

Otso Virri

# Service Integration and Management (SIAM) Practices and Four Case Studies of Finnish Companies

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<p>The purpose of this thesis was to research the concept of Service Integration and Management (SIAM) and SIAM practices in Finnish companies. This study was carried out for the organization itSMF Finland, and a taskforce called SIAM SIG within the organization. The objective of the thesis was to research and analyze existing SIAM practices in targeted Finnish companies to provide meaningful insight on the subject for the members of itSMF network and other interested parties.</p> <p>This study is based on a SIAM-survey conducted for the itSMF network, literature on IT Infrastructure Library (ITIL) and SIAM, and six targeted interviews conducted for SIAM-professionals working in four different Finnish companies representing different industries and known for practicing the concept. The findings of the targeted interviews are represented as individual case studies of the companies.</p> <p>The findings of this study showed that implementing a SIAM operating model into an IT-organization is the most challenging part in adapting the concept. This directed the research, and the thesis focuses on discussing means of successfully implementing a SIAM model by presenting good practices found from literature and from the operations of interviewed companies. The value of this thesis lies in four actual case studies of SIAM implementations in Finnish companies and the elicited practical experiences.</p> <p>On the basis of the findings, to successfully implement a SIAM model, a company should focus on developing its IT-maturity level and internal capabilities, plan the model and implementation well, manage partnerships and lead people towards the change. To develop internal SIAM capabilities, a systematic approach for training the IT-organization has proven to be valuable in building the necessary maturity level for adapting SIAM. Designing the model by planning the different SIAM components and their resourcing purposefully has a major impact on the outcome. The thriving force behind each successful SIAM model is ultimately the capable people involved with service management, both internal and external to the organization, and an organization willing to embrace change.</p>	
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<p>Insinööriyön aiheena oli tutkia palveluintegraation ja -hallinnan (SIAM) konseptia ja konseptin käytäntöjä suomalaisissa yrityksissä. Työ toteutettiin itSMF Finlandin SIAM SIG -työryhmän kanssa yhteistyössä. Työn tavoite oli tutkia ja analysoida olemassa olevia SIAM-käytäntöjä kohdennetuissa suomalaisissa yrityksissä ja raportoida löytyneitä hyviä käytäntöjä itSMF-organisaation jäsenille ja muille kiinnostuneille sidosryhmille.</p> <p>Insinööriyön löydökset perustuvat itSMF-verkostossa tehdyn SIAM-verkkokyselyn tuloksiin, ITIL- ja SIAM-aiheiseen kirjallisuuteen sekä kuuteen SIAM-ammattilaisille kohdennettuun haastatteluun neljässä eri toimialoilla vaikuttavassa kohde yrityksessä Kohdennettujen haastattelujen tulokset ovat esitelty yritysten erillisinä tapaustutkimuksina, joiden tulokset esitetään tiivistetysti insinööriyön lopussa.</p> <p>Insinööriyön tutkimuksen tulokset osoittivat SIAM-toimintamallin implementoinnin IT-organisaation toimintaan olevan konseptin sovelluksen vaativin osa-alue. Löydös ohjasi tutkimuksen suuntaa, ja insinööriyön pääasiallinen tarkoitus on esittää hyviä kirjallisuudesta ja kohde yritysten toiminnasta löytyneitä käytäntöjä, jotka tukevat SIAM-toimintamallin implementaation onnistumista.</p> <p>Löydösten mukaan onnistuakseen SIAM-implementaatioissa, yritysten on kannattavaa keskittää resursseja IT-maturiteettitason ja sisäisten valmiuksien kehittämiseen, toimintamallin ja implementaation perusteelliseen suunnitteluun, kumppanien ja toimittajien hallintaan sekä henkilöstön muutosjohtamiseen.</p>	
Avainsanat	SIAM, ITIL, ITSM, palvelunhallinta

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## 1 Introduction

Most modern companies have multiple suppliers for different business and IT-services. Managing these complex multi-level scenarios and service levels is challenging and often results in not gaining the full potential of the services as an entity. The concept of Service Integration and Management (SIAM) has been developed to address this problem.

SIAM is an approach for managing multiple suppliers of business and IT-services, and integrating them to provide a single business-facing IT organization. The goal of SIAM is to integrate interdependent services from various internal and external providers seamlessly into end-to-end services to meet business requirements. (Goldberg, Satzger and Kieninger, 2015)

By applying the practices of SIAM, a company may reach various business benefits, although this demands strong operational and commercial governance from the organization. As the concept of SIAM is relatively new and not a universally acknowledged standard, many businesses that could benefit from SIAM are struggling with multi-sourcing scenarios and are not utilizing IT-services to their maximum capacity or spend valuable resources in redundant parts of services. (Rae, Finders and Durbin, 2015)

This thesis introduces SIAM, discusses the state of the concept in Finnish companies from different industries and aims to find good practices both from literature and among the companies that have implemented the concept to their business. The thesis is done in cooperation with the organization itSMF Finland and especially with SIAM SIG (Special Interest Group), a task force within the organization.

### 1.1 itSMF Finland and SIAM SIG

IT Service Management Forum (itSMF) Finland is a non-profit organization run and organized by its members, a network consisting mostly of IT Service Management (ITSM) professionals and decision-makers in Finland. The goal of the organization is to

promote transparent information flow and collaboration in the IT Service Management business, as well as to research trending topics in the field.

The Finnish network is an independent chapter of the organization itSMF International, a globally recognized forum for ITSM and a prominent author in the on-going development and promotion of ITSM “best practice” standards and qualifications. itSMF International has over 6000 member companies, covering in excess of 40 000 individuals spread to over 50 chapters. The Finnish chapter consists of around 1300 members. (itSMF International, 2016)

itSMF Finland has special interest groups (SIG) within the organization. These groups are formed by volunteer individuals in the organization that share a common interest in a specific ITSM topic. The goal of these groups is to gather like-minded professionals tackling similar ITSM related problems, and to research and share information on the topic within the group, but also more widely in the organization. SIAM SIG is an SIG in itSMF Finland that has set out to research the current state of SIAM practices in Finnish companies in order to find beneficial practices from different industries around the topic for its members and other interested parties. (itSMF Finland Ry, 2016)

## 1.2 Objective and proposed outcomes of the thesis

The objective of the thesis was to research and analyze existing SIAM practices in targeted Finnish companies and the extent in which the concept is generally applied in order to provide meaningful insight on the subject for the members of itSMF network and other interested parties. As the concept is relatively new and a timely topic in service management, SIAM SIG is interested in findings about SIAM practices in service integration occurring in Finnish companies that could provide guidance in applying the concept further in the members’ professional environment.

As the activity in itSMF is based on volunteer work, resources for the research work are limited within the SIAM SIG. Therefore, the group has sought external aid in carrying out the research. The purpose of the project was to reinforce SIAM SIG in its work, producing an analysis of the current state of SIAM practices in Finland and as a conclusion of the findings, a set of recommended practices for applying the concept into business environments.



The outcome of this thesis includes a current state analysis scoping the challenge areas in adapting SIAM, and an addressing set of good practices in applying the concept, found from relevant literature and the studied companies.

### 1.3 Scope and structure of the thesis

This thesis is written in seven sections divided into individual chapters. This chapter introduces the thesis research and describes relevant concepts. The second chapter presents the methodology used in the research and thesis while the third chapter focuses on providing a current state analysis of SIAM practices in Finnish companies, which serves as a starting point for approaching the discussion of the conclusions. Chapter four provides a conceptual framework for the thesis discussing SIAM based literature in more detail. The fifth chapter presents case studies based on interviews conducted for companies contacted through the itSMF network. The sixth chapter discusses the conclusions of the practices that the research has revealed and offers recommendations based on the findings in applying SIAM to different types of organizations. The seventh and the last chapter aims to evaluate the thesis work and research itself objectively, and recommends sources for further research on the subject.

SIAM SIG has conducted a web-survey in the itSMF Finland network concerning the SIAM practices and how the concept is received in companies within the network. The current state analysis is mostly based on the material gained through this survey. A relevant conceptual framework was built based on SIAM best practices found in literature. Further data collection was done with targeted interviews based on the findings of the current state analysis. A group of professionals in the itSMF Finland network that have been involved in service integration projects were contacted for the interviews. These interviews were conducted to gain more insight in both successful and unsuccessful parts of SIAM operating models and implementation projects. The conclusions for the recommendations were made based on these interviews and best practices found in literature.

This thesis focuses in the SIAM-practices currently found in Finnish companies and does not necessarily discuss the concept outside this scope. The material for the conclusions of the thesis was mainly gathered from current literature, and through the itSMF Finland

network and interviewed companies, and may not reflect on the entirety of service management landscape in Finnish companies.

## 2 Research methods and material

This chapter discusses the strategy and approach for the research work of the thesis, as well as provides a description for different research stages, materials used for the conclusions of the thesis and methods for reaching the outcome defined in the previous chapter.

### 2.1 Research Design

The figure below presents the objective of the thesis, summarizes different work phases in reaching the defined outcome and describes the input needed for these phases.

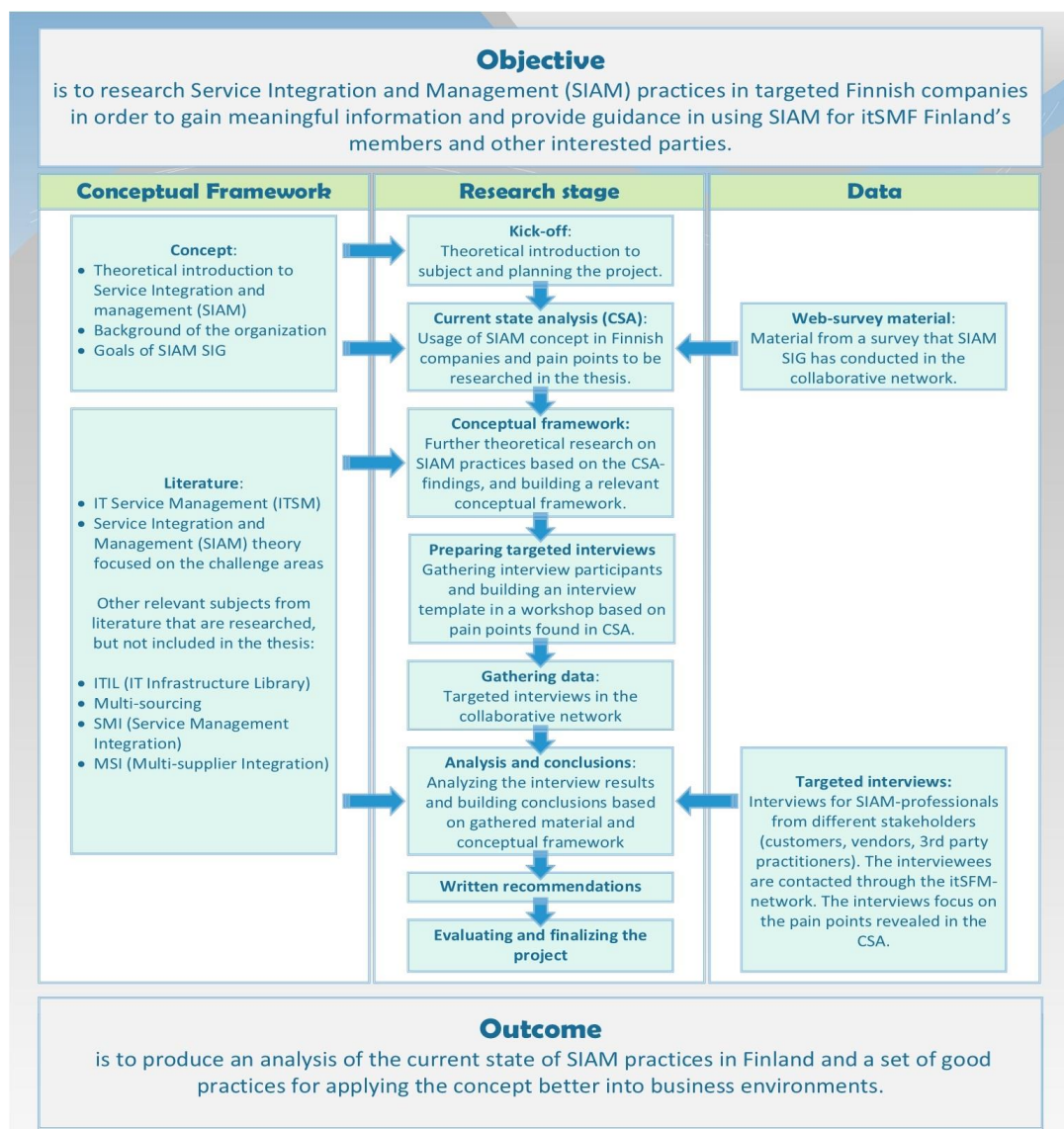


Figure 1. Research design for the thesis work

The thesis process is explained in more detail below.

## 2.2 Current state analysis (CSA)

After a theoretical introduction to the subject and planning the project, the next phase in the research work for the thesis was producing a current state analysis (CSA) on SIAM practices in Finnish companies. This was done in order to gain a comprehensive view on the maturity of the concept in Finland and to find possible scenarios and situations where Finnish companies struggle with applying SIAM to their operations. These pain points were addressed later in the targeted interviews among other aspects for finding good practices in difficult scenarios according to the CSA. The pain points also directed the focus of further theoretical research in building the conceptual framework.

The data utilized in the CSA comes from a survey SIAM SIG conducted for the members of itSMF Finland network during the Summer of 2016. The survey was facilitated online and consisted of 10 mostly quantitative questions concerning the SIAM concept and -practices. 43 members in the network participated in the survey, 42% of which were working currently in management level of their organization.

## 2.3 Conceptual framework

Theoretical research began before the current state analysis was done, to ensure that a necessary level of expertise was reached on the subject for analyzing and making conclusions on the above-mentioned SIAM survey material. The findings of the current state analysis directed further theoretical research that provided a foundation for creating an interview template and discussing the subject with SIAM professionals in the next phase of the research. The core theory and most relevant practices are presented in the conceptual framework chapter, and later summarized to complement the findings of the current state analysis and targeted interviews in the conclusions of this thesis.

To understand the concept of SIAM, one must be familiar with IT service management (ITSM) in general and IT Infrastructure Library (ITIL), for SIAM complements the teachings of these subjects. Relevant parallel frameworks such as Multi-Supplier Integration (MSI) and Service Management Integration (SMI) were visited as well

although the conceptual framework chapter of this thesis focuses only on SIAM and best practices of the concept found in literature.

## 2.4 Targeted interviews

Further data collection of SIAM practices in Finnish companies was done by interviewing IT-professionals working in or with the SIAM layer or functions in their organization. Interviewees represented different industries and stakeholders (suppliers, clients and separate 3<sup>rd</sup> party service integrators) for gaining different perspectives to approaching SIAM. Interviewees were contacted through the SIAM SIG's professional network, itSMF Finland and in a conference the organization hosts annually.

The purpose of the interviews was to address the pain points found in CSA and to find practices that have resulted to successful and failed service integration. The initial interview template was constructed by addressing each of the found pain points with counter questions to reveal how the issue in question was dealt with in the interviewed organization. These interview questions were then expanded after building a necessary expertise on the subject by researching relevant literature and creating the conceptual framework for the thesis. The final interview questions were prepared in a workshop with SIAM SIG, where the members of the group gave their professional input for the discussed topics. Please see the third appendix titled "SIAM-lopputyö Metropolia Ammattikorkeakoulu - kohdennettujen haastattelujen runko" for the final interview template in Finnish.

The purpose of the questions was to serve as a foundation and a guideline for an open conversation in the interview situation. Participants were free to bring up any other interesting points of view outside the scope of the prepared questions. The interviews aimed to gather detailed information on different SIAM practices to be presented as real case studies that have taken place in Finnish companies. The targeted interviews were recorded, unassembled and analyzed. Analysis was done by creating comprehensive notes of each interview under relevant topics, and then constructing them to a deliberate framework for each case company, after which a coherent case study was written on the practices of each case company. These case studies were then sent to the interviewed companies for revision and approval to ensure that the results are valid.

## 2.5 Analysis and conclusions

The material gathered in the targeted interviews are presented as individual case studies of each interviewed company in chapter five of the thesis. Found best practices of these case studies are summarized in the conclusions of thesis.

Once the data collection was done and best practices from literature were researched, the gathered information was analyzed objectively and represented coherently in line with the outcomes defined in the first chapter. Best practices from literature found on the challenge areas, as well as good practices and practices to be avoided found in the targeted interviews are represented as summarized recommendations for applying SIAM concept to business scenarios in the end of the thesis.

The last chapter presents an assessment of the thesis project, in which used methods and outcomes are critically evaluated and possible further research is pointed out. Last phases of the thesis work included finishing the project documentation and producing the deliverables.

### 3 Current state analysis

This chapter introduces a survey SIAM SIG conducted in itSMF Finland's network, key findings of the survey and conclusions of currently occurring pain points in the Finnish SIAM landscape. The most critical argued findings serve partially as a foundation for the approach in designing the targeted interview questions discussed in chapter five of the thesis.

#### 3.1 SIAM Survey for itSMF Members

SIAM SIG conducted the survey during the summer of 2016. The survey consisted of 10 mostly quantitative questions and background questions for understanding better the sampling of the participants and their relation to SIAM. The survey was facilitated online and the participants contacted through e-mail and by promoting the survey in the organization's monthly newsletter.

##### 3.1.1 Survey Background

When SIAM SIG was founded in the spring of 2016, the group was interested in investigating SIAM maturity and understanding in Finland, in order to promote both beneficial and concrete SIAM practices for itSMF Finland members. The members of the group represent a wide array of the IT industry and wanted to research not only managerial level of SIAM, but how the concept affects companies in various other aspects and levels. SIAM SIG decided to launch the research by conducting an online survey in the itSMF-network.

With the survey, SIAM SIG wanted information on how companies experience the SIAM concept and what is the current state of SIAM implementations in Finland. The survey also served a purpose for creating a background for a more detailed study.

43 members took part in the survey, most of which were working in different companies in Finland. Approximately one third of the respondents were service clients. Participants working in management level formed the largest group representing 42% of the sampling. An equally large group of the participants was working in a company employing more than 5000 people. The sample is visualized in the figure below.

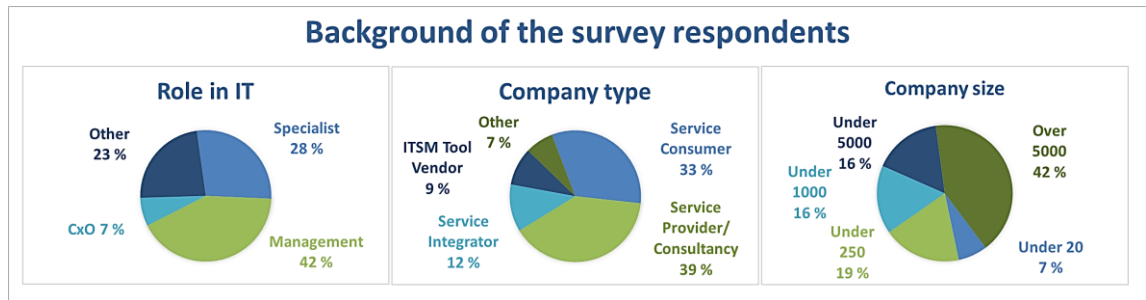


Figure 2. An illustration of the stakeholders that participated in SIAM survey for itSMF members.

Considering the channels participants were contacted through, the participants are most likely more familiar with the concept than the industry average. Sampling of the group is also rather small for making unbiased general assumptions of Finnish SIAM practices. These aspects must be taken into consideration when interpreting the results.

### 3.1.2 Survey questions

Most of the questions in the survey were multiple selection questions with the possibility for an open answer. The participants were asked a close-ended question type that lets the respondent select one or multiple answers from a defined list of choices with a possibility to insert an additional open answer if needed. Questions in the survey are listed below.

Table 1. A list of the questions in the SIAM survey for itSMF Finland members.

1. What does SIAM (Service Integration and Management) mean for you personally?
2. Do you think SIAM is a passing trend or something to stay for good?
3. Does your organization have plans for implementing SIAM?
4. Did the results of the SIAM implementation meet your expectations?
5. What do you expect to change in your organization after SIAM would have been implemented?
6. Do you currently see reasons why your organization should NOT adopt SIAM?
7. If implementing SIAM what would be two biggest challenges in your organization?
8. What are the most important enablers to successfully implement SIAM?
9. Who should be the business owners in your organization to drive and manage the SIAM adoption?
10. What scope should the SIAM implementation have in your organization?

For the full list of possible answers, please see the second appendix titled “SIAM SIG survey 2016 results”.



## 3.2 Key findings

The key findings of the survey as seen by the author are presented in this section. For the full survey report produced by itSMF Finland SIAM SIG, please see the second appendix titled “SIAM SIG survey 2016 results”.

### 3.2.1 SIAM perception and maturity

The most common view among the respondents on SIAM was that SIAM is a best practice description for managing multiple service providers complementing the ITIL framework. Two of the 43 respondents believed that SIAM is a re-branded version of ITIL. Overall awareness of the concept was high. Only one of the 43 respondents was not familiar with the concept of SIAM at all. The figure below presents all the answers.

