Self Services and Disservices
-Improving Avatars with Co-Design-

by

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Abstract

Corporations and government agencies that use Avatars claim there are substantial benefits for using them in their respective organizations; including 24/7 service availability, quick answers without a phone queue, and improved consistency in the responses provided. “There are also potential cost savings by having an Avatar answering questions compared to using personnel” (Lind and Salomonson, 2006). However, these benefits may not be great enough as the lack of possible human communication may lead to alienation between individuals and organisations. Furthermore, a robot may “miss out” on business opportunities that a human would act on. A robot will not hear and understand nuances in speech, with the risk that a potentially problematic situation may not be adequately resolved, leading to dissatisfaction with products and services delivered. Many companies measure the satisfaction with Avatars by analysing question and answer logs to see if the Avatar appears to give satisfactory answers. Few of these companies have actually asked their customers (e.g. IKEA and SAS until recently) what they really feel about the quality of the answers they receive. User Centered Design, Participatory Design and other methods are the preferred ways of developing such systems, but these do not include all stakeholders. This thesis addresses this exclusion of all stakeholders by applying a co-design research approach for developing avatars for e-Services.

Case studies from Mark Municipality, Sweden and Scandinavian Airlines Systems (SAS) are presented in this thesis showing how improvements of service quality aspects with Avatars can be managed by applying a four-step Co-Design research approach. From the first step of Co-Design, through interviews, log analysis and a channel survey, findings show that the failed dialogues with Avatars Eva (SAS) and Elin (Mark) are mainly concerned with five factors: interactivity; dialogue capability; consistency; knowledge; and synonyms. In the second step of carrying out customer workshops, a number of ideal scenarios are suggested for the Avatars to perform better. In the third step, SAS decision makers decided to implement the first three scenarios: Eva’s synonyms, knowledge and consistency. Mark decision makers decided to shut down their Avatar Elin, as they did not believe they had the necessary resources. In the fourth step, another channel survey was carried out for SAS as well as a new log analysis in order to know the impact of the redevelopment of the above three scenarios.

An important result of the study was that the company adopted the continuous use of Co-Design as an approach to continuous improvement of the service quality performed by the Avatar Eva. This, for example, led to an increase of 14 percentage points on the users overall satisfaction level. The results also open a new set of questions framing the relation and transformation between Co-Design as a research approach for knowledge creation and Co-Design as a method for innovation and service quality improvements. This thesis also presents an Extended Co-Design Model, which illustrates how Co-Design inspires SAS staff. In addition, the staff of the supplier of the Avatar use it for other functions within and without SAS.

Key Words: Co-Design, Avatar, e-Services, dialogue, Synonyms, Self Service Technologies
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Page</td>
<td></td>
<td>i</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td></td>
<td>ii</td>
</tr>
<tr>
<td>Abstract</td>
<td></td>
<td>iii</td>
</tr>
<tr>
<td>Table of Contents</td>
<td></td>
<td>iv</td>
</tr>
<tr>
<td>List of Tables</td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>List of Figures</td>
<td></td>
<td>vi</td>
</tr>
<tr>
<td>List of Publications</td>
<td></td>
<td>vii</td>
</tr>
<tr>
<td>1.</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1</td>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Problem Statement</td>
<td>3</td>
</tr>
<tr>
<td>1.3</td>
<td>Research Questions</td>
<td>5</td>
</tr>
<tr>
<td>1.4</td>
<td>Research Objectives</td>
<td>5</td>
</tr>
<tr>
<td>1.5</td>
<td>Research Methodology</td>
<td>5</td>
</tr>
<tr>
<td>1.6</td>
<td>Significance, Contribution and Outcome of this Study</td>
<td>5</td>
</tr>
<tr>
<td>1.7</td>
<td>Delimitations</td>
<td>6</td>
</tr>
<tr>
<td>1.8</td>
<td>Structure of the Dissertation</td>
<td>6</td>
</tr>
<tr>
<td>2.</td>
<td>LITERATURE REVIEW</td>
<td>8</td>
</tr>
<tr>
<td>2.1</td>
<td>Services</td>
<td>8</td>
</tr>
<tr>
<td>2.2</td>
<td>Analysis Tools</td>
<td>12</td>
</tr>
<tr>
<td>2.3</td>
<td>Design</td>
<td>14</td>
</tr>
<tr>
<td>2.4</td>
<td>Comparison table of different design methods</td>
<td>21</td>
</tr>
<tr>
<td>3.</td>
<td>METHODOLOGY</td>
<td>24</td>
</tr>
<tr>
<td>3.1</td>
<td>Research approach</td>
<td>27</td>
</tr>
<tr>
<td>3.2</td>
<td>Short introduction to the used knowledge foundation</td>
<td>29</td>
</tr>
<tr>
<td>3.3</td>
<td>How knowledge foundation has been applied as a methodological approach</td>
<td>30</td>
</tr>
<tr>
<td>3.4</td>
<td>Avatars</td>
<td>32</td>
</tr>
<tr>
<td>4.</td>
<td>ANALYSIS OF CASE STUDIES</td>
<td>33</td>
</tr>
<tr>
<td>4.1</td>
<td>Case Study of Mark Municipality</td>
<td>33</td>
</tr>
<tr>
<td>4.2</td>
<td>Case Study of Scandinavian Airlines (SAS)</td>
<td>47</td>
</tr>
<tr>
<td>5.</td>
<td>CONCLUSIONS AND RECOMMENDATIONS</td>
<td>72</td>
</tr>
<tr>
<td>5.1</td>
<td>Co-Design and actability - developing e-services with special focus on Avatars</td>
<td>72</td>
</tr>
<tr>
<td>5.2</td>
<td>Summary and Co-constructive reflections on the method used</td>
<td>73</td>
</tr>
<tr>
<td>5.3</td>
<td>A note about future work</td>
<td>76</td>
</tr>
<tr>
<td>6.</td>
<td>REFERENCES</td>
<td>77</td>
</tr>
<tr>
<td>7.</td>
<td>APPENDICES</td>
<td>88</td>
</tr>
</tbody>
</table>
### List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Co-Design in different industries</td>
<td>20</td>
</tr>
<tr>
<td>2.2</td>
<td>Comparison of Co-Design, Participatory Design and User-Centered Design.</td>
<td>22</td>
</tr>
<tr>
<td>3.1</td>
<td>How Co-Design and Actability were used together in the Cases of Mark and SAS</td>
<td>25</td>
</tr>
<tr>
<td>4.1</td>
<td>Activities and Responsibility of Mark Municipality</td>
<td>34</td>
</tr>
<tr>
<td>4.2</td>
<td>Successful dialogues with Elin</td>
<td>37</td>
</tr>
<tr>
<td>4.3</td>
<td>Examples of failed dialogues with Elin</td>
<td>38</td>
</tr>
<tr>
<td>4.4</td>
<td>Successful dialogues with Eva</td>
<td>48</td>
</tr>
<tr>
<td>4.5</td>
<td>Examples of failed dialogues with Eva</td>
<td>49</td>
</tr>
<tr>
<td>4.6</td>
<td>Descriptive Statistics and Pearson Correlation responding to the four questions</td>
<td>50</td>
</tr>
<tr>
<td>4.7</td>
<td>Five groups of Participants in the Workshop</td>
<td>52</td>
</tr>
<tr>
<td>4.8</td>
<td>Ideal scenarios that Eva could perform</td>
<td>53</td>
</tr>
<tr>
<td>4.9</td>
<td>Participants responses to the four questions</td>
<td>54</td>
</tr>
<tr>
<td>4.10</td>
<td>Successful dialogues with Eva after the changes</td>
<td>63</td>
</tr>
<tr>
<td>4.11</td>
<td>Failed dialogues after the changes to Eva</td>
<td>64</td>
</tr>
<tr>
<td>4.12</td>
<td>Success and Failure factors from the Case Studies</td>
<td>70</td>
</tr>
<tr>
<td>4.13</td>
<td>Analysis of the Case Studies</td>
<td>71</td>
</tr>
<tr>
<td>5.1</td>
<td>Co-Design / Extended Co-Design comparison</td>
<td>75</td>
</tr>
</tbody>
</table>
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Eva, SAS’ Avatar</td>
<td>2</td>
</tr>
<tr>
<td>1.2</td>
<td>Research Process Overview</td>
<td>7</td>
</tr>
<tr>
<td>2.1</td>
<td>Co-Design Innovation Process (Forsgren, 2010)</td>
<td>20</td>
</tr>
<tr>
<td>2.2</td>
<td>The Co-Design flow (Source: (Nedjah and Mourelle, 2007)</td>
<td>21</td>
</tr>
<tr>
<td>3.1</td>
<td>Research Methodology</td>
<td>27</td>
</tr>
<tr>
<td>3.2</td>
<td>Research Framework</td>
<td>28</td>
</tr>
<tr>
<td>3.3</td>
<td>Co-Design steps</td>
<td>30</td>
</tr>
<tr>
<td>4.1</td>
<td>Usage of Elin</td>
<td>39</td>
</tr>
<tr>
<td>4.2</td>
<td>Problem Graph of mark.se web page</td>
<td>40</td>
</tr>
<tr>
<td>4.3</td>
<td>Elin’s 10 most common answers</td>
<td>41</td>
</tr>
<tr>
<td>4.4</td>
<td>responses of 100 where Elin provides &quot;relevant&quot; answers: 30-June-10 to 31-Aug-10.</td>
<td>42</td>
</tr>
<tr>
<td>4.5</td>
<td>Elin’s 10 most common responses in the category of municipal affairs</td>
<td>43</td>
</tr>
<tr>
<td>4.6</td>
<td>Problem Graph Elin</td>
<td>44</td>
</tr>
<tr>
<td>4.7</td>
<td>Target Graph Mark Municipality – all channels</td>
<td>46</td>
</tr>
<tr>
<td>4.8</td>
<td>Customer Satisfaction after improvement in the Eva capacity</td>
<td>55</td>
</tr>
<tr>
<td>4.9</td>
<td>Participant feedback on Eva’s Service after dialogues in July 2010</td>
<td>56</td>
</tr>
<tr>
<td>4.10</td>
<td>Contacting SAS through online chat</td>
<td>57</td>
</tr>
<tr>
<td>4.11</td>
<td>Contacting SAS through email</td>
<td>57</td>
</tr>
<tr>
<td>4.12</td>
<td>Contacting SAS through Telephone</td>
<td>58</td>
</tr>
<tr>
<td>4.13</td>
<td>Contacting SAS through Eva</td>
<td>58</td>
</tr>
<tr>
<td>4.14</td>
<td>Respondents using of four different services of SAS</td>
<td>59</td>
</tr>
<tr>
<td>4.15</td>
<td>Respondents use of five different channels</td>
<td>60</td>
</tr>
<tr>
<td>4.16</td>
<td>Eva - problem graph</td>
<td>60</td>
</tr>
<tr>
<td>4.17</td>
<td>Eva - target graph</td>
<td>61</td>
</tr>
<tr>
<td>4.18</td>
<td>Participant feedback on Eva Service after dialogues in October 2010</td>
<td>64</td>
</tr>
<tr>
<td>4.19</td>
<td>SAS Dialogue survey after the workshop</td>
<td>65</td>
</tr>
<tr>
<td>4.20</td>
<td>Respondents perceived experience in using five different channels</td>
<td>68</td>
</tr>
<tr>
<td>4.21</td>
<td>General Experience of Respondent toward Eva before and after the changes using Co-Design</td>
<td>69</td>
</tr>
<tr>
<td>4.22</td>
<td>Participants perception on Eva’s knowledge and Courteousness before and after the changes using Co-Design</td>
<td>70</td>
</tr>
<tr>
<td>5.1</td>
<td>Extended Co-Design Model</td>
<td>74</td>
</tr>
</tbody>
</table>
List of Publications


**Alm H** and Forsgren O. (2011) “Successful use of avatar/e-services – powerful, but needs a knowledge manager with proper skills” accepted at BAI2011International Conference on Business and Information 4-6 Jul 2011, Bangkok, Thailand

Salomonsson N. and Allwood J. and Lind M. and **Alm H.** “Comparing human-to-human and human-to-AEA interactions in service encounters” accepted at Journal of Business Communication (JBC), SAGE


Salomonson, N. and Lind, M. and **Alm, H.** Metod för utveckling av medborgarkontakter i Marks kommun”, Mark and Borås, Sweden
Chapter 1

Introduction

1.1 Background

The force of modernization and globalization has had an impact on the way business operates in the 21st century. Whether it is hard business or soft business, survival depends on the ability to adapt to the changes that emerge in the business environment (Awuah and Amal, 2011; Ball, 2006; Castaldi et al., 2005; Inglehart and Baker, 2000; Needle, 2010). Changes in the last century and the impacts on the 21st century are primarily due to technological development, technology (Awuah and Amal, 2011) leapfrogging and the introduction of innovative technology in the business environment by entrepreneurs and corporations with support from local government policies (Brezis and Tsiddon, 1998); (Fan and Watanabe, 2006); (Madlener, 2009); (Rabaiah, 2009); (Margetts et al., 2010); (Palo and Tähtinen, 2011), (Mainela et al., 2011), (Nam and Barnett, 2011); (Chen and Li-Hua, 2011).

In addition, in today’s highly dynamic and competitive business environment, cost savings/efficiency and sales revenue maximization are the two most important motivators for the use of electronic services (e-services). Substantial economic resources are spent every year on research projects aimed to improve e-service quality as an integrated part of business. One important trend in this development is the usage of Self Service Technologies (SSTs). “SSTs can be used when customers are more active and willing to participate in order to gain value and convenience” (Lin and Pervan, 2001); (Lin and Pervan, 2002); (Nadar and Vijayan, 2009). “SSTs not only provide opportunities to corporations, organizations and government agencies as well as non-government organizations to get closer to their customers, but also give better services than ever before” (Phongkusolchit, 2008). SST applications help in reducing costs, improving coordination and reducing the gap between customers and the service providers. Some examples of SSTs include vending machines, automatic teller machines (ATMs), online automated phone systems, information kiosks, grocery and book shop self-checkout systems (Curran and Meuter, 2005).

The electronic services business boomed in the early 90s and was in full swing by the late 90s, where service providers (either private or public sector) provided their services to clients through electronic media (Internet) such as e-business and e-government. According to (Crockett, 2013), by the end of 2013, more than $963 billion US business revenue was expected to be generated from e-commerce. Many researchers have reported failures with SSTs when service quality requirements are not met (Alm and Forsgren, 2011).

“However, the real innovation of for example Internet banking is not the web software, but the redefinition of roles: the bank provides the technological infrastructure and the technology is available 24/7 and the customers do the transactions themselves. The actual innovation is the new way of interplay between the providing organization, the new technology and the users” (Bygstad and Lanestedt, 2009).

“In recent years, academics and business leaders focus on the efficiency and effectiveness of SSTs in their organizations compared to other such services” (Bitner and Brown, 2000; Campbell et al., 2011; Castro et al., 2010; Gelderman et al., 2011; Hsu et al., 2011; Lin and Chang, 2011).
Within the area of SSTs, a specific focus in this thesis is given to Avatars, which are types of humanoid question and answer robots, often used on corporate and government web pages. “An Avatar is a person-like “being”, a humanoid, which encourages you to engage in a dialogue. It is often in the shape of a woman who seems to work in the customer service department” (Salomonson et al., 2008). The reason that avatars are selected as a specific focus area is that they are a very promising and powerful tool in providing services to customers.

“Studies have investigated the benefits of using Avatars as company representatives on commercial retail websites” (Salomonson et al., 2008). As (Holzwarth et al., 2006) show, “Avatars positively affect the online shopping experience”. However, at the same time there are many examples of failures (Lind et al., 2008) where the benefits have not been delivered.

An Avatar is an example of an e-service that can potentially reduce costs for the organisation. In addition, its 24/7 instant availability is a possible benefit for the customers.

Therefore, it is good to involve users and other stakeholders when designing the Avatar. This helps in achieving a better understanding of users and customer needs. Involving users and developers of Avatars, as well as decision makers, could lead to improved service and increased customer loyalty. Involvement of all stakeholders through various means of mediation to develop a company’s Avatar could “influence knowledge sharing and learning through collaborative participation in these contiguous design processes” (Miller, 2002).

Research findings (Alm and Forsgren, 2011; Campbell et al., 2011; Lind and Forsgren, 2008) show that aspects of quality are important for explaining failures when using Avatars as means of providing services to customers. Co-Design is an approach for better quality management together with service development. Co-Design is similar to action research in the sense that it acknowledges intervention as an important part of the approach. It differs from action research in that also stakeholders are invited to take part of evaluation and reflection activities. It is also similar to Participatory Design as well as User Centered Design as the user is definitely in the center. However, not only the user is being taken into consideration, but as many stakeholders’ views as possible are considered and the design team consists of as many stakeholders and views as possible. As practitioners and researchers are all stakeholders working together in the design team, the theory and the practice are also closely entwined. The work is managed as Co-Design workshops and the focus is the view of individual users and other stakeholders (Forsgren, 2005).

Theoretically, the work is building on systems thinking (Flood, 1991) applied in IT-development (Fornells et al., 2008; Forrester, 2006). Systems Thinking is a problem solving approach that views the problem as a part of the overall system. Systems Thinking and more specifically Soft Systems Thinking (Checkland, 1998) or Systemic Thinking (Ackoff, 1998) can also be regarded as a research approach. This is further developed in research methodology in Chapter 3. This consists of people, structures and processes that work together to make an organization productive, efficient and effective (Chen and Chuang,
Furthermore, knowledge sharing and learning among the participants encourages them to combine their expertise and apply it as required. This approach is also known as Co-Designing, where participatory action takes place among the technical experts, business specialists and the users in framing the required products and services of the company (Kankainen et al., 2012; Lenihan and Briggs, 2011; Lucero et al., 2012; Miller, 2002). According to (Miller, 2002), Co-Design processes require firms to mobilize and combine their knowledge and resources in order to find new ways to reveal and exploit latent opportunities. Important are also the dynamic interplay between stakeholders as a learning process when prototypes are developed to implemented solutions. For instance (Bowen et al., 2010a) claim that the Co-Design method tends to delineate problems and converge towards solution early in the process, when exploring alternative framings could reveal different issues and identify radical opportunities. In this study, the researcher focuses on Co-Design approach resulting from the cases of Mark Municipality in Sweden and Scandinavian Airlines.

A new model for collaborative efforts between academic research and business innovation is presented in this study. In the process, Co-Design research efforts spread like a benign natural bacteria influencing the rest of the organization and can transform the ordinary quality improvement routines of the company. The case studies use improvements in service quality with Avatars as concrete examples.

1.2 Problem Statement

When comparing the Customer Satisfaction Index (CSI) for human services and Avatars the challenge is that it often ends up in an ‘apple and orange’ comparison situation (Fornell et al., 1996). Corporations and government agencies who use Avatars, claim that there are substantial benefits in using them in their respective organizations; including 24/7 service availability, quick answers without a phone queue, and improved consistency in the responses provided. “The Avatars represent a relatively new form of SST and it is therefore of interest to improve our knowledge of their role in sales as well as service encounters” (Salomonson et al., 2008).

Avatar technology is relatively new and although numerous attempts have been made, it has been hard to measure how successful these have been. Many decisions for investment are thus made despite lacking hard facts. All companies and organisations using or planning to use this technology are thereby potential stakeholders. Many companies measure the satisfaction of Avatars by analyzing question and answer logs to see if the Avatar appears to give satisfactory answers. Few of these companies (e.g. IKEA and SAS until recently) have actually asked their customers what they really feel about the quality of the answers they receive, thus risking the fact that they do not know what the customers actually think.

There are also claims that Avatars help gain efficiency and save costs. However, there is little empirical data to support this assertion. “From an information point of view, there are also potential cost savings by having an Avatar answering questions compared to using personnel. However earlier studies do not provide analysis of actual dialogues between users
and Avatars” (Lind and Salomonson, 2006). Moreover, they fail to provide real numbers of actual savings/gains.

1.2.1 Risk factors for Avatars

It is easy to be blinded by the positives. For example, in Mark Municipality (Salomonson et al., 2008) a number of risk factors were overlooked, such as:

Alienation among individuals
The lack of possible human communication with organizations.

Missing out on business opportunities
The risk of a robot “missing out” on business opportunities that a human would act on. For example if a user asks about a certain flight to a specific destination an attentive person may be able to also sell the user hotel accommodation and a rental car. The Avatar will only be able to provide a direct answer to a question.

Missing nuances in speech
Similarly, a real person will hear and understand nuances in the speech, which the Avatar will miss, resulting in the possibility that a potentially problematic situation may not be adequately resolved. This may lead to dissatisfaction with products and services delivered.

Another area of limited research is the Avatars on web sites provided by government and municipality websites. Limited research is carried out regarding the effects of this SST on government, municipality as well as on corporate web pages. Also, little is known about how people make use of Avatars in getting the services from a company.

1.2.2 Existing knowledge

The literature review in Chapter 2 shows that earlier work in this area is limited and most existing studies are focussed on commercial Web pages, for instance retail sales on the Internet. However, some show several positive aspects of using Avatars, such as producing more human-like interaction on otherwise impersonal Web sites. “From an information provision point of view, there are also potential cost savings by having an Avatar answering questions compared to using personnel. However, there are limited studies showing analysis of actual dialogues between users and Avatars” (Salomonson et al., 2008) (Lind and Salomonson, 2006). Also, they do not provide factual data regarding the actual savings or gains.

The European research project Avanti shows an interesting approach with co-design to improve the quality of the dialogue between users and Avatars or Electronic assistants, the term they use for Avatars (Forsgren and Albinsson, 2004). Inspired by this, this thesis is applying and developing the Co-Design approach as a tool for improving the effectiveness of using Avatars as a Self Service technique. In Co-Design, IT solutions are created as service elements making it possible for clients to satisfy demands. Actability (Ågerfalk et al., 2002) theory focuses on how IT solutions acts in an social environment. In that way actability theory adds to Co-Design theory and in these studies it also helps to further analyse the avatars. Therefore, the researcher combined Co-Design with Actability to benefit from its analytical features.
1.2.3 Knowledge stakeholders

Avatar technology is relatively new. Some cases show success, others failures, but here is a lack of studies focusing on the reasons behind the success. Many decisions for investment are thus made with the lack of important knowledge; hence, all companies and organisations using or planning to use this technology are potential stakeholders.

1.3 Research Questions

Based on the above research problem and knowledge gap, this research attempts to answer the following questions:

1. What are the success and failure factors using an Avatar?
2. How can an Avatar be developed to better meet the stakeholders’ needs by applying the theories of Co-Design and Actability and what would be the impact of Co-Design on an Avatar?

1.4 Research Objectives

The model evolved during this research work with the two organization’s case studies in parallel with theoretical studies. The specific objectives are:

i) To identify limitations of Avatars as a Self Service Technology
ii) To demonstrate strengths and limitations of the Co-Design technique in comparison with Participatory Design and User Centered Design.
iii) To evaluate the effectiveness of Co-Design for developing avatars for e-Services
iv) To identify the effect of Co-Design on stakeholders within and without the organisations

1.5 Research Methodology

For this case study, the research method consists of a literature review integrated with industry experience. Two case studies are studied as mentioned in the scope of this research. The purpose of the research is to propose a new model of developing e-services, with special focus on Avatars. The model is based on Actability and Co-Design theory. A case study approach was used and concentrates on two different organizations from Sweden, namely:

1. Mark Municipality, Sweden, and its Avatar ‘Elin’

Data collection was done through citizens, customers as well as key staff and decision makers. For Mark, data collection was also done through both public servants and political appointees to investigate learning about the Avatar and its procurement and implementation. Details of the research methodology are given in Chapter 3.

1.6 Significance, Contribution and Outcome of this Study
a) It could contribute to new knowledge in information management through using Co-Design to improve Avatar technology, which is very much needed in the Information Technology world;
b) It could help the corporate sector to reduce its costs with the Co-Design and actability tools to provide services to clients/customers;
c) With the support from Co-Design and actability tools, organizations could enhance and further strengthen the close relationship with their clients/customers and partners;
d) It could help to enhance Co-Design by combining it with actability, as it gives sharper analysis tools and therefore makes Co-Design stronger;
e) This study might help IT companies to be more cost effective by providing SST;
f) It could support IT infrastructure with hands-on approach to deal with their customers;

Findings of this thesis may bring benefits to researchers in the field of IT corporate policies. This study could be used as support for current information management study research.

1.7 Delimitations

Self Service Technologies (SSTs) and e-services are a broad area; thus, the focus of this study is on Avatars, in order to limit the broader perspective of SST. The main focus is on Avatars in a Customer Service context, where understanding could be limited from the perspective of business partners and clients in regards to SST: Avatar. Another application area of importance for Avatars is sales, which is closely related to e-commerce trust. However, this is only briefly covered in this study.

1.8 Structure of the Dissertation

This dissertation has been organized into three principal chapters. Chapter 1 presents background, research question and the approach in general. Chapter 2 is a review of current literature in the field and Chapter 3 describes the Methodology. Empirical data is represented by two case studies in Chapter 4 and Chapter 5 presents the conclusions. A working structure of the thesis is illustrated in Figure 1.2, below.
Figure 1.2 Research Process Overview
Chapter 2

Literature Review

In this chapter, a comprehensive literature review is carried out and categorized into three main areas: Services, Analysis, and Design.

As mentioned in 1.2 Problem Statement, Corporations and government agencies, see 2.1.3 Electronic governmental services, e-Government, e-Gov, who use Avatars, see 2.1.4 Avatars, claim that there are substantial benefits in using them in their respective organizations; including 24/7 service availability, quick answers without a phone queue, and improved consistency in the responses provided. “The Avatars represent a relatively new form of SST, see and 2.1.2 Self Service Technology (SST). However, in order better understand what Avatars are see 2.1.1 e-Services and its closely related 2.1.2 Self Service Technology (SST).

In the surveys for overall customer satisfaction SAS are using Customer Satisfaction Index see 2.2.1 Customer Satisfaction Index – CSI for human services and Avatars, see 2.1.4 Avatars. As mentioned in the latter part of chapter 1.2.2 researchers combine Actability, see 2.2.2 Actability to benefit from its analytical features.

All companies and organisations using or planning to use this technology are thereby potential stakeholders. Many companies measure the satisfaction of Avatars by analyzing question and answer logs to see if the Avatar appears to give satisfactory answers. Few of these companies (e.g. IKEA and SAS until recently) have actually asked their customers what they really feel about the quality of the answers they receive, thus risking the fact that they do not know what the customers actually think. As Co-Design, see 2.3.3 Co-Design as part of the CO3 movement takes multiple stakeholders’ perspective into consideration it enables the corporations to further design the Avatars. In order to better understand Co-Design and its origin, see 2.3.1 Web 2.0, Science 2.0 and Co-Design and 2.3.2 Earlier design theories.

This chapter also discusses key terminologies and reviews existing research in both this and related fields. The motive of the literature review is to support the importance of undertaking this study, and to demonstrate the basis for the methodology and tools used to attain the research objectives of this thesis.

2.1 Services

2.1.1 e-Services

Successful communication is vital to most organizational processes, including group cooperation and decisions. Although face-to-face communication is more successful when compared to other forms of communication, it is not well suited to deal with constraints, such as lack of time or distance between team members. Additionally, face-to-face meetings are not always cost effective. However, modern technology has reduced the cost of face-to-face communication by providing alternative means; for instance, email, voice mail, telephone conversation and similar forms have become highly efficient communication
mediums and are used where possible and appropriate. However, face-to-face communication is still important both internally within the organization and externally with partners (Eisner and Howard, 2007).

2.1.2 Self Service Technology (SST)

Usually, actions aimed at serving people are known as services (Baron, 2003; Hoffman, 2010; Longenecker, 2007). “When someone can perform the entire service on their own, without direct assistance from employees we name it Self Service Technology” (Bitner, 2005). An ATM is an example of an SST. The reasons for using SSTs are “convenience, time saving, control and intrinsic benefits such as enjoyment from using technology” (Meuter et al., 2003). An e-service is a type of SST where a customer is able to access a service using a browser connected to the Internet (Hassan et al., 2011).

“Self Services include using all technological interfaces available for customers; while the e-service is limited to using the internet. So, it can be concluded that e-services are one of the self service technologies” (Hassan et al., 2011).

“Technical support quality is one major factor that supports the electronic service to perform efficiently. Finally, customer service quality has to include both online and interpersonal service” (Rotchanakitumnuai, 2008).

e-Services are programs and people working in electronic cooperation, to provide a service or a product. Governments also provide their services through e-Government which is discussed below.

2.1.3 Electronic governmental services, e-Government, e-Gov

“Most of the e-service definitions in literature are clearly based on private sector assumptions. Authors who deal with e-service in the public sector rarely use the term preferring "e-government" (Hassan et al., 2011). “In Spain, a definition of e-government appeared in their official documents in 2000 after the acceptance of the Lisbon strategy for information systems” (Criado, 2010). The Lisbon strategy was an action and development plan devised in 2000, for the economy of the European Union 2000 to 2010. The e-Government is one of the known fields of research within Information Systems (IS). It is defined as “the use of information technology to enable and improve the efficiency with which government services are provided to citizens, employees, businesses and agencies” (Carter and Belanger, 2005). “In the public sector, organizations and agencies are rapidly setting up "e-government" systems to provide services to citizens” (Hassan et al., 2011).

e-Government exposes the local and central governments to opportunities to improve their practices through proper information system designs. “In addition, e-Government has benefited the governments to deliver their service on time as well as cost effectively and have improved their service efficiency” (Cegarra-Navarro et al., 2012; Chua, 2012; Davison et al., 2005; Magro, 2012). According to (Twinomurizi et al., 2010), literature related to the e-Government generally posits five stages of e-Government evolution:

- “One way communication where information flows outward from government in a single direction. An example would be static information provided by a government website.
• Two-way communication, where information flows both ways, but no immediate response should be expected. An example is the typical ‘contact us’ form on government websites.
• Exchange where government has an active presence on the internet and is able to actively communicate back and forth with its clients as well as carry out online transactions.
• Portal is where the government establishes a single point of contact for all government offerings regardless of the service that may be required by its constituents.
• Political participation is where citizen may be able to vote online using the e-government portal.”

However, bottlenecks can arise because the services are still often developed from the perspective of the public administration; rather than from the citizen’s perspective (Forsgren, 2005) resulting in inefficiencies and non-user-friendly services.

“However, few are likely to prefer only Internet, either, with no possibility of ever dealing with people; particularly in the Asian culture, which is oriented towards personal relationships. This indicates that service channel integration should be a key concern when e-government service is implemented” (Rotchanakitumnuai, 2008).

2.1.4 Avatars

According to (Mason, 1981) assumptions or perspectives can be implemented into self-services to make them into competent social agents. When we visualize this social agent as a virtual human being, we normally name this an Avatar. Avatars are also regarded as one of the most powerful and generic design metaphors for e-services (Gronholdt et al., 2000). Some companies use Avatars on their e-service Web sites to assist customers.

Sales conversion rates are low on the Internet compared to a physical venue (Curtis, 2009; Juon, 2012; Kurtz, 2010; Saleh, 2011). “The confidence can be increased and the sales conversion rate can be improved by using human-like interaction on retail Web sites.” Using the social response theory (Wang et al., 2007) posits that consumers may respond to a Web site that exhibits human-like characteristics in much the same way they respond in human-to-human interactions. Computer technology that exhibits human-like behaviour, such as turn taking in conversations and reciprocal responding, triggers users, to a higher degree, to personify the technology (Moon, 2000; Nass et al., 1995). According to (Wang et al., 2007) “Avatars can increase the persuasiveness of online sales channels”. In the log analysis of Eva, SAS’s Avatar, this was evident as well. For example, the customers would say “thank you” at the end of dialogues, much like when talking to a real life call centre agent.

“Other studies have investigated the benefits of using Avatars as company representatives on commercial retail Web sites. An Avatar communicator creates a more positive perception of the entertainment value and informativeness of a Web site which leads to shoppers being more satisfied with the retailer, more positive about the product, and more likely to purchase the product” (Holzwarth et al., 2006).

“However, factors such as age, language, income, disability and education may prove to be obstacles in obtaining and consuming the services on offer. Such differentiation
in accessibility among citizens in turn would imply digital exclusion, which is likely to result in social exclusion” (Raoufi, 2005).

The advantages persist even when the information content is held constant between an Avatar and a non-Avatar format. Another finding is that attractive Avatars are persuasive because of their likeability, whereas expert Avatars are persuasive because of their credibility (Salomonson et al., 2008).

Other researchers (Barlow et al., 2004; Redmond, 2002) also claim that Avatars can increase customers’ entertainment value, information value, and satisfaction of Web-based shopping experiences.

“The number of Internet applications and their users has grown rapidly over the past decade, increasing the importance of trust in information technology, especially in the area of Internet commerce” (Rattanawicha, 2005). “As younger participants are more used to seeing Avatars and robots in video games, films, Internet, etc., they may feel more comfortable when interacting with a robotic or animated interface” (Marcos et al., 2010). “People ascribe social attributes to technological artefacts, especially when the artefact is perceived to possess a set of characteristics normally associated with human behaviour” (Qiu and Benbasat, 2010). From an information provision perspective, there could also be potential cost savings by having a virtual servant answering questions compared to using personnel. However, these studies do not provide an analysis of actual dialogues between users and Avatars. “Another area that has not been well researched is Avatars on Web sites provided by governments and municipalities” (Salomonson et al., 2008).

“One of the Internet's greatest attractions, anonymity, is also one of its chief weaknesses” (Lambert, 2005). “People may browse your web pages, but when it comes to doing business, do they trust you? Nothing is free, especially confidence, it must be earned” (Wilson, 1997). There are many ways of measuring the success or the effectiveness of a web page, but whether it is through its viewership, its sales volume or any other factor, it is like a real life customer service or sales situation; without customer confidence the chance for success is very small. “In Internet marketing, conversion rate refers to the percentage of visitors who convert casual content views or website visits into desired actions” (Hopps, 2008). To online retailers, for example, a successful conversion may constitute the sale of a product to a consumer. “It is a well-known fact that sales conversion rates are low on the Internet compared to physical venues…Avatars can increase the persuasiveness of online sales channels” (Wang et al., 2007).

“A widespread term that has become even more popularized by on-line virtual world ‘Second Life’ is ‘Avatar’. While there is no single widely accepted expression” (Salomonson et al., 2008), “the term Avatars is gaining recognition within the marketing literature” (McGoldruck et al., 2008). “It has its derivation in the Sanskrit language and refers to the embodiment of a supernatural being on earth; an incarnation or God’s appearance on earth” (Gerhard et al., 2004). Consistent with this original definition, present-day definitions of an Avatar refer to a representation of an entity. “Avatars are defined as general graphic representations that are personified by means of computer technology” (Holzwarth et al., 2006). “An Avatar can thus be seen as the embodiment of a user in a virtual world” (Taylor, 2002). “The phenomenon is also sometimes described as virtual servants” (Gustavsson, 2005) and has been given several different terms in previous research, such as virtual agents, animated interface agents (Dehn and van Mulken, 2000) or
virtual assistants (Gustavsson, 2005). They have been described as computerized agents that “appear on the screen as embodied characters and exhibit various types of life-like behaviours, such as speech, emotions, gestures and eye, head and body movements” (Dehn and van Mulken, 2000).

“More experienced and practiced shoppers will find the normal e-retail interface more predictable, quicker, and easier to use than less experienced Internet shoppers. Consequently, for experienced users, the increased effort in interacting with an Avatar may outweigh any perceived advantages” (McGoldrick et al., 2008).

Some earlier research has identified a social aspect of interaction between humans and Avatars. The findings show that there is a commercial advantage for e-commerce companies to “use social cues that provide consumers with enhanced perceptions of human connection and the formation of emotional bonds” (Wang et al., 2007). “The confidence can be increased and the sales conversion rate can be improved by using human-like interaction on retail Web sites” (Salomonson et al., 2008). Authors like (Wang et al., 2007) used the social response theory that posits that consumers may respond to a Web site that exhibits human-like characteristics in much the same way they respond in human–to-human interactions. “Computer technology that exhibits humanlike behaviour, such as turn taking, in conversations and reciprocal responding, triggers users to a higher degree to personify the technology” (Moon, 2000; Nass et al., 1995).

