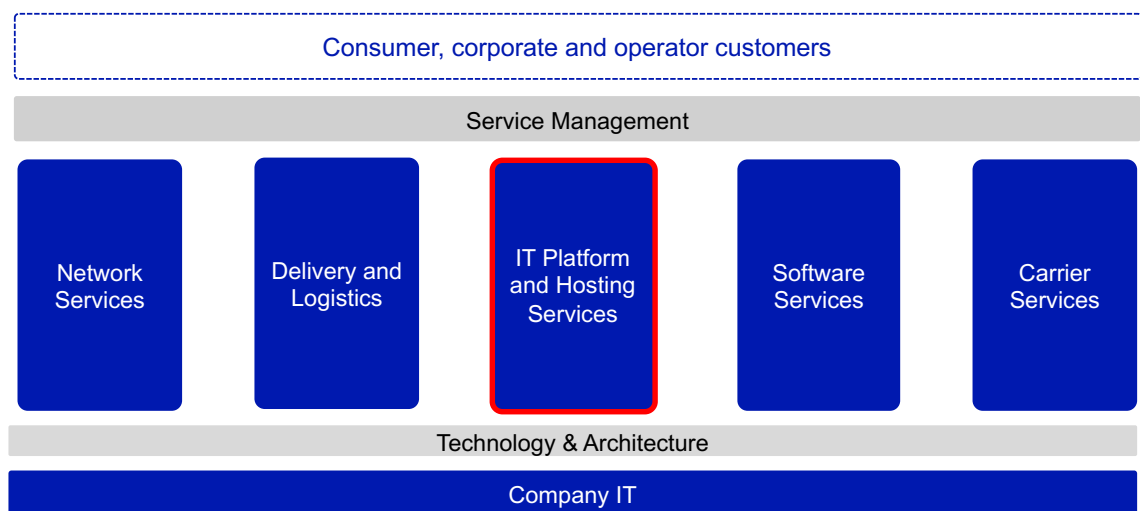


Figure 3. The case company's IT Platform and Hosting Services.

Currently, each business unit of the case company has their own product portfolios, catalogs and service offerings. Some of these products and services are commercial products as such but some of them are part of multi business unit end-to-end services. During the past decades, the case company has also acquired smaller startup companies. Some of these have merged with existing business units, where some of them have become their own business units and even their own brands. All this has resulted in slight dispersion in the organizational structure and has created challenges in internal end-to-end service research and development.

The case business unit recognized the lack of service design and structured service offering already in its previous organizational model. Based on this, the business unit founded a dedicated Service Design department to ensure a proper service-offering and service development in the future. The main focus of this Department is in portfolio management and reproducing and standardizing the current service offering and service catalog items. One of the design targets for the Department is to enable service delivery automation and increase self-services via standardized building blocks and service-blueprinting. The dedicated Service Design Department is shown in Figure 4 below.

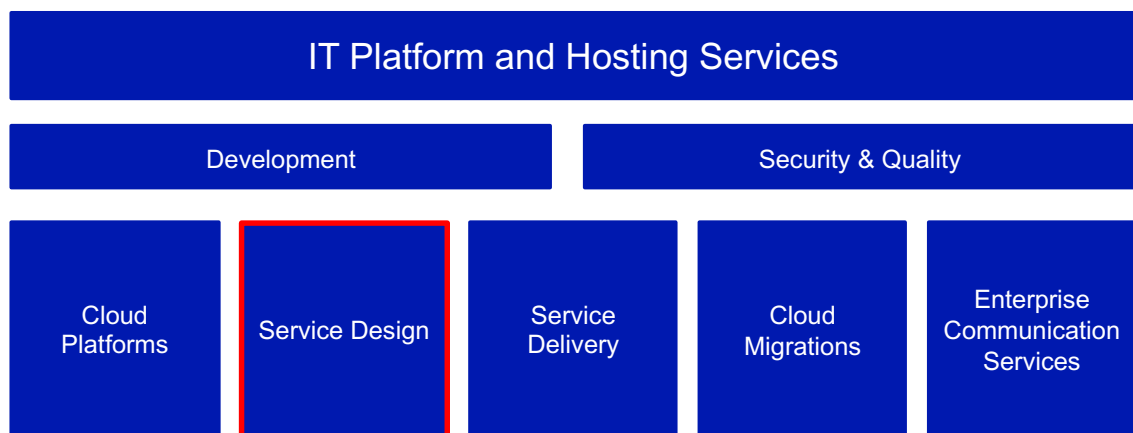


Figure 4. Dedicated Service Design Department.

As seen in Figure 4, the Service Design Department has become part of the organizational structure of the Business unit. One objective of this enhancement is to develop the production unit's service delivery processes to become more agile and better fitted to the customer's existing processes. This should lead to producing more customized and comprehensive services and, in the end, increase customer satisfaction.

To better service internal customers, one part of the business unit, service delivery, has also changed its organizational model towards more a customer-oriented structure. Following this change, every internal customer now has their own dedicated service delivery teams, with a service delivery manager and permanent set of employees. The Service delivery teams and their internal customers are shown in Figure 5 below.

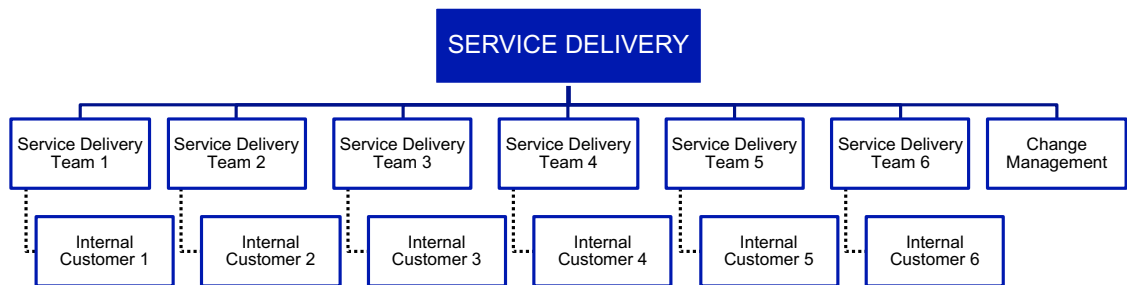


Figure 5. Service delivery teams for each business unit.

As seen in Figure 5, every business unit has a dedicated service delivery team and for better serving customer's specific needs. The idea behind this structure was also to lower cross-organizational collaboration and co-creation, by keeping the same set of personnel in touch between different organizational parts. When people get to know each other by their names, the barrier to communicate lowers dramatically. Previously, the business unit had technology based departments, and even though this model sure had its own strengths, it was perceived to be too disorganized as a whole. Employees were involved in too many different ongoing projects, which caused unwanted overheads in daily operations. Employees struggled to differentiate and evaluate the customer value and without a proper evaluation of internal customer's perceived value, it is quite difficult to prioritize work well.

### 3.3 Current Service Development and Service Delivery Processes

This section discusses the case business unit's activities, where service development and service delivery processes take place, and describes these processes with an emphasis on internal customers and stakeholder participation.

The Business unit has delivered services for some time now. Thus, the service delivery process is a slightly more mature process than the newly updated service development process. Figure 6 shows an overall picture of these processes.

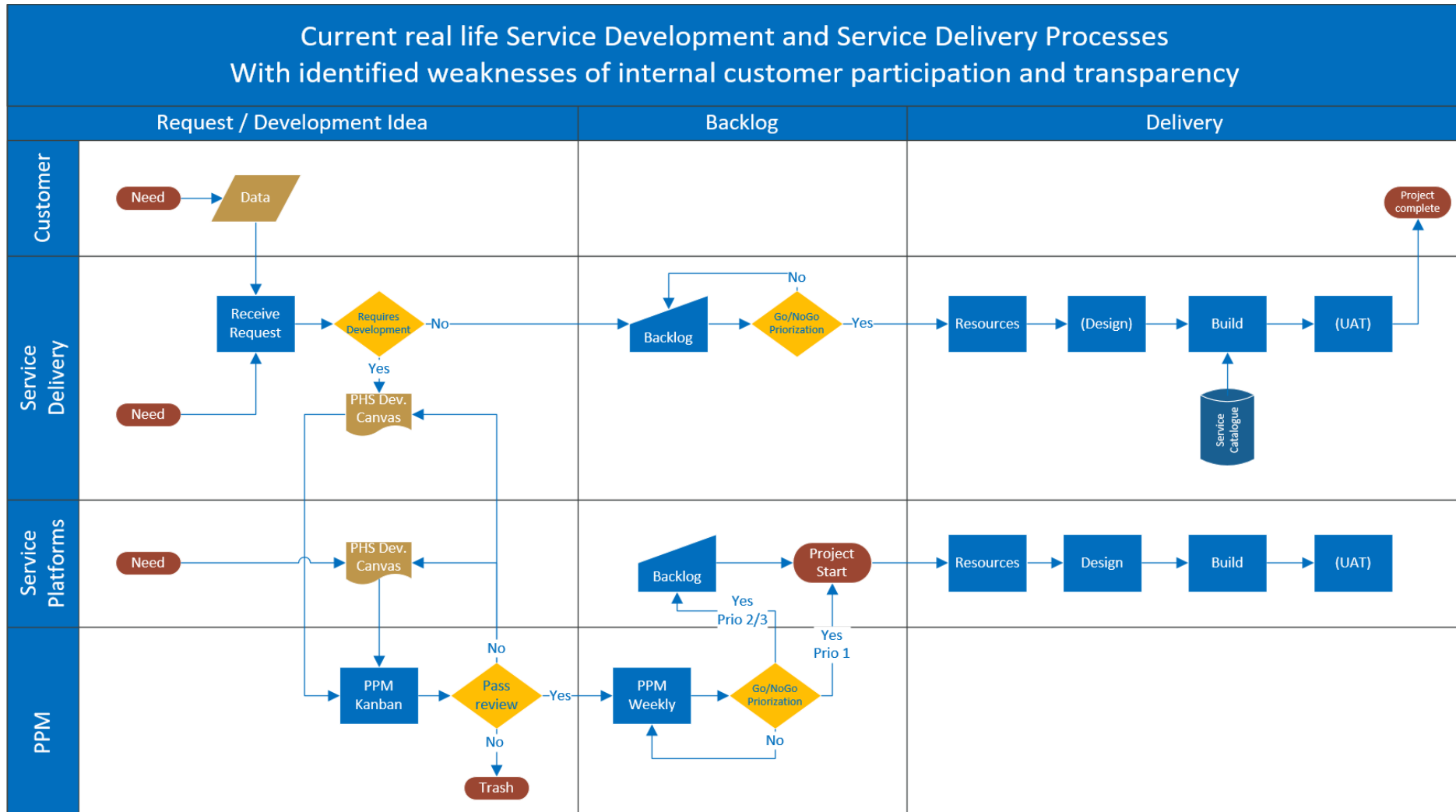


Figure 6. The steps in the existing service development and service delivery processes.

As seen in Figure 6, in both processes, customers from other internal business units and enterprise end customers are contacted and involved in the very beginning and at the end of processes. Therefore, from the participation and interaction point of view, process starts and ends are handled quite decently, but during both processes customers are not involved in a proper manner in the processes. Instead the case business unit is mostly focusing on its own efficiency and key performance indicators while producing its services.

In service delivery the case company uses predefined service building blocks from the service catalogue as shown in Figure 7. These catalogue items need to be up to date in order to fulfill proper service delivery.

#### 3.4 Challenges in Current Processes

Figure 7 illustrates the current processes with identified challenges from the customer participation point of view.



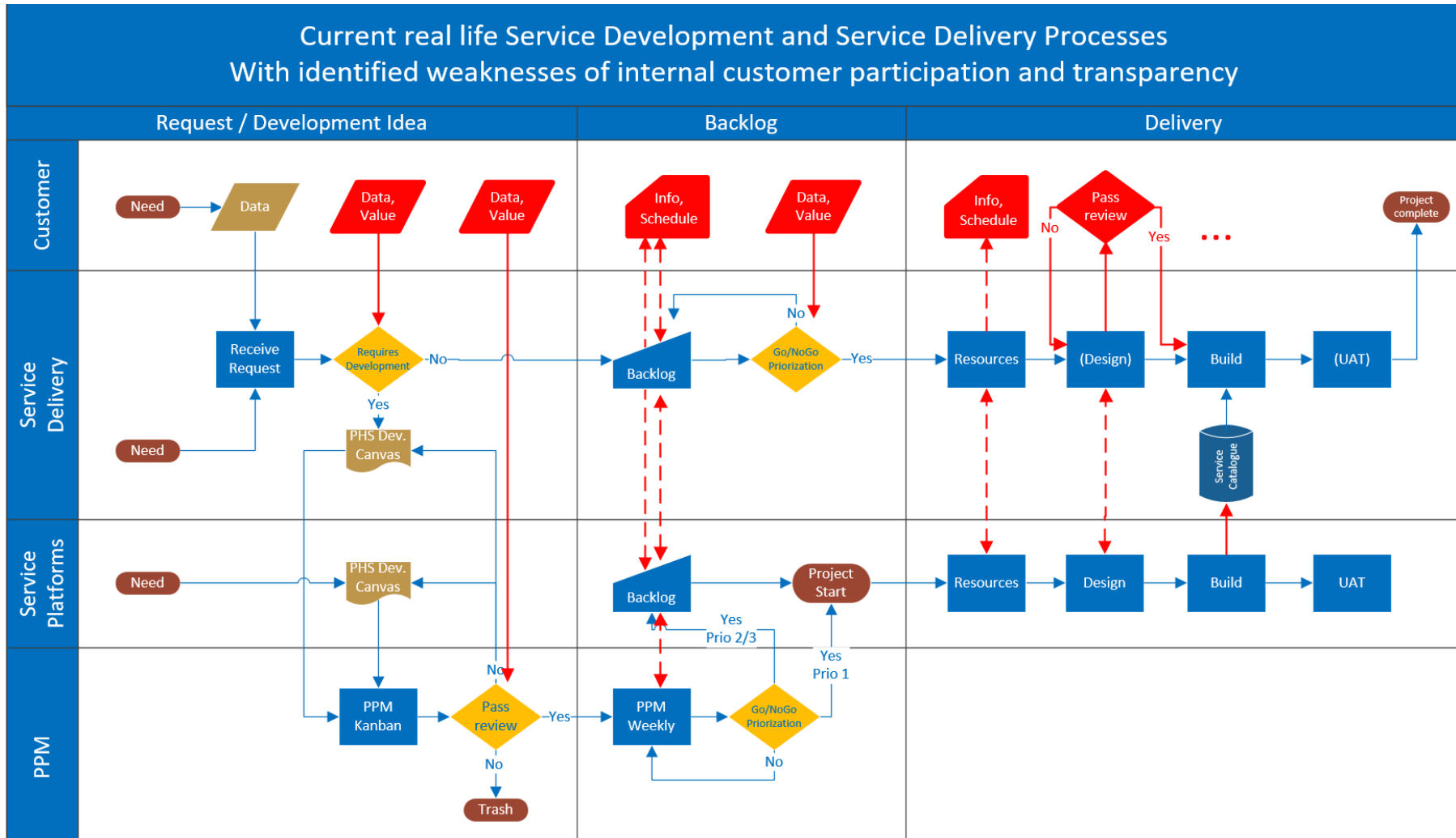


Figure 7. The missing steps in the existing service development and service delivery processes and the related customer touch points.