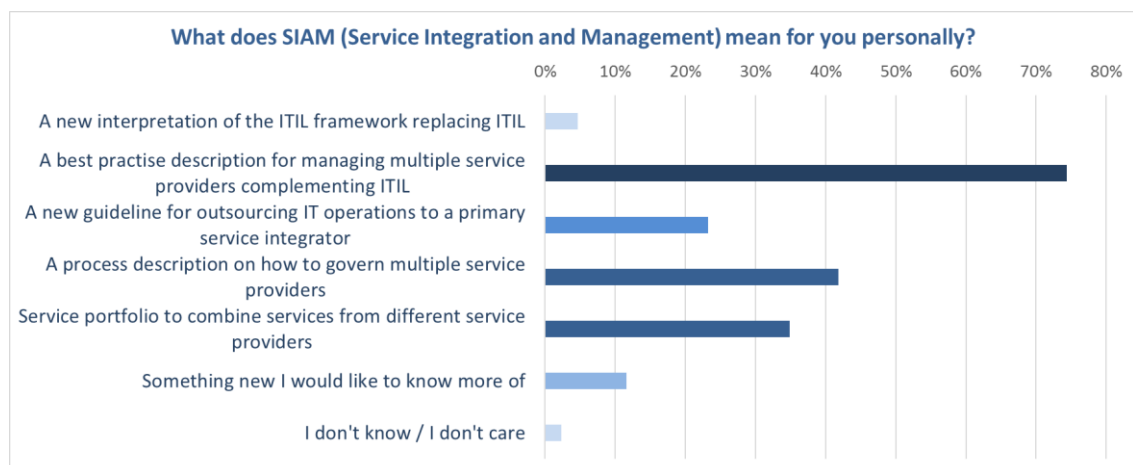


Figure 3. An illustration of the respondent's conception of SIAM.

According to the survey, SIAM is generally perceived as a best practice in ITSM or that it will become one. Only 9,3% of the respondents saw SIAM as a passing trend in service management. The figure below presents the overall perception.

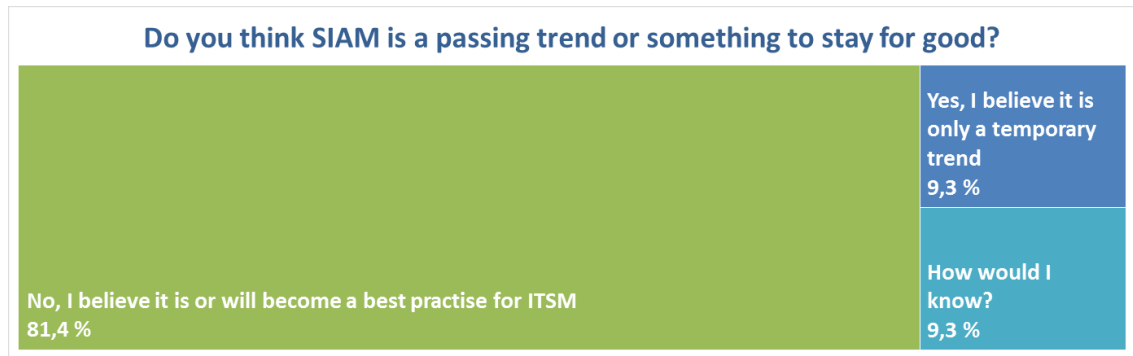


Figure 4. An illustration of the respondents' perception on SIAM consistency.

Not only is SIAM well perceived, over half of the respondents have either already implemented, are in progress to implement or are planning on implementing a SIAM model in their organization. The answers are visualized in the figure below. When the participants were asked about reasons not to adopt SIAM in their IT-organization almost a fourth of the respondents did not see any. Around 25% of the respondents thought that they currently have too few service providers to benefit from a SIAM model.

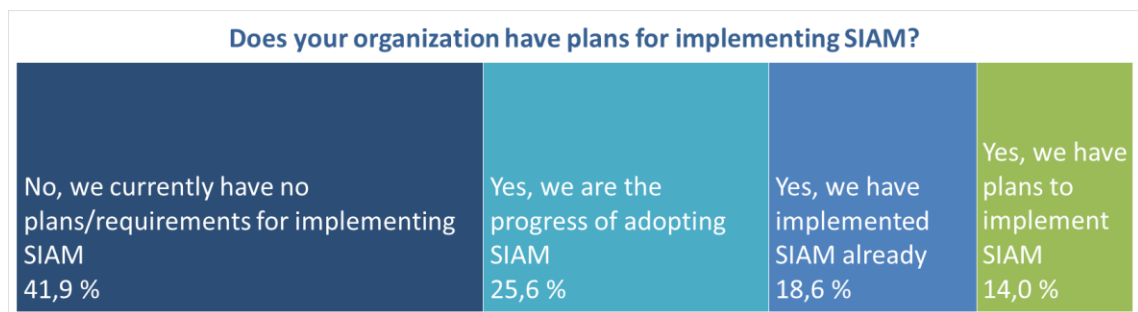


Figure 5. An illustration of companies' SIAM implementation progress.

Companies that had already adopted a SIAM model were satisfied with the results. Almost every respondent representing a company that had a SIAM model running answered that they had either fully or partially met their expectations of the impact of SIAM implementation. Only one respondent answered that the results were unclear and continued to further explain that this is because the data concerning the implementation was not available.

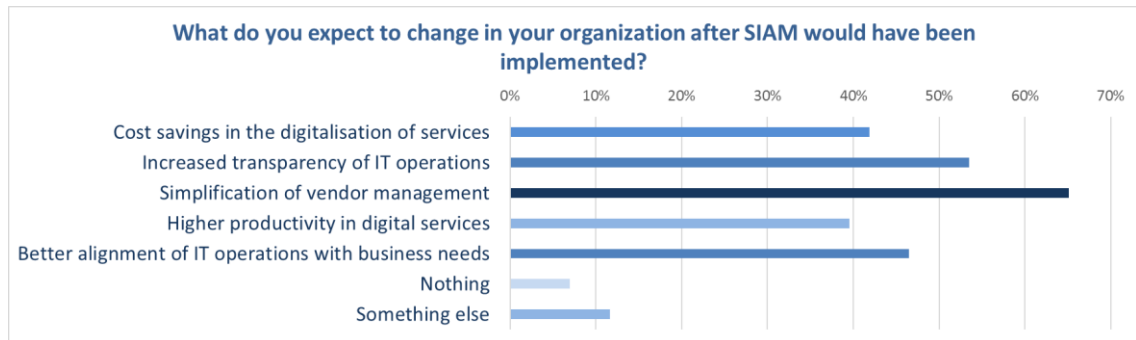


Figure 6. Respondents' expectations of SIAM implementation.

Speculated and achieved benefits of SIAM implementation received a wide array of answers. Like the figure above shows, two arguments that received the support of over half of the respondents were that by implementing SIAM a company gains simplicity to vendor management and increased transparency over IT-organization.

### 3.2.2 Challenges with implementing SIAM

While companies that had implemented SIAM seemed to have reached their aimed business benefits, many of the respondents had faced challenges concerning the implementation itself. Figure below presents answers on why companies are not currently adopting SIAM.

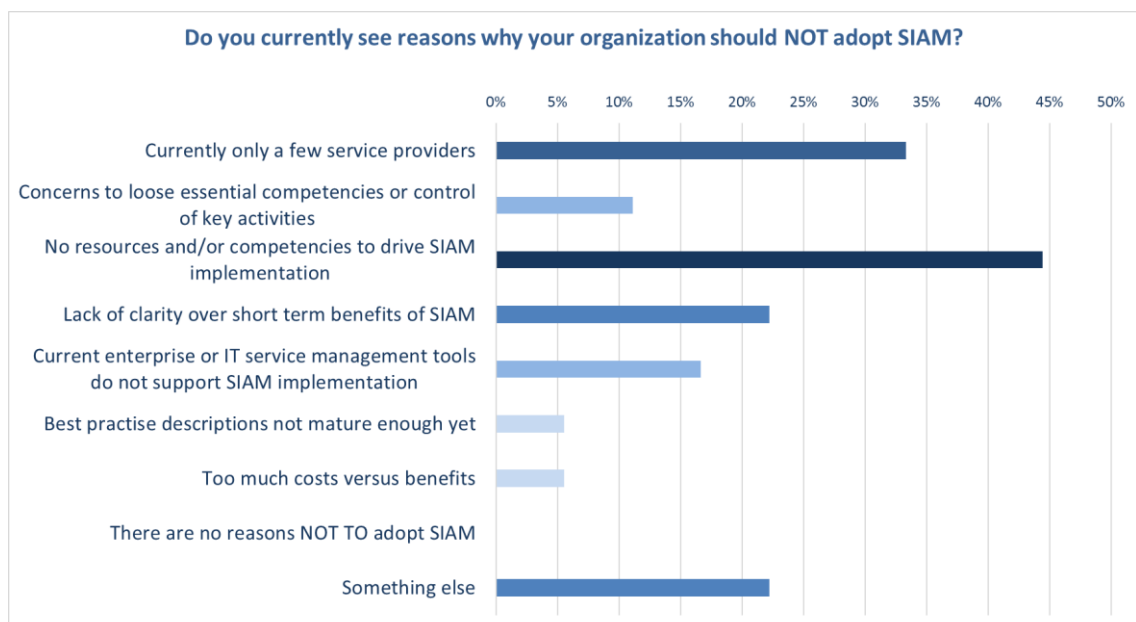


Figure 7. Reasons for not adopting SIAM by the respondents whose organization is not currently planning to implement a SIAM model.

One third of the respondents whose organization is not currently planning on implementing SIAM stated that they currently have only a few service providers and would not simply benefit from a SIAM model for this reason. Almost half of the same group felt their organization does not have the resources and competencies to drive SIAM implementation and 22,2% of these respondents did not feel that the short-term benefits of implementing a SIAM model were clear enough for the organization. When asked about the biggest challenges in implementing SIAM, 50% of the same target group stated “unclear goals or responsibilities” and “lack of internal SIAM capabilities and skills” as reasons for holding back implementation in their organization. These results raise questions on how successfully managed SIAM implementations have been coordinated and how capable organizations are developing their expertise and supporting processes.

Managing partnerships efficiently in the implementation of a SIAM model seems to have a great impact on the outcome. As much as 62.5% of the respondents who had already implemented SIAM listed “The vendor supporting the SIAM transition” as one of the most important enablers of SIAM implementation. One in five of all the respondents and 42.9% of service consumers listed “Insufficient SIAM maturity within service providers” as one of the top two biggest challenges in SIAM implementation.

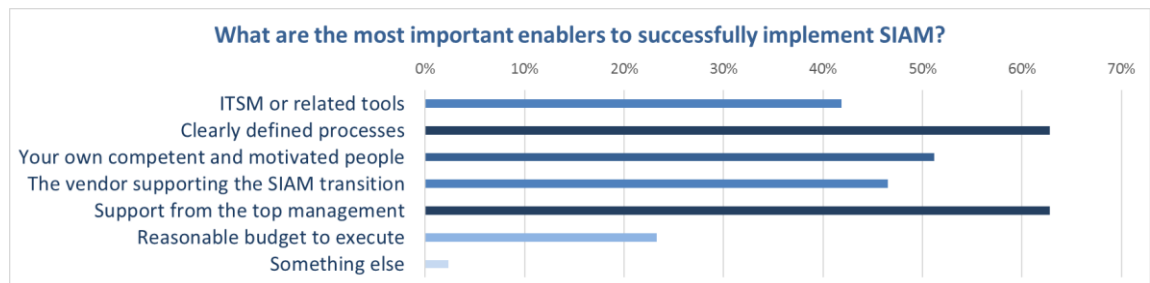


Figure 8. The most important enablers of implementing a SIAM model as seen by the respondents.

When asked about the most important enablers in implementing SIAM, most of the given choices got a strong support from the respondents and only one respondent gave an open answer. The figure above shows that the top three enablers that got the support of over half of the respondents were “clearly defined processes”, “support from the top management” and “your own competent and motivated people”. The commitment of management and personnel seems to be vital for successfully implementing SIAM.

A top answer for not adopting SIAM by service consumers was “Current enterprise or IT-service management tools do not support SIAM implementation”. The only respondents

who answered that “reluctance to change” is one of the two biggest challenges in implementing SIAM had already implemented SIAM. Half of the respondents who had implemented SIAM saw resistance to change as an obstacle. Once again, the importance of change management with both the IT-organization and the personnel was underlined by the respondents.

### 3.3 Conclusions of the SIAM survey

The sample of the survey showed that the concept of SIAM is well received in Finland and many organizations are already successfully applying the teachings of this prospective best practice to their operations. The benefits of using a SIAM model are well understood, but there are still a lot of questions and challenges that many Finnish companies are struggling with.

It is clear that companies that have implemented SIAM to their operations have benefitted of the concept, but it appears that the implementation itself seems to be the most challenging part in moving towards a SIAM model. SIAM is not a necessity for every IT-organization, but the bigger the organization and the more services are delivered for the end users, the more an organization is in a need for a more controllable service landscape.

For successfully adopting to a SIAM model, a company must manage organizational changes and raise internal SIAM capabilities to reach a maturity level that the concept demands. This means adapting existing processes and infrastructure to support the model as well as increasing the level of expertise among personnel. Leading the change and following the plans through requires a strong commitment from the management of the organization. It is also vital to communicate the defined responsibilities, roles, goals and forthcoming changes SIAM demands for the whole organization transparently.

The problems, however, are not only internal. The SIAM maturity level of outsourced service providers is also a concern that needs to be addressed for a successfully functioning SIAM model. Below is a list of pain points that the respondents of the SIAM survey found challenging in implementing SIAM to their organization.

The survey results revealed the following list of pain points with SIAM implementations:

- Defining clear goals for SIAM
- Assigning clear roles and responsibilities
- Planning resources for implementing and running SIAM
- Facing change resistance (creating SIAM awareness and communicating SIAM goals, upcoming changes and benefits in an organization)
- Increasing internal SIAM expertise
- Commitment of top management
- Managing partnerships and vendor-maturity
- Adapting processes to support a SIAM model
- ITSM related tools

Ultimately these pain points are related to three focus areas: people, planning and IT-maturity. The following figure presents the pain points in relation to these focus areas.

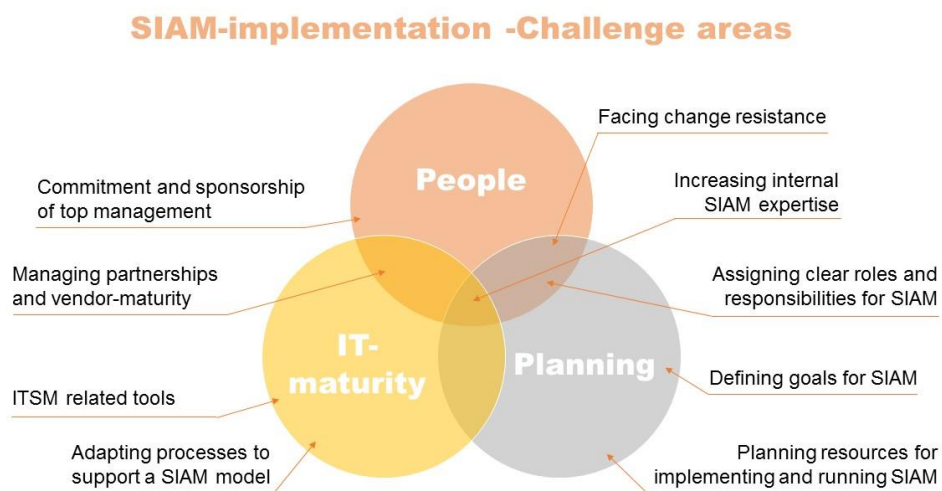


Figure 9. Pain points found in current state analysis in relation to three challenge areas

According to the survey, these topics represent the challenges that the members of itSMF Finland are currently struggling with the most in applying SIAM. For this reason, the pain points of this list will serve as focus points for further research in the thesis work, both in literature and data collection. This is done in order to ensure that the outcome of this thesis will offer the members of itSMF Finland and other interested parties valuable information on the concept, as the objective of the thesis suggests.

## 4 SIAM - Conceptual framework

This chapter discusses the concept of SIAM more in detail and the practices found in current literature. As the subject is very broad and branches to multiple technically detailed directions depending on the approach, the aim of this chapter is to describe on a high-level what SIAM is, who is it for, what the enablers of implementation are and what can be achieved by successfully applying SIAM. The goal is to give the reader a general understanding of SIAM, a chance to identify a business case for the concept and an overview of what can be achieved by effectively implementing it.

This research will also focus on presenting the relevant literature found on the pain points defined in chapter three. As the actual implementation of a SIAM model revealed to be the most challenging part in applying the concept, this chapter will focus on providing guidance in the different steps of implementation, such as planning SIAM strategy, building SIAM capabilities, managing processes and partnerships, and leading people towards the change. The table below lists the pain points their and corresponding topics where the matter is discussed in this conceptual framework.

Table 2. Pain points found in the CSA and the matching headings in the conceptual framework

CSA pain point	Conceptual framework topic
Defining clear goals for SIAM	4.1.3 Benefits of successfully applied SIAM
Assigning clear roles and responsibilities	4.1.1 Component model
	4.1.2 Sourcing models
	4.3 People and SIAM
Planning resources for implementing and running SIAM	4.1.1 Component model
	4.1.2 Sourcing models
	4.1.4 Enablers of SIAM-implementation
Facing change resistance	4.3 People and SIAM
Increasing internal SIAM-expertise	4.3 People and SIAM
Commitment of top management	4.1.3 Benefits of successfully applied SIAM
Managing partnerships and vendor maturity	4.3 People and SIAM
	4.4 Partnerships and SIAM
Adapting processes to support a SIAM-model	4.2 Adapting processes to support a SIAM-model
ITSM-related tools	4.1.1 Component model
	4.1.4 Enablers of SIAM-implementation

At the time this thesis was written, there was not an established body of knowledge on SIAM. A standard SIAM competence that is industry recognized is yet to come, and this means that future literature might be at variance to the material available at the time. This must be taken into consideration when reading this conceptual framework. While SIAM is a relatively new concept in terms of literature, SIAM is not a new invention. It has been discussed in all parts of the IT industry for many years and in other industries as common practice for much longer. (Armes, Engelhart, McKenzie and Wiggers. 2015. Pp. 1-2)

The concept of SIAM has started as a reaction to the ever-growing complexity in managing multiple suppliers. The IT industry saw a shift, in which organizations, whose core competencies were not in IT, started focusing on IT-vendor consolidation and restricting the number of suppliers they engage with. Gradually this developed into putting forth a strategy, whereby one of the suppliers is selected as a lead supplier and is given an additional responsibility to manage other suppliers. This created new business opportunities for major service providers, which resulted in number of SIAM models or approaches coming to the market, led by Accenture, IBM, TCS, Capgemini and Atos. The value SIAM has for vendors called to question the impartiality of the concept, which is why SIAM has encountered criticism that has opened a debate on whether SIAM is actually a beneficial concept, or if it only creates another layer of IT-organization that brings more hindrance than it does good. This is why the development of SIAM has been very vendor-led and not uniformed in the past. (Jha, 2015)

As structured governing of multiple suppliers has clearly been beneficial to a wide array of organizations, the IT industry has been demanding an unbiased and standardized body of knowledge on the subject. An objective third party Axelos, a joint venture set up in 2014 by the Government of the United Kingdom and Capita, has been addressing this problem by publishing several industry-recognized white papers on SIAM. In 2016, companies Scopism, EXIN and BCS announced that they are bringing SIAM training and certification to the market, and that they are releasing an industry-collaboratively developed body of knowledge in the first quarter of 2017. It is highly advised for the reader to go over said material, once it is published. (Scopism. 2016a)



#### 4.1 Introduction to SIAM

The increasing complexity of the IT value chain and the rise of multi-vendor supplier ecosystems has created a demand for a new approach to governing multiple service providers and has led to the rise of Service Integration and Management (SIAM). SIAM is a concept in which the end-to-end ownership of services and co-ordination of various service suppliers is managed by a single entity in the organization: a SIAM layer. In the book *SIAM: Principles and Practices for Service Integration and Management* published by Van Haren in 2015, the definition of service integration is as follows:

Service Integration is the set of principles and practices, which facilitate that collaborative working relationship between service providers required to maximize the benefit of multi-sourcing. Service integration facilitates the linkage of services, the technology of which they are comprised and the delivery organizations and processes used to operate them, into a single operating model. (Armes, Engelhart, McKenzie and Wiggers. 2015. Pp. 2)

SIAM, as seen by SIAM consultant and author Kevin Holland, is a set of practices and an accompanying model for managing, governing, and coordinating the delivery of services provided by multiple suppliers, both internal and external to the business organization. SIAM is not a process, but a service capability and set of practices that build on, elaborate, and complement every part of the ITIL practices. (Holland, 2015a. Pp. 4)

At its best, SIAM can provide a business with the benefits of multi-sourcing services with the simplicity of single-sourcing, minimize the usual risks involved with multi-sourced approaches and hide the complexity of service supply chain from the service consumers. The primary focus of SIAM is on providing the necessary consistent governance, performance assurance, and management of these multiple suppliers and services. SIAM aims to provide a single point of visibility and control for the service management and delivery of all services provided by suppliers. (Holland, 2015a. Pp. 5)

A well-designed SIAM model offers approaches for supplier coordination, integration, collaboration, interoperability and delivery of services. With SIAM, an organization can ensure end-to-end accountability for the performance and delivery of IT services to the end-users, irrespective of the number and nature of suppliers. SIAM creates an environment where all parties are aware of their roles and responsibilities, and are held accountable for the outcomes. (Holland, 2015a. Pp. 5)

#### 4.1.1 Component model

Having a homogeneous SIAM model provides consistency for the governance, management, and coordination for all types of services. Creating a uniform standard model for SIAM is not possible, because operating models for SIAM need to reflect the particular requirements of organizations and the particular nature of their supplier landscapes. However, at a high-level, the models all fit the same conceptual structure and share some common characteristics. Kevin Holland represents a high-level conceptual model of SIAM in the white paper *An example ITIL-based model for effective Service Integration and Management* published by Axelos in 2015.