2.2 Analysis Tools

2.2.1 Customer Satisfaction Index – CSI

The concept of customer or client is well discussed as a cornerstone in a teleological worldview (Churchman, 1971). Customer satisfaction is “conceptualized as a cumulative construct that relates the total consumption experience with a product or service to date” (Johnson et al., 2001). “Identifying the customer’s requirements, companies can improve their productivity and enhance service quality and performance, leading to customer satisfaction” (Anderson, 1994; Hayes, 2008; Hill et al., 2002; Jacka and Keller, 2009; Lewin, 2009; Szwarc, 2005; TransportationResearchBoard., 1999).

In the past two decades, various indices and barometers have been introduced to measure customer satisfaction (Johnson et al., 2001; Johnson et al., 1996; Szwarc, 2005). The main factors of these indices are “perceived company image, customer expectations, perceived quality and perceived value for money” (Gronholdt et al., 2000). Satisfying the customer’s needs is the main objective and goal of any company or organization to achieve their target or mission. In 1989 Sweden established a customer satisfaction barometer called the Swedish Customer Satisfaction Barometer (SCSB), which was later adopted by America in the American Customer Satisfaction Index (ACSI) (Fornell, 1992; Gronholdt et al., 2000). The success of the SCSB and ACSI led to the creation of the European Customer Satisfaction Index (ECI), which was founded by the European Organization of Quality (Gronholdt et al., 2000; Kristensen et al., 2000). Customer Satisfaction Index is commonly known in Sweden as ‘Nöjd Kund Index, NKI’. It is commonly used in Europe and in the US in surveys and requires the respondents to rate their satisfaction with a specific product.
or service on a scale from 1 to 10. It could be argued that it is a quantitative way to measure qualitative matters.

Measuring customer satisfaction enables companies or organisations to identify the consumer’s needs and requirements, and the company’s perceived performance in regards to meeting the needs of their customer.

“Customer satisfaction indices (CSIs) are determined from benchmark and tracking customer surveys. These indices rely on measuring the impact of customers’ ratings of individual services attributes on the overall satisfaction with service” (TransportationResearchBoard., 1999).

Research carried out by (Zenker et al., 2012) on CSI and based in Germany, involved four dimensions; namely, urbanity & diversity; nature & recreation; job opportunity and cost-effectiveness. They found that “the first factor had a strong impact on the citizen’s satisfaction and represents a kind of metropolitan character” (Zenker et al., 2012).

Effectiveness can be measured in many ways, but this thesis, in the case of SAS, is using Customer Satisfaction Index, CSI (Fornell et al., 1996) to measure effectiveness and then compare it to the Customer Satisfaction Index of the SAS web page in general and Customer Satisfaction Index for the call center in order to get a fairer comparison between different communication channels.

2.2.2 Actability

The Actability theory, developed by (Ågerfalk et al., 2002), describes the use of information technology systems in practice and is used as a quality concept and measurement. Also, it is used as a design theory to guide the development of information technology systems. This theory was further developed at the University of Linköping in Sweden, in the doctoral thesis of (Ågerfalk, 2003). Furthermore, some parts are also referenced in different research papers, such as (Cronholm and Goldkuhl, 2002) and later on it is explained in various other research areas (Ågerfalk and Eriksson, 2006; Goldkuhl, 2011; Hanrensk, 2011; Umapathy, 2012).

Actability was chosen instead of usability because usability is traditionally an expression of measurability and engineership, a little like a ‘Taylorian’ style engineer with his stopwatch thinking and measuring, while actability is believed to be a more qualitative term. The difference between these two is that usability is generally applicable for the information system tool and actability is explicitly concerned with the information system as a tool for practical business communication (Hirschheim et al., 1996); (Habermas, 1987); (Habermas, 1984). More explicitly, it is explained and described as the practice and the relationship between practice and the information system (Ågerfalk, 2003). In addition, it also goes beyond a “limited notion of usability restricted to an instrumental orientation” (Ågerfalk and Eriksson, 2006).

“One important difference between instrumental usability principles and the communicatively oriented actability principles is that the former are more generally applicable whereas the latter are explicitly related to information systems as tools for business action and communication” (Goldkuhl, 2011)
Actability is of interest in IT systems as a medium for communication, and as opposed to usability, it is not related to hardware and ergonomics. Studying an IT system’s actability means that the conditions for and effects of the studied communication situation are considered. The evaluation that follows has therefore been central to identifying different usage situations in which IT systems are an important part.

According to (Cronholm et al., 1999), “research creates a reconciliation of the human-computer interaction (HCI) perspective of usability with the language action (LA) perspective” and this is called actability. In their study, they concluded that:

“All information system’s actability is its ability to perform actions, and to permit, promote and facilitate users to perform their action both through the systems and based on messages from the system, in some context”. In addition, the action of the “information system and action of its users and other stakeholders should be seen as in an integrated whole” (Ågerfalk et al., 2002).

2.3 Design

2.3.1 Web 2.0, Science 2.0 and Co-Design

Science occurs not only because people do experiments, but because they talk about and share the outcome and data of those experiments. Web 2.0 puts weight on input and co-production of data and services.

“Some key characters of Web 2.0 are especially Rich Internet Applications, User-generated content, Semantic Web, Social Networking, Syndication/mash ups, Open Standards (supported by open source), Cloud Computing, User-generated Services, and Device Independence etc.” (Lind and Forsgren, 2008).

Web 2.0 is the network platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it.

“Consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation, and going beyond the page metaphor of Web 1.0 is to deliver rich user experiences” (Reilly, 2005).

Web 2.0 shows a new way of progress in the IT area heavily connected to Co-Design. Web 2.0 has been applied in various sectors, is useful in many business sectors and is helpful in enhancing the “collaboration and communication within and outside companies” (Andriole, 2010).

West Churchman, a pioneer Co-Designer (explained later in thesis), stated that one can design an infinite number of views of reality; detailed or just an overview. There are now many cases of prosperous implementations of Co-Design thinking.
“To design a common system, it is necessary to have input from their scholars” (Liu et al., 2002). This assembly of designing processes and selecting the most suitable one is called Co-Design. This has shaped the common system desired by all the participants (Ackoff, 1981); (Checkland, 1998); (Mitroff and Mason, 1981). However, “it is important to know that the notion of Co-Design is considered beyond the notion of participatory design” (Mumford, 1983). The main idea in Co-Design is both a scientific approach and a development approach; there is a close relation between innovative product/service development and knowledge creation.

“The relativist would argue that there are an infinite number of ways to describe an apartment or a dead human being. The Co-Designer agrees but he also says if the human culture is going to develop, someone has to decide on which description to use, and that is an act of politics, ethics and aesthetics” (Forsgren, 2005).

2.3.2 Earlier design theories

2.3.2.1 Action Research (AR)

“Real social events could not be studied in the laboratory” (Checkland and Checkland, 1999). In action research (AR) the basic idea is to move research into practice and to let research projects solve real world problems, thereby overcoming the laboratory problem. The development of AR is generally credited to Lewin, although it may have in parallel been developed at Tavistock Institute (R. Baskerville and Myers, 2004). AR is serving both practice and science to address organizational problems while at the same time contributing to scholarly knowledge. “We cannot study a newly invented technique without intervening in some way to inject the new technique into the practitioner environment” (Baskerville and Wood-Harper, 1996).

AR is said to depend in four premises (Baskerville et al., 2004):

- “It is necessary to establish beforehand the purpose of any action
- There must be practical action in the problem setting
- The practical action must inform the theory
- The reasoning and action must be socially situated” (Baskerville et al., 2004)

A criticism of AR is that it is “consulting masquerading as research” (Baskerville and Wood-Harper, 1996). Such criticism has inspired the introduction of a stronger rigor into AR, which however has often “disconnected theory from reality, making the research results largely irrelevant” (Baskerville, 1999).

2.3.2.2 Design Research (DR)

DR positions information technology artifacts at the core of the Information Systems discipline. However, dominant DR thinking takes a technological view of the IT artifact, paying scant attention to its shaping by the organizational context. “Consequently, existing DR methods focus on building the artifact and relegate evaluation to a subsequent and separate phase” (Sein et al., 2011).
2.3.2.3 Action Design Research (Zolghadri et al.)
“ADR reflects the principle that IT artifacts are ensembles shaped by the organizational context during development and use” (Sein et al., 2011). This method shows the study process as having attached and integrally entwined activities in constructing the IT artifact, prevailing in the organization, and assessing it concurrently.

2.3.2.4 Human-Centered Design

“Human-centered design is fundamentally an affirmation of human dignity. It is an ongoing search for what can be done to support and strengthen the dignity of human beings, as they act out their lives in varied social, economic, political, and cultural circumstances” (Buchanan, 2001).

Usability has a vital role in human-centered design. However, principles to monitor the work are not exhausted when done with ergonomic, psychological, sociological and anthropological studies of what is suitable for the human body and mind.

2.3.2.5 Participatory Design: Theory & Techniques

Participatory Design has its own benefits as it increases the awareness of the decisions taken by the participants. This assures the influence of the participants in decision making when designing particular models or structure where it enhances the responsibilities in decision making (Sanoff, 2006). Participatory design was very visible in the early 1960s in Scandinavian countries in their approach towards the workplace (Bjerkness et al., 1987; Ehn, 1992; Spinuzzi, 2005; Winograd, 1996). This has also been the case in North America where a human centric concept is popular in the workplace (Ouchi, 1981; Sanoff, 2006).

In recent years, participatory design has been applied not only in computer system development but also in urban design, planning, geography, social, economic as well as manufacturing and industrial areas. A participatory design shares insights, which come from group interaction and decisions are made from the outcome of a powerful sum of individuals (Fischer et al., 2005). This impacts not only on achieving agreement, but also it encourages the participants to engage in order to achieve meaningful solutions for the betterment of either group, organization, company or even the country. “Participatory approach is important in projects as it helps employees to play an essential role in the improvement process” (Vink et al., 2008).

In addition, user centric design is focused on user needs rather than on company needs. In this design, the interface is the main focus and encourages “referral to the primary user needs, ensuring they remain integral at all design levels, improving the overall navigational intuits of the system” (Mullane et al., 2010).

2.3.2.6 User Centered Design

User Centered Design (UCD), from Northern America, addresses problems with systems development, where they could perform specified tasks, but the user input needed is time consuming, hard to grasp and errors are common. “UCD offered a change to focus on people rather than technology” (Carroll and Rosson, 2007).
This is where the weight of User Centered Design (UCD) is to improve the user’s experience of IT. The book User centered system design: new perspectives on human-computer interaction (Norman and Draper, 1986) is one of the first American books to place the users in the foreground. The emphasis is on people, rather than technology. “User Centered Design is a philosophy based on the needs and interests of the User, with an emphasis on making products usable and understandable” (Norman, 1990).

UCD can reduce the errors and improve the productivity with significant new technology capabilities. It also improves the user’s acceptance and satisfaction and provides a means for better harnessing information technology to support human work. According to UCD, a good user interface can be achieved by following key principles and processes.

These principles lead to the realization that situation awareness is key to achieving a UCD.

1) Organize technology around the user’s goals, tasks, and abilities
2) Technology should be organized around the way users process information and make decisions
3) Technology must keep the user in control and aware of the state of the system (Endsley et al., 2003).

“The field of UCD has made major contributions, especially concerning usability, which has become a research field of its own, being part of Human Computer Interaction” (Grudin, 2004).

2.3.2.7 Open Source

The term “open source” entails software developed by groups of people under a license. This means that the source code is given freely and anyone can use and/or further develop it, as long as they in turn share their new code under the same license. An important value in terms of advancement from the open source model is that it allows for continued development. As the end product is free and anyone can change the code, the product remains continuously developed long after it is “released”.

It can be argued that a consultant cannot always have the flexibility of a researcher to be critical of developments in organizations; rather the consultant has to strike a balance to continue the engagement. Any researcher will, however, also have to strike a balance to gain access and to have influence on developments. In the action research paradigm, the mere superficial observation of an organization is not deemed sufficient. Knowledge is gained primarily through changing the organization. “Therefore it is necessary, also from a research perspective, to drive change and to be as closely involved as possible” (R. Baskerville and Myers, 2004).

2.3.3 Co-Design as part of the CO3 movement

CO-Design, CO-creative development, CO-constructive development have recently influenced R&D (research and development) together with Living Labs, Soft systems approaches, Participatory design, Open Innovation and more recently PIDoT-process (Public Innovation Do Tank). All these approaches are regarded as belonging to the CO3 paradigm and are all closely related.
One of the earliest and most reported sources of this movement is the CO-constructive branch. In the classical article “Misinformation systems”, (Ackoff, 1967) shows the close relation between the CO3 area and information technology. Later, he wrote many books and papers focusing on “creating the cooperate future” all developing different important aspects and results of this new approach to innovation. This way of thinking is radically different from the classical “operational research” or applied classical scientific thinking, but deeply based in the philosophical debates about knowledge and knowledge development.

This is often described in a line back in time from Ackoff via West Churchman, Tom Cowan, Edgar Singer, William James, and Immanuel Kant, also with influence from Hegel’s dialectical thinking. Some other partly connecting, parallel and crossing threads are “Second order cybernetics” (Forrester, 2006), “Double loop learning” (Sterman, 1994), “the fifth discipline” (Senge, 1994), Design thinking and Soft Systems thinking (Checkland, 1981). Other names in modern natural science such as Einstein, Pasteur, Capra, Rosen and Prigogine, are important sources to the CO3 movement. It is possible to describe three important levels of ambition:

• **CO-1: Co-Design** – integrating the physical and the virtual aspects into augmented co-evolving realities and products. An early example is Steve Jobs with Apple. One of the earliest and most impacting cases was the MIT-project with IKEA resulting in an integrated solution between the Stores, the catalogue and the web (Forsgren, 2005).

• **CO-2: Co-creative** – Involving key stakeholders in an “Open innovation” approach - synthesizing different perspectives into new co-created perspectives with possible implementations and impact. This is a further development of Hegelian thinking.

• **CO-3: Co-constructive** – On this level the research and knowledge development process is integrated with the innovation and artifact development process. The result can be described as a new world view where the artificial walls between public, private, political, business, culture, art and knowledge development have been removed and replaced with the co-construction of integrated service complexes governed by new forms of Public-Private-Partnerships. Globally, there are now many projects aiming at this level – often regarded as radical.

Co-Design can also be related to Participatory Design and User Centered Design as the user is definitely in the center, however, not only the user is being taken in consideration, but as many stakeholders’ views as possible are considered and the design team consists of as many stakeholders and views as possible. Action Research is defined as “systematic and intentionality inquiry” (Cochran-Smith, 1999). Action research is implementing research into action and is able to solve real problems (Baskerville and Wood-Harper, 1996; Greenwood, 1999; Lewin, 1948; Pelton, 2010). It addresses the “organizational problems while at the same time contributing to scholarly knowledge” (Baskerville et al., 2004). Also, it needs active involvement from the researchers to obtain knowledge and at the same time apply the gained knowledge in solving practical problems (Baskerville, 1999). As practitioners and researchers are all stakeholders working together in the design team the theory and practice are also closely entwined. The work is managed as Co-Design workshops and the focus is the view of individual users.

The Co-Design approach is inspired by a basic philosophy of knowledge creation (Churchman, 1971) that has been spread outside academia and projects in many ways. For
instance, it was used as a whole or in parts in management training for some 200 managers and executives at ExMI17 and at Edinburgh Business School during 1996-2009 to teach some 600 architectural students. It is also now commonly used as an approach to design and develop e-services. In this study, Co-Design has been used both as a research approach and as an approach for developing SSTs.

“In the Co-Design approach, it is stipulated that the overall quality of services will increase if as many as possible of the stakeholders are actively involved in co-producing the service” (Lind and Forsgren, 2008). “Co-Design is the incorporated design of systems using both hardware and software elements given a set of performance goals and an execution technology” (Subrahmanyam, 1992; Subrahmanyam, 1993).

Co-Design practices are carried out in different fields of studies depending on the expertise and mind-set of its practitioner. Some of the key advocates of Co-Design originated from business.

It is argued that “the framework for Co-Design means a methodology along with a complementary set of tools for the specification, development, simulation/prototyping and testing of systems, and this may be suitable for the general application but usually it consists of different steps” (Nedjah and Mourelle, 2007). For instance, one of the secrets of Lego’s success is engaging the customers as Co-Designers and consultants in creating new products. Lego is one of the world’s largest toy manufacturers and the largest in construction toys.

One key idea in Co-Design is the close relation between knowledge development and service development. That means it is possible to design an infinite number of true perspectives on, for example, a day care center. Such a perspective can also be implemented as an information service. Following that idea, it is difficult to try to analyze, for example, a day care center into its smallest detail to find the true depiction. Co-Design instead suggests considering perspectives of value for different groups of people during the design process, such as the distance between the home and a day care center (Forsgren, 2005).

The result of a developed distance home-day care center model with measured data is normally called knowledge. If this model is implemented in a computer application, it can be called a Self Service Technology (SST). As a user of this SST, you might give your address and as an answer you get the distance from your home to the day care center. In summary, Co-Design is both about creation of knowledge and an innovation process.

Influenced by this basic idea as well as the study by (Churchman, 1979),

“Forsgren developed the first Co-Design framework. This framework is a multi-stakeholder model in which all stakeholder concerns, related to a certain situation or problem, are taken into consideration by either inviting, or considering the perspectives of, diverse stakeholders in a workshop process” (Forsgren, 2005).

This work can be summarized in a raw model for performing the Co-Design process as four types of workshop activities.
1) Co-Design of the problem situation and ideal scenarios including a first idea of useful views possible to implement in integrated solutions (*Step 1: In my view, this is a problem*).

2) Co-Design of one or a few specified useful views with implementation integrated solutions and related measure of performance systems (*Step 2: I’d like to have it this ideal way*).

3) Co-Implementation of selected integrated solution and related measure of performance systems (*Step 3: I hope these solutions will get me to my ideal way*)

4) Co-evaluation and feedback based on key stakeholder views (*Step 4: Did “these solutions”, bring me closer to my ideal way?).

These four types of workshop activities are complemented with a fifth type of reflective Co-Design workshop activity. The question raised here is “if and how the Co-Design process itself can be developed in order to be more effective in producing knowledge and services” (Forsgren et al., 2012).

This process is developed further in the research methodology section.

“Some of the key advocates of Co-Design were originated from business” (Sander and Stappers, 2008). Table 2.1 presents how Co-Design is applied and implemented in different industries.

**Table 2.1 Co-Design in different industries**

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Study Focus</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science</td>
<td>Computing System</td>
<td>(Musqsit, 2011)</td>
</tr>
<tr>
<td>Engineering</td>
<td>System Engineering</td>
<td>(Peck, 2011)</td>
</tr>
<tr>
<td>Defence</td>
<td>Military planning</td>
<td>(Saltysiak., 2007)</td>
</tr>
<tr>
<td>Electronic</td>
<td>Automotive electronic system</td>
<td>(Balarin, 1997)</td>
</tr>
<tr>
<td>Urban development</td>
<td>Urban Design</td>
<td>(Poerbo, 1992)</td>
</tr>
<tr>
<td>Environment</td>
<td>Community</td>
<td>(King et al., 1989)</td>
</tr>
</tbody>
</table>
Studies of Co-Design in relation to hardware and software technology by (Micheli et al., 2001) is a similar concept to the Co-Design of this study. However, their concept of Co-Design is more towards technology with less interaction of humans. They argue that the concept of Co-Design in hardware and software technology becomes much more specific and generally conveys the tool based design of hardware and software systems. According to them, “Co-Design means meeting system-level objectives by exploiting the synergism of hardware and software through their concurrent design”. Research by (Gajski et al., 1997) concludes that the Co-Design “represents the methodology for specification and design of systems that includes hardware and software components. Co-Design consists of design tasks for refining the design and the model representing the refinements”.

Researchers like (Nedjah and Mourelle, 2007) use Co-Design methodology to determine the most suitable interface mechanism in a Co-Design system, which is based on the characteristics of the application and those of the target architecture of the system. In addition, they argue that “the framework for Co-Design means a methodology along with complementary set of tools for the specification, development, simulation/prototyping and testing of systems, and this may be suitable for the general application” (Nedjah and Mourelle, 2007), but usually it consists of different steps as illustrated in Figure 2-2.

![Figure 2.2 The Co-Design flow (Source: (Nedjah and Mourelle, 2007))](image)

For instance, one of the secrets of Lego’s success is engaging the customers as Co-Designers and consultants in making its products. Lego is a global leader among toy manufacturers and the number one in construction toys. “It is estimated that the world’s children spend five billion hours a year playing with Lego bricks” (Seybold, 2006).

### 2.4 Comparison table of different design methods

The following tables present the comparison of the three different design methods and the differences in their approach.
Table 2.2 Comparison of Co-Design, Participatory Design and User-Centered Design.

<table>
<thead>
<tr>
<th></th>
<th>Participatory Design</th>
<th>User Centered Design</th>
<th>Co-Design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Focused on processes and procedures of design</td>
<td>A philosophy based on the needs and interests of the User. Focus on people rather than technology</td>
<td>All stakeholders' interests are considered. Users to create solutions together</td>
</tr>
<tr>
<td><strong>Involve users</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Involve 'all' stakeholders</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Users part of development process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>design based on users needs / perception</td>
<td>design based on users needs / perception</td>
<td>design based on stakeholders needs / perception</td>
</tr>
<tr>
<td><strong>Limitations</strong></td>
<td>risk to neglect other stakeholders needs</td>
<td>risk to neglect other stakeholders needs</td>
<td>compromise solution, therefore trade off between stakeholders.</td>
</tr>
<tr>
<td><strong>Who Applies</strong></td>
<td>Developer and users</td>
<td>Users</td>
<td>All Stakeholders</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>users needs are considered</td>
<td>Focus on users rather than technology</td>
<td>endorsed within the organisation. Optimized total solution</td>
</tr>
<tr>
<td><strong>Limitations</strong></td>
<td>slower development</td>
<td>users will not see the product until it's finished</td>
<td>slower development</td>
</tr>
<tr>
<td><strong>Involvement</strong></td>
<td>User are participating and are an integrated part of the design process</td>
<td>Users are not part of design process, but the focus is on user needs and on the interface rather than on technology</td>
<td>Co-creating value by actively involving all main stakeholders, including the users and help evaluate proposed solutions</td>
</tr>
<tr>
<td><strong>Strengths</strong></td>
<td>quicker development process</td>
<td>quicker development process</td>
<td>knowledge retained by organisation</td>
</tr>
<tr>
<td></td>
<td>tested on representative customer subset</td>
<td></td>
<td>tested on representative customer subset</td>
</tr>
<tr>
<td><strong>Limitations</strong></td>
<td>all knowledge stays with developers and users in development process</td>
<td>all knowledge stays with developers and users in development process</td>
<td>slower development process</td>
</tr>
<tr>
<td></td>
<td>the stakeholders change their minds or cannot fully envision what they want until they see a concrete system</td>
<td>the stakeholders change their minds or cannot fully envision what they want until they see a concrete system</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 2.2 Co-Design can improve the actability of Avatars as a Self Service Technology to a higher degree than both UCD and PD. “A weakness is that since it consists of different stakeholders and different needs, carried out with human interaction, it is often a time consuming and error-prone task” (Micheli, 2002). It is also quite resource-intensive as it requires establishing face-to-face sessions which are time consuming due to the nature of the Co-Design technique, which aim to build up to ideas (Ross et al., 2013). “All
stakeholders need to be involved (not only developers and selected users) in the development process because the stakeholders change their minds or cannot fully envision what they want until they see a concrete system” (Boehm, 1988) and run the risk of making a large (costly) investment in the wrong design and implementation (since it is based on incorrect requirements) (Boehm, 1988).

The comparison with Participatory Design and User Centered Design shows that it may be faster to get results as less energy, time and other resources are spent on the different groups of stakeholders. However, this also means a risk for less endorsed solutions which in turn can mean that it is harder to implement and get the full positive effects of the solutions developed. Due to extreme competition in industry, the Co-Design approach is likely to play a strategic role for the organization (Micheli, 2002; Pless and Maak, 2012; WorldBank, 2012).

The Co-Design approach provides better quality with high performance of the products (Aubrun et al., 2010; Ziebland et al., 2013) and it is an effective solution that achieves an optimized solution (Chen et al., 2013). For instance, a study of (Shainer et al., 2013) shows that Co-Design’s multi stakeholder approach has enabled better performance.
Chapter 3

Methodology

This study is written from a co-constructive scientific perspective. The approach belongs to a tradition often called “soft systems-, systemic-, Co-Design-, co-creative- or co-constructive-approaches”. The very basic idea in these approaches is that different actors can have different but legitimate views on the same situation. During a co-constructive conversation these views emerge. When many actors agree on a stabilized view, this is regarded as a scientific result which is possible to use for different purposes (Forsgren et al., 2014).

A basic example of application of this scientific approach is the concept of time. As humans we can co-construct an infinite number of ways to measure time – but it is not possible in this approach to say that this is “a true way” to understand time. During many years of co-constructive conversations most people have agreed with a global system of measuring time in relation to the relative position between earth and the sun. This view is now implemented as a view in action in many “time–services” with an enormous impact on human life.

According to (Checkland, 2000) The seven-stage model gave a version of the approach which was by then sufficiently well founded to be applied in new real-world situations, large and small, in both the public and the private sector.

Further, (Checkland, 2000) states:

When it came to expressing the shape of the methodology in the 1990 book, the seven-stage model was no longer felt able to capture the now more flexible use of SSM; and even the two-streams model was felt to carry a more formal air than mature practice was now suggesting characterized SSM use, at least by those who had internalized it.

Researchers and practitioners are therefore forced to use less complex and therefore more useful models in Action Research, no one longer uses models that are too complex.

The above reasoning further leads (Checkland, 2000) to conclude that:

This is iconic rather than descriptive, and subsumes the cultural stream of analysis in the four activities, which it implies rather than declares. The four activities are, however, capable of sharp definition:
1. Finding out about a problem situation, including culturally/politically;
2. Formulating some relevant purposeful activity models;
3. Debating the situation, using the models, seeking from that debate both (a) changes which would improve the situation and are regarded as both desirable and (culturally) feasible, and (b) the accommodations between conflicting interests which will enable action-to improve to be taken;
4. Taking action in the situation to bring about improvement.
“Today, Information Technology systems area is a vital key to the success of most organizations” (Awuah and Amal, 2011). It can be internal administrative systems, but also systems for communication with customers and suppliers. To ensure that the systems have the anticipated effect, it’s important to evaluate these both as is and when they are being used. In the case of SAS, there were sometimes problems when Avatar “Eva” was communicating with customers. In solving the problems faced, researchers applied the Co-Design approach. Co-Design encourages sharing and learning of knowledge involving users, technical experts, business specialists and other stakeholders in designing its product: Avatar (Kankainen et al., 2012; Lenihan and Briggs, 2011; Miller, 2002). These problems were identified during the log analysis, and staff / supplier interviews as the first part of the step 1 in the Co-Design process. The case study was carried out in two time periods; in the first period, participants were asked about the services provided by SAS. This was carried out from June to September 2010. Researchers carried out interviews with key staff and decision makers of SAS as well as Artificial Solutions (the supplier of the Avatar). In the second period, researchers and SAS staff conducted workshops with customers. This was carried out in April and May 2011 as a crucial later part of the step 1 in the Co-Design process. The workshops with customers were carried out at the same time with different categories of customers from different parts of the country.

As part of the case study, some critical reflections on the use and results of the Co-Design method were made. The results are summarized in a further developed model of the Co-Design process focusing on the transfer of Co-Design from a research approach into an e-service redesign approach with Avatars as self-service technologies.

This chapter discusses in detail the research methodology of this study. Literature review was carried out and integrated with industry experience for this study and a case study approach is used. Researchers used the exploratory case study method. This method helps in examining the data and information closely within a specific context (Dooley, 2002; Kohlbacher, 2006; Thomas, 2011; Yin, 2009)

“The case study research method is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used” (Thomas, 2011).

The Table 3.1 below shows how Co-Design and Actability are used together in the two cases of Mark Municipality and SAS. The amount of work done on the SAS case were more elaborate as the researchers were able to join earlier in the development process and therefore able to contribute more to the design and the development as shown in more detail in Chapter 4.

Table 3.1 How Co-Design and Actability were used together in the Cases of Mark and SAS

<table>
<thead>
<tr>
<th>Co-Design step 1</th>
<th>Mark</th>
<th>SAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my view, this is a problem</td>
<td>e.g. 4.1.1 Workshops</td>
<td>e.g. 4.2.1.2 Channel survey 4.2.1.3 Interviews</td>
</tr>
</tbody>
</table>

25
<table>
<thead>
<tr>
<th>Step</th>
<th>Process</th>
<th>Co-Design Step 2</th>
<th>Co-Design Step 3</th>
<th>Co-Design Step 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’d like to have it this ideal way</td>
<td>4.2.2 Workshops</td>
<td>e.g. 4.2.2 workshops</td>
<td>- Figure 4.8 Customer Satisfaction after improvement in the Eva capacity</td>
<td>e.g. Table 4.10 Successful dialogues with Eva after the changes</td>
</tr>
<tr>
<td>Co-Design Step 2</td>
<td></td>
<td></td>
<td>Table 4.8 Ideal scenarios that Eva could perform:</td>
<td></td>
</tr>
<tr>
<td>I’d like to have it this ideal way</td>
<td>4.2.2 Workshops</td>
<td>e.g. 4.2.2 workshops</td>
<td>- Figure 4.8 Customer Satisfaction after improvement in the Eva capacity</td>
<td>e.g. Table 4.10 Successful dialogues with Eva after the changes</td>
</tr>
<tr>
<td>Co-Design Step 3</td>
<td></td>
<td></td>
<td>Co-Design Step 3</td>
<td></td>
</tr>
<tr>
<td>Co-Design Step 4</td>
<td></td>
<td></td>
<td>Co-Design Step 4</td>
<td></td>
</tr>
</tbody>
</table>

The first part of this chapter introduces the researcher’s approach toward this study followed by a short introduction of the use of the knowledge foundation. Also explained is how the knowledge foundation has been applied as a methodological approach to the case studies. In addition, Co-Design study was used as a basic theoretical framework. Co-Design has similarities as well as differences related to action research, action design, Action design research. However, the empirical cases of this dissertation can be regarded as action research.
3.1 Research approach

As part of the beginning of the studies, the researcher was introduced to scientific thinking and scientific methods as well as to an ongoing discussion about scientific approaches to information and computer science. Information science in most countries applies a social constructive view of knowledge as a useful perspective; while computer science often applies a classical natural science view of knowledge as more or less tested hypothesis. In this view, a successfully tested hypothesis can be regarded as established knowledge that is useful for further predictions and use.

This researcher’s methodological training in Sweden has been towards information science as a social science with the pragmatic constructivist view of knowledge as a useful view. The researcher applied this as the methodological base in this thesis and as an introduction under this chapter. The researcher provided his view on the relation between classical natural science and the constructive view applied in this thesis.

Background to that research included a number of earlier projects that focused on systems development from a systemic view of data, information, and knowledge. In that view IT-systems were regarded as social actors in interplay with other human and IT-actors. In this view it was natural to apply an Avatar as the interface for the IT-actor.

The approach and the focus of the projects were in line with the researcher’s industry experiences and the tacit knowledge gained through ‘on-the-job’ participation. Therefore, the researcher applied the use of actability and Co-Design approach for this study and the result is expected to beneficial to the industry, especially the IT industry.
The beginning of the Mark case study saw much assistance with the other researchers in parallel with learning more about the background of the research that was carried out. That was a project in collaboration with the Municipality of Mark where researchers evaluated a solution for electronic citizen interaction. After a while the researcher gained more experience with the various theories and methods and could take a more active and dominant role in the projects. When the research project was started with SAS, evaluating and helping to create methods to further develop their Avatar and other e-services, the researcher took the role as the research leader and Associate Professors Mikael Lind, Nicklas Salomonsson and Professor Olov Forsgren had more supportive roles and in the capacity as advisors to the researcher.

This is a practical and case based study with a focus on improvements for corporations and organisations within the field of Information Management. It uses the theories of Actability and Co-Design developing a continuation for the two. Figure 3.2 below shows the research framework of this study.

Figure 3.2 Research Framework
The case includes two different organizations in Sweden, one Public and one Private. Namely; the Municipality of Mark, Sweden, and the private company Scandinavian Airlines Systems (SAS). The selection of these two case studies is because the researcher is well connected with these organizations. In addition, the researcher assisted the other researchers in parallel with learning more about the background of the research at the Municipality of Mark where researchers evaluated a solution for electronic citizen interaction. With SAS, the researcher was involved in evaluating and helping in creating methods to further develop their Avatar and other e-services as well as taking the role as the research leader.

3.2 Short introduction to the used knowledge foundation

All the way back to the days of Ibn al-Haytham (Alhazen, 965-1039), the emphasis has been on seeking truth (Glenn, 2010).

For a thousand years scientific methodology has been used in some shape and form. It is hard to make a standard statement of method, however. “Invention, sagacity and genius are required at every step in scientific method. It is not enough to base scientific method on experience alone” (Whewell, 1837).

Within science, it always has been a discussion about the scientific method. This discussion can be traced all the way back to the ancient Greeks Aristotle and Plato; with Aristotle came the birth of Western realism (Barnes, 1991). Plato may with all justice be called the father of idealism (Pisarev, 1961). The core question in the debate was whether the knowledge was based on observations or if knowledge were based on ideas. The debate is still going on but nowadays many researchers have accepted a middle-path first proposed by the Philosopher Kant. “Kant’s proposal, often named the Kant emphasizes the absolute necessity of separating genuine morality from all empirical considerations. Instead, the necessity of deriving it a priori” (Guthrie, 2001) and can be described in the following way. To solve the philosophical argument amongst the idealists concentrating on ideas as the core of knowledge, and the realists concentrating on reality as the core of knowledge, Kant suggested that we need a priori ideas to interpret the real world. This idea, which currently in ordinary language is called a perspective, was more developed by another philosopher, Singer (Singer, 1959).

With it comes Aristotle’s teleological thinking and Plato’s thinking on ideals in which Singer conveyed the same idea in an example. He insisted on a must to design measurement scales to be able to measure, or in his own words, “we need to come up with good questions to get good answers”(Churchman, 1971). Subsequently (Churchman, 1971), in his work of “Design of inquiring systems” as part of the pragmatist tradition, clarified the direct connection between a measurement scale, an ideal and a hope for the future. He also introduces the dynamic quality aspect that ideals and scales of measurement have to be in a mood of change” (Lind and Forsgren, 2008). He also describes the arena for the dynamic change as a “system”. This way of scientific reasoning is influenced by the works of other philosophers (Dewey, 1931; James, 1907; Mead, 1934) and is often named a systemic approach to science.

“Influenced by this and partly together with Churchman, (Forsgren, 1988) developed a first Co-Design framework. This framework is a multi-stakeholder model in which all stakeholders concerns, related to a certain Co-Design situation, are taken into
consideration by either inviting, or considering perspectives of, diverse stakeholders in the Co-Design of a ruling measurement scale or perspective. With lots of examples Forsgren also shows how these perspectives can be implemented in computer systems and organizations as services. Therefore, energy needs to be focused on designing measurement scales that, in use, can satisfy some hope for a future better life for some people” (Forsgren, 2005).

3.3 How knowledge foundation has been applied as a methodological approach

During the empirical studies Co-Design has been used and different parts of steps 1 to 4 have been more or less apparent in the different case studies as follows:

![Co-Design Innovation Process](image)

**Figure 3.3 Co-Design steps**

3.3.1 Co-Design steps used in the case studies

IT systems are today an important need for most organisations. It can be internal administrative systems, but also systems for communication with customer and suppliers. To ensure that the systems have the anticipated effect it’s important to evaluate these both as is and when they are being used.

In previous IKEA studies (Lind and Salomonson, 2006) , steps 1 and 2 of Co-Design were used, meaning problems were identified and ideal scenarios were designed. This project did, however, not lead to implementation.

Based on empirical data from interviews, workshops and logs, problems and strength areas were identified and summarized producing strength, problem and ultimately target graphs in accordance with the principles for Actability.

Besides analyzing logs, workshops were carried out with a number of different groups of citizens where they were able to help improve and pinpoint problem areas of the product. Approximately a week after the workshops, the respondents were also interviewed individually to make sure that individual input and reflections were not missed.

