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Future Trends of Service Desk

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<p>The goal of this thesis was to produce information about the future of service desks for the itSMF member organizations. The objective of this thesis was to find out what the trends of service desk industry are, when they are coming and what the impacts of the trends are. Another aim was to establish the requirements to implement the trends and the risks involved in doing so in the next three years.</p> <p>To achieve this an initial trends list was collected with the help of the itSMF Service Desk Evolution special interest group. Next professionals suggested by the SIG were interviewed on what they thought about each of the trends selected to find out the most relevant ones. After this information on the most relevant trends was gathered from various online sources and white papers in order to gain a deeper understanding of the trends. Finally the professionals were interviewed for the second time to find out their opinions on why the trends are coming, what their impacts are and what the possible risks in implementing the new practices are.</p> <p>All of the data gathered in the first and second interviews as well as from the different Internet sources and whitepapers was finally gathered to form a roadmap that shows when the trends are going to be implemented as well as information on how they will impact the industry and what the requirements and risks of the trends are.</p> <p>The benefit of this thesis for the member organizations is the fact that they can see the roadmap and the trend descriptions and envision how their service desk might look like in the future. This could help them develop their service desk further.</p>	
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<p>Tämän opinnäytetyön tarkoituksena oli tuottaa tietoa tulevaisuuden service deskeistä itSMF:n jäsenille. Työn tavoitteena oli selvittää, mitä kehityssuuntia service desk alalle on tulossa, milloin ne jalkautuvat, sekä mitä vaikutuksia näillä kehityssuunnilla on seuraavan kolmen vuoden aikana. Opinnäytetyössä selvitettiin myös vaatimukset muutosten toteuttamiseen ja niihin liittyvät mahdolliset riskit.</p> <p>Tämän saavuttamiseksi opinnäytetyön tekijät keräsivät alustavan listan kehityssuunnista itSMF Finlandin Service Desk Evolution Special Interest Groupin kanssa. Seuraavaksi työssä haastateltiin SIG:in ehdottamia ammattilaisia siitä, mitä he ajattelivat kustakin kehityssuunnasta, jotta niistä voitaisiin valita kaikista tärkeimmät tarkempaa tutkimusta varten. Tämän jälkeen tekijät keräsivät tietoa merkittävimmistä kehityssuunnista eri verkkolähteistä ja raporteista ymmärtääkseen ne paremmin. Lopuksi työssä haastateltiin alan ammattilaisia vielä toistamiseen siitä, miksi juuri nämä trendit ovat tulossa, mitkä niiden vaikutukset ovat ja mitä mahdollisia riskejä niiden jalkauttamisessa voi esiintyä.</p> <p>Kaiken ensimmäisissä ja toisissa haastatteluissa, sekä eri verkkolähteistä ja raporteista kerätyn tiedon pohjalta muodostettiin kehityspolku, josta selviää, milloin kehityssuunnat jalkautuvat. Tämän lisäksi työssä on jäsennelty tietoa siitä, miten kehityssuunnat vaikuttavat alaan ja mitkä ovat niiden vaatimukset ja riskit.</p> <p>Hyöty tästä lopputyöstä itSMF:n jäsenille on se, että ne näkevät työssä tehdyn kehityspolun ja trendi kuvaukset, joiden pohjalta ne voivat pohtia miltä heidän service desksä voisi näyttää tulevaisuudessa. Tämä voisi auttaa organisaatioita kehittämään service deskejään pidemmälle.</p>	
Avainsanat	Service desk, kehityssuunta, tulevaisuus, service deskin tulevaisuus

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List of Abbreviations

IT	Information technology means the use of computers to store, retrieve and manipulate data.
ITSM	Information technology service management means the policies, processes and procedures that are performed to plan, deliver operate and control IT services to customers.
itSMF	itSMF is an independent and internationally recognized forum for IT service management professionals and decision makers worldwide.
SIG	Special interest group means a community within an organization that aims to advance a specific topic important for the organization.
SWOT	SWOT is short for strengths, weaknesses, opportunities and threats. It is a tool that is used to form strategies and recognize problems.
BYOD	Bring your own device is a policy that allows employees to bring their own devices, for example phones or laptops, to work and use them to perform their tasks.
CYOD	Choose your own device is a policy that allows employees to choose the devices that they use for their work from a pre-selected list of devices.
ESM	Enterprise service management means implementing IT practices for other than IT related services all around an organization.
SIAM	Service integration and management is a method to manage multiple service suppliers effectively.
CMDB	Configuration management database is a repository that works as a data warehouse for IT installations. It holds data relating to IT assets and descriptive relationships between them.
SaaS	Software as a service is a software licensing model in which software is licensed on a subscription basis and is centrally hosted.

TCO	Total cost of ownership is a financial estimate of the direct and indirect costs of a product or system. It is often used to help decision making when buying solutions or systems.
SPOC	Single point of contact means that a single person or department is operating as the coordinator of a service or an activity.
FAQ	Frequently asked questions is often a web page that contains frequently asked questions and answers to them.
SLA	Service-level agreement is a standardized service contract where the service is defined.
CSA	Current state analysis is an analysis method used to define the current state of the researched topic.
CIO	Chief Information Officer is a job title given to senior executive responsible for organization's information technology and computer systems to support the organizations goals.

1 Introduction

This thesis carried out for itSMF is about the future trends of the service desk. itSMF Finland is a nonprofit organization whose goal is to provide help and information about best practices of IT Service Management (ITSM) to its members. Through this study, itSMF Finland wishes to focus on the future trends of service desk and the impact of these trends on business operations and in that way help its members constantly improve their operations and competitive advantage.

A service desk is a single point of contact (“SPOC”) between the company and its customers, employees and business partners. It is a primary IT service within the discipline of IT service management (ITSM). The purpose of service desk is to ensure appropriate help in a timely manner for those who need it. It handles service requests as well as incidents. An incident is an event that disrupts service availability or quality. Service request are routine requests that can be as simple as an employee asking to change his/her password. The difference between service desk and help desk is often confused. Service desk offers a broader range of service capabilities, solving problems in fewer steps and it enables integration of business processes into the service management infrastructure according to ITIL v.3. Service desk is also often described as a more customer centric version of help desk. (TSO, 2011: p.157)

The purpose of this thesis is, therefore, to gather information about the current trends of service desks and their impact in order to help itSMF Finland members to keep their service desk operations abreast with competition and future requirements.

The main goal of this thesis is to create a roadmap that shows the future of the service desk industry as the participating professionals see it. A further aim is to figure out the enabling factors of the trends, how the trends can be implemented and what the risks involved with the trends of the roadmap are.

1.1 Case Company Background

itSMF is short for IT service management forum. It is an international non-profit organization that consists of IT service management professionals and decision makers. Their

purpose is to promote and develop best practice standards of IT service management. itSMF Finland is part of itSMF International. The main goal of itSMF Finland is to promote cooperation, distribute information among members and to research IT service management. (itSMF)

This thesis is produced for the itSMF Finland Service Desk special interest group about the future of service desks. This special interest group is working on finding and recognizing the future trends that affect service desk functions in the future.

1.2 Business Challenge

For their members to constantly improve their operations and competitive advantage, itSMF wishes to determine future trends of service desks and how they will impact the business operation. The business challenge in this field for companies is to create a reliable and realistic description of future trends concerning the service desk operations and how the trends will develop during the upcoming years. One aim of this thesis is to identify what is going to enable these trends and how the companies in the industry will try to advance the development. The idea is to show the itSMF members the development roadmap and trend descriptions so that they can envision what their service desk might look like in the future. Based on this the itSMF members can hopefully improve their Service Desk operations in the future.

1.3 Objective and Outcome

The main objective of this thesis is to give a realistic view of the future of service desk for the member organizations by researching what the experts of the field see in the future of this business area. This will help the members to stay up-to-date with the rapid development of service desk industry and allow them to keep their competitive edge.

To get started, an Initial list of trends is first made with the Service Desk Evolution special interest group. This list is then fine-tuned based on the expert opinions in the current state analysis phase of this study. For the chosen trends a roadmap is made that shows service desk development with a timeframe of about three years into the future.

See Section 4 for the final list of the trends and Section 6 for the roadmap.

1.4 Scope and Structure of Thesis

The scope of this thesis is to find out what are the most relevant future trends for service desk industry in about three years into the future. This was decided so that the thesis has practical value and the trends are not too vague.

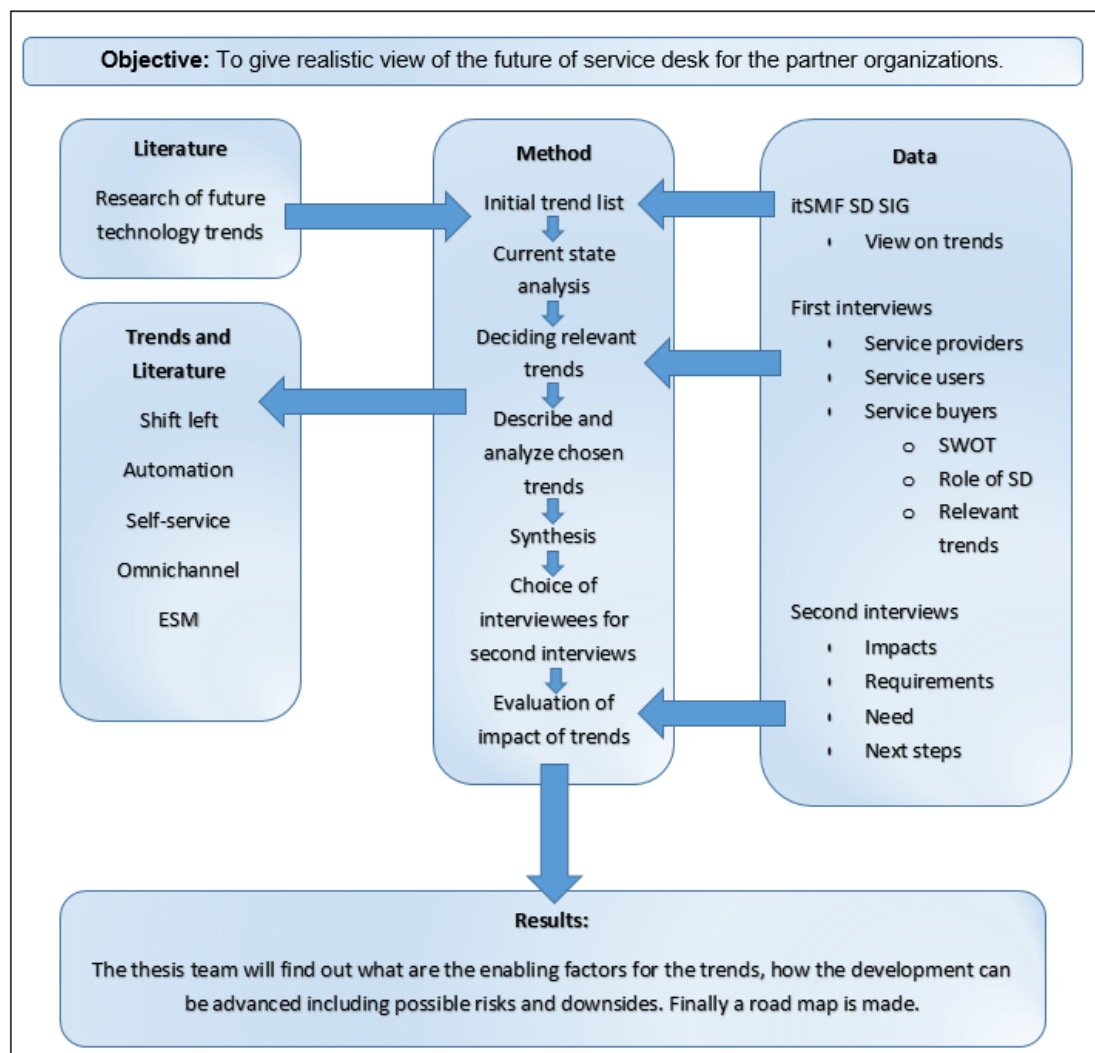
The first section of this thesis explains the subject of this thesis and the challenges that the thesis attempts to solve for the customer. It also describes the objectives and the scope of the thesis. The second section describes the execution of the thesis in detail and it also describes the expected outcome. It also defines how and from where the data and theory of the thesis is gathered. Section 3 goes through the results of the first interviews in detail. In addition, it introduces the interviewed companies, their SWOT analyses and their comments and views about the important trends. The most relevant trends from the initial trends list are selected based on this section. In Section 4 the trends chosen in the CSA in Section 3 are described in detail. The fifth section describes the second interviews and their results in detail. Section 6 contains all the results of this thesis. This section contains the roadmap of the future trends of the service desk industry and the conclusions based on sections three, four and five. In the last section the thesis is gone through step by step and the thesis team evaluates how the thesis succeeded.

2 Method and Material

This section describes the execution of the thesis in detail and also the expected outcome is introduced. It also defines how and from where the data and theory are gathered.

2.1 Progress of the Thesis

Picture 1 below shows how this thesis was carried out.



Picture 1 Research design

The thesis starts by studying different trends that can possibly change the service desk industry. The methodology of studying future is also investigated. This is done through online sources, e-books, whitepapers, blog posts and webinars.

Initial trend list is formed with the help of the Service Desk Evolution special interest group. Then short introductions for the trends are created. The short introductions for the trends can be found in Appendix 1. After this the current state of service desks is studied. The current state is composed based on the first interviews and their analysis. In the current state analysis SWOT's are created for each of the participating companies Service Desks to find out the similarities between them. The initial trends are also introduced to the experts to find the most relevant ones for further research.

The initial trends chosen are then analyzed and described in detail based on the first interviews. This part aims to answer the following questions:

- How important is the trend?
- How soon will it be implemented?
- General comments and thoughts about the trend

Based on this information the most relevant trends are chosen with the help of Service Desk Evolution SIG.

The second interviews are carried out to deepen the understanding on how the participating professionals see the trends and the impacts they will have. In the second interviews the aim is to get answers to following questions:

- How and on what it will impact?
- What are the requirements for the trend to be successfully implemented?
- How does the trend connect with other trends?
- Why is the trend coming?
- What are next steps of development?

The second interviews can be found in Section 5 and the results of the interviews are in subsection 5.10 in Chart 14.

Also two different scenarios are created and professionals are interviewed about how to improve the service desk from these points of view.

The scenarios are:

- How to pursue greater customer satisfaction in service desk?
- How to approach if service desk is facing a need to cut costs?

The results of the scenarios can be found in subsection 5.10 in Chart 15.

Based on this, a unified roadmap will be created to give clear picture of what the future will bring in the service desk industry.

2.2 Theory

Theory about the trends and how to research future trends are gathered from various sources. Websites and online articles offering professional points of view are used to learn about the trends. Also other studies about the subject are utilized. Theory on how to research future trends is mainly gathered from online articles and eBooks.

The theory is mostly gathered from online sources as there are not many books that tell about the future and especially the future of service desk. Also it can be pointed out that trends are usually thought out by forerunners so descriptions and information about them can be mostly found from blog posts, whitepapers and other online publications.

2.3 Data

Data for the thesis is mainly collected from interviews. The interviews are held with people with different views on the industry. Service providers and users/buyers are interviewed separately to get broader picture of the way the industry is advancing. The Interviews are held in two stages.

In the first interviews the professionals are interviewed about the current state of the service desk. Strengths, weaknesses, opportunities and threats of the service desk are the most important to identify, but the interviewees are also asked about how much their companies value their service desk. Trends are not discussed too much in these interviews, but a quick look at those is taken so that a picture of the preliminarily chosen trends relevance for the companies is figured out.

The object of the second interviews is to obtain a deeper understanding of individual trends and especially map out the impacts of the trends. The goal of the second interviews is to hear about ongoing projects the companies are doing to form a precise picture where the industry is going in near future.

itSMF Finland's service desk special interest group also gives valuable information, insights and views about the industry to be used in this thesis.

2.4 Validity and Reliability Plan

Describing the future is difficult and there cannot be a completely reliable and valid forecast of the future. The further in the future the forecast is made the more vague it will become.

Validity means that the making of the thesis is done in a way that the results are well-founded and realistic. To reinforce the validity of the research the research design was made. To ensure the validity of the research design it is done with the help Service Desk Evolution SIG. Also after each of the phases the SIG is consulted about the results in a meeting and the next steps of the research are decided. In the research design it can be seen that the interviews are planned to be done in two parts. First to make sure that the thesis is focusing on the right trends and the second to take a closer look at the most relevant ones.

Reliability means that the thesis is executed according to this well-made plan and enough high quality data is collected. The reliability is improved by using sources that are relevant and made by experts of the industry. The interviewees are suggested by the Service Desk special interest group. The aim is to interview the forerunners and service desks that are more developed. Experts of the industry are interviewed to ensure the data gathered from the interviews is not outdated or irrelevant. The reliability of the end results is secured by collecting enough data that is relevant to make conclusions.

To get enough interviews all the willing professionals are accepted so the reliability suffers from not having all the forerunners of the industry. This problem is countered by following the research design precisely and having high quality interviews with precise questions and documentation.

In the thesis many service- and solution providers are interviewed and it is very important to keep in mind that they might have their own intentions in the interviews. Critical mind-set towards the information found out in those interviews is maintained. It must be kept in mind that the service- and solution providers cannot affect the results of the thesis by promoting their product or their thinking.

2.5 Methods Used

The following methods are used in this thesis.

2.5.1 Interviews

Interviews are used in the thesis to gather the SWOT, the role of service desk, deeper knowledge about the trends and their impacts. Qualitative interviews are used in the second interviews to get a deeper understanding of the trends.

A qualitative interview gives deeper insight into what an interviewee thinks. It gives the interviewee more room to expand the answers. In a qualitative interview the interviewee can express their feelings and experiences better. This makes the qualitative interviews more personal than quantitative interviews. This aspect can be useful during the thesis. Another good thing about qualitative interviews is that they do not follow a strict form and allow the interviewer to ask follow up questions. The only thing to consider is that qualitative interviews are time consuming.

“The aim is often interpretation and understanding of how and why, not 'fact-finding' or getting answers to questions of how much or how many “(Warren, 1998).

The interviews of this thesis can be found in Chart 1 below. The interviews are suggested by the Service Desk Evolution special interest group. The results of the current state analysis interviews can be found in Section 3 and the results of the in-depth trend interviews can be found in Section 5.