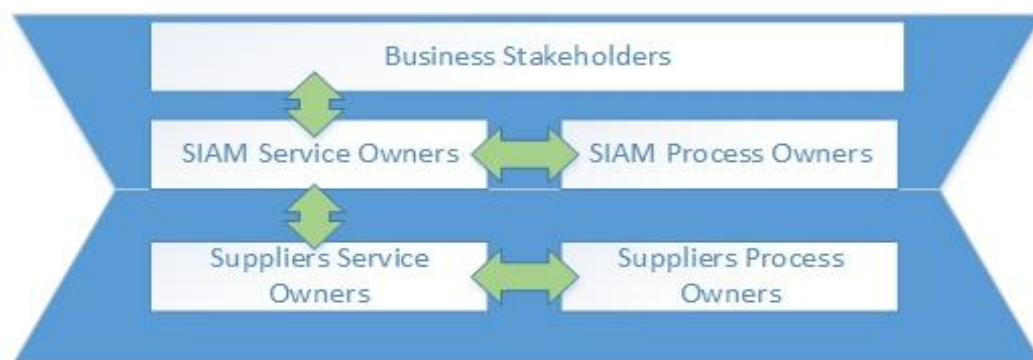


Figure 10 - A high-level conceptual illustration of a SIAM model.

The figure above shows the SIAM provider in the center, acting as the bridge between the service consumers and the suppliers of the services. The SIAM provider provides a SIAM capability as a set of services. The SIAM provider may be from within the business, outsourced to one or more SIAM providers, or a combination. The SIAM component model helps to determine the most appropriate approach. (Holland. 2015b. Pp. 5)

SIAM should always be broken down into a logical grouping of different but interrelated components, process areas, capabilities, functions, activities and principles. If a business uses a SIAM model without fully understanding and validating against requirements precisely what is provided by the model, there are several risks that will exist. The organization can choose an incorrect sourcing approach for SIAM, resulting to inapplicable SIAM model for the organization's suppliers. The chosen SIAM model might not fit the needs of the business and costs of SIAM can outweigh the available benefits or the benefits cannot be realized. Quality of the service might be adversely affected and the organization can end up paying for unnecessary capabilities. Once the

decision on a SIAM model is done, it can also be highly expensive to change to a different SIAM provider. (Holland, 2015a. Pp. 7-8)

In the white paper *An example ITIL-based model for effective Service Integration and Management* published by Axelos, Kevin Holland represented an illustration of an example SIAM model that has been broken down into components that is based on the UK Public Sector's SIAM Enterprise Model. The model can be used to design and review specific SIAM models to ensure that all of the aspects included are considered when planning on implementing a SIAM model.

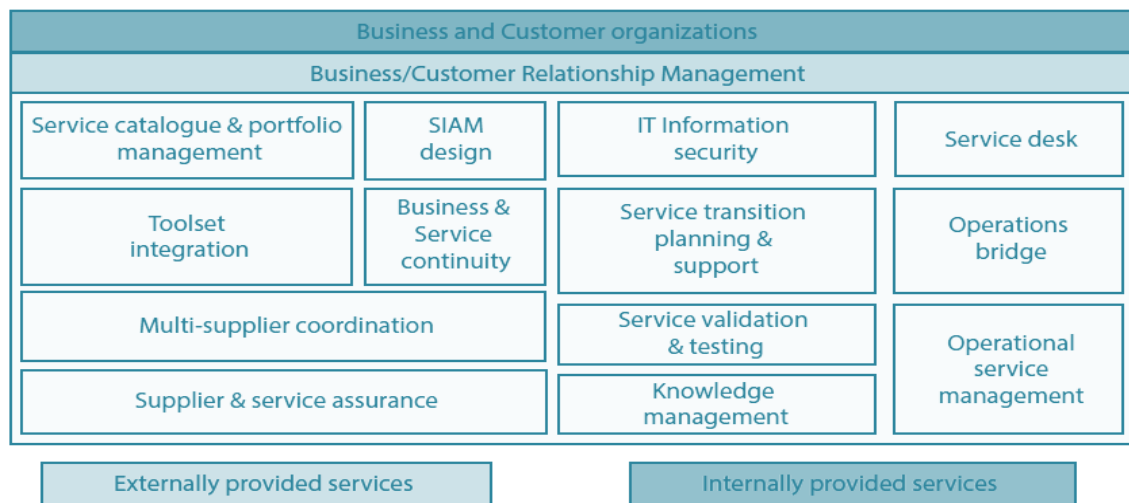


Figure 11. An example of a SIAM component model.

Breaking SIAM down into standardized component model supports better understanding of SIAM and making informed decisions on the sourcing model of SIAM. A component model enables applying consistent terminology and approaches, brings flexibility to accommodate a variety of different services and flexibility to changing the model if necessary. Component approach also gives capabilities to apply the SIAM model to a variety of sizes and shapes of business organizations, supplier and consumer landscapes. A component model will also clarify planning the use of resources. (Holland, 2015a. Pp. 7-8; UK Government, 2016)

SIAM cannot operate in isolation. As well as the suppliers of the IT services, SIAM also needs specific support from the business organization in areas that should include enterprise architecture, programme and project management, systems integration and commercial procurement. The level of service integration will differ depending on the complexity of the business services and customers that are being supported, and the

complexity of the services that are being delivered to those businesses. As the services and businesses become more critical or complex, the level of service integration becomes deeper. (Holland, 2015b. Pp. 8; UK Government, 2016)

#### 4.1.2 Sourcing models

As mentioned before, many businesses have traditionally outsourced the provision of services to a single company that provided service integration capabilities as a part of their role as a prime contractor. These service integrators typically also had responsibility for design and operation of the end-to-end services, including systems integration, development and support. They also appointed and had contracts with any subcontractors and sub-suppliers. It was often assumed, and sometimes incorrectly, that these prime contractors had strong service integration capabilities. This single sourcing approach has contributed to many of the current challenges around SIAM. (Holland, 2015a. Pp. 19-22)

Many businesses have found out the hard way that outsourcing service integration does not and cannot outsource all of the risks, contrary to the claims from some service integrators. In the end, the customer organization always retains the risk to its reputation from major service failures. This need to be taken into consideration when determining the appropriate SIAM sourcing strategy. The challenges in the industry created the demand for different outsourcing approaches, which ultimately has resulted in the development and availability of other effective SIAM models and the creation of companies whose core business is being a third-party service integrator. (Holland, 2015a. Pp. 19-22)

In the Axelos publication, Kevin Holland distinguishes three different sourcing models: internally sourced service integrator, externally sourced service integrator and a hybrid of these two, where some of the SIAM capabilities and activities are kept in-house while others are outsourced. Some more recent white papers go a little further, dividing the externally sourced service integrator to two different models. The first one being the already discussed model where a prime contractor acts as a service integrator. In the second model, an objective third party service integrator provides the SIAM layer. Ultimately, customer organizations have four main options for the SIAM structure:

1. Externally sourced service integrator
2. Internally sourced service integrator
3. Hybrid service integrator
4. Lead supplier as service integrator

All the functions in SIAM need to be seen to work as one. They should always act as the agent of the business regardless of the SIAM sourcing arrangements, with good working relationships between all parties. The selection of a SIAM provider is a significant undertaking for any business. A robust approach should be used for evaluating the capability of potential SIAM providers against the specific requirements for the business. (Holland, 2015a. Pp. 6 and 10; Scopism, 2016b. Pp. 2)

The appendix titled “SIAM sourcing model comparison” is a table that gives a summary of example benefits and issues of different sourcing models, and can be revised for more detailed guidance on the possible differences between the sourcing models. Below is a table that describes on a high-level what SIAM sourcing model is suitable for different types of customer organizations according to Scopism publication on SIAM models.

Table 3. A graph describing on a high-level the suitability of different SIAM sourcing models to customer types. (Scopism, 2016)

Suitability of different SIAM sourcing models	
Lead supplier as Service Integrator	3rd party as Service Integrator
Customers that have a trusted service provider that also has service integration capabilities	Customers who are prepared for another organization to take the service integrator role
Customers that are prepared for another organization to take the service integrator role	Customers who are prepared to have a high degree of trust in an external organization acting as their service integrator
Customers that do not have service integration capabilities or resources and do not plan to develop them	Customers who do not have service integration capabilities and do not want to develop them
	Customers who do not have service integration resources and do not want to add or manage them
Internally sourced SIAM	Hybrid Service Integrator
Customers who have in-house service integration capabilities or plan to develop them	Customers who want to act as a service integrator but do not have sufficient capability or resources
Customers who have business, regulatory or legislative requirements relating to the governance and management of suppliers	Customers who want to learn from an external service integrator
Customers who want to retain control and flexibility over the SIAM ecosystem	
Customers whose timescales do not allow procurement of an external service integrator	Customers who want the flexibility of a temporary or permanent hybrid service integrator.

Selecting the best approach for providing SIAM capability requires careful consideration and clear understanding of SIAM, the business organization and potential providers of SIAM services. For all of the options, the business should retain control and the rights over the overall SIAM process model and associated tooling design and ownership. (Holland, 2015a. Pp. 19-22)

#### 4.1.3 Benefits of successfully applied SIAM

Adapting to a SIAM approach is a business change, the benefits of which are precisely the same as the benefits of any other business change that provides a consistent approach for a particular set of activities. An effective SIAM layer increases clarity through coordinating cross supplier interactions, leading to reduced cost through duplication and improved service through better coordination of resources, and as a result improved customer satisfaction. SIAM allows improved controls that supports reduced risks and more consistent service delivery across service providers. SIAM creates an environment where IT is operating as a single team based on the service coordinating and managing the cross-supplier interactions. This reduces service silos, and in case of a serious service disruptions, there is a single point of contact and accountability due to clear responsibilities and roles between suppliers. (Armes, Engelhart, McKenzie and Wiggers. 2015. Pp. 8)

Onboarding new services gets easier through SIAM, when new IT-services and solutions that are initiated by the organization can be integrated fast in a predefined structure using tested onboarding procedures. Fast switching of service providers is also easier through simplified service transition. The overall service integration enables clearly defined service scope and standardized interfaces, which will facilitate a replacement of a service provider for a single service bundle when such a need surfaces without business disruption. This is because the standardization of process interactions means that changing one service provider has minimal impact on others. (Armes, Engelhart, McKenzie and Wiggers. 2015. Pp. 8)

The areas of business that are most evidently affected by SIAM beneficially include supplier contract optimization, supplier performance management, cost management, ownership of incidents and problems, incident resolution times, service availability, service reporting, multi-supplier governance and coordination and introduction of new and changed services. Creating a single point of contact for different services can also

mask the complexity of the service landscape from the end-users and increase productivity in the business organization. (Holland, 2015a. Pp. 16)

Effective SIAM builds supply networks rather than supply chains. This supports a move to value networks instead of value chains, as the number of interactions between parties and hence opportunities to add value increase. Supply networks can lower the cost for developing and maintaining services, increase the ability to innovate, and increase agility and flexibility. SIAM therefore increases value much more than traditional methods of supplier management. As SIAM models move to a standard approach, suppliers are also likely to see many of the same benefits, as they no longer have to tailor their ways of working to adapt to each customer's different operating model requirements. (Holland, 2015a. Pp. 16)

The benefits of a well-designed, planned and executed SIAM model can be realized by businesses that use multiple external suppliers, a mix of internal and external suppliers, or several internal suppliers. SIAM is therefore appropriate for most of today's organizations. The greater the complexity of the supplier landscape is, the more likely it is for an organization to gain value from applying a SIAM model to their business. A traditional business case for SIAM cannot be created in isolation nor can it be separated from the services being managed. The cost of performing SIAM has to be evaluated as part of the total business case for strategic sourcing or service initiative. (Rae, Finders and Durbin, 2015. Pp.12)

#### 4.1.4 Enablers of SIAM implementation

SIAM implementations use a structured approach that covers every aspect of the management and governance of services. The book *SIAM: Principles and Practices for Service Integration and Management* introduces a paradigm of SIAM enablers, where the authors have applied the teachings of the 4P model of ITIL (People, Process, Products and Partners) and seven enablers of COBIT (Control Objectives for Information and Related Technologies), the good-practice framework created by international professional association ISACA.

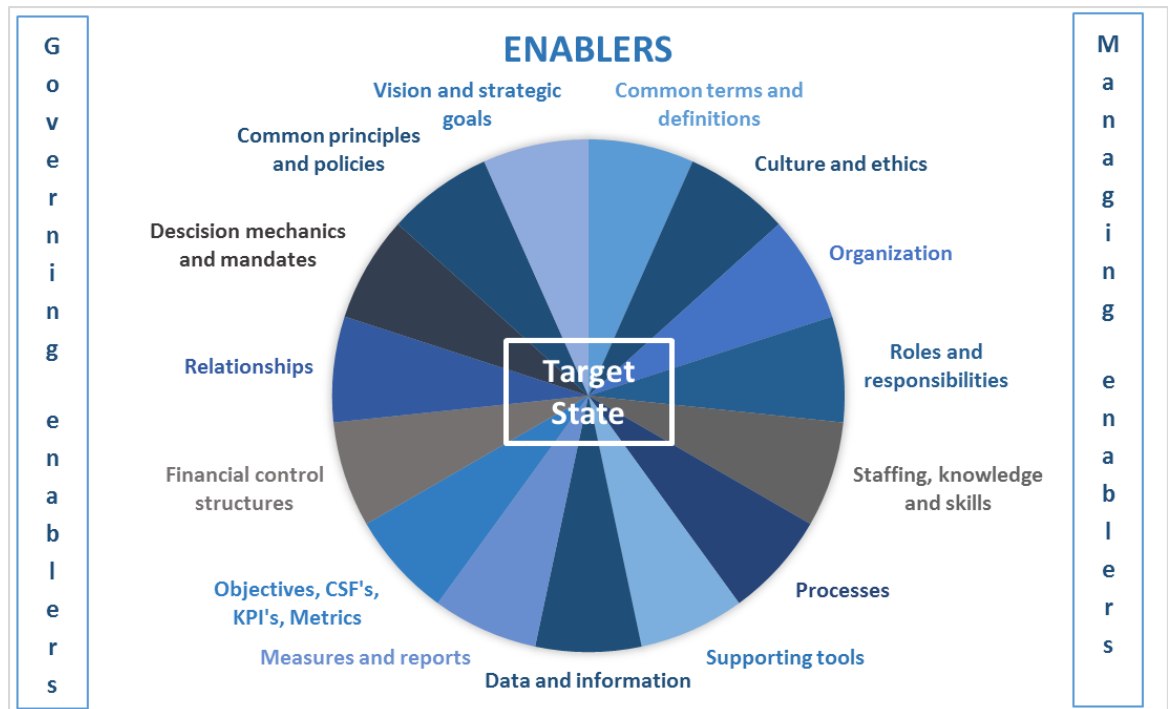


Figure 9. Enablers of implementing SIAM

The figure above presents different areas of managing and governing services. In the target state, all of these areas meet. To manage the aggregated delivery of multiple IT services, enablers for management and governance should be applied to every intersection between the service integrator, the service providers and their services. These enablers are a vital part of the SIAM function, and should therefore be common to all services. Every participating party should recognize and adapt to them. (Armes, Engelhart, McKenzie and Wiggers, 2015. Pp. 10)

#### 4.2 Adapting processes to support a SIAM model

SIAM itself is not a process, but relies on a number of processes to operate effectively. As mentioned before, Kevin Holland's definition of SIAM complements and builds on the ITIL practices in every way. Therefore, ITIL processes and capabilities provide a strong foundation for implementing SIAM because they cover the lifecycle of IT services, and the terminology is recognized and understood by most IT suppliers. ITIL provides a strong platform and common language with which a SIAM team can manage and work with a full spectrum of suppliers. Existing ITIL processes can be aligned and assigned to the corresponding components of a designed SIAM operating model.



An adoption of SIAM should always start by developing a service portfolio and service catalogue. Without this, the operating model cannot be fully designed and adopted. The portfolio and catalogue must include the business services, IT services, and the individual components, all mapped with clear dependencies and service characteristics. This should be done in a consistent way using a common template, definitions and classifications for all of the services. This way there is a comprehensive view over the service landscape that enables effective use of the knowledge held in the service portfolio and catalogue. Therefore, service portfolio management and service catalogue management are crucial processes for SIAM adaptation. (Holland, 2015a. Pp. 11)

There should always be a single documented design for a SIAM operating model. If the SIAM capabilities are provided externally to the business, the business should retain the rights to use the design in order to avoid “lock-in” to a SIAM provider. This design must be a subject to the change management process. The SIAM design should be a part of the design coordination, availability management and capacity management processes. (Holland,2015b. Pp. 7)

SIAM covers a wide array of processes from commercial, managerial, operational and infrastructural aspects. Many of the processes used within the SIAM ecosystem are processes familiar from other practices, for example, change management and business relationship management. Processes used within a SIAM ecosystem require adaptation and augmentation to support integration and coordination between different parties involved. They also require alignment with SIAM practices. Therefore, process activities and cross-supplier coordination within the SIAM layer should be defined well. (Vromant, 2015)

Process models are processes of the same nature that are classified together into a model. The execution of many processes in SIAM will span multiple layers, and involve multiple parties. For example, the service integrator and service providers will each have responsibilities in the end-to-end change management process. Each service provider might carry out individual process steps in a different way, but as part of an overall integrated process model. Process models are therefore crucial for operating SIAM successfully. Each party in a SIAM ecosystem should adapt and augment their own processes to integrate with the relevant process models, as part of the overall SIAM model. (Holland, 2015b)

### 4.3 People and SIAM

Ultimately, the driving force behind a well-functioning SIAM model is the people running it. People make SIAM work, not just processes, which is why there is a need to embed a supportive culture in the business organization, the SIAM function, and in the suppliers, building effective relationships across all the levels of the organization. (Holland, 2015a. Pp. 9-10)

As the success of the SIAM model is heavily dependent on the knowledge and experience of the resources that perform the SIAM activities, building internal SIAM expertise is necessary. The combination of IT operational skills and a deep understanding of processes is critical to achieve the SIAM goals. Expertise with the structure of outsourcing contracts and with legal aspects, together with a solid foundation in procurement and supply-chain processes can also strongly influence the success of SIAM initiatives. SIAM training can be done internally or by using outsourced consultancy depending on the available resources. (Vromant, 2014)

The key people engaged in SIAM, particularly process owners and service owners need to be at least as qualified in ITSM and related techniques as the staff in the suppliers. Otherwise, they will not be able to effectively design and govern the necessary processes and activities. A SIAM organization that relies on very small number of qualified and experienced people is unlikely to succeed. (Holland, 2015a. Pp. 9-10)

For SIAM to be effective, operating it demands a set of soft skills as well as technical skills. Key soft skills are relationship management, conflict management, persuasion, negotiation and stakeholder management. The maturity and existence of these soft skills is critical to effective SIAM, because many of the people managing the SIAM layer will spend most of their time dealing with staff outside of their direct management control that come from other parts of their own organization, or from external suppliers who may be even contracted to a different organization. (Holland, 2015a. Pp. 9-10)

One of the ways to achieve this, is to build leveraged teams within SIAM that perform a specific set of SIAM activities across all suppliers. Apart from designated service owner roles, staff should not be assigned to one particular application or technology, as this will result in working in silos, which goes against the principles of SIAM and leveraging key

soft skills. The SIAM change management team should, for example, coordinate changes across all services, and not just a specific set. (Holland, 2015a. Pp-9-10)

It is also highly important to define clear roles and responsibilities for SIAM functions and to communicate these roles to the organization. After the components of a SIAM model are planned and sourcing strategy has been determined for these components, the model should be used to assign and document the roles and responsibilities. These roles include for example SIAM supervision over the business organization outside of SIAM, customers, providers of the SIAM components, suppliers of individual services and service lines under SIAM, any suppliers of services not under SIAM and the suppliers of any outsourced business processes. (Holland, 2015b. Pp. 13)

#### 4.4 Partnerships and SIAM

Successful SIAM implementation and operating the model is very dependent on the cooperation and involvement of different stakeholders that have touchpoints with SIAM functions. SIAM cannot be imposed. Adapting to a SIAM model requires changes in the supplier network and the business organization, as well as the IT organization.

As mentioned before, ITIL provides a good foundation for implementing SIAM, because it ensures SIAM mature processes and creates a common language between suppliers. However, good processes alone will not guarantee success in SIAM. Running SIAM needs a comprehensive view of the supplier network and the needs of the business organization, and good relationships between the SIAM layer and these parties. It is important to build working relationships between SIAM process owners and supplier process owners, and across the supplier process owners, where possible. Building a culture where the suppliers work with and support each other is important. (Holland, 2015a. Pp. 6)

Understanding the capabilities and responsibilities of each supplier is crucial. In many customer and provider relationships, existing standard contracts have some limited alignment to a SIAM model, stating generally that suppliers have to work collaboratively, but many service agreements lack sufficient clarity on accountabilities and responsibilities of the various providers and, of equal importance, the controlling and receiving customer. Introducing a RACI (, a responsibility matrix,) into the contract

construct is of great value, but it has to remain flexible so that the customer retains the required levers to enable the IT services to remain aligned with the changing business and IT strategy. (Dorst, Major-Goldsmith and Robinson, 2015)

SIAM layer has the overall accountability for providing the required quality of services to the business. Any failures by a supplier automatically becomes the responsibility of the SIAM provider to explain and ensure a resolution. Therefore, in a SIAM environment, the SIAM layer is only as good as their weakest supplier, which is why the SIAM provider should perform appropriate assurance during introduction of new and changed services, audit the performance and capability of suppliers, establish necessary processes for managing and governing the suppliers and understand the requirements of the business organization. (Holland, 2015a. Pp. 11-14)

It is a necessity for a SIAM provider to recognize different types of suppliers, apply appropriate levels of management, and where necessary take on more work themselves. Sometimes these different levels are referred to as service towers, and the number of levels varies depending on the source. Kevin Holland divides suppliers to four different categories: integration services, bespoke services, standard services and commodity services.