Analysis of data logs from Avatars Elin (Campbell et al.) and Eva (SAS), with actual dialogues with the citizens from Artificial Solutions website (CSOK), qualitative and
quantitative material was compiled from CSOK. In addition, also additional questions were asked and answers evaluated.

In Mark Municipality all steps were used to a certain extent. Firstly, problems were identified (e.g. Avatar Elin did not possess answers to most common questions). Secondly, solutions were designed (increased knowledge database). Thirdly, these solutions were implemented and lastly, after evaluation, it was decided to uninstall the Avatar as it currently did not and was not expected to bring value in the foreseeable future.

The researcher categorized the participants into three different groups, namely, retirees, youths and parents. These three groups of citizens are the main ‘customers’ of Mark.

The researcher carried out interviews with the key staff and decision makers, both public servants and political appointees to investigate the aspect of learning about the Avatar and its procurement and implementation, including information given about the objectives for the municipality’s communication with the citizens. The interviews were designed to provide an understanding of the context, as well as the specifics about use of the IT services.

At the Municipality of Mark, workshops with three different groups of citizens were carried out and the citizens interacted with the computer systems. This also meant that the three groups expressed both problems and strengths of the systems.

Data about Avatar: Elin has been taken from Artificial Solutions Backend (CSOK). The material from Elin's so-called backend has been compiled and thus, there is quantitative data on the following:

1) Categories of answers Elin gives users;
2) The number of dialogues and the number of responses recorded in a particular hour during a specific month, and
3) The number of dialogues and the number responses recorded each day.

Data on categories of responses and the number of dialogues / responses generated from CSOK has since been transferred to a spreadsheet where the diagram has been created. Thus, Mark municipality can therefore filter and study the material. The goal was to also evaluate the usefulness of the statistics that can be generated from CSOK. In addition to quantitative data, dialogues between Elin and users were also filtered out. The dialogues between Elin and users have been studied from a qualitative perspective. The purpose is to deepen the understanding of the interaction between citizens and Elin. It is used by Mark to evaluate Elin's current role in citizen contact, and to make regular analysis of the interaction.

In the SAS case, the researcher carried out the study in two major stages. In the first stage, researchers carried out interviews with staff, supplier; workshop with customers, staff and researcher; log analysis: Avatar dialogues with the customers and a channel survey. In the second stage, researchers carried out log analysis and channel survey to measure the respondents’ perception of the improvement made to Avatar Eva from the first stage after the workshop.

With regards to the steps of Co-Design, all steps have been used in a couple of cycles as problems were identified, solutions were presented, implemented, evaluated and ultimately
this has led to more opportunities. The project is ongoing even though the need for input from the researchers is less.

The customers were categorized by age and the case study was carried out in two stages. In the first stage, participants were asked about the services provided by the organizations. This was carried out in the months of June to September 2010.

Similar to Mark Municipality, a set of interviews were conducted with key staff and decision makers of the SAS (Annex 1). Based on the participants’ responses, researchers conducted the workshop involving both customers as well as the service provider. This was carried out in the months of April to May 2011.

Also, at SAS, customer workshops were carried out with different categories of customers from different parts of the country. Furthermore, log analysis has been carried out on actual dialogues between Eva of SAS and customers. An online communication channel comparison survey was carried out to see how Eva fared in comparison to phone, email, online chat and web page communication and also to see how high the rate of acceptance was of Eva before and after changes were carried out to it.

### 3.4 Avatars

In this thesis, extra interest has been taken in this exciting and relatively new technology as there is little research and hard evidence of the effectiveness of this Self Service Technology. Effectiveness can be measured in many ways. This thesis uses Customer Satisfaction Index, CSI (Fornell, 1996) to measure effectiveness and then it is compared to the Customer Satisfaction Index of the SAS web page in general and Customer Satisfaction Index for the call center. Customer Satisfaction Index is commonly known in Sweden as ‘Nöjd Kund Index, NKI’.
Chapter 4

Analysis of Case Studies

There is limited research and empirical evidence of the effectiveness of these Self Service Technologies. In this chapter, two case studies are analyzed in detail. These two cases are (i) Mark Municipality, Sweden, and (ii) SAS. The concept of Actability was applied and used to study the Co-Design concept in these two cases.

4.1 Case Study of Mark Municipality

In Sweden, the first local government acts were implemented in 1863 and there were two acts; namely, one for towns and another for rural areas. Among the 2,500 municipalities, 89 towns had the right to call themselves a town. The municipal reform of 1971 lead to the merging of large scale municipalities and removed the distinction between towns, market towns and rural municipalities.

Mark Municipality was established with the municipal reform of 1971 by the union of eight previous towns and rural areas. Most municipalities had themselves been formed by the 1952 municipal reform. The Swedish word ‘mark’ means land. This municipality has a population of around 34,000. It is conveniently only a 30-45 minute drive from both Gothenburg (Sweden’s second largest city and industrial hub of the Nordic countries) and Borås (e-commerce hub of Sweden) and only 20 minute drive to Gothenburg International Airport.

Mark is an attractive town with many small and medium sized parts and is located in Västra Götaland County, western part of Sweden. Mark Municipality (Marks Kommun) helps and assists the local community in various areas, such as encouraging the local business leaders or entrepreneurs to establish their business or to get started, as well as participate in the various ongoing business activities. It also supports the growth of the local community and keeps harmony within the community. Mark Municipality is also a center point in providing information and links for those who are living in the municipality of Mark. Local residents are kept informed about daily activities such as trekking, camping and other information for leisure activities as well as health, education and employment related support.

In this study, the case is focused on Mark Municipality’s communication with its citizens through two main channels with modern information technology (IT). Information technology plays a significant role in reducing manual work as well as enhancing interaction with the local community and to provide faster services to the local Mark community. At the same time, it is cost effective. In this study, primarily Mark Municipality’s web page and Elin (the Avatar) are being studied and analysed using Co-Design and actability.

Mark’s web page is the Municipality’s main tool for interaction and services provided to the local citizens. Elin, the Avatar, is placed on the web page to help the citizens find things on the web page and to answer their queries.
Secondary data was collected through Mark's website (mark.se) and various brochures, and primary data was collected through interviewing the staff and the decision makers of the municipality.

The Mark website (mark.se) is the platform to gather and gain information about the Mark Municipality. Information of various activities in the Mark region is provided. Table 4.1 shows the summarized activities carried out by Mark Municipality.

Table 4.1 Activities and Responsibility of Mark Municipality

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
</table>
| Governance     | Main responsibility:  
✓ City Council,  
✓ City Council and Board (politicians).  
Operational Performer:  
✓ Administrative organization (employees). In the various administrative tasks municipal employees work to implement what the politicians decide on. So it is the political organization that controls the employees of the administration. |
| Policy         | All must follow the policy of Mark Municipality such as  
✓ Ensure that the municipality for all people aged 7 to 15 years attends primary school.  
✓ The citizen can say; I am old now and need help to take care of myself or I've been meaning to modify my house and need a permit for this.  
✓ An entrepreneur can say: We need a license to open a restaurant in a given location. |
| Needs          | Satisfy basic needs, such as peace and harmony: citizens of the municipality of Mark to live and feel support for entrepreneurship, security, environment, nature and a good life situation. |
| Clients        | Local residents, businesses and some visitors (all of them are clients, in different contexts). |
| Operational funding | Tax revenue 60%  
General state subsidies and tax equalization 19%  
Other income 21% (fees, rents, government grants, etc.) |
| Main Product   | Infrastructure for the local residents (citizens) such as preschools, schools and care for the elderly |
| Co-product     | Library, housing, financial aid, district heating, emergency prevention, pre-school, child care, school, high school, adult education, community water and sanitation, culture-recreation, arts, premises, monitoring, rehabilitation, sanitation, social support for children and youth, social support to adults, emergency operations, assistance to elderly and disabled |
| Main client    | Citizens who fall into two main groups: residents and businesses. Within the group of people we find, for |
As an organization, Mark Municipality is captured in a manner that ‘municipality’ is not used to describe it. Rather than to assume the political responsibilities based on description, it focuses on the products it offers to residents. This means that there is a clear beneficiary of the services, namely, local residents, and a producer who is both the political organization and also the administrative organization. The model also outlines the requirements that the municipality has further responsibilities even during a change of parliament, through changes in legislation and the structure of tax equalization.

This researcher applied the Co-Design model of (Forsgren, 2005) (see Figure 3.3). In this model, there are four steps:

- Step 1: In my view, this is a problem
- Step 2: I’d like to have it this ideal way
- Step 3: I hope these solutions will get me to my ideal way
- Step 4: Did “these solutions”, bring me closer to my ideal way?

At Mark, to follow Co-Design step 1, the researcher used four different types of data collection, namely, interviews, workshops, log analysis and channel survey.

4.1.1 Workshops

The researcher carried out workshops with the citizens of Mark and through the workshops the respondents were grouped into three different categories: 1) Retirees; 2) Youths and 3) Parents.

Retirees’ perspective

Because of the difficulties and problems faced by retirees on the web page, they used other sources of information to know what is happening in their community such as Google, Borås Newspaper and Halland News. At the same time, retirees have problems using the Avatar Elin if there is already text in the search box. They find it confusing that there are two different "Mark-related" websites (www.mark.se and www.markskommun.se ). In addition, retirees are experiencing that it’s sometimes hard to find things and that the menus are not clear. They claim that there are other municipalities that have better websites.

Youths’ perspective

The Youths indicated that some links do not work (for example, Kunskapens Hus (House of Knowledge)). They pointed out that there is no information about summer jobs and they claim that some information is not meaningful to them. Youths sometimes experience difficulty in knowing whom to ask questions to get information. They pointed out that the page does not have a guestbook / forum to help others find things that are going on and thus have received help from the municipality to arrange this. Youths do not have a forum where they can get an overview of different programs in high schools and elementary schools. They also stated that the register of associations is inaccessible and flawed. This young group do not perceive that mark.se contributes relevant information in respect of secondary
or tertiary education, and as a result they select other Internet channels to meet many of their needs.

**Parents’ perspective**

Parents find it cumbersome to find out contact information for school staff. In their experience they maintain that different schools have different quality of information and Mark municipality's website does not provide a proper guideline for the selection of corporate identity. Parents find it difficult to find information such as music schools and they do not appreciate that there are broken links. Also, it takes time for the computer novice families to consider the entire screen.

4.1.2  Mark Municipality’s log analysis from Elin

The researcher analysed dialogues (log analysis) between citizens and Elin (one week in June and one week in September 2010). The log analysis is a study of electronically recorded interactions. For this study, the researcher selected 100 dialogues that customers had with Elin. Table 4-2 shows some of the dialogues where Elin succeeded in answering the customers/clients questions.
Table 4.2 Successful dialogues with Elin

<table>
<thead>
<tr>
<th>#</th>
<th>Questions from Citizen</th>
<th>Elin Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I want to read about the Social Services Act</td>
<td>I open a page about social care, where you can learn more. Municipality Matters. Individuals and care. Individuals &amp; Family Touch</td>
</tr>
<tr>
<td>2</td>
<td>Which restaurants can you offer in Mark on Saturdays covered by the 100-bill campaign?</td>
<td>You can find information about the restaurants and cafes in Mark on <a href="http://www.tygriket.se">www.tygriket.se</a> Municipality Matters. Tourism, &amp; Culture. Happy</td>
</tr>
<tr>
<td>3</td>
<td>Opening hours</td>
<td>I open a page where you can see the opening hours for Mark Municipality. Municipality Matters. About the Municipality. Opening Hours &amp; Contact point</td>
</tr>
<tr>
<td>4</td>
<td>Lottery license</td>
<td>I saw that you have a question about the licensing of gaming. Perhaps you can find what you are looking for at <a href="http://www.lotteriinspektionen.se">www.lotteriinspektionen.se</a> Municipality issues. About the Municipality. License to sell alcoholic beverages, Games</td>
</tr>
<tr>
<td>5</td>
<td>Can I burn yard waste or is it only allowed under certain conditions.</td>
<td>Here on the side you can read more about the conditions that apply Municipality issues. Security &amp; Safety. Fire protection work neutral</td>
</tr>
<tr>
<td>6</td>
<td>Fuel Rules What do you know about the fire ban, firing rules?</td>
<td>Try to rephrase the question and I will try to help you. Municipality issues. Security &amp; Safety. Fire protection work</td>
</tr>
<tr>
<td>7</td>
<td>How can I find a home?</td>
<td>Mark Municipality has a housing company, Marks Housing Corporation but also several private landlords. Municipality matters. Build &amp; Live. Homes point</td>
</tr>
<tr>
<td>8</td>
<td>Spa</td>
<td>Your question relates to SPA, the bathhouse Cascade can book spa evenings. More to read about Cascade, see page opposite. Municipality matters. Nature &amp; Health. Health point</td>
</tr>
<tr>
<td>9</td>
<td>Who is the CIO?</td>
<td>Kerstin Guth's the CIO in Mark Municipality. I open a page where you will find contact information for her. Municipality issues. About Municipality point</td>
</tr>
<tr>
<td>10</td>
<td>Personal Data Act, the Personal Data Act (PUL)</td>
<td>The purpose is to protect people from having their privacy violated by the processing of personal data. More info Municipality matters. About Municipality. Fact about the Municipality neutral</td>
</tr>
<tr>
<td>11</td>
<td>Inspection of all building permits is required for larger tanks.</td>
<td>Permits are also required for the storage of certain quantities of flammable materials. Consent from the Environment Agency is also required. Municipality matters. Roads &amp; Environment. Environmental care neutral</td>
</tr>
</tbody>
</table>

Based on the above table, it shows that Elin is to an extent able to answer the questions by Mark’s citizens. However, there are other dialogues where Elin is unable to answer correctly as shown in Table 4.3.
When comparing the success and failure of Elin at Mark, 40 percent seems to be successful and remaining 60 percent failed, meaning Elin was not able to respond. Failure could be due to Elin's knowledge, lack of Elin’s interaction or lack of synonyms for Elin to properly answer questions.

The following Figure 4.1 shows that out of 1000 dialogues, 38 percent were questions regarding municipality affairs, 14 percent information about tourism, leisure and culture and 16 percent about the individual, care and education and training opportunities in Mark municipality area. The remaining 28 percent concerned business opportunities, schools and other needed information.
In addition to the actability, the researcher applied the Co-Design technique in developing the Elin (Avatar) by, among other activities, organizing workshops with the users (to benefit from their expertise), specialists and other stakeholders. In the current business environment, every organization does their best when providing services to their customers. However, because of the mass customization to fulfill the demand of individual customers, organizations and companies need to apply the Co-Design technique in framing their activities as a necessary prerequisite. However, this also risks diluting the customers’ needs. This happened to Mark Municipality, where it was able to use only the first two steps of the Co-Design as shown in Figure 3.3 in Chapter 3. This led to the failure of continuing the service of the Avatar, Elin. The problems faced by Elin are elaborated by the researcher.
4.1.2.1 Findings in Elin’s Problems

The response rate shows the most frequent responses from Elin in various categories available. The user selects a time period for Mark, most frequent number of responses (5, 10, 20, 50 or 100) and a specific response category, omitting the latter category to view all the answers during the time period. For example, filtering out the 10 most common responses from Elin in the period 2010-06-30 to 2010-08-31 shows the following (Figure 4.3):
Figure 4.3 Elin’s 10 most common answers

1) Good Day! My name is Elin. My Job is to help you to find information on this web page and to answer questions about Mark Municipality. Please don’t hesitate to ask me. Kindly write short and full sentences. How can I help you?

2) I didn’t really understand your question. Please try to reformulate the question in order for me to understand it. Kindly use complete sentences.

3) Good evening! My name is Elin. My job is to help you to find information on this web page and to answer questions about Mark Municipality. Please don’t hesitate to ask me.

4) If you’re not happy with the answer you can ask us to contact you. Would you like us to contact you?

5) I believe you forgot to write anything at all.

6) Good Day! My name is Elin. My Job is to help you to find information on this web page and to answer questions about Mark Municipality. Please don’t hesitate to ask me. Kindly write short and full sentences. How can I help you?

7) Good Day! My name is Elin. My Job is to help you to find information on this web page and to answer questions about Mark Municipality. Please don’t hesitate to ask me. Kindly write short and full sentences. How can I help you?

8) Good evening! My name is Elin. My job is to help you to find information on this web page and to answer questions about Mark Municipality. Please don’t hesitate to ask me.

9) I believe you have a question about some place in the municipality. I’m opening a page where you can find more info about different places in Mark Municipality.

10) I didn’t really understand your query?
This shows that the response rate in a horizontal plane is rather crude; since these include five of Elin's introductory phrases. The most common response is an adaptation phase. This is followed by the answer: “Now I unfortunately do not really know what you want to ask. Please try to rephrase the question, in order that I might understand it better. Please use full sentences.”

Number 9 was in first place with 327 responses (out of 9,538 for the 10 most common responses, i.e. 3%), which indicates that Elin reasonably “understood” what the user requests. The goal of Mark should logically be to achieve a higher accuracy in Elin's answers as many of them end up in the top 10.

Furthermore, filtering out the 10 most common responses out of the top 100 most frequent responses where Elin seems to guide the user, can be seen in Figure 4.4 below, the number in the respective responses indicates where in the top 100 list they are found.

Figure 4.4 responses of 100 where Elin provides "relevant" answers: 30-June-10 to 31-Aug-10.

Figure 4.4 shows that in the fifteenth place, Elin gives a response on job vacancies in the municipality by opening a page about jobs and in the nineteenth place, she opens a page on Swim Center Cascade. One can say that Elin in many cases opens a new web page to which she refers ("Here you will find..."). Elin was guiding the user to a specific page. It is also possible to obtain the most frequent responses in different subcategories. One such category is the municipal affairs. The top 10 is shown in Figure 4.5.
1. I understand you have a question about towns and villages in the municipality. I here open a page where you can read more about towns and villages in Mark Municipality.

2. I’m opening a page where you can get more fact about Mark Municipality

3. On the side here you will find a page listing job opportunities within the activities of Mark Municipality

4. You can get info about how to reach staff at the municipality by calling 0320 21 70 00

5. In Mark we have Kaskad Swim Center. Here beside will find more info

6. Looking for contact info? Here beside you will find more contact info to the Municipality

7. You can get information about how to reach staff by calling 0320 21 70 00.

8. You would like to know more about water and sanitation. You will find more info here on the side

9. The department for water and sanitation are responsible for waste and recycling. Call customer service to get more info

10. Here on the side you can read more about the Municipality recycling station.

Anything else I can do to help?

The most common answers include information about the municipality of Mark, job vacancies within the municipality, and references to the local exchange. The latter response ranks number seven.

The findings show that the retirees and youths do not use Elin spontaneously; rather they go directly to the web site. Retirees and parents confuse the box for the search function with "Ask Elin" box. Parents’ experienced that Elin sometimes pointed to broken links. Retirees have problems using Elin when there is text in the search box and they are not able to ask questions to Elin in simple language. On the other hand, the Youths’ group experienced that
Elin did not really navigate them to where they want to go and her answers are not always adequate.

Figure 4.6 Problem Graph Elin

In Mark Municipality, all Co-Design steps were used to a certain extent. Firstly, problems were identified (e.g. Avatar Elin did not possess answers to most common questions). Secondly, solutions were designed (increased knowledge database etc.). Thirdly, these solutions were implemented and lastly after evaluation the leaders of the municipality decided to uninstall the Avatar as it did not and was not expected to bring value in the foreseeable future.

Nevertheless, if Elin was properly managed through the concept of Co-Design, a major improvement could be completed locally. One example is improving Elin's ability to provide complete answers and provide better links to the home page. Much of the work, however, is to intensify the dialogue with Artificial Solutions (provider of Elin) and to work with them to make Elin "cleverer".

There is a need to improve the perceived functionality of the chat feature with staff that starts when Elin is not proving efficient enough (see the SAS case). The following needs for change were identified:

1. Increase availability of information distributed through the website.
2. Ensure the right information, real (effective) action, and "evenly distributed" information about various events in the municipality.
3. Ensure a higher update rate of information on the website.
4. Ensure that required information becomes available to the public (such as event information).
5. Increase interactivity in terms of ability to provide documents and application forms through the website and the opportunity to get feedback on what is done.
6. Have continuous dialogue with Artificial Solutions to increase the degree of local adaptation and customization.

7. Increase the effort to achieve local adaptations and improve, among others, internal weaknesses in the web such as broken links, which greatly impairs Elin's ability to give relevant answers. An ongoing dialogue with Artificial Solutions and an increased effort to:
   a. Increase Elin's ability to understand what citizens want.
   b. Increase Elin's accuracy in navigating the user where they want go.
   c. Increase Elin's dialogue skills.
   d. Increase opportunities for analysis of national electronic interaction through the site and Elin, both in terms of clicks statistics for the website that improved the analytical capabilities of Elin’s back-end.

4.1.2.2 Target list

The goals identified in the interviews that were focused on the municipality's IT systems were:
- Good electronic citizen communication with web page, mark.se, as a base
- e-ID to support interactive e-services
- Website that is well structured and easy to navigate with frequent updates
- Interactive website with well-functioning Elin plus chat and telephone linkage
- Ability to answer general questions from all administrative districts (at a higher level than today's receptionist)
- Citizens to receive prompt and high quality responses
- Satisfied Citizens who seldom have to wait
- Officers have time for other work
- Officers involved in skilled tasks
Figure 4.7 Target Graph Mark Municipality – all channels

Mark Municipality has the desire and ambition to increase the use of information technology systems and tools (internet and website) where it would like to communicate with the local community faster for those accustomed to the internet. For those who are not familiar with the internet, Avatar Elin was created. This is a way to give citizens an easier softer and more inviting way to find information on the web page than clicking around or using the search engine. In addition, Mark did not want to be left behind in terms of information technology, as it was well aware that many other municipalities, both large and small, had a similar solution. Artificial Solutions, a leader in Sweden when it comes to Avatars (they have for example developed Ikea's Anna and SAS’ Eva) was early to develop the Botkyrka project. Botkyrka and Mark were among many municipalities that took the opportunity to catch on to the revolution of the internet and the use of Avatars in communicating with the citizens.
4.2 Case Study of Scandinavian Airlines (SAS)

Scandinavian Airlines (SAS), previously known as Scandinavian Airlines System, is the largest carrier in Scandinavia. It was founded in 1946 and in 1951 a number of local airlines merged to create SAS with headquarters in Stockholm, Sweden. Presently, the airline has roughly 200 planes flying to more than 30 countries.

SAS’ Avatar ‘Eva’ plays a significant role in interacting with customers. Customers enjoy a positive experience with Eva (Alm and Forsgren, 2011). Eva improves efficiency and saves the cost of employing a number of full time staff. Eva manages to send customers into specific sales situations. For instance, during the interview, one of the participants stated that “Eva sells pretty well, has excellent stability and performs well”. Eva’s logs give feedback on what the customers think about Eva, the home page and also about SAS organization as a whole. When Eva cannot answer, she starts a live chat and she refers the dialogue to call center staff. SAS is proud to be early adopters of this new technology. Results show that having an SST helps in managing and saving costs (Alm and Forsgren, 2011; Hsieh, 2005; Kim, 2013; Mehrjerdi, 2013). It is also better than a manual service as it is faster. During the workshops one user said ‘Sometimes using a machine can be good as one doesn’t always want to talk to somebody and be polite’.

Researchers applied the four steps of Co-Design approach based on the Co-Design research and Innovation Process (Forsgren, 2010).

4.2.1 Co-Design Step 1 (See: Figure 3.3, Step 1: In my view, this is a problem).

Applying the first step of Co-Design, researchers carried out log analysis, interviews and a channel survey, to identify problems from June to September 2010.

4.2.1.1 Log Analysis

The log analysis is a study of electronically recorded interaction. Researchers carried out a log analysis for Avatar Eva as it helps in analyzing and identifying problems of Eva and this helps in the Co-Design process. Researchers selected 100 dialogues that customers had with Eva from the thousands of dialogues recorded. The dialogues between customers and Eva were analyzed (one week in July 2010 and another one week in September 2010), looking at SAS service, for example, getting flight details, re-funding of tickets, booking flights, telephone numbers, flight costs, cancellation of tickets, taking pets on flights, check-in, passport issues and other information. Table 4.4 shows some of the dialogues where Eva succeeded in answering the customers/clients.
A review of the log analysis shows that the Avatar Eva is able to answer questions raised by the client and respond correctly. Some of the raw data given in Table 4.4 show that Eva is able to accurately answer questions asked by the customers. This shows that Avatars play an important role and are cost effective for organizations that would like to serve their customers or clients by employing SST systems such as an Avatar.

<table>
<thead>
<tr>
<th>#</th>
<th>Questions from customers</th>
<th>Eva’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Can I get a refund on my ticket</td>
<td>You always get a full refund within 24 hours from the time of booking. You book yourself a ticket on <a href="http://www.sas.se">www.sas.se</a>. If the delay time varies possibility of refunds depending on the type of ticket you purchased. Please contact SAS by telephone. It may take up to 10 days before the money is in your account. Related Questions: 'Can I cancel my trip?' How do I cancel SAS payment</td>
</tr>
<tr>
<td>2</td>
<td>What are the measurements allowed for hand luggage?</td>
<td>It's fine to bring a carry-on baggage if you stay within the following requirements: Dimensions 23x40x55 cm. Weight 8kg. There may be exceptions and more about exceptions, see the page I opened next</td>
</tr>
<tr>
<td>3</td>
<td>How do I become a member of EuroBonus?</td>
<td>On the page I opened on the side you can register as a new member of EuroBonus. You will receive your membership number on the screen.</td>
</tr>
<tr>
<td>4</td>
<td>I need help creating a profile. How do I?</td>
<td>Here, next I have opened a page where you can create your profile. If you do not have some of the following information in order to create the profile, click below.</td>
</tr>
<tr>
<td>5</td>
<td>What cards can I pay with?</td>
<td>You can pay for your trip with the following cards: Visa, MasterCard, Eurocard, Dankort (Denmark only), Discover or American Express. (Maestro and Electro Card are not valid).</td>
</tr>
</tbody>
</table>
Table 4.5 Examples of failed dialogues with Eva

<table>
<thead>
<tr>
<th>#</th>
<th>Questions from Participants</th>
<th>Eva’s Response</th>
<th>Remarks (Failures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Want to book with bonus points, and have been publishing both the username and password. How do I?</td>
<td>I find it hard to understand too complex issues. Try to ask a question at a time. I can transfer your question to a form that you can send to us by clicking the link below</td>
<td>Interactivity</td>
</tr>
<tr>
<td>2</td>
<td>Are you wearing pantyhose?</td>
<td>You have questions, But I do not understand about what. Kindly limit your question to one sentence</td>
<td>Dialogue Capacity</td>
</tr>
<tr>
<td>3</td>
<td>What's the difference between username, password and security code?</td>
<td>When you log in using your profile on the SAS website you use your username and password you created yourself. Contacting Member Services by phone, email or via the EuroBonus voice mail, use your four-digit security code</td>
<td>Knowledge</td>
</tr>
<tr>
<td>4</td>
<td>Which is the closest airport to Torino,</td>
<td>You have any questions about travel and destinations. I will help you find answers to your questions and to find information on our site.</td>
<td>Consistency</td>
</tr>
<tr>
<td>5</td>
<td>How to book a plane ticket rebooked rebooking through your travel agent or SAS Telephone sales (some exceptions exist for EuroBonus and Travel Pass / Travel Pass Corporate travel).</td>
<td>To provide information on the feasibility of rerouting, and what it would cost, we need more information</td>
<td>Knowledge</td>
</tr>
</tbody>
</table>

In addition, Avatars may be able to assist the organizations to understand the customers better in a shorter period of time. One of the most important things for the company’s management to consider is how Avatars communicate with their customers and provide feedback concerning the customer’s needs. However, there are other dialogues, where Avatar Eva is not able to answer correctly as shown in Table 4.5.

From the log analysis, researchers found instances where Eva failed in responding to its customers. Table 4.5 shows some of the raw data extracted from thousands of dialogues that Eva had with clients. Researchers found that Eva lacks capability in five main areas 1) interactivity; 2) dialogue capability; 3) consistency 4) knowledge 5) synonyms. Thus, these are main factors where Eva needs further development in ability and functionality.
4.2.1.2 Channel survey

In accordance with the principles of Customer Satisfaction Index (CSI), researchers conducted an online survey (Channel Survey). The purpose of this survey was to measure respondents' satisfaction and their perception of Avatar Eva based on their experience. Similar to the log analysis, CSI is able to identify problems and difficulties faced by the respondents. Knowing and understanding Eva’s problems, it could be improved further by using the Co-Design approach. The participants in the channel survey were asked the following four questions: 1) general experience from the dialogue with Eva; 2) Eva’s knowledge and courteousness; 3) Eva’s ability to meet the participant knowledge needs and 4) the participant’s perception of Eva. There were a total of 97 participants. Participants then rated their experiences using a scale of 1-10 (where 1 represents very dissatisfied with Eva’s service and 10 very satisfied) to give the researchers more accurate data.

Furthermore, researchers carried out a reliability test for the above four variables using Cronbach’s Alpha. The Alpha value of more than 0.5 is acceptable (Chen and Small, 1994) for further analysis of the data. The method reliability testing supports the measurement in terms of equivalence and internal consistencies. Reliability “concerns the extent to which an experiment, test, or any measuring procedure yields the same results on repeated trials” (Carmines E.G and Zeller R.A, 1979). Overall Cronbach’s Alpha for the six indicators is 0.7766. Detail of each variable is set out in Table 4.6.

Table 4.6 Descriptive Statistics and Pearson Correlation responding to the four questions

<table>
<thead>
<tr>
<th>Q</th>
<th>Questions</th>
<th>Alpha</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Experience from the Dialogue with Eva</td>
<td>.580</td>
<td>6.85</td>
<td>1.39</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Eva’s Knowledge and Courteousness</td>
<td>.704</td>
<td>7.21</td>
<td>1.77</td>
<td>0.89**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Eva’s ability to meet the participant knowledge needs</td>
<td>.729</td>
<td>6.86</td>
<td>1.20</td>
<td>0.59**</td>
<td>0.42**</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Eva service meeting the participant expectations</td>
<td>.831</td>
<td>6.80</td>
<td>1.37</td>
<td>0.34*</td>
<td>0.19**</td>
<td>0.43**</td>
</tr>
</tbody>
</table>

(Correlation is significant at the 0.01 level (2-tailed).

Based on the reliability test, researchers carried out a descriptive and Pearson Correlation analysis as shown in Table 4.6. The purpose of Pearson correlation is to examine the inter relationship between the variables.

Table 4.6 also summarizes the results of participant’s responses on the four questions/variables which were asked during the channel survey. Results show the respondents were somewhat satisfied with the Avatar’s answers, but that there was still room for improvement in Eva’s replies. When it comes to the perception of Eva’s knowledge and courteousness, it shows an overall value or mean of 7.21 from a total of 1-10 scale, followed
by Eva’s ability to meet the participants knowledge needs (6.86) and the general experience from the dialogue with Eva (6.85). Among the correlation pairs given in Table 4.6, the correlation between question Q1 and Q2 has the highest value (0.89**), and the correlation between Q1 and Q3 has the second highest (0.59**). The highest correlation indicates that Q1 and Q2 are associated with the respondent’s satisfaction in regards to the performance of Eva.

4.2.1.3 Interviews

Interviews were conducted with key staff and decision makers of the SAS on Avatar Eva. Researchers were informed that Eva was performing 30,000 dialogues per month and delivering 70,000 answers in these dialogues. SAS measured Eva’s performance and found that by using Eva sales improved, and she was able to answer specific questions based on specific situations. Usage of Eva has been growing and the most common questions from customers are in the areas of EuroBonus, travel with SAS, luggage and Check-in. During the interviews, staff reported that since introduction of the Avatar there is a reduction in number of calls to their Call Center. However, staff members stated during the interviews that since Eva is an SST, it is not 100% reliable as she lacks communication skills such as dialogue capability and interaction. Eva’s weaknesses are mainly her lack of interactivity and dialogue capability but also in the areas of synonyms, consistency and knowledge. This was also found more in detail during the log analysis as shown in Table 4.5.

Based on the log analysis, channel survey and interviews, researchers found the following five main problem areas with Eva:

a) **Interactivity**: From the above three methods in analysis and understanding the problem of Eva, it was found that she is not interactive and also does not provide real time information to the participants. However, Eva could provide travel suggestions for certain dates rather than a certain destination. Participants want Eva to be available during the booking. During the Co-Design workshops the participants’ suggested that Eva should be able to interact with different SAS systems, for instance, flight status, price and booking information and check-in- or check out time. This will enhance the usefulness of Eva significantly.

b) **Dialogue capability**: it was observed that Eva lacks dialogue capability during log analysis, interviews and workshops. It was suggested that Eva should have more dialogue capability, which could help in providing information to the participants and also, for her to be able to ask questions based on the participants earlier questions. Currently, Eva is not able to handle sequences of related questions.

c) **Eva’s consistency**: During the workshop, it was observed that the information provided by Eva and the information available on the Web is at times inconsistent, especially the booking charges. This finding was very helpful for SAS to fix certain problems faced by the participants such as synonyms and knowledge.

d) **User friendliness**: During the workshop, participants were not always sure how to begin their questions as it was often challenging for the users to formulate their questions. Specific observations from the participants highlighted issues about font size and lack of ability to communicate properly. Through the workshop, participants suggested to have a print function so that they can keep the chat dialogue for future reference.
e) **Performance and ability**: Participants observed that Eva is able to provide some information but not always full answers to their queries. Since participants were not happy from the beginning, it might result in users not using Eva again. For instance, one participant asked for his flight time, but Eva directed him to the Swedish airport authority’s flight page.

### 4.2.2 Co-Design Step 2: (I'd like to have it this ideal way).

Based on the log analysis, channel survey and interviews, researchers conducted workshops with customers. Researchers carried out workshops with five different groups as shown in Table 4.7, using Co-Design technique (see Figure 3.3). This workshop was carried out in May 2011 in Gothenburg and in SAS head office in Sweden. The researcher was the moderator of the workshops.

**Table 4.7 Five groups of Participants in the Workshop**

<table>
<thead>
<tr>
<th>Group</th>
<th>Participants</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experts</td>
<td>Customers/users</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Group 2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Group 3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Group 5</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Workshops with five groups above were carried out in five different phases using the same technique with all groups.

1. Phase 1 was to characterize the target groups, general life situation as well as travel specific life situation
2. Phase 2 based on phase 1 generated different scenarios such as finding the right flight price/departure; Baggage; Opening hours; Check-in when and how; Conditions for over bookings; Rules for changing flights; Booking; Using EuroBonus points and expiry; Ethic and Green flights
3. Phase 3 was to test these scenarios through electronic contact with Eva and SAS.se
4. Phase 4 common evaluation and
5. Phase 5 individual short interviews

During the workshops, participants were asked whether Eva should have a separate window or should be integrated into the SAS Website. The participant’s recommended Eva to be part of the SAS web page and that she should not be a separate window. Using the Co-Design approach and integrating Eva as a part of the actual web page will solve the problem and enable SAS to provide required information.

Based on the workshop using the Co-Design technique shown in the Table 4.8, the researchers gave their feedback to SAS which was then used by SAS to redevelop their Avatar. Researchers made suggestions to SAS how Eva could be more helpful and generate customer satisfaction, which would translate into loyalty to SAS, thus improving SAS’s
position as an innovator in the airline business. Table 4.8 below shows the ten (Bowen et al.) ideal functions that Eva could best perform.