Current state analysis interviews				
Company	Name	Role	Date	E-mail/Face to face
Aalto university	Liisa Länkä	Manager of customer services	2.12.2015	E-mail
Metropolia UAS	Mikko Mäkelä	Service manager	23.11.2015	Face to face
University of eastern Finland	Marko Jäntti	Head of research	7.12.2015	Face to face
Efecte	Henri Jääskeläinen	Product manager	29.9.2015	Face to face
Efecte	Saku Sulander	Product manager		
ServiceNow	Mika Jämsen	Senior solutions consultant	16.11.2015	E-mail
Service provider A	-	-	11.12.2015	E-mail
Service provider B	-	-	4.12.2015	E-mail
Service provider C	-	-	9.12.2015	E-mail
F-Secure	Juuso Hämäläinen	IT services senior manager	24.11.2015	E-mail
Sanoma	Antti Kervinen	Head of service management	23.11.2015	E-mail
Symfoni	Juha Salmi	Senior consultant	30.11.2015	Face to face
Symfoni	Paula Määttänen	Senior consultant		Viewpoint: Customer stories
In-depth trend interviews				
Company	Name	Role	Date	E-mail/Face to face
Sanoma	Antti Kervinen	Head of service management	16.2.2016	Face to face
CGI	Kimmo Metso	Production director service desk	18.2.2016	Face to face
ServiceNow	Mika Jämsen	Senior solutions consultant	19.2.2016	Face to face
Tieto	Juhani Vuorijärvi	IT service enablement manager	29.2.2016	Face to face
Service Provider C	-	-	16.2.2016	Face to face
F-Secure	Juuso Hämäläinen	IT services senior manager	29.2.2016	Face to face
F-Secure	Kimmo Aren	Senior service owner		
Efecte	Aki Ylivaara	Senior solutions consultant	3.3.2016	Face to face
Efecte	Saku Sulander	Product manager		
Fujitsu	Janne Kalliomäki	Service desk director	19.2.2016	Face to face
Fujitsu	Juha Niemi	Operations manager		

Chart 1 The interviews

As seen in the Chart 1 13 people are interviewed for the first interviews and 11 are interviewed for the second interviews. The interviewees roles vary a lot but all of them are directly in contact with their company's service desk. The interviewees are contacted by email and for the first interviews they are allowed to answer by email. The second interviews are also contacted by email but the interview itself is carried out face to face.

2.5.2 SWOT

SWOT analysis is a technique used in this thesis to describe the current state of the service desk.

SWOT analysis was originated by Albert S Humphrey in the 1960s and has been from the early days to now a very useful technique to understand the strengths and weaknesses and identifying open opportunities and the faced threats. (Mike Morrison, 2012) It allows the development by understanding the advantages of one and making use of

them. With a little thought it helps to uncover opportunities to exploit. Understanding the weaknesses of one makes them easier to manage. It also keeps you on record about the threats and so you can eliminate them and they will not catch you unaware. (Tim Berry, 2009)

Strengths and weaknesses are often internal to the organizations, while opportunities and threats are generally external factors.

This method is used in this thesis to collect and analyze data.

2.5.3 Roadmap

The final result of this thesis is a roadmap in the form of a timeline that describes when each of the studied trends will be implemented.

Roadmaps can be described as a view that shows mileposts from the current time to the future. It visualizes the development and it is extremely helpful to show what needs to be prioritized to achieve the vision in time. When creating a roadmap understanding of the current situation and what is the desired achievement is needed. Based on those, an analysis of the gap is made and the steps for getting there are decided. (Hubdesigns)

3 Current State Analysis

This section goes through the results of the first interviews in detail. In addition, it introduces the interviewed companies, their SWOT analyses and their comments and views about the important trends. The trends were chosen for this phase are based on the opinions of the Service Desk Evolution SIG and the complete list can be found in Appendix 1 with short descriptions.

3.1 Introduction to Current State Analysis

The point of this current state analysis is to see where the companies, that are believed to handle service desks well, are at the moment and how they are developing their service desks. It is also important to find out if the right trends are studied for the thesis. The current state analysis is carried out by asking for the company representatives to fill out a SWOT analysis of their service desk and to tell how they are developing their service desk. The interview also includes a part where the representatives are asked to tell how they feel about the trends that the Service Desk Evolution SIG sees as possible future trends. The complete interview template can be found in Appendix 2 and an example of the answers can be found in Appendix 3. The list of the trends discussed in this interview are:

- Shift Left
- Omnichannel
- Personalization
- BYOD/CYOD
- SIAM
- Crowdsourcing
- ESM
- Self-service

All the people who answer this interview are directly in contact with their company's service desk. The goal of this phase in the study is to contact companies that are considered to be handling service desk well in order to get the view of future oriented experts. The

companies that are interviewed are suggested by itSMF Finland's Service Desk Evolution SIG.

The companies can be roughly divided into four categories. These are: universities and universities of applied sciences, service desk solution providers, service providers and customers which includes both companies with internal service desk and those with outsourced service desks.

3.2 Interviewed Companies and SWOT Analyses

3.2.1 Aalto University

Aalto University is the largest university in Finland. It operates in three campuses in Helsinki and Espoo. They have around 4,600 employees and roughly 20 000 students. Around 150 of the employees are working in IT and their service desk employs about 50 people. Out of the 50 only 8 work in service desk full time and the rest are mostly higher level specialists rather than first level service desk employees. The service desk receives around 35 000 tickets a year and the customer support resolves roughly 70% of them. Aalto University's SWOT can be found in Chart 2 below.

The customer base in Aalto really respects the service desk work but inside IT they are only respected as long as they don't need to escalate the tickets to specialists who want to focus on their main work instead of resolving service desk tickets. The manager of customer services at Aalto University, Liisa Länkä, was interviewed for this study.

<p>Strengths Customer receives service when they want and they can choose from multiple contact channels and contact points. Capable to provide quick solutions and handle the problems at once. Close to the customer and well available.</p>	<p>Weaknesses Walk-in service uses a lot of resources and arriving on site takes time from customers (10% of cases). Phone service is not popular among service desk employees. For this reason the service is not advertised and used (12% of cases). English language is considered difficult in phone contacts. Also the fact that the call can come from any campus makes it difficult to find out the exact technical environment.</p>
<p>Opportunities Professional service desk service that is capable to handle over 80 % of service requests and problems. This reduces the resource need in on-site support and allows the specialists to focus more on service development and administration. The professional service desk employee also can find routine activities that could be automatized or prevented. Many contact channels.</p>	<p>Threats If customers need more support than can be provided there will be shadow support organizations that have just been gotten rid of. If the support is centralized to service desk it is vulnerable to absences and resources diminish. If the service desk is centralized information flow to service desk might not be good enough and service desk cannot fulfill its role properly.</p>

Chart 2 Aalto university SWOT

Aalto is constantly developing their service desk but they don't have a specific development plan for improving their service culture. Still they are about to roll out a number of improvements over their current service desk. Their goal is to move the ticket solving even more strongly to the service desk instead of the specialists. They are implementing a self-service portal and they encourage their service desk employees to use more remote control tools instead of going to different campuses for on-site support. They are also implementing a service management system which includes CMDB, problem management, knowledge management and chat to improve their processes. Service promises are also being defined to improve their service quality and consistency.

3.2.2 Metropolia University of Applied Sciences

Metropolia University of Applied Sciences operates in Helsinki, Espoo and Vantaa. They employ around 1100 people and the university has about 16 000 students. The internal service desk employs roughly 50 people and they receive about 13 500 tickets a year. Metropolia's SWOT can be found in Chart 3 below.

The service desk in Metropolia is highly respected inside and outside of IT. From Metropolia, Mikko Mäkelä who is the service manager at Metropolia IT services, was interviewed.

<p>Strengths Flexible and dynamic. Can help in wide variety of problems and provide in very different situations.</p>	<p>Weaknesses The flexibility of the service trough taking a lot of the employee's time. Metropolia service desk can help customers in almost any tech related problem. Rare and unfamiliar problems take a lot of time from the service desk employees.</p>
<p>Opportunities Growth in resources.</p>	<p>Threats Smaller budget. Inability to fulfill customer needs. Feedback being too positive leads to difficulties in development. How to recognize essential service if you need to save resources or money.</p>

Chart 3 Metropolia SWOT

Metropolia is planning their service desk roughly to 4 to 5 years ahead of time and they make an annual action plan. They are trying to make their service desk more proactive and efficient. The goal is to support teaching even better.

3.2.3 University of Eastern Finland

University of Eastern Finland employs about 2800 employees and has around 15 000 students. IT employs about 100 employees and about 30 of them work in service desk. The service desk receives about 35 000 tickets a year. From University of eastern Finland, Marko Jäntti who is their head of research, was interviewed. University of Eastern Finland's SWOT can be found in Chart 4 below.

<p>Strengths Knowledge of the business processes, service management, knowledge of the business (many employees have been students), new tools (service manager, other social media tools)</p>	<p>Weaknesses Weak first contact resolve rate leads to the fact that the tickets need to be escalated.</p>
<p>Opportunities Achieve the level of companies. Cooperation with IT services and IT research.</p>	<p>Threats Smaller resources. Outsourcing</p>

Chart 4 University of eastern Finland SWOT

University of Eastern Finland has a 2-year development cycle for their service desk. Their main goals are to improve the process, service catalog and change management.

3.2.4 Efecte

Efecte is a Finnish company that provides solutions for IT service management. The company employs around 50 employees and around 50% of them work in IT. The company has around 200 customer organizations. Interviews were held with Henri Jääskeläinen and Saku Sulander who are both senior product managers. The SWOT below is about Efecte's service management solutions. Efecte was asked to answer from their solution's point of view so that the development of service desk solutions is understood. Efecte's SWOT can be found in Chart 5 below.

Strengths Easy reporting, easily conformable to changing needs, connects to other processes, easy to use (customers and sovereign studies agree)	Weaknesses -
Opportunities Automation, easier to use, self-service, ESM (HR for example)	Threats Not developing, staying put

Chart 5 Efecte SWOT

Efecte plans their improvements only about three to six months ahead. They think it is unwise to plan any further so that they can react quickly to customer needs. Still they have visions of what the future may look like. They think that automation and further development of self-service will be the key to success. Also identity and access management will be important.

3.2.5 ServiceNow

ServiceNow is a global company that produces IT service management solutions. Globally they have about 3400 employees and around 350 of those work with customer support requests. The company has about 2800 customers. To find out about the current situation at ServiceNow, Mika Jämsen who is a Senior Solutions Consultant, was interviewed. The SWOT below is about ServiceNow service management solutions. ServiceNow was asked to answer from their solution's point of view so that the development of service desk solutions is understood. ServiceNow's SWOT can be found in Chart 6 below.

ServiceNow has been leader in the IT service support management tools category alongside BMC for two years in a row. (ServiceNow, 2015)

<p>Strengths Uniform knowledge model for all services. SaaS, System is available everywhere, common base for IT and business services.</p>	<p>Weaknesses Understanding the practices and cultures in different countries.</p>
<p>Opportunities savings that come from SaaS model, TCO efficiency, agility of further development</p>	<p>Threats Legislation. Invalidation of European safe harbor legislation.</p>

Chart 6 ServiceNow SWOT

ServiceNow is trying to plan as much ahead as possible. Especially the first level support is constantly in development. They are focusing on business services, IT operations, process automation and improvement of self-service which are seen as important in the future.

3.2.6 Service Provider A

Service provider A has around 600 employees that work in service desk. Service provider A's SWOT can be found in Chart 7 below.

<p>Strengths Solving capabilities, customer satisfaction, development</p>	<p>Weaknesses Development of cost effectiveness, providing standardized service</p>
<p>Opportunities Internationality</p>	<p>Threats More agile smaller competitors</p>

Chart 7 Service provider A SWOT

Service provider A is using the SCRUM method to develop their service desk. At the moment they have a 3-year roadmap which includes automation of standard processes, self-service development and to achieve superior end user experience.

3.2.7 Service Provider B

Service provider B is a company that provides outsourced service desk service for their customers. Unfortunately Service provider B did not feel comfortable filling in the SWOT analysis but they agreed to answer on the trends that they feel are important.

Strengths -	Weaknesses -
Opportunities -	Threats -

Chart 8 Service provider B SWOT

Service provider B has a three-year road map that they use to develop their service desk and they have a long term vision to supplement this roadmap. They are focusing on improving self-service, personalization and creating intelligent automation.

3.2.8 Service Provider C

Service provider C employs around 13 000 people. The department that took part in this study employs around 1 000. The service desk of this department employs around 200 people in Finland, Sweden and in Norway. The department has about 1 000 customer organizations and they receive about 90 000 support tickets per year. The service desk of service provider C supports super users of their services. Because of this they have a somewhat different take on the trends and the future compared to the other service providers. Service provider C's SWOT can be found in Chart 9 below.

The company says that the respect towards their service desk has grown significantly during last 5 years.

Strengths Strong knowledge of the industry, common practices and processes	Weaknesses All the service desks are not as mature as others.
Opportunities Information distribution, learning from others	Threats Not acquiring the right capabilities

Chart 9 Service provider C SWOT

Service provider C plans their service desk 1-3 years ahead. Their main goals now are to improve self-service and to provide multi or omnichannel solutions to their customers.

3.2.9 F-Secure

F-Secure is Finnish company that provides information security services. They employ around 900 people and their internal IT has about 25 employees out of which 11 work in

service desk. From F-Secure, Juuso Hämäläinen who is a IT Services Senior manager, was interviewed. F-Secure's SWOT can be found in Chart 10 below.

Strengths very professional, customer service spirit, responsivity	Weaknesses Most busy times are resource challenging, usually outside help is used
Opportunities Concierge style service, Taking the service spirit of service desk to other services	Threats More agile competitors and finding the right competencies. Service desk also helps out in arranging larger conferences which eats up a lot of resources. Difficulties in predicting the amount of tickets and the development in support needs.

Chart 10 F-Secure SWOT

F-Secure is not making specific plans to improve their service desk until they are fully committing into something. They have been talking about making the service desk into concierge style service and implementing ESM but they don't have any concrete plans. Otherwise they are further developing their customer experience and proactivity where they are taking a look at a tool that can help bring out important information before the need to react.

3.2.10 Sanoma

Sanoma Oy is a Finnish media company. The company employs around 7 000 people and about 300 of them work in IT. Their service desk handles about 35 000 tickets per year. Antti Kervinen who is head of service management office at Sanoma, was interviewed for this thesis. Sanoma's SWOT can be found in Chart 11 below.

Strengths Local language, Easy to scale because of outsourcing, industry specific knowledge.	Weaknesses Newly outsourced service desk suffers from brain leak and the knowledge transition between people.
Opportunities Media is well connected with many other industries and through this they can find new practices also to the service desk. The end users are open minded for new practices. Customers are more demanding but also more capable.	Threats Demanding and capable customer base can easily run away to their own shadow IT organizations for help if they are not happy with the service desk.

Chart 11 Sanoma SWOT

Sanoma has outsourced their service desk so they are developing their operations on many levels and on a longer timeframe. They are taking a look at important metrics such

as number of tickets, quality of tickets and turnaround times. They are also including ESM ideas in their service desk development. Their most important development aspects are improvement of self-service, automation and developing more intuitive programs and services in order to diminish the need of support.

3.2.11 Symfoni

Symfoni is an enterprise service management consulting company who mainly make ServiceNow implementations. They operate in the Nordics and in Benelux countries. They work very closely with their customers' service desks and they took part in this study by providing their customer's view for the first interview. The company has about 100 employees and around 90% of them work among ESM implementations. From Symfoni, Juha Salmi and Paula Määttänen who are both Senior consultants, were interviewed. The SWOT in Chart 12 below is based on Salmi's and Määttänen's experiences with their customer organizations.

<p>Strengths Service experience is good, real time information, self-service portal, reporting, ticket control</p>	<p>Weaknesses Small organization suffer from the cost of the tool licenses. Change resistance from end users. Organization's capability to produce the service.</p>
<p>Opportunities Mobile (phone), BYOD, chat (more channels)</p>	<p>Threats Customers skillset, Shadow service desks, managing the scope of the support, Outsourcing.</p>

Chart 12 Symfoni's customers SWOT

According to Symfoni many companies plan their service desk development about 6 months to 1 year ahead. The most common goals are to improve solution times, to diminish the number of tickets, to improve the organization itself and to start using portals for managing and contacting service desk.