In an integration service, a supplier provides technical integration of multiple services into a single coherent supported service to meet business requirements, for example, integration of multiple application to a single product. Bespoke services are services that are tailored by a supplier for the business, for example, a custom software application developed to the customer's specification. These two types require a close relationship between the SIAM layer and suppliers, in order to ensure agility and innovation as well as good service delivery. (Holland, 2015a. Pp. 11-14)

A standard service is a service that is based on a configurable standard application where the supplier provides support, such as a payroll application. Standard services require a good relationship to support the service delivery, but are otherwise treated similar to commodity services, which are standard to the market and are not configurable, and are usually likely to have a purely contractual relationship without the ability to build a close relationship with the supplier. (Holland, 2015a. Pp. 11-14)

Process owners within SIAM should have regular meetings with their peers in each of the suppliers, where the supplier type allows this. The meetings can be informal to reinforce necessary mutual trust, but should also be supplemented by formal meetings to document and manage resolution issues or concerns with the process. This approach should go both ways – it is viable for a supplier process owner to raise concerns over the effectiveness of a SIAM process or interface, as well as the SIAM process owner raising concerns with the supplier. (Holland, 2015a. Pp. 11-14)

#### 4.5 Steps of implementing new SIAM operating models

As for any major change, transition to a SIAM model must be treated as a business change by using appropriate techniques for managing organizational change. In the Axelos white paper *An Introduction to Service Integration and Management and ITIL*, Kevin Holland lists the following high-level sequence as an example of approaching a SIAM model:

Table 5. Different phases in implementing SIAM according to Kevin Holland

1. Review and fully understand potential detailed SIAM models
2. Assess any gaps in the models for the specific business organization and adapt the model accordingly
3. Document the current service landscape into a service portfolio and service catalogue (, see the <i>ITIL publication on Service Design for advice on how to approach this</i> )
4. Ensure a full understanding of the characteristics of each service and the dependencies between each service
5. Conduct an assessment to understand the current process and resource capabilities, process maturity, governance and controls, tooling, capacity in the business organization against each of the component SIAM service areas, and identify and quantify any gaps
6. Assess the ability to grow the in-house capability and capacity in the SIAM component services (, see the <i>ITIL publication on Service Strategy for advice on how to approach this</i> )
7. Determine the sourcing strategy for SIAM services, one component SIAM service at a time
8. Procure additional internal/external resources as required
9. Establish the necessary SIAM capabilities, including any necessary functions and techniques
10. Use a phased approach to transition services to come under the SIAM operating model, either one at a time, or in logical groups of services (, see the <i>ITIL publication on Service Transition for advice on how to approach this</i> )
11. Review and if necessary amend the SIAM model, under change control, in line with continual service improvement (, see the <i>ITIL publication on Continual Service Improvement for advice on how to approach this</i> )

These steps serve as a practical foundation for a controlled implementation of an effective SIAM model. High-level guidance for these steps can be revised from this conceptual framework and more detailed approach to the steps can be found in the reference material.

#### 4.6 Conceptual framework and thesis work

This conceptual framework provided the necessary expertise for creating a relevant interview template and discussing the challenge areas with SIAM professionals in the case companies. The summarized findings of this conceptual framework are presented in the conclusions of this thesis with the found good practices from the case studies.

## 5 SIAM Case Studies in Finnish companies

This chapter presents four individual case studies that are based on material gathered in targeted interviews for professionals working with IT service integration in their organization. Six people were interviewed in total for the case studies using an interview template that was constructed in a workshop with itSMF Finland's SIAM SIG. The purpose of the interviews was to investigate, in hopes of finding lessons learned, how service integration and management is done in Finnish organizations that have been applying SIAM at some level for years, not because they were aware of the concept but because the organizational structure, complex vendor landscape and number of managed services created a demand for a new operating model.

### 5.1 Background for the Case studies

Finding useful SIAM practices from Finnish companies to promote for the reader was one of the goals of this thesis. A decision was made to reach this goal by interviewing known professionals on the subject that could be contacted through the itSMF Finland network. The interviewees were chosen from the professional network of SIAM SIG members. The companies that agreed to participate in the interviews were known for applying SIAM practices in their organization. Presenting the findings as individual Case Studies was a conscious decision to create a straight forward approach to a complex subject and to maximize legibility of the results.

The template for the interviews was constructed after creating a relevant theoretical maturity on SIAM and building the current state analysis described in chapter three of this thesis. The findings of the current state analysis served as a starting point for the interview template, as the preliminary questions were designed to address the challenges the analysis revealed. The final questions for the interviews were designed in workshop with SIAM SIG members. The original questions were specified and SIAM SIG members provided their own professional input for the questions to adduce the challenge areas. Please see the full interview template in the appendix part of this thesis.

The interview template was sent in advance for each participant, giving them time to prepare for the interview. The purpose of the template was to create a framework for the interview and leave room for open conversation with the participants to gain as much

meaningful content for the case studies as possible. This approach worked well, and most of the participants were able to prepare for the interviews and bring presentation material for the sessions.

Each individual case study aims to describe (where possible) the background of the interviewed company without revealing details of the business, triggers for applying the concept of SIAM, planning and executing SIAM implementation, the company's current SIAM model and ITSM-tools, and the most important lessons learned in implementing and operating SIAM.

## 5.2 First case company

The first case company is an internationally operating group that employs over 5000 people. The company has gone over heavy organizational changes due to business acquisitions and industry changes. In 2014, the company had centralized different business areas and merged formerly multiple IT-departments to a single IT-organization of over 150 employees. As the former IT-departments had no visibility over each other's operations in the past, they had all had their own siloed ways of working. Quickly after the merger it occurred that the maturity level, for example, in ITIL processes within this newly formed IT-organization varied a lot. Around the same time, the company had also decided to outsource all end user services and IT-infrastructure services for a single provider. All the services concerning the company's business applications were still managed internally, but it was on the roadmap to start outsourcing some of these in the future as well.

### 5.2.1 Trigger for SIAM and planning the change

Differences in process maturity and the outsourced end user service model created challenges in the transition and a need for unified practices that had to be addressed. The company founded a Service Management Office (SMO) of the three most experienced process backgrounded employees in the organization to oversee the design of a new operating model for the IT-organization. The company hired outsourced consultants to help with planning, building and implementing a SIAM model, process models and ITSM-tools. The goal was to implement unified ITIL based processes for all the managed IT-services, create a single point of contact for the end users and build



ITSM-tools where both the internal and external service providers would work in. The SIAM model and tools would be in control of the company after the implementation, and would provide necessary capabilities for service governance and transparency over the provider landscape.

### 5.2.2 Implementation

Quickly after founding the SMO, the company started implementing processes that were considered most vital for all services. These processes were incident management, request fulfillment, change management and configuration management. The first three of these processes were thought to be most essential for the practical work in an IT-organization and configuration management on the other hand necessary for managing assets. The initial plan was to implement these processes for all services throughout the IT-organization in planned phases over the next two years. Implementing the configuration management process was very challenging, as some of the vendors did not have the process in place, which made building a Configuration Management Database (CMDB) very demanding.

When the implementation began, it started to become clear that the workload for the SMO had been underestimated, as the hired staff was struggling with constant overflow of tasks. The company added a fourth person to the SMO and used a varying number of outsourced consultants during the implementation. On average, from two to three outsourced consultants worked full-time with the project. The responsibilities and tasks for the implementation were divided by assigning each process for a chosen member of the project team based on their expertise. The problem with this approach was that processes vary in scale and complexity, which resulted to overburdening the workload of some of the project team members and locking their expertise to a single assignment when it could have been used in several assignments.

Building vendor integrations with the ITSM-tools occurred to be more challenging than expected, especially with vendors that had lower ITIL maturity level. Building, implementing and running the ITSM-tools reserved a lot of resources from the SMO that could have been more useful in other areas of SIAM development. Tool solutions could have been also completely outsourced, as there are many competent providers available.

The biggest issue with the SIAM implementation came from the management of the company. During the implementation, CIO of the company changed. The previous CIO had supported SMO and was responsible for the budget decisions for the IT-organization, and by default, the budget of the SIAM implementation. The new CIO did not have as strong a process background as his predecessor did, and did not see the direct value of building unified process models and therefore restricted the budget for the project and eventually shut down the SMO before all the planned processes were implemented into the service portal and ITSM-tools. This occurrence demonstrated in practice why the commitment of top management is the premise of a successful SIAM implementation. Without sufficient funding and sponsorship development projects never completely succeed.

The work SMO had done before it was shut down was not in vain. Excluding the challenges with resource planning, the implementation was executed efficiently, because it was planned well. The goals and means to reach them were clear, and as a result, the new operating model brought results. The company had now a service portal in place for its end users, which had raised customer satisfaction significantly. Processes the SMO had implemented are working as planned, are still in place, and have improved ticket and request lead times. Internal and external providers are integrated to the company's ITSM tools, and the overview of provider performance is now more transparent. The results stayed, but further development of the model ended when the SMO did.

### 5.2.3 Training employees

The people chosen for the SMO had the most experience and a strong background in working with ITIL processes, and for this reason the concept of SIAM was not unfamiliar to them either. Building internal SIAM capabilities with formal training was not needed inside the SMO, but the company relied on outsourced experts in building the new operating model.

In the rest of the organization, the level of ITIL and SIAM maturity varied before and after the implementation. The SMO raised SIAM awareness during the implementation by communicating the changes through different channels, for example, newsletters and promoting the new operating model in company events, but the interviewee felt that this was not done enough.

Service owners and service managers were trained for the new operating model, as they were responsible for overseeing that the implemented processes are executed in practice. The company had plans for raising SIAM maturity level gradually in the whole organization with outsourced trainings, but the implementation project never got to that point before SMO was shut down.

#### 5.2.4 Tools

The company built an online portal tool that served as an end user service catalogue, where end users can report issues, create tickets and make requests. The portal covered all the services from hardware procurement to different applications. Some of the most important vendors are integrated into the portal, and they receive tickets and service requests directly from the end users through the portal. This is how the complexity of the IT-service provider landscape has been masked from the end users.

Building and maintaining a comprehensive service catalogue for end users was highly challenging due to vendor's different operating models and tools. Some of the built integrations did not work as fluently as intended, which created issues with the processes, resulting to end users working their way around issues outside of the set channels.

#### 5.2.5 Lessons learned

As the implementation and integration challenges with vendors showed, it is in general more feasible to integrate processes that all parties are already practicing, which is why ITIL-mature service providers demand less effort with integrations. The decision to build the ITSM-tools reserved internal capabilities that could have been utilized better in the implementation. Tool solutions could have been also completely outsourced as there are many competent providers available that have done similar tool implementations before, and their expertise could be taken advantage of. It is hard to evaluate which option would have been more beneficial for the company, but similar sourcing decisions have a significant impact on the outcome and should not be taken lightly. Not everything needs to be done and managed internally, if the ownership and control remains in the organization.

Building and maintaining a comprehensive service catalogue for end users is important, but can be highly challenging due to different nature of vendors and the way they work. If the integration cannot be built fluently, the processes will not work and end users do not commit to using the given tools. Instead, they manage ways to go around issues they feel they do not get a solution for in time. This can drive users away from the dedicated channel for processes that have demanded a lot of effort to develop and implement. Another problem it can create is shadow IT, which brings new variables to the environment and weakens the manageability of IT-services. The business organization loses effectiveness of its resources if employees are spending their time on working around issues through unsupported channels that cannot be managed.

The case company struggled with implementing the new operating model to the change reluctant business organization. An ITIL foundation level training for the whole IT-organization and a similar SIAM training for selected stakeholders would have been useful for the implementation, because it would have made communicating the goals and changes clearer for the organization, as everyone would have been already familiar with the concepts and aware of the possible benefits. Training employees is an effective way for addressing change resistance in an organization. It would have been important to promote more the goals of SIAM, reasons behind the implementation and changes in everyday-work throughout the organization, and to do this in a planned and regular manner. This, however, would have demanded more resources from the already undermanned SMO team.

Usually when a company must make tight budget decisions, development projects, such as implementing a new IT-operating model, are the first to lose funding. The value a SIAM model brings cannot always be directly communicated, but it is necessary that the management of the organization perceives the benefits and potential, as it is crucial for a SIAM implementation to have full support of top management to completely succeed, no matter how well-planned or defined the model and implementation is.

The most important lessons learned are highlighted in the figure below.

## Lessons learned

The commitment of top management is crucial for successful SIAM

The case company in question made a decision to seize the funding of the SIAM-implementation project, leaving the SIAM model incomplete. Further development ended and the IT-organization never reached its full potential.

Practical plans for training and informing the organization reduces change resistance and creates a common goal

Employees trained on ITIL did not resist the change to new operating model in the case company. Communicating the change to the business organization had a clear impact.

Evaluate internal capabilities, focus on core competencies and make deliberate sourcing decisions

A decision to focus on building the ITSM-tools reserved valuable internal capabilities from the implementation that could have been utilized better in the case company.

Figure 10. Lessons learned from the first case study

### 5.3 Second case company

The second case company has over 8000 employees. The company has a centralized Business Services department that provides services for the company's five core business divisions, and consists of financial services, customer services and IT-services. IT-headcount is around 160 and the department serves 8200 workstations. IT-organization is responsible for delivering 380 business applications and 470 workstation software for the end users, and processes high volumes of around 5000 Service Desk tickets and 6000 application tickets monthly.

#### 5.3.1 Trigger for SIAM implementation

The company had started centralizing its core business areas to five separate business divisions. At the same, time the IT-architecture was centralized as well, but all the business divisions were still managing their IT-services themselves and had their own way of doing so. This siloed organization model made it difficult to observe service lifecycle and develop IT-operating model and processes as the information concerning the services was scattered and unstructured. In 2007, The CIO of the company and the future head of the company's SIAM programme started discussing the benefits of

unifying service management and creating a new operating model for the IT-organization.

The company started with the idea that all the information concerning each service should be in one accessible place in a structured manner where it can be observed and analyzed. With this idea, the company built a plan for a new service governance model.

### 5.3.2 Implementation

The company assigned a small team for planning, building and implementing the new operating model for service governance. The SIAM team started with planning and building the initial tools for the most important processes. As the end users were scattered across different business divisions, a simultaneous roll-out of the new tool and processes for each business division would have demanded a massive and carefully planned implementation project and corresponding resources to be successful. The SIAM team thought that if they began forcing the new operating model for the business divisions and service managers, they would most likely face an insurmountable resistance to change, and the built operating model would be either never or very slowly adapted by the end users. The team did not want to make elaborate plans and three-year roadmaps for the implementation as they thought that the plans would never be executed as intended. They had a concept and the tools that they knew would prove to be beneficial for the whole organization, so they took an alternative approach to an implementation of this magnitude: an agile approach.

The team chose the business division with most ITIL-mature processes and approached the service managers with a suggestion. They explained the new service governance model for the service managers of five services and asked if they would be willing to test a new approach for incident management to begin with as they were the best candidates for a pilot group. The business division was onboard, so they implemented the tools and the new process model for incident management, where the end users of the five services were asked to report incidents to a new service portal tool, from which the information would be channeled to the company's ITSM-tool. The idea was to focus on ensuring that the new tools and processes would improve performance and user satisfaction, and let the results communicate for themselves.

The new model worked well, and word about the new incident management tools got around. The rest of the service managers in the business division started to get interested. The SIAM team suggested for the business division that they could proceed with the pilot by either implementing a new access management and a request management process, or implement the incident management process to more services in the division. In this manner, the implementation proceeded in small steps, process by process and service by service, constantly ensuring that the new operating model brought good results and different stakeholders were satisfied. The end user service portal worked well and users liked the new interface. The small implementation iterations that were not planned too far ahead were also simpler to resource.

In the following two years, the good results had spoken for themselves and the rest of the business divisions wanted in on the new governance model. It was no longer a question of if the SIAM model can be implemented to the company's business divisions and services, but in which order it will be implemented in. Now after 8 years of constant development of the service portal and ITSM-tools, all the services are under the same portal, all of the most important processes for each service are managed through the portal and ITSM-tools, all the information concerning services is available in a single source with embedded business analytics tools, most of the vendors are integrated into the company's tools and work within the same layer, responsibilities are clear and traceable and the IT-organization is performing better than ever.

### 5.3.3 The designed SIAM model

The company manages the governance of all services internally. The IT-organization has an assigned three-person service management team, the members of which are responsible for the design of internal processes, operating models and principles for all services. The integration model is built around the principle that all the data and information concerning services would be centralized and kept in-house. Therefore, the Business Services department controls the tools which act as the integrating layer between different stakeholders, as the whole organization and most of the vendors work with the tools. Requirements for services come from the business divisions and are communicated for the Business Services department of the organization, where Service Managers manage the related stakeholders for the services. The different governance bodies are presented in the figure below.

The company's whole SIAM model relies on strong end-to-end ownership of service delivery. Each service manager is accountable for the service they are managing and are as responsible for their sub-contractors work as they are of their own. Total accountability stays in the service provider layer and in-house. Strong ownership is the backbone of the company's operating model and has worked well.

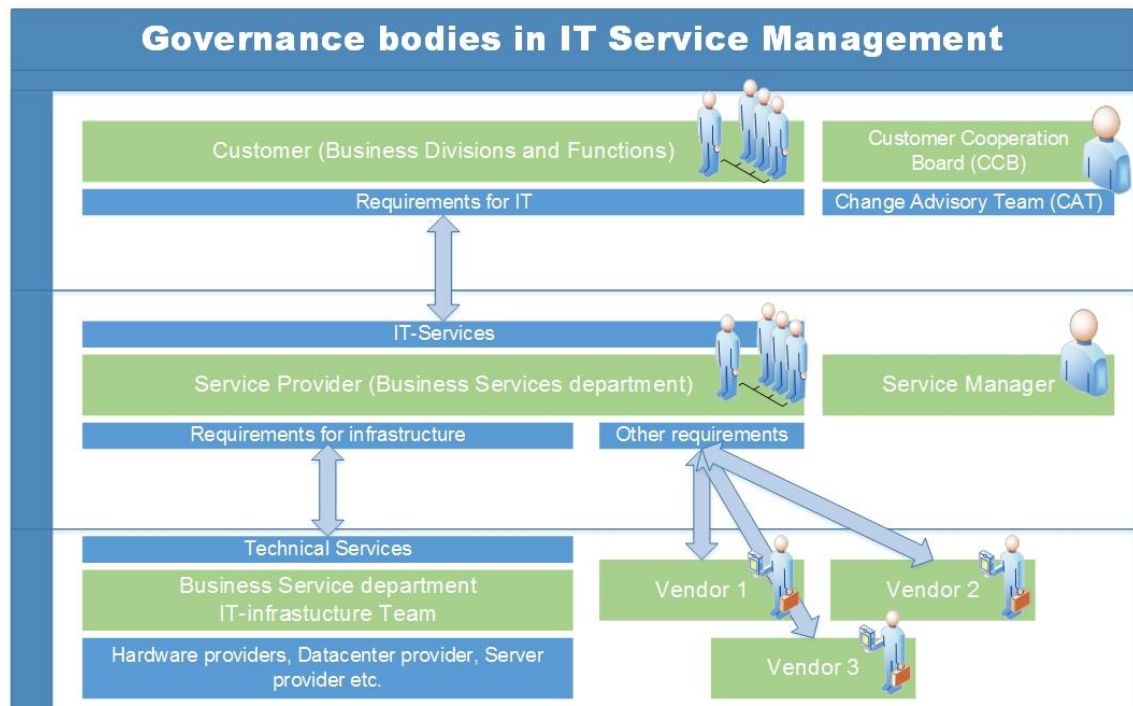


Figure 11. A presentation of different service management governance bodies in the case company

Business divisions have a Customer Cooperation Board (CCB) assigned for each service. A CCB can be a single person or a team depending on the scale of the service. A CCB is responsible for communicating the service requirements for IT. CCB members of each division negotiate, for example, the lifecycle of the service, budgets and applied principles for the services they need with the corresponding Service Managers in the IT-organization.

All services are managed in a unified way in service lifecycles. Each service lifecycle has six distinctive phases ending with decision making points, and assigned responsible persons for each phase of the lifecycle. The first step is identification of business opportunities and demands, where a business case is built for a new service. If a service is approved for defining, the service is named a Business Owner and an IT-owner who



are responsible for defining a development plan, overseeing the development of the service and finally deploying the service to operations. Before the service is deployed, it is assigned a Service Manager in the Business Services department and a Customer Cooperation Board in the business division, to whom the Business Owner and IT-owner hand over the responsibility of the service. The Service Manager and the CCB are responsible for running the service and at some point, retiring it, if a decision is made to terminate the service. Every service goes through the service lifecycle model, regardless of the size of the service.

#### 5.3.4 Service portal and ITSM-tools

The company has a service portal for the end users where they can for example contact service desk, report, manage and follow their tickets and service requests and manage the hardware and applications they are using. The portal directs the end user actions to the company's ITSM-tool, where they are channeled for the right personnel, for example change requests to change managers. In the ITSM-tool, the business services department and most of the vendors operate. In addition to tools for managing different processes, the ITSM-tool has, for example, built-in analytics, dashboards and knowledge database. The ITSM-tool is the center of all service information.