Table 4.8 Ideal scenarios that Eva could perform:

<table>
<thead>
<tr>
<th>#</th>
<th>Suggested Ideal Scenarios</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In order for Eva to better understand the client’s questions in everyday language, more synonyms should be added to Eva’s ‘vocabulary’.</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>In certain areas (e.g. Eurobonus Frequent Flyer Program) Eva should be given more knowledge, i.e. be able to answer more questions.</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>When contacting Eva, she sometimes provides different answers compared to when browsing the web page or calling the call centre. The consistency of information between channels must be safeguarded.</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Eva could help the passengers in all their booking arrangements. At the same time SAS web could be interactive for booking including current and most frequent travels that the passenger have made in the previous years.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>When booking flights using Eva, she can assist in showing the baggage allowance during the booking process.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Since, above, differs by flights and airlines, Eva could connect to relevant airlines’ online databases and can use statistics for consumers’ web pages of the flexibility and ‘leniency’ of each airline. She could also show the fee for overweight luggage allowances to the travellers.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>In Eva’s booking form, the passengers could choose to use points for themselves and for family members. In addition, Eva could also show the list of available flights to passengers with kids and where flights are available using points.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Once Eva knows that the passengers are minors, she could also offer the passenger the opportunity to check box for ‘unaccompanied child assistance’. Eva could do this by connecting directly to SAS’s flight databases.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Eva could help to easily order a new trip if the passenger has done the same trip before and it could with a click on that trip and just a change of dates. As a result all possible flights around that date could be shown to them including flights with other companies with a lower price. This will enhanced the customer loyalty because SAS not only care about their flights but also understand the budget requirement for their travellers;</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Eva could give a message that it is possible to upgrade them to business class by using extra mileage / points. This up selling will help the Airline to maximize its passenger load and use up miles which are liabilities on the Airline’s books;</td>
<td></td>
</tr>
</tbody>
</table>

4.2.3 Co-Design Step 3: (I hope these solutions will get me to my ideal way)

As some of the suggestions given in Table 4.8 are expensive and time consuming, SAS decision makers decided to implement the first three ideal scenarios: Eva’s synonyms (Scenario 1); Eva’s knowledge (Scenario 2); and Eva’s consistency (Scenario 3). Eva was improved and upgraded accordingly. This helps their customers to get better answers with greater consistency. However, as many ideal scenarios and their requirements have not been met, there is still much room to improve Eva.
Co-Design Step 4: (Did "these solutions", bring me closer to my ideal way?).

Based on the feedback and suggestions considered by SAS, researchers again carried out a channel survey to know the impact of the redevelopment of synonyms and the knowledge of Eva. This survey was carried out in the months of December 2011 to February 2012. There were a total 114 responses to this question. From the scale from 1-to 10: Very dissatisfied to very satisfied.

Table 4.9 Participants responses to the four questions

<table>
<thead>
<tr>
<th>#</th>
<th>Questions</th>
<th>Alpha</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Experiences from the Dialogue with Eva</td>
<td>.592</td>
<td>7.47</td>
<td>1.19</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Eva’s Knowledge and Courteousness</td>
<td>.758</td>
<td>7.28</td>
<td>1.31</td>
<td>0.25**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Eva’s ability to meet the participant knowledge needs</td>
<td>.768</td>
<td>7.25</td>
<td>1.17</td>
<td>0.26**</td>
<td>0.25**</td>
<td>1.00</td>
</tr>
<tr>
<td>4</td>
<td>Eva service meeting the participant expectations</td>
<td>.821</td>
<td>7.11</td>
<td>1.31</td>
<td>0.09**</td>
<td>0.03</td>
<td>0.09</td>
</tr>
</tbody>
</table>

The above table shows participant perception of Eva’s service after the modifications. The overall alpha test was 0.734 and details of each alpha for the variables are given in Table 4.9. Researchers further carried out a descriptive and Pearson Correlation analysis as shown in Table 4.9.

Results show that respondents were satisfied with the Avatar’s responses. When it comes to the perception of the general experience of a dialogue with Eva, it shows an overall value or mean of 7.47 from a 1-10 scale, followed by Eva’s knowledge and Courteousness (7.28), Eva’s ability to meet the participants knowledge needs (7.25) and Eva’s service meeting the participant’s expectations (7.11). Among these correlation pairs presented in the Table, the correlation between question (Q) 1 and 3 has the highest value (0.26**), and the correlation between Q1 and Q2 has the second highest (0.25**). The highest correlation indicates that Q1 and Q3 are associated with the satisfaction of the respondent in regards to the performance of Avatar Eva.

There is a slight improvement of Eva before and after using the Co-Design technique. In regards to the participants’ general experience from the dialogue with Eva, there is improvement in the overall satisfaction level of participants: .36 (7-21-6.85, see Figure 4.8). Similarly to Eva’s service meeting the participant expectations: .15 (6.95-6.80, see Figure 4.8). When comparing the situation before and after the workshop, participants perceived an improvement. It should be noted that the respondents were not the same individuals before and after. This increase of customer satisfaction has an impact on the costs of SAS.

Improvement of the customer satisfaction can be seen in Figure 4.8. The figure shows that there is an increase in respondent’s satisfaction level when comparing the before and after
the changes in Eva. It is noteworthy that in the two surveys, the respondents are different and the total number of respondents also differs. In the ‘before’, 97 respondents responded and in the ‘after’, there were 114 respondents stating their satisfaction level in regards to their experience with Eva. In the CSI scale, there is a clear improvement regarding respondents experience with Eva.

Figure 4.8 Customer Satisfaction after improvement in the Eva capacity

Figure 4.8 clearly indicates that SAS customer satisfaction level improved when comparing such levels of satisfaction with the results obtained before modifications were made. The blue bar (below) shows before modifications and the maroon bar (above) shows after modifications. Eva was improved through a Co-Design approach and this can also help other industries. Co–design approach can be used in any industry following the four steps of Co-Design that was developed by (Forsgren, 1988, 2005).

In addition, after the improvements and modifications were made, there was a decrease in the number of calls to the SAS Call Center. An important result of the study was also that SAS adopted continuous use of Co-Design as an approach to continuous improvement of the service quality performed by Avatar Eva.

“Later studies show that this continuous improvement process is an important key to Eva’s long term improvement and plays a crucial role in terms of cost effectiveness for SAS, as Eva is more cost effective than her human counterparts” (Alm and Forsgren, 2011). This can also be compared with the increase in the acceptance of Eva, which is likely to lead to increased usage. A slight increase in the usage of Eva helps the company achieve greater cost savings when serving current and potential customers.

SAS’ use of Avatar Eva played a significant role in interacting with clients. One of Eva’s strengths is that a live chat activates when Eva cannot answer a question, which gives customers a positive experience with the Avatar. Eva improves the efficiency and saves the cost of four full time staff. Eva manages to send customers into sales specific situations. She sells competently, has excellent stability and performs well. Eva’s logs give very good feedback on what the customers think about the home page and also about SAS organization. She unloads call center staff by answering basic questions.
While customers were having dialogues with Eva, the researcher and SAS requested feedback on Eva’s service. Figure 4.9 shows the feedback on Eva’s service provided to the individuals while in dialogue.

![Pie chart showing feedback on Eva’s service](image)

**Figure 4.9 Participant feedback on Eva’s Service after dialogues in July 2010**

Figure 4.9 shows that 42 percent (42%) of the participants are satisfied with Eva and 39 percent (39%) were neutral. However, 10% of the participants were glad and happy with the Eva service. The difference between the glad and the happy is the degree of contentment. Glad in this context is considered a higher level of contentment than happy. However 6% of the respondents would prefer to have clearer information from Eva because while asking the question to Eva, she was unable to answer their question directly and referred to other answers.

### 4.2.4.1 Contacting SAS through Chat

Figure 4.10 below shows the participants contacting SAS through the online chat box. The Y axis shows the point scale from 1 to 10 and X axis shows the number of respondents. There were a total of 96 participants responding to this question and the measuring scale was from 1 to 10: Very dissatisfied to very satisfied. It shows that 41 percent of the respondents are very satisfied or satisfied about contacting SAS through online chat; and 20 percent of the respondents are satisfied. However, 28 percent of the respondents are neutral to this enquiry. The figures also show that only 29 percent of the participants are very dissatisfied or dissatisfied with contacting SAS through chat.
4.2.4.2 Contacting SAS through email

Figure 4.11 shows the participants’ email contact with SAS. The Y axis shows the point scale from 1 to 10 and X axis shows the number of respondents. There were a total of 90 participants responding to this question and the measuring scale was from 1 to 10: Very Dissatisfied to the Very Satisfied. It shows that 54 percent of the respondents are very satisfied or satisfied when contacting SAS by email, 26.67 percent of the respondents are neutral and 18.9 percent of the participants are very dissatisfied or dissatisfied with email contact with SAS. The satisfaction level here is higher than using the on-line chat feature.

Figure 4.11 Contacting SAS through email

Figure 4.11 represents the participants contacting SAS through email. There were 96 participants responding to this question and the measuring scale was from 1 to 10: Very
Angry to very Happy. The result shows 62 percent of the respondents are very happy and 52 percent of the participants are happy with contacting SAS via email. This is higher than when contacting SAS through the chat box. However, 25 percent of the respondents are neutral to this enquiry.

4.2.4.3 Contacting SAS through Telephone

![Bar Chart](image)

Figure 4.12 Contacting SAS through Telephone

Figure 4.12, presents participants contacting SAS by telephone. The Y axis shows the point scale from 1 to 10 and X axis shows the number of respondents. The pie chart shows that 50 percent of the respondents are very satisfied or satisfied when contacting SAS by telephone, 23 percent of the respondents are neutral and 25.5 percent of the participants are very dissatisfied or dissatisfied contacting SAS by telephone.

4.2.4.4 Contacting SAS through Eva

![Bar Chart](image)

Figure 4.13 Contacting SAS through Eva
Figure 4.13 presents the participants contacting SAS through Eva. The bar chart shows that on average 57 percent of the respondents are very satisfied or satisfied about contacting SAS through Eva, 20 percent of the respondents are neutral to this enquiry and 21 percent of the participants are very dissatisfied or dissatisfied when contacting SAS through Eva.

The results show that respondents using Eva have almost the same level of satisfaction as when using the Web, telephone and email. Chat is ranked last, as is seen in Figure 4.14.

![Bar Chart](chart.png)

**Figure 4.14 Respondents using of four different services of SAS**

More than 55% of the respondents are satisfied or very satisfied respectively (general experience) with the dialogue via SAS Eva and “knowledge and courteousness” (62%), “ability to meet knowledge needs” (58%), “meet expectations” (52%). This shows that over half of the respondents are generally satisfied or very satisfied with Eva’s service and a slightly more pleased with the Eva’s knowledge and courteousness. Overall, 69% of the respondents are willing to contact SAS via Eva again.

Respondents who are using Eva are equally satisfied and very satisfied when using Eva/Web, telephone and email. Chat, however, is ranked last. Percentages of Eva users that are satisfied and very satisfied with each channel are as follows: Chat 39%, email 50%, Telephone 50%, Eva/Web 55% and web 52%.
Figure 4.15 Respondents use of five different channels

Figure 4.16 Eva - problem graph
4.2.4.5 Targets Eva

The improved targets of Eva are to make her part of the webpage not have her as a separate window. In addition, she is to be complimenting the information provided on the web page as well as complimenting the other tools of communication, such as email, chat, telephone. At the same time, Eva could provide full details for travel suggestions. Furthermore, it should be made possible for customers to print out the conversation dialogues they have with Eva so that they can save the logs for future reference. Another improvement target could be that Eva’s opening phrases could be modified according to specific situations. Figure 4.17 shows the target graph of Eva to better serve customers and SAS itself in saving costs.

Figure 4.17 Eva - target graph

Based on the workshop using the Co-Design technique as shown in Figure 3.3 the researcher gave feedback to SAS to redevelop Avatar Eva especially in five areas: 1) dialogue; 2) interactivity; 3) synonyms; 4) knowledge: questions and answers to the customer and 5) position of the Eva.

Since the first two suggestions are expensive and time consuming, SAS’ decision makers considered the third and fourth suggestions; thus, the company re-developed Eva’s synonymous and knowledge. This helps their customers to get correct answers for their enquiry and enables them to navigate according to Eva’s suggestions. However, the position of the Avatar needs to be changed. For instance, when Eva answers queries on bookings and follows to the booking webpage, suddenly Eva disappears, which creates difficulties for the customers.

4.2.5 Dialogue Analysis (log analysis) after changes

In July 2011, the researcher carried out a log analysis to see the differences and the improvements in Eva’s service to SAS clients and customers. There were more than 2500
dialogues recorded between Eva and the customers. The researcher applied the same log analysis as in the previous one done before the changes were made to Eva. For this study, 100 dialogues between customers and Eva were selected. Table 4.10 shows the successful dialogues.
Table 4.10 Successful dialogues with Eva after the changes

<table>
<thead>
<tr>
<th>#</th>
<th>Questions from Participants</th>
<th>Eva Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tickets to Bangkok?</td>
<td>You have questions about Bangkok. The links below you can read more about attractions, offers and when we fly to Bangkok</td>
</tr>
<tr>
<td>2</td>
<td>Vacancies available jobs within the SAS Group.</td>
<td>This can be found on the page I opened up here on the side. Good luck! SAS. OmSas</td>
</tr>
<tr>
<td>3</td>
<td>I need help creating a profile. How do I?</td>
<td>Here, on the side, I have opened a page where you can create your profile. If you do not have some of the following information in order to create the profile, click below.</td>
</tr>
<tr>
<td>4</td>
<td>I forgot my username, how do I find out?</td>
<td>The user name is unique and consists of 3-10 characters. It's something that you choose when creating your profile. In order to give out your username, we need to prove your identity. You have the opportunity to chat with us every day at 7:00 a.m. to 22:00. There you can ask your questions directly to us</td>
</tr>
<tr>
<td>5</td>
<td>Where do I book youth travel?</td>
<td>I open a page here on the side where you can book both the youth and student tickets</td>
</tr>
<tr>
<td>6</td>
<td>Which trips can I book online?</td>
<td>You can book most types of tickets on the SAS website. In case you are unable to book a ticket via the Internet, you will be asked to contact SAS or your travel agent</td>
</tr>
<tr>
<td>7</td>
<td>Where do I find my points balance?</td>
<td>It can be found when you login and then select &quot;My EuroBonus pages.&quot; I open the page where you log on</td>
</tr>
<tr>
<td>8</td>
<td>Why do not I get points on some domestic routes?</td>
<td>According to the decision of the Market Court EuroBonus points may be earned on domestic routes where SAS and Skyways compete, it may not be used for bonus trips or other offers</td>
</tr>
<tr>
<td>9</td>
<td>Can I have a computer as hand luggage?</td>
<td>On your trip you bring a piece of hand luggage. It's fine to take a computer instead of another hand luggage as long as it stays within the dimensions 23x40x55 cm and weighs no more than 8 kg</td>
</tr>
</tbody>
</table>

The above table shows that the service provided by Eva has improved as she is able to answer more questions. However, there are still questions Eva is unable to answer correctly as shown in Table 4.11.
Table 4.11 Failed dialogues after the changes to Eva

<table>
<thead>
<tr>
<th>#</th>
<th>Questions from Participants</th>
<th>Eva Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I booked a trip just now but got no email about it. How do I do?</td>
<td>I find it hard to understand too complex issues. Try to ask one question at a time. If you wish, you can chat with anyone on the Internet support that may help you</td>
</tr>
<tr>
<td>2</td>
<td>How do I register when I got home my euro bonus code?</td>
<td>you have questions about registering. The issues I have been dealing with the registration string</td>
</tr>
<tr>
<td>3</td>
<td>What is meant by the post?</td>
<td>I understand that you are wondering what something means. Unfortunately I have no good answer to your question</td>
</tr>
<tr>
<td>4</td>
<td>When changing to a higher price category in the Economy prices will it show the difference between the current price paid and the new one?</td>
<td>If your trip is more than 2 days from now, you can use our form or call SAS Telephone sales to help with the inquiry of rebooking</td>
</tr>
<tr>
<td>5</td>
<td>You have any questions concerning senior citizens</td>
<td>I have the most knowledge about luggage, payment, check-in, EuroBonus, profile / login and questions about our website</td>
</tr>
<tr>
<td>6</td>
<td>I have made a booking and was named Weststroem instead of looking for West Power. I cannot register on the trip. Can you fix it?</td>
<td>I find it hard to understand too complex issues. Try to ask a question at a time. If you wish, you can chat with anyone on the Internet support that may help you</td>
</tr>
</tbody>
</table>

The failed dialogues with Eva mainly concern two factors; namely, Eva’s lack of interactivity and her lack of dialogue capability,

The researcher and SAS requested feedback of Eva’s service and dialogue with customers, Figure 4.18 shows the feedback on Eva’s service provided to the individuals while in dialogue.

Figure 4.18 Participant feedback on Eva Service after dialogues in October 2010
Figure 4.18 shows that 12 percent of the participants are satisfied with Eva’s service provided during the dialogues and 58 percent are neutral. Although 18 percent of the participants are glad and happy about Eva’s service, 7% would prefer to have clearer information from Eva because while asking Eva questions she was not able to answer them and were instead referred to other answers. This means inconsistency and lack of knowledge.

![Pie chart showing participant responses](image)

Figure 4.19 SAS Dialogue survey after the workshop

Figure 4.19 shows the participants perception of Eva’s service after modifications. There is a jump in the percentage before and after using the Co-Design technique. The above figure shows that 37 percent of the participants are happy about the way Eva responded. If compared to the situation before, this percentage was 4% (see figure 4.5) and after the workshop, participants perceived a huge improvement. It must be noted that the respondents are not the same individuals in the activities before and after. This increase of customer satisfaction has a direct impact on the costs for SAS.

4.2.5.1 Channel Survey after the changes

Based on the feedback and suggestions considered by SAS, the researcher again carried out a channel survey to understand the impact of the redevelopment of synonyms and the knowledge of Eva. This survey was carried out in the months of June to August 2011.

The researcher suggested to SAS how Eva could be more helpful and generate customer loyalty to the company so they could be front-runners in the airlines business. Some of the ideal scenarios that Eva could perform are:

- In order for Eva to better understand the clients’ questions in everyday language, more synonyms should be added to Eva’s ‘vocabulary’
• In certain areas (e.g. Eurobonus Frequent Flyer Program) Eva should be given more knowledge, i.e. be able to answer more questions

• When contacting Eva, she must give the same answers as when, for example, browsing the web page or calling the call center. The consistency of information between channels must be safeguarded

• Eva could help passengers in all their booking arrangements and at the same time SAS website could be interactive for booking, including previous and most frequent trips that passengers have made in recent years.

• When booking flights using Eva, she could inform customers on how much luggage they are able to bring on each flight by showing the baggage allowance during the booking process.

• Since it differs on flights and airlines, Eva could connect to relevant airlines’ online databases and she could use statistics for consumers’ web pages of the flexibility and ‘leniency’ of each airline. She could also show the fee for overweight luggage

• In Eva’s booking form, passengers could also choose to use points for themselves and for family members. In addition, Eva could show the list of available flights to passengers with kids and where flights are available using points

• Once Eva knows that the passengers are minors, she could also allow the passenger to click in the check box for ‘unaccompanied child assistance’. Eva could do this by connecting directly to SAS’s flight databases

• Eva could also inform passengers that there are many games and movies on the flight as well as Skype and adobe connect available on the flight travelling between two cities, thus enabling passengers to make voice or video calls

• Eva could help to arrange a new trip if passenger has previously done the same trip by clicking on that trip and changing the dates. All possible flights around that date could be shown to the customer, including flights with other companies with a lower price. This will enhance customer loyalty because SAS not only cares about their flights but also understands budget requirements of customers.

• The service could include information from tax authorities about different ways to reduce taxes. At this point, Eva could inform passengers about new possibilities to upgrade, to select seats with extra space or to upgrade to a hot meal even if they travel in economy class. Further, Eva can inform about the estimated flight time, connections, price and model of plane and selected service options

• Eva could also be able to connect to SAS’ frequent flyer point system and all the Star Alliance partner airlines. Eva can do this by first checking the client details to assess whether he or she has enough points (or offers the client to buy points for cash) and then she could suggest different alternative flights using these points according to clients’ requests. She can also warn clients when points are due to
expire; 12, six and three months beforehand to make sure that members do not lose their points.

- Additionally, Eva could connect the passengers to website of different embassies to download relevant application forms and fill in relevant information for her customers. As her clients have the option to log in using their e-ID (the same one as Swedish citizens use for their tax returns) she can also apply with a digitally signed visa application on customer’s request. Eva could also fill in arrival cards for the countries where this is applicable. This will reduce the passengers’ stress of filling in the right information and trying to read the small text on the arrivals cards, and prevent customers from worrying about possible problems at passport control.

- Eva could also help the passenger to arrange a rental car with a navigator to make sure they make it safely to their destination. Eva could connect with all the major car rental companies and a few local ones as well, allowing plenty of flexibility in price and quality. In addition, members could be given the option to use frequent flyer miles instead of ‘cash’ as payment.

- Customers can also receive a message that it is possible to be upgraded to business class if using some extra points.

If travelers are busy, Eva could help with all the travel arrangements by guiding customers through an online form showing their different travelling options. Eva could show them the last time they flew with flight details: flight name, flight number and the destination; for instance, flight is Lufthansa or Thai. This could help passengers to make simple adjustments to change the dates for this trip. Eva can present other choices to the passengers and inform them of the technical details of the flight, such as Boeing or Airbus. Eva could get all the up-to-date information from the respective airlines flight info databases and web pages and present this during bookings according to passengers preferences and also by email. Eva could also provide updates on changes and opportunities based on passengers travelling patterns and preferences.

Eva plays a crucial role in terms of cost effectiveness for the company as she can deliver information at a much lower cost. This can also be compared with the increase in the acceptance of Eva, which is likely to lead to an increased use, see Figure 4.20 usage of five different channels in contacting SAS. The figure shows that there is about a five percent increase in the usage of Eva when compared to before. A slight increase in the usage of Eva helps the company in saving costs when serving current and potential customers.
4.2.5.2 General Experience from the Dialogue with Eva (after changes made to Eva)

The researcher applied similar CSI method after the workshop on the services provided by SAS. Figure 4.20 presents the respondents perceived general experience from the dialogue they had with Eva, which was carried out from June to August 2011. There were 114 responses to this question with a scale from 1 to 10: Very dissatisfied to very satisfied. The X axis shows the point scale from 1 to 10 and Y axis shows the number of respondents. Applying the CSI measurement, the average perceived experience of respondents regarding their general experience from the dialogue with Eva shows an overall satisfaction level of 7.21 from a total of 10. Calculating CSI average 7.21: \( \frac{(10 \times 2) + (12 \times 4) + (25 \times 6) + (33 \times 8) + (34 \times 10)}{114} \).

In addition, from Figure 4.21, overall it shows that 69 percent of the respondents are very satisfied or satisfied with Eva’s ability to meet the participants’ expectations, 25 percent of the respondents are neutral and 22 percent of the participants are very dissatisfied or dissatisfied regarding customers general experience from the dialogue with Eva.

4.2.5.3 Impact of Co-Design on Eva’s performance

Co-design activities have helped Eva to improve performance by SAS implementing suggested changes by researchers. SAS improved the technical parts of Eva, especially the synonyms and the knowledge (better ability to answer questions in certain pinpointed areas). These improvements are shown statistically throughout the comparison of the channel surveys before and after. Figure 4.21, shows respondents’ general experience from the dialogue with SAS through Eva before and after the Co-Design activities carried out during 2010-2011. The X axis shows the number of respondents and Y axis shows the point scale from 1 to 10.

The figure indicates that there is an increase in respondents’ satisfaction level comparing before and after situations. However, it is noteworthy that in the two surveys, respondents
are different and the total number of respondents differed. In the ‘before changes’, there were 97 respondents and in the ‘after changes’, there were 114 respondents stating their satisfaction level in regards to their experience with Eva. In the CSI scale there is an improvement in respondents experience with Eva.

Figure 4.21 General Experience of Respondent toward Eva before and after the changes using Co-Design

From the scale of 1 to 10: Very dissatisfied to very satisfied, the above Figure 4-21 shows that there is a 14 percent increase on the satisfaction levels when comparing Eva before and after changes are made to her. The above figure clearly indicates that respondents’ satisfaction clearly increased.

Figure 4.22 below shows the comparisons of respondents’ perception on Eva’s knowledge and courteousness before and after changes are made initiated by Co-Design. There were a total of 97 and 110 participants respectively responding to this question before and after. From the scale from 1 to 10: Very dissatisfied to very satisfied, the graph shows that there is an increase of 11 percent in responses to very satisfied about Eva’s knowledge and courteousness. There is no change in the level of satisfaction. However, two percent of respondents are neutral before and after changes are initiated to this enquiry.
Table 4.12 Success and Failure factors from the Case Studies

<table>
<thead>
<tr>
<th>#</th>
<th>Index</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Success</td>
<td>Strong Knowledge Management: SAS strong knowledge management team has been working with the Avatar to ensure its longevity and to continuously add knowledge and functionality to the product. Correct answers to most relevant questions: Answers to questions are continuously added ensuring that users get correct and timely answers making sure that call center and other channels can be unloaded.</td>
</tr>
<tr>
<td>2</td>
<td>Failure</td>
<td>Lack of preparations and too early launch: Elin was launched too early which meant some users that tested the product early simply were not willing to try it again after improvements were done due to an early disappointing experience. The main reason for the lack of preparations was that the staff was not aware of the huge investment in time to be able to launch a strong Avatar. Lack of ‘knowledge’: When the number of answers available in the database is too small then it limits the purposes of the Avatar. Low search engine capability: When the search engine capability is too low another use for the Avatar is eliminated as the users then do not find enough of what they need on the web page. Incomplete answers: Elin often only gave very basic and incomplete answers which resulted in users having to find out information for themselves by using the web page or even having to make a call. Lack of synonyms: If the users ask the question ‘the wrong way’ there will not be an answer to a given question and the user is forced to phrase the question in words that the Avatar will understand, rather than the Avatar being intelligent enough to understand the user.</td>
</tr>
</tbody>
</table>
### Table 4.13 Analysis of the Case Studies

| #  | Cases                        | Test and Analysis                                                                 | Log Analysis                                                                                     | Staff Interviews                                                                                     | Citizen Workshops                                                                                           | Channel Surveys                                                                                           |
|----|------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 1  | Mark Municipality 2010-2011  | Some lab based ideal scenarios were created and the Avatar of Mark Municipality was then tested to see how well it could solve problems | Two full weeks (one in spring and one in autumn of 2010) of logs from real interaction with the citizens were analyzed. | Key staff and decision makers, both public servants and political appointees to investigate and learn about the Avatar and its procurement and implementation | Besides analyzing logs, workshops were carried out with a number of different groups of citizens where they were able to help improve and pinpoint problem areas of the product. |                                                                                                          |
| 2  | SAS and Artificial Solutions 2010-2011 | SAS Avatar was tested in a similar way to the IKEA and Mark cases.               | Two full weeks (one in spring and one in autumn of 2010) of logs from real interaction with the citizens were analyzed. | Key staff and decision makers, were interviewed to investigate and learn about the Avatar and its procurement and implementation | Workshops were carried out with a number of different groups of customers where they were able to help improve and pinpoint problem areas of the product. Approximately a week after the workshops the respondents were also interviewed individually to make sure that individual input and reflections were not missed. | An online survey was launched on SAS webpage www.sas.se to get the views from the respective users on all the channels; namely, Telephone, Email, Web Page, Avatar and Live chat. This was to learn which factors in which channels were more or less appreciated and to help the customer find a balance and when to prioritize what features in which channels towards the customer. |
Chapter 5

Conclusions and Recommendations

This chapter concludes the findings from the case studies and provides answers to the research questions. At the same time, recommendations are also given for further consideration and research.

Based on the analysis in Chapter 4, the researcher has concluded the objectives as follows:

Mark’s Avatar could have retained Elin if the researcher was able to intervene earlier using the Co-Design technique following the four steps.

5.1 Co-Design and actability - developing e-services with special focus on Avatars

i) To identify limitations of Avatars as a Self Service Technology

From the two cases of Mark Municipality and SAS, it was determined that information technology plays a significant role in providing an organization’s services either to their citizens in the case of Mark or to their customers in case of SAS.

The first study of Mark Municipality clearly shows numerous examples how Avatars as Self Service Technology fail to reach a level of actability acceptable for the defined user groups. In this first case, all four steps were not followed, which led to the termination of Avatar Elin. In the case of SAS, all four steps of the Co-Design were used, which resulted in the success of customers using Avatar Eva. Eva’s services are still available and appreciated by the SAS’s loyal old customers as well as new and potential customers.

ii) To demonstrate strengths and limitations of the Co-Design technique in comparison with Participatory Design and User Centered Design

The results from these two cases also demonstrate the strength and limitations of Co-Design. The strength is that the method obviously can improve the actability of Avatars as a Self Service Technology as in the SAS case. The limitation is that Co-Design in this form is a slow process and it has to be applied early or the organisation has to be prepared for rather slow process for progress.

The study found that actability and Co-Design techniques are effective instrumental tools in developing e-services, especially Avatars. An Avatar placed on the web pages of the company or organization helps its citizens/customers to find information on the web page and answer their queries.

The comparison with Participatory Design and User Centered Design shows that it may be faster to get results as less energy, time and other resources are spent on the different groups of stakeholders. However, this also means a risk for less endorsed solutions which in turn can mean that it is harder to implement and get the full positive effects of the solutions developed.
iii) To evaluate the effectiveness of Co-Design for developing avatars for e-Services

In regards to employing the Co-Design technique in developing e-services through Avatars, its impact is satisfactory to the customers. The two cases show how to successfully develop Avatars following the four steps of Co-Design (see Figure 3.3).

iv) To identify the effect of Co-Design on stakeholders within and without the organisations

As described in the reflections (see section 5.2), with the use of the Co-Design method stakeholders adapted the method for other uses within and without the organisation. Even if this is not verified in a strong way it indicates the possibility of an extended Co-Design model. Early attempts in this direction can also be found in (Forsgren and Albinsson, 1994).

5.2 Summary and Co-constructive reflections on the method used

In this case study, the application of a Co-Design approach is described for improving the service quality of SST Avatar Eva as part of the web portal of the company Scandinavian Airlines (SAS). This section presents some reflections on the method used. Such reflections can also be regarded as a self reflective activity which could possibly be added as the fifth type of workshop activity in the Co-Design model. In this case, the reflections are based on workshop presentations at two international conferences (Alm and Forsgren, 2011; Alm et al., 2011)

1) Co-Design of the problem situation and ideal scenarios (In my view, this is a problem).
2) Co-Design of one or a few specified useful views with implementation (I'd like to have it this ideal way).
3) Co-Implementation of selected integrated solution (I hope these solutions will get me to my ideal way)
4) Co-evaluation and feedback based on key stakeholder views (Did “these solutions”, bring me closer to my ideal way?).
5) Co-evaluation and redesign of the used Co-Design model (Can we improve the used Co-Design model?)

Following this extended model the Co-Design process with Co-Design workshops can be demonstrated as an important element. In the process created, co-created views can be transformed into suggested improvements of the actual services performed by the Avatar and also how these improvements can be implemented and later evaluated in other Co-Design workshops. The case study also demonstrates how other complementary techniques such as log analysis and channel survey can be used as input in the Co-Design process.

During the workshops, a number of problems were found and discussed. For example, it was found that when Eva is not a part of the web page but a separate window, the users tended to get confused. Sometimes, Eva also gives incomplete or limited answers and answers lack time information and interactivity. In addition, some answers are confusing (e.g. Greenland / Green flights). Another problem was the inability to print a dialogue log with Eva and live chats and it cannot support the customers throughout the booking process. Customers are not sure how to ask Eva the questions. Moreover, inconsistent answers from web pages and Eva create a lack of dialogue capabilities and do not handle sequences of
related questions. Eva sometimes gives only some information, not full answers. Finally, Eva’s lack of synonyms impedes her ability to handle a full array of questions, and thus she is most effective when responding to simple questions.

Many of these problems were transformed into service improvements according to the Co-Design approach. This was important for the improvement of avatar service quality.

Even more important was that SAS adopted the Co-Design approach for continuous improvement of the Avatar performance. It was also discussed how this approach could be expanded to other services offered.

Furthermore, as an important added value for the SAS organization, it could be noticed that staff who participated in the workshop seemed to be inspired to use the Co-Design technique in other parts of the operations (e.g. Call center & online support, Flight Scheduling and Sales & Marketing). The Co-Design spread and evolved like a benign natural bacteria within and without (e.g. to Artificial Solutions) the organization leading to improvements in many areas.

These findings are illustrated in the model below:

![Extended Co-Design Model](image)

**Figure 5.1 Extended Co-Design Model**

The model illustrates how the Co-Design inspires other staff to use it for other functions and uses in their organization. In fact, staff are Co-Designing the Co-Design to fit other applications. In a number of years, the original Co-Design model will perhaps look very different and may even be called something different. This will then mean that the staff themselves will be researchers and developers reducing the dependency on academic
involvement in each phase of the Co-Design. This would be an understandable and natural evolution in the development stage.

The observed results open a new set of questions framing the relation and transformation between Co-Design as a research approach for knowledge creation and Co-Design as a method for innovation and service quality improvements.

The differences between Co-Design and its extended model is further illustrated and shown in Table 5.1.

**Table 5.1 Co-Design / Extended Co-Design comparison**

<table>
<thead>
<tr>
<th>Item</th>
<th>Co-Design</th>
<th>Extended Co-Design</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Co-Design of the problem situation and ideal scenarios including a first idea of useful views possible to implement in integrated solutions (Step 1: In my view, this is a problem).</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>2) Co-Design of one or a few specified useful views with implementation integrated solutions and related measure of performance systems (Step 2: I’d like to have it this ideal way).</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>3) Co-Implementation of selected integrated solution and related measure of performance systems (Step 3: I hope these solutions will get me to my ideal way)</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>4) Co-evaluation and feedback based on key stakeholder views (Step 4: Did “these solutions”, bring me closer to my ideal way?).</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>5) Reflection A fifth type of reflective Co-Design workshop activity</td>
<td></td>
<td>✔️</td>
<td>How can the Co-Design process itself be developed in order to be more effective in producing knowledge and services</td>
</tr>
</tbody>
</table>
5.3 A note about future work

This study contributes to new knowledge in information management and will help IT companies to be more cost effective in providing SSTs, with special focus on Avatar technology.

The Co-Design model in this case is applied on Avatars (an SSF) and it has been successfully applied in both private and public SSFs (Forsgren et al., 2012). What has not been shown in these cases is how the model can be developed as a base for networks between organizations or companies. A few attempts have been made to propose such networks (Forsgren et al., 2005) and the EU-project ‘Smart Cities’ can be regarded as an early case in this direction with a network of cities applying the Co-Design model (SmartCities, 2013). However, a scientifically based case with a Co-Design network between different cultures is missing as far as this researcher is aware. Of course, it is possible to regard global companies like Google, Microsoft and Ikea as intercultural networks themselves. Taking this perspective, there is the well-known example of the culturally dependent design of the Ikea catalogue. Every year the company tries to match the changes in cultural differences in the design of their catalogue. IKEA has been applying the Co-Design approach but to what degree it is applied in the design of the catalogue as an SST, is not known by this researcher.

The example shows the possibility for such international Co-Design networks between cultures and since this researcher lives both in Sweden and in Thailand it could be a natural step to try to establish such a Co-Design network exchange between these two countries. This is also in line with the extended Co-Design model presented in this thesis.

Such a project could include a joint project with SAS, IKEA, Artificial Solutions (supplier of Avatar to both) and researchers from Sweden and Thailand and could greatly benefit both industry and academics.

This study supports IT infrastructure in a hands-on approach dealing with customers at the same time and it may give benefits to researchers in the IT field. Furthermore, this research could enforce current information management research. Academics and research scholars may use it as a model for further study, or use the Co-Design in their own research.
References


Winograd, T. (1996). *Bringing design to software: Addison-Wesley, Boson, MA.*


Appendices

Below, please find a number of appendices relevant to the data collection of the case studies
The Artificial Solutions story:
It started 2004 with the split up of SAS as SAS Sweden, Norway, Denmark and International and as newly appointed IT Manager for SAS Sweden I was contacted by Kent Hilly, Internet support, Örnsköldsvik.

We discussed **ideas around automated customer services**. How can we minimize the number of calls? **Voice controlled answer system** when on queue waiting at call center. We looked at different supplier and their solutions for Voice Provider and Dialog Tech (?). Can we **electronically answers questions** like this?

We looked at what was available on the market. Internal Voice Response

We saw a wider scope and to have one common database for all. We also saw different Avatar solutions. Due to other more pressing matters we waited until around 2005.

We brought in a consultant (Per Hultman) who was primarily looking at online sales.

Per and Annelie Nässén who was in charge of the call centers wrote an agreement with Artificial for a pilot test of Chat and Avatar solution. The Avatar knowledge database was mainly focusing on Profile and login, payment and Check-in issues. The test was carried out for 6 months until July 31, 2006. The cost was SEK 400 000. The target was for call center staff to be able to handle 20 percent more volume by using the chat product from NTR (sold by Artificial Solutions) and the digital assistant (avatar) to be able to handle 2500 customer ‘calls’ / month.