3.2.12 Conclusions

To conclude, the SWOT analysis does not give an overview of where the companies are in general with their service desks. All the companies have such different setups to support different organizations that it is basically impossible to form any kind of unifying current state for service desk based on these interviews. However, what is very common among the companies is the fact that almost all of them are focusing on one to three year

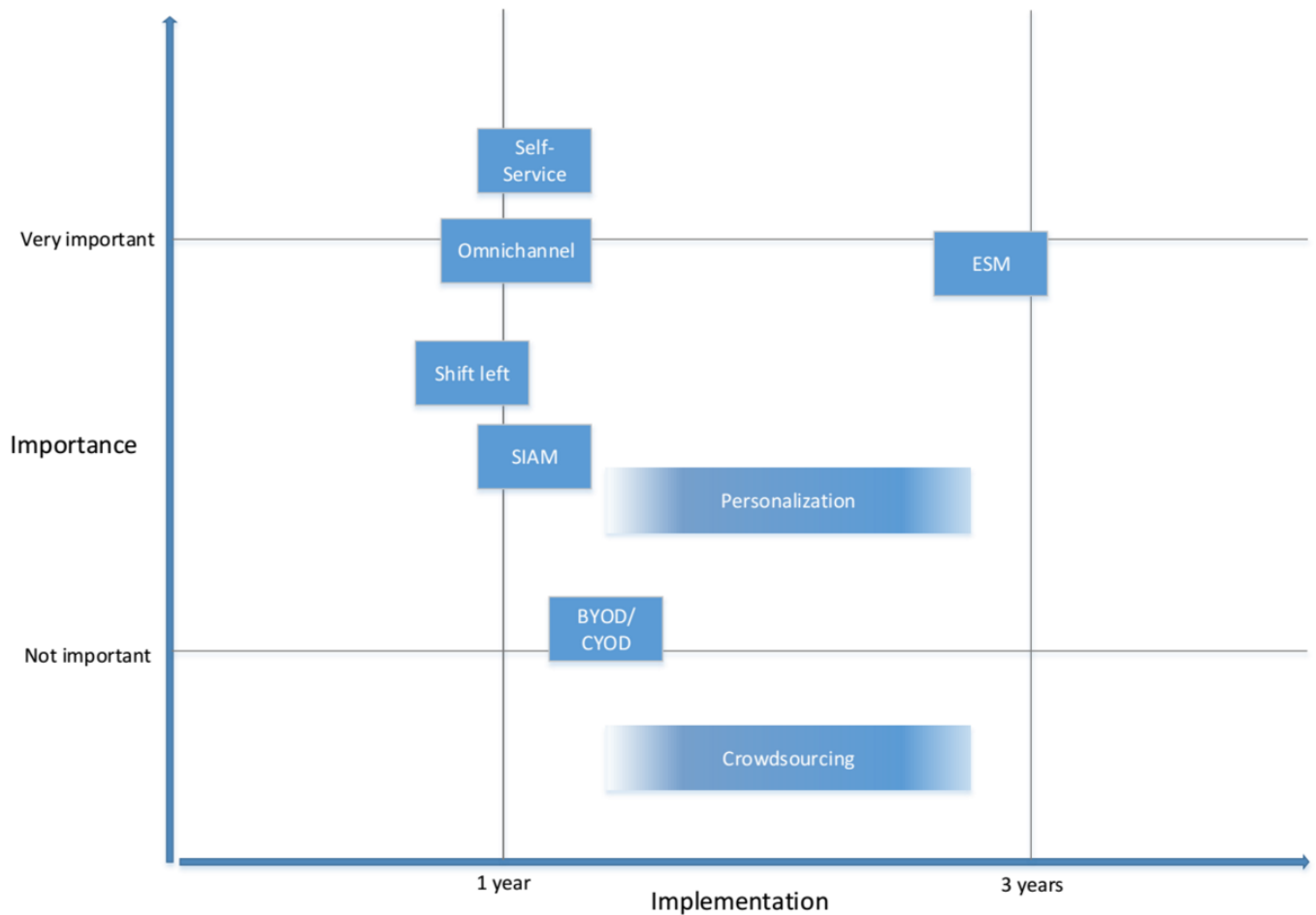
development periods for their service desk and they are following the same trends. Almost all the companies are focusing on improving their self-service capabilities by either further developing their self-service portal or creating one. Automating trivial and common processes is another very popular trend at the moment.

3.3 Views on Future Trends

In this part of the interview the company representatives are given short introductions to different future trends that the Service Desk Evolution SIG feels are the coming trends. After that they are asked to give their opinion on each of the trends and rank them on three scales of importance: not important, important and very important. They are also asked to give their opinion on how quickly each of the trends are implemented. The short descriptions of the studied trends can be found in Appendix 1. The results of the interview can be seen in Chart 13 below. The average results are visualized in Picture 2.

	ESM		SIAM		Omnichannel		Shift left	
Company	Importance	Implementation	Importance	Implementation	Importance	Implementation	Importance	Implementation
Aalto	Very important	<3	Important	>3	Important	<1	Not important	>3
Efecte	Very important	<1	Important	<3	Very important	<1	Very important	<1
F-secure	Important	<3	Important	<3	Very important	<1	Very important	Don't know
Service provider A	Important	<3	Very important	<1	Very important	<1	Important	<1
Metropolia	Very important	<1	Not important	Don't know	Important	<1	Important	<1
UEF	Very important		Not important		Important		Important	
Symfoni	Very important	<3	Very important	<1	Important	<1	Very important	<1
Sanoma	Very important	<3	Very important	<1	Important	<3	Very important	<1
Service Now	Very important	<1	Important	<1	Important	<3	Very important	<1
Service provider C	Not important	>3	Important	<3	Very important	<1	Important	<3
Service provider B	Important	>3	Very important	<1	Very important	<3	Important	<1
	BYOD/CYOD		Crowdsourcing		Self-service		Personalization	
Company	Importance	Implementation	Importance	Implementation	Importance	Implementation	Importance	Implementation
Aalto	Important	>3	Important	>3	Very important	<3	Very important	<3
Efecte	Important	<3	Not important	<1	Very important	<3	Very important	<1
F-secure	Important	<3	Not important	>3	Important	<3	Not important	>3
Service provider A	Not important	<1	Important	>3	Very important	<1	Important	<1
Metropolia	Important	<3	Not important	Don't know	Important	<3	Not important	Don't know
UEF	Important		Not important		Very important		Important	<3
Symfoni	Important	<1	Very important	>3	Very important	<3	Important	<3
Sanoma	Very important	<1	Important	<3	Very important	<1	Important	<1
Service Now	Not important	<1	Very important	<1	Very important	<1	Important	<3
Service provider C	Important	<3	Not important	>3	Very important	<1	Important	>3
Service provider B	Not important	<1	Important	<3	Very important	<1	Very important	<1

Chart 13 Results of the first interviews



Picture 2 Results of the first interviews

As can be seen in Chart 12, the answers are very similar. Shift left is found to be quite important and it is considered to be the most upcoming trend to be implemented. Looking at the SWOT analysis and the direction in which many of the companies are developing their service desk, this is in line with the fact that many of the companies are actually pursuing self-service and automation which could be included under shift left trend. Also many of the companies thought that self-service itself is even more important than the whole shift left mentality. This can be because the people that are interviewed are mostly employed in operations where they like to think more practical things instead of wider ideas.

The most interesting result is the fact that omnichannel is considered to be implemented within a year. As omnichannel is defined as providing the same customer experience regardless of the contact channel it seems odd that it would be implemented so quickly. This can be because of the fact that many of the experts may view that if they have multiple channels where customers can contact them it can be called “omnichannel”.

“All omnichannel solutions use multiple channels, but not all multi-channel experiences are omnichannel.” (Agius, 2015)

Many see BYOD/CYOD coming very soon. The general attitudes towards this trend are more negative because supporting all kinds of devices could prove challenging. Yet, many are convinced that technology wise the problems are solvable for example by using web based systems. Also some experts see that especially when working from home it could be more efficient when the employee can choose their tools. Some of the companies are already partially implementing this by allowing their employees to choose their mobile phones for example.

ESM is considered the last trend to arrive even though some of the companies stated that they have already begun implementing the practice. All of the expert believe ESM has massive potential and it already has some success stories. For example Efecte imparted that they are ready to provide the tools for the trend but the businesses are not yet demanding this kind of service.

Crowdsourcing and personalization are more challenging trends for the experts to time. The answers are not conclusive but it is clear that many do not see crowdsourcing as very important from their point of view. The most challenging factor is that crowdsourcing is near impossible to be helpful when problems are affecting internal systems. Although for example ServiceNow conveyed that some kind of system that covers many companies could be possible in the future.

Personalization is widely seen as a very important trend and something that the customers really want to see and use. Still the experts are in very different minds about when its time will come. Symfoni may have come up with the reason for this as they say that it is already partially done but the applications are very limited considering the possibilities.

SIAM is considered to be quite important and already implemented to a certain extent. Service provider A said that they are already providing also this kind of service where the key is for one service desk to operate as SPOC for the customer and they escalate the ticket forward to different service providers without the customer even knowing.

3.4 Conclusions of the Current State Analysis

To conclude, the experts agree on most of the trends. It is interesting to see such similar results in the development of service desks while the SWOT analyses were so different. Especially the implementation timelines that the experts are giving to each of the trends have to be taken with a grain of salt. For example in the case of omnichannel the experts may not define the trend as precisely as they are defined by this thesis. On the other hand this could mean that the trends can be effectively implemented in very distinct organizations. For example automation is most likely to be successful at some level almost regardless of the maturity of the service desk it is implemented in but ESM for example needs very capable employees and well thought out structures inside the company as well as in partner companies.

The results of the first interviews are not satisfactory. The answers are too superficial for the thesis to make any conclusions. This led to the agreement with the itSMF SIG to run second interview round with the companies to get more insight on longer term changes and to get to the bottom of what the reasons behind certain trends are and what they need from technology and the organization to be successfully implemented. Based on the first interviews, crowdsourcing and personalization are dropped from the trend list because the professionals do not consider them to be among the most important future trends. Also SIAM is considered a wider entity than just service desk and thus it was mostly excluded. It will be kept in the discussion but it is not emphasized.

4 Trends Based on Literature

In this Section, the trends chosen in the CSA in Section 3 are described in detail.

4.1 Introduction

In the current situation where economy is down and the gap between the users and the service desks technical specialists has been decreasing, the service desk is facing high pressure to improve. Basically the service desk needs to work more efficiently with less money and still maintain a high customer satisfaction level.

Organizations have been trying to enable flexible around-the-clock IT support that works consistently from anywhere and on any device, but are not yet in a position to say it is done.

Based on the results of the current state analysis interviews, it is decided together with the SIG on what trends should be focused on. Crowdsourcing and personalization are dropped from the initial list in the current state analysis as they are not considered as important as the other trends.

The trends described in this section are:

- Shift left
- Self-service
- BYOD
- Automation
- Omnichannel

Enterprise service management and service integration and management cover so much more than just the service desk that they are not described in this chapter. However, a short description of these trends can be found in Appendix 4. Enterprise service management and service integration and management are still considered as an important trends in the development of the service desk.

The goal of this section is to form a deep enough understanding of the most important aspects of the trends to be able to carry out the second interviews.

4.2 Service Desk

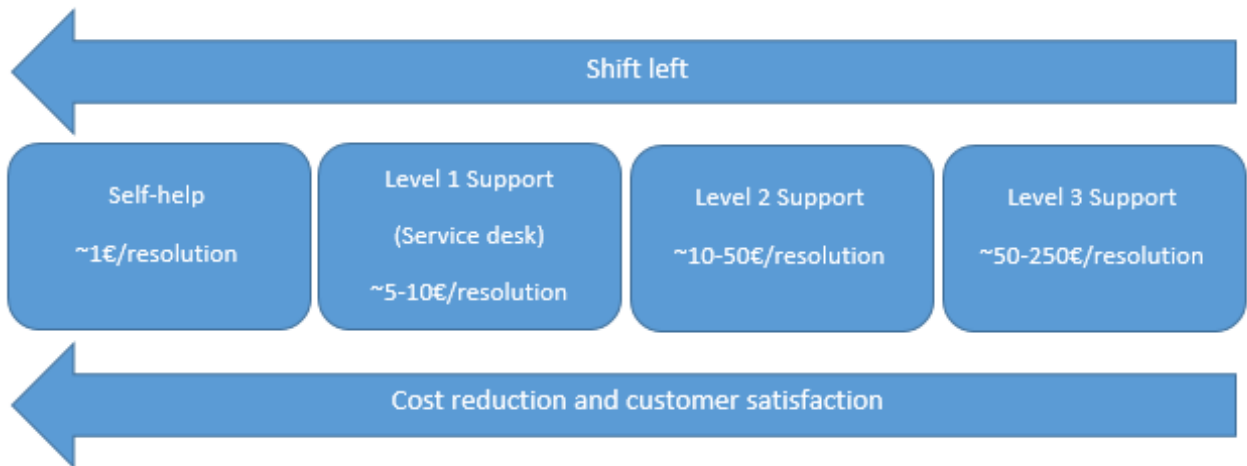
A service desk is a single point of contact (“SPOC”) between the company and its customers, employees and business partners. It is a primary IT service within the discipline of IT service management (ITSM). The purpose of service desk is to ensure appropriate help in a timely manner for those who need it. It handles service requests as well as incidents. An incident is an event that disrupts service availability or quality. Service request are routine requests that can be as simple as an employee asking to change his/her password. The difference between service desk and help desk is often confused. Service desk offers a broader range of service capabilities, solving problems in fewer steps and it enables integration of business processes into the service management infrastructure according to ITIL v.3. Service desk is also often described as a more customer centric version of help desk. (TSO, 2011: p.157)

4.3 Shift Left

Shift left as a concept means that the activity of providing the solution to the customer is on the lowest possible support level. In other terms it makes the service desk more proactive. This is nothing new, but something that the organizations are struggling to achieve. (Lahav, 2014)

Shift left means moving incident resolution to lower cost levels instead of escalating it right to the next levels of support. This is presented in Picture 3. The picture shows how the costs decrease when the solutions are provided on an earlier support level. It also means that organizations should adopt a call elimination strategy that aims at reducing redundant and repetitive calls. (Lahav, 2014)

According to Pete McGrahan : “Moving issue resolution to the lowest cost level in the service and support organization, with a focus on resolution at the front line or at the closest point to the customer”. It reflects that shift left is a response to cost decreasing pressure created by the business. (Hornbill, 2)



Picture 3 Shift left. This picture is adapted from MCGrahan's slideshare shows slide 14. (MCGrahan&associates, 2014)

4.3.1 Benefits of Shift Left

It is a common fact that no one likes to wait or chase for answers. With Shift left reduced waiting times and finding the answer more easily are achieved. The concept greatly boosts customer satisfaction as it works to find the quickest possible resolution instead. Key is that customer organizations can keep running all the time. If an incident can't be solved it is punishing the business they do, thereby the supporting IT organization is failing. Simply said faster resolution times mean less productive downtime for the customers. First call resolution is important because it is linked to customer satisfaction and it avoids the time-consuming escalation. Escalating the call also increases the cost of the resolution. (McGarahan, 2010)

The cost of support grows when the resolution increases across from the first level to 2nd and 3rd levels. Nowadays there is also the zero level which is before contacting 1st level support. The so called zero level can be a page with frequently asked questions where people go see if they can resolve the incident themselves. So the value comes from moving incidents from 3rd level to 2nd level and so on. The focus of the Shift left is to save money for the company providing the service. (Lahav, 2014)

4.3.2 Challenges in Shift Left

For Shift left to work knowledge management and its level of maturity in the organization is a key factor. That is where the information, expertise and practical solutions are documented and shared across the organization. The biggest challenge for Shift left to work

is usually the mindset that prevents front line in service desk to carry out more difficult, technical and higher risk functions that used to be done by the more experienced people. Shift left changes the structure of service desk so that the staffing needs to be trained and more skilled. It is achieved by delivering a good knowledge management, staff training and ongoing governance and management. This should boost the morale of the employees as they are not just fixing easy problems and taking requests anymore. (Lahav, 2014)

Shift left is not suitable for every situation though. In some situations where critical services are affected, more cautious actions are needed. (Lahav, 2014)

4.3.3 Conclusions

As a conclusion it can be said that shift-left is a strategy to answer the cost pressures caused by the business. It consists of the other trends and steers the service desk to cost reductions and resolutions happening closer to customers through the other trends.

The upcoming trends can be seen as ways to pursue shift-left and for example self-service is an obvious step to that direction. (Hornbill, 2)

Shift-left is an opportunity for the businesses to shape the IT services to be seen as facilitator of business needs. (IBM, 2011)

4.4 Self-Service

Most of the service desk products already have a self-service and knowledge management tools so this is not a new trend, but not all the service desks are taking full advantage of them. The problem is that the reputation of self-service has been damaged by poorly implemented FAQs and unfriendly search tools. These experiences have created a negative cycle where the self-service tools are unloved and unused, so there is no incentive for the service desk providers to improve them. (Hornbill, 1)

It is believed that the customers like calling to service desk to solve problems because it has a "human touch" in it, but according to Diane Clarkson from Forrester it is one of the most common service misperceptions to think that customers prefer to call you. Clarkson

states that the telephone customer service has the highest satisfaction compared to other channels, at 69%. Though, according to their studies, 72% of US consumers prefer to use a company's web site to get an answer to their questions instead of contacting via phone. And roughly half of that group preferred self-reliance. Complex questions or emotional needs like reassurance still needs the telephone to satisfy, but telephone is not the first choice of customers as it is not the most effective choice. According to Clarkson telephone customer service is typically \$6-\$12 per contact so there is potentially significant savings to be realized in self-service, not to mention preserving customer satisfaction. (Clarkson, 2010)

Self-service is the content made available for customers when they want to find information on their own or when the frontline support is unavailable. The most common ways to provide self-service are FAQs, public help centers, community forums, knowledge bases or tutorials. It is not a way to leave all the support off to the customers, but to make an easy way to find the solution quickly and find immediate satisfaction. It is a way to provide a better service experience. A tutorial can be much richer and in-depth than email, and incorporate visuals to support the information and help learning. (Salesforce desk, 2012)

If an organization's customers collectively ask the same support question many times the solution can be documented and published in a knowledge base, which is a library of support articles that the customers can use for themselves to find answers to their problems quickly. A study by Coleman Parkes for Amdocs has found that 91% of their survey's respondents would use an online knowledge base if it were available and tailored to their needs. (Clarkson, 2010)

It is better to not only rely on knowledge base in self-service. It is even better when it is paired with other ways to provide self-service like an online community where the audience can share information and help each other. (Capel)

4.4.1 Benefits of Self-Service

If self-service is done right it is a win/win for both business and its customers. Businesses are able to save in costs by helping customers to help themselves. Self-service should be done for the high-volume, low-risk requests that eat up a lot of service desk staffs

precious time. For customers it is a far more efficient and convenient way to solve the issue. (Capel)

David Coyle, the research vice president at Gartner, says that self-service is a great concept that enables and empowers the end users to solve their own IT problems, thereby allowing the support organizations to gain efficiencies through reduced incident and request workload. (Gartner, 2010)

There are three big benefits when self-service is done right:

Firstly it is more efficient. Twenty people can help themselves all at once instead of one person helping them one by one. It is more efficient for both parties. Employees of the service desk can focus on the more difficult tasks. Enabling self-service needs prioritization though. What services are worth paying your service desk team to do and what problems can be reasonably expected that the customers are willing to solve when given the right tools. (Capel)

The second benefit is that self-service can be a more customer-oriented way to offer service. When done right the customer can get the resolution easily and they do not need to wait in line to get the service. (Capel)

The third and the biggest reason for the organizations to push for self-service is that it reduces the need for level 1 support and thus has the chance of reducing cost of service desk. It lowers the cost by moving end user issues to lower cost levels. Organizations should understand that implementing self-service will mostly only reduce the volume of the most usual call types like how-to requests and password resets and some issues still require a call to service desk and the support of a technician.