As seen in Figure 7, and based on the interviews and workshop, five stages of cooperation were found in the service development and delivery processes, under which the customer experiences regarding challenges were found. The steps, in a rough chronological order, are described below.

The interviewees indicated that, in general, the case business unit service development and service delivery processes focus mostly on optimizing the case business units own operations, efficiency and cost efficiency and only to fulfill these case business unit's internal needs and key performance indicators. Customers are acknowledged, but internal key performance indicators are still much more valued because they are constantly measured and followed. These will, however, take the focus away from the customers in the end, if they are not set correctly. These results are discussed in more detail later in this section.

This incomplete optimization wrecks the corporate level development. When for example customer facing business units are designing new services, these are designed against the case company's core processes. Now, if the case business unit is optimizing its own operation and internal processes, but not taking the bigger picture into account, it will tear down the whole development and delivery process chain and the internal customers will not be taken into account.

#### 3.4.1 Challenges in 'Request or Development Idea' Step in Processes

The first challenge is that there are multiple different channels to receive development ideas or service requests at the moment and that there are no single clear structured procedure or process to receive these requests. Currently the procedure of receiving requests is personified and thereby getting service depends on whom you are contacting. This means it can sometimes be problematic for the customers to approach the case business unit without a standardized contact process. Therefore this makes interaction with the case business unit somewhat challenging, when internal customers need to interact with multiple different parties within the case business unit.

Once a request is received, it is compared against the current service portfolio. Does the request need new service development or can it be delivered based on existing service portfolio products? If there is no need for development, the request continues to service delivery backlog and continues within the service delivery process. But, if there is a need

to develop something new the request goes to the project and portfolio management department as shown previously in Figure 7. Here service development requests are placed into a project and portfolio management Kanban board for evaluation and evaluated against each other as shown in Figure 8.

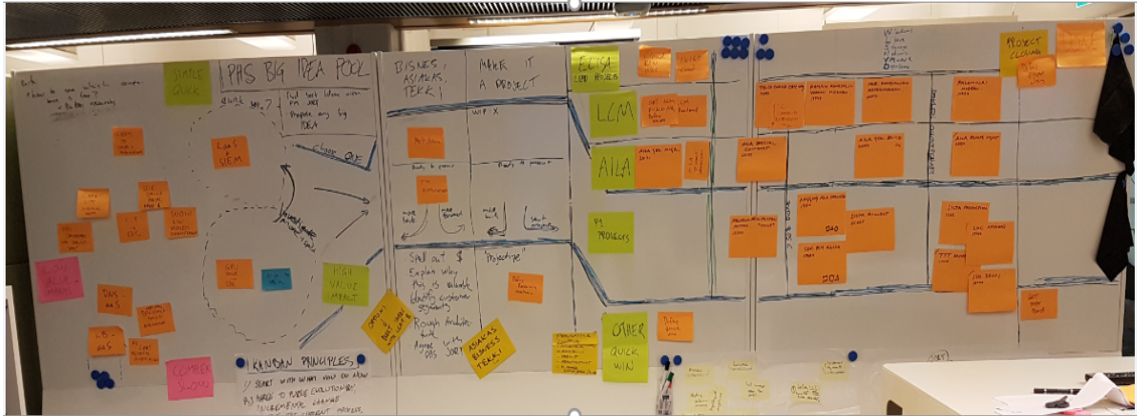


Figure 8. PPM, Service development process sketch on whiteboard.

As seen in Figure 8, a physical Kanban board is used for better visualization and overview of the existing request situation. Here requests are evaluated and prioritized with each other. Some requests are quicker to develop and implement than others, while others might bring more business value to the case business unit. If there is not enough information to make go or no-go decisions, requests are sent back for more detailed information to service delivery or service platforms as illustrated in Figure 7. If project and portfolio management does not see value in the request at all, the request is disposed at this point. If the request is seen to be valid and beneficial to the case company it is moved to the project and portfolio management backlog for further processing.

### 3.4.2 Challenges in 'Backlog' Step in Processes

Project and Portfolio management department is regularly evaluating all the requests and checks the current resource situation with the business unit's production managers. Here one challenge is to define the customer value of the request. The value can be observed at this case from two different angles. The first angle is the case business unit's own value and focuses on how to fulfil its own measured key performance indicators and how to perform and produce services in the most efficient way. The second angle is the customer's perceived value with focus on how to understand the customer's perceived value and importance of their requests. Currently, in many cases, the case business unit

lays more weight on its own values when prioritizing and sorting customer requests. This is mainly because this information is easier and quicker to get as own resources are seen as more tangible and visible. Therefore the internal customers might not get the opportunity to express their view when prioritizing and scheduling projects.

After evaluation, if there are resources available, the next project with the highest priority is taken on the go. Current service delivery and service development backlogs have grown gratuitously long, which has slowed down regular evaluation and pre validation. After this, requests are moved forward from backlog to development or delivery process streams.

### 3.4.3 Challenges in 'Delivery' Step in Both Processes

After a request have been moved from backlog to development, the first step is to establish the project according to the request and assign a project manager. A project manager is responsible for the project scope and schedule, and he or she starts by gathering the required resources for the project. What happens next varies also, but generally the project team should start the project with design. Once again design principles and guidance come from the case business unit's own perspective and needs.

After design, projects move to implementation where the case business unit is trying to deliver the designed solution as efficiently as possible. Service delivery is using existing items from the service catalogue and the Service Platform department's service development should produce new items to catalogue.

### 3.4.4 Challenges in 'Catalogue' Step in Both Processes

The case business unit is partly relying its service delivery on the predefined catalog items. Service delivery should use these items in its daily service delivery. However, in many cases these items do not fulfil what has been requested. In these cases service delivery then delivers what is closest to the request.

Service development and service design should on the other hand keep these catalogue items up to date, but they do not get the required information from service delivery. And also the internal customers do not know what they can request, due to invalid list of catalogue items.

### 3.5 Existing Documentation

During this research the researcher has gone through much of the case company's process documentation, from different business units and also from corporate level general process documentation. Table 2. These corporate level general process descriptions and process development documents are of high quality and they generally take customers very well into account. The documentation also includes general guides on how the processes should be developed and documented in the case company context.

At the same time, this same good process documentation unfortunately does not apply to the case business unit process documentation. The case business unit has used its internal systems and programs to store its process documents and there has been no clear structure for documentation. This has led to the fact that process documentation is not unified nor formally formatted. In addition, it is stored in different systems and places, and therefore it is difficult to find. Thus, the problem with the case business unit's analysis of existing processes is the lack of process documentation.

The case business unit has lately founded a project and portfolio management department. From the documentation point of view, one department's key mission is to produce process and development documentation to the case business unit. Unfortunately by the time this study was conducted, there were not many business unit's internal process documentation available. And what was notable, the case business unit did not have as comprehensive process nor development documentation as on the corporate level and what many other business units generally had.

The case business bases its operations on the ITIL framework and uses ITIL processes and documentation methods in its daily operations. This means that the case business unit's processes are mostly based on ITIL service delivery processes, such as Change, Access, Problem, Incident and Capacity Management processes. The ITIL framework as such is a very mature concept and of course takes customers into account, but not in a sense how this research focuses on customer centricity. In ITIL processes customers are used when defining services, but they are used as some external reference, not as an active part of an interactive or collaborative process. Customers are noticed in the beginning and the end of ITIL processes, but in the middle of the process they are mostly kept outside of the process. This very same phenomenon is clearly visible in the case business unit's way of delivering its current services, as was visible in previous Figure 7.

which illustrates the strength and weakness areas revealed by the current state analysis interviews.

Among these other weaknesses, the case business unit is struggling in its way of documentation. Multiple different locations are used for storing documentation and there is no clear single place for certain documentation. This has led to documentation spreading over multiple different locations and therefore it is hard to find, and equally importantly, also hard to keep up to date. Some documentation has expired and in some cases there was no clear owner for the documentation with nobody responsible for documentation lifecycle management. The case business unit has acknowledged this and started a documentation project to solve this long-standing issue.

### 3.6 Interviews and Customer Satisfaction

All interviewed participants had nearly identical overall picture about the case business unit's customer orientation state in contrast to other business units. The general opinion was that customers are not taken into account sufficiently enough in processes. Both of the observed processes, service development and service delivery, are taking customers into account in the very beginning, when customers order something, and then at the end of the process, when the service or product is delivered to customers. But during the actual process, planning and work, the general opinion was that there is no customer interaction nor collaboration.

#### 3.6.1 Business Unit Services

The case business unit is considered a service provider within the company and other business units like to see themselves as customers, which influences the expectations of the case business unit's services. Customers are expecting that they can be customers, not a vital part of the services themselves. The case business unit is expected to take the full responsibility of the ordered services and projects. Furthermore, the case business unit is expected to have the best expertise and knowledge of its own services, and it is expected to find out and design what type of services suites the best to customer's particular use cases.

*"The case business unit doesn't have enough resources". (Respondent 1, Appendix 1)*

The case business unit's performance, in general, was perceived as slow. Many interviewees stated that the case business unit has challenges with its resourcing, which was thought to be the cause of the case business unit's slowness. The customers were compassionate for the case business unit employees and found that they understand the reason for the sluggishness of the services as a cause of employee rush. But in some extreme cases this has for example resulted in shadow IT. Internal customers have been forced to make their own decisions and actions to urge forward their own deliverables.

*"The business units processes need to be mapped to corporate processes". (Respondent 4, Appendix 1)*

How to get started and contact the case business unit is unclear. There are multiple possible contact channels, i.e. ticketing systems, email addresses and direct contacts, and customers may not be aware all of these alternatives. On the other hand, this might decrease the case business unit performance even more, when there is now clear way to receive different kind of requests. For example, a customer may call directly to a well-known employee and overpasses the ticketing system and such. This could interrupt this particular employee's current work and increase unwanted overhead between tasks.

The case business unit processes and working methods are also unclear to the customer. Even though the latest organizational change was done almost a year ago, the processes and working methods are still not fully clear to internal customers and these have aroused some concerns. Also process and service descriptions and methods are difficult to find. The case company has several internal channels for documentation, and the user may not know where to find the information which is needed.

As mentioned, the case business unit is perceived as an internal service provider with a proper level of technical and architectural expertise, and it is expected to be capable of designing the right solutions for customers as a part of the service. However, the interviewees perceived that the case business unit did not have deep enough expertise and resources in the solution design, and that the case business unit needs more expertise in this area. Customers felt that this current tightly resourced situation causes excessive workload for solution designers and appears to customers as slow and lowered quality of services. The response was that the customer may not be able to order the right products or services without a proper solution design. This can cause contradictions and the



customer might be disappointed, when they do not receive what they thought they ordered. Some interviewees also felt that they do not have the required skills to order the case business unit's products or services. Therefore, they hope that the case business unit would be able to take the ownership of solution design and steer it in the right direction and bring even raw ideas into a doable action plan.

*"I felt that I have to tear out information from the case business unit"* (Respondent 9, Appendix 1)

### 3.6.2 Responsibilities and communication

At present, customers feel that the case business unit does not offer as comprehensive turnkey solutions to customers as needed and expected. Customers felt that they have to reluctantly take responsibility with one or more solution delivery steps, and felt that project management should be the case business unit's responsibility. The interviewees felt that, for example, project management, co-ordination between the various case business unit internal parties, escalation, expertise assurance and overall project management require too often customers participation and project management intervention. Customers do not want to be responsible for coordinating the case business unit's projects, as the case business unit project management is not the top priority of a customer's day-to-day work. Generally, customers felt that project management done by technical specialists is not enough.

Communication with different parties, for example between business units, within business unit or within team, may not be coordinated well enough and project coordination is often left to the customers. In many cases customers had to contact several technical specialists, in order to help the progress of the project. It appears to the customers that the case business unit's employees do not talk to each other. The interviewees felt that there is no end-to-end control of projects or service requests, and they assumed that probably no one is likely to have an overall view of the business unit's projects or service requests. It is often the customer's responsibility to check if for example the ordered connection is actually working. Sometimes the service requests were already closed when the requests were not actually delivered yet. The customers felt frustrated when they are forced to make a new service request on the same issue. This lack of structured coordination causes ambiguity, it takes time and frustrates the customer to whom the coordination of the case business unit's projects is not number one priority.