As all the stakeholders are working with the same tool, there is no room for miscommunication. The same information is available for everyone and the progress of tickets and request are documented and easy to track to the responsible party for each step of a process. If a vendor leaves or is changed, all the information concerning the provided service remains intact in the tool. This makes changing vendors less risky and integrating new ones easier, as they can be given access to the service data immediately with the integration. When the information is transparently available for all parties, vendor performance reports cannot be biased. Integrating the vendors to the ITSM-tool was challenging, because of insufficient maturity level to work with ITIL processes and reluctance for change, as some have their own tools and environments, and changing them is inconvenient. Promoting the mutual benefits of using the same tool helped with reluctant vendors.

The company has built other tools that utilize the data from the ITSM-tool. The company has a separate ITSM-portal, in which decision makers in the business organization can review all the IT-services that the business is using. ITSM-portal, for example, includes

information on how much the business division is paying for the different services they are provided with. This tool is used by the business divisions for budget evaluations and similar tasks. The ITSM-portal has built-in business intelligence functionalities for following Service Level Agreement (SLA) defined Key Performance Indicators (KPI). The company has also a separate analytics tool for managing assets that utilizes information from the Configuration Management Database (CMDB).

### 5.3.5 Lessons learned

With an effective service strategy and service design the company was able reinvent its IT-organization and centralize service related information into a single source, where data is transparent and can be utilized in a manner that was not possible before the new operating model was implemented. With an agile implementation approach the company was able to tackle change resistance effectively and manage resources for different implementation phases. Strong ownership of the services and clearly defined roles for the whole service lifecycle has made managing services steady and controllable.

The most important lessons learned are highlighted in the figure below.

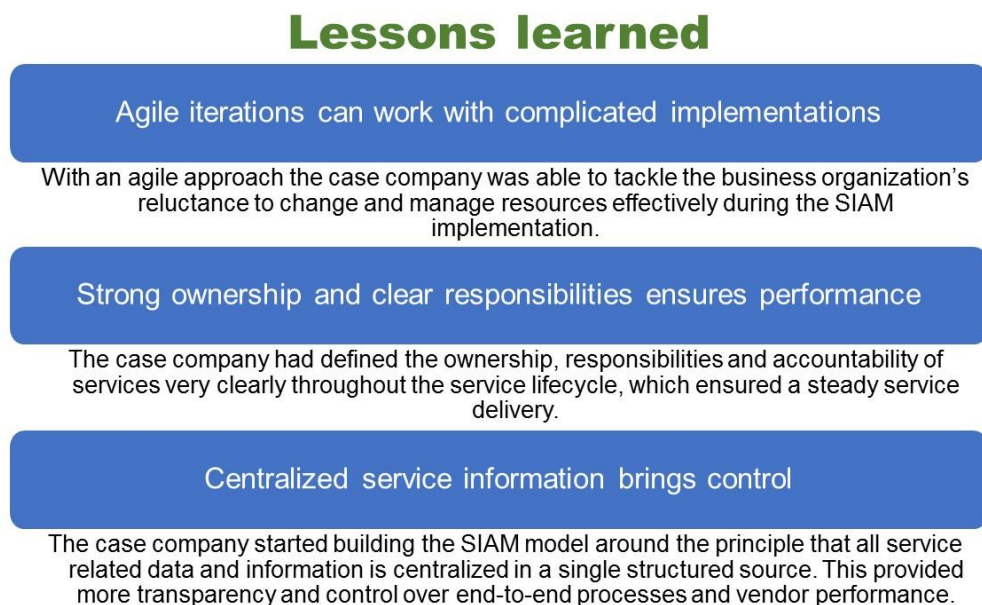


Figure 12. Lessons learned from the second case study

## 5.4 Third case company

The third case company has currently over 11 000 employees around the world, around 1000 of which are currently working in Finland. The company has centralized the management of IT-services to a single department of around 50 people and local operational IT-support working in different branches, serving around 8000 workstations for end users. The company has an outsourced and globally operating service desk for end user support. The IT-organization is currently managing around 70 services from different internal and external providers through their ITSM-tools.

### 5.4.1 Trigger for SIAM

The company first started developing its end-to-end IT service management operating model with goals for a more harmonized end user experience, faster service restoration, better control over service costs and enhanced utilization of resources. By managing and controlling their IT-services more efficiently the company aimed for gaining a more transparent overview on the delivery of provider services and their quality. A decision was made to outsource both the service desk and the necessary ITSM-platform for the new operating model. The required ITSM-tools were bought from an experienced provider that handled the implementation with the help of a few ITIL-trained internal IT-process management backgrounded employees.

### 5.4.2 SIAM and end user support model

The company wanted to mask the complex IT-processes and service provider network from the end users, and build clear IT-support channels for the business organization where the end users would always have single point of contact for their issues. The IT-organization developed a concept, in which the end users would have a single email, a single phone number, a single online chat feed and a single self-service portal tool associated with service support, from which the IT-organization would channel the issues and requests to the appropriate party. The future direction of the model is that the self-service portal is the encouraged channel for service requests and reporting incidents. For more complicated services such as ERP-systems, the company has trained key users, who are available directly from the portal tool. Financial services are integrated

into the service portal as well, and end users from the business organization can contact the service desk also in financial service matters.

The self-service portal was designed in iterations and in tight cooperation with the end users. The aim was to minimize training by building an intuitive user interface. This was done with involving all the end user stakeholders into testing and piloting the portal in each iteration, and then applying corrective-action plans according to gathered feedback. This development phase demanded a lot of resources but ensured that the implemented tool eventually served the end users well. However, the challenges do not end with the implementation of the tool. Resources should always be reserved to address the occurring user issues right after introducing a tool, such as the self-service portal, to the organization. As the user volumes rise exponentially, there are usually issues that are going to surface despite of thorough testing and piloting.

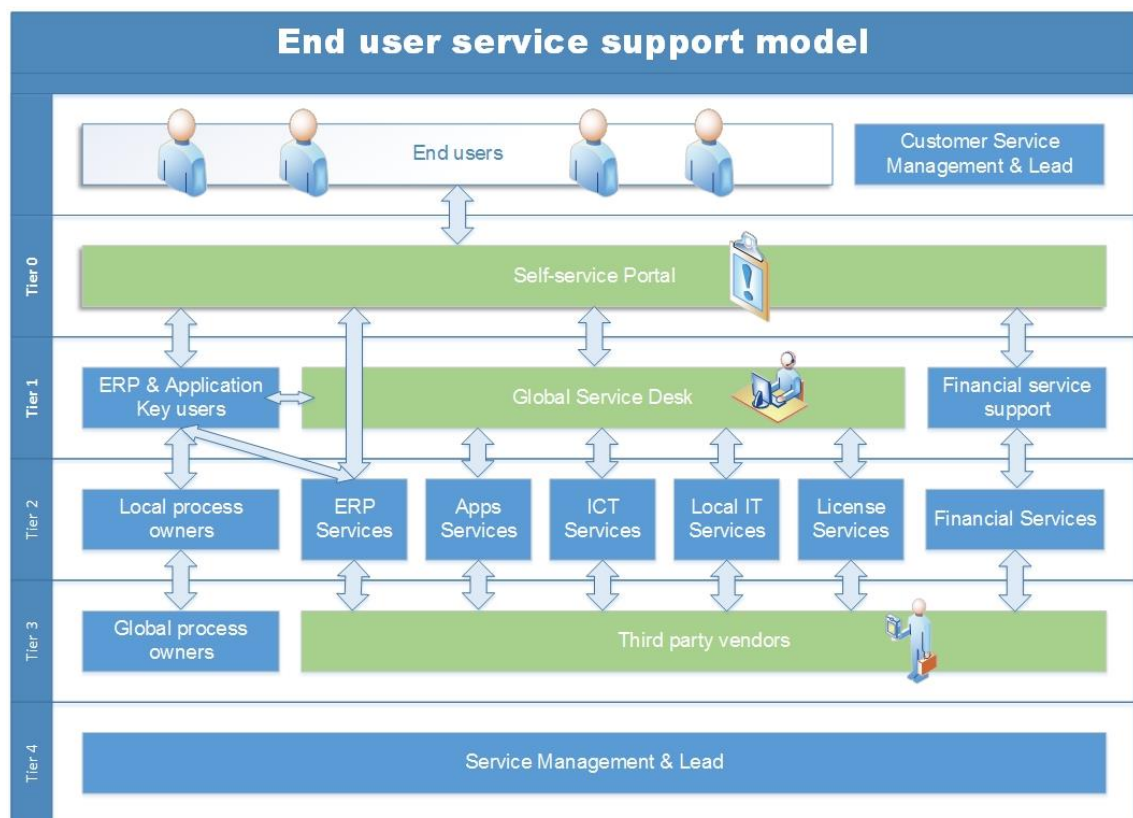


Figure 13. Different stakeholders and levels of the case company's end user support

The figure above presents the company's support model for end users. The service desk and ITSM-platform work together as the integrating layer that combines internal and external service providers to work together with unified processes designed internally.

As the service desk has been outsourced, the company still needs to retain control over the IT-processes. Therefore, service desk does not forward tasks directly to third party vendors, as otherwise issues would be completely processed by outsourced parties. The second-tier support is internal for this reason. Service desk is trained to manage automated and minor tasks, but bigger issues are forwarded to the second-tier support teams. If the internally assigned teams cannot manage the tasks coming from the service desk, the third-tier support is contacting the service vendors. Sometimes it would be faster to solve issues if vendors were integrated to the second-tier support, but by operating this way, the company would lose control over the processes. This is one of the challenges with the current support model; how to get the vendors integrated deeper without losing the control of the processes.

#### 5.4.3 ITSM-tools

Integrating the vendors into working in the company's ITSM tools has proved to be challenging, as most of the vendors have their own tools and would typically prefer integrating customer organization into their tools. Some of the larger vendors have built integrations between the company's tools and their own, making the same information available in both sources. However, building these integrations is very costly and requires that the volume of business cases is worth the vendor integration. With new vendors, the company manages this issue with a predefined onboarding plan, which has three integration options for how the new vendors are built into the company's tools.

Aside from following typical SLA defined KPI's and other metrics for vendors and service performance, (i.e. downtime, recovery time and request response time), the company measures a Net Promoter Score (NPS) for each ticket and request that goes through the service desk. Net Promoter Score (NPS) is a management tool that can be used to gauge the loyalty of a company's customer relationships. The company has applied the NPS concept to service desk. After the service desk closes a task, a simple inquiry is sent for the end-user to rate the service received from 1 to 10. Individual responds do not have much weight, but when a service receives a large volume of reviews over time, the NPS becomes a qualitative indicator of how the vendors handle their service requests. This information is very valuable for following and reporting vendor performance. However, it must be considered that the NPS is built on a volume of service requests and tickets, meaning that a low NPS does not always indicate poor performance. For example, if a vendor deploys a perfect service that the end users very rarely have any reportable

issues with, but when they do, they are for example solved slowly, a nearly perfectly performing vendor might have a low NPS.

#### 5.4.4 Lessons learned

The company has utilized strategic partners well, gaining efficient tools and functions for running SIAM. The expertise of experience partners has provided them with unconventional metrics for monitoring vendor performance. For maintaining governance and control over end-to-end processes, the company has created an inevitable internal layer in the end user support model, resulting to an additional intermediate in some of the processes, where information could otherwise be directed straight for the responsible stakeholder.

Implementing a new operating model and ITSM-tools to the organization has had several benefits. The SIAM model has provided transparency and overall control of the service delivery and quality, enabled controlling resources and service continuity, improved reporting and forecasting, and made resource planning simpler. Customer satisfaction with the delivered services has been in a steady incline, and this development will most likely continue. The most important lessons learned are highlighted in the figure below.

### Lessons learned

Unconventional KPI's can provide valuable and easily accessible information on vendor performance

Benchmarked metrics, such as NPS, offered easily obtainable and valuable information on the quality of vendor performance for the case company. KPI's should not be based solely on SLA's.

Consider how control is retained in the IT-organization if all or most of the SIAM functionalities are outsourced

The case company had outsourced major functionalities of the SIAM functionalities, and had to create an internal layer to its support model to retain control over end-to-end processes. Building a completely or partially outsourced SIAM model requires control and governance for maintaining transparency to evaluate provider performance.

Reserve resources after implementing new tools for tackling unexpected surfacing issues

As the user volumes rise in an organization wide tool implementation, there are probably going to be challenges, that cannot be anticipated, despite thorough preparations.

Figure 14. Lessons learned from the third case study

## 5.5 Fourth case company

The fourth case company has almost 20 000 employees scattered across 70 countries and 200 locations. The company has a global IT-organization, consisting of around 250 employees: technical support mostly in Asia, local IT-management in most locations for operational support, centralized IT-procurement, a delivery center in Europe and solution management mostly in Finland. The company has outsourced its Service Desk and local IT-support, and, for example, ERP-systems and platform tools to a few strategic partners with whom the company is cooperating closely with.

### 5.5.1 Raising ITIL maturity

In the early 2010, most of the company's IT-operations were still in Finland. The maturity level in ITIL was not high at the time; the IT-organization used unstructured processes for communications and services. Most of the personnel were not familiar with the terminology generally used in service management, and the IT-organization was lacking a common language. These issues made management of the expanding number of outsourced services difficult. The company built a new business strategy in 2011, a part of which was addressing the immaturity of service management in IT-organization, resulting to the initiation of the company's ITSM programme.

The first goal for the ITSM programme was to design and implement a new operating model for the IT-organization. The company started with building an assigned delivery management team of different concept owners in the IT-organization. These concept owners were trained on ITIL first on a foundation level, and then more in depth in their own field of expertise. The delivery management team defined which of the ITIL processes, and to what extent, would be adapted to the organization's operations and then taught to the employees involved with these processes. Each of the chosen processes were named process development managers, who were responsible for executing the plans for implementing the processes into the organization's operations. The processes were divided to three waves, in which they would be implemented in, starting with the core processes applied for most services such as incident management and request fulfillment.

After the first wave of process implementation, the company started an internal audit programme for evaluating objectively and annually different services and finding non-

conformance in them. The findings were handled with corrective-action plans, ensuring that the maturity level of processes in different services were raised.

The company raised ITIL maturity in the whole IT-organization with outsourced trainings. All the employees whose daily work was changed and affected by the new operating model were sent to a foundation level ITIL course. Process development managers were trained with other ITIL modules depending on their managed processes to ensure their capabilities in designing the process models. For the rest of the IT-organization, the company produced e-learning courses and videos, and organized classes about the changes in the organization. After their own training, the process development managers held crash-courses for the employees working in their teams. The e-learning ITSM-trainings still take place, and each new employee in the company's IT-organization takes these courses as they start working in the company.

#### 5.5.2 Trigger for SIAM and planning a SIAM model

After the implementation of the new operating model, the company was practicing ITIL processes with services, but did not have unified tools for the organization to use and vendors were still using their own. Because of this, information concerning services was not transparent and vendors could only provide requested information in a format that came from their own tools, often manually modified and difficult to interpret. The company did not have a good understanding of the overall content of tickets and requests. This created a need for integrating the processes and vendors into their own tools further, and the new operating model had brought the IT-organization to a necessary maturity level to do so. A new ITSM project was founded that defined goals for organizational changes.



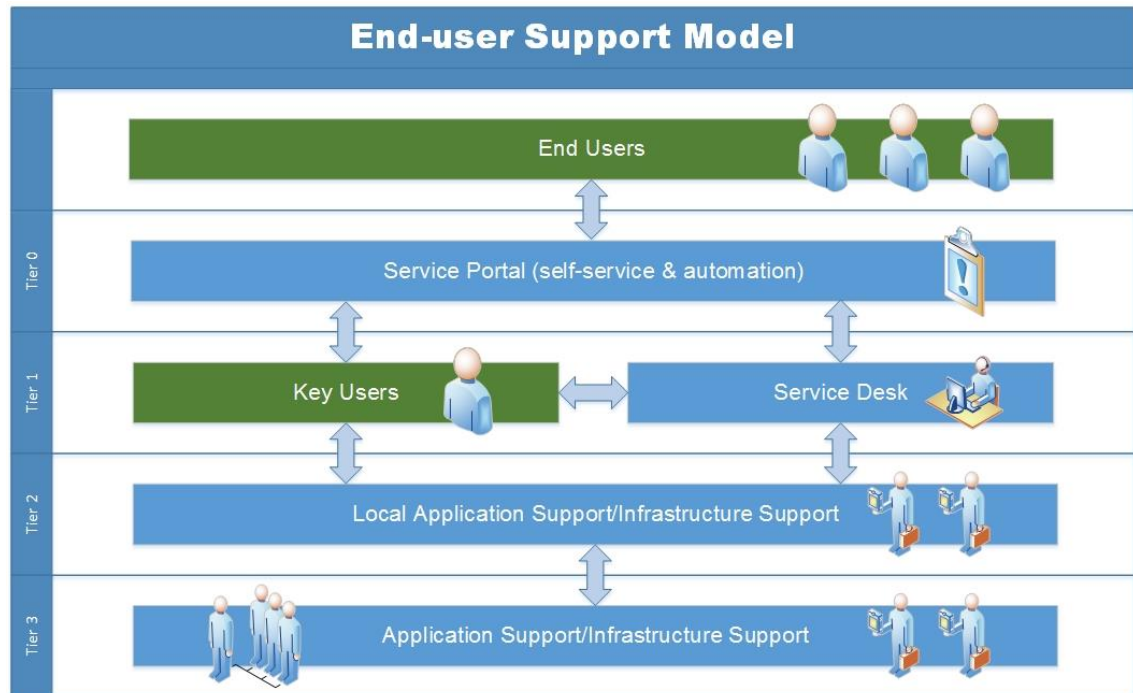


Figure 15. Different stakeholders and levels in the case company's end user support concept

The company wanted to build a SIAM model for supplier contracts and an end-user support concept. The figure above presents the designed model for end user support. End users would have a self-service portal for reporting their service concerned issues, from where they would be directed to service desk (, or key users with more complicated services such as ERP-systems), if the process is not automated. A decision was made to give the responsibility of ticket lifecycle for the outsourced service desk to manage, while maintaining visibility and control to the tools. The service desk would seek consultancy from designated expert teams in the organization when they could not resolve themselves the issues coming from the end users. Each bigger site of the company has their assigned team of experts with more knowledge of the services providing local support in operational issues. If the local expert teams are not able to solve an issue, the company has a third tier of assigned expert teams ultimately responsible for the service performance. Both second and third tier support teams can be either internal experts or integrated vendors and their assigned experts.

### 5.5.3 Implementation of the SIAM model and ITSM-tools

Service desk teams were evaluated on their maturity level, different ITSM-tools were tested and negotiations held with strategical partners that ultimately led to a decision for

investing into a new outsourced ITSM platform tool. The new platform was implemented in a similar fashion to the IT-operating model; with a carefully planned deployment in several releases. In the first release, a pilot user group was assigned to use the new platform with the first two implemented processes, request fulfillment and Continual Service Improvement (CSI) process. A beta version of the self-service portal was introduced to all the end users as an optional tool for reporting issues.

After a successful pilot, the second release was a bigger “go-live”. A service catalogue was launched as an improved version of the earlier beta self-service portal. With the service catalogue, the company introduced incident, problem and knowledge management processes for the end users, that were managed end-to-end in the invested service management platform. Building the service catalogue was very demanding despite the strong ITIL foundation, as it required documented definitions for each service and the components they are built of, for example, support models, different end-to-end processes and dependencies to other services.

Knowledge Management process and building a Knowledge Base occurred to be a challenge as well. Before the platform was implemented, the organization had only an unstructured shared folder consisting of around 400 Knowledge Base articles, some of which were outdated and no one was assigned responsible for maintaining the articles. Employees used outdated articles as task instructions for processes which created inconsistency within the organization, even though employees were performing as instructed. This challenge was dealt with a large-scale project, in which the biggest vendors added their Knowledge Base articles in to the ITSM-tool, and each service manager was instructed to produce from three to five updated Knowledge Base articles for each service offering, to begin with. This practice was then continued regularly. Currently the company has knowledge management process in place for maintaining the Knowledge Base; a dedicated knowledge manager in the SIAM team and a responsible person with each bigger vendor. Now the current Knowledge Base consists of over 1500 articles that are structured and up to date. Having a more comprehensive and structured Knowledge Base has had a tremendous impact on the quality of work.

A separate project was also founded for planning the design and interface of the self-service portal, and how to promote the portal for end users as the right channel to manage their service related issues. Process development managers did tours on bigger sites of the company, where they held local info sessions and desks, trained assistants

and key users with using the portal, and produced training videos to be released in different channels in the organization.

The portal was built using Service Design processes, with several iterations and different versions tested with the end users, and the results were good, although the process demanded a lot of work. The interface was clear and an efficient channel that delivered promptly. As end users started to embrace the portal, it cleared a lot of resources for use in for example service desk. End users used to make a lot of calls to service desk concerning tracking their tickets, the progress of which they could now follow themselves in the portal. Before the implementation of ITIL processes this data was unconstructed and hard to find, which made calls like this very time consuming for the service desk to manage. Before the portal was implemented, a base line analysis was made for service desk and the user satisfaction indicator Net Promoter Score (NPS) at the time was minus 25. Now the latest statistics revealed an NPS of a little over 70. The NPS scale goes from negative 100 to positive 100, where zero marks a neutral customer engagement and positive 50 is generally acknowledged excellent. Considering this, the improvement in end user satisfaction for service desk was phenomenal with the implementation of the portal.