According to Mr. Coyle from Gartner the benefits of a well-designed self-service portal can go beyond the contact reduction. Properly implemented it can also provide incident trend analysis, identify training opportunities and consolidate the knowledge that currently exists in silos across the support organization. He thinks that these soft benefits should not be a reason for making a business case for self-service though. (Gartner 2010)

4.4.2 Challenges in Self-Service

According to Gartner building a top-notch IT self-service portal does not guarantee that it will be utilized and only five percent of the issues are actually solved by self-service.

IT self-service also requires constant care and feeding. It cannot be set once and forgotten after that. The IT leader has to understand all the time how it is leveraged and whether the end customer is getting value from the service. Also it needs marketing efforts to get the self-service known. Ongoing efforts also include maintenance of the knowledge base. The articles in the knowledge base need continuous updating. The self-service portal does need to establish credibility and articles that do not fix the problem or are difficult to understand will not do that. The knowledge base can be very hard to keep up to date if it supports a wide range of information. (Gartner, 2010)

Adopting the self-service portal can be slow and the first-year adoption rate can be very low. End user utilization is the main objective of self-service so the time and cost invested to them trying to solve their own problems with using the self-service portal. Factors that affect the success of organizations self-services can be demographic. Groups like young people can be more willing to use self-service than end users who are stuck on their ways and are not sophisticated computer users. (Gartner, 2010)

Self-service also has prerequisites and needs the right tools and processes to be successfully implemented. End users want a self-service portal that is easy to use and the knowledge is readily available. It is not end users responsibility to dig through knowledge base if it is not organized correctly or care about support organizations issues that keep the site down and not up to date. (Gartner, 2010)

Two of the most common calls are how to-requests and password reset, which makes 20 to 30 percent of all IT service desk volume. Automating this with self-service can save the organization a lot of money. (Gartner, 2010)

4.4.3 Conclusions

In conclusion the self-service service desk needs to be well moderated to work. The knowledge base articles need periodic revival and for example by setting an expiration date the support team is ensured to keep the articles up to date. At the same time it is

very important to improve the articles. The organization can embed a rating button to get knowledge about which articles are helpful and which are not. It is very important that the customer's journey is kept in mind at all times and it is made as easy as possible for the customer to find the solution. (Salesforce desk, 2013)

A good way to start self-service is to start small and not trying to cover everything at once. Prioritizing the areas where support is needed most and the expertise is within the community. Users and support staff become more motivated to share their knowledge and make a better self-service. (Hornbill, 1)

When time goes on you can start flagging cases that come up often. The organization can then evaluate those flagged cases and make a knowledge base article based on them if it is needed and expand the self-service in that way. A good tip for a working self-service would also be that it has to work on all devices. Providing a multichannel experience really allows the customers to solve their problems on the go. For customer experience the two most important things are easy to use portal which works on all devices and customer experience is the core of self-service. (Salesforce desk, 2013)

4.5 BYOD

Bring your own device (BYOD) is an emerging cost-lowering strategy. It is a policy under which the employee is allowed to bring his or her own device to work and use it to do their tasks. It is a trend that has been on the lips of people for some time, but it has not reached its full potential in lowering the service desk expenses by minimizing new tickets. (Borowski, 2014)

For a while there has been skepticism about whether the benefits of BYOD outweigh the risks it brings with it, which has delayed the development of this trend.

The most important thing in adopting BYOD is the new mindset that is needed to effectively support the devices. A traditional service desk has a reactive mentality. When something breaks it needs to be fixed. In the new era of mobile devices and applications service desks have an opportunity to be more proactive, critical enabler of business performance and boosting employee productivity. Service desk is not about fixing problems anymore, but more about enabling business processes. Service desks have to adapt to

these changes in order to keep with the pace and ensure efficiency for the employees of the organization. (Weiner, 2012)

4.5.1 Benefits of BYOD

The most obvious explanation why BYOD reduces the ticket amount is that employees are likely more skilled with their own device than company-issued hardware, which leads to employee running into fewer technical problems. Familiarity is one of the biggest reasons BYOD programs can reduce service desk costs. People generally spend time on their personal devices in their spare time. They often check email, social media or browse the internet. These are not completely work related activities, but they do help to familiarize the user with their device and its operating system, which translates to more skill using the device and that skill can be transferred to the workplace. If the users are more skilled with their personal device they run to less technical problems with it and when they do often their skill level is enough to solve the issues without the help of the service desk. Employees are more likely to troubleshoot the problems on their own and some would even do it after workhours. (Borowski, 2014)

The organizations can also see a cost reduction in hardware costs as devices previously bought by the organization are now bought by the employee. BYOD also usually requires implementing community wikis, forums, and other streamlined support options. It can reduce the support costs that way too. Migrating some of the employees from corporate data plans to self-funded plans organizations can see a cut in telecom costs. BYOD offers a way to move to a more productive environment and a way to cut on some costs. (Loucks & Medcalf & Buckalew & Faria, 2013)

BYOD is one of the factors that has led to a decrease in service desk calls and so reducing the amount of workforce needed. Jared Greene, a Gartner analyst, states that the trend is so clear that the traditional face of an IT service desk is in risk to become irrelevant in the upcoming years.

With BYOD the organizations can make the employees to provide their own support. Greene gives an example of a company located in Georgia that had a BYOD program and they could not support the employees issues so what they did was they gave the employees a SharePoint portal to support themselves. Over time there came IOS, BlackBerry and Android group without SLAs. People governed themselves and a year later

the service desk parsed the information and is now able to support the employees based on the shared information. Bring your own device brings bring your own support with it. The issues the traditional service desk should be dealing are password resets, break-fix triage and high-level outage notifications. (Kaneshige, 2013)

Employees also have many reasons to want to use their own device at work. Cisco made a study in 2013 that revealed that the employees feel more productive while working with their own device. Employees had the feeling they get more work done when they use their own device. They also felt that they are more flexible with their own device than organization provided device. With their own device it is easy to combine work and personal life. BYOD using employees can move between their work and personal lives easily throughout the day. The ability to mix work and personal activities lead to greater net productivity according to Cisco since the employee is able to do both tasks on same device so it is quicker to move between personal tasks like arranging schedule or their banking and work. Flexibility also comes from being able to access work content from anywhere. (Loucks & Medcalf & Buckalew & Faria, 2013) Organizations employees might be spread all over the world and they are able to access the company tools from anywhere in the world using the applications they have chosen on their own and preferred device. (Fujitsu, 2014) The study also shows that employees think that sometimes their personal device can provide better utility than the one provided by the organization. The employees are likely to personalize their iPhone with productivity tools and applications to deliver up-to-the-minute data. The personal iPhone will so accelerate the employee's responsiveness. This is unlikely if the organization has provided the employee a less customizable BlackBerry. Also the employee is more likely have the personal device with them at all times instead of only work hours so they are more accessible and in-touch. (Kaneshige,2013) The growth in mobility and companies adopting the anywhere, anytime model increases efficiency and productivity for sure. (Meredith, 2016)

BYOD also helps the organizations to attract new talents. Students for example have been used to bringing their own devices to universities and being able to plug their own device to the university network. They will more happily connect with their own device than be forced to use a company provided devices. Providing devices and not letting students use their own devices is seen as archaic, restrictive and unsatisfactory. The likelihood that the devices provided by the employer are inferior to those owned by the employee are big. (Kendall & Wood, 2013)

4.5.2 Challenges in BYOD

Organizations have a dilemma. The employees of the organization want to use their own devices they are familiar with and applications and cloud services of their choice, while demanding the corporate network access and IT support. Is BYOD worth taking the risk? (Loucks & Medcalf & Buckalew & Faria, 2013)

The Biggest fear in BYOD for Chief Information Officer is security and lending access to sensitive information to employees with their personal devices. This opens an opportunity for the information to leave the organization and to leak to competitors. However this is not a new problem raised by BYOD. Employees have had access to the same data with a laptop provided by the employer and it would be as easy to steal the data with a USB stick, email forwarding or something that you cannot track like photo or pen and paper.

Another security issue comes if the device is lost or actually breach detected. Is the organization allowed to wipe all the data on the device including the personal files? (Kendall & Wood, 2013)

Also new issues can arise from BYOD. Such issues could be application compatibility, network connectivity, bandwidth hogging, inaccessibility of shared devices and it is feared in the organizations that the service desk will see an increase in the ticket count.

The service desks are familiar with the issues about the software and devices provided by the organization, but with BYOD they would have to also deal with unfamiliar operating systems such as MAC or Linux and the applications which can be installed to them. The skillset of service desk employees has to increase alongside BYOD. (Manohar, 2014)

The service desk support staff will have to have clear criteria what is supported by service desk, what is supported by a third party and what is the employee's own responsibility in relation to BYOD. It has to be decided to what extent the employees can use the service desk and how the service will be delivered. The support team needs to be equipped with enabling knowledge and tools. It has to be ensured that the employees understand the level of access their organization has to the employee's personal device and the data in it. (Kendall & Wood, 2013)

4.5.3 Conclusions

BYOD should not be a battle between IT and employees. Once the gains that BYOD brings in form of productivity are seen by IT and business leaders it should realize it is not only cost-saving method, but a way that can reinvent the way to do work. (Loucks & Medcalf & Buckalew & Faria, 2013)

When using their own devices, employees are more skilled at using the device which leads to them being less likely to encounter problems they need help solving. And if they do they often try to solve them on their own or with the help of forums and such. They are ready to do it even on their own time. (Borowski, 2014)

4.6 Automation

The main portion of the incidents and service requests the service desk gets are very simple tasks like password resets. When the average cost of level 1 service desk engineer to manually handle a ticket is around \$22 it is easy to see why organizations push to automate easy and simple tasks. (Bryce, 2015)

Advanced service desk solutions can already automate basic requests. Automation can be done for any process that can be completed the same way each time it is performed. (Sunview) This kind of tasks are for example password resets, server provisioning or access requests. (Ericson, 2013)

4.6.1 Benefits of Automation

The main reason organizations are pushing for automation is how it helps the ongoing issue of costs. Service desks have been made more accessible than before which has led to an increased number of tickets made. More tickets mean bigger costs. The biggest benefit of automation is that it reduces the number of tickets made and that way reduces the costs significantly. Valuable level 1 service desk agents do not need to be involved in handling easy service requests when automation solves the common password resets and other easier tasks. (Bryce, 2015)

With automation the organization also increases their customer's satisfaction for the service. Customers do not need to wait 24 hours to get a response when their ticket is stuck in the service desk agents queue. Instead they get an answer to their ticket immediately and if it is a simple task it will also be solved fast. (Bryce, 2015) With Automation in place uptime and availability are also improved. It leaves less room for human errors that lead to rework. These are factors that improve the customer's satisfaction. (Powell, 2009)

Automating the simple tasks also frees the IT staff to focus on operations that require more focus and thinking. This way it also improves the efficiency of the IT staff. (Sunview) It moves the service desk staff from reactively fixing problems and requests to proactively managing the IT infrastructure. (Powell, 2009)

Anthony Bryce states in his blog post that a service desk needs to continually ask if it is adding value or is it an obstacle to productivity. He gives an example of a case where the customer came in and had a request thinking that it would take a whole day to get solved. Instead the problem was solved in two minutes with automated service and the customer could carry on doing his work immediately. An automated service desk can improve the end-user productivity when they don't have to wait for resolutions on their problems. (Bryce, 2015)

4.6.2 Challenges in Automation

Numerous things can be automated or standardized, but it does not remove the need for a physical service desk. There will continue to be someone that needs an option to talk with a service desk agent to deal with badly documented issues. Also automation cannot answer to non-standard issues that come up for the first time or are situational. (Howard & Kendall, 2013)

4.6.3 Conclusions

Automation is one of the areas that has been most invested in service desk due to its capability to reduce costs fast and undoubtedly. It is the most developed of the trends and for example password reset is already automated in many of the service desks. A great deal remains to automate and the trend has not been used to its fullest potential. It has already reduced many of the emails sent between the customer and service desk

agent when the ticket is missing information. What will happen when automation is combined with big data and analytics? Will there be self-healing machines? Automated and cloud-based service desk solutions seem to be the next big thing. (Weiss, 2012)

4.7 Omnichannel

Organizations are clearly going towards a multi-channel approach to keep in touch with their customers. There is still a more fundamental need than plain multi-channel. That need is a seamless approach to multi-channel that provides unified experience for the customer across all channels. (Accenture)

All omnichannel solutions use multiple channels, but not all multi-channel experiences are omnichannel. Omnichannel is in many ways multi-channel done right. (Agius, 2015) Omnichannel is a synchronized operating model in which all of the organizations channels are aligned and presented as a single face to the customer. (Accenture) With omnichannel the service desk can manage the lifecycle of a customer journey and provide personalized and context appropriate experience for each of their customers. (Genesys)

In an omnichannel service desk solution the customer may start the interaction online, but then switch to phone and finally to email and the organization is aware of the activity that has been carried out. (Accenture)

4.7.1 Benefits of Omnichannel

For a customer one of the biggest frustrations is when he or she needs to repeat their issue over and over again. Customers want to feel that the service desk values their time. Old siloed support tools could not provide the feeling of seamless experience, but omnichannel does just that. The biggest advantage that omnichannel brings is it improves the customer satisfaction as they do not have to repeat themselves. The service desk has all the information the customer has provided before even if it was in different channel.

The fact that the service desk agent has all the information and does not have to ask for it again or dig for it from another channel saves time and reduces handling time. This will

help with increasing the first-contact resolution and requires less resources. (Severn, Oye)

Omnichannel is also beneficial to the service desk agents as it refreshes the monotonous work from just answering to calls and emails and improves their skills in using multiple channels. (Salesforce desk, 2015)

4.7.2 Challenges in Omnichannel

When using the omnichannel approach on the service desk the service desk agents need to be able to handle multiple channels which the organization has decided to use. This requires training the use of the channels to the service desk agents and hiring people fit for the job from the organization. (Team Support)

The organization also has a responsibility to respond to customers quickly, helpfully and humanely regardless of the channel it comes from. Service desk has to manage all the channels and not focus on one as it is customer's choice which is preferred to use. (Solomon, 2015)

To provide the seamless omnichannel experience it is the organization's responsibility to understand how the channels come together.

(Solomon, 2015)

4.7.3 Conclusions

Omnichannel boosts the customer's ability to contact the service desk whenever, wherever and however they want. It gives the customer seamless, consistent and personalized experience through every channel he or she decides to use and increases customer satisfaction. (Accenture)

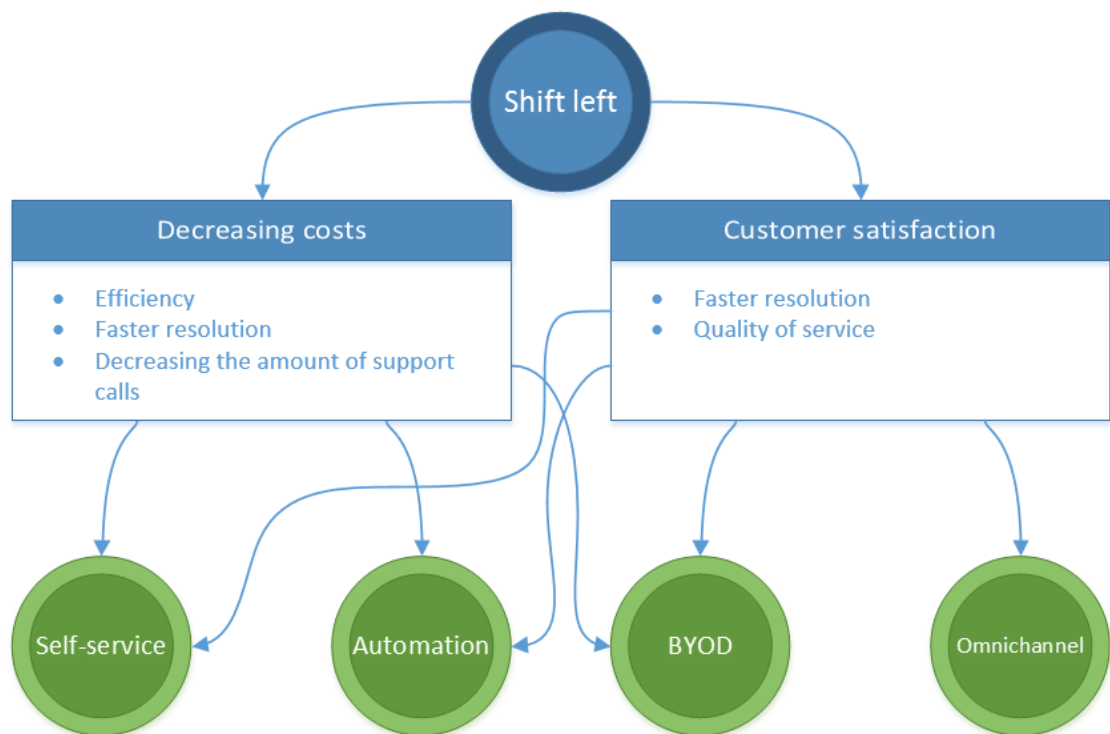
4.8 Theory Conclusions

Business has built a lot of pressure on service desks to improve and most importantly reduce costs. That is why most of the trends are cost reduction oriented. The common

idea in reducing the service desk costs is either reducing the number of tickets or moving them to lower cost level. That is why shift left can be seen as a strategy that guides companies when developing the other trends chosen for the theory chapter.

The other direction the service desk industry seems to be developing is more customer-oriented service. In the future service desk the service will be easier and more accessible. Resolutions come faster and the service desk may not always be even needed. The wherever, whenever and on whatever device thinking is also developing through the trends to please more customers.

The new developments in service desk will require changes in the workforce and in the decision making. It will require new skills and deeper knowledge from the service desk employees. Also the attitudes need to change from reactive to proactive. The daily work they do might change, but the need for a service desk that can provide efficient and customer-centric support will not change. Picture 4 shows the motivations of the trends and how they are connected to each other.



Picture 4 Theory conclusions

The picture is based on the idea that shift left is the driving ideology that connects all of the trends together. The idea of shift left is to decrease the costs of service desk while maintaining or improving the customer satisfaction. As can be seen in the picture, self-

service decreases the costs of the service desk by decreasing the amount of calls and contacts made to the service desk. It can also increase customer satisfaction if it is implemented well and instructions provided in the self-service portal are easy to understand. Automation decreases the cost of service desk by making the resolution of certain incidents a lot faster and decreasing the calls to the service desk. The faster resolution also increases customer satisfaction because the customer's needs are fulfilled faster. BYOD can decrease the costs of service desk by decreasing the amount of calls to the desk. This is achieved through the fact that since the customers use their own devices they have better capabilities to use them. The customers also prefer to use familiar devices and this way it increases the customer satisfaction. Omnichannel increases customer satisfaction by improving the quality of service. A well implemented omnichannel allows the customers to contact the service desk from anywhere and by any means they like. This way the quality of service is increased.