Transparency is needed. Especially service requests requires both passive work monitoring and active control. Customers felt that in the ideal situation, passive transparency would be enough. Active transparency is required only when, according to passive transparency for example monitoring, the work is not proceeding. In this case, it is essential for the customer to get a feeling that they have the ability to influence the situation by themselves. Transparency, as an enabler of activity, could basically mean for example knowledge about whom to contact and how to promote your service request if it is not proceeding within the service level agreement schedule.

*"I think it would be better if they told directly that now we don't have time to do this!"* (Respondent 9, Appendix 1)

Communication via service requests or tickets is not suitable for quick information exchange or other agile activities. Customers may just need to check some quick information that they cannot access by themselves. Making a service request about something like this and waiting for a week to get an answer for a small thing is considered frustrating. Instead, many are cutting corners in the processes and contact the case business unit's technicians directly to fasten things up. While this could be an easy way out from the customer's point of view, the case business unit's technicians felt that doing this increases interruptions and eventually overall work overhead.

While there are many interactive communication tools in use, customers still mentioned that geographical distances influence communication. The interviewees stated that for example in initial project planning, they consider direct human communication to be mandatory, in order to achieve the level of agility needed to get the required results. Communication requires strict and clear responsibilities and contact information about whom to contact in which situations. When direct access to the resource is obtained, communication is generally feasible. Getting to know the technicians helps communication and working together. It helps to identify the mutual objective, as well as remarkably lower the barrier for contacting people. As many interviewees mentioned, they prefer to contact technicians they already know. Physical presence in general is felt to support teamwork. One interviewee had a good experience of a kick-off meeting at the beginning of the project as it made people known to each other. One interviewee hoped that the case business unit resources could work in the same space with the customer employees during the project or delivery.

### 3.6.3 Transparency

Prioritization takes place on several levels in the case company; between business units, within the case business unit, within the department, within a team as well in every specialist's own work. Prioritization between these different levels lacks transparency, which makes it difficult to manage different requests and projects. Prioritization is now done per customer and other customers don't have the overall visibility of all orders and resources available. At the same time, the case business unit has very limited visibility and understanding of customers' priorities or values, or how one specific task would influence customers' productivity in their own businesses. This makes it difficult to compare different customer requests to each other and prioritize these.

"prioritization is not a secret, but you have to ask it always differently". (Respondent 3, Appendix 1)

This lack of visibility and transparency influences also how customers perceive the case business unit's trustworthiness. Lack of transparency is experienced as untrustworthiness. For example unkept timetable promises have caused a lack of confidence. Promised schedules do not hold almost ever and this has been seen as a rule rather than an exception. Some customers even add couple months extra to their own schedules after having seen the schedule promised by the case business unit. Customers desire for more transparency and visibility to better follow and understand what they can expect to be delivered and in what schedule. This has a huge influence on the customers' own project and delivery schedules, as well as their own customer relationships and service level agreements.

"I always add two months extra to the case business units estimates!". (Respondent 6, Appendix 1)

Escalation to the case business unit's top management is used as a last resort, if a customer's service request or project is not proceeding as agreed. However, customers are trying to avoid escalate orders, as they have acknowledged the case business unit's resource challenges, but more importantly, interviewees discussed the possible inflation of escalations if they are used too often. Some customers thought escalation is being away from the others, possibly from their own co-workers. The threshold for escalation depends on the person's experience and personality. The general feeling was that the

one who shouts the loudest, gets the best service. Thus, some customers are more vulnerable than others and customers are not in an equal situation.

*"If I would've go with normal process, I would be still waiting in the line".*  
(Respondent 7, Appendix 1)

Delays in service or project delivery have in many cases an impact on the customers' own businesses and service delivery. The customers' own production could stand still when they cannot start or proceed, as they are waiting for some prerequisites or initial steps from the case business unit. Generally, things tend to depend on other things, as everything is interrelated. Customers may also use external consultants in their projects and if they cannot start their work, this generates additional costs to the customers. Also the case business unit's customers' own customers may put pressure on the customers when the project is not proceeding in the case business unit. The end customer is not satisfied, and the customer of the case business unit will have to act as a middleman with no actual ability to influence the progress. Many of the interviewees were responsible for other instances outside of their own team, for example their own customer, sub-contractor or other case company business unit.

*"Things depends on each other's. I cannot proceed with my own project before the request has been processed"* (Respondent 1, Appendix 1)

Depending on the product and service, the case company has many touch-points where to interact with its customers. These different touch-points and a single transaction can be handled relatively well separately. But the case company has a challenge to line up its Omni channel functions, and there are some points now where the customer journey interrupts leading to negative overall customer experience.

### 3.7 Key Findings from the Current State Analysis (Data Collection 1)

When interviewing people from the case company, it became somewhat clear that the current processes did not have any superb features from the customer interaction point of view. Instead, in general, people felt that customers are not involved enough in the processes.

The results showed that the internal customers are somewhat aware of the case business units resource shortage and situation, and to some extent they sympathize with this dominant situation. However, all interviewees had experienced challenges with the case business unit. In particular, three predominant themes stood out; (a) lack of transparency, (b) untrustworthiness and (c) social interaction. These influenced negatively the experience of doing business with the case business unit.

The lack of transparency in the case business unit's activities, such as prioritization, service requests, resourcing and working practices, has contributed to a sense of insecurity among customers. These uncertainties have made it difficult for customers to design and deliver their own services, when they do not have a clear view, when to expect delivery from the case business unit. This lack of transparency also caused customers to experience untrustworthiness.

The untrustworthy image created through experience influences how reliable customers see the case business unit. In practice, the experience of the case business unit's ability to perform and deliver, and on the other hand also the motivation to serve, creates this trust. Ability and motivation become concrete for example in prioritization, delivery and timetables promises, where the business unit needs to stand behind its words and actions – from the top management all the way to all employees.

Working with the case business, or any other business unit, in the end is a social interaction, whether it is technology mediated or directly between people. The case business unit is most successful when interaction with it was direct with its personnel without any technological fences or systems or middleman. Effective interaction emphasized the role of proximity of personal relationships when collaborating. If relationships are not close, it is more difficult to promote things. Another important interaction issue was the coordination of different service requests and project related tasks. Here the interviewees hoped for a more proactive and stronger role from the case business unit. Now the customers felt that they had to act as their own project managers, in order to help the progress of their requests or projects.

In summary, findings from the current state analysis will form the basis of literature survey and conceptual framework in section four. Thesis concentrates three areas that arose above others during CSA; *Cross-Organizational Collaboration*, *Co-Creation* and

*Re-engineering selected processes.* The next section discusses existing knowledge about these selected areas.

#### 4 Existing Knowledge for Better Customer Involvement

This section explores existing knowledge and relevant literature to address the challenges revealed in the current state analysis. It discusses best practice for better customer involvement regarding the issues revealed by the current state analysis. Based on the findings of the current state analysis three areas stood out. First, *lack of transparency* in the case company's service development and service delivery. Customers felt that they do not have visibility to the actions of the case business unit. Second, a rudimentary area was the business unit's overall *social interaction with its customers*. Customers' felt that they are not heard and that their needs are not met. These together have contributed to the overall business unit's *untrustworthiness*. Customers felt that they could not trust the business unit's ability to fulfil customers' needs nor deliver services in a timely manner. The case business unit's employees also indicated a lack of customer interaction in the processes discussed. Thus, based on these findings this section focuses on best practice and tools to tackle these challenges.

Before going any further in these areas, the service strategy needs to be mentioned, as strategy is a foundation of any activities in any company. Without a proper implementation of strategy, organizations do not have a mutually agreed direction to build things. In this current rapidly changing competitive environment, the strategy is no longer just positioning a fixed set of activities to the value chain. Successful companies are not just adding more value to it, but they are redesigning and developing increased value again looking for new business possibilities. One key strategic task is to transform the interaction between suppliers and customers' roles and relationships so that they can activate value creation with totally new combinations. This divides the distinction between products and services and combines them into activity-based offerings, where customers can create value for themselves. But because offerings are becoming more complex, so are the customer relationships needed to create them. As a result, the strategic task of the company, moves from to re-configure and integrate its know-how and customers together into co-creation of value to all parties. This customer involvement can start with a new tactics in marketing, but it needs to develop into something which is more built in, in the organizations strategy (Merlo et al. 2014). Delivering outstanding customer experience requires leadership and management of every part of the service organization. If there is no clear vision and strategy what to do and where to aim and if no single person is explicitly responsible for the customer experience, no single person is held accountable if it's not right. The failure is almost inevitable.

This very quarter-year oriented market economy makes businesses often driven by short-term thinking. Thereby a poor customer experience is symptomatic of a bigger problem, a lack of vision at the top, or a program structured around quarterly profit statements. These make it difficult to increase long-term thinking. This is a widely recognized phenomenon and there are multiple empirical evidence based researches, which states that companies should focus more on long-term goals than short-term quick profit increases (Egan 2011). Fore runner companies have already taken actions in this area and proved this theory. To start this journey companies need to focus on their internal structure, communication and collaboration, because without superb internal customer relationships it is almost impossible to deliver valuable service to external customers either.

#### 4.1 Importance of Customer Involvement

In customer relationships, customer's commitment is considered to be even more important than customer satisfaction (Keh, H.T. and Xie, Y. 2009). In different studies, customer satisfaction does not ensure a customer relationship. For example, the customer could be satisfied with the company, but still the customer has moved to a competing company. This is because the customer has not been committed to the company. Commitment means the customer's willingness and the desire to use and buy corporate products and services. It is noticed that commitment is not only related to the company's operations and consequently customer satisfaction, but commitment is more based on excellence of customer perceived value. People for example enjoy and buy from a person more easily with whom their chemistry works. Thus, personal relationships have a huge impact on customer experience as well.

*"That the future of capitalism depends on shifting the focus of companies back to the customer: Customer delight is a more powerful objective than shareholder value. If you take care of customers, shareholders will be drawn along for a very nice ride. Opposite, if you try to take care of shareholders, customers don't benefit, and ironically, shareholders don't get very far either!"* Martin, R.L. (2011)

Moreover, if companies focus on their customers' delight, their profits will become well-earned from a business that will succeed in a more broader sense. However, if their

focus is only on maximizing their own profit, their decisions will lead them directly into collision course with the interests of their customers. (Watkinson M. 2013). Instead companies should take into account customer interaction, because discussion is a process during which the parties are involved in the exchange, and create new ideas and share knowledge together. Discussion is the source of active participation and mutual commitment between interacting parties. Ultimately, companies can take customers into the conversation by shifting customers into the organizational change resources (Sundqvist A. 2004). Furthermore, as Ian Alan and Chap Perry put it:

*"Customers are the rich source of information and their input may technically decide success or failure of a new service."* Alam, I. & Perry, C. (2002)

This pushes businesses increasingly to search for ways to develop new ideas into the market. Research and development has always been seen as a costly, time-consuming and somewhat imprecise process. By involving customers into a development process itself, it has been seen as an efficient way to shorten the feedback time between consumption and development cycles (Lundkvist 2004). The added value to the company is the insight from the customer interaction and participation. (Normann and Ramirez) argued this already back in 1994, when they stated that customers are sources of information and customer involvement in the value chain will improve the efficiency of service development.

*By Value chain* they basically meant constitution, where any person, process or product adds tangible or intangible value to a product or service, or its development. Moreover, the concept of *customer value chain involvement* means that the target groups of the company should be exposed to the *value chain* of the company that is exposed to its people, processes, products and their relationships. This perception is not passive as for example the public audience of the exhibition. It is rather active interaction and participation with all the participants of the value chain, as long as this participation brings added value to all parties. According to Prahalad and Ramaswamy (2003), customer added value is more than a new, useful, convenient or cutting-edge technology product or service. It is the co-creative development of this product or service and it is about producing experience and co-ownership of developed products and services (Lengnick-Hall, 1996).



*"Eventually, the roles of the company and the consumer converge toward a unique co-creation experience, or an experience of one". Prahalad and Ramaswamy (2004)*

Co-creation is not outsourcing activities to customers nor doing minor customizations to products or services. Co-creation is a much more fundamental phenomenon. It implies the value of co-operation via tailored and unique interactions that are meaningful and valuable to specific customers. The customer perceived value comes from the experience of co-creation, which is the foundation of the whole co-creation (Prahalad and Ramaswamy, 2004). It has been shown that customer relationships have started to organize around individuals and their co-creation experiences, rather than rely on companies' passive offerings.

#### 4.2 Cross Organizational Collaboration and communication

Another topic in developing and providing comprehensive customer experiences is the company's internal collaboration. Many researches (Marengo 1993, Kirikova 1995, Eberhagen 2000) have discussed the distribution of knowledge, information sharing and correlations of these. How an individual perceives knowledge sharing has been shown to correlate with different factors, for example; personal motivation, awareness of information sharing security, physical capability to share and also people self-interests and investments on personal knowledge.

According to the principle of internal customer relationship (Eichorn 2004), each unit inside an organization has both internal customers and internal vendors or suppliers. By focusing and developing these internal customer relationships, rather than pure efficiency, an organization can improve co-operation between its internal units. Internal customer relationship emphasizing the identification and development of internal customer interface within the organization. Often, internal customer relationships can be quite complex. The parties within the organization serve each other and the output of one function depends on two or more other functions provided by an internal service. These internal customers need to be served as well as external customers are expected be served. (Grönroos 2015, 405)

Nowadays with the globalization of the digital economy, multiple companies now regularly rely on virtual teams that could be spread over the customary organizational boundaries, such as work units, departments, and even different companies (Boughzala 2002, Romano et al. 2010). Teams need to be able to communicate even if there is little or no physical interaction with each other.