A separate project was founded for integrating the vendors into the new platform. There was a transition period where both, the old channels for reporting to vendors and the new self-service portal, were in use at the same time. Cooperating with the vendors was sometimes challenging. For example, some vendors had assigned process managers for integrating the processes from different siloed departments that did not communicate well together. This resulted to unnecessary delays in process deployment. Visibility over all the different stakeholders involved makes implementing new operating models more efficient.

As the company has moved the services and processes to the same platform and most vendors have been integrated to work within the same layer as well, the management and governance of each service has become clearly more efficient and overall possible, when all the statistics, reports and other relevant information can be found from a single source. Proactivity of service desk has improved because with the new tools service desk employees have been able to observe the processes more transparently, take note on things that are not working as efficiently as they should and report the issues.

Now the company has a separate SIAM team, and former process development managers have become capability leads that are responsible for managing and overseeing the processes and their corresponding applications in the ITSM-platform. The SIAM team follows different trends in the platform, and proactively suggests improvements for the service managers. For example, an end user can use a non-catalogue item for reporting issues that do not fall into predefined categories for a service in the self-service portal. If the SIAM team notices that a lot of users of a service are reporting similar events as non-catalogue items, they suggest standardizing the process for the service manager. A standardized catalogue item for the event will help the end user to report the problem faster, and the process to be a subject for improvement and even to be automated at some point. The SIAM team also reviews the user reading habits in Knowledge Base and suggests improvements based on often searched and read articles, and articles that the end users have flagged inaccurate in the service portal.

As mentioned above, the self-service portal was created using the Service Design approach, in multiple iterations and versions, involving end users in the process. Implementation of the platform and building the processes into the tool was done in a more straight-forward manner that caused problems that occurred during the implementation, as the design was flawed, and did not take all the user types into account. For example, implementing a new Continuous Service Improvement (CSI) process to the platform demanded a lot more resources than anticipated. The process involves a lot of stakeholders from the IT-organization and different business divisions, which makes managing the process very complex, as the process consists of multiple phases and all parties do not necessarily have the same visibility to the platform because of for example licensing problems. The process was designed to be managed in the platform through development forums where the stakeholders from the business organizations report issues with services and assigned people would then follow the forums and service managers would take necessary improvements to development. Some services, however, are a lot smaller than others and do not have the resources needed for maintaining and following the development forums, which results to the smaller services to not being subjects to the improvement process and fulfill the requests coming from the business organization.

#### 5.5.4 Lessons learned

The company faced issues with implementing a Continuous Service Improvement process, as they did not involve all the stakeholders into the development and gather feedback prior to implementation. The process should be more flexible and take into consideration different stakeholders better. Using service design approach with the CSI process as the company did with the portal could have prevented some of the current issues with the platform.

Decision making in the organization has been very heavily based on bringing end users value, by creating more simple methods for them to perform in their occupation. Many of the decisions have demanded great investments, from which the benefits cannot be realized in years. For example, the very extensive training of the IT-organization demanded a lot of resources, but without the investment, the company would have wasted a lot more in struggling with its poorly performing service delivery. It was the capable people, a customer based strategy, long term decision making and purposeful consistent planning that have made the development of the IT-organization to its current state possible. The most important lessons learned are highlighted in the figure below.

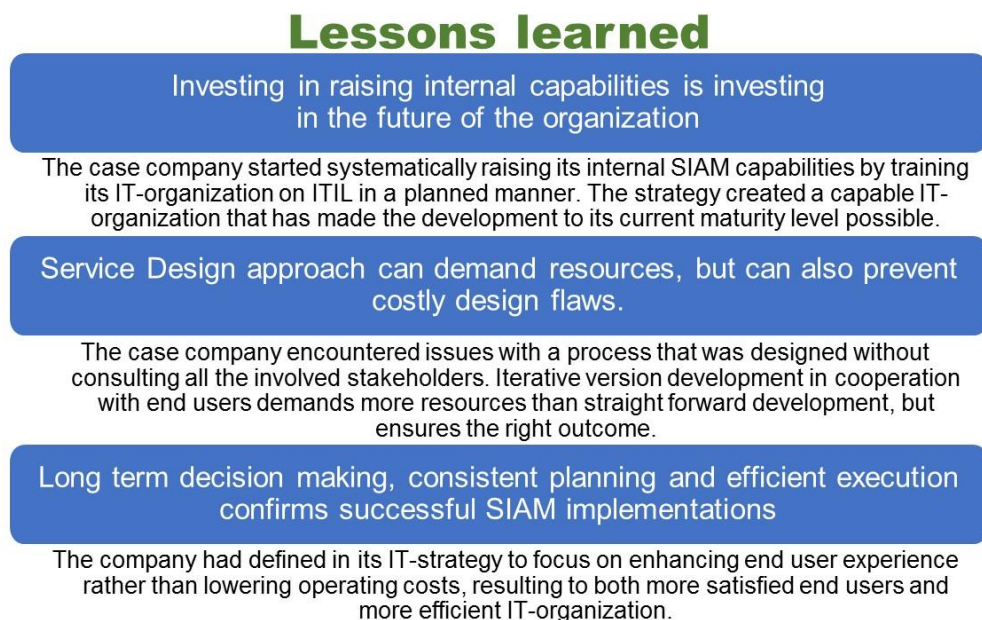


Figure 16. Lessons learned from the fourth case study

## 6 Conclusions

The goal of this thesis was to research Service Integration and Management (SIAM) as a concept and currently occurring SIAM practices in Finnish companies to find beneficial practices to promote for the members of the organization itSMF Finland and other interested parties. To reach this goal, a decision was made to research relevant literature and gather information of SIAM practices by interviewing SIAM professionals in known Finnish forerunner-companies in the field, targeted through the professional network of itSMF Finland. As the concept is a broad entity, a current state analysis was made to set a scope for the research areas. The current state analysis, an analysis based on a SIAM survey described earlier in the thesis, revealed several challenging focus areas that directed further theoretical research and data collection for the thesis. The conclusions of the findings on these focus areas are summarized in this chapter.

### 6.1 Service Integration and Management - SIAM

Service Integration and Management (SIAM) is an approach for service management that can be beneficial for companies struggling with a complex service and vendor landscape. The definition used in this thesis for SIAM describes the concept as a set of practices and an accompanying model for managing, governing, and coordinating the delivery of services provided by multiple suppliers, both internal and external to the business organization. Although running SIAM relies on a number of processes to function, it is not a process itself, but a service capability and set of practices that build on, elaborate, and complement every part of the ITIL practices. (Holland, 2015a. Pp. 4)

On the basis of both literature and the studied companies, applying SIAM can, for example, improve transparency and control over the whole IT-organization, by creating a single source of service visibility and tools for operations. The SIAM approach can help with masking the complex service and vendor network from the end users by providing a single business facing IT-organization and a single point of contact that reduces shadow IT and can release resources in the business organization. SIAM models have been documented to reduce incident and request lead times by providing more efficient channels for managing processes. SIAM approach can also help with developing vendor on and offboarding procedures that prevent vendor-locking and can help creating simplified service level agreement management.

SIAM is not for every organization. Adapting to a new IT-operating model is a demanding business change and must be treated as such and approached with the according planning, financing and organizational change management. For a smaller organization, a SIAM operating model can create an unnecessary layer of the IT-organization that can extract some of the agility a smaller IT-organization usually has a vantage of. However, as most of the case studies showed, by applying SIAM, a company can reach various business benefits and build a foundation for more flexible future development and expansion that are well worth the investment in the long run.

## 6.2 SIAM challenge areas

Chapter three of this thesis discusses a current state analysis based on the results of a SIAM survey conducted for ITSM-professionals in the itSMF Finland network. The analysis revealed that the most challenging part in applying SIAM methodology in an IT-organization was the implementation of the SIAM model itself and themes revolving around it, such as preparing for the implementation by raising IT-maturity in the organization, planning the model and resources, and leading people towards the change in the organization. The most critical found pain points are listed in the figure below in relation to the focus areas they have an influence on.

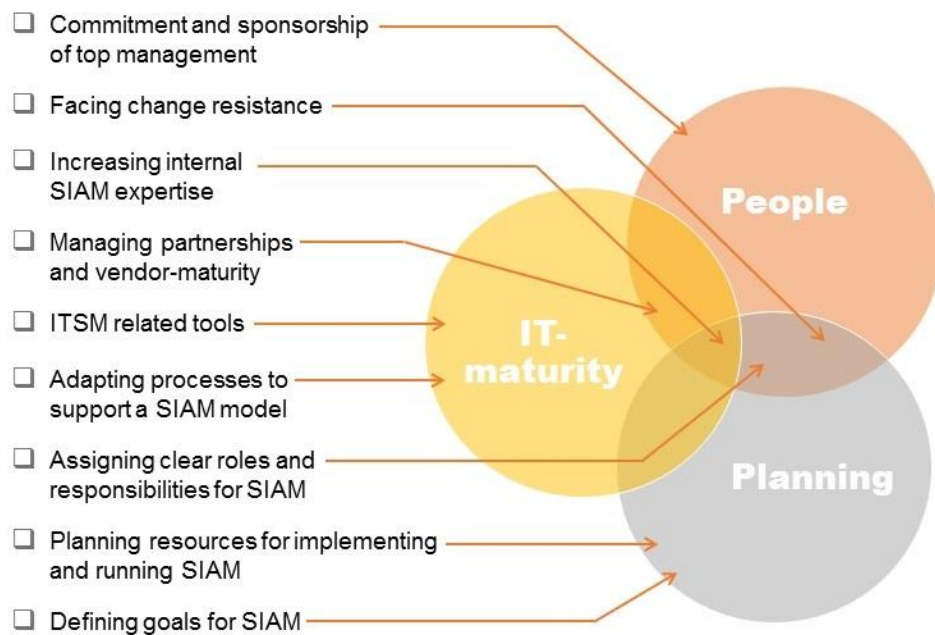


Figure 17. Challenge areas in SIAM implementations

These challenge areas directed thesis research both in literature and data collection for ensuring that the findings will concern the most critical areas in SIAM implementations and the conclusions of the thesis will address common challenges in the industry.

### 6.3 Recommendations

This chapter presents summarized findings of the thesis research concerning the challenge areas represented above and points out further reading where possible.

#### 6.3.1 Raising IT-maturity for adapting SIAM

SIAM cannot be implemented into an organization that does not have the necessary IT-maturity to begin with, as the concept demands strong operational governance from the organization. Literature and practice in the case studies have both shown that strong ITIL-maturity provides a steady foundation for SIAM internally in the organization and with cooperating vendors. ITIL creates a common language between all parties, and it is easier to create a unified operating model for an organization that is already performing according to certain standards.

The organization's own capable people are the striving force behind every successful and well-performing IT-organization. If the organization does not have the demanded internal capabilities, it is a good investment to spend resources on training the IT-organization. The third case study of this thesis provides a good example of how an organization can raise its internal capabilities with systematically planned and purposeful training of its employees. This demands a decision-making body that has taken into consideration the different needed expertise on different areas of the organization. Training can be outsourced, but is recommended to develop internal training practices once the expertise is in place in the organization. Internal e-courses and videos can for example help with training new employees without spending resources after producing the material.

A capable organization can implement ITIL-mature processes to reinforce its operations and service management. ITIL processes that are already in place for different services make the transition to a new unified process model much simpler. The current state analysis and all the case studies underlined how difficult it is to work with vendors who



do not have mature processes in place. It is advised to choose a vendor with the necessary IT-maturity where possible.

Before a SIAM model can be implemented, it demands that the current service landscape is documented sufficiently into a service portfolio and service catalogue. Producing service portfolio and service catalogue proved to be surprisingly demanding in most of the case studies despite of a mature ITIL operating model. The advice on this is to start early and maintaining the documented services accordingly, as producing the documents can be very time consuming and demand a lot of resources when it must be done on a short schedule. It is important to ensure full understanding of the characteristics of each service and the dependencies between them. The ITIL publication on Service Design has more advice on how to approach this.

### 6.3.2 Planning SIAM

Planning of a new operating model always begins with a trigger, a demand for change. Whether it is unstructured service data, siloed departments with no visibility over others' operations or poorly reported and uncontrolled vendor performance, the demand should define the original goals for a new operating model. Making clear decisions on what needs to be achieved with the change determines the service strategy. As the current state analysis and the first case study demonstrated, the sponsorship of top management must be assured to proceed with an implementation. Therefore, the goals and value a new operating model would bring have to be communicated well to ensure that funding will not cease to exist when there are no reported short-term profits and long term goals and benefits are not clear. SIAM must be seen as an investment and a business change, and treated accordingly. End-user experience based on long-term decision making is the common nominator for most of the SIAM-forerunners.

Like in all the case companies, the responsibility of planning the SIAM model is usually left for an assigned SIAM governance lead, who is a skilled and experienced process backgrounded employee in the IT-organization and has an experienced SIAM team to lead in the planning of a new operating model. The same team usually oversees the implementation of the new operating model and is accountable for training and informing process owners, process managers, service owners and service managers of the new model and its requirements. A SIAM team or a part of it usually continues with developing the operating model and its principles once it has been implemented. There are no rules

on who should be responsible for planning and designing a SIAM model, but it is advised that it is not completely outsourced for maintaining control and governance, and managing the risks involved. However, experienced outsourced consultants may be valuable advisors where the internal competence is lacking.

Planning the design of the operating model should start with carefully reviewing and fully understanding different potential detailed SIAM models. Having a homogeneous SIAM model provides consistency for the governance, management, and coordination for all types of services. Creating a uniform standard model for SIAM is not possible because operating models for SIAM need to reflect the particular requirements of organizations and the particular nature of their supplier landscapes. In the white paper *An example ITIL-based model for effective Service Integration and Management* published by Axelos, Kevin Holland presented an illustration of an example SIAM model that has been broken down into components (, see chapter 4.1.1. in this thesis). Breaking SIAM down into standardized component model supports better understanding of SIAM and making informed decisions on the sourcing model of SIAM. A component model enables applying consistent terminology and approaches, brings flexibility to accommodate a variety of different services and flexibility to changing the model if necessary. Theory suggests that the component approach is a simple way to plan and review a SIAM model, and assess any gaps in it for the specific business organization.

According to the implementation steps presented by Kevin Holland (, see chapter 4.5. in this thesis), after the SIAM model is designed and service landscape is thoroughly documented and understood, an assessment should be conducted to understand the current process and resource capabilities, process maturity, governance and controls, tooling, and capacity in the business organization against each of the component SIAM service areas. Any occurring gaps should be identified and attended to, after which an evaluation can be done on the organization's ability to grow in-house capability and capacity in the SIAM component services and determine the sourcing strategy for different SIAM services for each component. ITIL publication on Service Strategy provides more advice on how to approach this.

The sourcing decisions can have a major impact on the outcome of the implementation. As most of the case studies showed, outsourcing SIAM components out of the scope of internal expertise and focusing on core competencies have provided successful outcomes in SIAM implementations. A skillful strategic partner can bring otherwise

unreachable expertise to the organization, for example, companies that provide ITSM-tools usually already have a lot of valuable experience in implementing the tools. In the first case study the company could have released valuable internal expertise to be utilized elsewhere, had the company chosen not to build and implement the ITSM-tools itself. However, switching a poorly performing strategic partner can be highly costly in future. The most important matter in sourcing decisions is to ensure that the control and governance remains in the organization even if most of the SIAM services are outsourced, as in the end, the organization carries the risks itself.

Before the SIAM implementation begins, a plan should be made on how to create SIAM awareness and communicate the goals, changes and benefits throughout the organization. A well-informed organization is more likely to embrace the upcoming change. For example, in the third case study different trainings, educational videos and e-learning courses proved to be very beneficial especially in communicating the change into the business organization. In the first case study, on the other hand, the company representative felt that they did not have enough ITIL training in the IT-organization before the implementation as it clearly reduced resistance to change in adapting new process models among employees. Communication and training should be done in a planned and regular manner throughout the SIAM implementation. However, the second case company created awareness and tackled change resistance as a by-product of a successfully performed agile implementation and steady results.

### 6.3.3 SIAM implementation

SIAM implementation should start with procuring the required internal and external resources for establishing necessary SIAM capabilities, functions and techniques, such as ITSM-tools. A very common approach for masking the complex service and provider network from end users is building a self-service portal where the service catalogue is published. In the portal, end users can review provided and offered services, seek support, report tickets and requests, and manage their services online. From the service portal, the user activity is forwarded to the company's ITSM-tools where the IT-organization and integrated vendors operate. The third case study showed that a good way for developing a service portal is using the Service Design approach, involving end users in the process and creating the tool in iterations and versions, for ensuring that the tools serve the end user well. The approach can demand more resources than a more straight-forward development approach, but it can also prevent costly design flaws. The

third case study showed that resources should be reserved right after implementing new tools, such as a service portal, for the end users to use, as the rising user volumes have a tendency to surface unexpected challenges with the end user tools.

Integrating vendors to operate in the organization's own ITSM-tools proved to be challenging in every one of the done case studies. Vendor often have their own tools and can be reluctant to change, or might not be ITIL-mature enough to implement the process models into their operations. Promoting mutual benefits of unified tools, and predefined onboarding plans and categorizing vendors can help with tackling these issues. With bigger vendors, it can be profitable to build integrations between vendor's tools and the organization's own, but building such integrations is usually costly and demands that there is a business case for it.

Once the organization is ready and capable for adapting SIAM, the transition of services should be approached in phases, bringing either one service at a time, or logical groups of services under the SIAM operating model. The actual implementation of the operating model does not have to planned elaborately far ahead. Agile iterations are simple to resource, and can work even with implementations of great magnitude if the goals are clear. The second case study provides a good example of a well-phased implementation that diminished the business organization's reluctance to change. The ITIL publication on Service Transition also provides more advice on approaching this.

#### 6.3.4 Running SIAM

Once SIAM is up and running, all the components and the model as whole should be a subject for ITIL continual service improvement processes. Review and, if necessary, amend the SIAM model, under change control and in line with continual service improvement. The ITIL publication on Continual Service Improvement provides more advice on how to approach this.

Measuring the performance of vendors should not be done only with key performance indicators solely based on service level agreements and lead times. Benchmarked unconventional vendor metrics, such as Net Promoter Score, can offer easily obtainable and valuable information on the quality of vendor performance.

When SIAM is running, a service lifecycle approach has proved to be a valuable way of managing decision making and responsibilities services. The second case study presents an example of service lifecycle management and shows how the responsibilities and roles are defined in each step of the service lifecycle for each service. A strong ownership over service performance and end-to-end accountability ensures a steady service performance, and SIAM can provide tools for doing so.

#### 6.4 Summary

Service Integration and Management (SIAM) is a developing concept for managing and governing multiple services and service providers. Although it is a relevantly new concept in terms of literature, it has been discussed and applied in many industries for years. SIAM can provide a business with improved transparency and control over service landscape, create a single business-facing IT-organization for the end users and mask the complexity of service network.

Implementing a SIAM model has proven to be beneficial for a lot of organizations, but it is not a concept for everyone as it demands strong operational and commercial governance. This thesis presents the core theory revolving around the subject, and introduces four SIAM case studies written of SIAM practices in Finnish companies representing different industries. Implementing the concept into an organization has revealed to be the most challenging part in adapting it, and the means to tackle the issue have been discussed in this thesis. The value of this thesis lies in the actual case studies of SIAM implementations and the elicited practical experiences.

Table 6. A table presenting the lessons learned from literature and case studies.

Pain point	Conceptual framework	Case studies
<ul style="list-style-type: none"> <li>Defining clear goals for SIAM</li> </ul>	Identify a business case, and define goals around it. <b>(4.1.3)</b>	The commitment of top management is crucial for successful SIAM. <b>(1<sup>st</sup> Case)</b> Long term decision making, consistent planning and efficient execution confirms successful SIAM implementations. <b>(4<sup>th</sup> Case)</b>
<ul style="list-style-type: none"> <li>Assigning clear roles and responsibilities</li> </ul>	After the components of a SIAM model are planned and sourcing strategy has been determined for these components, the model should be used to assign and document the roles and responsibilities. <b>(4.3)</b>	Strong ownership and clear responsibilities ensures performance. <b>(2<sup>nd</sup> Case)</b> Consider how control is retained in the IT-organization if all or most of the SIAM functionalities are outsourced. <b>(3<sup>rd</sup> Case)</b>
<ul style="list-style-type: none"> <li>Planning resources for implementing and running SIAM</li> </ul>	Designing a component model for different SIAM functionalities helps with planning a sourcing strategy, and to assess the ability to grow in-house capability and capacity. <b>(4.1.1 &amp; 4.1.2)</b>	Evaluate internal capabilities, focus on core competencies and make deliberate sourcing decisions. <b>(1<sup>st</sup> case)</b> Agile iterations can work with complicated implementations. <b>(2<sup>nd</sup> case)</b> Reserve resources after implementing new tools for tackling unexpected surfacing issues. <b>(3<sup>rd</sup> case)</b>
<ul style="list-style-type: none"> <li>Facing change resistance</li> </ul>	Embedding a SIAM supporting culture is a necessity. <b>(4.3)</b> For SIAM to be effective, operating it demands a set of soft skills as well as technical skills. <b>(4.3)</b>	Practical plans for training and informing the organization reduces change resistance and creates a common goal. <b>(1<sup>st</sup> case)</b> Agile iterations can work with complicated implementations. <b>(2<sup>nd</sup> case)</b>
<ul style="list-style-type: none"> <li>Increasing internal SIAM-expertise</li> </ul>	Combination of IT operational skills and deep understanding of processes is critical to achieve SIAM goals. <b>(4.3)</b>	Investing in raising internal capabilities is investing in the future of the organization. <b>(4<sup>th</sup> case)</b>
<ul style="list-style-type: none"> <li>Commitment of top management</li> </ul>	Communicate the goals of SIAM and long-term value of the model for management. <b>(4.1.3)</b>	The commitment of top management is crucial for successful SIAM. <b>(1<sup>st</sup> case)</b>
<ul style="list-style-type: none"> <li>Managing partnerships and vendor maturity</li> </ul>	It is a necessity for a SIAM provider to recognize different types of suppliers, apply appropriate levels of management, and where necessary take on more work themselves. <b>(4.4)</b>	ITIL-mature service providers demand less effort with integrations. <b>(all cases)</b>
<ul style="list-style-type: none"> <li>Adapting processes to support a SIAM-model</li> </ul>	ITIL processes provide a strong foundation for adapting unified process models between different stakeholders. <b>(4.2)</b> There should always be a single documented design for a SIAM operating model. <b>(4.2)</b>	Service Design approach can demand resources, but can also prevent costly design flaws. <b>(4<sup>th</sup> case)</b>
<ul style="list-style-type: none"> <li>ITSM related tools</li> </ul>	Supporting tools are a key enabler for SIAM. <b>(4.1.4)</b>	Centralized service information brings control. <b>(2<sup>nd</sup> case)</b> Unconventional KPI's can provide easily accessible information on vendor performance. <b>(3<sup>rd</sup> case)</b>

The table above has the summarized lessons learned from literature and case studies on the found SIAM implementation challenge areas. The number in the brackets identifies the corresponding chapter in the thesis or the case study.