We had limited tools to measure activities on the homepage at that time and we didn’t really now our ‘look to book’ ratio

Historically we have seen a falling trend in numbers of calls to customer care and internet support call centers even before the implementation of chat and the Avatar. So it’s hard to point it out as a single factor. One have to take the on-line migration to account and SAS change of on-line booking dialog.

We could see early in the pilot that calls to both were decreasing. Our findings clearly showed benefits with these solutions.

I was asked to make an agreement with Artificial, but not happy about the fact that we were negotiating with only one party. 

When we summarize the business case Artificial Solutions presents highly optimistic numbers that we didn’t really believe in.

Per Hultman stops as being externally acquired E-commerce manager. Later on replaced by Anders Signell. Annelie Nässén found a new position within SAS Sweden and was replaced as call center manager by Carina Göransson.
The final business case was a lot less optimistic. Costs were even a bit higher than the benefit. Carina estimated to only save 2-3 FTEs (full time employees) the first year. Ultimately 4 FTE with total effect of 1.8 MSEK / year.

After the test we could see that the chat did improve efficiency and Eva gave 16 000 answers / month compared to budgeted 2 500. but the term answer is different to how we see it. Artificial even include Eva’s opening phrases. According to us an answer is only an answer if it’s given to a direct question by a user of the avatar.

After the pilot we temporarily rented the solution from Artificial at SEK 146 000 / month. We didn’t want to take it away from the homepage during our negotiations.

We could commit to 4 FTEs in savings. This is more about choosing an on-line strategy. Do we believe in on-line sales as our primarily sales channel and if so can we support our customers by using this technology?

We have afterwards proved we can save more. We decided to go for it even if the case was negative, as we believe in automation.

The final business case estimated one full time staff (Pelle Westerlund) on our side to work with Eva’s knowledge database. Purchase of 100 parallel dialogues, maintenance and support, hosting of the application and the database provided by the supplier. Further more, Artificial were to develop 25 knowledge units / month in order to widen the Avatars knowledge base. As they spent lots of work in the pilot we also paid a one time fee for the knowledge developed during the pilot project.

We quickly reached our maximum capacity for the live chat application so we focus on chat only when booking and actually selling tickets. We also moved the phone number deeper in the structure web page in order to make the customers try out the Avatar but not to deep, in order not to upset the customers.

Currently we have around 30 000 dialogues per month and around 70 000 given answers (net when all background noise is deducted).

56 000 of the answers are SAS relevant and 23 000 classified as first time resolved, meaning that the customer was given the correct answer to the given question. These are conclusions from analyzing logs from Eva’s statistics.

We also measure when Eva manages to send customers into sales specific situations. She actually sells pretty well.

In may 2006 we had only 10 000 dialogues / month so it’s growing and customers are using her more and more.

Most common question areas are Eurobonus, travel with SAS, luggage, Check-in.

At minimum effort we want to give best possible answer. Mostly Eva delivers good answers. My job is to get savings or gains from these kinds of solutions.

We have only received positive feedback from customers.

I believe that our cost is around 70-80 SEK per call at manual call center.

Malin Selander, Customer Relations is doing the NKI surveys. A large survey is done once per year.
Artificial has delivered what they promised and the application has excellent stability and performs well.

We have not seen any avatars in any other airlines. So far other external airlines have not contacted me.

We give an answer when the customer wants an answer without any waiting time. For us we have managed to automate and save money. Also, we also have to ask ourselves, what is the value of giving quicker answers in general not only what we save on less call center staff?

We still want our customer with the help of voice recognition technology get answers from Eva’s knowledge database when waiting in line at the call center. We want one knowledge database only.

We have call center in Luleå, Örnsköldsvik and Östersund. As more of our sales are done on-line it’s likely to see a consolidation of these over time.

Eva gives a good answer in 80 percent of cases.

When it comes to the problematic of comparing NKI it is not science fiction and we will see more of this.
Carina Göransson 30-July-10

General Questions:

- What does SAS do? What is your core business? (strategy/goals/values)
SAS Flies people, with high focus on frequent travelers. SAS Sweden is primarily a Sales company (this will change after we have an AOC-organization in place), it is SAS Group (owned in parts by Sweden, Norway and Denmark states and private investors through stock exchange)

- How do you make money?
We are good at controlling available space. We are however, a victim of history with strong unions, high salaries etc.

- Who are your main stakeholders?
We are a part of the public infrastructure and are partly governmentally owned. The Society sees SAS as a responsibility to serve the citizens but receives no government support.

The country of Sweden, Denmark and Norway is a 50% owner of the company.

- What is good service according to SAS?
Punctuality, proactive interaction with customers, on the customers conditions and to facilitate their needs.

Eva (Avatar), web page and customer relations Specific Questions:

- Please tell me what you do at SAS?
I am the Call Center manager. We currently have three call centers located in the northern parts of Sweden.

  - how do you come in contact with / work with:

    c. Eva?
    A member of The Steering committee ‘Styrgruppen’. Eva is developed by the Work Group (‘arbetsgruppen’) on a daily basis, Anders Signell and Carina Göransson ‘owns’ it

- Do you have any suggestions for improvements?
We should try to use info from Eva’s database in other channels as well, as lots of time and other resources have been invested in this.
Eva is a 'Search engine' and not a linkage system

- What is Eva’s role in relation to the manual customer service?
To see how well Eva really works I would like to close her down for a week to see if it really work / take away FTE’s (full time employee) costs?.
We have moved our online support to the frontline.

NKI Specific Questions

- Could you tell me about your NKI-measurement?
  The NKI, Nöjd Kund Index (Customer Satisfaction Index) has been a Head KPI (Key Performance Indicator) in the test Phase. An interesting fact is that NKI has not improved as much EVA has improved itself!

- What do you do with the results?
  We use the results as a guideline.

- How do you make a dissatisfied customer satisfied? Could you give me an example?
  When an answer (even if it’s correct in itself) is not satisfactory, it is important to Pedagogic, and to listen. We sometimes need to use more flexibility and bend our rules a little bit in special circumstances.
Interview 30-July-10:

Karl Lundstedt, Artificial Solutions, Project manager www.SAS.no project www.SAS.se project manager 2006- Sep 2007

Among other things my job is to carry out analysis of the current situation (Nuläges analys)

The Barcelona office support many more languages than Stockholm office For example, IKEA has avatars in 14 languages, which is maintained by Barcelona office.

Artificial solutions bought Kiwi Logic from Hamburg around 2006
Eva was installed in 2006
Per Hultman was our contact and he was working as a consultant for SAS.

We would like to see more cooperation between SAS.no and SAS.se team. Pelle Westerlund is also pushing for this.

We call our concept Customer Service Optimisation (CSO)
Eva is an avatar or a VDA (Virtual Dialogue Agent)
She can handle simple questions and then forward to the right channel.
All information is kept in a central knowledge database

We are currently working on Info Catcher (form filler) and a prototype VSA (Virtual Speech Agent) which reuses current knowledge database

VDA (Eva) challenges/possibilities:
1. Interaction with web pages. E.g. Current position
2. Integration with other systems. E.g. Change a booking
These functions can help to even out the workload solve issues faster?
- How well does Eva work in your opinion:
Eva on .se page is very good, but .no page version is still very new and work in progress.

Do you have any suggestions for improvements?

Eva gives a good answer in 80 percent of the cases, but the statistics tool is not good.

NKI Specific Questions
- How do you measure quality in what you do?

1. Direct feedback - did you get a satisfactory answer?.
2. Eva Survey 1 week per month

- Could you tell me about your NKI-measurement?

We don’t have any of our own NKI Value models at Artificial Solutions as far as I know.

We are not sure, but it is possible that SAS is currently the only airline using and avatar.
Interview 30-July-10, Artificial Solutions Office in Stockholm

Andreas Greven, Project Manager SAS ‘Eva’ avatar project
Studied Systems Science (Systemvetenskaplig Linje) in Umeå, Has earlier worked as education consultant and project manager.

Working for Artificial Solutions for 2 years.

The EMS could be a good solution for SAS as they already have developed the knowledgebase and the knowledgebase already built will be re-used. The success of the EMS is depending on if SAS still wants the email channel to be open in the future

At Artificial we are also currently building a VSA (Virtual Speech Agent), and we will see in the future if SAS are interested in this technology.
The VSA is an existing product that has been implemented in customer projects. VSA Express uses logs from existing projects like SAS to shorten the implementation time

Eva (Avatar), web page and customer relations Specific Questions:

- How do you come in contact with / work with Eva?

  I Started with the Eva project Aug 2006. first as a consultant and then took over responsibility as Project manager from Karl Lundstedt. Initially it was more “me”, but as the project has progressed more of the hands on work has been moved to Marina in BCN, Barvelona office

- Could you tell me about your NKI-measurement?

  We at Artificial as far as I know do not have any specific models for NKI (customer satisfaction Index). What we do have, however, is a Customer Dissatisfaction Index (CDI), which is a very important tool to measure satisfaction as it gives a very good pointer to how many users are not satisfied with the answers they get. We can deliver techniques for “surveys” but it’s up the customer/SAS what questions that will be asked and how and when the survey shall be shown.

  Pelle Westerlund is doing certain customer satisfaction surveys through Eva and the homepage, but I think it’s not a full NKI, as it includes less detail than a ‘normal’ NKI survey.

  Eva helps to develop Sas.se as she can point out weak areas on the web page.
Interview Allan Lidforsen 14-Aug-10

Allan Lidforsen, IKEA project manager for Artificial Solutions since Jan 2008.

Joined Artificial in Jan 2008, so far mainly IKEA project, but also a little bit with the Norwegian mobile operator Chess.

I also have a pretty good overall picture all our major projects.

Expansion in Artificial is good even when world economy is generally slow so we are pleased with our current development.

Previously IKEA staff Aug 2001 - Dec 2007, but in close cooperation with Artificial since 2003.

I was working with improving customer service on internet and had a dialogue with Artificial Solutions. The goal was to use different kinds of electronic self service to increase customer satisfaction and save money.

IKEA implemented a Artificial Avatar as a pilot project in England 2003. They had many problems with the call center and other parts of customer service. The effect of the project was a decreased number of calls and the customers were happy. They could see on the logs that the answers to the customer’s questions were correct and relevant.

-How do you come in contact with SAS ‘Eva’?

I have no direct contact with SAS, but I know what goals and purpose SAS has with our products and that they have a relatively high conversion rate of sales generated through Eva.

NKI Specific Questions

- How do you measure quality in what you do?

IKEA has a well structured customer satisfaction survey system, qualitatively they interview customers when leaving the store.

We don’t have a as much structure for this on our electronic solutions. We have carried out 3 surveys as Ad Hoc solutions:

In England after the first pilot in 2003. We asked people who called the call centre 5 questions:

Whether they used the avatar, how they felt about the experience and If they were happy with the answers or not. This was done by IKEA England staff, not the global organization.

We had the same approach in France and Spain. Around 2004-2006. done centrally by global IKEA organization. None of these surveys were carried out by Artificial.

They all showed that around 55-60% were of the customer were very satisfied with the Avatar.

IKEA has a different way of doing things including how they deal with IT and they are normally very successful in their undertakings.
IKEA now has an avatar on all country sites which includes 14 languages

Another thing that I would like to add is that in many cases you have a situation and you want to improve it. You many times bring in consultants and technology etc. After a successful implementation, the operation has a tendency to not follow through and to keep improving this solution, instead you tend to step back and let the technology run on its own.

I believe we need to keep driving and pushing and not stop, to make sure that the change management in the progress is not stalled!

You must review the competence and how we distribute the work. The technology must be there and together with further analysis build an improved solution. We need technology updates and changes in unison with change management.
Interview Ulrika Hallberg, Marketing Department 30-Aug-10

General Questions:
- What does SAS do? What is your business?  
SAS Sells Air Tickets

- How do you make money?  
From Airline business in Sweden

- Who are your main stakeholders?  
Board, shareholders. SAS group

Market/Customers
Stock exchange

- How do you want customers to perceive SAS?  
SAS should be the Swedish people’s airline, top of mind.

- What expectations do customers have on SAS?  
Deliver a bit extra.

- What is good service according to SAS?  
Punctuality, good reception from staff

- What is good service according to you customers?  
The SAS customer is expecting exclusive service even when the flights are inexpensive, this is a bit different to what SAS wants as they want to deliver better service only to customers who pays a higher price for their tickets.

- Who are your main competitors?,  
Swedish Railway, low price airlines, i.e. Sverige Flyg

- Which are your main strengths compared to your competitors?  
SAS are trying to support Local upcountry sport teams by sponsorship (e.g. Kalmar FF) to really make people feel that they are the Swedish people’s airline.

Eva (Avatar), web page and customer relations Specific Questions:

- Please tell me what you do at SAS?  
I work as a Senior Officer marketing department.

- What does a typical day consist of for you?  
I do lots of Follow-ups on advertising campaigns and activities and Online banners + Eva  
We have a Editors meeting every Wednesday to sync all channels  
I also interact and coordinate with suppliers every Friday  
When times are good our work is more structured and when times are hard and funding is limited we do much more Ad Hoc activities  
My base is Sverigehuset (Airport Office), but I spend one day per week at Frösundavik office to get a feel for the mood around my colleagues.

Since we moved to Airport office we are much closer to the action and can even see the airport and the airplanes and we have better and closer access to our passengers.

Once or twice/ year we have a Check in event when we meet our clients and get a feel for how they perceive us as and airline.
In which ways do your customers currently communicate with you?
Chat, email, phone calls and occasionally written letters (mainly older people)

In which ways does SAS want to communicate with the customers?
More electronic (e.g. EVA) less others
We want our customers to use as Self help tools as possible
I continuously randomly read Eva’s dialogue logs. I believe the quality of the answers are generally good.

On Eva we perform monthly surveys. Running a week / month
In many ways Eva has simplified the info available electronically.

Which strategy does SAS have in when it comes to communicate with the customers?
We want our electronic tools to be more interactive.
We have been testing to modify Eva's opening phrases to new situation specific information instead of 'Hej Jag är Eva…' (Hi I'm Eva)
We also have an Eva mailbox.

Eva has around 4-6 percent conversion rate, which easily cover her own running costs.

On the web page you can:
Book
Get info,
check-in,
schedule,
book and buy hotel stays
buy insurance
Satellite page
Downloadable pdf's
and we even have a web shop

Which services would the customers like to do through the web page?
I believe it would be nice for people to be able to have a travelers savings account to provide for big birthdays etc.
Also, I would like to be able to sell electronic Gift vouchers.

I think Eva should be able to Check-in
People should be able to decide requirements (e.g. Food or not) already at booking.

- How do you come in contact with / work with:
  c. Eva?
  I am in ‘Arbetsgruppen’ (Work Group) with Pelle Westerlund, Andreas Greven (earlier Karl Lundin) from Artificial
  Biweekly we:
  -analyse logs and statistics
  -investigate areas of Eva’s ‘not understanding’
  -New Analysis categories
  -Old stats wrong.
- Auto-semi solved.

And various ad hoc activities.

The group is active and self-driven.

The Steering Group (Anders Hellsten, Carina Göransson, Anders Signell, Mikael Söderström (Artificial) and Andreas Greven (Artificial) are mostly dealing with policy issues.

We have different focus season by season.

- How well does Eva work in your opinion?

Eva is very good, but needs to continuously improve/restructure.
For example Eurobonus should improve.
And Eva should be able to handle Bookings.

When we work with Eva:
Artificial ads questions and question IDs
SAS can only modify existing question.
This is a good way to work.

We should be able to use info from Eva’s database in other communication channels.
Eva is a good ‘Search engine’.

- What is Eva’s role in relation to the manual customer service?

Eva is our Online frontline support:

NKI Specific Questions

- How do you measure quality in what you do?
We perform numerous Customer surveys. Lately structure, navigation.
Pop-up, Focus group.
Sometimes calls/meetings.
Eurobonus and not.

Just finished.

- Could you tell me about your NKI-measurement?

We have certain means of checking for example whether a respondent has seen certain ad.
Customer Relations department (SPET) make surveys.

- Why do you measure it?
Head KPI (Key Performance Index) in test Phase.

An interesting fact is that Eva’s NKI value has not improved as much as EVA herself has!

- What do you do with the results?
Every 2nd year we revise the marketing plan to see how it affects NKI.
We also carry out improvement workshops.

At SAS we have big focus on NKI.
- How do you turn a dissatisfied customer to a satisfied? Could you give me an example?

During the strike in the early spring and when we had problems with the Q400-8 airplanes etc. we can see a clear loss of trust from our clients which is hard to regain.
Phone Interview, Michael Söderström, Managing Director, Artificial Solutions, 10-Aug-10

**THIS INTERVIEW IS NOT YET VERIFIED, due to lack of answer from respondent**

Eva (Avatar), web page and customer relations Specific Questions:

- Can you tell us a little bit more about the Eva project?
  
  We at Artificial Solutions do not focus on a specific channel or interface, Eva is only one way to get information from a common knowledge database.

  Eva can also hand over a dialogue to on-line chat with SAS call center staff.

  SAS has now developed an extensive knowledge database and can use it for more. For example automated Email Management Service (EMS) and Virtual Speech Agent (VSA).

  We look at our solution as a total Content management system.

  Some questions can not be automated, How do we handle these. It’s important to develop a well working migration and handover strategy. How can we use this in an optimum way?

  I am a member of the SAS Eva steering group. I have an advisory role and give feedback and ideas.

  I Sold the on-line chat solution and Eva concept to SAS. Eva’s pilot started in early 2006 and the on-line chat a few months before that.

  How well does Eva work?

  Eva works really well. The progress has, however, sometimes been a bit slow. The work group has been very active and done well. The steering group has been a bit unclear with setting up goals for the work group to have a clear direction and guidelines. The operation of Eva works well. SAS’ Customers are happy according to all indications we receive. When Eva cannot answer she starts a live chat.

  Eva is used to improve customer service and to avoid costly phone calls and emails.

  There are many sales related questions and we have started to experiment in how to aid in the decision process. When SAS customers are using Eva we have a higher conversion rate compared to when they are using the web page only.

  We will try to find out what questions they ask to go forward to booking / buying.

  A new challenge for the steering group and Pelle is how to analyse the online sales.

  From SAS view it is a great knowledge source about the customer as we have logs to analyse. How can we use this to make better solutions for the client?

  Eva’s logs gives very good feedback on what the client think about the home page and also about the SAS organization as such.

  Great difference between SAS and other less successful avatars implementation is that they have allocated lots of time and resources for development and analysis.
There are two parts:

The ability for the system to understand questions and how well the system can help you to get a good answer.

The other part is how we choose to answer the question. We have to be strong in giving the client a good and complete answer.

For example: Currently SAS customer can only change their bookings by phone, we have to tell the customer this immediately to not confuse them and waste their time.

A New service:
Eva will first interview the customer and then send her/him to a web form and then SAS can call back. This is a way to even out the volume at call center through handling non urgent issues when not busy. This way the staff will work faster and more efficiently.

We currently have no way of measure how much time money we have saved. SAS has so far not developed a way to measure this with us.

- Can you tell me about NKI-measurement?

All our customers prioritise this and we agree. We need to prove value. For us it’s important to know where we stand at the moment. Few clients know where they before the implementation of the Avatar which we need to measure to be able compare with the future.

What we suggest is to use the immediate function of dissatisfaction index (DSI). When the client is not happy with Eva’s answer, the user can click on that option and we can analyse this.

In the rare case when the answer Eva delivers is actually wrong we immediately fix it. Sometimes it’s a signal for us to add new knowledge.

Sometimes the answer is correct in itself but client is simply not happy with it. This is something we forward to the SAS organisation and they themselves take into consideration.

According to our statistic, less than 5% are dissatisfied with the answer. All dissatisfaction answers get logged. We also give the client a chance to write a comment.

Pelle Westerlund is doing a survey one week per month.

A few questions that I think SAS must ask themselves:

Currently in SAS total NKI surveys they keep a target for 80% NKI index, why is 80% ok and what parts of the total experience (pre-during-post flight) has to more and less? Why is it ok to have 20% dissatisfied customers?

Do we expect the same on selfservice or perhaps more or less?

If we don’t reach the target what do we do?

Can we accept a low NKI on this as self service in itself is cheaper?

How much can we allow this to cost?

We at Artificial are aware of the fact that the user interface of our statistics tool is not so user friendly. However, all or at least most reports and statistics are available when it’s utilized the right way.
Pelle Westerlund, Communications Manager, SAS 15-Aug-10

General Questions:

- What does SAS do? What is your business?
  SAS Sells trips, give service, takes care of the customers and transport him or her from A to B.
- How do you make money?
  People want to travel with us.
- What expectations do customers have on SAS?
  SAS should provide cheap and good service. Simple and Cheap when it comes to price, booking, at airport, in the airplane, after airport, all needs to be simple. All needs to be simple and fast.
- What is good service according to SAS?
  Service is good when customer is satisfied. Customer is in focus we adjust to their needs. We however, don’t always live as we preach. The difference between what we think and the customer think is not so large any more. We have come closer to the customer and we are changing. Sometime we move bit too slow. The organization is not always moving fast enough. We have too many computers systems and they are too slow to change as well.
- Who are your main competitors?
  The customer’s behavior is our biggest threat and competitor as well as our own limitations.
  The low price airlines are obviously competitors, they will always be there. The trains are competitors.
- Which are your main strengths compared to your competitors?
  It is not that much any more, but we have our staff, our history and our Brand name. The answer would have been better 5-10 years ago. The market was different then.

Eva (Avatar), web page and customer relations Specific Questions:

- Please tell me what you do at SAS?
  Communication manager, toward global sales centers, information, intranet, newsletters, road shows, education and standards, and intimately involved in the Eva and chat functions.
- What does a typical day consist of for you?
  Lately lots of migration with Eva and Chat. I have been involved with Eva since the beginning. We make quick decision and actions. We have around 50 sites globally in the group, but so far we only run Eva on Sweden and Norway site.
- In which ways do your customers currently communicate with you?
  We use all channels of communication, phone, email, chat, homepage including electroic form on the www.sas.se page. We are lacking video chat. We have tested it and we would like to do it later on. We are also looking at voice chat and try to see how keen the customers are on such a solution.
- In which ways does SAS want to communicate with the customers?
  The customer should be able to choose, but we have to be clear what channels are available and the advantages of each channels. The customer should be able to call if he wants to. We should be open and honest. We will try to convince them to chat or to use other electronics means as it is faster for the client (and cheaper for us), but the customer must still have the option to call.
- In your opinion – how would your customers prefer to communicate with you?
  I beleive the customer depending on time, situation and specific need would like to be able to choice a suitable channel for themselves.
- Which type of information do the customer require?
  Luggage, profile, Eurobonus and checkin are very frequent questions.
- Which services can the customers perform on the web page.
  We can do most thing, but there are limitations. You can book certain flight but no others, you can book Eurobonus flight but not with all our airlines. You can change some bookings, but not all. We lack the completeness in the service on the homepage. We have most functions but not enough.

- Which services would the customers like to do thorough the web page?
  We need to develop what we have. The service have to be complete. We need to coordinate more with all the airlines involved, make it more clear and less confusing for the customers. It is pretty good today but it has to be much better. We may even need to take some functions away if they don’t work really well. Eva could be a great help if she was interactive with our systems and be a great support. When the home page fails to do something for the customer it should offer the chat option and Eva could be a support as well.

  During online chat one agent can handle around 5 simultaneous dialogues at the same time.

  We try to push the chat only when Eva cannot answer the questions.

  Currently we have around 150 chats per day and 2500 phone calls (around 6 percent).

  We are controlling this but could have up to 20 % if we wish. It is really up to us, how we would like to balance this.

  We can offer the client forms to fill in where we offer to call back within for example 12 hours if it’s acceptable to the client. This means a shorter and more to the point phone call and it also means we can call off peak when our agent aren’t busy and it saves lots of money.

- How do you come in contact with / work with:
  a. web page?
  Me and my team give support to the homepages.
  c. Eva?
  Eva is purchased centrally, through Anders Hellsten by online department and sales and support department. Nobody has set any clear goals and guidelines. There is a big difference between result and goals. In my view Eva is a real opportunity.

  Earlier Eurobonus has not been part of Eva project.

  Eurobonus has now requested our help 1 and a half months ago and the result is great. Adding the whole Eurobonus package at the moment is high focus.

  The first two years we have added a lot of knowledge to Eva. What we have to do now is to adjust all the answers to today’s situation. We need to update the answers.

  Eva normally give the same answers as on a phone call and through other channels. However tone of voice etc. does of course not come through the same way with Eva. We strive to give the same answers to the same question regardless of channel being used and we are successful at delivering that.

  We and I do competence and functionality development on Eva. I am in the EVA work group with Andreas Greven, Ulrika Hallberg, and Eva (Ö-vik staff)

  We are lacking strong and clear direction from the steering group and many times are unsure about what direction to follow.
Interview 17-Aug-10:

Anneli Nässén, Manager for Private Sales through agents

Eva (Avatar), web page and customer relations Specific Questions:

- How do you come in contact with / work with Eva:

March 2005-aprox summer 2006 I was Sales center manager, responsible for 3 sales center with around 250 staff

- Can you tell us a little bit more about the Eva project?

Together with other colleagues we were looking for a more efficient dialogue with clients. We had many challenges: for example we had a switch board that was not really efficient.

We also knew that many recurring questions were rather simple and could be automated.

The idea was born to standardise a way to answer questions.

We looked at IKEA’s avatar solution together with Per Hultman who also started the e-commerce department at SAS.

We spoke to Artificial Solutions . Our team in Örnsköldsvik were a driving force and they have spoken earlier with them.

We made this an Internal project and built a Business Case around this which lead to an agreement with Artificial solutions for a Pilot in early 2006.

We trained Eva in a few limited areas. We focused on a few of the most frequent questions. We also thoroughly analyzed how to position the sales center in all this and to find a balance on how deep in the navigations our main phone number should be on the home page.

We received positive response on Eva immediately.

An online chat function was also activated early. We structured it in such a way that simple questions could be handled by Eva and high level questions with live chat as well as of course the regular call center. Eva is very attractive for us as she is a much cheaper way to deliver answers.

Eva unloaded our call center staff as she is taking care of basic questions.

I was pushing hard for Eva and still believe in her very much. Eva has a shared ownership between online sales, marketing and the call center.

We are generally vey pleased with Eva. Pelle Westerlund and colleagues have done a great job and are a very large part of Eva’s success.

Around spring 2006 i got my current position and in Summer 2006, my old position was taken by Carina Göransson.

- Could you tell me about your NKI-measurement?
Initially we did some digital surveys, we sent out questionnaires to clients who has booked on the net. Generally received very positive feedback. She is visible and immediately available. Eva works 24/7 which is valuable for our clients.

We have a culture in SAS to measure the investments we do. We have to motivate all costs.

We have a general SAS common NKI yearly for the whole group and SPET (SAS passenger experience tracking) which is carried out monthly.

We share experiences with our colleagues in Norway and Denmark and often get synergies.

Already in 2006 we had a dialogue with Norway and we also shared development costs. If we develop anything we normally share costs.

We were early with this technology in the Airline business and its success made us proud.
Analysis of SAS channel survey  Julyy 2010

Executive Summary

During July 2010 a survey was carried out to compare the customer satisfaction between the Phone, Chat email and Eva Channels.

The results can be summarized in the following chart that demonstrates the percentage of respondents that are satisfied or very satisfied regarding their general experience with each channel:

The chart shows that the respondents’ **General experience** is 96 % with Phone, 77 % with Chat, 69 % with Email and 54 % with Eva/Web. Further we can see that respondents that are satisfied or very satisfied amount to:

**Knowledge and courteousness:** 88% with Phone, 83% with Chat, 76% with Email, and 62% with Eva/Web.

**Ability to meet knowledge needs** 88% with Phone, 75% with Chat, 77% with Email and 58% with Eva/Web.

**Meet expectations** 88% with Phone, 67% with Chat, 70% with Email and 52% with Eva/Web.

Overall we see a clear pattern that the customers are the most satisfied with Telephone, there’s an almost even match between chat and email they are the least satisfied with Eva.

The researchers recommend to run these kinds of surveys on an ongoing basis, perhaps yearly of even quarterly, and when some major changes have been done considering:
• Make the survey a full customer satisfaction survey (NKI). The questions should contain different levels of the word satisfied not smileys like this time.
• ‘Raw Data’ available in order to see answers from each individual respondent.
• Format of data in each channel is exactly the same to not leave room for errors.
• Add Web as a fifth channel, Don’t bundle channels together in any questions.
• Run the surveys until 100 responses are reached for each channel

**Purpose and methodology of the study**

The purpose was to make an initial comparison between the channels with focus on the customers’ perceived experience. As an incentive to answer the questions they were offered to submit their email addresses in order to participate in a lucky draw for xxx. Enclosure 1 contains the study’s questions and alternative answers (one answer / question). All questions and answers in this report are translated from Swedish which was the language for the actual survey. Below is brief summary from Eva Berglund (SAS) regarding the conducted surveys of the different channels and what dates they were carried out:

During July 2010 SAS carried out a small survey of four channels: chat, telephone, e-mail and ”Eva” as follows:
Chat      (‘good’ response times)
Eva       (no delays)
Mail      (‘pretty’ good response times)
Telephone (waiting times were long)

**Results**

On the chat channel survey 107 persons replied to question 1 and 105 to question 2 and 3 while totally 25 people answered the questions for telephone channel. In Eva’s case 97 people answered question number 1 and 2 and 96 people answered question number 3. For email 13 people answered questions 1, 2 and 3. Since the number of telephone and e-mail respondents are a lot fewer is difficult to make an accurate comparison.

<table>
<thead>
<tr>
<th></th>
<th>Question 1</th>
<th>Question 2</th>
<th>Question 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>107</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>97</td>
<td>97</td>
<td>96</td>
</tr>
<tr>
<td>Telephone</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>E-mail</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

**Summary of answers in each channel**

According to the information from SAS there were ‘good’ response times on Chat while the ‘waiting times for telephone were long’. The latter means that the customer service staff during the period of the survey had high workload with many call. This in its turn led to that they were not able to ask the customer to the extent that was initially planned.
The alternative answers for questions 1 and 3 consisted of five smilies (very angry smiley, angry smiley, neutral smiley, happy smiley and very happy smiley) where the customers ranked their perceived experience of the channel in question (question 1) and the other channels (question 3). In order to simplify we say that the smiley ranking is equal to customer satisfaction\(^1\). This means that:

“Very angry” smiley = “Very dissatisfied”
"Angry smiley” = ”Dissatisfied”
"Neutral smiley” = ”Neither satisfied nor dissatisfied”
"Happy smiley” = ”Satisfied”
"Very happy smiley” = ”Very satisfied”

It is thereby a five level scale of Customer satisfaction. From now on we will present and analyse the result from each channel. Then a comparison between the channels will be carried out. Lastly the report is concluded with an evaluation of SAS’s study in its whole and suggestions for how next survey can be further improved.

**Chat**

**Question 1**

<table>
<thead>
<tr>
<th>1 Welcome to a survey on SAS chat service! Kindly rank your experience on the following</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your general experience from the dialogue with us via chat</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
</tr>
<tr>
<td>The agents knowledge and courteousness via chat</td>
<td>6 6</td>
<td>3 3</td>
<td>12 11</td>
<td>36 34</td>
<td>50 47</td>
</tr>
<tr>
<td>The agents ability to meet your knowledge needs via chat</td>
<td>5 5</td>
<td>3 3</td>
<td>21 20</td>
<td>30 28</td>
<td>48 45</td>
</tr>
<tr>
<td>How well did our chat service meet your expectations</td>
<td>8 7</td>
<td>5 5</td>
<td>13 12</td>
<td>25 23</td>
<td>56 52</td>
</tr>
</tbody>
</table>

\(^1\) Normally the in a customer satisfaction survey the questions should contain different levels of the word satisfied. In the SAS survey it is problematic to translate this directly the respondents don’t necessarily connect a smiley to satisfaction.
The results show that 81% of the respondents are satisfied and very satisfied respectively (general experience\(^2\)) with the dialogue via SAS chat. The equivalent for other questions is:

- "The agents’ knowledge and courteousness via chat" (73%)
- "The agents’ ability to meet your knowledge needs via chat" (75%)
- "How well did our chat service meet your expectations" (69%)

This shows that the absolute majority of respondents are generally satisfied or very satisfied with the chat service and that they also are pleased with the agents’ knowledge and courteousness. The absolute majority of the customers are generally satisfied or very satisfied in that the agents met their knowledge needs and that the chat service met their expectations.

\(^2\) Also here a bit problematic to link this directly to satisfaction. It would be more beneficial to have a general question with the wording: "Tell how satisfied you are in on a scale from 1-5 (or even better 1-10) where 1 represents very dissatisfied and 5 represents very satisfied".

\(^3\) It’s generally not advisable to mix different concepts in the same question.
Question 2

<table>
<thead>
<tr>
<th>2 Will you contact us via chat again?</th>
<th>answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>78</td>
<td>74</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Don’t know</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Unanswered</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Accumulated answers</td>
<td>105</td>
<td></td>
</tr>
</tbody>
</table>

The results from question 2 demonstrate that 74 % of the respondents are willing to contact SAS by chat again.

Question 3

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>answers</td>
<td>%</td>
<td>answers</td>
<td>%</td>
<td>answers</td>
<td>%</td>
</tr>
<tr>
<td>Chat</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>13</td>
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<tr>
<td>E-mail</td>
<td>4</td>
<td>4</td>
<td>6</td>
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<tr>
<td>Telephone</td>
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<td>14</td>
<td>12</td>
<td>11</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>17</td>
<td>16</td>
<td>22</td>
<td>21</td>
<td>33</td>
<td>31</td>
</tr>
</tbody>
</table>

The results show that respondents using chat clearly are more satisfied when using chat, followed by telephone and then e-mail that got about half as many supporters. Eva/Web is clearly ranked last. The amount of respondents using chat that are satisfied and very satisfied with each channel as follows:

Chat 80 %
E-mail 44 %
Telephone 47 %
Eva/Web 26 %

113
Telephone

Question 1

<table>
<thead>
<tr>
<th>1 Welcome to a survey on SAS telephone service! Kindly rank your experience on the following</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>Acc. answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your general experience from the dialogue with us via telephone</td>
<td>0 0 1 4</td>
<td>0 0 11 44</td>
<td>13 52 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The agents' knowledge and courteousness via telephone</td>
<td>0 0 1 4</td>
<td>2 8 8 32</td>
<td>14 56 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The agents' ability to meet your knowledge needs via telephone</td>
<td>0 0 1 4</td>
<td>2 8 6 24</td>
<td>16 64 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did our telephone service meet your expectations</td>
<td>0 0 2 8</td>
<td>1 4 6 24</td>
<td>16 64 25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that 96 % of the respondents are satisfied and very satisfied respectively (total experience) with the dialogue via telephone. The equivalent for other questions are:

- ”The agents’ knowledge and courteousness via telephone” (88 %)
- ”The agents’ ability to meet your knowledge needs via telephone” (88 %)
- ”How well did our telephone service meet your expectations” (88 %)

This shows that the absolute majority of respondents are generally satisfied or very satisfied with the telephone service and that they also are pleased with the agents’ knowledge and courteousness. The absolute majority of the customers are generally satisfied or very satisfied in that the agents met their knowledge needs and that the telephone service met their expectations.

Question 2

<table>
<thead>
<tr>
<th>2 Will you contact us via telephone again?</th>
<th>answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>21</td>
<td>84%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
The results from question 2 demonstrate that 84% of the respondents are willing to contact SAS by chat again.