There are many levels of collaboration within a company, but the company's cross-organizational collaboration as a whole should take into account all the different organizational units and departments across the whole company. The company's various activities around collaboration should be guided and encouraged to share the common strategic goal of serving the customer. Cross-organizational collaboration is particularly important for example in virtual teams which are spread across organization. Combining the participating individuals and units comprehensively will increase efficiency and internal customer satisfaction, and eventually end-customer satisfaction as well. (Boughzala and Briggs 2011)

One important thing in collaboration is gathering the feedback from customers, whether they are internal or external. Very often companies find it easy to collect feedback, but analyzing it is a whole different thing. It is very important to truly understand what the customers are saying. If the message is perceived wrongly, corrective actions and improvements are built on wrong assumptions. Moreover, in order to create a comprehensive picture, it is important to gather feedback from multiple parties from a customer. For example, feedback gathered only via sales, might miss some important insights which are crucial for the bigger picture. Moving further, instead of just gathering feedback, customers should be involved in the company's internal development processes as customers tend to have rich ideas for a company's service offering (Merlo et al., 2013). It is still important to keep in mind that customers need to see the participation to be voluntary and not forced. Thus, involving customers in the process might require some extra creativity sometimes.

In the end, all interactions are individual conversations. Customers are contacted by suppliers and vice versa, through multiple channels. Also within an organization there are multiple touch points between different units and departments. The importance of employees' communication skills cannot be underestimated. This has a direct effect on the customer satisfaction and the organization's impression. According to Grönroos (2011), all employees that are working with customer's one way or another are the company's

marketers and they have a huge overall impact to customer relationships and more importantly customer experience and satisfaction. Even though the thesis focus is on the case company's internal customer relationships, the same exact philosophy applies here as well.

Building and improving cross-organizational collaboration and interaction between different organizational parties, especially parties with diverse knowledge, requires special attention in organizational structures. For example, Ratcheva (2009) has approached collaboration, interaction and preventing boundaries by dividing these into three sub categories; *action boundary*, *knowledge boundary* and *social boundary*. *Action boundaries* refers to the originally engaged project team boundaries which includes design, development and implementation responsibility of the project. Diverse knowledge teams are expected to complete themselves in knowledge. However, there are recognized difficulties, where different areas of expertise have different funds of knowledge. Furthermore knowledge could have different meanings, which could make it difficult to understand to other team members. These challenges are referred to as *knowledge boundaries*. The third area, *social boundaries* refers to how group members reach their social and professional networks for help and consultancy. This distinction depends not only on the blurring of professional boundaries, but above all on the creation of a new kind of work. New way of working cannot be brought into the workgroup, but it can arise and develop via strong interactions and relationships. In order to improve the collaboration, new tools and can be adopted. One efficient way is to analyze and visualize formal and informal organizational relationships.

Organizational Network Analysis is a quantitative research method, which is used for modeling and analyzing how communication, information, decisions, and resources go throughout an organization. ONA strongly invokes charts that describe people or groups to "nodes" that play a role in providing information, ideas, or decisions, and the links between them. ONA can be used to achieve a deeper understanding of organizational formal and informal relationships. According to a (Deloitte 2016), there are three main types of nodes in ONA. *The central nodes* are people who are interacting in many directions and they own a vast network of contacts, and they have plenty of information to share. Central nodes can be anywhere within an organization. *Knowledge brokers*, on the other hand, are acting as bridges between groups. Without knowledge brokers ideas could remain within one group and not elaborated to other groups. *Peripheral nodes* are easily overlooked people with low profile and weak or non-existent connection with the

organization. A peripheral with large potential and insight can be a risk for organizations. Therefore organizational transparency is a very efficient way to prevent the emerging such islands.

#### 4.2.1 Transparency

In today's increasingly competitive and rapidly changing business environments, people need to easily and quickly access all relevant expertise and information needed - all the time. This is not possible if organizations do not become more open.

Within organizations there are many levels of transparency. One could be the organization's internal transparency between organization and employees. It has a huge impact on how people perceive the company. In the worst case it could lead top performing employees to leave the company, but on the opposite, it could create very fruitful trust, loyalty and long-term relationships (Berggren and Bernshteyn 2002).

There are many levels of transparency. One is about sharing all the possible information needed, not just the information what the sender is willing to share. In terms of transparency all information needs to be shared, even though sharing some of it might not feel comfortable. One could be more critical and opaque in sharing. In the end, it is still about being honest and open about what actions are being taken, by whom and on what basis. It is about creating an atmosphere where questions can be asked and knowledge can be shared in open and honest ways and co-creating a mutual understanding, by removing obstacles that prevent people from accessing the information they need in their work. It is also about making people and their skills, knowledge and ideas visible to all their colleagues. Today's organizations can easily access new information technologies such as social software that can be used to increase the transparency of organizations. Increasing transparency requires changes to existing patterns of behavior and practices that could make people feel threatened. On the other hand, there is always the other side of the coin, which (Albu and Flyverbom, 2016) discussed in their article.

*"Literature conceptualizes transparency as complex communicative, organizational, and social processes rife with tensions and negotiations, and largely unsettles the assumed positive effects of information disclosure".*

Albu and Flyverbom 2016

### 4.3 Engaging Customers In Co-creation

In today's business world, many companies trade goods and services with the customer indirectly. In many cases, companies are independently designing their products and services, and related processes, with little or no interaction at all with their customers, and often the only customer participation sits at the very end of the process, in the exchange phase. Companies have focused on developing and facilitating this exchange point for decades. For example, by dividing consumers in relevant segments, and then customizing and improving processes towards these different segments. (Prahalad, Ramaswamy, 2004). All this has led the traditional concept of making business very company centric, where interaction between companies and customers are not seen as a source of value creation (Normann & Ramirez, 1994). This is not enough anymore, instead customers are now much more conscious and they are seeking different ways to use their knowledge in all areas of businesses. With new tools and satisfying choices available, customers want easy co-operation with companies and thereby co-create value to themselves.

According to (Merlo et al. 2014), customers are wanting easily accessible and understandable services. If a company succeeds this way, it will increase customer satisfaction. Also, the feedback barrier should be as low as possible. Customers give more feedback when it is easy and requires no extra effort. Furthermore, customer satisfaction increases as they have the feeling that they are being heard. Since the core of many services is solving customer problems, it is important for service companies to get customer feedback or information about problems and to be able to form solutions from these. Taking suggestions seriously from the customers is not always easy, but companies that are willing to give up the assumption that they always know the best are most likely the ones who benefit from customer co-creation. Related to easy access and understandability, it is important that all service and product related documentation is up-to-date and easily available.

Also one notable topic from the same authors is the incremental improvement approach to customer participation initiatives, which in many cases is a relatively strange area of expertise to many companies. However, the commitment does not have to be complicated. In fact, the more easily the customers can take part and the less time it takes, the more likely it is that different customers are engaged and committed.

To deepen customers and employees engagement and commitment, one possible procedure is to use the DART model, which emphasizes the customer's commitment in collaboration and co-creation with the company (Prahalad and Ramaswamy 2004).

Value co-creation has been generally perceived as the possibility to increase an organization's competitive edge by developing unique competencies, as well as the appropriate organizational resources and technological capabilities that seek to better meet customer needs for individual products, services and experiences. (Prahalad and Ramaswamy's 2009) The DART framework has been found to be effective, wide-ranging and profound to cover numerous aspects of co-creation of multiple areas.

The four fundamentals of co-creation in the DART framework; Dialogue, Access, Risk assessment and Transparency, are visualized in Figure 9.

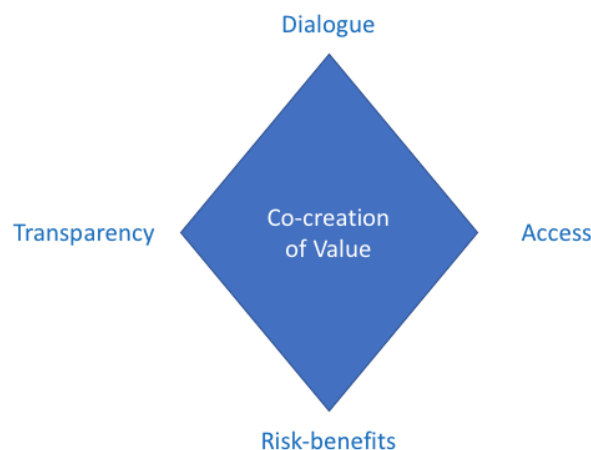


Figure 9. The DART Model.

As Figure 9 shows, according to the DART model value co-creation consists of four different areas, which are listed below.

*Dialogue* means interaction, commitment, and tendency to act on both, customers and suppliers sides. It is more than just listening to the customers. It means mutual learning, understanding and communication between two equal parties, while it creates and maintains a loyal community.

*Access*, basically means facilitating the co-creation area by providing the right communication tools and methods between customer and supplier. It also means the marketing solutions that increased freedom of choice for customers.

*Risk assessment*. The risk here refers to the likelihood of the customer's disadvantage. If customers are active co-operation partners, are they also be responsible for risks. Talking about responsibility for businesses and consumers is likely to continue for years. However, we can assume that customers are, and will be, more involved in creating value and they need to be fully aware about risks. It is not enough to only provide information, but rather appropriate methods for assessing the personal and social risk of products and services.

*Transparency*. Traditionally, businesses have benefited from asymmetric consumption of information between company and customer. However, this asymmetry is disappearing as information about services, technologies, and business systems is becoming more accessible all the time, creating increasingly new levels of desirable transparency needs. Businesses can no longer hide behind the inaccuracy of prices, costs and margins. Information of products, technologies and business systems is becoming more and more easier to access. This opens a new the level of openness to customers.

Multiple companies have spent large sums of money on information technology and automating existing processes without defining whether these processes are even necessary or not. Only after business processes have been renewed should automation take place. Automating an already bad process just makes it easy to do the wrong thing faster (Hammer 1990).

#### 4.4 Business Solutions

Developing solutions begins by understanding the customers' situations and standing in the customer's shoes. In order to achieve this level of understanding, it requires companies to constantly interact with their customers. Customer value research requires the company to map its customers processes and identify what is valuable to the customer. To truly understand this value and quantifying it in the very beginning of development process is important. This reveals the customers value drivers and creates insight to the

customer's processes so companies can map their processes to customers for better value creation.

Figure 10 Illustrates the customer value research steps.

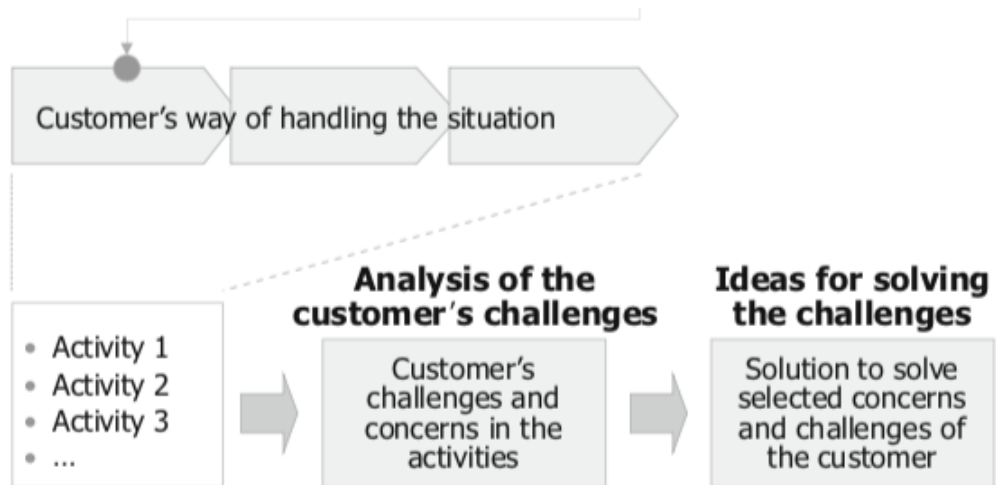


Figure 10. Customer value research (Storbacka & Pennanen 2014).

As seen in figure 10, the existing way of customers to handle some specific situation is divided in different activities and then the activities are analyzed to identify process challenges. Companies usually are familiar with their own processes, but they need to fully understand the customers' processes technically and also from a business point of view. After this, companies can identify process improvements and customers KPI's in collaboration with the customer's key stakeholders. The value research should provide the needed information to propose solutions to the identified challenges. Value research could be a holistic and overwhelming approach and require a lot of resources. Therefore companies could focus their scope and start with selected lead customers, to whom value research is assumed to be most valuable. (Storbacka & Pennanen 2014)

To create and develop mutually valuable solutions requires combining both outside-in and inside-out approaches. Companies need to be able to understand the customer's challenges and business models, while mapping these to their own key capabilities and competencies in order to achieve the strategic objectives. This changes the whole fundament of companies' research and development to customer oriented solutions.



#### 4.5 Business Process Reengineering

The relationship between the business process reengineering (BPR) and Continuous Improvement (CI) has been discussed extensively in the literature. These two approaches are very similar as they both are aiming to improve the process. The only difference between these is the focus. According to Hammer and Champy (1993), Reengineering is the *"fundamental rethinking and radical redesign of business processes to achieve dramatic improvements"*. The continuous process improvement, on the other hand, seeks incremental improvements that are not so drastic. According to Masaaki Imai in Kaizen, *"incremental improvements usually focus on the individual parts of a process or system"*.