5 In-Depth Interviews

In this section the second interviews are gone through in detail. Sample notes from one of the interviews can be found in Appendix 5.

5.1 Introduction

The data gathered in the Section 4 gives a good picture of the trends and how they will affect the service desk industry. In the second interviews, the differences between the professional's views and the literature are explored.

The second interviews are approached in a different way than the first interviews. For the second interviews guidelines are created that steer the session, but allow further discussion.

The first discussion with the professionals is how they see the service desk will change in the future from the following points of view.

- What are the things that will change?
- How the changes will affect the current service desk?
- What will the change require to happen?
- Why is this change coming?
- What are the next steps to achieve this change?

The two important aspects in the trends based on the current state analysis are reducing costs and improving customer experience. Based on this the two scenarios are created and interviewees are challenged to think how they would react to them:

- How would they pursue greater customer satisfaction in service desk?
- How would they approach the need to cut the expenses of service desk?

Finally, the results from the first round of interviews are shown and comments on the results are asked from the professionals.

The companies interviewed are:

- Sanoma
- CGI
- ServiceNow
- Tieto
- Service Provider C
- F-Secure
- Efecte
- Fujitsu

The companies are chosen based on itSMF SIG assessment that these are companies that have a forward thinking mindset about the service desk industry and they also agreed to a face to face interview.

After the name of the company there is a picture that shows what trends are discussed as future changing.

5.2 Sanoma

From Sanoma the Antti Kervinen is interviewed, with the results showing in Picture 5.



Picture 5 Trends discussed with Sanoma representative

Antti Kervinen believes that in the future of service desk there will be big implementations that improve predictability with solutions like IBM Watson. Implementing intelligence to the analysis of tickets and maybe even solving them will boost the efficiency of service

desk. According to Kervinen the realities of market economy restricts the pace of development. He says that this might for example make it difficult for ServiceNow to get Watson to their use. In the future the service desk user might talk to Watson at the start of the incident solving and with human only if it is needed. He also believes in development of self-service. Kervinen says that in order for the self-service to develop even more customers need to be profiled based on their capabilities. After the customers are profiled the right level of self-service can be determined and delivered. According to Kervinen the devices used will not matter as programs become cloud based. He thinks service desk will move to a mindset that allows you to contact the desk from anywhere with any device. The reasoning behind this is that working in general is moving to be more mobile and the support has to follow. Also connecting the problem and person with the problem will become easier and the problem can be steered to the right professional immediately. In general he thinks the problems can be noticed and solved quicker as the amount of data increases.

One of the big changes Kervinen sees is that the service desk's scope will widen and people can contact support about any problem, not just IT related ones. As a downside he sees that this might decrease the depth of support the service desk can offer. The change requires communication between the whole organization and will drive the organization out of a silo mindset. It also requires remodelling of the service channel and thinking about what special needs there are when the IT service desk is used outside of IT. The possibility for this change is now understood by the business. The reason it is not yet in use is that the business lacks the courage to fully commit to this change. He also mentions that there are employees who think that the current solution is good enough and they do not seek these process improvements. They think there is no need to change. It depends a lot about the organization's culture whether it will go for the enterprise service management. Up to this point it has been IT trying to push these new ideas to the business. And according to Kervinen they are not the best salesmen out there. At the same time the organizations live in quartal economy where costs have to be reduced. This is not the optimal situation in introducing big changes in the organizations. As final words on ESM Kervinen says that IT has to have their own things sorted before they can go show off elsewhere.

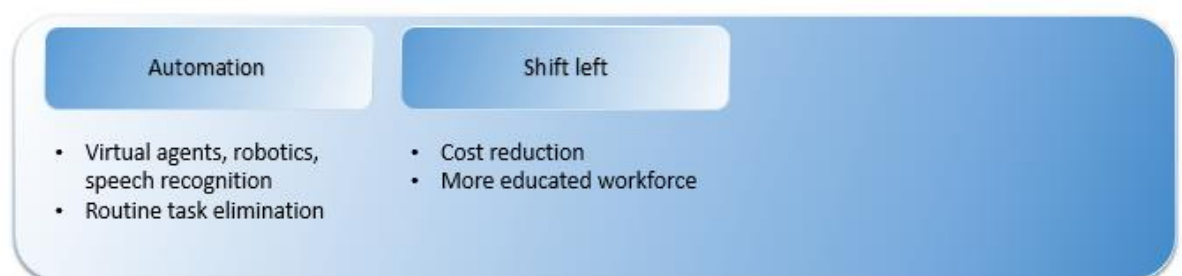
In customer service Kervinen believes more in customer's expectation management than the possibilities that technology can bring. He believes that communication with the customers is the key to a successful service. It is a lot about setting expectations and then

surpassing them. He tells that this is also a possible way to make savings. A direct quote from Kervinen is: “With the price of Lada you will not be able to buy Mercedes Benz.” This quote represents the set customer expectation. If the service desk does not have the resources for “Mercedes Benz” level support it cannot be provided. He also says that opening more self-service channels and handling knowledge management better will bring costs down. Better documentation and having the knowledge in the right place at the right time are the keys to have success in knowledge management. As a practical way to handle the knowledge articles Kervinen points out that the articles should have an owner and expiration date. He also mentions that investing elsewhere might reduce service desk costs. For example buying new computers will more than likely make the owners of the new computer to require less support.

Kervinen thinks technology wise the industry is on the verge of possible big changes. Things like virtual reality and internet of things will possibly affect the industry, but companies will not take these solutions into practice if they do not see them as a competitive advantage.

5.3 CGI

From CGI the Kimmo Metso is interviewed, with the results showing in Picture 6.



Picture 6 Trends discussed with CGI representative

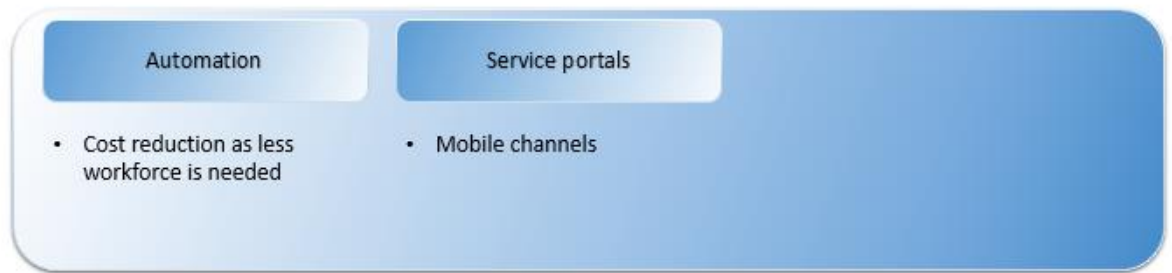
Metso thinks that automation is the big thing that is being developed in the future of service desks. He says there are already solutions that contain virtual agents, robotics and speech recognition, but they are not in use. At the moment automation is already used to eliminate many routine tasks. He sees that the near future of service desk is mainly implementing current technologies. The pace of the implementations done is based on what the customers want and he mentions that there are already many SIAM

and ESM implementations. He believes that information security and the need for all the technologies to work together seamlessly are slowing forces against the development. Many companies want to see that others have implemented new technologies and practices successfully before investing in it. Metso says that the companies need to change their mindset and have more courage to take action. Also companies are rethinking the scope of their service desk. He says that the service desk will not die, but instead the automation helps to remove the password resets and other mundane jobs and the service desk employees will evolve to be more competent experts. He mentions that the customer service will not vanish from the service desk.

When asked about how Metso would decrease the costs of service desk he says that quality of service is something that cannot be compromised. He would increase effectivity with strict meters, but trying to make the service too effective could decrease quality. As another option he mentions outsourcing the service desk or automating routine tasks. It is all about getting the users to adopt the service. Metso also talks about shift left as a way to reduce costs. He does not see the service desk as an expense, but its costs could be reduced with the help of shift left as solutions on first level of support are cheaper than they are on the second level. The workforce would need to be more educated and the work would change from just answering the phone to giving real, more specialized, support quickly and correctly. When it comes to increasing customer satisfaction he would do it also through educating the workforce to be more competent and understand the customer.

5.4 ServiceNow

From ServiceNow Mika Jämsen is interviewed. Jämsen wanted to clarify that the following opinions are his own and they do not necessarily represent the company's official views. His views are seen in Picture 7.



Picture 7 Trends discussed with ServiceNow representative

Mika Jämsen believes that consumer applications such as Facebook and Twitter will affect how the service desks will work in the future. Common practices from those applications will be implemented into service desk tools such as live feed, chat and other collaboration methods. This will change the way the service desk personnel work at the moment.

He mentions that e-mail was taken to use in the 80's and 90's and now a more efficient and wiser way to deal with things is needed. He has a vision where the context of the problem at hand is in one place in the cloud where people are able to discuss the solution. This will make getting the background information faster and give more power to fix things in the first line. The first line would be able to see the information from systems, devices, knowledge bases and would be able to start workflows. This would remove irrelevant chains and improve the assignment where the incident would be steered to the right people based on the background information. First line supports work will change and more knowledge is expected from the employees. Technology is really close to be ready to implement these kind of services, but it will be a whole new way to work also on the operative side and requires a great deal of automation so adapting the change might make a while.

Jämsen says that the biggest costs in service desk come from the employees. One way to lower the costs related to this is to automate as many of the workflows of service desk as possible. As other ways to lower costs in service desk he mentions asset management, which means that the service desk workers have exactly what they need to fulfill their job and nothing more, and removing excess licenses.

When talking about the ways to improve the customer satisfaction the talk turns to service portals. Jämsen mentions that some companies still do not have one and in many companies it is still very basic. He mentions that the channels to contact the service desk

is the next step to improve, mobile channels being the priority at the moment. The technology is there and only needs implementation, but the attitudes towards change is somewhat resistant. Information security is the most common reason to hold up the development.

Many have woken up to the fact that the service desk needs to be measured and the customers are being asked what they liked about the service. For example this can be done directly in the portal with the concept canteens are using where the customer can press emoji faces.

Mika Jämsen sees that technology is ready for many things like ESM, but stiffness and the ways the organizations work are slowing the change in service desk. According to him many are thinking “It will have a time, but it is not now” about the changes. But what will definitely change according to him is that there will be all the needed information available to the workforce and the amount of e-mail will reduce. His opinion is that this will result in better turnaround times.

5.5 Tieto

From Tieto Juhani Vuorijärvi is interviewed. Vuorijärvi wanted to state that the following opinions shown in Picture 8 are his own and they do not necessarily represent the company’s official views.



Picture 8 Trends discussed with Tieto representative

Vuorijärvi thinks that there will be much more automation in the future. More and more of the tasks that service desk has to handle can be dealt with automated processes. He sees that the main reason for automation is the cost savings it can bring to a company. He states that almost 80 to 90% of the service desks costs are composed of human resources. Direct quotation from Vuorijärvi: “As sad as it sounds, with automation the

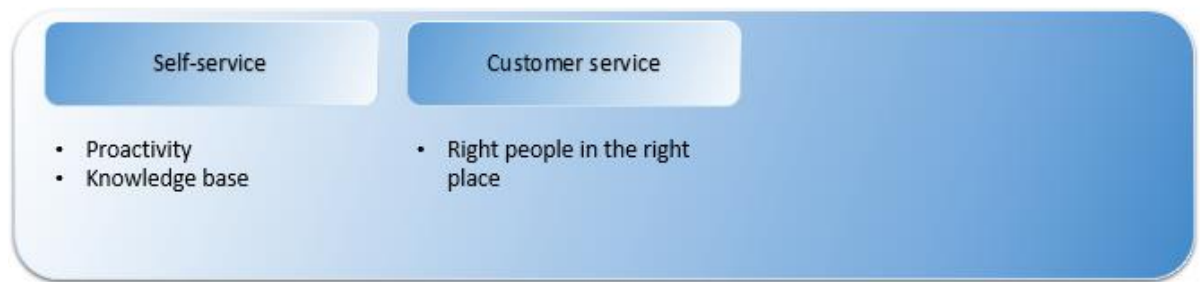
organization can reduce the amount of workforce they need and thus decrease the costs of service desk.” He also sees that this shift will allow many of the employees to do more challenging tasks. This naturally requires more capabilities from the employees. According to him the automation and artificial intellect will change the work in service desk to governing all the automated processes, but again for this to happen new and higher skillset is needed from the employees.

Vuorijärvi also introduced IT4IT architecture for managing IT business. According to Vuorijärvi the IT4IT is about producing value to customer which is not always the case at the moment. The processes inside the company are thought sometimes more than the value that can be brought to customer. For IT4IT to work Vuorijärvi told that the services have to be modelled to suit it and new framework has to be found. It also needs new tools and the processes inside the company has to be well thought before it can be implemented. It would shift the organization to lead service chains as whole from the customer value point of view. At the moment the service chain is thought part by part. For example incident management is one part and change management is one part. IT4IT would change this thinking and the whole organization's employee structure from change management owners to customer owners. Watching the process from customer's point of view would ensure better service for the customer and so boost the customer satisfaction. IT4IT is briefly introduced in Appendix 6.

Vuorijärvi from Tieto thinks that that the attitude and the organizations are ready for the change, but the technology is not there yet.

5.6 Service Provider C

Service provider C did not want to identify themselves, but they still wanted to keep the focus of their interview on their own business. The topics discussed with service provider C can be seen in the Picture 9 below.



Picture 9 Trends discussed with Service provider C representative

Service provider C sees future in a more proactive service and points out that this will be mostly done through self-service. Their target is to make their service desk nearly use-less. The service provider C sees that key to a working self-service is easy to use knowledge base. In their case the self-service needs highly customized solution as their customers are administrators.

The service provider C also mentioned that making changes elsewhere than service desk can reduce the workload in the service desk. For example they are working to make their product so flawless that the customer don't need to call the service desk. To monitor the efficiency service provider C believes in analytics. The interviewee said that there will be more data that can be used more easily in the future.

Service provider C does see SIAM as important trend and one that they are developing currently.

Customer experience was also important to service provider C. They approach it from the human resources angle. According to the interviewee key to a good customer service is having the right people in the right place. Competences of the employees must match the task they are doing. Measuring the service and collecting feedback from the customers were also seen as ways to improve customer experience.

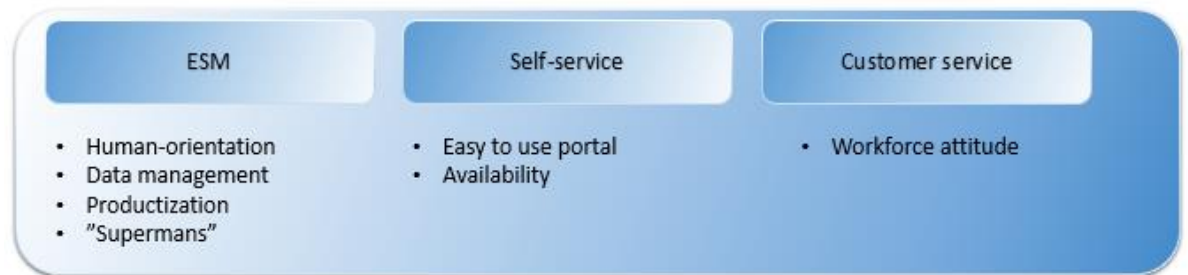
Service Provider C thinks that the technology is developing in a way that it offers a possibility to implement the chosen trends. The interviewee mentions that looking into the future can be difficult as many things that are considered important right now were not thought of a couple of years ago.

5.7 F-Secure

From F-Secure Juuso Hämäläinen and Kimmo Aren are interviewed.

F-Secure's IT service productization was selected as the ITSM act of the year by itSMF Finland. Service desk being part of IT services they are undoubtedly one of the leading Finnish organizations in the service desk industry. (itSMF, 2015)

It was clear based on the interview that F-Secure and their service desk is top notch in Finland as they have many things implemented that many are only dreaming. For example they have real and working omnichannel in place. The topics discussed with F-Secure can be seen in the Picture 10 below.



Picture 10 Trends discussed with F-Secure representative

Juuso Hämäläinen and Kimmo Aren from F-Secure see that in the following years the services of IT service desk will expand and start to offer similar services also outside of IT. The success of ESM lies in human-oriented service desk that can offer help in any problem, not just IT related ones. This change depends more on attitudes than technology. According to Hämäläinen and Aren the technology is already here, it is just not utilized to its full potential. One of the biggest challenges is to realize how and where it can be implemented. Organizations also have to adapt their culture and practices to these changes. The shift to ESM cannot happen before the organization is ready for it. The transition to enterprise wide service desk also needs good data management and in-depth knowledge of the employees. They also mentioned that productization is needed for the ESM service for this to work. Hämäläinen and Aren were worried about the possibility that this may result in that the service desk employees may have to become "supermen" to be able to help in any kind of requests that the service desk might face if it is enterprise wide. The employees already have a lot of competences, but the question is how far can they be pushed?

F-Secure's service desk employees have realized the importance of providing self-service to their customers. They understand that the work that can be done without human interaction and the tasks that do not generate as much value should be handled with the help of self-service. For this to work the service portal has to be easy to use and it has to have high availability.

Hämäläinen and Aren also maintained that the customer's opinion about the service desk often comes down to the attitude of the service desk employees. The service desk employees have a huge impact on the customer experience. They thought that the service desk employees should never forget why their job needs to be done. It is to provide value for the customer and support their everyday work. Technology brings more efficiency to this service, but the attitude is key in keeping the customers satisfied.

In a scenario where they would need to reduce costs of service desk Hämäläinen and Aren would handle the communications to the business side better. For example they would make the business think what they are really willing to pay for and eliminate excess license fees and negotiate new SLA's. It all comes down to a need for services and what the business is willing to work without.

5.8 Efecte

From Efecte Aki Ylivaari and Saku Sulander are interviewed. The topics discussed with Efecte can be seen in the Picture 11 below.