## 7 Evaluation of the thesis

This chapter evaluates the thesis, used research methodology and outcome, and the reliability and validity of the results. Lastly, further reading is pointed out for more detailed SIAM researches.

### 7.1 Outcome versus Objective

The objective of this thesis was to research Service Integration and Management (SIAM) practices in targeted Finnish companies in order to gain meaningful information and provide guidance in using SIAM for itSMF Finland's members and other interested parties. To reach this objective, a current state analysis was made to find areas that the members had communicated challenging in applying the concept, and the results set as a scope for the research. This ensured that the outcome of the thesis would serve the interests of the organizations members.

In order to research the SIAM practices in targeted Finnish companies, a decision was made to contact SIAM professionals in these companies and approach them with a set of questions that had been especially formed to concern the scope of the research. As the challenge areas mostly concerned the implementation phase of SIAM, interviewing involved parties was the best option to gain historical data on the events.

As an outcome, the thesis presents a set of good practices in applying the concept in the challenge areas defined in the current state analysis.

### 7.2 Reliability and validity

At the time this thesis was written, there was no established body of knowledge on SIAM and the concept is still developing. This means that the validity of this thesis does not necessarily withstand time well. Given the current environment, the built research design was the best approach for researching the topic and reaching the defined outcomes.

The sampling of the SIAM survey that defined the direction of the research was relatively small, and could have been biased. This was a conscious risk for defining the scope of the research effectively.

The number of case studies and interviewed people is not large enough for making general assumptions. Good practices that have worked in one company are not guaranteed to work in another. This should be taken into consideration when interpreting the results.

### 7.3 Further areas of research

This thesis discussed mainly SIAM implementations and implementation related challenge areas. Further research could be directed to researching development and operations of existing SIAM models, and creating metrics for evaluating the impact of SIAM in an organization.

### 7.4 Further reading

It is highly recommended that the reader researches the body of knowledge on SIAM, the first version of which was published on January 2017 by companies Scopism and Exin.

The ITIL publications mentioned in the conclusions serve as more detailed manuals for approaching different areas in SIAM implementations.

White papers published by Axelos and Kevin Holland provide detailed SIAM practices that can be useful in applying the concept.



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## Appendix 1. SIAM sourcing model comparison

Outsourcing option	Example benefits	Example risks and issues
<b>Outsourced SIAM – Lead supplier as service integrator</b>	<ul style="list-style-type: none"> <li>▪ Attractive to large SIAM providers</li> <li>▪ Lowest increase to business organizations</li> <li>▪ Uses established capability in SIAM provider</li> <li>▪ Uses established SIAM model</li> <li>▪ Can minimize impact to the business if a good fit to current business model</li> <li>▪ Supports use of commercial levers for SIAM performance</li> <li>▪ SIAM may already have model integrated with external suppliers</li> <li>▪ Potentially easier to implement if a good fit for current business model</li> </ul>	<ul style="list-style-type: none"> <li>▪ Dependent on maturity of businesses' current models, but can be 6 to 12 months to implement after appointment</li> <li>▪ High costs to tailor suppliers model for specific service requirements</li> <li>▪ Potentially inflexible for future changes</li> <li>▪ Risk of high costs for future change</li> <li>▪ Cost of tailoring model to fit with business organization's way of working</li> <li>▪ Challenges with managing any in-house suppliers through outsourced provision</li> <li>▪ Tension between quality and profit</li> <li>▪ Few effective and mature models for managing SIAM provider's performance</li> <li>▪ Risk of "lock in" to SIAM provider with high costs of change</li> </ul>
<b>Outsourced SIAM - 3rd party as service integrator</b>	<ul style="list-style-type: none"> <li>▪ Opportunity to review multiple service providers and choose the right fit</li> <li>▪ Uses established capability in SIAM provider</li> <li>▪ Potential for faster benefit realization</li> <li>▪ Lowest increase to business organizations</li> <li>▪ Dedicated quality driven by commitment and separated concerns</li> <li>▪ Access to innovative practices from the service integrator's experience on other SIAM implementations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only recently maturing market for SIAM providers</li> <li>▪ Risk of high costs for future change</li> <li>▪ Potentially inflexible for future changes</li> <li>▪ Challenges with managing any in-house suppliers through outsourced provision</li> <li>▪ Usually an expensive solution</li> <li>▪ Few effective and mature models for managing SIAM provider's performance</li> <li>▪ Risk of "lock in" to SIAM provider</li> </ul>
<b>Internal resources only</b>	<ul style="list-style-type: none"> <li>▪ Potentially lowest cost</li> <li>▪ Builds on existing capability and capacity</li> <li>▪ Flexible future changes</li> <li>▪ Facilitates tailoring for specific service requirements</li> <li>▪ Quality driven by commitment, not profit</li> <li>▪ Lowest cost for future change</li> </ul>	<ul style="list-style-type: none"> <li>▪ Highest increase in business organizations headcount</li> <li>▪ If limited existing capability, highest risk to the business and highest change for business</li> <li>▪ Limited capability to meet changes in demand</li> <li>▪ Constrained availability of skills</li> <li>▪ Requires well-defined process models</li> <li>▪ No commercial levers for SIAM performance</li> </ul>
<b>Internal resources supplemented with flexible co-source</b>	<ul style="list-style-type: none"> <li>▪ Potentially lowest cost</li> <li>▪ Builds on existing capability and capacity</li> <li>▪ Flexible for future changes</li> <li>▪ Facilitates tailoring for specific service requirements</li> <li>▪ Quality driven commitment, not profit</li> <li>▪ Can flex to meet changes in demand</li> <li>▪ Low cost for future change</li> <li>▪ Provides access to proven SIAM partners to assist in transfer of skills/knowledge</li> <li>▪ Supports use of smaller SIAM providers</li> <li>▪ Potentially the easiest to implement</li> </ul>	<ul style="list-style-type: none"> <li>▪ Constrained availability of skills</li> <li>▪ Only recent maturing market for SIAM providers</li> <li>▪ If limited existing capability, highest risk to the business and highest change for business</li> <li>▪ Limited commercial levers for SIAM performance</li> <li>▪ Requires a well-defined process model</li> <li>▪ Some commercial levers for elements of SIAM performance</li> </ul>

A comparison of different SIAM sourcing models (Holland, 2015a. ; Scopism 2016b)



**Appendix 2. SIAM survey for itSMF members, 2016**

# SIAM Survey for itSMF Members, 2016

Key Findings

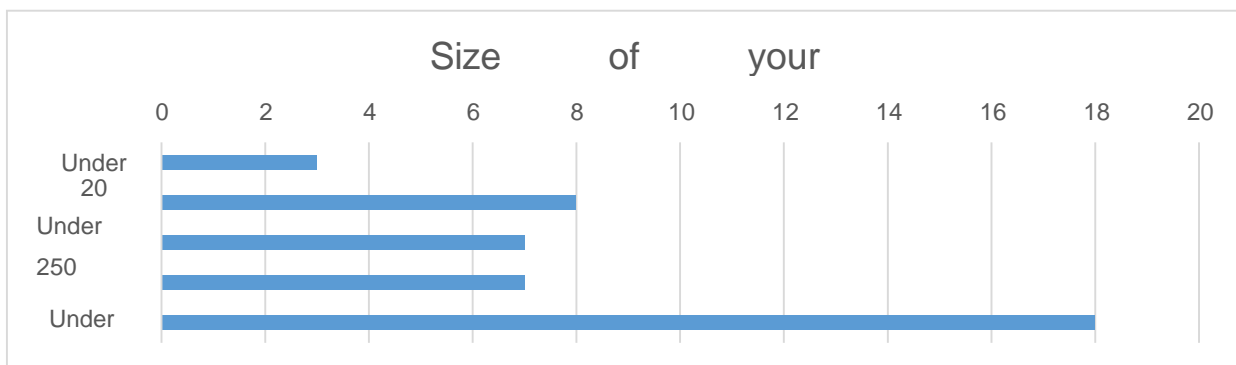
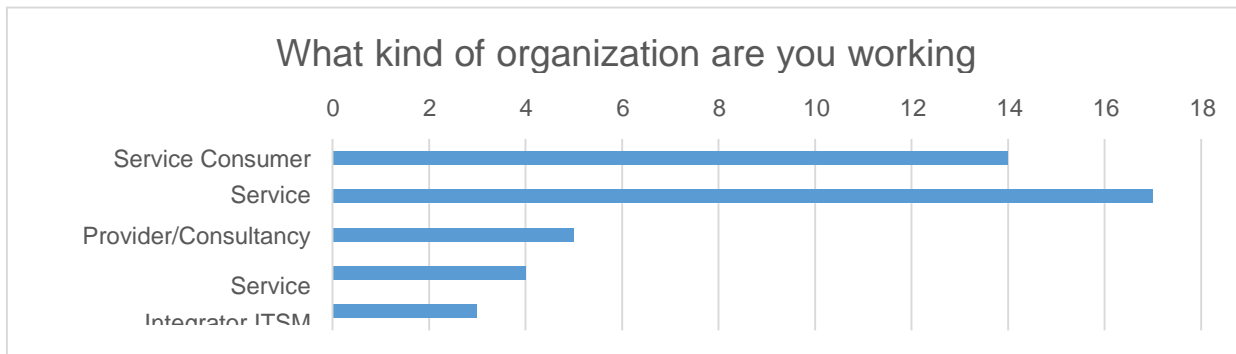
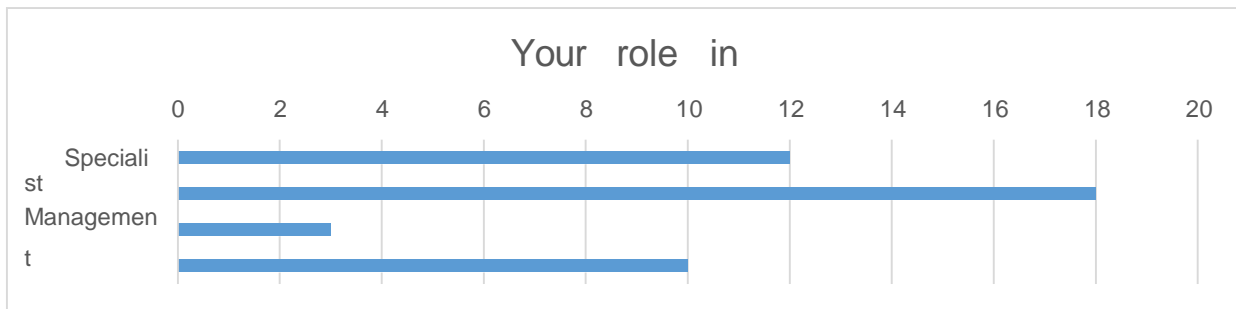
11/2016

About the Survey

SIAM SIG wanted to know how companies see SIAM, what is the current state of SIAM implementations in Finland and to create a background for more detailed study. For this purpose the survey with 10 questions (plus background questions) was created.

The survey was conducted during June-August 2016 with online questionnaire. Three invitations were sent to itSMF Finland member organizations via email. All answers were confidential and anonymized.

Number of responses was 43 (most of them from the different companies). One third (33%) of the responders were from service consumers. Biggest group (42%) was working in the management level. Almost half (42%) of the responders were working in companies with people more than 5000.



## Introduction

Managing the IT as a whole is changing fast. Organizations work with increasing number of internal stakeholders, external service providers, technology vendors, cloud providers and service integrators to meet their business and end user needs. SIAM (Service Integration and Management) is about coordination and management of IT services sourced from both internal and external parties to provide services for end users with one common service portfolio and smooth service experience.

## High Level Findings

Top findings from the survey were as follows.

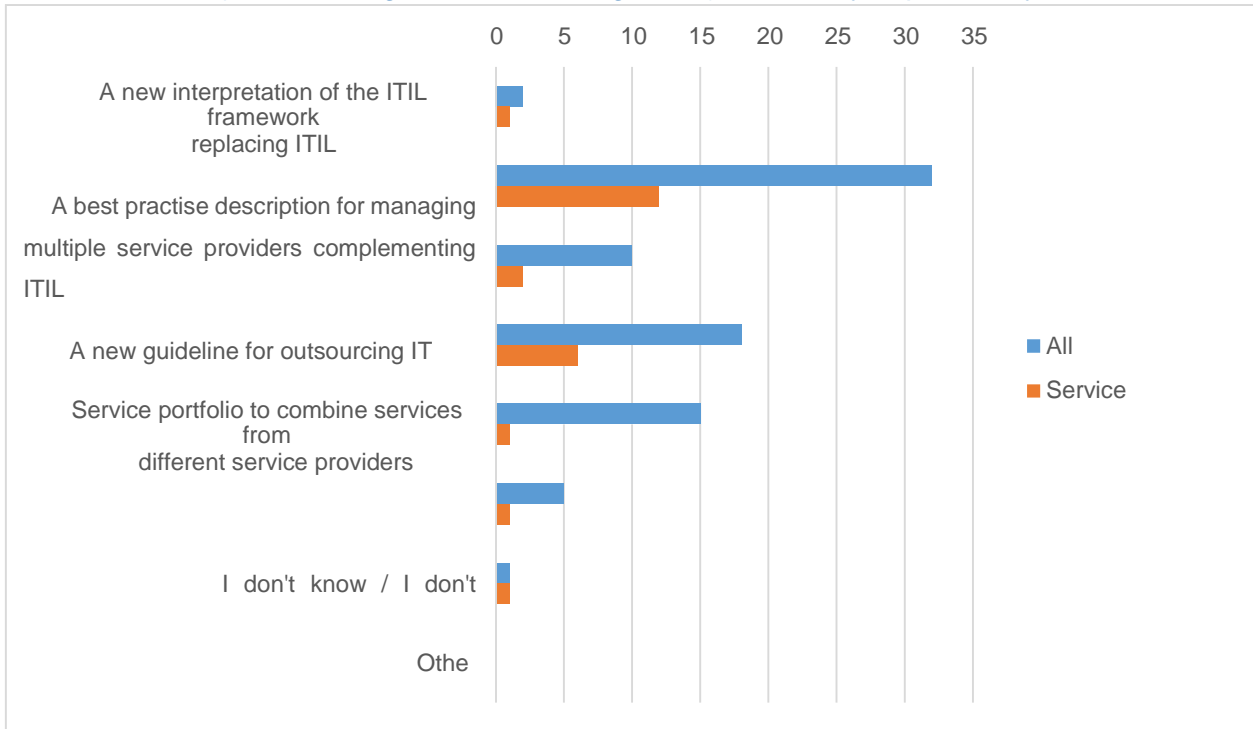
- Almost three fourth (74%) see that SIAM is a best practice for managing multiple service providers and just 5% that it's just new name to ITIL
- 81% think that it'll be new best practice for ITSM
- More than half (58%) have either implemented, are in progress or have plans to implement SIAM
  - o Almost all (88%) of organizations adopted SIAM have met (either fully or partially) their expectations
- Top two things to be changed in organization after SIAM have been implemented is more simplified vendor management and increased transparency of IT operations
- Almost one fourth (23%) of the responders think that there are no reasons not to adopt SIAM

## Survey Results

In this report survey results are reported from all answers and answers from service consumers group. Following chapters represent individual questions and answers to those questions.

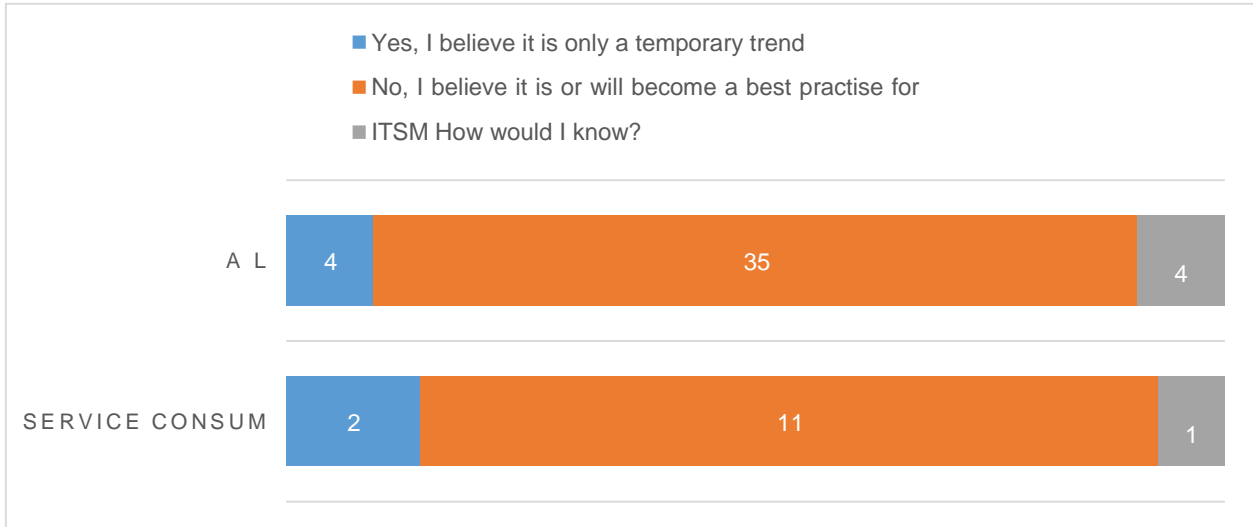


What does SIAM (Service Integration and Management) mean for you personally?



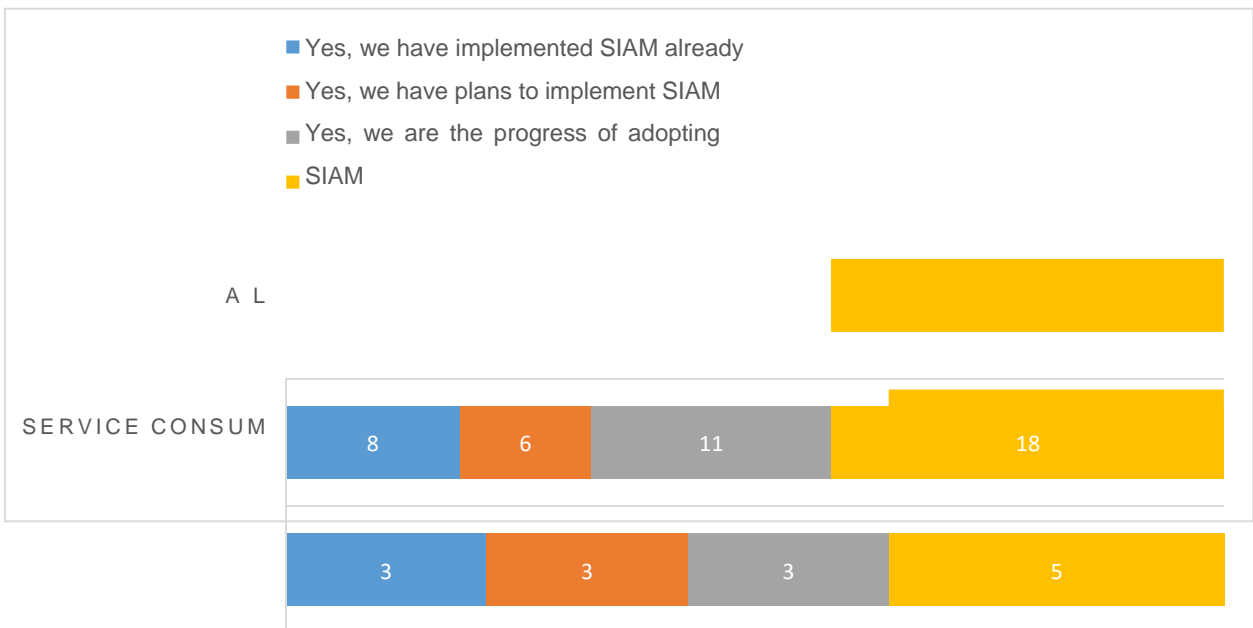
*n: All = 43, Service consumers = 14*

Do you think SIAM is a passing trend or something to stay for good?