The focus of this thesis is on the case business unit's service development and service delivery processes, which are already in place and used in the business unit's daily operations. The thesis focus is not to reinvent or recreate totally new processes. Instead the focus is more on improving these existing processes by involving customers more in both processes. Moreover, this thesis gathers the most suitable parts and practices from continuous improvement, and Business Process Reengineering frameworks, to improve these existing processes. Figure 11 lists the main differences between these two approaches. (Mohapatra S., 2013)

Primary criteria	PIP (process improvement)	BPR (process innovation)
Change level	Incremental	Radical
Starting point	Existing process	Clean slate
Frequency of change	One-time/continuous	One-time
Time required	Short	Long
Participation	Bottom-up	Top-down
Scope	Narrow, within functions	Broad, cross-functional
Risk	Moderate	High
Primary enabler	Statistical control	Information technology
Type of change	Cultural	Cultural/structural

Figure 11. Differences between PIP and BPR. (Mohapatra S., 2013).

As shown in Figure 10, PI (Process Improvement), BPO (Business Process Optimization), CI (Continuous Improvement) or BPM (Business Process Management) are not so radical compared to BPR. Still both frameworks, business process reengineering and

business process improvement, have same objectives, i.e. to identify and define challenges in existing processes, and then design the solution according to a suitable framework.

Figure 11 illustrates the general work flow of BPR. Any BPR operation starts from clearly defined and measurable goals. The goal is to reduce costs, improve product quality or increase efficiency. What needs to be achieved, must be aligned with the company's vision and strategy.

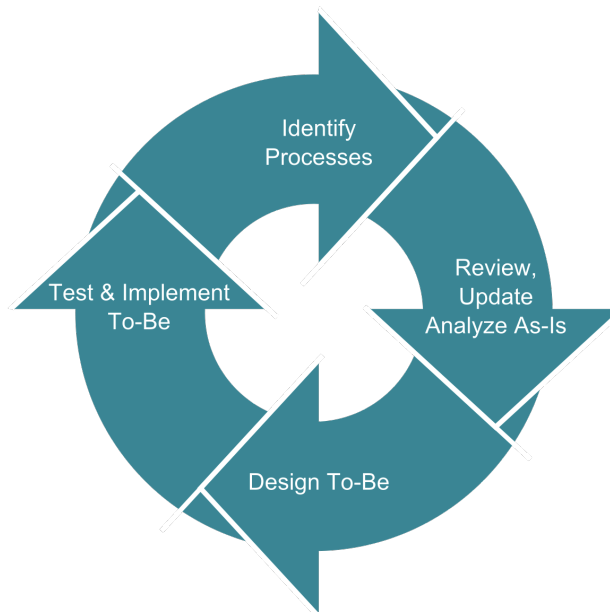


Figure 12. Business process reengineering cycle.

As seen in figure 11, business process reengineering consists of four different main stages:

*Identify Customer Needs:* Customer business interests must be a first prior, when redesigning the process. The process have to bring a clear added value to the customer. Moreover, every BPR project needs to start with defined and measurable objectives.

*Review an existing process:* When improving a business process, the current process provides the basis for the new process. Examining the strengths and weaknesses in the current business plans and processes, will give rich and valuable input for redesign. At the same time companies should identify processes that should not be developed. This could make a difference with success and failure.

*“The major challenge for managers is to obliterate non-value adding work, rather than using technology for automating it”. Hammer M. 1990*

*Redesign business plan:* Whenever an existing business process is thoroughly explored, the necessary changes are recorded on paper and converted into an ideal redesign process. All the changes are marked down and the best of all options is selected.

*Implement redesign:* Finally, the changes will be implemented according to the redesign plan to achieve the improvements. The responsibility of the administration and the designer for the new operational process and the responsibility of everyone is responsible. Thus, the business process reengineering is collection of interrelated tasks or activities designed to accomplish the specified outcome.

According to the current state analysis, the customers indicated that they do not have substantial competence to design or even order new services or solutions to their challenges. The case business unit needs to develop and acquire new capabilities as it needs to shift from being service-centric to be more customer centric. The case business unit needs to strengthen and focus its service portfolio, in order to provide more comprehensive solutions than separate services. Via integrated solutions, services can be developed to extend over their traditional lifecycle and enable innovate approaches for co-creation and mutual added value for company itself and to its customers. (Brady et al. 2005)

#### 4.6 Business Process Improvement

Continuous improvement approaches and methods include, among others Total Quality Management, Six Sigma, Kaizen and Lean. Continuous improvement is a comprehensive process that consists of different approaches and methods which are used together and by covering multiple areas.

Over the years ITIL (Information Technology Infrastructure Library) has become de facto in information technology service delivery, and the case business unit also leans heavily its operations and service delivery on ITIL. ITIL is a set of concepts and practices in IT services, development and management. The ITIL framework was developed to ensure the efficient and cost-effective use of IT resources. Over the years, many companies

have carried out small and large-scale implementations amounting to multiple success stories. Figure 11 illustrates the ITIL framework.

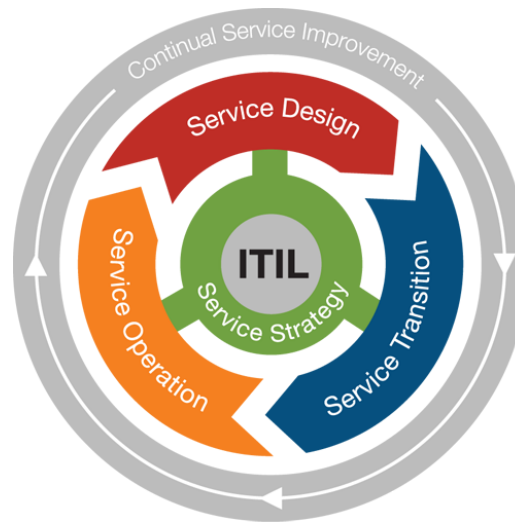


Figure 13. Information Technology Infrastructure Library, framework.

As shown in Figure 11, ITIL is a very comprehensive continuous service improvement framework. And its main focus is on the processes. However, at the same time it is leaving out one very important part of the equation, the organization itself.

ITIL is a very thorough framework and many companies have learned it the hard way how easy it is to get carried away by all the small details what ITIL offers. This often results in implementations that are just the opposite of their purpose. If ITIL is taken too slavishly, the whole idea of the framework can be lost and there is a danger that overwhelming bureaucracy can actually turn against itself and jeopardize efficiency and kill all the innovation and creativity. Similarly, the implementation of ITIL, committed to all principles, can also increase the organization's costs more than it saves.

In *Lean*, the core idea is to maximize the customer's value, with less resources while minimizing the waste in processes. However, the idea of lean is not just for reducing development cost, it is a fundamental way of thinking and acting throughout the entire organization to truly create value together with customers. It is important to understand the customer value in co-creation. Consumers can directly participate in a mechanism where companies can increase value-added activities and reduce value added. Experience generates value together, because value is defined for its beneficiary. Reducing waste from the entire value streams enables creating processes that require less human work and less time to design new products and services.

*Six Sigma* is a method which uses qualitative and quantitative techniques that enable organizations to improve their business process capability by reducing variation in processes. With this increase in performance and the reduction of process fluctuations, improvements will lead to a reduction in the risk and to increase the quality of processes, the morals of employees and the overall quality of products or services. Six sigma sees all tasks as processes that can be improved by defining, measuring, analyzing and controlling them. The fundament is, if you can control the process input, you can control process outcomes as well. Six sigma uses many methodologies, but the most famous is *DMAIC*, Define, Measure, Analyze, Improve and Control. However, the demarcation between Six Sigma and Lean has blurred, because efficient process improvement requires both of these approaches in order to achieve reasonable results.

*Kaizen* is a really comprehensive and holistic philosophy that focuses on improvements to all parts of an organization through the standardization of production processes. Personal level Kaizen can help people improve their way of working by removing waste from their work. At organizational level, Kaizen involves people at all organizational levels and it can be an effective approach for teams. Similar to Lean and Six Sigma which can be used together, Six Sigma and Kaizen can be used together as well, and they are often used together for process improvement, as they both are aiming to increase efficiency and reduce waste from processes. It is still important to understand the philosophical difference between these two. With Kaizen, the already mentioned extensive involvement can help to improve morale and satisfaction. In addition, it can decrease production costs and increase overall effectiveness. Small changes can have a great impact on continuous improvement.

*Total Quality Management (TQM)* is a holistic and structured approach to organizational management, aimed at improving the quality of products and services through continuous refinements by leaning to continuous feedback.

*Plan Do Check Act (PDCA)* philosophy was introduced in 1950's by W. Edwards Deming (Sokovic et al. 2010). It is based on principles that reduce errors in the manufacturing or service process, increase customer satisfaction and enhance supply chain management to modernize processes. Deming summarized this concept by his famous PDCA cycle, which is shown in Figure 10.

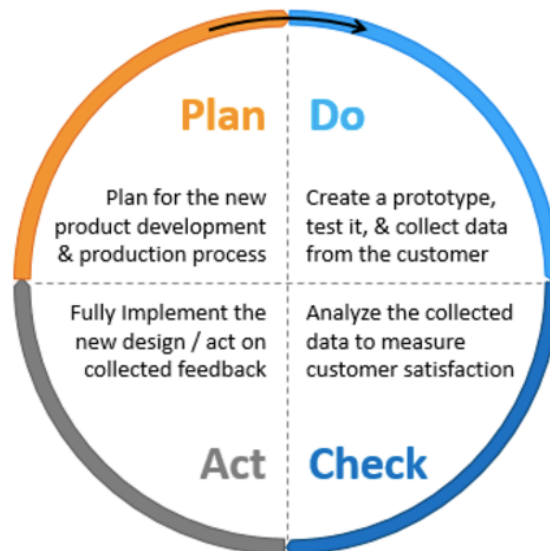


Figure 14. W. Edwards Deming's PDCA cycle. (Sokovic et al. 2010).

As illustrated in figure 10, there are four different stages in the PDCA cycle. There are multiple variations and definitions of what these different steps include, but in the end, they all have more or less the same overall ideas.

*Plan* phase defines a business problem, collects relevant facts and information, and tries to understand the root cause of the problem. The overall solution is developed and implemented in the *Do* phase. In the plan phase the objectives and goals are set to improve or develop the tasks and tasks are described in detail with clear specifications and deadlines. Also a team should be established that is part of the PDCA. In a *Plan* phase, this approach defines the scope, the information to be used, the resources needed, the expected costs, the risks and mitigating steps, the required workforce and the support needed from the management. Continuing to visualize the implementation plan according to each task, owner, expected outcome and guidelines.

*Do* phase, implements all tasks according to the implementation plan. By follow the timetable as well as the metrics used to evaluate the solution and emphasize any major concerns and variations and keep the stakeholders up to date with progress.

*Check* phase, ensures that the results are confirmed before and after the implementation and whether the result was planned and designed. All changes, errors, best practices, scopes and challenges will be marked. If issues occur, the causes of problems will be identified.

In the *Act* phase possible errors are fixed to make improvement meet the requirements. Then the results are documented and reported, and recommendations are made to improve in the next PDCA round. These four steps will be repeated until all goals are met to a satisfactory level of interest.

Using PDCA provides a standardized method for continuous improvement that companies can use in any department to solve new and recurring problems. It also prevents wasting time on implementing ineffective or bad solutions. But it also involves people in teamwork, brainstorming and problem solving. This enables internal problem solving and removing obstacles, and saving the company's resources, time and money.

All of these different methodologies and methods can be combined together and the organization can use whichever suits the specific use case the best. In the end all of these approaches have the very same objective, to improve processes and overall customer satisfaction. Whatever methods or approaches are used, improving processes and increasing customer co-creation requires organizations to internalize the ultimate intention of customer-centric approach. Service organizations should adopt customers processes and adjust its own processes to fit into these (Grönroos 2015).

#### 4.7 Conceptual Framework

As discussed in the preceding subsections, the case business unit is lacking customer involvement and engagement in its existing service development and delivery processes. According to the findings of the current state analysis, this study has reviewed existing literature and knowledge around relevant concepts and practices and observed key elements of *customer engagement*, *cross-organizational collaboration* and *process reengineering*.

The conceptual framework of this thesis is going to serve as the foundation for improving the processes at the case company for improved processes. Proposed improved processes use tools from different methodologies and approaches, discussed in the preceding subsections. For better customer involvement processes Lean, Six Sigma, Kaizen and PDCA methods could be used.

Figure 14 illustrates the conceptual framework of this thesis.



Figure 15. Conceptual framework of this thesis.



Figure 14 illustrates the three main areas identified, i.e. *customer engagement*, *cross-organizational collaboration* and *process reengineering*.

According to existing knowledge in section 4, multiple tools for customer *engagement* and better involvement were identified. One central concern raised was listening to the customers and the *feedback* what they are committing. When customers feel that they are heard and that they have the possibility to influence, it will increase customer *commitment* to continuity and deliver even more insight. This results, with time, in loyalty and partnership. (Fitzsimmons 2011)

The second area identified is *Cross-organizational collaboration*. According to the interviews, both internal customers and own employees indicated that there is a clear gap in communication and interaction between business units, but also within a case business units departments. Both parties indicated the need for a structured way of collaboration to lean on when developing and customizing customer specific processes.

These findings lead us to the last area identified, *process reengineering*. When designing or reengineering processes, there is a danger right at the first place to get lost in processes and once again forget the customer. Also the case business unit is trying to develop its operations towards *Lean* and agile way of working, where processes are almost a curse word. However, a service provider needs many processes and KPI's for measuring its operations. Therefore, this thesis proposes some improvements to the existing processes at the case business unit.

## 5 Building Initial Proposal for the Improved Service Design and Delivery Processes

This section focuses on building an initial improvement proposal by combining the findings from the Current State Analysis and Best Practices established through the conceptual framework. The objective is to propose improvements to the service design and delivery processes of the case business unit. This initial proposal is conducted in collaboration with the case business unit's service design department and with the case company's internal customers. This section is divided in three different subsections describing the proposal building steps and finally a summary of the initial proposal.