**Question 3**

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
</tr>
<tr>
<td>Email</td>
<td>2</td>
<td>3</td>
<td>13</td>
<td>2</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Telephone</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>3</td>
<td>12</td>
<td>2</td>
<td>12</td>
<td>48</td>
<td>5</td>
</tr>
</tbody>
</table>

The results show that respondents using telephone clearly are more satisfied when using telephone, followed by e-mail and then Eva/Web. Chat is clearly ranked last. The amount of respondents using telephone that are satisfied and very satisfied with each channel is as follows:

Chat 16%
E-mail 56%
Telephone 88%
Eva/Web 32%

**Eva/Web**

**Question 1**

<table>
<thead>
<tr>
<th>1 Welcome to a survey on SAS Eva! Kindly rank your experience on the following</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>Acc. answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
</tr>
<tr>
<td>Your general experience from the dialogue with us via Eva</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Eva’s knowledge and courteousness</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>21</td>
<td>22</td>
</tr>
</tbody>
</table>
The results show that 54% of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via SAS Eva. The equivalent for other questions are:

- "Eva’s knowledge and courteousness” (62%)
- "Eva’s ability to meet your knowledge needs” (58%)
- "How well did Eva service meet your expectations” (52%)

This shows that over half of the respondents are generally satisfied or very satisfied with Eva service. They are a bit more pleased with the Eva’s knowledge and courteousness. The absolute majority of the customers are generally satisfied or very satisfied in that Eva met their knowledge needs and that the Eva service met their expectations.

Question 2

<table>
<thead>
<tr>
<th>2 Will you contact us via Eva again?</th>
<th>Answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>66</td>
<td>68</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Don’t know</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Unanswered</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Accumulated answers</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

The results from question 2 demonstrate that 68% of the respondents are willing to contact SAS via Eva again.

Question 3

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>N/A</th>
<th>Acc answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>15</td>
<td>16</td>
<td>12</td>
<td>13</td>
<td>27</td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td>Email</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>24</td>
<td>25</td>
<td>31</td>
</tr>
<tr>
<td>Telefon</td>
<td>12</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>22</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>14</td>
<td>15</td>
<td>6</td>
<td>6</td>
<td>19</td>
<td>20</td>
<td>33</td>
</tr>
</tbody>
</table>
The results show that respondents using Eva are about equally satisfied and very satisfied when using Eva/Web, telephone and e-mail. Chat is clearly ranked last. The amount of respondents using Eva that are satisfied and very satisfied with each channel is as follows:

Chat 39 %
E-mail 50 %
Telephone 50 %
Eva/Web 55 %

**Email**

**Question 1**

<table>
<thead>
<tr>
<th></th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>Acc. answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your general experience from</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>15</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>the dialogue with us via</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>email</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The agents knowledge and</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>courteseness via email</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The agents ability to</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>meet your knowledge needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>via email</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did our email</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>15</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>service meet your</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that 69 % of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via e-mail. The equivalent for other questions is:

- ” The agents knowledge and courteousness via email” (76 %)
- ” The agents ability to meet your knowledge needs via email” (77 %)
- ” How well did our email service meet your expectations” (70 %)

This shows that absolute majority of the respondents are generally satisfied or very satisfied with the e-mail service. They are a bit more pleased with the agents’ knowledge and courteousness. The absolute majority of the customers are generally satisfied or very
satisfied in that the agents met their knowledge needs and that the e-mail service met their expectations.

Question 2

<table>
<thead>
<tr>
<th>2 Will you contact us via e-mail again?</th>
<th>Absolutal</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
<td>62</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td>Unanswered</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Accumulated. answers</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

The results from question 2 demonstrate that 62 % of the respondents are willing to contact SAS via e-mail again.

Question 3

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Happy smiley</th>
<th>Acc. answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>percent</td>
</tr>
<tr>
<td>Chat</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>31</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Email</td>
<td>2</td>
<td>15</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Telephone</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>15</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>15</td>
<td>3</td>
<td>23</td>
</tr>
</tbody>
</table>

The results show that respondents using e-mail are more satisfied and very satisfied when using telephone and e-mail followed by Eva/Web. Chat is ranked last just behind Eva/Webb. The amount of respondents using e-mail that are satisfied and very satisfied with each channel is as follows:

Chat 46 %
E-mail 61%
Telephone 61 %
Eva/Web 54 %

Comparison – chat, telephone, Eva/Web and e-mail

Question 1

<table>
<thead>
<tr>
<th>1 Welcome to a survey on SAS Chat/Phone/EvaEmail service! Kindly rank your experience on the following</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
</tr>
</thead>
</table>
A. General experience from the dialogue with us via

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>6%</td>
<td>3%</td>
<td>11%</td>
<td>34%</td>
<td>47%</td>
<td>107</td>
</tr>
<tr>
<td>Telephone</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>44%</td>
<td>52%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>9%</td>
<td>8%</td>
<td>29%</td>
<td>32%</td>
<td>22%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>8%</td>
<td>15%</td>
<td>8%</td>
<td>31%</td>
<td>38%</td>
<td>13</td>
</tr>
</tbody>
</table>

B. Agents knowledge and courteousness

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>5%</td>
<td>3%</td>
<td>20%</td>
<td>28%</td>
<td>45%</td>
<td>107</td>
</tr>
<tr>
<td>Telephone</td>
<td>0%</td>
<td>4%</td>
<td>8%</td>
<td>32%</td>
<td>56%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>7%</td>
<td>9%</td>
<td>22%</td>
<td>37%</td>
<td>25%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>38%</td>
<td>38%</td>
<td>13</td>
</tr>
</tbody>
</table>

C. Agents ability to meet knowledge needs

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>7%</td>
<td>5%</td>
<td>12%</td>
<td>23%</td>
<td>52%</td>
<td>107</td>
</tr>
<tr>
<td>Telephone</td>
<td>0%</td>
<td>4%</td>
<td>8%</td>
<td>24%</td>
<td>64%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>10%</td>
<td>14%</td>
<td>22%</td>
<td>37%</td>
<td>21%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>0%</td>
<td>8%</td>
<td>15%</td>
<td>31%</td>
<td>46%</td>
<td>13</td>
</tr>
</tbody>
</table>

D. Meet expectations

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>7%</td>
<td>5%</td>
<td>20%</td>
<td>22%</td>
<td>47%</td>
<td>107</td>
</tr>
<tr>
<td>Telephone</td>
<td>0%</td>
<td>8%</td>
<td>4%</td>
<td>24%</td>
<td>64%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>11%</td>
<td>16%</td>
<td>21%</td>
<td>24%</td>
<td>28%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>8%</td>
<td>15%</td>
<td>8%</td>
<td>8%</td>
<td>62%</td>
<td>13</td>
</tr>
</tbody>
</table>

On question 1A concerning **general experience** we can see that
77% are satisfied or very satisfied with Chat,
96% are satisfied or very satisfied with Phone,
54% are satisfied or very satisfied with Eva,
69% are satisfied or very satisfied with Email,

On 1B **Agents knowledge and courteousness** we can see that:
83% are satisfied or very satisfied with Chat,
88% are satisfied or very satisfied with Phone,
62% are satisfied or very satisfied with Eva,
76% are satisfied or very satisfied with Email,

On 1C **Agents ability to meet knowledge needs**
75% are satisfied or very satisfied with Chat,
88% are satisfied or very satisfied with Phone,
58% are satisfied or very satisfied with Eva,
77% are satisfied or very satisfied with Email,

On 1D **Meet expectations**
67% are satisfied or very satisfied with Chat,
88% are satisfied or very satisfied with Phone,
52% are satisfied or very satisfied with Eva,
70% are satisfied or very satisfied with Email,
In all these comparisons we can see a clear pattern that the customers are the most satisfied with Telephone and the least with Eva.

**Question 2**

<table>
<thead>
<tr>
<th>Channel</th>
<th>Will contact us via chat again?</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
<th>No answer</th>
<th>Tot answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td></td>
<td>74%</td>
<td>1%</td>
<td>23%</td>
<td>2%</td>
<td>105</td>
</tr>
<tr>
<td>Phone</td>
<td>Will you contact us via telephone again?</td>
<td>84%</td>
<td>0%</td>
<td>16%</td>
<td>0%</td>
<td>25</td>
</tr>
<tr>
<td>Eva</td>
<td>Will you contact us via Eva again?</td>
<td>68%</td>
<td>13%</td>
<td>16%</td>
<td>2%</td>
<td>97</td>
</tr>
<tr>
<td>Email</td>
<td>Will you contact us via e-mail again?</td>
<td>62%</td>
<td>0%</td>
<td>38%</td>
<td>0%</td>
<td>13</td>
</tr>
</tbody>
</table>

A very similar situation here with the difference that email actually has a slightly lower ‘approval rating’ than Eva. 13% of the respondents that were asked questions when using Eva answer that they will not use Eva again. 38% of the respondents that were asked questions when using email answer that they are not sure if they will use email again.

**Question 3**

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry</th>
<th>Angry</th>
<th>Neutral</th>
<th>Happy</th>
<th>Very happy</th>
<th>N/A</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>105</td>
</tr>
<tr>
<td>Chat</td>
<td>5%</td>
<td>1%</td>
<td>13%</td>
<td>26%</td>
<td>54%</td>
<td>1%</td>
<td>105</td>
</tr>
<tr>
<td>E-mail</td>
<td>4%</td>
<td>6%</td>
<td>35%</td>
<td>33%</td>
<td>11%</td>
<td>10%</td>
<td>105</td>
</tr>
<tr>
<td>Telephone</td>
<td>14%</td>
<td>11%</td>
<td>24%</td>
<td>25%</td>
<td>22%</td>
<td>4%</td>
<td>105</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>16%</td>
<td>21%</td>
<td>31%</td>
<td>16%</td>
<td>10%</td>
<td>6%</td>
<td>105</td>
</tr>
<tr>
<td>Phone</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chat</td>
<td>8%</td>
<td>12%</td>
<td>52%</td>
<td>8%</td>
<td>8%</td>
<td>12%</td>
<td>25</td>
</tr>
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</table>
Conclusions

Chat

81 % of the respondents are satisfied and very satisfied respectively and “knowledge and courteousness via chat” (73 %), “ability to meet your knowledge needs via chat” (75 %), “how well did our chat service meet your expectations” (69 %)

74 % of the respondents are willing to contact SAS by chat again.

Chat users clearly are more satisfied when using chat, and Eva/Web is clearly ranked last. Chat 80 %, E-mail 44 %, Telephone 47 %, Eva/Web 26 %

Telephone

96 % of the respondents are satisfied and very satisfied respectively (total experience) with the dialogue via telephone, ”knowledge and courteousness” (88 %), “ability to meet knowledge needs” (88 %), ”meet expectations” (88 %)

84 % of the respondents are willing to contact SAS by telephone again.

Respondents clearly are more satisfied when using telephone, Chat is ranked last. The amount of respondents using telephone that are satisfied and very satisfied with each channel is as follows: Chat 16 %, E-mail 56 %, Telephone 88 %, Eva/Web 32 %

Eva/Web

54 % of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via SAS Eva and ”knowledge and courteousness” (62 %), ”ability to meet knowledge needs” (58 %), ”meet expectations” (52 %). This shows that over half of the respondents are generally satisfied or very satisfied with Eva service and a bit more pleased with the Eva’s knowledge and courteousness.
68 % of the respondents are willing to contact SAS via Eva again.

Respondents using Eva are about equally satisfied and very satisfied when using Eva/Web, telephone and e-mail. Chat is clearly ranked last. Eva users that are satisfied and very satisfied with each channel is as follows: Chat 39 %, E-mail 50 %, Telephone 50 %, Eva/Web 55 %.

**Email**

69 % of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via e-mail, ”knowledge and courteousness” (76 %), ”ability to meet your knowledge needs” (77 %), ”meet expectations” (70 %). An absolute majority of the respondents are generally satisfied or very satisfied with the e-mail service. They are a bit more pleased with the agents’ knowledge and courteousness.

62 % of the respondents are willing to contact SAS via e-mail again.

Respondents using e-mail are the most satisfied and very satisfied when using telephone, Chat is ranked last just behind Eva/Web. E-mail users that are satisfied and very satisfied with each channel are as follows: Chat 46 %, E-mail 61 %, Telephone 61 %, Eva/Web 54 %

**Comparison – chat, telephone, Eva/Web and e-mail**

**On general experience** we can see that respondents that are satisfied or very satisfied amount to: 96 % with Phone, 77 % with Chat, 69 % with Email and 54 % with Eva.

On 1B **Agents knowledge and courteousness** we can see that respondents that are satisfied or very satisfied amount to: 88% with Phone, 83% with Chat, 76% with Email, and 62% with Eva.

On 1C **Agents ability to meet knowledge needs** we can see that respondents that are satisfied or very satisfied amount to: 88% with Phone, 75% with Chat, 77% with Email and 58% with Eva.

On 1D **Meet expectations** we can see that respondents that are satisfied or very satisfied amount to: 88% with Phone, 67% with Chat, 70% with Email and 52% with Eva.

In all these comparisons we can see a clear pattern that the customers are the most satisfied with Telephone there’s and almost even match between chat and email they are the least satisfied with Eva.

**Evaluation of SAS concluded survey**
Suggestions and comments from the researchers to make future surveys even more useful:

- Normally in a customer satisfaction survey the questions should contain different levels of the word satisfied. In the SAS survey it is problematic to translate this directly the respondents don’t necessarily connect a smiley to satisfaction.
- Also here a bit problematic to link this directly to satisfaction. It would be more beneficial to have a general question with the wording: ”Tell us how satisfied you are in on a scale from 1-5 (or even better 1-10) where 1 represents very dissatisfied and 10 represents very satisfied”.
- It’s generally not advisable to mix different concepts in the same question
- In order to draw more conclusions we would need to see the answers from each individual respondent.
- The format of the data is lightly different on the Excel sheets, sometimes it percentages and sometimes it is decimal numbers. This leaves room for errors.
- When the customer is asked to rank which channel they prefer. Eva and Web is bundled together. It would be more beneficial to know who prefers the web and who prefers Eva.
- Why were web users not surveyed as a fifth channel? It would be useful to know how satisfied they are.
- Also, as we only had 25 answers on the telephone channel and 13 email channel in comparison to 100 on the other two channels the results are indicative rather than conclusive, for future surveys it would be beneficial to reach at least 100 on each channel.

Suggestions for future surveys

Run these kind of surveys on an ongoing basis (perhaps yearly of even quarterly, and when some major changes have been done) to get clear indications on how the different channels relate to each other and how Eva is improving when improved, with the following considerations:

- Make the survey a full CSI, customer satisfaction survey, (NKI) meaning the questions should contain different levels of the word satisfied not smileys.
- Have a general question with the wording: ”Tell us how satisfied you are in on a scale from 1-10 where 1 represents very dissatisfied and 10 represents very satisfied”.
- Make sure that ‘Raw Data’ is available in order to see answers from each individual respondent.
- Make sure the format of the data in each channel is exactly the same to not leave room for errors.
- Don’t bundle channels together in question.
- Add web as a fifth channel
- Run the surveys until 100 responses are reached for each channel

The Survey
Chatt
1. Välkommen till en undersökning om SAS chattservice! Vänligen rangordna din upplevelse kring följande:
   a. Din totala upplevelse av dialogen med oss via chatt
   b. Agentens kunskap och bemötande via chatt
   c. Agentens förmåga att tillgodose dina kunskapsbehov via chatt
   d. Hur väl motsvarade vår chattservice dina förväntningar
2. Kommer du att kontakta oss via chatt igen?
   a. Ja
   b. Nej
   c. Vet ej
3. Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:
   a. Chatt
   b. E-mail
   c. Telefon
   d. Fråga Eva/webb

Telefon
1. Välkommen till en undersökning SAS telefonservice! Vänligen rangordna din upplevelse kring följande
   a. Din totala upplevelse av dialogen med oss via telefon
   b. Agentens kunskap och bemötande via telefon
   c. Agentens förmåga att tillgodose dina kunskapsbehov via telefon
   d. Hur väl motsvarade vår telefonservice dina förväntningar
2. Kommer du att kontakta oss via telefon igen?
   a. Ja
   b. Nej
   c. Vet ej
3. Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:
   
   a. Chatt
   b. E-mail
   c. Telefon
   d. Fråga Eva/webb

Eva
1 Välkommen till en undersökning om Fråga Eva! Vänligen rangordna din upplevelse kring följande

   a) Din totala upplevelse av dialogen med oss via Fråga Eva
   b) Fråga Evas kunskap och bemötande
   c) Fråga Evas förmåga att tillgodose dina kunskapsbehov
   d) Hur väl motsvarade Fråga Eva dina förväntningar

2 Kommer du att kontakta oss via Fråga Eva igen?
   a) Ja
   b) Nej
   c) Vet ej

3 Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:
   
   a) Chatt
   b) E-mail
   c) Telefon
   d) Fråga Eva/Webb

Mail
1 Välkommen till en undersökning SAS e-mailservice! Vänligen rangordna din upplevelse kring följande

   a) Din totala upplevelse av dialogen med oss via e-mail
   b) Agentens kunskap och bemötande via e-mail
   c) Agentens förmåga att tillgodose dina kunskapsbehov via e-mail
   d) Hur väl motsvarade vår e-mailservice dina förväntningar

2 Kommer du att kontakta oss via e-mail igen?
   a) Ja
   b) Nej
   c) Vet ej

3 Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:
a) Chatt
b) E-mail
c) Telefon
d) Fråga Eva/Webb
Customer Workshops

Scandinavian Airlines/Artificial Solutions/University of Borås
Customer Workshops

General comments and suggestions
SAS.se and Eva comments and suggestions

12-14 May 2011

Group 1
Jan 12, 13.30, Gothenburg

Participants:
Customers
Claes-Åke Johansson
Johannes Kocher
Anders Berg
Hans Nilsson
Mats Olofsson

Scandinavian Airlines:
Anders Signell, in charge of SAS.se web page
Camilla Brydolf, Corporate Sales (Gothenburg office)

University of Borås
Mikael Lind
Nicklas Salomonsson
Håkan Alm (moderator)

Håkan wishes everyone welcome, gives a little bit background to the project and himself
and asks SAS and University of Borås representatives to introduce themselves.

Håkan briefly describes the outline of the workshop:

Phase 1: ~ 45 min
Characterize the target groups general life situation as well as travel specific life situation

Phase 2: ~ 1 hour
(based on phase 1) generate different scenarios (including coffee brake)

Phase 3: ~ 45 min
Test these scenarios through electronic contact with Eva and SAS.se

Phase 4: ~30 min
common evaluation

Phase 5:
individual short interviews ~10-15 min/ person (at a later date)
Johannes, 34, medicine technician, with HQ in Stockholm. lives in Gothenburg downtown. Works for newly established company with development in Gothenburg and Head office in Stockholm. 2 people in the house hold.

Anders Berg, 44, from Luleå, moved to Got 1978, lives in Kungsbacka just south of Gothenburg, newly married, two kids from earlier marriage, 44 years old. Aspero Sports High school teacher mainly maths and natural science but also business.

Mats Olofsson, 34, Northern Europe Manager for GNLD. common law spouse, 3 cats, no kids, lives on Hisingen Island in the northern part of Gothenburg, 2 cars summer home in Dalsland.

Hans Nilsson, Single, 48, works for Astra Zenica in Mölndal. IT manager. For work Astra Zeneca is using videoconferencing 95% of the time.

Claes-Åke Johansson, 56, born in Gothenburg, 2 kids, grown up. Responsible for sales between Europe and middle east at Syrgis, which is owned by an American company (formerly Norakandos).

Common question: what is SAS to you?

Claes-Åke, says SAS is Falling apart, SAS does not represent anything any more, not low price and not business airline. I experience an enormous amount of problems flying with SAS. For example cancelled flights. One positive thing is the telephone sales staff, they are very happy to help. But generally it is not good. We all know why. When it comes to travelling internationally SAS is almost the only choice. The Eurobonus program and lounge is important for me, if this disappears so will SAS for me.

Mats, says he is pretty new as a business passenger and has only been travelling the last 6 months in his work. I don’t travel that much privately either. What I notice if I for example compare City Airlines with SAS travelling to Finland is that City Airlines are still serving a meal on the flight which SAS does not unless you pay. That the largest difference I notice.

Hans Nilsson agrees that the service is better with other airlines and he seconds that it is neither cheap nor high service. When I fly with Ryan Air to Bergamo. I paid 468 kronor round trip and SAS is 650 one way, if you are lucky. If the price is very low it’s easy to accept low service.

Anders, The big point is that SAS are trying to copy the low price airlines but fails to lower the prices. I just flew with them to Luleå and I would be happy to pay 50 kronor extra to get my cup of coffee. The passenger would be more satisfied. I am pleased that you are evaluating the web page as it is sometimes making me crazy. In my work I travel
a lot. I am a very demanding user, the one I thought everyone wanted. I read everything including the fine prints. For example if I book a specific flight, as soon as there will be a change, 5 minute time slot change is enough, then I cannot access my flight any more through the web page. SAS has failed to solve this problem for 10 years now. On Alaska Airlines hey have the same problems but if I call them they can unlock it to enable access, on SAS it is simply not possible.

Johannes says, when I travel with SAS it actually works well, I normally book and buy on the internet. If I pay 450 kronor to go to Stockholm I don’t expect coffee and sandwich. Generally I don’t expect anything when I fly. I like that you can choose if you buy the cheapest ticket you don’t get anything extra, If you pay some more you get some more.

Claes-Åke, I bought a ticket for 4 500 kronor to go to Düsseldorf for a meeting, the meeting was moved and I had to pay 9 000 for a new ticket. When we flew, none of the flights were more than half full in any class, I cannot accept this. I feel the service is a lot less today also in Business class on the long-haul international flights outside Europe.

Travelling situation

Johannes, 4-5 times to USA Boston, we have production there. I go to HQ in Stockholm now and then.

Anders to Luleå 4-5 times per year. Often to Stockholm flying a lot for my holidays. To US twice. One international trip at least every year.

Mats, mainly travelling for work, England, Estonia, UK and sometimes France. Before I used to travel many times to Thailand, mainly with Lufthansa.

Hans, these days mainly privately. 2-5 flights per year mixed domestic and international, not only with SAS. When flying for work often City Airline direct to Manchester.

Claes-Åke, mostly in Europe but also frequent to the US, 2 to 3 times per year. I travel almost every week, many destinations. Still lots with SAS as I get lounge access with them thanks to that I have Eurobonus gold card. The lounge is important for me.

Describe a trip

Claes-Åke, I often book through the homepage, looking for value for money. When flying in Europe I take first flight out and last flight home. Rather nothing to check-in. The lounge is really good. The morning sandwich in the lounge is much appreciated as eating at home 5AM does not work for me. The lounge in Copenhagen is really nice. Especially as I sometimes end up waiting there for a few hours. Often I take the car to Gothenburg airport and put it in the garage. When there are problems normally the SAS people I deal with are pretty OK. I feel there is pretty low staffing in the transfer and service offices at the airports. Sometimes in Copenhagen I see 1 or 2 people ending up
rescheduling a full flight of passengers. I feel the staffing is so slim that they barely can handle a problematic situation, for example a cancelled flight. However, mostly SAS are good when it comes to fixing problems.

The homepage is sometimes a bit tricky and inconsistent to use. Eurobonus tickets are impossible to book through the web page, I normally call. However, I don’t really understand the phone system where you have to push lots of buttons back and forth. It is not consistent. It will say there are many in line ahead of you and then a few seconds later you suddenly get connected anyway. I need to be able to book quickly and not spending half an hour to just book a flight. To make the web page as simple as possible or a phone system where you can get through quickly. I rarely need to change or cancel flights, If I do I call, as far as I know this cannot even be done on the Web Page.

Normally I only book flights; my customers book the Hotels for me. I have never used Eva before. I check-in through the net, or through SMS, but these days I don’t always get the SMS.

After check-in at airport I go to the lounge. The domestic lounge in Stockholm is appalling, SAS could just as well close it.

Mats, most of the time I don’t book my flights, my company does. Often I fly out the night before so that I get a full day on-site. I often check-in at Landvetter. I normally check-in my bag as I think it’s smoother that way. I arrive at airport an hour before departure, board the flight, Arrive and take a taxi. Normally there haven’t been any major problems. There is a great difference between SAS Radisson Hotel and The Airline. Radisson is among the better Hotels I’ve used and the prices are OK, for example Tallinn and Stockholm. A few times I tried booking myself, I made a mistake and then I called and I ended up waiting for 45 minutes in a phone queue for a 10 second issue. Generally SAS staffs are courteous and helpful. I often fly direct to destination for example to Tallinn and UK, when I fly to Åbo in Finland I fly through Stockholm. Sometimes I fly with Finnair to Tallinn. The most important is that it is easy to understand and easy to make changes without calling.

Johannes, normally I grad a cab to go to Gothenburg Airport. I prefer to Check in with a person at a counter. I need to be persistent to get to check-in with a live person. The reason I prefer to check-in with a person is that I normally have a couple of questions and can get these answered as well. I often fly to Stockholm to have my staff to join me when we fly to USA. The SAS staff are very service minded. The only airline I know which is even better is British Airways. I often connect with continental to Boston and the transition is smooth, I don’t really notice it’s a different airline. I’ve only been once in the lounge, someone brought me, it’s very luxurious.

SAS have never lost a bag for me, it works well. I book on the internet. Price is the main decider for which flight I pick. As we are a young company the price is very important. If I know exactly what day I’m flying the webpage works well, but if I’m flexible I only see one day before and after, on Lufthansa page I see longer before and after.
Claes-Åke it’s good to check in with a person.

Hans. I’ve also tried and If I want to sit with some colleague joining up at a later flight, this cannot be done without help from staff. Ten years ago or earlier SAS had a very interesting thing where they auctioned out tickets on Internet and it was very nice. The web interface was excellent done and the auction process was managed perfect and extremely user friendly. Unfortunately they don’t do it any more.

Anders, I book flights via Internet. I notice a big difference between booking flights independently or a combination of flights. For example SAS do not guarantee the luggage to come through all legs. It can sometimes be cheaper splitting the flights.

Claes-Åke, if I want to fly to US via Stockholm and do the GOT-STO flight the night before I need to call, I cannot book this through the web page. I would like to be able to choose.

Hans, I normally use Eva to find the balance for my SAS / Mastercard. It is really tricky to navigate through the Web page to find this.

Anders, They have hidden away that link where it is hard to find.

Claes-Åke, I normally use my points for upgrading or to book Hotels to get the most value for my points.

Anders, when I travel I spend more time booking than traveling. I want the cheapest and the best. I buy upgrade vouchers and I have even bought gold membership on the internet (not SAS). I do everything to make the trip perfect. The Web page is normally the only contact with the respective airlines. I do heavy testing of sas.se. I try to figure out the different web pages and learn all the rules. If I book flight for my kids I am allowed to book long-leg seats, but when we board the flight the attendants tell me my kids are not allowed to sit there, why is then ok to book those seats?

When other good alternatives are available (for example city airlines) I fly them instead, I always make sure I get the best possible deal.

Anders, I bought gold membership on Alaska Airlines. I also bought upgrade certificates. My luggage was lost in Paris and after a few attempts SAS gave up, but I did not and ultimately after a while the luggage just showed up. I’ve used Eva once.

Claes-Åke, I like the old system where you called a travel agent. I miss that, but I am now used to the homepage. I would like to arrive at the airport as late as possible. Security check at airport should be swift as well. Actually the security at Gothenburg Airport is very quick, the staff are very good. I would like all waiting to be less. When I fly through Copenhagen I normally wait at least 1-1.5 hours, less would be good. Waiting
takes lots of time. The perfect trip is little waiting. Ryan Air are really quick in turning their flights around if I compare with SAS.

Hans, Ryan Air are really punctual. According Ryan Air themselves they are on time or earlier in 98.5% of all their flights!

Anders, SAS are close to perfect, security (which is not SAS fault) could be faster.

Hans, as little waiting times as possible at all instances is very important.

Mats, I generally check in my cabin bag to avoid all the hassle with boarding as the shelves are often full. Wintertime it’s difficult with all the jackets.

Johannes, If I fly on the cheapest ticket I expect the least service and vice versa. The web page is moving in that direction, but i don’t think it is clear enough.

Scenario:
  Hitta flighter/Booking/change/cancellation
  Flying with Children
  Use points / bonus point bookings
  When something goes wrong
  Lost baggage
  SAS/Master Card balance
  How much luggage can I bring
  Klaga

Johannes,
Scenario Booking
from Gothenburg to Boston via Stockholm. This is a regular trip for me. Normally I book 14 days before the trip, We are pretty flexible. I just picked a date. It’s a bit difficult to do if you don’t know what time, only the date. It gives me the different alternatives. For a certain date, I end up going back and forth many times. For me it is important to fly via Stockholm. It does not give me that option.

I’m asking Eva from Gothenburg to Boston via Stockholm. Eva only give me info on flying Sto-Got, it was not the answer I expected. I would like Eva to take me to the relevant page, which she didn’t. An error came up on the right frame of the SAS.se page. On every flight to the use you get a designated seat, I would like to choose, but in general the page gives me the info I need. I would like Eva to be a part of the web page not a separate window.

I can now choose the seat I want, It works well. This is a cash flight. I am making a real booking as I need to fly to Boston anyway. I need to know whether I at all can change the
booking for a fee or it is impossible. I will not be refunded. That’s what I needed to know. NKI 8

Scenario

where do I find my booking

Johannes, misspelled and rectified. Eva says she opens a page to input the booking reference, but she doesn’t. I open a new window with SAS.se web page and starts Eva again. Now she opens the page in question. I asked Eva how much luggage I can bring as a ‘Miles and More’ member, she did not understand the question and only answers on bonus points.

She can answer questions about luggage allowance in general and if you are a Eurobonus Silver or Gold member, but not miles and more (Luft Hansa). This is not the answer I expected NKI 7 or 8.

I ask if my flight is on time, Eva point to the Swedish airport authorities flight, which is not good enough if I fly internationally. I ask if my flight on time, same result. I would rather call. It seems Eva does not have real time info

Mats,
Scenario – booking
Holiday from Gothenburg to Greenland in August on a Sunday. Fly back 2 weeks later. No flights to Greenland on those dates. I Change the dates. Found acceptable dates and added more details, no indication on middle landings. Gothenburg-Copenhagen-Greenland. 2 hours 10 minutes. NKI 10. Possible for different options

Scenario – ask Eva for flights to Greenland
She answers Green flight and environment, not perfect. Mats tries Eva with Flights to Greenland. Eva points to a page for destination, but Greenland is not possible to choose. NKI 5

Scenario / how much luggage can I bring on my flight

A page about luggage appears. Silver members can bring 10kg extra. NKI 10

Claes-Åke, I am using sas.se trying to find a trip to Nice in France. We shall see what happens. I feel it’s a bit slow. I am trying to get economy tickets for two persons using Eurobonus points. 39 000 points, there will be some taxes and stuff but that normally shows up in the end. It shows very late in the booking process, I would like to see it earlier. It appears there are seats available.

I will ask Eva about this. I don’t really get an answer from Eva, she’s only talking about cancellation and rebooking fees.
I am trying the live chat as Eva did not answer my question. Here it would be nice to have a print function so that I could keep the chat dialogue I had for future reference. I had a chat on Philips homepage and there I was able to print out the log. The answers on the chat are a bit slow. I type ‘are you still there?’. This is a bit frustrating. Now I got an answers, but it was not much of an answer.

Anders, I am trying to find seats on Eurobonus points. It would cost 60 000 points per person, but I only have 63 000 so not enough for both of us. There is not so much flexibility in this function so I end up going back and forth many times.

I try Eva, I ask her whether I can book an exit seat when I’m flying with Eva. I don’t get a straight answers, rather some options to click, but none that really answers my question. In this case Eva did not help me.

I would like to chat with online. I keep asking the same question again, hoping the chat will kick-in. now the chat function starts to kicks in, but all chat operators where busy.

Hans, I am using sas.se trying to book flights on points. I get the same answer twice that the trip to Geneva costs 29 500 and I only have 21 500 points, it’s a bit redundant to get this info twice. My experience here is that I have to stop my booking, go and buy the points I’m missing and then come back and finish my booking/purchase.

I will ask Eva about this. ‘buy extra Eurobonus points’. When I start asking Eva the booking pages disappears and Eva opens another page. In this case I would expect either a question if I want to leave the booking page or rather having the new information opened in a new window.

Normally it’s very good that Eva answers questions and opens relevant pages, but in this case I didn’t want that as I was in the middle of a booking. I get the list from Eva how many point it cost to fly to various destinations. Eva give me an option to click on. ‘when I want to pay with points and cash’. On the link it says I can buy more points to meet the balance but there a 24 hour delay, so I cannot do this directly. I get the info 1000 is €55 and 2000 points are €110 etc. It is expensive, I have never done it. As the price is too high. It doesn’t make sense.

Hans, I clicked on ‘help and contact’ and then ‘service fees’ I can then see that if I book via internet the fee is 25kr and on the phone it’s 150kronor for domestic. This info is clear and easy to understand. When I look at ‘SAS service commitment’. I appreciate that this is available on the homepage and I can get all this info without having to call.

Mats, right now I am asking Eva how to find the balance on my SAS/Mastercard and she serves me a link, but I have to click a couple of times first, which is a little bit unnecessarily complicated. I ask Eva why, but do not get a good answer. I ask Eva if I can give my views on the homepage. She opens a feedback page for me.
Clase-Åke, we are unable to change a flight as we haven’t booked and bought any, so that exercise will not be possible to do only to find info on how to do it.

Summary

Hans, I tried to book a Eurobonus trip. It was a bit unclear with warning on insufficient points but in general it worked reasonably well. The colors where a bit bleak and did not stand out so much. Another thing is that under help and contact I found lots of good information and it follows all the way through the booking. For example it contained good information on service commitment, NKI 8. On Eva I searched for lost luggage. It roughly found what I wanted, but when I wrote lost luggage she still only gave me the answer regarding luggage. When I’m logged in on my profile it should fill in more info automatically and default start my flights from Gothenburg not Stockholm, simply because I live there

Anders, the page should remember my preferences and remember what I have used earlier. The page doesn’t really work very well and even crashes during heavy usage in my experience. I also feel the page lacks the ability to give the user a good overview of information.

Mats, it found my flight to Greenland on sas.se worked fine, on Eva not

Claes, I asked about taxes and fees on the Eurobonus pages to certain destinations but it referred to Eurobonus. The page referred back to Eurobonus.

Hans, when running a booking I would like to see taxes and fees earlier, now it only appears in the very end.

Claes, when using Eva for finding out how much luggage I can bring she provided this info very nicely. She opened a new page which gave a good answer.

Anders, on simple questions Eva answers well. If you ask Eva for the balance of SAS/Diners club she will still forward you to the SAS Master card login. On more complex questions such as whether I can do multiple single hops on points, but also the web page does not really answer this. I don’t like when there are secrets.

Johannes, the booking went well. But when I want to fly via a specific destination it does not support that. I also feel there is lots of going back and forth during the booking process. Eva gave a good answer on luggage. Eva work pretty well.

Claes-Åke, for simple questions Eva is OK.

Hans, good service on a homepage is when I can find what I need and do what I want intuitively and quickly.

Claes-Åke, more info on each page to avoid so much clicking.
Claes, good manual service is when the staff is polite and courteous and understand that not everything is easy for the passenger to do themselves.

Anders, Good service when it comes to self service is when more things can be done. All information must be readily available.

Johannes, in my profile I should be able to choose default, airport allergies etc. and the page should be smart enough to set this automatically when I book flights. I want to be able to set standard trips in the system to easily repeat them.

Claes-Åke, it would be nice if I can book for example the Arlanda Express (train in Stockholm) when I book my flight. Also, when I book a flight I would like to be able to see how many Eurobonus points I will earn on this flight. In the current system the number of points you can earn varies very much.

Johannes, I enjoyed that I got to test myself.
Group 2
May 13, 09.30, Frösundavik, Stockholm

Participants:
Customers
Mei Wen

Scandinavian Airlines:
Anders Signell, in charge of SAS.se web page

University of Borås
Håkan Alm (moderator)

Håkan wishes Mei Wen welcome, gives a little bit background to the project and himself and asks Anders Signell, SAS to introduce himself.

Håkan briefly describes the outline of the workshop:

Phase 1: ~ 45 min
Characterize the target groups general life situation as well as travel specific life situation

Phase 2: ~ 1 hour
(based on phase 1) generate different scenarios (including coffee brake)

Phase 3: ~ 45 min
Test these scenarios through electronic contact with Eva and SAS.se

Phase 4: ~30 min
common evaluation

Phase 5:
individual short interviews ~10-15 min/person (at a later date)

Mei Wen has just graduated from Oxford University as an Engineer and she is 24 years old. Her parents are both consultants in the Telecom Business. She has just been hired by IBM and will be working with ERP Solutions.