*n: All = 43, Service consumers = 14*

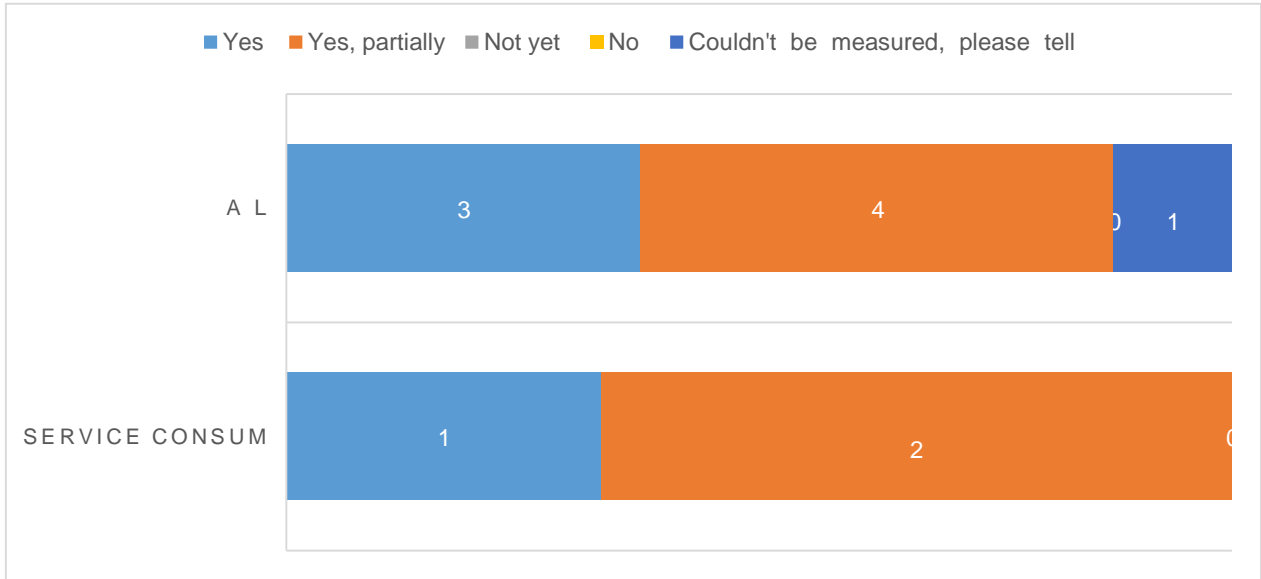
Does your organization have plans for implementing SIAM?



*n: All = 43, Service consumers = 14*



Did the results of the SIAM implementation meet your expectations?

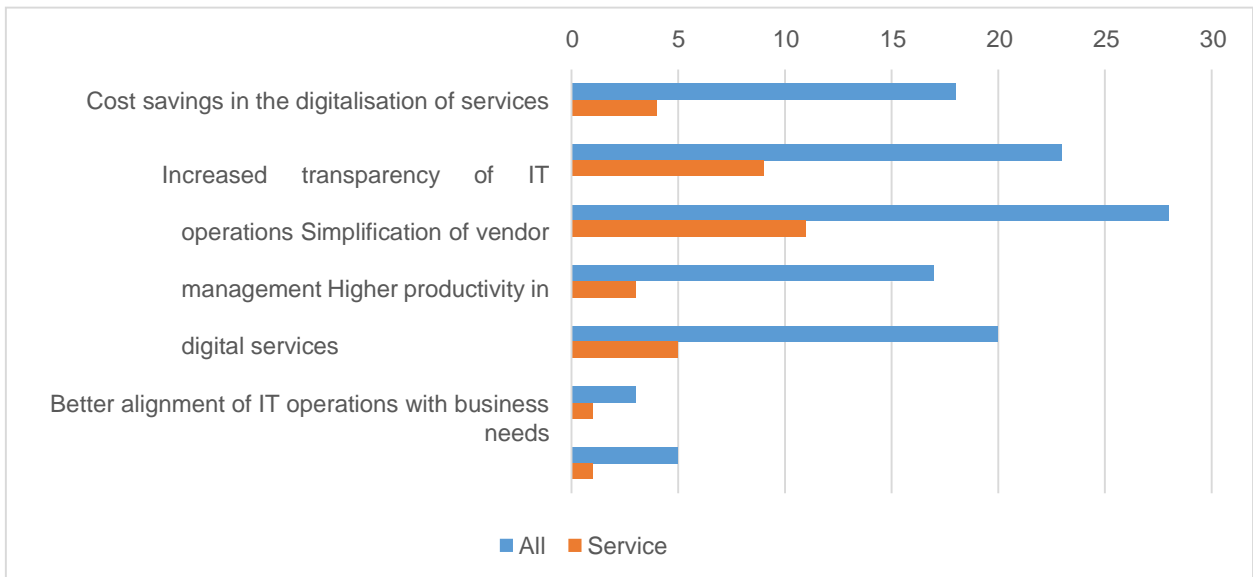


*n: All = 8, Service consumers = 3*

Open answers:

- I do not have access to the data

What do you expect to change in your organization after SIAM would have been implemented?



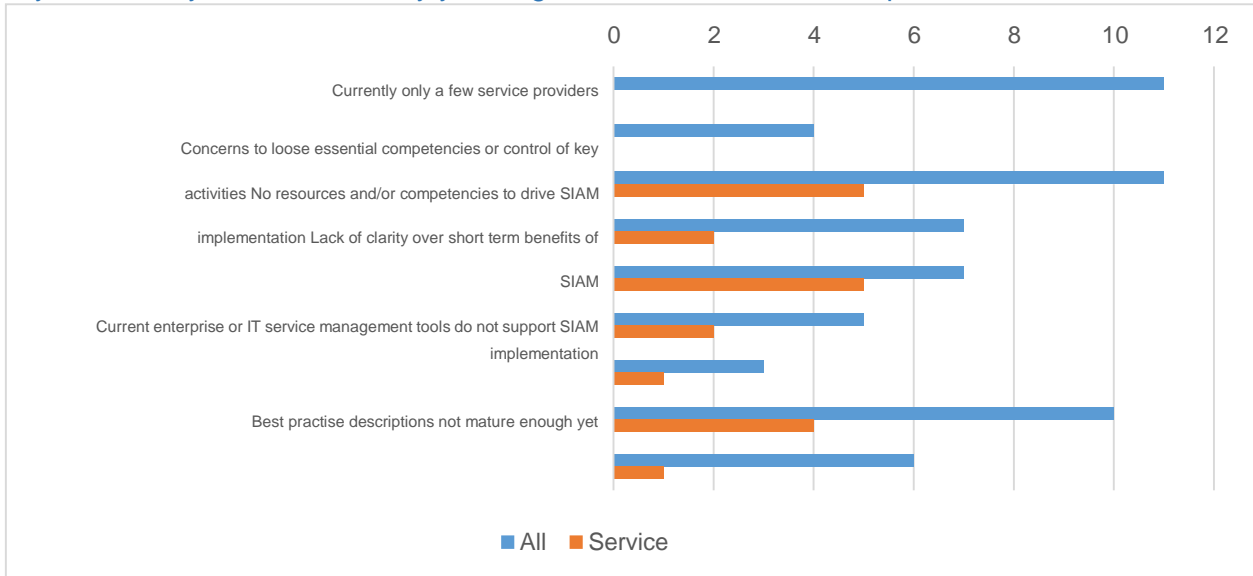
*n: All = 43, Service consumers = 14*

Open answers:



- Revenue increase from the deals where company acts as service integrator
- Easier to find SPOC. Does not mean it's simpler vendor mgmt
- Better productivity and measurement
- Ability to leverage a wider variety of IT services and providers in a structure and managed manner

Do you currently see reasons why your organization should NOT adopt SIAM?

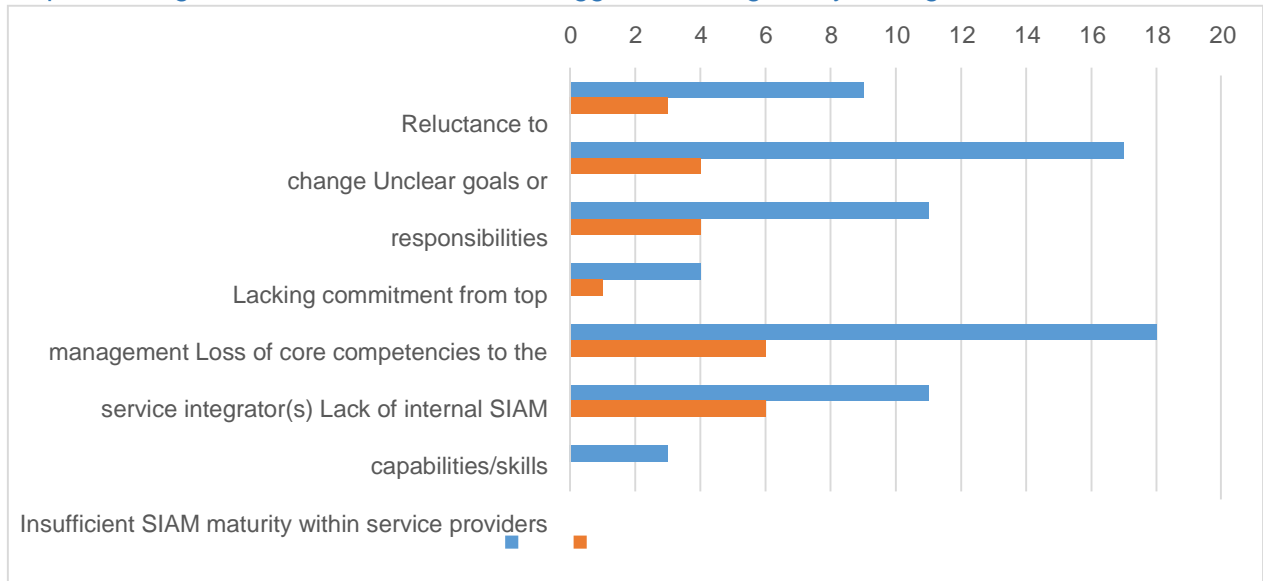


*n: All = 43, Service consumers = 14*

Open answers:

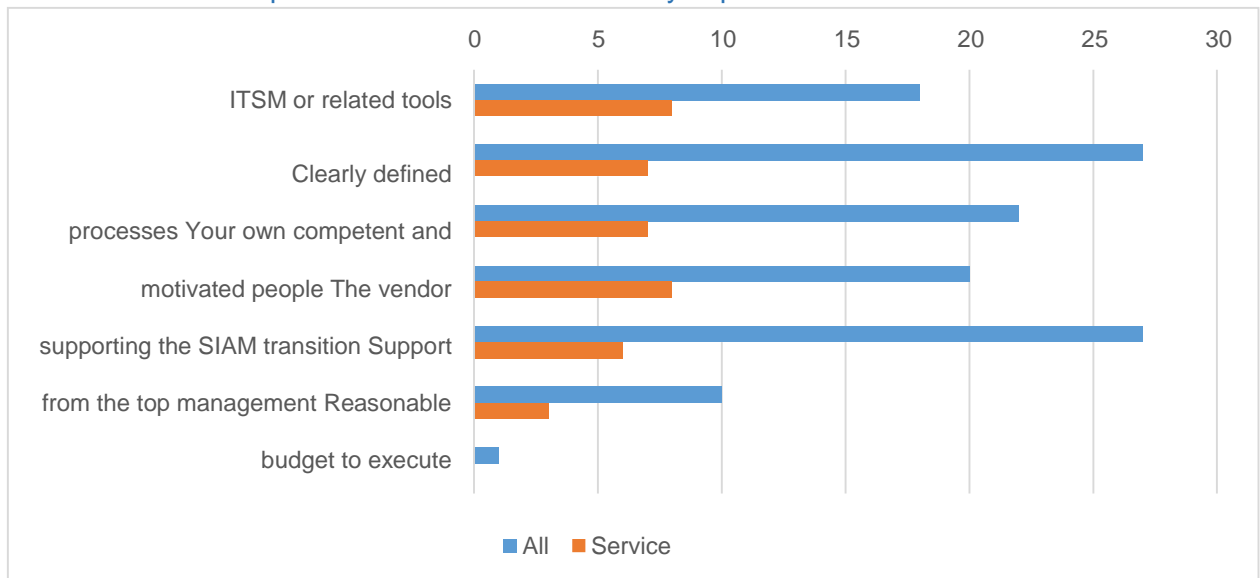
- We don't have such a requirements at the moment
- ICT Improvement processes mainly on-hold and waiting for impact from new owners.
- Outsourced SIAM should be on operational level, rest (tactical & strategic aspects) to be retained as a strategic internal capability

If implementing SIAM what would be TWO biggest challenges in your organization?



n: All = 43, Service consumers = 14

What are the most important enablers to successfully implement SIAM?



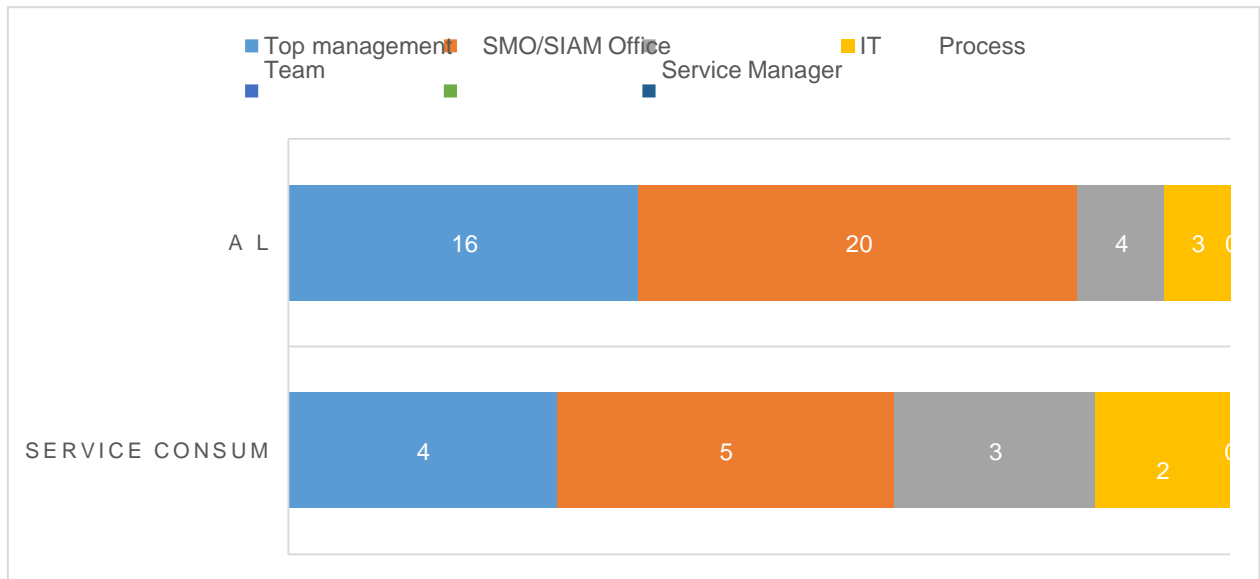
n: All = 43, Service consumers = 14

Open answers:

- Data models which supports SIAM approach.



Who should be the business owners in your organization to drive and manage the SIAM adoption?



n: All = 43, Service consumers = 14

What scope should the SIAM implementation have in your organization?



n: All = 43, Service consumers = 14

## About SIAM SIG

itSMF Finland SIAM SIG (Special Interest Group) consists of volunteer professionals from customer, servicer provider and consultancy companies. SIAM SIG enables views from a wide array of IT industry. SIAM SIG members are as follows.

- Jussi Vuokko (Sofigate), group leader
- Olga Antonova (Tieto)
- Tiina Eronen (Service-Flow)
- Joakim Kockberg (Tieto)
- Ari Luttinen (Sanoma Pro)
- Paula Määttänen (Symfoni)
- Peter Schneider (Efecte)

SIAM SIG goal is to investigate SIAM maturity, understanding, wishes, hopes, fears and dreams in Finland. SIAM SIG focuses on not just CxO level but on various aspects & levels from companies.

Main goal for SIAM SIG is to promote both beneficial and concrete SIAM practices for itSMF Finland members.

## Appendix 3.

### SIAM-lopputyö                      Metropolia                      Ammattikorkeakoulu kohdennettujen haastattelujen runko

#### Taustakysymykset

- Yrityksen liikevaihto
- Toimiala
- Työntekijöiden lukumäärä
- Työpisteiden lukumäärä
- IT-henkilöstön lukumäärä
- SIAM-hallittujen palvelutoimittajien lukumäärä
- SIAM-hallittujen sisäisten palvelutoimittajien lukumäärä
- Suurimmat palvelutoimittajat
- SIAM-mallilla loppukäyttäjille tarjottavien palveluiden lukumäärä

#### Johdattelevat kysymykset

- Mitä SIAM (palveluintegraatio ja –hallinta) tarkoittaa sinulle henkilökohtaisesti?
- Pidätkö SIAM-konseptia ohimenevänä trendinä vai pysyvänä toimintamallina?
- Millaisia muutoksia odotit organisaatiossasi SIAM-mallin implementaatiolla?
- Kenen mielestäsi tulisi olla vastuussa organisaatiossasi SIAM-mallin käyttöönoton läpiviennistä ja hallinnasta?
- Hallinnoitteko SIAM-mallia organisaationne sisäisesti vai oletteko ulkoistaneet kokonaan tai osan hallintatoimista?
- Kuvaile kuinka SIAM-implementaatio aloitettiin organisaatiossasi ja mitkä olivat implementaation suunnitellut eri vaiheet ja aikataulu?

## Implementaatio

- Kuinka resurssien käyttö ja niiden hallinta oli suunniteltu organisaatiossasi SIAM-implementaation aikana?
- Miten vastualueet ovat määritelty SIAM-implementaation hallintaan organisaatiossasi?
  - Miten SIAM-hallinnan vastualueet ovat määritelty organisaatiossasi implementaation jälkeen?
- Miten SIAM-implementaation tavoitteet määriteltiin organisaatiossasi?
  - Miten SIAM-hallinnan tavoitteet ovat määritelty organisaatiossasi implementaation jälkeen?
- Mitattiinko ja seurattiinko SIAM-implementaation vaikutuksia organisaatiossasi ja jos, niin millaisilla mittareilla (KPI:t, laadullisia mittareita yms.)?
  - Ovatko nämä tulokset läpinäkyvästi muun organisaation nähtävillä?
- Mitkä ovat SIAM-mallin sujuvan toiminnan kannalta tärkeimmät prosessit organisaatiossasi?
- Mitkä palveluhallinnan osa-alueet olivat kaikkein työläimpiä sopeuttaa SIAM-malliin implementaatioissa?
- Miten yhteistyökumppaneiden hallinta oli toteutettu SIAM-implementaatioissa?
- Mitkä olivat toimivaksi havaittuja metodeita SIAM-implementaatioissa organisaatiossasi?
- Millaisia odottamattomia haasteita SIAM-implementaation yhteydessä organisaatiossasi ilmeni?
- Millaisia onnistumisia koitte yrityksessänne SIAM-implementaation yhteydessä?
- Vastasiko SIAM-implementaation vaikutukset odotuksia organisaatiossasi?
- Jos voisit läpikäydä SIAM-jalkautuksen uudestaan, mitä tekisit eri tavalla?
- Millaisia oppeja SIAM-implementaatiosta jäi?

## SIAM-valmiudet ja organisaation muutosjohtaminen

- Miten SIAM-valmiuksia on hallittu organisaatiossasi?
- Mikä oli SIAM-valmiusaste organisaatiosi eri tasoilla ennen SIAM-implemmentaatiota?
- Jouduttiinko palvelunhallinnan prosesseja muokkaamaan SIAM-implemmentaation tukemiseksi organisaatiossasi ja jos, niin miten?
- Olivatko ulkoisten palvelutoimittajien SIAM-valmiudet organisaatiosi vaatimalla tasolla ennen implementaatiota?
- Miten palvelutoimittajien SIAM-valmiuksia hallittiin?
- Mitkä ovat tärkeimmät sidosryhmät SIAM-mallin toiminnan kannalta organisaatiossasi?
- Jos käytössänne on loppukäyttäjälle suunnattu palvelukatalogi, kuinka se on jäsennelty ja miten olette integroineet toimittajien palvelukatalogin siihen läpinäkyvästi?
- Miten kontrolloitte organisaatiossanne sisäisiä ja ulkoisia toimittajia IT-työkalujen suhteen?
- Millaisia mittareita ja metodeita käytätte organisaatiossanne palveluiden toimittamisen kokonaisvaltaiseen hallintaan?
- Millaisia ovat parhaat menetelmät, joita organisaatiossanne käytetään SIAM-toteutuksessa?
- Onko organisaatiossasi käytetty jotain metodeita SIAM-toteutuksessa, jotka eivät ole toimineet ja miksi nämä menetelmät eivät ole toimineet?

## Henkilöstön muutosjohtaminen ja SIAM-tietoisuus

- Miten organisaatiossanne otettiin huomioon eritasoinen SIAM-osaaminen henkilöstön muutosjohtamisen hallinnassa?
- Millaisia vaiheita organisaatiossasi käytiin läpi SIAM-osaamisen kasvattamisessa henkilöstön keskuudessa?
- Miten henkilöstön muutosjohtaminen toteutettiin organisaatiossasi SIAM-implemmentaation aikana?
- Käyttittekö sisäisiä resursseja vai ulkoistettua konsultaatiota SIAM-tietoisuuden kasvattamisessa organisaatiossasi?

*Heräsikö haastattelun aikana ajatuksia SIAM:sta, joita emme käsitelleet?*