### 5.1 Overview of the Proposal Building Stage

An initial improvement proposal was conducted together with the case company's key stakeholders and internal customers, i.e. the case company's other business units. The proposal building was conducted in five different steps. First, the improvement proposal discussed increasing transparency in service development and service delivery. Second, the improvement proposal discussed co-creating comprehensive solutions to customers rather than separate and isolated services. Third, the improvement proposal focused on cross-organizational collaboration between business units, but also within the case business unit. As the fourth step, the improvement proposal discussed the importance of service catalogue and findings related. And the final fifth step of the improvement proposal discussed and visualized the improved service development and service delivery processes.

As revealed by the Current State Analysis, the case business unit has increased its customer centricity already and has taken some steps on this road. This section discusses *Customer Engagement*, *Cross-organizational collaborations* and *re-engineering service development and delivery processes* findings by providing actual co-created practices and actions. These can then be implemented in the service development and delivery processes and operations.

Building the initial proposal was conducted collaboratively with key stakeholders and internal customers by interviews and workshops. The objective was to discuss the weaknesses and try to find solutions to these and then create a proposal based on the findings. According to the interviews in the CSA, Data 1 phase, internal customers tend to

share the common understanding that they want to step in to the customer's role and they want to be treated and served as customers. There is a pitfall in this. It is really important to understand the difference between delivering services to customers and co-creating and developing services with them! The question is how to get customers interested and involved in service development.

## 5.2 Findings of Data Collection 2

Data 2 Workshop was conducted together with service design department employees and service delivery managers. Internal customers could not unfortunately attend this workshop due to scheduling challenges. However, a second workshop was conducted separately with two internal customers. Data 2 was gathered based on Data 1 and the conceptual framework built for this thesis. The findings from the CSA and CF, and the comments and recommendations from Data 2, are listed in Table 3 and discussed in the following section.

## 5.3 Increasing Visibility and Transparency Over Business Units and Departments

Both Data 1 in the CSA and Data 2 indicated that internal customers have very limited or no visibility at the case business unit's activities. Additionally, DATA 2 revealed that there is also a lack of visibility within the case business unit, between the activities of its departments and development roadmaps.

There is plenty of information and documents available, but the challenge is that there is no organized or structured way to distribute information across the business units and not even within the case business unit. There are too many different systems which are used to store information. Therefore, the first step to achieve better documentation structure is to nominate the accountable for internal documentation and related activities, who is responsible for creating a documentation strategy and implementation plan. The plan should include structure, what data is stored in which system and in which format, who can access the data and so forth.

Customers need to have visibility to their service orders and requests. The case business unit is using Service Now on its service delivery operations, which offers out of the box options to let customers view their own service requests. The case business unit should

enable customers to access Service Now to follow their own requests. There is also the need to enable Service Now to send reminders to customers from service requests, which have waited for customers' actions too long. SDM's indicated that there are multiple service requests that are waiting for customer input and manual backlog updating wastes resources. After a few reminders, requests should be closed automatically with closure information.

*“Process visualization would help to understand processes in organizational level” (Respondent 3, Appendix 1)*

The case business unit has founded a PPM department and has started to utilize a physical Kanban in its development projects. This has been done in order to bring the customers to the same level of understanding on what different initiatives and projects are going on, what the business impacts on these are and how customers' own needs and requests reflect on these others. They need to have a similar holistic view of the big picture. An electronic version of Kanban is needed, with business value canvases. Figure 16 illustrates stakeholders suggestions from workshops.

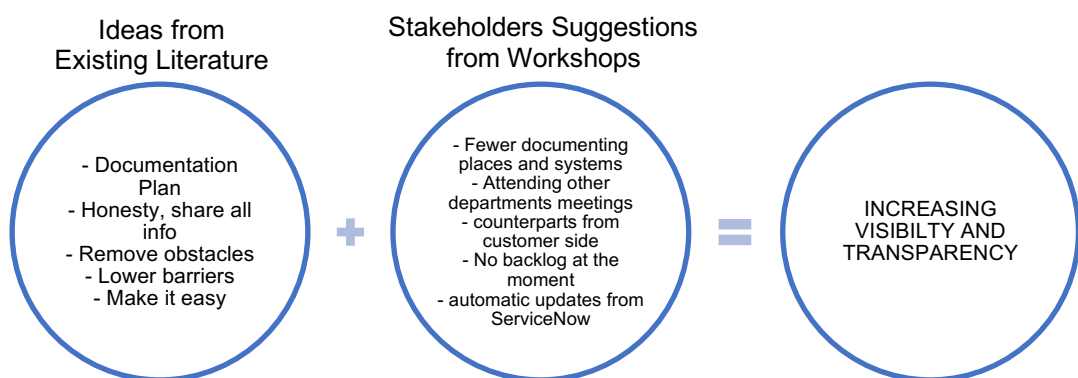


Figure 16. Enabling transparency.

As shown in Figure 16, multiple actions were proposed to be taken in order to increase customer visibility and transparency, but also to increase transparency within the case business unit. It is important that designated persons are appointed to take the responsibility for the decided actions, with accountability for each specific area. Also it is important to define key performance indicators, how to measure these and what the timeframe for actions is and what the success factors are.

#### 5.4 Building Comprehensive Solutions Instead of Isolated Services

The case company's different business units have different areas of expertise and many of these business units do not possess technically oriented employees, for example marketing people. Therefore, some customers have indicated that they have their own business challenges, key focus areas and KPI's, which to follow, and that they do not necessarily have time, the competence nor the resources to order services from the case business unit. As in this case customers have to act as their own project managers managing the case business unit's separate departments and tasks. A general trend was that customers required more comprehensive service solutions from the case business unit to their business challenges. Furthermore, because internal customers do not necessarily have this substantial competence, the case business unit should proactively approach its customers, listen to what customers have to say and truly identify what customers want to achieve in their own businesses. Then conduct a value research to identified lead customers, and the design solutions in co-creation based on identified challenges.

A second notable thing with this is that the case business unit needs to "sell" new ideas and perspectives proactively to its customers, who do not necessarily even know all the technological possibilities that are available. Taking this active solution designer role will create more suitable solutions to all parties, rather than deliver only individual services what customers have ordered.

The case business unit has changed its organizational model so that each internal customer has their own dedicated delivery department. While this study gives a generalization of improved service development and delivery processes, each and every customer facing department needs to adjust their processes to adapt to their customers' processes.

While each of these delivery teams or service platforms department is developing new services, these need to be documented in the earlier mentioned standardized way and then stored into a *Service Catalogue for repeated usage* to other customers. And again, all of these areas require owners.

## 5.5 Co-creation and Cross-Organizational Collaboration

For improving *Co-Creation and cross-organizational collaboration* between business units, for the case business unit, several improvements were identified and proposed as depicted in Figure 17.



Figure 17. Improving co-creation and cross-organizational collaboration.

As listed in Figure 17, topics emerging from existing literature for improving cross-organizational collaborations include, for instance, the need for a *communication plan* in order to achieve a structured and managed way to communicate and help with its implementation via *Organizational network analysis*. And as the case business unit needs to make a fundamental shift in its customer centricity, it needs to absorb the *Outside-In* ideology to proceed beyond its existing services. To get guidance in this path the case business unit needs to *Analyze gathered feedback*.

On the other hand, stakeholders expressed a need for several improvements. According to them, internal collaboration requires *Reoccurring Backlog meeting*, for continual knowledge share. Employees indicated that it is easier to attend meetings when there is recurrence in their calendars for such a meeting. There is also a clear need to *Focus on the case business unit internal CRM*, for developing the case business unit internal customer relationships between departments. The last item in this list is *Require counterparts*, which means customers need to nominate counterparts for continuous communication.

First, collaboration starts with a good *Communication Plan* which then needs to be clearly communicated throughout the case business unit. The plan needs to be made collaboratively with all relevant parties. There needs to be someone who is accountable for monitoring and measurement of all the related actions. *Organizational Network Analysis* could help mapping relevant parties in organization via whom and how the implantation could be conducted.

Second, the case business unit has approached its business model, service operations and offering basically via *Inside-Out* orientation, where it has developed processes to serve the needs of the organization to provide services to customers. The whole fundament should be flipped the other way around to *Outside-In* orientation, where the whole process is approached as if you were a customer and looking in at the organization through a customer's eyes, enabling a process focused on the needs of the customer.

Third, gathering customer *feedback* is relatively easy, but *Analyzing the feedback* is a whole different thing. Customers need to be able to express their feelings and worries and they are entitled to become heard. The case business unit should review gathered feedback together with customers with supplementary questions, in order to understand what customers have to say.

Fourth, Service Delivery Managers indicted that there are a great deal of valuable information available, but it is hard to find time in the calendar to attend different department info's on an ad-hoc basis. Therefore there is a need for *reoccurring inter department backlog meeting*, where the current status is shared regarding each department. One suggestion was that all team and department meetings could be public, so anyone can attend online as a muted participant, if so desired.

Fifth, the case business unit needs to focus also on its internal customer relationships. There are several customer relationships within the case company. For example Service Platforms is the supplier for Service Delivery and so on. These internal customer relationships need to be handled with the same intensity as the case company's internal customers and externals customers.

Sixth, in order to enable collaboration, internal customers need to nominate required counterparts for the case business unit's personnel at all levels. The VP needs to have the right contacts to every direction, SDM's need to have proper counterparts from their

customer's business unit and also specialists need correct counterparts in order to create relationships as it has been proven that personal relationships will lower communication barriers and enable collaboration.

And finally, history has shown that shared responsibility is no one's responsibility. Thus, in order to make sure the planned activities are going to be implemented and measured, all activities need to have someone who is accountable for their own area.

## 5.6 Initial Proposal for the Improved Service Development and Delivery Processes

The original service development and delivery processes were lacking customer participation during the processes. During Data 2 phase, this study also found that the case business unit internal collaboration between departments was lacking behind. Based on the findings during the study, the processes were reengineered from the customer involvement point of view as shown in figure 18. Rather than focus on process reengineering itself, the researcher preferred to put more value on kept customer value and customer centricity. Therefore, there was no intention to reengineer the processes themselves, but just to add customer centricity into the processes.

Figure 18 illustrates reengineered processes.



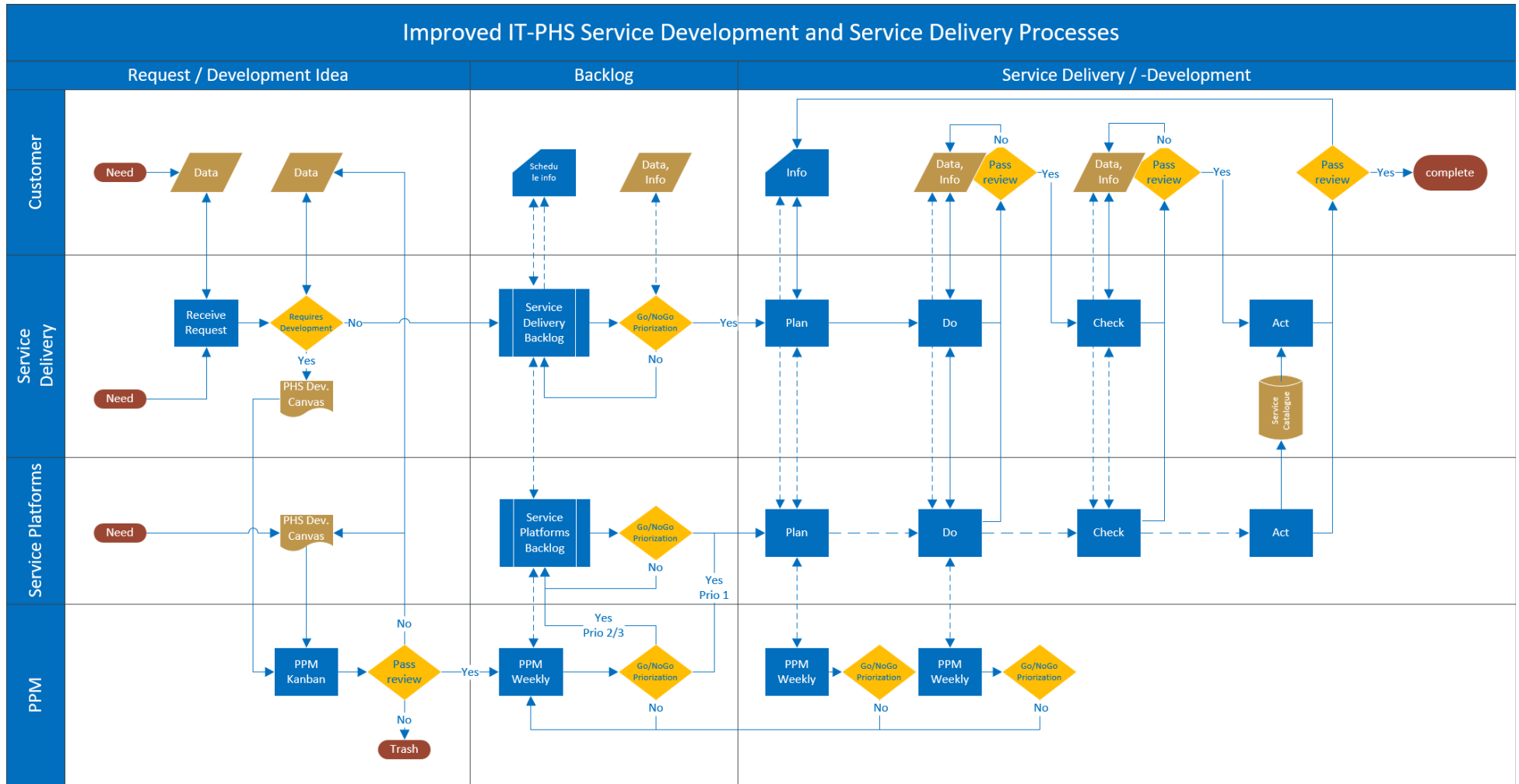


Figure 18. Proposal for the improved service development and service delivery processes.