Picture 11 Trends discussed with Efecte representatives

Ylivaari and Sulander think that automation will continue to develop even further. They say that in fact automation can never be called "ready". There is always room for improvement. People will keep noticing more and more things that can be automated. At the moment it is password resets and requests, but who knows what can it be when

things like 5G and big data are fully implemented. In the future there will be less mundane tasks and they will be easier to fulfill. The service desk will specialize in things that really matter and are more complex. Ylivaara and Sulander see the cost reduction potential of automation is considerable.

They see a lot of potential in self-service as a cost reduction method. With easy to use self-service portal the amount of phone calls will reduce and thus reduce the costs of service desk. It is important to understand what is needed to be done by the service desk and what requests the self-service can solve.

For these changes to come true Ylivaara and Sulander think that the decision needs to come from the business. The technology is there, but it is not utilized to its fullest potential. The organizations lack the courage to try new things. Many of the changes need very little integration from the service desk tools. They both agree on the fact that smaller companies have easier time to adapt and try new things than the big and less agile organizations.

These changes will affect the organizations by changing the personnel structure and their way of thinking. The employees has to be able to do more than just the simplest of tasks. The mindset also needs to change to be more end user focused. The service desks have to understand what they are doing and why. Communication between the customer and the service desk needs to have more significant role. The service desk has to be able to provide trackable and transparent services. Ylivaara and Sulander see that the customer experience is very important in the services that service desks provide. If the customers are not satisfied with the service they will seek help from another source.

The development is slower in business world than with consumers. The current mindset in many companies is that the current solution is working and they should not change that. In the end service desk industry is changing slowly, but steadily.

5.9 Fujitsu

From Fujitsu Janne Kalliomäki and Juha Niemi are interviewed. The topics discussed with Fujitsu can be seen in the Picture 12 below.



Picture 12 Trends discussed with Fujitsu representative

Kalliomäki and Niemi from Fujitsu think that the routine tasks will die out from service desks because of automation and the zero level support (self-service) spreading. They also see that the work will become more challenging as the service desk evolves and, for example, starts to support finances and human resources too. They also think that the service desk services will be device independent because the services are mostly cloud based solutions. Kalliomäki and Niemi think that the service will be available in more channels than it is now and shift more towards mobile around the clock service. According to them the technology is ready to make a lot of this to happen, but the courage to try and implement these changes is missing. They also thought about a possibility that most services would be cloud based in the future.

They think that in future we will see self-repairing machines and automation will remove the “easy” work from the service desk. For the automation to be implemented to its fullest potential Kalliomäki and Niemi think that the technical knowledge of the employees has to develop and, more importantly, the customer service has to still be in the core of the service. While the services are digitizing the need for customer service still is there. The role of informing, creating knowledge and communicating becomes more critical in the service desk in near future. When automating the service desk the documentation and administration of the process has to be good. If the automation does not work it puts big part of organization's actions at risk. The benefits of the well implemented automation Kalliomäki and Niemi see in reducing costs and increasing efficiency as it removes bulk work. The service desk must be developed in a way that new incidents are gathered and then automated if necessary.

For the customer service improvements they see the development of the service portal to be the most important thing. In order to boost customer service an easy to use portal has to be implemented. This can be supported with a working automation. They also thought that it is important that the portal understands user's skill level and role and offers

service accordingly. Knowing the customer also allows the service provider to be proactive and help the user better and more effectively. The ideal situation according to Kalliomäki and Niemi would be where the end user will not even notice the problem before it is dealt with.

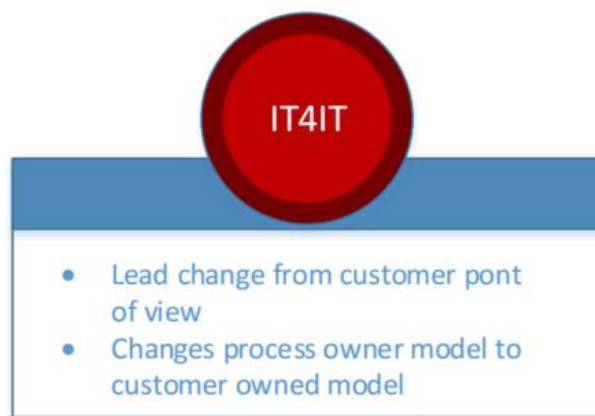
5.10 In-Depth Interviews Conclusions

The service desk seems to have two different directions it is developing in the future and this was taken into account when the two scenarios were made. On one hand the costs of the service desk are driven down, which is understandable because of the current economic situation, and on the other hand the service desk is looking to improve their customer service.

The biggest cost in the service desk is the cost of human resources. So a logical way to reduce costs is to automate mundane work. It seemed to be the way to strive for a more efficient service desk and every interviewee saw automation as an important trend in the development of the service desk. It is a trend that has been developed in the past, is developed now and will be developed in the future. Many of the interviewed professionals did not think that there is an end line for automation. In the future people will see and understand more and more tasks that can be automated. Real proactivity and automation that would be able to solve problems beforehand is way further in the future and still a hard thing to understand. Development of automation in the near future will keep on removing the mundane tasks and let the service desk agent do more challenging work.

Increasing customer satisfaction is another direction that the service desk is going. Professionals are trying to find ways that both increase customer satisfaction and decrease costs. Self-service is seen as an important trend considering the future of the service desk as it has potential to performance in both directions the service desk seems to be going. It has a lot of potential to remove some of the mundane tasks that the service desk agents have to do and thus decrease costs. It also gives the service desk customers faster resolutions so it may result in higher customer satisfaction. Therefore it is easy to see why the professionals found self-service so important.

In general customer experience was seen as a very important aspect for the service desk that has to be kept in mind at all times. One of the interviewees approached more customer centric service desk with the IT4IT management architecture. IT4IT itself is not a trend per se but rather a possibly upcoming framework that can help the organizations make their services more customer oriented. For this reason, IT4IT is not directly related to any of the trends that are studied in this thesis IT4IT is visualized in picture13 below. IT4IT aside all of the experts agreed that the service desk employees are the most important factor in the customer experience of the service.



Picture 13 IT4IT

‘Anywhere, anytime and with any device’ starts to be a common mindset so the service desk needs to adapt to this. Device independency is what many experts see that is coming in future. It seems that it will bring trends like omnichannel with it naturally. To enhance the customer experience the organizations start to offer a seamless service through cloud that can be connected to with any device.

Shift left has traits of both of the directions the service desk seems to be going and thus it can be seen more as a development strategy that steers the development. Automation, self-service and the other trends can be seen as parts of shift-left that pursue its objectives to remove unnecessary tasks and increase customer satisfaction. This will be described in more detail in the Section 6.

The second interviews show that BYOD is not very relevant trend to the service desk industry. It is a trend that generated a lot of hype around it, but the hype is slowly fading

away. Some parts of BYOD has been taken to use, but organizations feel the risks are too high.

Enterprise service management was seen as an important trend that will affect the service desk in many ways. Some of the interviewees thought that it will widen the range that service desk can help, but the depth of the service will suffer. The service desk is able to help in everything, but cannot give as in-depth help as it is giving now. Some of the interviewees however were thinking that the employees in the service desk will need to become “supermen” that can solve any problem. It was commonly agreed that the service desk will move to the direction where it can also help on other topics than just IT.

Service integration and management is seen important by the service providers, but the others did not see it as big thing as some of the other trends.

Many of the interviewees think that technology is already at the required level to realize the upcoming trends or at least almost there, but they agree on the fact that the resistance to change the current working methods is what slows down the development of service desk. The service desk agents need to adopt new skills and start working with more challenging tasks and the organizations are missing the courage to implement some of the new changes.

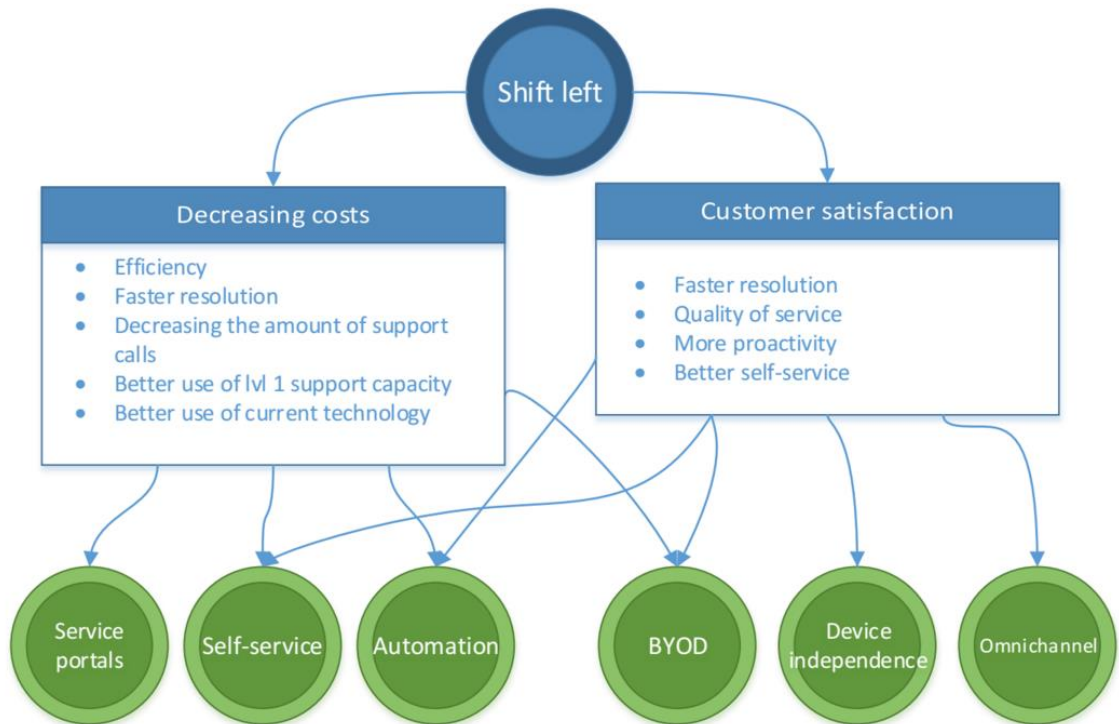
One of the experts pointed out that it sometimes requires a really good solution from somebody that everyone can copy, before the solution is commonly implemented.

The results of the second interviews are satisfactory. The topics of the second interviews are as follows:

- What are the things that will change?
- How the changes will affect the current service desk?
- What will the change require to happen?
- Why is this change coming?
- What are the next steps to achieve this change?

The results of the interviews give a good picture on most of the points. However, the results are lacking in finding out the next steps of the trend.

Based on the second interviews the theory conclusions are updated. The results can be seen in the picture 14 below. The second interviews introduced couple of new trends to the thesis. They were fitted under the shift left methodology accordingly. IT4IT in itself is another methodology that pursues its own targets so it is separated from the shift left trend tree.



Picture 14 Trend conclusions

In Chart 14 below the changes, requirements and impacts of the four most relevant trends according to second interviews and theory are collected.

Trend	Changes	Requirements	Impacts	Risks
Automation	Routine task elimination, less tickets leads to lower costs	Change of attitude, documentation, administration, physical service desk is still required	Workforce moves to more challenging tasks, faster resolution, less human errors, from reactive to proactive	Attitude towards change, automating wrong processes could lead to service downtime
Self-service	Less mundane work, proactivity, self-service portal implementation	Knowledge management, profiling, easy to use portal, availability, find out what to solve with SD and what with self service, requires constant management, requires "advertising"	Cost reductions, contact reduction, workforce moves to more challenging tasks, more efficiency	Shadow organizations, not easy to use, slow implementation, slow adoption
ESM	Scope change, organization wide support	Re-modelling, data management, productization, defining the processes, service desks deep understanding of the business	Out of silos, better knowledge management, higher productivity	Organization's processes not mature enough, need of "supermen"
Omnichannel	Seamless service regardless of contact method	Mastery of all the channels, training, Service desk portal/ticketing tool that is able to support omnichannel	Visible customer contact history, better customer service, saves handling time, increased first contact resolution, cost reductions, whenever and however support	Employees not willing to serve all the channels equally
Device independence	Mobility	Cloud portals	Anywhere, anytime, any device	Information security

Chart 14 Results of the second interviews and theory

Chart 15 below indicates the results of the two scenarios. The scenarios were:

- How to pursue greater customer satisfaction in service desk
- How to approach if service desk is facing a need to cut costs

Trend	Trends related to the scenario	Changes	Requirements	Impacts	Risks
Customer service	Self-service, device independence, ESM, automation, omnichannel	More capable employees, faster resolutions	Employees attitude, employees capabilities, employees understanding of the business, physical desk is still important	Faster resolution, better customer satisfaction, no shadow organizations, productivity	Need of "supermen"
Cost reduction	Self-service, automation	More automation, better self-service, customers solve the most simple incidents themselves	Good documentation, good knowledge management, easy to use portal, availability, administration	Fewer level 1 service desk agents, more efficient processes	Shadow organizations, automation of wrong processes

Chart 15 Results of the trend scenarios

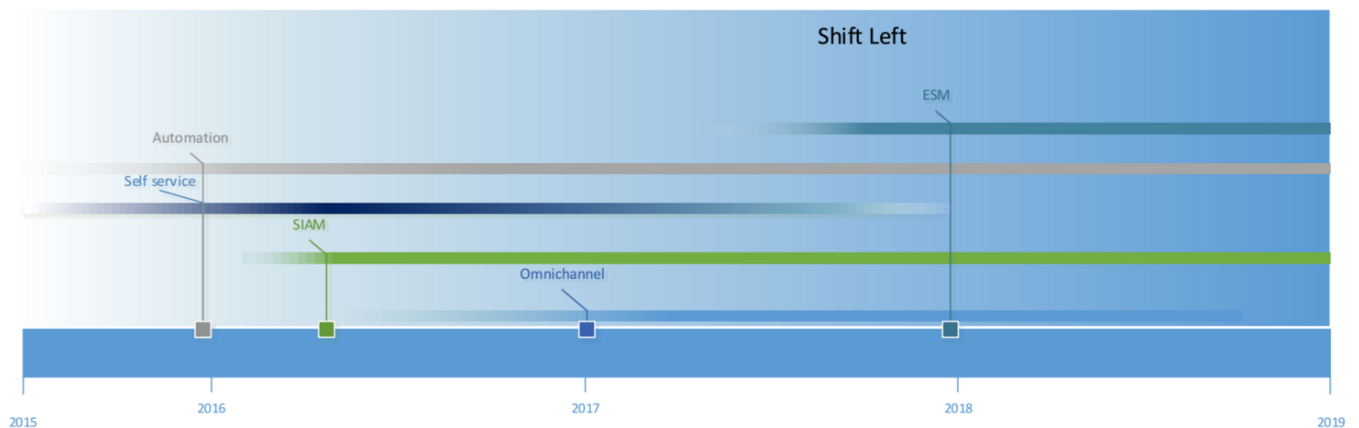
6 Conclusions

In this section the full results of this thesis are presented. This section contains the roadmap of the future trends of the service desk industry and the conclusions based on sections three, four and five.

6.1 The Roadmap

The final roadmap presented in this section is partially based on Picture 2 but it is more streamlined and shows only the most important trends. It also takes into account the theory and the second interviews, and, in particular, the professionals' comments on Picture 2 collected in the second interview.

The following roadmap is compiled based on the first and the second interviews and it is depicted in Picture 15 below. In the roadmap picture each of the final trends are presented. The horizontal line of graph shows when the trends will become relevant and more generally implemented according to the interviews. The importance of each of the trends is presented in the vertical line. The higher the trend is in the picture the more important it is. This hierarchy is based on the first and second interviews.



Picture 15 The roadmap

The roadmap is made for itSMF Finland's member organizations to easily see the most important trends to keep up with the industry's development. The member organizations

can see the roadmap and think what their service desk might look like in the future. This could help them to develop their service desk further.

The overall main trend at the moment seems to be shift left. Following the mentality of shift left allows the service desks to cut expenses through automation and self-service while at the same time making the processes of service desks more efficient. This is why the shift left is presented above every other trend in the picture¹⁴. The shift left term itself is not often used by the professionals most likely because they are focusing on more practical and gradual improvements. Nevertheless the shift left methodology is very strongly represented in the opinions of the professionals. All of the interviewees talked about automation in lowering the workload of service desk employees. Also self-service directs support request away from the service desk employees. At the same time all of the professionals say that since the simple support work is diminishing the service desk employees will have to develop their skills and competencies.

The risks of shift left are not forgotten by the professionals either. Many say that if implemented incorrectly or too “heavily” these practices harm the customer experience significantly. If automation scripts do not work or the self-service portal is badly implemented and outdated the customers will find their support from elsewhere in the organization and take time from employees who have different responsibilities. The traditional service desk will not completely vanish in the future since unexpected things will still keep happening and so far people are the best at solving complicated problems.

The next trend in the roadmap is SIAM. It includes a lot more services than just the service desk but SIAM still strongly affects service desks. The service providers are seeing more and more SIAM implementations and inquiries all the time. The biggest impact that SIAM has on the everyday work of service desk can come in the form of the service desk being the SPOC of the whole SIAM solution. This requires a better understanding of the customer’s business and organization from the service desk employees than before. Also it requires better communication from the service desk employees with even more stakeholders than before.

Omnichannel seems to be quite an elusive term for companies. It is not always desired, from the service desk standpoint. For example if the company has invested in an expensive service portal and put a lot work in making that process effective allowing customers to contact through any channel might not be desired. Still the reality is that the work is

becoming more and more mobile for everyone. This fact has to be taken into account in service desks and more ways have to be offered for customers to contact support. Also the fundamental principle of providing the same service regardless of the channel needs to be implemented in order to maintain customer satisfaction.

The trend furthest in the future in the roadmap is ESM. The principle of ESM is to provide service desk like service for any kind of incidents and problems people might run into in their everyday work. Only lately has this possibility been recognized but the development and implementation has been slow. Admittedly it is not an easy task to unify practically all of the company's practices and processes to be supported by a single entity. This might require a lot of changes to the everyday work of many employees and changes like that are not easy to pull off. Also the service desk employees who support all of these processes need to understand well how the different processes in the company work. The interviewed service providers believe that this can be done through SIAM. This would be logical since the service desk could already be the SPOC for many different requests and they are used to communicate with other service providers linked to the customer organization. But this is not the only way to do it. F-Secure's Hämäläinen and Aren said that their company owns all of the services that they provide for their employees and they are still pursuing the ESM principles. They are planning to make the current service desk as their SPOC for any kind of support requests. They realize that this requires a lot from the service desk employees and they are planning to improve their self-service portal and automation to allow their service desk employees to have time to support enterprise wide requests and to have the required skills to do so. This way the whole roadmap is a logical way to achieve a more effective and more intelligent service desk.