She used to live in Luleå so she flew a lot between Stockholm and Luleå. Also, as she studied in England and her family is now resident in Stockholm she has been flying around six times per year between Stockholm and London. On top of this Mei Wen is originally from Beijing, China and she still has family there so at least once every year she flies to China.

Often she flies to London with SAS and also with British Midlands. Domestically in Sweden she flies with SAS and to china she generally flies with Air China.

Being a student the price is very important, finding the right price is more important than the time of departure. As she normally travels with lots of books it’s also important for
her to have a generous luggage allowance. She says SAS are normally very nice to her and let her bring some extra weight.

She books on the web page of the respective airline. Sometimes when SAS and British Midlands has a code share flight the buying from British Midlands is cheaper. And if I book it in England and pay in UK pounds, it’s even more so.

She normally goes to the airport using the cheapest possible public transportation. It takes a bit longer but it’s not that big difference. Sometimes I take the airport bus or Arlanda Express Airport train if I’m in a hurry. Normally I fly using my Eurobonus card or else my credit card. I normally print out my e-ticket just in case. As a student I have more time than money so it’s very important for me to always get the best deal. We study a lot when we study, but we have 3 semesters times 2 months every year only, so lots of time of in between.

As I prefer a window seat I normally check-in on the internet and then at the airport I put in my Eurobonus card in the machine to get my luggage tags and then I leave the bags at the baggage drop. I look around at the airport, perhaps I buy some cosmetics and other tax free items. I try to be at the airport early, around 2 hours before departure. Often I have something I can read or study. Maybe I take the opportunity to call some friends to say good bye, then I go to gate. Often someone will help me with my carry-on luggage. It is a little bit heavy as I have my laptop and some books in the carry-on bag. Besides the baggage drop, when I board the aircraft is the first time in this process I meet a person. Most of the time they are nice, but for me it is not such a big deal. I cannot recall any time when anyone has been rude to me. If I am really hungry I will buy something on the flight, but normally not. The ticket does generally not include a meal. On the flight, I normally read a book. As my computer is pretty big I don’t use it during the flight. I get lots of exercise by carrying around my computer and my books and despite being pretty small I am still strong as I did military training here in Sweden.

I’ve never flown Ryan Air. SAS has good information and booking works well and I get a confirmation. I contact the support when I need to change a flight, often I call. Sometimes when I book a ticket, I book an open ticket so that can change the flight. They are called Economy flex.

Good Service is reliability and that I will arrive in time as I book transportation when I arrive and so on. The electronic tools for example that the web page is working well is more important than how nice and helpful the SAS staff servicing me are. Bad Service is when no one knows what’s going on and no one knows where you can call to get information and fix problems.

The perfect trip is very flexible. I have unlimited luggage, I get a meal, I can change my flights as I want. All is free (included). And the flights should be green. When I fly to Asia I also want pillow and blanket, games and other entertainment.
When I fly to China I normally fly economy but it depends, sometimes I fly business as the price difference is not that big.

Scenarios
Find the right flight price/departure
Baggage
Opening hours
Check-in when and how
Conditions for over bookings
Rules for changing flights
Booking
Using Eurobonus points and expiry
Ethic and Green flights

Mei Wen logs in to her SAS profile after finding it in her google mail.

I am trying to find out how many Eurobonus point I have and what I can use them for. Most of my SAS traveling was during 2005. After that I have been using Sterling which was pretty cheap especially if I fly via Copenhagen. Most of my flying with SAS is to London. Checking out my Eurobonus account balance. Right now I would like to find out how many points I need to be Silver member. It says when I have ‘enough’ basic point I will get silver membership. I am not very satisfied with that answer. So far I only find a table of points. I have 26 000 point and only enough to fly domestic or to Denmark, not more. I need 30 000 points to fly to London. Upgrade to higher class, I can do. 12 months of qualification period. I need 20 000 to become silver member. I got a good answer to my question.

I try Eva now and I am not sure if she is just a search engine or real Artificial Intelligence. I ask her “how many point do I need to get Eurobonus Silver. I get directed to the right page, but it doesn’t tell me directly how many point I need to become silver member. I actually found it here and I am satisfied with the answer. It worked well and Eva gave me the answer faster than if I was looking for the answer myself. Before I tried Eva I thought it would be the other way around. The other question ‘how many points do I need to for a trip in Europe’. I got exactly the answer I wanted. NKI10.

I don’t like this cartoon image as it’s difficult for me to take her serious. I have difficult to understand whether she’s a search engine or what she is. I prefer the live chat function with a picture of a real person. I can chat with Eva but she chats like a computer but not like a person.

I ask Eva ‘How do I chat with support’. Eva answers If you would like to you can chat with a person at internet support. Would you like that. I answer YES.

A new window opens. I like that Eva invited me to chat with a real person. Otherwise I may have to click around on the web page to find this feature.
Eva is better than the search function sometimes. On the chat, before they had a picture of a person (now it’s an airplane) here and it feels like real chat with a person.

I will ask Eva if they have any mobile services. I didn’t really get an answer on my first attempt. Sometimes when I’m in UK it’s not convenient for me to call, then it’s very good I can chat instead and they normally answer very quickly. I will say thanks and close the chat window.

I think Eva is pretty good, but maybe she can not help ME that much. I ask Eva about Mobile SAS. Eva answers and gives a number of mobility options. She listed all mobility pages. She answers just like a search engine sometimes.

I will try sas.se itself and see if I get the same answer.

I am asking Eva Search. She does not understand
I ask search engine. As above
I ask Where is the Search function. I don’t really get any proper answers

Maybe Eva is the Search Engine?

Anders Signell adds that Eva IS the only search function SAS.se has.

I ask Eva, ‘how much luggage can I bring’. I got a really good answer. It says I’m allowed to bring 20 kg. I also found that Eurobonus Gold and Silver members are allowed to bring more.

I’m asking for the allowed measurements for checked luggage. I already now the maximum weight. Only answers for USA trips, perhaps there are no specific rules?

When I was young I used a chat robot on MSN, but my friends discovered this very quickly and knew it was not really me.

Before SAS had snowflakes, which had cheap flights. I don’t now if they still have it. Maybe it’s already closed.

Anders adds that Snowflakes only exists as a brand name.

I am trying the low price calendar on the sas.se. I look for flights to London on dates a couple of months ahead. I like that SAS lists all the different prices and price classes.

I manage to find the cheapest flight on SAS. Normally I click around on other airlines homepages as well.

This low price calendar was very smooth and easy to use. If I log in to Eurobonus I get name and credit cards information automatically. I can book a flight in a couple of minutes. NKI 8-9
I try this with Eva. I want to buy a ticket to London. She gives me a list of destinations. She refers me to low price calendar. The low price calendar is cheaper.

I select a couple of dates where prices were cheap. However, the prices in the low price where lower than the actual flights presented later on.

When I use Eva I am not sure how to ask the questions.

I ask Eva what is the cheapest return ticket to London right now. Same result. I ask London cheap trip, she present the low price calendar. I think the problem with the low price calendar is that the cheap flights presented may already be gone.

The prices are not always the cheapest when using the low price calendar than using the regular flight search. This is a bit illogical.

If I use the Eurobonus pages to find out when my points expires, validity of bonus points. Eva answers your points are valid 4-5 years.

The answers from Eva are not always clear.

Many times Eva is actually faster than me finding information. However, I still have a tendency to click around myself. She provides the same answer as if I click around myself but sometimes she does not really answer my questions.

I think that google live search is very good as it fills in words as I go. Eva is much better than I expected and she answers correctly most of the time and I will use Eva a bit more now. The problem is she finds the wrong thing sometimes. The problem with that is that for someone not being happy with Eva’s answer may not try her again. First impression is very important.

Maybe a small Eva user guide would be good.

I think she looks a bit not to serious because it’s a cartoon. Eva is a good search function and more. I have underestimated her because of her appearance.

The perfect Eva must be efficient and give quick answers to question and give suggestions. If she only gives suggestions to a number of pages it’s the same as if I click around myself.

The web page is pretty clear fast and efficient. On the low price calender gives diffent prices that normal flight search and not always cheaper, this is not logical. The low price calender should be very visible and easy to find. On the low price calendar at first I got really good prices, but when I selected those the low prices did not actually exist. I’d like to see colors indications what is the absolutely cheapest price clearly.
Call center can sometimes be replaced by Eva.

If there is a long phone queue SAS can call back, that is pretty good. Give the option to chat when Eva cannot answer. Sometimes when I speak to call center they refer me to the web page. When chatting, they could not rebook my flights. If I could rebook my flight in my profile, I would do this on the webpage. I would like as much as possible to be able on the sas.se page. If there was more flexibility in my pages (profile) I don’t think I would need Eva so much.

I think it’s nice to be able to give feedback like this. I think you can also get a lot of feedback asking the users on the homepage.
Group 3  
May 13, 17.00 Frösundavik, Stockholm

Participants:
**Customers**
Anna Björklund
Kia Johansson
Mikael Armstrong
Ulf Alfredsson

**Scandinavian Airlines:**
Anders Signell, in charge of SAS.se web page

**University of Borås**
Håkan Alm (moderator)

Håkan wishes the participants welcome, gives a little bit background to the project and himself and asks Anders Signell, SAS to introduce himself.

Håkan briefly describes the outline of the workshop:

**Phase 1:** ~ 45 min  
Characterize the target groups general life situation as well as travel specific life situation

**Phase 2:** ~ 1 hour  
(based on phase 1) generate different scenarios (including coffee brake)

**Phase 3:** ~ 45 min  
Test these scenarios through electronic contact with Eva and SAS.se

**Phase 4:** ~30 min  
common evaluation

**Phase 5:**  
individual short interviews  ~10-15 min/ pers (at a later date)

**Phase 1:** life and travel situation

Anna, 36, single, born in Malmö moved to Stockholm a year ago. Working as a legal counsellor for Customs department. Earlier worked for the Police department in Malmö. Travels a lot for work and privately. Enjoying life in Stockholm and around Sweden. Have previously worked for the police department in Malmö.

Ulf, 40 , moved to Stockholm 15 years ago. Married and has 1 girl age 3. HR manager for a company called Dalkia.

Kia, 38, lives in Stockholm since 9 years. Originally Umeå in the northern parts of Sweden. Travels a lot, but not so much for work. Managing Director for addressändring (the company taking care of the populations domicile addresses). Kia is Single.
Mikael 37 born in Solna in Stockholm and still lives in Stockholm. He just finished his education as a physician, has a boyfriend since a few years, but lives alone. No kids.

Anna, I travel lots for work around Europe and in Sweden. When in Sweden it’s normally going to Malmö. Privately I travel a fair bit as well. As often as I can afford it I travel to Australia. I travel lots in Europe as well. I am also a volunteer to help traveling with vision impaired people. It’s not really a holiday, but I enjoy it as I can help fellow beings. When I fly to Australia I normally fly with Singapore Airlines. When I fly for work in Europe it’s often to Brussels.

Ulf, in my work I travel 2 - 3 times per month, to Gothenburg and Malmö with Malmö aviation. Main reason is that they fly from Bromma Airport which is walking distance from my home. When I fly to Östersund I normally fly with SAS. Roughly twice per year a weekend trip to somewhere in Europe. 1 trip per year a bit further, sometimes to Kenya as my wife is from there. Normally we use economy class when we fly privately.

Kia, at the moment I don’t travel as much as I would like to as things are pretty hectic at work right now. Normally I do shorter trips, for example to go skiing. I also try some unusual destinations. Before, I traveled a lot. I studied abroad as well. I have friends that live abroad. For work I don’t travel that much and if I do it’s normally to Östersund in the north.

Mikael, I used to work as a journalist and then I traveled a lot for work, around 7 to 8 years ago. Since I studied to be a doctor I did not travel at all in my work. I travel privately around 4-5 per year.

Mikael, Anna and Kia are Eurobonus members. Ulf is member of Malmö Aviation. Kia used to be gold member, but not any more. Mikael is also member of KLM and Finnair.

SAS what does it mean to you.

Ulf, many trade unions

Mikael, For me SAS is something positive, something safe and comfortable and stabile, when you enter an SAS plane, everything is going to work. when you fly on the way home from somewhere it feels like you’re almost home.

Kia, I agree, also it is the Airline that covers all the routes, not just the high profit ones.

Ulf, SAS has problems to make changes because of its structure. I agree that SAS is safe and covers the region very well, with flights even to the really small and remote destinations. It must be really difficult to be profitable flying to these small places.

Anna, sometimes I feel SAS staff can be a little bit arrogant. For me SAS is middle aged slightly arrogant women.
Mikael, SAS is a little bit depressing sometimes as it is this huge company and you feel a little bit sorry for them sometimes. Difficult to do any major changes as there are too many people with too high salaries and too good terms of employment. It’s a big challenge for SAS to change this.

Kia, I never saw SAS staff as arrogant. When I was very young on a long flight I had a very good and safe experience. I don’t really feel sorry for SAS, but quality in comparison to price is good. I can find cheaper alternatives with other airlines, but when you add all the hidden cost together the difference is normally not so big. However, if I can fly from Bromma, I save time and that would be a reason to sometimes fly with some other airline. If I get a price from SAS it’s all inclusive but if I fly for example Ryan Air there are so many extra little hidden charges.

Anna, I agree with SAS I get quality, but sometimes I feel that the service is efficient, but not always so charming and friendly.

Ulf, I don’t think they are unfriendly, but Malmö Aviation can be a bit more charming. The air hostesses are a bit old and I think it can be difficult for them sometimes to keep a good mood. I tend to not use Airlines such as Ryan and I understand they have extremely poor conditions for their staff. I have tried Sterling and Norwegian, I think they were OK. When I travel for work and price is not the main priority there is no way I’m going fly with any of those low price airlines. And now as I’m a bit older also flying privately I tend to not fly too much with those as quality is important. SAS also has good departure times.

Anna, A typical trip I will use Arlanda Express train to get to the airport. I check in on the internet. If it’s for work I will go to SAS.se and see what flights I like and then I will call a travel agent and they will do the rest of the work.

They will send me a mail. They will put the flight on my Eurobonus frequent flyer card. I check in 22 hours before. I will put my card in the check-in machine at the airport and If I bring any luggage I will get a tag for it. I will then line up at the baggage drop. Sometimes there’s a line and sometimes not. As I have a silver card I’m also allowed to use the business class line which is nice as it’s faster. I do the fingerprint function and I go to the gate. The impression from staff here is completely neutral, not positive and not negative. Flying to Malmö I try to be 20 minutes early. If I fly somewhere else I try to be at least 45 minutes early. When I board I just use my finger print again to identify myself. And then I board, say hello to the airhostess and find my seat. The interfacing with the SAS staff is neutral. Once I flew with a very nice pilot, that was joking and very nice. It made the trip memorable. You can if you want to. I prefer certain seats. I prefer flying with SAS and I am pretty loyal. I like getting my Eurobonus points. When I fly SAS I know what I get. Also, I prefer SAS.se homepage compared to other multi-airline pages as the information is clear and simple to grasp. When I leave the airplane I grab my bag and go where I need to go, after that I don’t have so much dealings with the SAS staff any more.
Last time I flew to Brussels my bag was damaged, I waited till I was home to claim it and the woman taking care of this was very nice. She happily gave me a new bag on the spot. That was very nice where something negative became positive.

Ulf, a small thing, when I travel for work. When it just comes to a few tens of kronor, why can I not get a cup of coffee when I fly? A very small thing, but a bit irritating. I think they can add more than the cost for this sandwich.

Anna, I agree, when I fly Malmo Aviation, I get my little box. On SAS I have to pay myself.

Kia, I quite appreciate that it’s nice that not too many things are included. The trips are so short so I think it’s a bit stressful to always serve something. I’m happy to pay if I want something.

From an environment point of view it make me sad to see all this plastic and paper waste as well. My typical trip is Umeå -Stockholm as I still have family and friends there. When I fly privately I am pretty price conscious. I open a number of window in the web browser to compare and SAS, Malmö Aviation etc. I normally use the respective airline’s own site. I check if I can be a bit flexible on the dates and what effect that has on price. Sometimes SAS is a lot more expensive. I use Arlanda Express or the airport buss, depending on how much time I have. I normally fall asleep as soon as I sit down in the airplane seat. I actually appreciate that I can just sit down and not get disturbed. I feel sometimes like I have this nonverbal agreement with them to just give me my own space and not disturb me. On a longer flight, however, I am much more aware of the service level I get and what food I get etc. I can also remember when staff has been funny, but I do believe if the pilot always have to say something funny it would not be spontaneous and probably just annoying. Sometimes I check in before, sometimes not. Normally I check in on the machine at the airport.

Mikael, when you fly privately the trip starts with an idea that you would like to go somewhere. Maybe I read something in a magazine or I saw something on TV. Maybe you get an impulse from someone you talk to and you just feel tat the timing is right for that. It takes me a while before I actually book something, I normally browse around on an enormous number of sites first. Ultimately it’s my mother, who works for a travel agency, who will do all the booking and arrangements.

Mikael, Good Service is professional attitude from the staff with a bit of charm and good humor, not too much queuing and problems. Any measurement for good service and a good airline is the ability to fix things when something goes wrong.

Ulf, when I fly with the family, the service is actually more important than when I travel for work. I think If I used for example Ryan air the cheap trip would probably ending up expensive and my wife, then my daughter and ultimately myself would end up being upset and unhappy. The trip will end up being expensive instead. It has to work and the
reliability and ability to fix problems has to be there. If I have a little bit extra luggage with SAS it normally is not a problem. I have not flown Ryan air, but I assume there’s going to be extra charges. I prefer knowing from beginning there is a certain acceptance to stretch the limits a bit with SAS and it is safe secure and reliable. I like to pay once and then that’s it.

Kia, nobody likes to feel cheated. If it’s a good deal you’re not going to feel that way if there’s a lot of hidden charges. With good service I also see the ability from staff to sense who wants lots of attention and who just want to be left alone in their own world.

Ulf, I flew with SAS to Manchester last week and they were very good. The flight wasn’t quite full, so perhaps they had a bit of more time than usual.

Mikael, this whole travel thing is not a big deal. I just make sure to be there in pretty good time. I try not to bring luggage as I then don’t have to line up at the baggage drop.

It’s super good that you can just slide your Eurobonus card and you can go inside. No papers needed.

Ulf, my typical trip is a business trip and I book through the internet. We have a travel agent at work, but for some reason I think it’s pretty smooth as you ‘own’ you trip with more flexibility and you can change your booking yourself as you please (if you buy a flexible ticket) and you don’t have to worry about a travel agent closing at 6 PM. I also try to be a bit economical as the travel agent add lots of fees all the time. A taxi, which I will pay 200 for, they’re going to charge me 250. Also, privately, I tend to book online. I had a gift voucher to some travel agent and there were so many extra charges so the Budapest trip I had in mind ended up be so much more expensive despite the gift voucher. I also feel that it’s safer buying directly from the source rather than the airline.

Anna, when you stuck at Malmö airport for fog or some weather conditions. When were delayed three hours as there were some delay due to not enough staff in the control tower we got a 100 kronor voucher (enough for a coffee and sandwich). It didn’t feel so good. In this case they should copy The railway company, SJ, and have a punctuality guarantee.

Ulf, I have an example, we were once flying with Iberia Air having some problems flying out of Cuba due to over bookings. I was there with some friends and we were offered a nice hotel and transportation. Also, in order to not carry to much luggage we gave away some of our clothes, but we were asked if we needed any clothes. I also lost a day of work and they compensated me with some money as well. This was in the nineties and it may have changed now, but I think they treated us very well.

Mikael, bad service is lack of information. You get stuck somewhere and nobody tells you why. Most inconvenience, I believe, is acceptable if there is proper information.

Kia, when we went from Mallorca with some airline and we hit a terrible turbulence and there was just no pre warning from the flight crew and some passengers were actually
really scared and panicked. Why did they not give pre warning, they must have known. This is bad service.

Ulf, we flew to Nairobi via Addis Abiiba, we ended up waiting for a while, but the bad thing was that my wife endd up in an argument with some airline staff as our daughter had a small ball and was not allowed to bring it. I think it’s a matter of neighboring country rivalry. I though my wife exaggerated. In Europe it would have been ok. For me this was not a big deal but they allowed my wife to argue so much so that we missed the flight. If tey were more professional they should have warned us that arguing about this makes us miss the flight. The good new in all this was that even if we did not have a flexible ticket at leas we were able to catch the next flight without any more dissapointments, which for a while I was pretty worried about.

Kia, once I was booked with SAS to Umeå and on Sunday night I found out that my father was in a hospital and it was pretty serious. I then tried to reach SAS to go immediately, this is a good example when the savings perhaps have gone a bit far. By lying a little bit I managed to get through to internet support and the girl understood my dilemma and helped me. The situation get a bit bizarre when you must reach somebody and it just is impossible.

Ulf, to get info as soon as you enter the airport on where to go and what to do would be great. If it’s a new airport there is a certain level of stress.

Anna, I am happy with my regular traveling, but I miss the (glimten I ögat) charm of the staff and to at least sometimes get a coffee and something with it. If I was not satisfied with SAS I would not use them.

Kia, I can be very irritated with long lines at the airport for example for security. They know which flights are departing so they should be able to plan for this. Also, for people that are not experienced travelers, traveling gets more and more difficult. When my mother travel I need to write specific instructions for her to be able to manage. Some people don’t want to travel as it is so scary and stressful. When I have had bad experiences it has not so much been SAS staff but rather ground staff for example when bags are lost and so forth.

Anna, the thing is now that you do the work yourself these days.

Mikael. The service was worse when you had to line up to a check-in counter.

Anna, yes, but it’s a generation thing as well, for those who don’t know all this new technology. It’s nice to have someone to ask.

Kia, I can get irritated with other passengers that do not know how to use the machines, but they are not to blame, they are jus doing their best. The perfect trip is when everything just goes smooth.
What I have missed is that in the old day you actually got a discount for using internet, then it was just neutral and now you actually have to pay a fee for booking on the internet. I feel like I am paying for doing the work myself, this is very unfair and illogical. Why not just include this in the ticket prices instead, as it is a lot less irritating.

Mikael, to add on what Kia said, the staff planning on airports have to be better to avoid unnecessary lines for security etc. I feel powerless and pushed around. You have to take off lots of clothing and items and then its such a hurry to put it on again. This is not the perfect trip.

Anna, Copenhagen Airport has something very good, when you’re in the security check line, you get a time estimate how long the time it’s going to take and this takes away a lot of the frustration and you don’t worry so much how long it will take. And it is very precise.

Scenarios

Book buy flight
Travel with children
Environment
Damaged baggage
Reimbursement for delays
What’s included (coffee etc)

Mikael, I’m searching for a small place in Canada, but I cannot find it. When there are some slightly more unusual destinations that are actually available, I sometimes cannot find them on this site. I select, country and city, dates and then when I go forward I get ‘no suggestions’. Why can I select it when there are no flights? This is illogical and not helpful. Especially when I know that there are ways to go to these places.

I tried some place in Taiwan and got good options of flights. I found some Taipei flights and got plenty of options and how long time it takes, how many connections etc. This works really well and I almost went all the way to the payment point. I have booked and bought on SAS page before and there are rarely problems and it’s easy to find things. On mainstream destinations it’s simple. Booking NKI 9.

I am now looking at the low price calendar, I didn’t know this even existed. I have missed before that you cannot find an easy way where there are cheap leftover tickets if you just feel like going somewhere for the weekend. I would like to just search for categories such as sun and beach, rather than specific destinations to get some flexibility if you’re just looking for a quick weekend escape somewhere at low price. May be this low price calendar has that. This is good, I didn’t see this before. I found some good prices. I found some good price in the low price calendar, but when I go to the next screen those prices are actually no available, this is not right. It feels unbelievable. If have to check it again. NKI 1,
This is crazy and a waste of time. I can ask Eva a bit about the environment. I ask ‘I wonder what environment policy SAS has’ I got some info. I can get some info about related issues as well such as Green Flights etc. I think this was a very good answer. I now ask about carbon monoxide emissions and compensation and get to the emission calculator which is good, but suddenly the language on this info is now in English. That shouldn’t be to hard to translate into Swedish. On the calculator I cannot just type a city but need to state the actual airport. Here I get info, but its hard to understand for a layman. Eva did a pretty good job as she took me to right page, but she didn’t really bring me all the way. I cannot compensate. It just says coming soon on this page, not so good. That should work. NKI 6.

Kia, I found out that I would fly to Johannesburg, one really young and some older ones as well. In the flight search it was not very clear as the prices are initially shown only for adults. If you are used to this page you will know to go to next screen and then back and it works which is good. The problem including more stuff on the initial screens is of course that it will be even more info on an already busy screen with prices and info.

Perhaps it could say somewhere that to get the other prices go next to help inexperienced users to make it easier. No major problems so far. What I appreciated with a previous booking was that there is a control so if I use a dummy Eurobonus number, it warns that this number is not correct. Another thing that is good is that if I am loged in all my information is added automatically and I don’t have to type it again. Booking NKI 7.

I haven’t tried Eva very much, what I really appreciate is whatever question I ask I have gotten a relevant answer and the web page in question is opened. On this question When I write ‘is a meal included’. it says clearly what I can expect. Breakfast is included 6-9 AM. EVA NKI 10 so far.

She blinks her eyes very nicely. She is good, she not only answers but she actually opens a relevant page.

Ulf, I am trying to book a flight for 2 adults and a child to Prague. I like that you don’t need to state an exact age for the child but rather a range, which is nice. I tried some dates and I am now trying to step back on the page. It doesn’t work so I need to start from the beginning, I assume. I got a few optional dates, three before and three after my selected date, but when I needed to change that I ended up starting from the beginning. I will now need to fill in all info from scratch. It would be nice to keep that info. I am now choosing Rome as a destination: suddenly the design is now very different. This shows me prices on respective days and some total price on my earlier selected dates. I go next and the actual flights available. It is clearly stating, economy, luggage allowance. I think this was pretty clear. The only thing I wonder is, why it does it not remember my settings when I go back. It is not a huge inconvenience, but it would be an advantage if this was possible.

Anna, I went from the start page to ‘during the trip’ then ‘all about the trip, then If I look at number 6, what’s included and when. It states very clearly what is served and at what time. Then I went to traveling in Europe, also very clear and easy to understand. I
navigated through the sas.se rather than using Eva as I feel sometimes when I ask Eva something she asks ME questions like ‘is this what you mean’. I tried Eva for damaged luggage and she linked me to the page about damaged and delayed baggage. It was good.

I ask Eva ‘damaged luggage’ it points me to a page about this and it tells me what to do. It would be good to also know how I get compensated and what steps are involved. I try to find out about the environment and the info is good going through the web page. Most info on the web page is easy to find. I tried the low price calendar and I compared the prices with the normal booking the price were the same in the end, but it was a little misleading.

When I had a delay and only got 100 kronor voucher for this it was a bit small. However, I’m not sure what would be reasonable.

Evaluation

Mikael, Eva was impressive; she answered and opened relevant pages.

Anna, I am a little bit against this kind of automated things, it is like when I call to a call center and I get these automated response. Did you mean this, I didn’t really understand your question etc. I still thought she was good and a positive experience.

Kia, I generally don’t like these things very much, but I liked chatting when I tried that. However responses when chatting can be a little bit slow, I assume they chat with many at the same time. But the fact that Eva did direct linkage and opened pages for me was very good. I tried all sorts of stuff, delays, what’s included, luggage, environment etc. She gave good answers on all this. Eva is hot.

Ulf, I too normally don’t use Eva much, I tried and it was both good and not so good, on some environment questions she did not answer very well. When I asked about damaged luggage she gave a very clear answer though and she added all the related background info as well. I normally browse through the page through the different menus and when I give up, I call.

Ulf, Eva NKI 7. I have tried the Avatar of Stockholm Municipality page and nothing really happened or worked.

Mikael, I know she works well, but I am not sure when I will actually use her anyway.

Kia, I will definitely use her again when there is something I wonder about.

Ulf, I would probably rather email even though it may take a bit longer to get an answer. I prefer to have a physical contact person.
Mikael, Eva can answer most questions.

KIA, the interesting thing is that people are different. I have no patience to wait and appreciate a service which is available 24/7. I also experience that mail actually takes more times than a phone call. As there will be so many times back and forth. I appreciate quick answers.

Mikael, I used the online chat as I got a bit irritated with the low price calendar as it indicated prices for flight that did not exist. I checked both Paris and Milan. I clicked on ‘help Via Chat’ on the upper left side in the booking screen to start chatting. I was chatting with someone called Nina and told her that the prices on the low price calendar did not match the actual prices. I did not get an answer yet.

Anna, when I tried prices for Copenhagen the low price calendar was correct.

Mikael, I highly appreciate that I had the possibility to contact customer service live at this time. I would not have called, I would have left sas.se and gone to another airline instead.

Ulf, when I booked a Eurobonus trip, I appreciated that I could search for six destinations at the same time.

Anna, I only have positive experience with Eva.

Mikael, Eva could give travel suggestions for a certain date rather than a certain destination.

Ulf, If I ask Eva, 9-12 February she just answers, -3.

Anna, the online chat girl Nina is pretty cool, I asked her, how many customers she can handle in one go and she answer right now 4, but there is no upper limit. Normally I manage to give good help and answers. I asked her if she doesn’t give the wrong answer sometimes and she said ‘it normally doesn’t happen 😊’.

If there is no waiting both Ulf and Anna would prefer to call.

Kia, for me it depends on the case. If it’s a pure information issue I prefer Eva or homepage which is more logical for me. If it’s a more complex matter I would probably call.

Ulf, If I get to wait 5 minutes it’s from case to case. If I’m in the car, a little bit waiting does not really matter to wait a little bit. Over 10 minutes I will hang up.

Anna, If I get an answer orally I know who to hang if it is not correct. If I read it myself it could be me misinterpreting.
Ulf, if it’s about for example how much luggage I can bring it’s much better to have it in writing. If somebody just said something it can be difficult to prove.

Mikael, it’s all about how complicated it is. If something simple orally is ok, but more complex stuff is better to have in writing.

Kia, If I live chat and I make a screen dump I can show that such and such person said this and SAS have to take responsibility for it. I generally trust what it says on the web page. When I check in with for example SMS, could there not be some additional info as well gate etc. to find the way easier at foreign airports.

Anna, you actually do get the above info by SMS message.

Kia, printing out stuff can be very helpful sometimes.

Kia, it’s difficult for us to have an opinion of whether this is a good way to collect information, it depends on what this actually leads to.

Anna, I feel I tried many things and I got a chance to speak my mind about what was positive negative and what is missing.

Kia, I get curious from another perspective. How were we selected?

Hakan Explains
Group 4
May 14, 09.30, Frösundavik, Stockholm

Participants:
Customers
Joakim Schlegel
Hans Christoffersen

Scandinavian Airlines:
Anders Signell, in charge of SAS.se web page

University of Borås
Håkan Alm (moderator)
Nicklas Salomonsson

Håkan wishes the participants welcome, gives a little bit background to the project and himself lets asks Anders Signell, SAS to introduce himself. He also ask Nicklas Salomonsson to introduce himself

Håkan briefly describes the outline of the workshop:

Phase 1: ~ 45 min
Characterize the target groups general life situation as well as travel specific life situation

Phase 2: ~ 1 hour
(based on phase 1) generate different scenarios (including coffee brake)
Phase 3: ~ 45 min
Test these scenarios through electronic contact with Eva and SAS.se
Phase 4: ~30 min
common evaluation
Phase 5: individual short interviews ~10-15 min/ pers (at a later date)

Phase 1: life and travel situation

Nicklas asks:

When we say SAS, what is the first thing that comes to your mind?

Hans, you think of an established airline, high quality and a good reputation.

Joakim, I agree, Swedish (Scandinavian) old and reliable. I grew up with SAS.

Joakim, I am 42 years old and live on Lidingön, work for SVT, Swedish Television, doing broadcast control. My family is Hans here.
Hans, 47 born in Lapland in the very north of Sweden, lives with Joakim on lidingon. Moved to Sto -78. We have two dogs as well. I am doing ambulance medicare, have done this for 12 years.

Travel situation

Joakim, We travel mostly privately reasonably extensively. We travel to USA for example New York, Miami. We enjoy pleasure cruises. I am our own little travel agency at home. I Also help friends to book sometimes. I really enjoy this. 5 to 6 times per year. We have cruised Caribbean, Hawaii, Panama Channel. We leave for the Caribbean again next Friday. Many live under the impression that it’s really expensive and only old ladies do it, but it is actually not that high. I buy online, I used to buy from a travel agent, but found out online is much cheaper. I found out flying to US it is sometimes cheaper to buy the hops separately rather than one complete trip. Price and departure times are important. When you buy separate hops you can book the flights too tight. I normally use multi airline site for guidance, but I buy from the site of the respective airline.

On cruises I buy from last minute sites, where surplus is sold very cheap. Most of the info I find on homepages so I rarely actually have to call or email them. I have all mileage memberships: One World, Sky Team and Star Alliance. I prefer SAS and Star Alliance. Sometimes I fly KLM. I don’t get so many SAS points any more as the lower the price the lower the points, which is different from before.

I only see advantages booking on the internet, but when talking to friends, many are skeptical and scared to book over the internet. Internet payment is also an issue for some.

Hans, people worry that something goes wrong and they are unable to sort it out before it’s too late.

Joakim, I know that you can change your booking within 24, but it should be more clear on the page for people that don’t know that. As many are scared to give their card number on the web why not have a service where you do all the looking and booking on the net and get a reference number and then all you do is call and do the payment on the phone.

Joakim, we have booked on the net, I check in on the net. I think it’s a bit unclear on the web page as I check in and then I still have to go and get my boarding pass. It’s a bit more clear now, but this has created confusions in the past. We board the aircraft. I leave my luggage in the bag drop. Another not so good thing is the baggage tag comes out in machine next to where I put my frequent flyer card, this you may not see if you don’t pay attention. I have learned this now but it is not really intuitive. I see people just leaving not realizing that the baggage tag is still in the machine. There should be a clear message on the screen with an arrow pointing to the baggage tag. In the US it works differently and the information is not always very clear. Then we go to buy some tax free alcohol.
On board on SAS you get nothing, perhaps a smile, with Lufthansa you still get a coffee and a sandwich. Perhaps the sandwich is not such a big deal but the coffee is! We are going to Hamburg in March and as the price was the same we choose Lufthansa mainly because of this.

Hans, it is an atmosphere thing as well with this little coffee and sandwich. It has an comfort factor. It make the flight seem a bit shorter.

Joakim, as Hans is tall we check in early to get good leg space. I do online chek-in to get the seat, but also to get the boarding pass there as well. Another thing, very good, but not so clear on the page is the fact that there are machines that only gives baggage tags when you have already done your online check-in. Sometimes the staff is nice and sometimes not, mostly they are nice. There are those who are nice and always do the little extra things and those who are sighing and moaning and it seems everything is a problem.

Hans, they are not rude but you get the feeling that we are bothering them.

Joakim, we flew once to Australia and first we flew with SAS and then the last leg we flew Quantas and suddenly the average age of the staff members dropped by 40 years, and the energy level in this younger crew was so much higher.

Hans, of course there are many SAS staff that are really nice as well. Then we land. We get the luggage. We have occasionally lost it but claims have worked well. It has only happened at home trips so it has not been such a big deal, and we have just reported it at the arrival service counter. But when you land at the international part at Arlanda it takes an enormously long time to get the bags. You can end up waiting 30-45 minutes. At least lately I’ve seen that there is an estimated arrival of the luggage which is good.

When my father passed away we rebooked a flight, but I called them as this cannot be done on the web as far as I know. I do not book Hotels with SAS as prices have not been very attractive. Environment is not such a big deal.

Hans, price is a deciding factor.

When we fly multi-hop flights bought separately we sometimes check in bags flight by flight, but sometimes we can actually check in baggage all the way even when flying different airlines. I budget extra time to be able to handle baggage at every airport. I try to give ourselves 2 or even 3 hours to make sure there is plenty of time.

Joakim, I may ask Eva about traveling with the dogs or I have three bags how much is that. I have not used her that much, but sometimes she works pretty well and sometimes we get very strange answers. If you use the some words Eva sometimes doesn’t get it. One thing I miss with SAS that SJ railways does, is selling out spare capacity on for example. Tradera.se.
Hans, On a perfect trip I want everything to be smooth, easy to understand, quick and easy security and not too much waiting. I would like to have more leg space. I am not extremely tall, but never the less. Coffee and Sandwich is nice. Generally I think it’s fantastic how we can transport ourselves from A to B in the way we actually do.