As seen in Figure 18, the customer swim lane is now populated with customer faced actions and activities. At the beginning, receiving the service development request, customers are involved in the valuation to give their input of their perceived business value of the request. Next, the request moves to Service Delivery, Service Platform or PPM backlog. In each backlog queue, requests are evaluated against each other regularly. Customers are involved in this process and they have the possibility to give their input to the evaluation process. The evaluation process is totally transparent as the customers are company's internal business units. It is even desirable to provide full transparency to each other's requests. This might even bring additional value and synergy, when different business units can identify each other's activities.

Moving from backlog to development or delivery, the first thing, customers are informed about initial schedules. More important project resources are allocated and counterparts are required from customers side. This is a crucial part in order to create any kind of collaboration or co-creation. Collaboration cannot be generated unilaterally. Then the request continues to the Plan phase. This is so even though customers have already done some initial planning during the request phase. The case business unit is bringing its own insight at this phase and designs together with the customer a proper comprehensive solution to fulfill the customer's specific needs. After the solution plan, the project continues to Do phase where the solution is implemented in small iterative steps along with the customer. This way the customer can immediately take corrective action, if the designed solution is not what was intended. All incremental implementation steps are tested and approved by the customer along the project through the Check phase. Depending on project or delivery, the Act phase might not be needed if the full scale solution is already completed during the earlier phases, but if not, then the project continues to Act phase for full scale implementation.

If the service request cannot be fulfilled with existing services, the request continues to the Project and Portfolio Management (PPM) department's Kanban board. This is a physical board located in the case business unit's premises and it is available to all case business unit's employees. But due to the security requirements at the case company's business premises, internal customers do not have physical access to this Kanban board. Therefore the Kanban board needs to be made available to internal customers, preferably electronically, for example via service desk software or company Intranet.

The first evaluation of a development request is done on the Kanban board, where internal customers might be needed to give their more specified information about requests, in order to make prioritization and decisions between requests. If there is no business value, requests are eliminated at this point. Validated requests continue to the PPM backlog, where they are evaluated regularly. In this step it is also very important to organize a reoccurring backlog meeting with internal customers. In this meeting, they can once again express themselves and share their business requirements, when prioritizing requests. This way the case company can ensure that it prioritizes and chooses the most valuable projects companywide.

During implementation, the development process steps mimic delivery process customer involvement steps and customer touchpoints are the same. It is notable that in this case the customer might be the case business unit's own other department or the case company's internal customer. When something new is developed during the processes, new services need to be modelled by a pre-agreed standardized way and inserted to the service catalogue for repeated use.

To summarize briefly, the improved service development and delivery processes are enabling the case company's internal customers to be better involved in the processes, and most importantly bring their own insight and view of their perceived business value of requests.

Next, the thesis proceeds to validating the proposed improvements. In Section 6, the improvements proposed herein are evaluated by key stakeholders.

## 6 Validation of the Proposal

This section describes the validation of the initial proposal of the improved service development and delivery processes. The data collected in this phase is referred to as Data Collection 3. First, this section describes data 3 collection. Second, the final proposal is built based on feedback from the participants in data collection 3. Finally, the proposed next steps of implementing the improvements are discussed.

### 6.1 Overview of the Validation Stage

The proposal validation was conducted in two stages and the objective was to gather feedback on the initial proposal for corrections and adjustments. Furthermore, according to the feedback gathered from the case business unit's board of directors, the implementation plan required adjustments to create the final proposal. First, two one-to-one interviews were held with internal customers. Second, a workshop was conducted with the case business unit's board of directors. The initial proposal was introduced for the final approval. All initial proposed items were discussed in detail. The initial proposal divided findings in three categories and this section follows the same logic.

### 6.2 Further Developments to the Improved Processes Based on Feedback

Based on the feedback gathered in the workshop (Data collection round 3), all the improvements that were proposed in Section 5, were perceived as relevant improvements for the case company. The steering groups and directors considered all of them important issues and a few of them with higher prioritization. The following subsections discuss these one by one.

The reason behind two evaluation rounds was to achieve a thorough analysis of the proposal to ensure the relevance of the proposed improvements. The data collection 3 attendants, customers and board of directors, were new to the initial proposal. consequently, they brought a totally new angle and point of view to observe and evaluate the initial proposal to give their feedback.

### 6.2.1 Increasing Visibility and Transparency over Business Units and Departments

For increasing visibility and transparency between different business units and departments, there were many topics in the initial proposal as illustrated in Figure 19.



Figure 19. Increasing visibility and transparency over business units and departments (based on feedback).

As illustrated in Figure 19 a few topics with higher priority and higher expectations of value were picked into the final proposal. These include *Create Documentation plan*, *Consolidate documenting places*, *Standardize documentation* and *Create Customer Portal*.

*Create Documentation plan*, was considered to be one of the most important things during a journey toward better customer satisfaction. The case business unit did not have a proper documentation plan at the beginning of the study. However, the situation around documentation has actually changed already during the study. The documentation program has started and the program has dedicated resources with defined roles and responsibilities. A new employee was hired to be responsible for this area. Current documentation did not have any standardized format or place to store it, and therefore the data was hard to find. The documentation program includes steps to *consolidate existing documentation places* for easier access to relevant data. With standardization and predefined structure, all specific information can be found in a predefined place and format.

The last proposed area was to create a *customer portal* for internal customers. Even though existing systems could be exposed to internal customers fairly quickly and easily,

it was considered, according to customer interviews and internal discussions, that these systems are too complicated to be exposed to customers as is. The case business unit have already made some initial tools and a portal to itself. And the proposal from board of directors is to breed these existing tools and portal, and expand their usage to internal customers.

### 6.2.2 Building Comprehensive Solutions Instead of Isolated Services

For building more comprehensive solutions instead of isolated services, the case business unit needs to evaluate the existing services in its portfolio and service catalogue. Currently some of the existing services do not fulfill customers' needs and therefore these should be either removed from the catalogue or totally redesigned. When updating the service catalogue the customers' voice should be heard based on the outside-in philosophy.

### 6.2.3 Co-creation and Cross-Organizational Collaboration

For improving the co-creation and cross-organizational collaboration there were also multiple corrective actions to the initial proposal as illustrated in Figure 20.

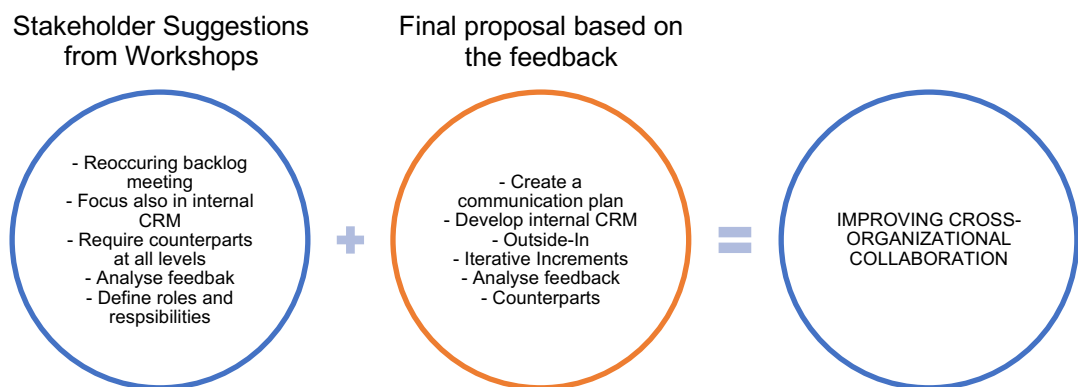


Figure 20. Co-creation and cross-organizational collaboration (based on feedback).

As illustrated in Figure 20, according to feedback gathered in Data collection 3, the most essential step is to create a comprehensive *communication plan*. Then the case business unit needs to focus more on its *internal collaboration* between departments. It is equally important to make the overall fundamental shift from inside-out thinking to *outside-in*

*thinking* and go to the customers and truly understand what customers have to say by *analyzing the customer feedback*. Of course collaboration cannot be created unidirectionally, therefore customers need to be engaged and *counter parts are required* in all levels.

The first action, *create a comprehensive communication plan*, was placed on the highest priority. The board of directors saw that there is an urgent need for creating this plan, as there are currently no guidelines regarding how and on what to start developing the documentation. As proposed, the development director was nominated to be responsible for creating a communication plan.

The second action is about improving the case business unit *internal collaboration*. This thesis focused originally on the case business unit's collaboration with other business units. The study however revealed during data 2 collection that the business unit's internal collaboration was not in good shape either and there was a need to improve this as well. The Head of Service Platforms and Head of Service Delivery was nominated to create a plan to improve collaboration between these two internal departments.

The third focus area is to change the overall approach *from inside-out thinking to outside-in* to really understand the customers and to create solutions what internal customers need to operate their own businesses. The case business unit needs to take a fundamental step in its operations and change its mindset to outside-in thinking. One step to achieve this is that the case business unit needs to *analyze the customer feedback* with thought, to understand what customers are actually doing and what they are trying to achieve in their own businesses.

The fourth action is *require counterparts in all levels*. Customers should not be pushed, but collaboration cannot exist in unidirectional communication either. The case business unit needs to require accountable counterparts in all levels from its customers. The top management has this channel already by and large, but the same approach needs to be implemented into all levels throughout the entire organization. While customers are asking comprehensive turnkey solutions, these are always somewhat unique and require a lot of collaborative development and co-creation. This cannot be achieved without mutual commitment and understanding.

### 6.3 Summary of the Final Proposal

As for the summary and recommendations to the case business unit, an action plan needs to be created for the proposed improvements. The action plan should include guidelines for implementations as well as more specific roles and responsibilities within the business unit, but also from internal customers as well. It is also recommended to nominate a customer experience manager whose responsibility is to continue to drive outside-in customer centric fundamental thinking, as well as responsibility for the related actions.

In summary, the final proposal of improved service development and delivery processes consists of multiple incremental improvements which were all approved with minor changes. The reengineered processes were completed as shown in Figure 21.



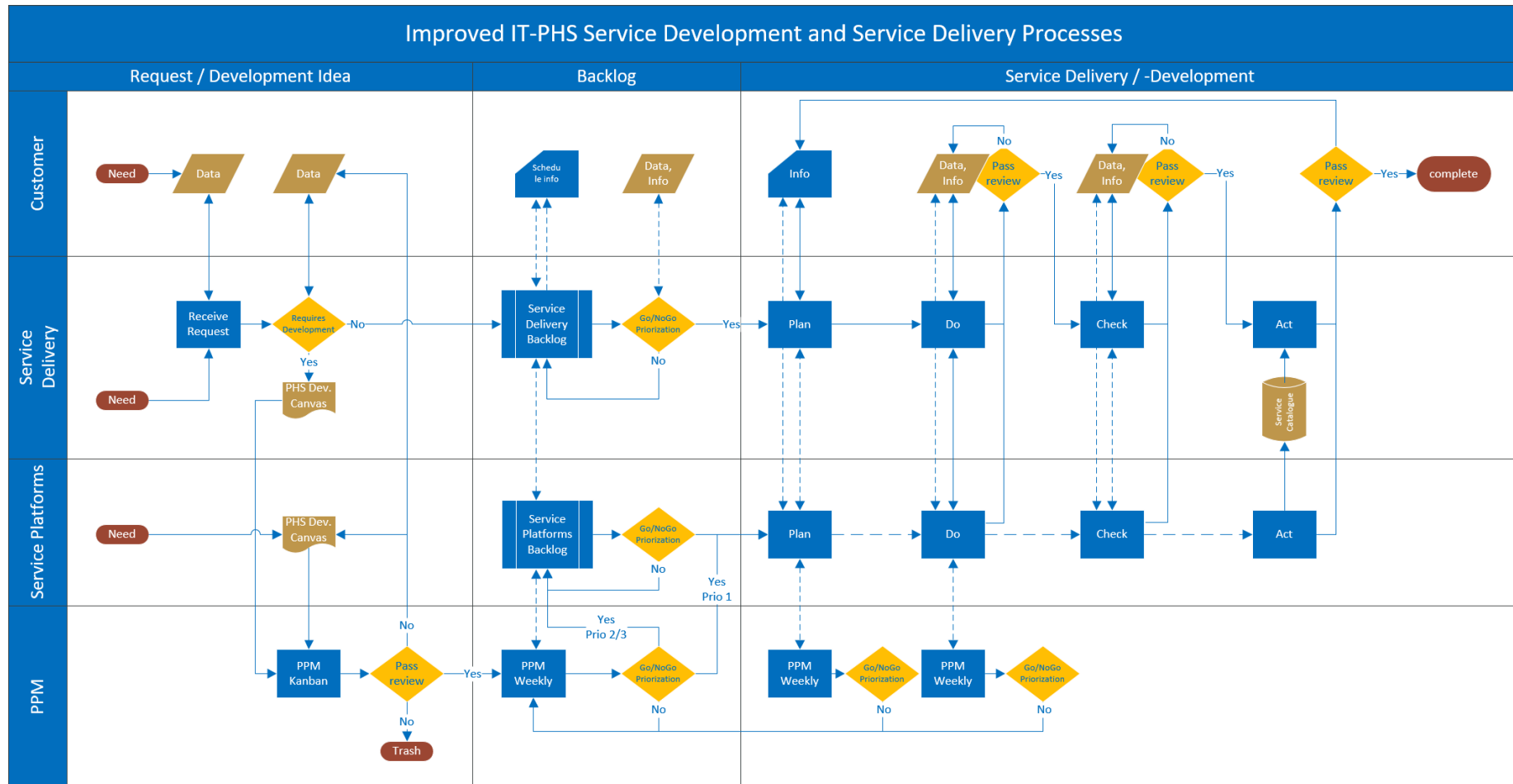


Figure 21. Final proposal for the improved Service Development and Service Delivery processes.