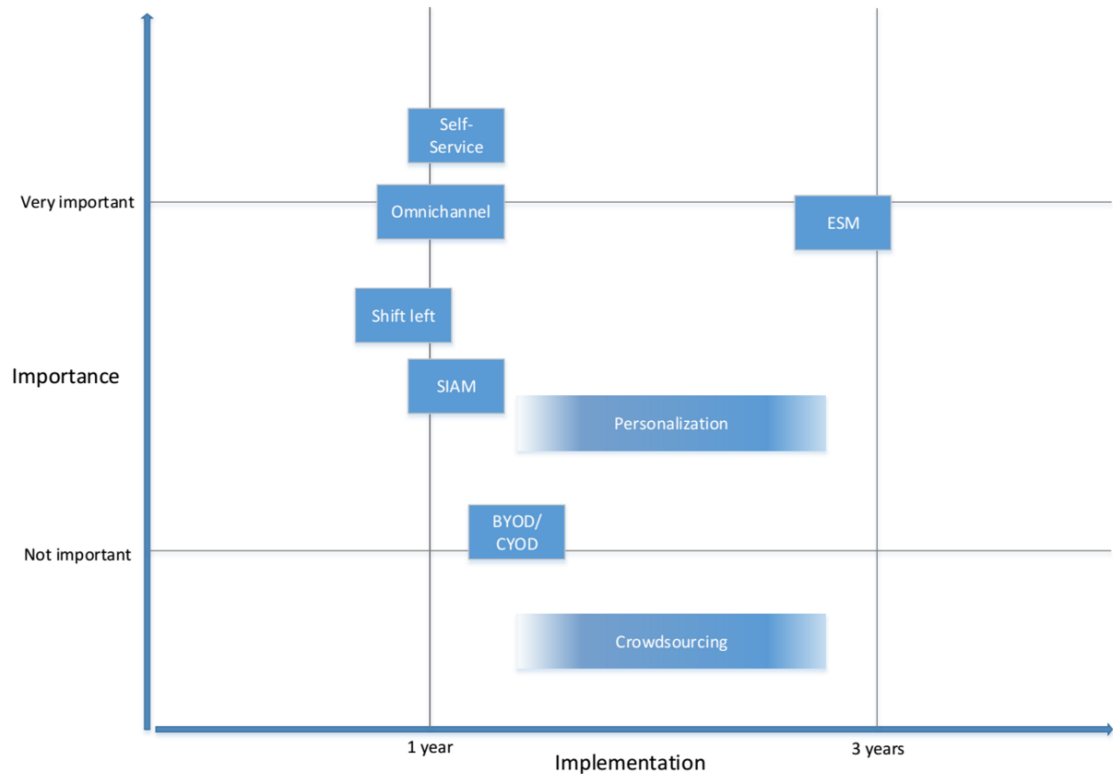
7 Thesis Summary and Evaluation

In this section the thesis is gone through step by step and after that the thesis team evaluates how the thesis succeeded.

7.1 Thesis Summary

The goal of this thesis is to convey to the itSMF Finland's member organizations what the most important trends that are coming in the service desk industry are so that they can keep up with the industry's development. To achieve this the thesis team created a roadmap that shows the most relevant trends and figured out what the requirements, impacts and the risks related to these trends are.

First the thesis team and the Service Desk Evolution Special Interest Group collected possible future trends to study with the SIG suggested industry professionals. This way the list of trends for the first interviews was created. Next the thesis team contacted the service desk professionals suggested by the SIG to find out what the strengths and weaknesses of their companies Service Desks are and what their opinions on the chosen future trends are. Based on the interviews the thesis team could not find almost any similarities between the strengths nor in the weaknesses of the companies that were interviewed. This led to the fact that no coherent current state analysis could be formed about the service desk industry. Still, every single expert stated that they are improving their self service solutions and that they are beginning to explore the possibilities of automation. This gives an indication that even though their service desks are very different they can, to an extent, use the same capabilities brought by technology and different practices. Most likely the implementations will be different but the basic idea behind the improvements to service desks are the same. Because the service desk professionals were so unanimous about the most important trends that they are developing in their organizations the thesis team was able to narrow down the trend list to include only the most relevant trends of the industry. The exact results of these interviews can be found in Section 3 and they are visualized in Picture 16 below.



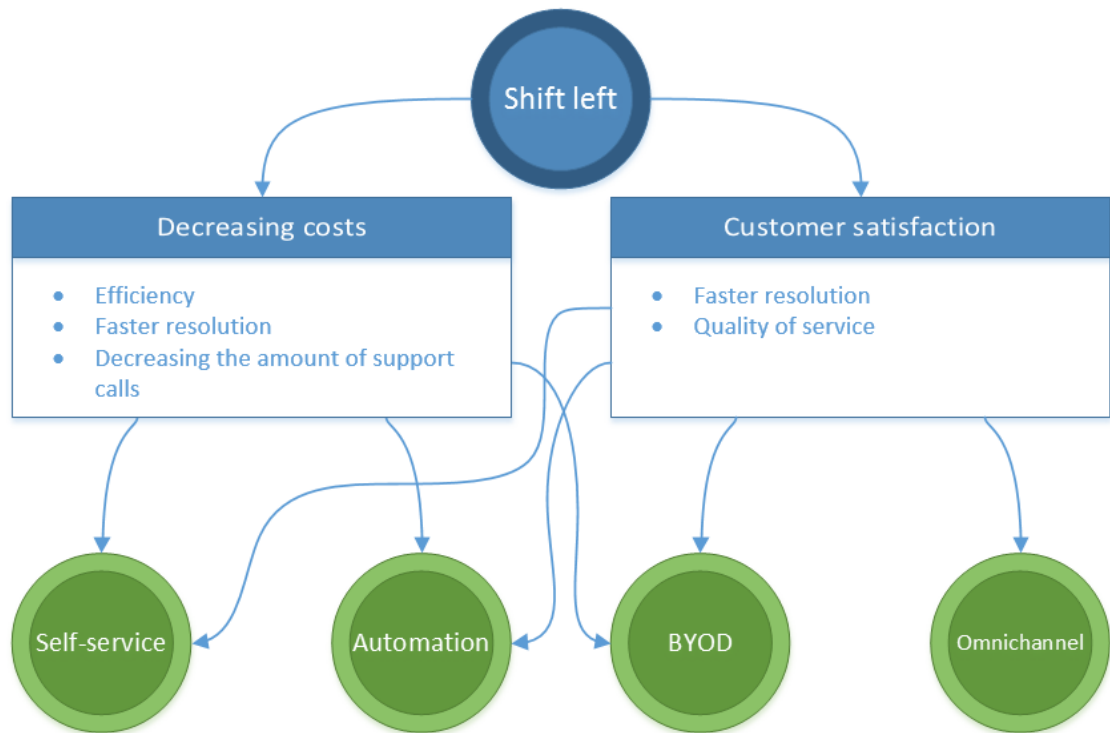
Picture 16 Results of the first interviews

As shown in Picture 15, the most relevant trends chosen were:

- Shift left
- Self-service
- BYOD
- Automation
- Omnichannel

After the most relevant trends were figured out the thesis team studied the trends mostly from online sources to find out what the global industry experts think about them. The theory about the trends can be found in Section 4. The goal of this phase was to understand the trends deeply enough to be able to carry out the second interviews. When the theory from the trends was gathered the thesis team formed the questions for the second interviews to get more thorough answers from the service desk professionals. The point of this thesis was to find out what the future will bring for the service desk industry. This led to the insight that the theory had to be gathered mostly from Internet sources that are

not necessarily the most reliable. However the interviewed service desk experts had very similar understanding about the possibilities and challenges that the trends will bring to the service desks as the Internet sources studies. This fact makes the Internet sources to be more trustworthy. The results of the theory can be found in subsection 4.9 and they are visualized in Picture 17 below.



Picture 17 Theory conclusions

The purpose of the second interviews was to find out what the professionals thought were the reasons behind the emergence of the trends and what they require from different stakeholders. The results of these interviews were extremely similar. Even more so if the companies are categorized based on their relationship with service desks.

All the companies agreed on the importance of automation and proactivity in noticing and resolving of incidents and problems. This allows the experts in the service desk to focus on more demanding tasks and improve their capabilities.

The service providers, which are the most represented category in this phase of the study, all agreed that SIAM and ESM will be very important in the future. SIAM is already being implemented in many companies and most of the service providers feel that ESM can be implemented on top of SIAM very seamlessly.

The so called customer organizations, one with outsourced and one with in house service desk, are focusing mostly in customer experience and its management.

This sample is very narrow and from different service desk production models so the results cannot be generalized in any way. The IT service management solution providers both agreed on the fact that technology is ready for all of the trends studied here but that the companies are not yet ready to take the step in implementing the changes.

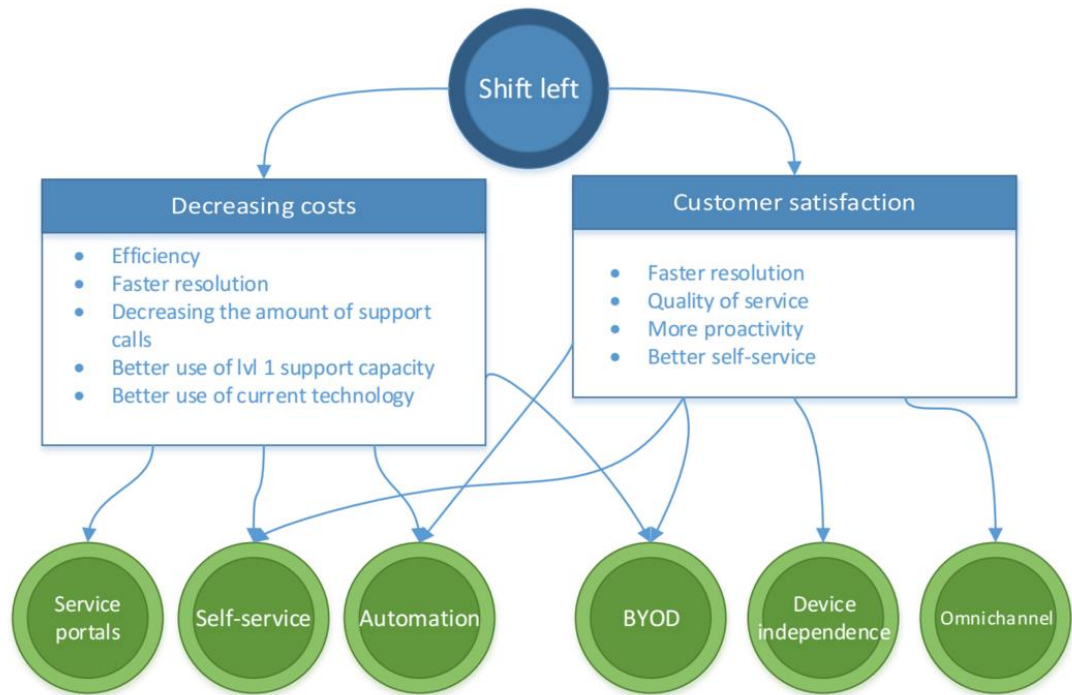
Many of the professionals criticized the lack of courage from the companies. Companies are not often willing to test and develop new technologies and practices unless someone else has already successfully implemented them. This also slows down the development of service desks. For example this shows in the implementation of automation. The professionals say that there is not enough research on what are the possibilities of automation. There are still so many things that can be automated that people have not even thought of because of the lack of research. Even though some mistakes will be made and some automations at some point need to be scaled down the possibilities strongly outweigh the risks according to Niemi and Kalliomäki. Admittedly the current economic situation in Finland probably has an impact on the risk taking tendencies of companies. The complete results of the second interviews can be found from subsection 5.10 and the results are visualized in Charts 16 and 17 below. Also the theory conclusions were updated based on the second interviews because some of the professionals talked about trends that are not included in the theory. The trend conclusions can be found in the picture 18 below.

Trend	Changes	Requirements	Impacts	Risks
Automation	Routine task elimination, less tickets leads to lower costs	Change of attitude, documentation, administration, physical service desk is still required	Workforce moves to more challenging tasks, faster resolution, less human errors, from reactive to proactive	Attitude towards change, automating wrong processes could lead to service downtime
Self-service	Less mundane work, proactivity, self-service portal implementation	Knowledge management, profiling, easy to use portal, availability, find out what to solve with SD and what with self service, requires constant management, requires "advertising"	Cost reductions, contact reduction, workforce moves to more challenging tasks, more efficiency	Shadow organizations, not easy to use, slow implementation, slow adoption
ESM	Scope change, organization wide support	Re-modelling, data management, productization, defining the processes, service desks deep understanding of the business	Out of silos, better knowledge management, higher productivity	Organization's processes not mature enough, need of "supermen"
Omnichannel	Seamless service regardless of contact method	Mastery of all the channels, training, Service desk portal/ticketing tool that is able to support omnichannel	Visible customer contact history, better customer service, saves handling time, increased first contact resolution, cost reductions, whenever and however support	Employees not willing to serve all the channels equally
Device independence	Mobility	Cloud portals	Anywhere, anytime, any device	Information security

Chart 16 Results of the second interviews

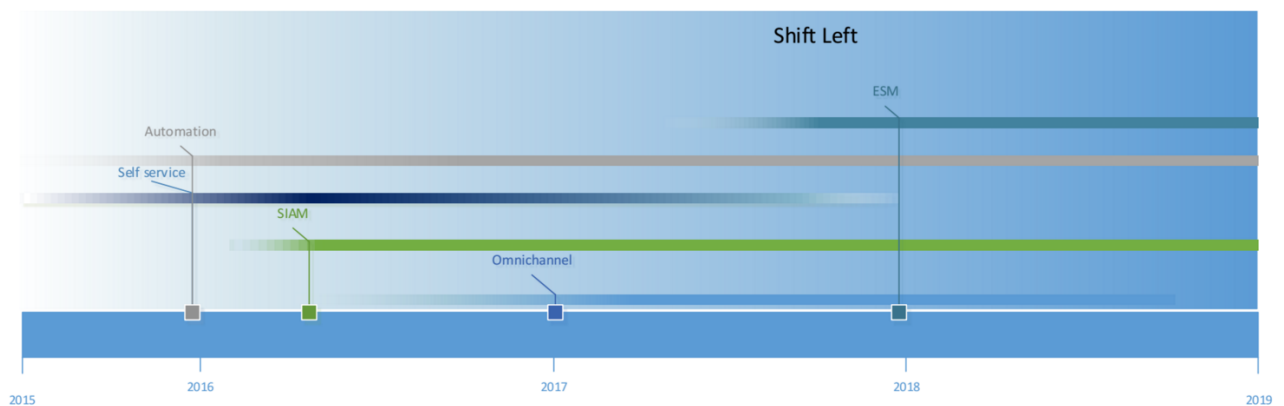
Trend	Trends related to the scenario	Changes	Requirements	Impacts	Risks
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Cost reduction	Self-service, automation	More automation, better self-service, customers solve the most simple incidents themselves	Good documentation, good knowledge management, easy to use portal, availability, administration	Fewer level 1 service desk agents, more efficient processes	Shadow organizations, automation of wrong processes

Chart 17 Results of the trend scenarios



Picture 18 Trend conclusions

Finally, the thesis team formed the roadmap based on all of the interviews and theory gathered for this thesis. The roadmap can be found in the end of Section 6 and in Picture 19 below.



Picture 19 The roadmap

7.2 Evaluation

The goal of the thesis was to form the roadmap of the most relevant coming trends. Also the impacts, implementation and the risks of each of the trends were to be studied. The

thesis team is happy with the end results of the thesis as they were able to form the roadmap based on the expert opinions. The impacts and risks of the trends became clear and the experts agreed on most of them. However the implementation of the trends is lacking. The experts could not or would not give practical enough steps in the implementation of the trends due to either restrictions set by their organization or because of the fact that they are not sure how the future will turn out to be.

Also collecting the theory turned out to be a challenge. Most of the sources regarding the theory are from various Internet source and blog posts. These might not be the most reliable sources to study. The subject of the thesis being about trying to foresee the future is very difficult. There are practically no books and very few white papers about the future of service desk. This fact forced the thesis team to look for the information elsewhere. However the experts agreed quite well with the theoretical information that the thesis team found. This indicates that the Internet sources were the best possible sources for the study.

The thesis team and the SIG are surprised that the discussion on outsourcing versus insourcing is almost nonexistent in the interviews. The thesis team got the feeling from the interviews that the outsourcing trend has mostly faded but the thesis team did not get a solid result for this. Also the thesis team thinks that it is not very important whether the service desk is in- or outsourced as long as it understands the customer organization and the business of the customer well.

Due to these difficulties the thesis team suggests that a new study should be made about how mature the organizations should be if they want to implement these trends. This would give a better idea on how the trends should be implemented and it would also justify the requirements of the trends found in this study.

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Trend Introductions

Olemme tehneet pohjatyötä tutkimalla asiantuntijoiden mielestä lähitulevaisuudessa ilmeneviä trendejä, joita on listattuna alla:

ESM (Enterprise service management) - enemmän kuin IT

ESM:n tarkoitus on laajentaa IT-palvelunhallinnan käytäntöjä ja prosesseja IT:n ulkopuolelle. Tarkoituksena on parantaa tämän alueen tuottavuutta. Service deskiin liittyen kaikki muutkin yrityksen "tukipyynnöt", kuten esimerkiksi kiinteistön hallinnan (facility management) korjauspyynnöt ja vikailmoitukset voidaan hoitaa IT:n prosessein ja työkaluin.

SIAM

Service integration and management, eli palvelu integraatio ja hallinta, on tarkoitettu helpottamaan usean palveluntarjoajan hallintaa ja palveluiden integroimista yrityksen toimintaan niin, että ne toimivat saumattomasti yhdessä yhtenä organisaationa sen vaatimuksiin vastaten.