## 7 Conclusions

This section summarizes the outcomes and conclusions of the thesis, starting with an overview and an executive summary of the thesis. It then continues to the evaluation of the thesis, including a comparison of the objective vs. outcome and assessment of the reliability and validity of the thesis.

### 7.1 Executive Summary

To deliver superb customer services and experience, companies need to have their internal processes and customer relationships in order. In general, it has been perceived that companies can deliver just as good customer services as they do internally have between their organizational parties. The case company of this Thesis has put a great deal of effort in its end customers and their journey and experience. But at the same time, internal collaboration between business units, i.e. the case company's internal customers, have not been given very much attention. Consequently, the objective of this thesis was to improve the case company's one essential business unit's service development and delivery processes, to take better into account the case company's internal customer relationships and customer needs.

This study started by analyzing the current state of the existing processes and practices in the case business unit. The research approach used in this study was action research. Qualitative data was collected and used during structured interviews and workshops analyzed in three different stages. The current state analysis identified multiple strengths and weaknesses of the current processes, with a few areas standing out in particular. These included lack of *transparency*, *collaboration* and *communication*, which all has led into *untrustworthiness* towards the case business unit. In other words, the current processes were lacking customer interaction. Therefore, this thesis focused on reengineering the current processes by adding previously unnoticed customer interaction steps into them. Co-creation and collaboration require also mutual interaction, and thesis therefore proposes creating a solid communication plan with required roles and responsibilities to ensure good long term results. Achieving this level of collaboration requires also paying close attention to organizational transparency. All organizational parties need to have effortless access to all relevant data, everywhere, anytime. Consequently, this thesis

proposed to build a solid communication plan, which includes exact responsibilities for each specific area.

## 7.2 Managerial implications

The outcome of this thesis is improved service development and delivery processes for the case company. As proposed above, both of these processes require further practical implementation steps in order to evolve and take better into account the internal customers and their needs in these processes. Moreover, it is crucial for the case company to create a comprehensive action plan with clearly defined roles and responsibilities for implementing the proposed actions.

1. To achieve a satisfactory level of transparency in all communications, a *communication plan* needs to be created and implemented.
2. Transparent communication needs to be supported with a solid *documentation plan*. Therefore, the documentation plan needs to be created and implemented.
3. Changing the whole service fundament from inside-out to *outside-in* is required as well as starting to develop and deliver comprehensive solutions regarding what customers need in order to operate their own businesses.

## 7.3 Thesis Evaluation

This study was conducted to research and identify solutions and actions for the case company to improve its capabilities to deliver better customer experience and end to end customer journeys, by focusing on the customer centricity of the case company's internal processes.

The aim of academic research is to provide reliable and valid results of the researched topic. This thesis focused on four research quality criteria to ensure validity, reliability, logic and relevance. According to Yin (2009), these or similar criteria are needed to ensure credibility of the research results. Following four criteria were selected to evaluate the research results of this Thesis.

*Validity* is in many ways the most important criteria in academic research, which typically means the authenticity of the data and correctness of the research instruments. Research validity increases when the researcher is driven by the data content and meaning, rather than his or her own opinions or experience of the researched topic (Yin 2009: 30-34). Validity is also improved by explicit and detailed description of the research design and techniques used for data collection and analysis, and solution building. These steps can reassure on avoiding researcher's bias and strengthen the trustworthiness of the construct and instruments selected.

In this thesis, validity was ensured by having the data well documented as field notes and also reporting the results from the data analysis in detail, also with direct quotes as illustrations of the data. Moreover, the data was collected from multiple different sources and thus the study relied on data triangulation. Data saturation was ensured by including enough stakeholders to obtain a satisfactory level of detail. The stakeholders were selected according to their roles in the process and also were able to review their input to ensure mutual understanding between them and the researcher, and for possible correction. The informants were selected from both internal and external stakeholders, and the observations from the processes discussed openly in the workshop and interviews, as well as the conclusions drawn from the existing documentation.

*Reliability*, which has also been defined among others as trustworthiness, believability and accuracy, is the key factor for credibility evaluation (Colepicolo 2015). There are some commonly adopted characteristics to define research reliability. Firstly, the research process should provide similar results if the research were repeated following the description of the research process (Quinton and Smallbone 2006 p. 105). Second, transparency is also one of the key aspects of reliability, which is visible for example in all research findings being linked to the data, as well as the data being accessible and visible to all stakeholders throughout the entire research process (Noble and Smith 2015).

In this study, reliability was ensured by making the research process and the data used as transparent as possible. All stakeholders had continuous access to all research data and they were kept up to date throughout the whole research process. However, stakeholders could have been involved even better by keeping regularly meetings together.

*Logic* as the third evaluation criteria involves the significance of ensuring the logical flow and constructs in conducting the study. Research logic basically means correct inferences and interpretation of the data and making sure that the results are sound (Business Dictionary 2017).

In this study, logic was ensured by constructing and tracking the stages of the research process in a sound logical way, and with validation of the final outcome and gathering all relevant results into a comprehensive integrity of one study. The research process started from identifying the business challenge which then helped define the research objective and developing a research design in advance. The research continued to the definition and analysis of the current state that guided the search for relevant knowledge and input from existing studies and best practice. The research provided the final outcome that was validated, with the logic of each step evaluated.

*Relevance* means, first of all, that research is in close relation to the identified business challenge and provides answers to it. It also means that research topics are logically connected and build on each other, creating a meaningful and linked holistic story line (Hjørland and Christensen 2002: 960-965).

In this study, relevance was ensured by involving the case company in identifying the business challenge and developing its research process, in line with company strategy. The research objective was formulated in close collaboration with the case company to ensure the best possible utility of the research findings and results.

#### 7.4 Closing Words

To be able to deliver comprehensive services and solutions, ones that truly enable customers to get their job to done, service providers are required to understand what customers are trying to achieve in their businesses. Both collaboration and co-creation are generally perceived to be good ways to approach these kinds of challenges. Mutually founded solutions include the customer point of view, which makes the solutions more comprehensive.

Furthermore, focusing on customer centricity and delivering comprehensive solutions to customers, the author of this study is enthusiastically looking forward to development continuation.

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<b>Data 1, for the Current state analysis</b>					
	<b>Participants / role</b>	<b>Data type</b>	<b>Topic, description</b>	<b>Date, length</b>	<b>Documented as</b>
1	Respondent 1: The case Production Unit, Development Manager	Face to face Interview	The case company CX approach and internal co-operation strategy. Existing service development process on the respondent's experiences. Experiences of current CX and customer involvement in service development process Questions in Appendix 2	Feb 12 <sup>th</sup> 2018 1,5h	Field notes and recording
2	Respondent 2: The case Production Unit, External consultant	Face to face Interview	The case company CX approach and internal co-operation strategy. Existing service development process on the respondent's experiences. Experiences of current CX and customer involvement in service development process Questions in Appendix 2	Feb 13 <sup>th</sup> 2018 1,5h	Field notes and recording
3	Respondent 3: The case Production Unit, Development Manager	Face-to-face Interview	The case company CX approach and internal co-operation strategy. Existing service development process on the respondent's experiences. Experiences of current CX and customer involvement in service development process Questions in Appendix 2	Feb 13 <sup>th</sup> 2018 1,5h	Field notes and recording
4	Respondent 4: The case Production Unit, Development Manager	Face-to-face Interview	The case company CX approach and internal co-operation strategy. Existing service development process on the respondent's experiences. Experiences of current CX and customer involvement in service development process Questions in Appendix 2	Feb 13 <sup>th</sup> 2018 1,5h	Field notes and recording
5	Respondent 5: Internal Customer, Business Unit 1, System Specialist	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
6	Respondent 6:	Face-to-face Interview	The case company services and service development.	Jan 2018 1h	Field notes

	Internal Customer, Business Unit 1, Project Manager		Latest experiences with the case company services and service development. Questions in Appendix 1		
7	Respondent 7: Internal Customer, Business Unit 1, Service Manager	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
8	Respondent 8: Internal Customer, Business Unit 1, System Specialist	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
9	Respondent 9: Internal Customer, Business Unit 1, System Specialist	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
10	Respondent 10: Internal Customer, Business Unit 2, Contact person	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
11	Respondent 10: internal Customer, Business Unit 2, Production Manager 1	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
12	Respondent 10: Inter internal Customer, Business Unit 2, Production Manager 2	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
13	Respondent 10: internal Customer, Business Unit 2, Solution Manager	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes
14	Respondent 10: internal Customer, Business Unit 3, Contact person	Face-to-face Interview	The case company services and service development. Latest experiences with the case company services and service development. Questions in Appendix 1	Jan 2018 1h	Field notes

<b>Data 2, for Proposal building</b>					
	<b>Participants / role</b>	<b>Data type</b>	<b>Topic, description</b>	<b>Date, length</b>	<b>Documented as</b>
8	Participants 6: SDM's, SD Department, Internal customer representative.	Workshop / discussion	Initial proposal building based on findings from current state analysis and literature	April 2018	Field notes
<b>Data 3, from Validation</b>					
	<b>Participants / role</b>	<b>Data type</b>	<b>Topic, description</b>	<b>Date, length</b>	<b>Documented as</b>
9	Respondent 8: VP, Head of Service Design, Head of development	Group interview / Final presentation	Validation, evaluation of the Proposal		Field notes

## The Case Business Unit - Research Interview

### TOPIC: Customer involvement and observation in the case company's service development process

#### Information about the informant

Table 1

<b>Name (code) of the informant</b>	
<b>Position in the case company</b>	
<b>Date of the interview</b>	
<b>Duration of the interview</b>	Xx min
<b>Document</b>	Interview field notes

#### Field notes

Table 2

<b>Customer participation in the case company's service development process.</b>	Who are your business units customers, in service development process?	
	Who are your business units suppliers, in service development process?	
	Does existing service development processes take customers enough account? Why? What should be improved?	
	What is your position in the current service development process?	
	How long have you been working with existing process?	
	Are you aware and familiar with other business units corresponding service development processes?	
<b>Existing process initiation</b>	How is the current service development processes initiated? By whom? <i>To where?</i>	
	What is the formal process for request handling? Describe? How requests are addressed and prioritized?	
	Is business value calculated and evaluated with customer? Your point of view? Your customer point of view?	
	How Go/No-go decision is made? By whom? Based on?	
	How are service development requests done?	
	Are customers' needs heard and met?	
	How would you develop process initiation?	
	Is CSA held? Who are the contributors?	

<b>Existing process flow</b>	<i>Are customers participating?</i> In what stages? Who? How? Are Internal stakeholders participating? In what stages? Who? How?	
	What are the customer touch points during process development?	
	Is feedback gathered continuously?	
	How would you evaluate the results, immediate and long-term?	
	How would you like information distribution developed during process?	
	How do you get to know if there is new features in SD process or services?	
	Are you satisfied of existing service development process? Why?	
	How would you develop existing service development process?	
<b>Strengths</b>	What are the key strengths of current service development process? (Insight, interaction, collaboration, participation, knowledge transfer, etc.?)	
<b>Weaknesses</b>	What are the key concerns about current service development processes?	
	If you feel that process was not successful, what were the reasons?	
<b>Documentation and tools</b>	Is there existing documentation available about service development processes? Your own department? Other business units?	
	What tools are used?	
	How would you develop existing process tools and documentation?	
<b>Analysis</b>	In which areas do you think there is space for improvement? In what way? How could that be done?	
<b>Best practices</b>	Does our company have some guidelines of how to involve customers in service development?	
	What best practice do you think the company should follow as for taking customers better account in service development process?	
<b>Development needs</b>	How could the case company increase customer satisfaction and overall customer journey?	
	How do you see your organization commitment in increasing CX?	
<b>To add</b>	What would you like to add that we have not yet discussed?	

## Customers Research Interview

**TOPIC: Customer involvement and observation in the case company's service development process**

### Information about the informant

Table 1

<b>Name (code) of the informant</b>	
<b>Position in the case company</b>	
<b>Date and time of the interview</b>	8.1.2018 1h
<b>Document</b>	Interview field notes

### Field notes

Table 2

<b>Background</b>	Tell briefly about yourself?	
	How would you describe your typical workday?	
<b>Using the case business Services</b>	How would you describe the case business unit? What the case business unit is to you?	
	How many times have you used PSH services in past six months?	
	What kind of situations you use the case business unit services?	
	How do you know when to contact the case business unit?	
	How do you contact the case business unit?	
	How satisfied are you about the case business unit services? Why?	
	What makes you dissatisfied? Why?	
	<b>Latest Experience</b>	What did you need from the case business unit? Why?
	How did you start with? Why?	
	Were there different phases in services? What kind of?	
	How did these different possible phases influenced in your own work?	
	What tools did you use?	
	How did you communicate with the case business unit? Why?	
	What went well in communication? Why?	
	What didn't work in communication? Why?	
	Were there different parties involved? Who? How?	

	What went well? Why?	
	What didn't work? Why?	
	Did you miss something in service? Why?	
<b>Weaknesses</b>	Could you name three key development areas in the case business unit services?	
	Is there something else what you like say to the case business unit?	



<p><b>Problem</b> Top3 problems</p>	<p><b>Solution</b> Top3 solutions</p>	<p><b>Customer Segments</b> Target Customers</p>
<p><b>Value</b> Why do this? What will be gained?</p>	<p><b>Cost</b> Work hours, fixed/variable €, etc.</p>	<p><b>Resources/Activities</b> Systems, people, actions that are known to be required</p>

PHS Development Canvas

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