Ominchannel

Omnichannel tarkoittaa asiakkaan mahdollisuutta valita service deskiin käyttämänsä yhteydenpitotapa. Tämä tarkoittaa sitä, että asiakas voi esimerkiksi ottaa service deskiin yhteyttä sosiaalisen median, service desk työkalun, Lyncin, puhelun tai sähköpostin avulla. Asiakas voi myös vaihtaa yhteydenpitotapaa saumattomasti tukiprosessin aikana. Asiakaskokemuksen parantaminen on tämän trendin päätavoite.

Shift left

Shift leftin perusideana on siirtää ratkaisua lähemmäs loppukäyttäjää ja näin vähentää service deskin ratkaisuaikaa ja kuluja. Tarkoitus on saavuttaa proaktiivisempi service desk, jossa ongelmat voidaan ratkaista service deskin ensimmäisellä tasolla tai jopa jo asiakkaalla itsellään on kyky ratkaista useimmat ongelmansa.

BYOD/CYOD

(Bring your own device) eli "tuo oma laitteesi" ideana on, että käyttäjä tuo omat laitteensa (puhelin, tietokone) töihin ja työskentelee niillä. Tarkoituksena on, että koska työntekijä tuntee ja osaa käyttää omia laitteitaan paremmin kuin työnantajan tarjoamia hän kykenee ratkaisemaan suuren osan ongelmistaan itse. Näin Service Desk henkilöstölle jää enemmän aikaa pureutua isompiin ongelmiin.

(Choose your own device) eli "valitse oma laitteesi ideana on, että työntekijöillä on mahdollisuus valita yrityksen hyväksymistä laitteista itselleen sopiva. Työntekijä joko maksaa puhelimen itse ja voi pitää puhelimen pysyvästi tai yritys on rahoittanut puhelimen ja työntekijä voi pitää sen työsuhteen ajan.

Crowdsourcing

Crowdsourcing eli joukkoistaminen on käytäntö, jossa tehtävä ulkoistetaan suurelle ja kevyesti määritellylle joukolle ihmisiä. Ideana on saada uusia

näkökulmia, kehittyneempää tietotaitoa tai suurempi joukko ihmisiä työskentelemään tietyn tavoitteen saavuttamiseksi.

Itsepalvelu

Käyttäjä voi hakea ratkaisuja, ohjeistusta, seurata tukipyyntöjensä tilaa, saada raportteja, seurata palvelustatusta, antaa palautetta, lukea häiriötiedotuksia yms itsenäisesti ja käyttäjäystävällisesti. Sisältää myös automatiikan tuomat mahdollisuudet, kuten automaattiset softatilaukset.

Tuen personoiminen

Personointi tai räätälöinti tarkoittaa palvelun tarjoamista niin, että se on sovitettu tietyn yksilön tarpeisiin, eikä suurelle joukolle. Näin pyritään takaamaan asiakastytyväisyyttä.

Tuen tarjoaminen personoidusti service deskissä tarkoittaa, että esimerkiksi tukityökalu tunnistaa käyttäjän tekniset taidot ja roolin ennen kuin tämä ottaa yhteyttä tukeen. Tämä voi tarkoittaa myös sitä, että toimittaja räätälöi tukifunktionsa eri asiakasorganisaatioille niiden tarpeiden mukaan.

Current State of Service Desks - Interview

Luottamuksellisuus: Mitä tietoa saamme julkaista yrityksestänne?

1. Yrityksen koko, IT:n koko/service deskin koko, asiakkaiden määrä, tukivolyymit ja yrityksen toimiala?

2. Service deskin merkitys yrityksellenne?

Oma vai ulkoistettu?

Arvostetaanko service deskiä IT:n sisällä?

Arvostetaanko service deskiä IT:n ulkopuolella?

3. Service deskin vahvuudet, heikkoudet, mahdollisuudet, uhat tällä hetkellä? (SWOT)

4. Miten ja kuinka pitkälle yrityksessänne suunnitellaan service deskin kehittämistä?

5. Mihin suuntaan kehitätte service deskiänne ja mitkä ovat sen tärkeimmät kehittämistavoitteet 1-3v eteenpäin?

6. Määrittele seuraavien trendien tärkeys organisaationne osalta ja yleisesti, sekä miten nopeasti ne jalkautuvat.

Huom. Esittely trendeistä löytyy trendien esittelyt -tiedostosta.

ESM

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

SIAM

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

Omnichannel

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

Näkemyksiä miten yhteyttä voidaan pitää service deskiin tulevaisuudessa:

Shift left

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

BYOD/CYOD

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

Crowdsourcing

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

Itsepalvelu

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

Tuen personoiminen

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä):

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä):

Jalkautuminen (<1v. - <3v. - >3v.):

7. Puuttuiko listastamme jokin tärkeä trendi? Jos, niin miten se on miten on huomioitu omassa yrityksessänne?

8. Mitä toivotte/odotatte lopputyöltämme? Mitä toivotte sen sisältävän?

9. Oletteko halukkaita osallistumaan syventävään haastatteluun?

Current State of Service Desks - Interview

– Aalto Answers in Finnish

Luottamuksellisuus: Mitä tietoa saamme julkaista yrityksestänne?

Saa ilmoittaa, että Aalto-yliopisto on mukana tutkimuksessa

1. Yrityksen koko, IT:n koko/service deskin koko, asiakkaiden määrä, tukivolyymit ja yrityksen toimiala?

- asiakkaat: henkilökuntaa 4600, opiskelijoita 20000, vierailijoita vaihteleva määrä (satoja)
- IT-henkilöstöä keskitetyssä IT:ssä 150, laitoksilla n. 50
- IT-asiakaspalvelussa (servicedesk + lähituki) henkilöstöä 50
- servicedesk-työtä kokopäiväisesti tekee 8 henkilöä, resurssia täydentää myös lähitukihenkilöstö

- toimiala: opetus ja tutkimus

Volyymista jäi mainitsematta, että tikettejä on vuositasolla IT:ssä 35.000 kappaletta.

Asiakaspalvelu ratkoo näistä yli 70%.

Kontaktityypeittäin:

- email servicedesk järjestelmää 70%
- puhelut 12%
- palvelupistekäynti 10%
- on site 8 %

2. Service deskin merkitys yrityksellenne?

Oma vai ulkoistettu?

Arvostetaanko service deskä IT:n sisällä?

Arvostetaanko service deskä IT:n ulkopuolella?

Oma servicedesk

- arvostus IT:n sisällä: kyllä ja ei. Tarkoitan tällä sitä, että arvostetaan kaikkea sitä työtä, jonka servicedesk tekee eskaloimatta asiantuntijoille. Asiakasrajapinnassa työskentelyä sen sijaan ei välttämättä arvosteta.
- IT:n ulkopuolella servicedeskä arvostetaan suuresti.

3. Service deskin vahvuudet, heikkoudet, mahdollisuudet, uhat tällä hetkellä? (SWOT)

Vahvuudet:

- palveluhenkinen, nopea, asiakasta lähellä, pystyy tarjoamaan nopeita ratkaisuja ja asiat hoituu kerralla, hyvin tavoitettavissa ja löydettävissä
- asiakas saa palvelua itselleen sopivana ajankohtana ja valitsemastaan palvelupisteestä/kanavasta

Heikkoudet

- walk-in –palvelu sitoo resursseja ja paikan päälle sapuminen kuluttaa palvelun käyttäjien aikaa (10%kontakteista)
- puhelinpalvelua ei koeta servicedesk-henkilöstön keskuudessa miellyttäväksi ja palvelun saatavuuden varmistaminen vaatii paljon esimiestyötä. Palvelua ei ole markkinoitu näistä syistä eikä sitä kovin paljoa käytetä (12% kontakteista). Työ koetaan vaikeaksikin, koska puhelut ovat usein englanninkielisiä ja puhelu voi tulla miltä tahansa kampukselta, jolloin asiakas ja hänen tekninen ympäristönsä ei ole entuudestaan tuttu.

Mahdollisuudet:

- Ammattimainen servicedesk-palvelu pystyy hoitamaan yli 80% palvelupyynnöistä ja ongelmaratkaisuista, mikä vähentää lähituen resurssitarvetta ja säästää asiantuntijoiden työaikaa palveluiden kehittämis- ja ylläpitotyöhön.

- Ammattimaisesti toimiva servicedesk-henkilö tarttuu mahdollisiin ongelmatilanteisiin ja raportoi näistä välittömästi eteenpäin. Hän myös edesauttaa löytämään sellaisia rutiininomaisia ja usein toistuvia tapahtumia, joita kannattaa automatisoida tai estää esim. paremmalla ohjeistuksella.
- Servicedesk tarjoaa mahdollisuuden monikanavaiseen palveluun.

Uhat:

- Mikäli asiakkaat, erityisesti tutkijat, kokevat tarvitsevansa lähitukea enemmän kuin sitä pystytään tarjoamaan, toteuttavat he itse omiin tutkimusryhmiinsä oman lähituen ja syntyy varjo-IT-rakennelmia, joista juuri ollaan pääsemässä eroon.
- Jos IT-tuki keskitetään servicedeskiin, niin se on haavoittuvainen poissaoloille ja resurssivähennyksille. Riittävät resurssit on pystyttävä turvaamaan.
- Keskitetty servicedesk toimii usein erillään muusta IT:stä ja saattaa jäädä ilman riittävää informaatiota palveluissa ja organisaatiossa tapahtuvista muutoksista. Riittävä tiedon saanti on edellytys toimivalle servicedeskille.

4. Miten ja kuinka pitkälle yrityksessänne suunnitellaan service deskin kehittämistä?

- Servicedeskin pienkehittäminen on jatkuvaa työtä – reagoimme sisäiseen ja asiakkailta saamaamme palautteeseen.

Isompia kehittämislinjauksia synkronoidaan koko organisaation muun palvelutuotannon kanssa. Huomioidaan myös ulkoiset vaikuttajat, kuten taloudelliset paineet, kansainvälistyminen ja digitaalinen transformaatio, mitkä vaikuttavat IT:n sisäisten resurssien kohdentamiseen.

Erillistä kehittämissuunnitelmaa palvelukulttuurin muuttamiseksi ei ole laadittu.

5. Mihin suuntaan kehitätte service deskiänne ja mitkä ovat sen tärkeimmät kehittämistavoitteet 1-3v eteenpäin?

- Tavoitteemme on vahvistaa entisestään servicedeskin osuutta ratkottuista palvelupyynnöistä ja ongelmanratkaisuista.
- pyrimme tukemaan itsepalvelua parantamalla ohjeistusta ja kehittämällä sähköisiä lomakkeita. Olemme myös ottamassa käyttöön itsepalveluportaalin. Nykyisin tiketit tulevat sähköpostiviesteinä tiketointijärjestelmään.
- kannustamme it-asiakaspalvelua käyttämään aiempaa enemmän etähallintatyökaluja – nykyisin liikutaan melko paljon isoilla kampuksilla, mikä vie paljon aikaa.
- Olemme ottamassa vaiheittain käyttöön palvelunhallintajärjestelmää, johon integroidaan CMDB, ongelmanhallinta, tietämyksenhallinta ja chat. Tämä tehostaa prosesseja.
- Parannamme palvelun laatua ja tasalaatuisuutta ja määrittelemme palvelulupauksia, mikä tuo parempaa hallintaa asiakasodotuksiin.

6. Määrittele seuraavien trendien tärkeys organisaationne osalta ja yleisesti, sekä miten nopeasti ne jalkautuvat.**Huom. Esittely trendeistä löytyy trendien esittelyt -tiedostosta.****ESM**

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): Erittäin tärkeä

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): Erittäin tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): < 3v

SIAM

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): Tärkeä

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): > 3v

Omnichannel

Kommentteja trendistä: Madaltaa kynnystä pyytää apua ja siten nopeuttaa ongelmien ratkeamista. Eri tilanteissa eri kanavat toimivat optimaalisemmin kuin muut.

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): Tärkeä

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): Tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): <1v, on jo osittain käytössä

Näkemyksiä miten yhteyttä voidaan pitää service deskiin tulevaisuudessa: Chatiltä odotan paljon. Myös palvelukuvauksissa on oltava linkki kanavaan, mistä apua saa. Yliopistomaailmassa olisi hyvä vahvistaa ja virallistaa myös crowdsourcingia, koska käytännössä opiskelijat neuvovat toisiaan ja kynnys pyytää apua esim. servicedeskistä on melko korkea.

Shift left

Kommentteja trendistä: tehokkuuteen pyrittäessä tämä on organisaatioiden, ei välttämättä loppukäyttäjien tavoite.

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): ei tärkeä

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): ei tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): > 3v

BYOD/CYOD

Kommentteja trendistä: Kannattaa tutkia huolella, mitä sudenkuoppia tähän sisältyy ja mitä mahdollisuuksia se rajaa pois. Mm lisenssiehdot ovat merkittävässä roolissa. Miten varmistetaan, että kaikilla opiskelijoilla on käytettävissä tarkoituksenmukaiset työvälineet? On yliooptimistista kuvitella, että kaikki osaisivat hallita omia työvälineitään. on myös iso joukko, joka mielellään jättää tämän työn sen alan ammattilaisille.

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): tärkeä selvittää

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): >3v

Crowdsourcing

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): tärkeä

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): > 3v

Itsepalvelu

Kommentteja trendistä:

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): erittäin tärkeä

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): erittäin tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): < 3v

Tuen personoiminen

Kommentteja trendistä: Tämä sopii ja on tarpeen tutkimusta tukevassa asiakaspalvelussa. Ei koske kuin osaa käyttäjistä.

Tärkeys organisaatiollenne (ei tärkeä- tärkeä-erittäin tärkeä): erittäin tärkeä, kohderyhmä rajattava huolella.

Tärkeys yleensä (ei tärkeä- tärkeä-erittäin tärkeä): tärkeä

Jalkautuminen (<1v. - <3v. - >3v.): < 3v

7. Puuttuiko listastamme jokin tärkeä trendi? Jos, niin miten se on miten on huomioitu omassa yrityksessänne?

-

8. Mitä toivotte/odotatte lopputyöltämme? Mitä toivotte sen sisältävän?

9. Oletteko halukkaita osallistumaan syventävään haastatteluun?

ei tällä kertaa

Enterprise Service Management

Enterprise service management is taking the practices, management models and tools used in IT to also other service domains for example HR or finance in the organization. Doing so ESM aims to achieve higher productivity by adapting tested support methodologies the across the organization internally so the business can move forward and keep delivering results.(Axios systems)

That being said the organization will improve productivity and profitability by improving the efficiency of internal operations(Axios systems)

Taking the IT Service Management principles to other areas of the organization too can provide many benefits. It can be seen as an opportunity for IT to lift up the entirety of the business. Enterprise service management helps to make all of the units in organization to share the organization's goals. It shatters silos and creates environment where each unit communicates and contributes for the bigger picture._(McArthur, 2015)

Service Integration and Management

Service integration and management is a model that allows companies to manage multiple service providers efficiently. Use of the model requires the services to be well defined. Each of the services responsibilities and accountabilities have to be agreed upon. SIAM can be implemented in many ways. it can be operated completely inside of the company or the in house layer of the integration can be very thin where almost all of the services are outsourced. Service desk is often part of the service managed with the help of SIAM.(Gareth Rushgrove, 2014)

F secure

Kimmo Aren
Senior service owner/team lead

Juuso Hämäläinen
Senior manager, IT services

1. Ihmislähtöistä, scope nyt vain it tulevaisuudessa yleinen palvelu desk. Walk in tuki+support. Paleluasenteen pitää muuttua koko organisaatiossa. Muiden palveluiden tuotteistaminen, yksikertaisen tiedon. Suurimmat ongelmat ovat ihmisistä ja kulttuurista rippuvia. Työntekijöiden mind set on jo hyvin pitkällä oikea. Mutta vaatii syväksitymistä useampiin asioihin. Nyt jo deskissä paljon kompetenssia eri asioista. Dokumentaatio ja hallinta pitää olla myös tukemassa. Itsepalvelu on kasvussa jatkuvasti menossa automaatio/itsepalvelu. Mahdollisimman suuri osa arvoa lisäämättömistä töistä koneistetaan. SD työntekijät keskittyvät vain ajattelua vaativiin tehtäviin. Myös sd ymmärtää automaation tarpeen ja ajaa sitä eteenpäin.

2. a) Turhat lisenssihankinnat. Palveluiden määrittelemine bisneksen kanssa. Tätä kautta selvitetään onko jotain mikä ei lisää arvoa bisnekselle. Jos tällaisia ei ole niin sitten pitää keskustella mistä bisnes on valmis luopumaan. Vendoreiden kanssa voidaan enemmän lisenssi ostoissa yms. Säästää.

b) Asenne, miksi tätä työtä tehdään. Tuntee tuottavansa arvoa. Mahdollistetaan muiden yrityksen työntekijöiden työn tekeminen mahdollisimman tehokkaasti ja asiakkaan odotukset ylittäen. Asiakas ja palveluhenkisyys. Self service ja automaatio voi nostaa, tämä kuitenkin riippuu yrityksestä ja asiakkaista. Palvelujen saatavuus ja helpokäyttöisyys. Tukijärjestelmät mitkä auttavat olemaan responsiivisia, käyttäjät voivat ottaa yhteyttä miten haluavat, tiketit kertovat paljon asiakkaan tiketin tärkeydestä yms. Tekniset asiat auttavat, mutta tärkein on ihmiset.

3. Omnichannel on jo realismia. ESM eteen tehdään koko ajan töitä, mutta siinä tulee kestävään n. 3-5v. BYOD on ollut puheenaiheena jo pitkään, mutta ei ole realisoitunut oikein kunnolla. Joitain osia toteutetaan. SIAM on käytössä mittaamista ja raportointia varten. Sen avulla seurataan toteutuuko SLA:t. Yrityksemme sisällä on MAC ja Linux yhteisöt, koska niille ei ole varsinaista tukea. Personointi toteutetaan meidän tapauksessamme tuotteessa ei palveluissa. Trendejä, joita ollaan mahdollistamassa ei oteta hetkessä käyttöön.

IT4IT

IT4 IT's vision is to be vendor neutral reference architecture for managing IT business. IT consist of a reference architecture and a value-chain based operating model for managing IT business. It also contains guidance on how to design, procure and implement all of the functions to run IT in a company. The IT4IT value chain has 4 value streams which are: strategy to portfolio, request to fulfill, requirement to deploy and detect to correct. These value streams help to control the IT service model through its life cycle. IT4IT is made by The Open Group IT4IT Forum. (The Open Group)