Joakim, more automatically added passenger profile info take from Eurobonus profile when booking would be nice and minimize the amount of clicking and typing during the booking. Also, I would like to have preset fellow passengers that I can just add by clicking on them and no typing of their info. As little typing and clicking as possible. The perfect trip is the trip with nice and smooth flow.

Hans, that can make the trip better, a bit of fine tuning.

Joakim, If I got a good deal immediately flying for example Stockholm-London-Los Angeles-Hawaii I would not go to other home pages, I would just buy it directly from SAS. A best price guarantee would be nice.

Joakim, I don’t call much, but if I do I sometimes end up waiting for a long time. Now they have a feature where they will call back later, this is a plus.

Hans, it would be good to freshen up the service-mindedness and the general attitude among the staff a little bit to take it to a slightly higher level.

Hans, when you travel long distance they expect you to travel everything in one go: pre-drink, drink with the meal, food etc. This gets difficult sometimes and you tend to forget something and the staff gets upset. I think it’s wrong as it’s not easy to order the wine before you actually know what meal you get.

Joakim, good service is smooth and easy booking. Smooth, check in security, boarding. Service to the right level on the flight. Some drink or refreshment on the flight and no waiting for the luggage at arrival.

Hans, the availability to get help when you come to the airport is good service.

Joakim, if you are in transit, it’s not so easy to find someone to help. You have to grab someone.

Joakim, I think self service is better than manual service, because it’s faster than manual service if it is clear and simple. On domestic flying the airline assumes that everyone knows how to use a touch screen, which is not always the case. My mother does not know what a touch screen is, she has never even used a computer, I believe. You have to be very clear to make everyone understand.

Hans, it is pretty good at Stockholm airport as most of the time there will be somebody circulating the area to assist.
Joakim, we should put my mother there at age 75 to see if the systems really are intuitive and easy to use. There must be somebody around that can help if problems.

Hans, you do not always have to interact with a person, sometimes using a machine can be good as you don’t always want to talk to somebody and be polite.

Joakim, for example check-in on the internet you can see a graphical overview of the seats and select the one you prefer. This is better than having another person selecting it for you.

Joakim, when I ask Eva or when I look at the regular homepage, I get different information on how much the booking charge is.

Scenarios

Book / Book flights as separate hops
Check in, when need boarding pass?
Luggage handling during transfer
Payment by phone
Change a flight
Booking service charge

Hans, I want to travel to Kiruna, which is near to where I grew up. I am selecting destinations on the sas.se web page. I want to go early February. Feb 6 and home on the Sunday. I found a good price for Friday, Sunday was a bit expensive. I select Monday instead as it is cheaper a day later. I clicked and nothing happened, same page came up again. This is not what I was hoping for. I try again, same result. I now found a faint read warning message saying that arrival date has to be later than departure date. I missed it twice and it was not very Clear. I am trying to change the dates on my selected flights. I selected departure March 6 and return March 9. Departure 8.49 and return. The dates and prices are correct. I go next. I fill in my details. I got a clear error message here as the bogus Eurobonus number I put in does not exist. This was good. I don’t remember my EB number so I just leave it blank. I try to go next. I change my email address as well. Now I get to the payment screen. I see my summary and all is OK and looks good. I stop here in order to not charge my card. Except for not so clear error message it was good, I give her NKI 8.

Hans, I ask Eva, ‘can I bring my 7kg duchshound’. Eva answers, ‘You can bring your cat or dog if you have booked this with SAS…’.I open a relevant page which also includes prices...

Hans, This info was clear and complete. NKI 10. very very good.

I believe that using Eva can save me a phone call, Absolutely! I ask Eva, ‘what do I do with my Skiing equipment. Eva guided me to the relevant page and I am happy with the answer. She also gave me answers about musical instruments and other related things too.
I ask Eva ‘can I bring my walking sticks in my carry-on luggage’. She sent me to a page regarding carry on luggage, but she doesn’t give me any specific answer to this. I click on a link listing forbidden objects. The page says that it will open a document in a new document, but it doesn’t happen. This was not good.

I ask ‘how do I check in as smooth as possible’. She says I can check in on the web page, by SMS or at the check in machine at airport. She gave me a good answer.

Joakim, I went to United Airlines web page and they have a function supporting multi hop flights. They call this ‘function Multi’. I try two different hops, not directly connected Seattle to Los Angeles and San Francisco to Chicago. I rent a car and drive in between. The United page presents different options. I would like this to be possible on SAS page as well.

Evaluation

Joakim, to book a trip using Eurobonus points on sas.se and buy sas flights is easy, but to use my point with another star alliance partner I think is very difficult. I ask Eva ‘Eurobonus points with lufthansa’ no answer. Use points with other airline. No answer. For example this time when we wanted to go to South Africa with Lufthansa. Australia is also not available. This is easier on other airlines. I try Nuremberg in Germany which is a code share and that is OK.

Joakim, Eva should have a more dominant position on the page and she should also be explained as I believe people simply don’t know what she is. I also want Eva to be available during the booking. Eva never says no, it seems like she avoids delivering bad news. It is nice if she can answer more direct.

Hans, she should be more clear.

Hans, some answers on Eva for example regarding my dog, were very clear and obvious. Then I had another question regarding walking stick with sharp edges, where she did not really deliver an answer and I ended up on a page that referred to a document on forbidden objects that never opened. I also got a good answer on different options how to check in.

Joakim, many times Eva opens a new page on her left side on the actual sas.se page, but if you just read in her answer you may not see that. It would be better if Eva was integrated in the actual page and that she clearly said and pointed to the window next to her.

Eva is a very nice feature and I will definitely use her again, but perhaps she should be further developed.

If Eva is further developed and give more complete answer to questions she will be very useful.
Hans, Eva can sometimes save me a phone call. If she is good it really makes the whole process more efficient.

Joakim, the font size is very small, perhaps it should be adjustable to facilitate for older people. To develop Eva is perhaps to add more thesauruses so that she can understand questions regardless of how the questions are asked.

Joakim, I felt writing sentences are not any value added for me, but perhaps for others.

Hans, I wrote sentences to Eva and it worked well.

Joakim, It can be good for Eva to have more dialogue capability so that she can give information and even ask questions based on previous questions. It’s also critical that the answers are correct and up to date. I see Eva as a possible complement to making phone calls and also to a regular search engine. In some cases when Eva was not delivering a correct answer I am forced to call instead.

Joakim, Perhaps the customers should be informed that Eva is continuously learning more so that people know that when they come back to her after a few months, she will have more answers.
Group 5  
May 14, 13.00, Frösundavik, Stockholm

Participants:

**Customers**
Anders Ohlberger
Inger Mesterton
Tommy Arvidsson
Bjarne Nielsen

**Scandinavian Airlines:**
Anders Signell, in charge of SAS.se web page

**University of Borås**
Håkan Alm (moderator)
Nicklas Salomonsson

Håkan wishes the participants welcome, gives a little bit backgroud to the project and himself lets asks Anders Signell, SAS to introduce himself. He also ask Nicklas Salomonsson to introduce himself

Hakan briefly describes the outline of the workshop:

Phase 1: ~ 45 min  
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(based on phase 1) generate different scenarios (including coffee brake)

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Phase 4: ~30 min  
common evaluation

Phase 5:  
individual short interviews ~10-15 min/pers (at a later date)

**Phase 1:** life and travel situation

All are Eurobonus members

Anders, 57, middle year school teacher, separated, live at Södermalm. As all teachers, I am very interested in the world and often ask the questions WHY. My parents are no longer with us and as I am born in Härnösand in the northern part of Sweden I have traveled a lot there, especially during my parents last years.

Inger, 64, retired 1.5 years ago and used to work with elder and handicap care. The last 20 years on management level. Married, we have a condo (bostadsrätt) in Östermalm.
Have a summer house just outside Uppsala and a condo in Spain. I have a very good life. I have 4 biological kids and 2 step kids. Totally 11 grandkids, this takes lots of my time.

Tommy, 56, from Lycksele in the north, my parents also passed away. I have remarried, in my previous marriage we had 4 kids and I have 2 children in my new marriage. Live in Stockholm, have a cabin in the archipelago which my first kids are using most of the time. Travel a couple of times per year to my apartment in Bangkok, on Sukhumvit Road, Soi Onnut. We bought it 3 years ago. This is my base in Asia. We were there all November. I got stuck because of the Airport closure in Bangkok end of last year. I am Deputy Managing Director at a fire safety company.

Bjarne, 53, originally from Odense in Denmark, live between Strangnäs and Eskilstuna, 140 kilometers from Stockholm. We build exhibitions and I spend around 80% of my time at work. We also do retail shops interior work. I, too, remarried, but no children with my new wife. I have three kids and my new wife has three kids as well.

Anders, I travel very little for work, but lately, I have traveled lots domestically to visit my mother in Sundsvall. I do another 3-4 domestic trips and perhaps 2 or three international trips every year. I in Europe and 2 more further away. Often with SAS and always with Star Alliance. I look at myself as well traveled. I speak Swedish, German, English and a tiny bit of Spanish. I’ve been to the US, South America, South Africa, Asia including Japan, China, Malaysia Singapore, Indonesia. I am part of a group that does trekking trips in Europe around the Mediterranean region, Turkey, Spain and this year we will do Morocco. I have to enjoy as long as my body can handle it.

Inger, I travel mostly privately. US, Thailand, Tokyo. Go to Spain a lot since -85. We got a dog a few years ago and this is an adventure in itself. The high Euro exchange rate has impact on our life a little bit.

Tommy, travel both for work and privately. For work mainly in Europe and domestically. North, Gothenburg, Malmo etc. Privately went to US. Two kids, the youngest is only 1 years old. We’re going to Ireland next March. Eurobonus member since 1992, was gold member for a short time.

Fly often with SAS but also with Finnair to Asia. Tried Thai and Austrian. Finnair is in ‘One World’. When I asked Eva when SAS flies direct to Bangkok I don’t get a straight answer, just a link and ‘book here’.

Bjarne, at times I fly a lot, 47 roundtrips, mainly within Europe. Sometimes to Hongkong, Singapore, Tokyo. US, I never fly to. I send my staff instead. Not so much privately, I fly enough in my work. First time I used Eurobonus points was 2004.

We were in Khao Lak just before the Tsunami, but left just before to get the sad news when we came home. There was nothing left of the Hotel we stayed in.
I have a farm which I take care of when I don’t work.

A typical trip

Bjarne, I book a lot of flights as I book for my staff as well. Often I use sas.se and it’s often at night time. I see what times and dates are available that suits us. If not I will have to use one of the competitors. I try SAS first. If I or the guys need to fly multiple locations the page does not work very well, on Lufthansa this works well.

On SAS you can only book round trips or one way flights. It is not possible to book multiple flights. I normally cannot call because I generally do this in the evenings. Often I’m early and I get a good price with SAS.

If we are late it is expensive. Hotels and flights are a large part of what we charge our customers, so if SAS do not have any economy class tickets left it’s too expensive and we are forced to use another airline. I have seven staff. 5 are traveling a lot. We also bring in people on projects. I get a confirmation. I drive myself to Arlanda. I have 17km of dirt road before I reach a major road from my home so busses and trains are not an option.

Most of the time I book hotels on sas.se as well. I arrive at airport, park the car in the garage, check-in with the machine and drop the baggage, if I have any. With short trips, no baggage. I arrive pretty late at the airport and sometimes it’s tight with time.

I board the flight. Most of the time I sleep on the flight as I use medicine that makes me sleepy. I prefer to sit by the window. I normally manage to get a window seat. I think the SAS staff give a good service and I’m fully satisfied.

When I fly charter flights the service is horrible, they treat you like animals. I get off the flight. I try to find my baggage and wait for that. Go out and take a taxi to the Hotel or the exhibition. Same procedure on the way back. Before I always used Bennets travel agency. I just called them and they fixed it. But today, I can control it much better. My priorities when buying flights are also depending on the money in the project I do. Also, we normally need to book flights with a bit of flexibility as we can never be sure when we are done.

Anders, when I fly domestically I normally plan well so for me to get good prices is not a problem. Sometimes when I fly I get an SMS which I think is very nice and then I can choose whether I want a window seat for example. If I have no baggage I can basically go straight to the gate and this always works very well.

The only sad thing is that even if you already checked in you still need to queue in the enormous baggage drop line. This is a bit annoying. On international flights, I always check for the best price. I have a travel agent and they’re very good at finding the best flights for me.
When it’s many legs it’s messy on sas.se home page and you get lost on the page. I then prefer to do it through an agent. I feel Eva is sometimes giving me answers on question I didn’t ask. I think the agents prices are reasonable and they are very good at finding me the right flights so it’s worth it. I have never experienced anyone who has been rude or uninterested. Normally they are positively neutral, which I like.

If I get the 650 kronor per leg in Europe, then I just go for it. I try to get an exit seat for some extra leg space. When I get a really cheap ticket sometimes I get the seat in the back near the toilet that cannot be tilted, that can be a bit annoying. One thing is with code share flights, it its Lufthansa, you get coffee and with SAS not.

Inger, when Sterling still existed, it was pretty uncomplicated as there was a little check box ‘dog in the cabin’, we have a dachshund. This was never a problem. We always sat in the back with him in his little bag. I’m not so interested in movies and entertainment. In the beginning, I did but no more. I normally read a book. The problems started when Sterling went bankrupt. We were in Spain when it happened. We booked with Norwegian, but for dogs you have to call. When we finally got through their phone system we expected this to be a formality, but they only tae two dogs per flight and only in the luggage area. We ended up going a couple of weeks earlier and paying 4-5 times more. We are not happy with Norwegian.

Now we have a flight on Feb 15. On the way down was OK, but not back home so we had to cancel and then I had to look for flights again on the web page. We found other flights luckily. I don’t understand why they can not fix this pet booking issue directly on the phone or even better online. Why do I have to go back and forth? I am now forced to call because of this. This is irritating. Low prices are good.

Tommy, I prefer to book on the net. We sometimes use Nyman & Schultz travel agency but only when there are many of us. Normally I use the net. Check-in normally via SMS. I make sure to always state our Eurobonus numbers so we get the points. My son joined Lufthansa star alliance program instead. We normally take Arlanda express, but if we have many bags we go by taxi. I check for flights on SAS and Lufthansa pages. I appreciate that all classes for tickets are displayed on the web page. From the cheapest to the most expensive, that’s very good. I rarely use SAS for booking hotels. The advantage is that you can book whenever you want to. I think that you can check in via SMS is good. The system to warn when flights are delayed is great, but many times we are already on the way to the airport when we get the message. This of course must be that SAS themselves know pretty late. Even if the baggage drop line is long it moves fast and at least you do not need to need to line up for the check-in.

Service

Tommy, I think for me it is important that people are nice. I miss the cup of coffee. It gives a feeling of service. It’s such a small thing, just add it to the price of the ticket.
Anders, good service is when you don’t even think about and things just work and everything is smooth.

Bjarne, the security staff are rarely kind and polite, not only on Arlanda.

Tommy, when the airport suddenly closed in Thailand, I flew Thai, it was impossible to get answers. In these complicated situations it’s important to get answers. Also, when something happens with the baggage. When I arrived at Bangkok airport I got a couple of Thousand (around 500 kronor) baht immediately in cash. This was good service and much appreciated.

When you hear SAS, what comes to your mind?

Inger, Jan Carlzon

Anders, Safe and good. I have been very proud of SAS for long periods of time they won lots of awards.

Tommy, a good airline

Bjarne, If you fly Lufthansa you get coffee sandwich etc as well as better leg space. I am Swedish, I book SAS when it’s possible. SAS is Nordic and they should have the most departures from here. I am 99% happy with SAS.

The ideal trip

Bjarne, They will just pick me up at home and I’m there without thinking of anything.

No seriously, If the waiting time could be less and the flow could be smoother would be great. I would like to arrive at airport only 30 minutes before departure. Normally when I fly midday there are normally some type of delay somewhere. Personally, I think walking around at the airport is incredibly boring.

Anders, I must say that most things work very well, but one thing I think about and which may not have to be so expensive is to have some sort of transfer when you land at new destinations as people that re not very experienced travelers will often feel pretty lost at new destinations. When you for example land at Tokyo or Peking airport it is a bit tricky.

Inger, I would like to book my dog directly on the net.

When we flew out of Copenhagen they asked for our passport and suddenly ID cards were not enough to check in in the machine and we ended up queuing to check in manually. This should be more clear. Especially as we are often told that passports are not needed to travel to those countries.
Tommy, another thing is that the little on board baby beds cannot be booked before hand normally you find out on the flight or at the gate. This would be nice to know earlier as it is a huge difference whether you get one or not.

Inger, to compensate a little bit for the environment impact, I ride a bicycle.

Anders, me too.

Tommy, I walk to work. I would appreciate if the airlines were upfront with what they do for the environment and how we can help. Perhaps a pamphlet in the seat pocket. I would appreciate that.

Anders, I think it’s good that the airlines are trying to do their part for the environment, but sometimes in the news it can get too much talking about it.

Scenarios

Booking
Travel with kids / animals
Environment
Check-in
When do I need my passport
Delays and SMS info on this
Who is responsible for the baggage

Tommy, I ask eva ‘can I pre-book a child bed’. She answers why it’s like this I don’t have an answer to. NKI 0 to this answer. Perhaps I can rephrase it. I ask just ‘childbeds on trips to Asia’ she answers you ask something about destinations… She doesn’t answers this question. I tried just child bed as well.

I ask If I can pre-book seats. She just says you wonder something about booking and gives a few alternatives.

I am not really happy with the answers.

I ask ‘what do I do if I want to book a ticket for my dog’. here I get some answers. She answers ‘You can bring your cat or dog if you have gotten a pre-approval for this. In some cases there are special rules and restrictions. I open a page with prices and more details’.

At least this answer gave me a little guidance and partly answered my question. I now ask ‘I am allergic to fur animals’ if you are allergic contact which was an OK answer.

I ask passport within the Nordic countries. Eva answers.’ When you travel abroad you often need to bring your passport, it shows who you are and what country you are citizen in. if you travel within the Nordic countries and Schengen countries you can bring a
national ID card rather than a passport. To the countries ….to other countries a passport is needed.

Tommy, the passport and ID card answers was NKI10

Bjarne, I check what’s the rules for lost luggage, it’s a bit unclear but if I keep looking I guess I will find info. I opened some baggage claim for but it didn’t tell me much. I expected a proper answer and in Swedish. NKI 1

I lost my baggage 3 times in 5 years and it was from Oslo all three times. Let’s see what she says about delays. she says something about delays, but when I ask to get that information she doesn’t understand. Obviously she does not handle sequences of related questions (följdrågor).

She seems to give me some info but not full answers.

I ask Eva if I can book other airlines with SAS and she doesn’t give a proper answer, but I found out by clicking around on the page that it is possible. With a bit of imagination Eva works pretty well.

Anders, I ask Eva something, but sometimes she just disappears. She gets hidden behind, which was not easy for me to see. I asked Eva about booking pets and she answered by pointing me to a page which states that I need to call to do this, I cannot do it on the web page directly. I got the answer to my question.

I asked Eva about transfers, but I did not get an answer. I asked about lost and delayed luggage and Eva forwarded me to a page which gave me a good answer. I think Eva generally gives good answers to simple questions. When it comes to a bit more complicated things, I still need to call. And of course it’s great that she works 24/7.

Inger, I try to find out how to check in with a machine, using ID card only. I found out it was only possible to do this when using a passport, the machine didn’t take my ID car in Copenhagen, so we ended up checking in manually at the counter. I asked Eva ‘what do I do if the cage for my dog is a few centimeter too high’. I did not get a proper answer. It only give general pet info. I ask Eva ‘can I check in the dog at the machine’. I don’t get a proper answer, just regular pet info. I think Eva did not help me at all.

Evaluation:

Bjarne Eva gives mysterious answers sometimes. If I ask about changing a flight she says that the price is 500 kronor, but she doesn’t say whether you can do it on the web page or not.

Tommy, there’s a lot more work to do with Eva. When I ask about children bed, no info. With pre-booked seats, same story. About compensation on lost luggage there is also no answer.
Bjarne, she gives cryptical answers and she cannot handle related sequential questions.

Anders, When it comes to interactivity, for example as we can check in through the web page there’s no real benefit for Eva to be able to do it.

Tommy, there were a few things where Eva did not solve the issue and answer the question and I would definitely have had to call to the call center.

Anders, todays workshop was pretty good.

I would really appreciate that there will be a person 24/7 to answer questions when Eva and web page is not enough. It would be nice to have someone that I can call or chat to when Eva is not enough. The live chat closes at 22.00

Inger, I feel all the info is available on the homepage so I can feel that Eva is a little bit silly sometimes.

Anders, all questions to Eva is a first questions, I would like her to have more dialogue capacity.

Bjarne, yes, it’s sometimes difficult to formulate questions so that she understands and as she lacks dialogue capability I cannot refer to previous questions

Tommy, she give very general answers and she gives multiple links. I think maybe more studies are needed to improve Eva.

Tommy, as I spend lots of time flying with SAS I felt happy to spend a few hours to share some of my views.
Channel Survey Part II
Analysis of SAS channel survey July 2010

Executive Summary

During July 2010 a survey was carried out to compare the customer satisfaction between the Phone, Chat email and Eva Channels.

The results can be summarized in the following chart that demonstrates the percentage of respondents that are satisfied or very satisfied regarding their general experience with each channel:

![Chart showing customer satisfaction percentages for Phone, Chat, Email, and Eva/Web channels.]

The chart shows that the respondents’ **General experience** is 96% with Phone, 77% with Chat, 69% with Email and 54% with Eva/Web. Further we can see that respondents that are satisfied or very satisfied amount to:

- **Knowledge and courteousness:** 88% with Phone, 83% with Chat, 76% with Email, and 62% with Eva/Web.
- **Ability to meet knowledge needs** 88% with Phone, 75% with Chat, 77% with Email and 58% with Eva/Web.
- **Meet expectations** 88% with Phone, 67% with Chat, 70% with Email and 52% with Eva/Web.

Overall we see a clear pattern that the customers are the most satisfied with Telephone, there’s an almost even match between chat and email they are the least satisfied with Eva.

The researchers recommend to run these kinds of surveys on an ongoing basis, perhaps yearly or even quarterly, and when some major changes have been done considering:

- Make the survey a full customer satisfaction survey (NKI). The questions should contain different levels of the word satisfied not smileys like this time.
- ‘Raw Data’ available in order to see answers from each individual respondent.
• Format of data in each channel is exactly the same to not leave room for errors.
• Add Web as a fifth channel, Don’t bundle channels together in any questions.
• Run the surveys until 100 responses are reached for each channel

Purpose and methodology of the study

The purpose was to make an initial comparison between the channels with focus on the customers’ perceived experience. As an incentive to answer the questions they were offered to submit their email addresses in order to participate in a lucky draw for xxx. Enclosure 1 contains the study’s questions and alternative answers (one answer / question). All questions and answers in this report are translated from Swedish which was the language for the actual survey. Below is brief summary from Eva Berglund (SAS) regarding the conducted surveys of the different channels and what dates they were carried out:

During July 2010 SAS carried out a small survey of four channels: chat, telephone, e-mail and ”Eva” as follows:
Chat    (‘good’ response times)
Eva      (no delays)
Mail     (‘pretty’ good response times)
Telephone (waiting times were long)

Results

On the chat channel survey 107 persons replied to question 1 and 105 to question 2 and 3 while totally 25 people answered the questions for telephone channel. In Eva’s case 97 people answered question number 1 and 2 and 96 people answered question number 3. For email 13 people answered questions 1, 2 and 3. Since the number of telephone and e-mail respondents are a lot fewer is difficult to make an accurate comparison.

<table>
<thead>
<tr>
<th></th>
<th>Question 1</th>
<th>Question 2</th>
<th>Question 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>107</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>97</td>
<td>97</td>
<td>96</td>
</tr>
<tr>
<td>Telephone</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>E-mail</td>
<td>13</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Summary of answers in each channel

According to the information from SAS there were ‘good’ response times on Chat while the ‘waiting times for telephone were long’. The latter means that the customer service staff during the period of the survey had high workload with many call. This in its turn led to that they were not able to ask the customer to the extent that was initially planned.

The alternative answers for questions 1 and 3 consisted of five smilies (very angry smiley, angry smiley, neutral smiley, happy smiley and very happy smiley) where the customers ranked their perceived experience of the channel in question (question 1) and the other
channels (question 3). In order to simplify we say that the smiley ranking is equal to customer satisfaction\textsuperscript{4}. This means that:

“Very angry” smiley = “Very dissatisfied”
”Angry smiley” = ”Dissatisfied”
”Neutral smiley” = ”Neither satisfied nor dissatisfied”
”Happy smiley” = ”Satisfied”
”Very happy smiley” = ”Very satisfied”

It is thereby a five level scale of Customer satisfaction. From now on we will present and analyse the result from each channel. Then a comparison between the channels will be carried out. Lastly the report is concluded with an evaluation of SAS’s study in its whole and suggestions for how next survey can be further improved.

\textit{Chat}

Question 1

<table>
<thead>
<tr>
<th>1 Welcome to a survey on SAS chat service! Kindly rank your experience on the following Your general experience from the dialogue with us via chat The agents knowledge and courteousness via chat The agents ability to meet your knowledge needs via chat How well did our chat service meet your expectations</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
</tr>
</thead>
<tbody>
<tr>
<td>answers</td>
<td>%</td>
<td>answers</td>
<td>%</td>
<td>answers</td>
<td>%</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>21</td>
<td>20</td>
</tr>
</tbody>
</table>

The results show that 81% of the respondents are satisfied and very satisfied respectively (general experience\textsuperscript{5}) with the dialogue via SAS chat. The equivalent for other questions is:

\textsuperscript{4} Normally the in a customer satisfaction survey the questions should contain different levels of the word satisfied. In the SAS survey it is problematic to translate this directly the respondents don’t necessarily connect a smiley to satisfaction.

\textsuperscript{5} Also here a bit problematic to link this directly to satisfaction. It would be more beneficial to have a general question with the wording: ”Tell how satisfied you are in on a scale from 1-5 (or even better 1-10) where 1 represents very dissatisfied and 5 represents very satisfied”.

172
• "The agents’ knowledge and courteousness via chat” (73 %)
• "The agents’ ability to meet your knowledge needs via chat” (75 %)
• "How well did our chat service meet your expectations” (69 %)

This shows that the absolute majority of respondents are generally satisfied or very satisfied with the chat service and that they also are pleased with the agents’ knowledge and courteousness. The absolute majority of the customers are generally satisfied or very satisfied in that the agents met their knowledge needs and that the chat service met their expectations.

6 It’s generally not advisable to mix different concepts in the same question.
Question 2

<table>
<thead>
<tr>
<th>2 Will you contact us via chat again?</th>
<th>answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>78</td>
<td>74</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Don’t know</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Unanswered</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Accumulated answers</td>
<td>105</td>
<td></td>
</tr>
</tbody>
</table>

The results from question 2 demonstrate that 74% of the respondents are willing to contact SAS by chat again.

Question 3

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
</tr>
<tr>
<td>Chat</td>
<td>5 5 1 1 14 13 27 26 57 54 1 1</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mail</td>
<td>4 4 6 6 37 35 35 33 12 11 11 10</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>15 14 12 11 25 24 26 25 23 22 4 4</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eva/Web</td>
<td>17 16 22 21 33 31 17 16 10 10 6 6</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that respondents using chat clearly are more satisfied when using chat, followed by telephone and then e-mail that got about half as many supporters. Eva/Web is clearly ranked last. The amount of respondents using chat that are satisfied and very satisfied with each channel as follows:

Chat 80%
E-mail 44%
Telephone 47%
Eva/Web 26%
**Telephone**

**Question 1**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>%</th>
<th>Answers</th>
<th>%</th>
<th>Answers</th>
<th>%</th>
<th>Answers</th>
<th>%</th>
<th>Answers</th>
<th>%</th>
<th>Acc. answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Welcome to a survey on SAS telephone service! Kindly rank your</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>experience on the following</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your general experience from the dialogue with us via telephone</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>44</td>
<td>13</td>
<td>52</td>
<td>25</td>
</tr>
<tr>
<td>The agents' knowledge and courteousness via telephone</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>32</td>
<td>14</td>
<td>56</td>
<td>25</td>
</tr>
<tr>
<td>The agents' ability to meet your knowledge needs via telephone</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>24</td>
<td>16</td>
<td>64</td>
<td>25</td>
</tr>
<tr>
<td>How well did our telephone service meet your expectations</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>6</td>
<td>24</td>
<td>16</td>
<td>64</td>
<td>25</td>
</tr>
</tbody>
</table>

The results show that 96 % of the respondents are satisfied and very satisfied respectively (total experience) with the dialogue via telephone. The equivalent for other questions are:

- "The agents’ knowledge and courteousness via telephone” (88 %)
- "The agents’ ability to meet your knowledge needs via telephone” (88 %)
- "How well did our telephone service meet your expectations” (88 %)

This shows that the absolute majority of respondents are generally satisfied or very satisfied with the telephone service and that they also are pleased with the agents’ knowledge and courteousness. The absolute majority of the customers are generally satisfied or very satisfied in that the agents met their knowledge needs and that the telephone service met their expectations.

**Question 2**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Will you contact us via telephone again?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>84%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
The results from question 2 demonstrate that 84% of the respondents are willing to contact SAS by chat again.

### Question 3

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
</tr>
<tr>
<td>Email</td>
<td>1</td>
<td>4%</td>
<td>5</td>
<td>20%</td>
<td>5</td>
<td>20%</td>
</tr>
<tr>
<td>Telephone</td>
<td>1</td>
<td>4%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>3</td>
<td>12%</td>
<td>2</td>
<td>8%</td>
<td>12</td>
<td>48%</td>
</tr>
</tbody>
</table>

The results show that respondents using telephone clearly are more satisfied when using telephone, followed by e-mail and then Eva/Web. Chat is clearly ranked last. The amount of respondents using telephone that are satisfied and very satisfied with each channel is as follows:

- Chat 16%
- E-mail 56%
- Telephone 88%
- Eva/Web 32%

### Eva/Web

### Question 1

<table>
<thead>
<tr>
<th>1 Welcome to a survey on SAS Eva! Kindly rank your experience on the following</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td>answers %</td>
<td></td>
</tr>
<tr>
<td>Your general experience from the dialogue with us via Eva</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>8</td>
<td>28</td>
<td>29</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>22</td>
<td>31</td>
<td>32</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>97</td>
<td>24</td>
<td>25</td>
<td>25</td>
<td>97</td>
</tr>
<tr>
<td>Eva’s knowledge and courteousness</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>97</td>
<td>24</td>
<td>25</td>
<td>25</td>
<td>97</td>
</tr>
</tbody>
</table>
The results show that 54% of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via SAS Eva. The equivalent for other questions are:

- "Eva’s knowledge and courteousness" (62%)
- "Eva’s ability to meet your knowledge needs" (58%)
- "How well did Eva service meet your expectations" (52%)

This shows that over half of the respondents are generally satisfied or very satisfied with Eva service. They are a bit more pleased with the Eva’s knowledge and courteousness. The absolute majority of the customers are generally satisfied or very satisfied in that Eva met their knowledge needs and that the Eva service met their expectations.

Question 2

![Table]

<table>
<thead>
<tr>
<th>2 Will you contact us via Eva again?</th>
<th>Answers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>66</td>
<td>68</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Don’t know</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Unanswered</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Accumulated answers</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

The results from question 2 demonstrate that 68% of the respondents are willing to contact SAS via Eva again.

Question 3

![Table]

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>N/A</th>
<th>Acc answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>answers %</td>
<td>answ %</td>
<td>answer %</td>
<td>answ %</td>
<td>answ %</td>
<td>answ %</td>
<td>Acc answers</td>
</tr>
<tr>
<td>Chat</td>
<td>15 16 12 13</td>
<td>27 28</td>
<td>19 20</td>
<td>18 19</td>
<td>5 5</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>8 8 9 9</td>
<td>24 25</td>
<td>31 32</td>
<td>18 19</td>
<td>6 6</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>Telefon</td>
<td>12 13 12 13</td>
<td>22 23</td>
<td>23 24</td>
<td>25 26</td>
<td>2 2</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>Eva/Web</td>
<td>14 15 6 6</td>
<td>19 20</td>
<td>33 34</td>
<td>20 21</td>
<td>4 4</td>
<td>96</td>
<td></td>
</tr>
</tbody>
</table>
The results show that respondents using Eva are about equally satisfied and very satisfied when using Eva/Web, telephone and e-mail. Chat is clearly ranked last. The amount of respondents using Eva that are satisfied and very satisfied with each channel is as follows:

Chat 39 %
E-mail 50 %
Telephone 50 %
Eva/Web 55 %

Email

Question 1

<table>
<thead>
<tr>
<th>1 Welcome to a survey on SAS email service! Kindly rank your experience on the following</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Very happy smiley</th>
<th>Acc. answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>answ. %</td>
<td>answ. %</td>
<td>answ. %</td>
<td>answ. %</td>
<td>answ. %</td>
<td>answ. %</td>
</tr>
<tr>
<td>Your general experience from the dialogue with us via email</td>
<td>1 8 2 15</td>
<td>1 8 4 31</td>
<td>5 38</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The agents knowledge and courteousness via email</td>
<td>1 8 1 8</td>
<td>1 8 5 38</td>
<td>5 38</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The agents ability to meet your knowledge needs via email</td>
<td>0 0 1 8</td>
<td>2 15 4 31</td>
<td>6 46</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well did our email service meet your expectations</td>
<td>1 8 2 15</td>
<td>1 8 1 8</td>
<td>8 62</td>
<td>13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that 69 % of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via e-mail. The equivalent for other questions is:

- ” The agents knowledge and courteousness via email” (76 %)
- ” The agents ability to meet your knowledge needs via email” (77 %)
- ” How well did our email service meet your expectations” (70 %)

This shows that absolute majority of the respondents are generally satisfied or very satisfied with the e-mail service. They are a bit more pleased with the agents’ knowledge and courteousness. The absolute majority of the customers are generally satisfied or very
satisfied in that the agents met their knowledge needs and that the e-mail service met their expectations.

**Question 2**

<table>
<thead>
<tr>
<th>2 Will you contact us via e-mail again?</th>
<th>Absolutal</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>8</td>
<td>62</td>
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<tr>
<td>No</td>
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<td>0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>5</td>
<td>38</td>
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<tr>
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<td>0</td>
</tr>
<tr>
<td>Accumulated. answers</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

The results from question 2 demonstrate that 62 % of the respondents are willing to contact SAS via e-mail again.

**Question 3**

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley</th>
<th>Angry smiley</th>
<th>Neutral smiley</th>
<th>Happy smiley</th>
<th>Happy smiley</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>answers</td>
<td>%</td>
<td>answers</td>
<td>%</td>
<td>answers</td>
</tr>
<tr>
<td>Chat</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>31</td>
<td>2</td>
</tr>
<tr>
<td>Email</td>
<td>2</td>
<td>15</td>
<td>1</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Telephone</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>15</td>
<td>3</td>
</tr>
</tbody>
</table>

The results show that respondents using e-mail are more satisfied and very satisfied when using telephone and e-mail followed by Eva/Web. Chat is ranked last just behind Eva/Webb. The amount of respondents using e-mail that are satisfied and very satisfied with each channel is as follows:

Chat 46 %  
E-mail 61 %  
Telephone 61 %  
Eva/Web 54 %

**Comparison – chat, telephone, Eva/Web and e-mail**

**Question 1**

| 1 Welcome to a survey on SAS Chat/Phone/Eva/Email service! Kindly rank your experience on the following |
|--------------------------------------------------------------------------------------------------------|------------------|-----------------|-----------------|-----------------|

179
### A. General experience from the dialogue with us via

<table>
<thead>
<tr>
<th>Method</th>
<th>% 1</th>
<th>% 2</th>
<th>% 3</th>
<th>% 4</th>
<th>% 5</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>6%</td>
<td>3%</td>
<td>11%</td>
<td>34%</td>
<td>47%</td>
<td>107</td>
</tr>
<tr>
<td>Telephone</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>44%</td>
<td>52%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>9%</td>
<td>8%</td>
<td>29%</td>
<td>32%</td>
<td>22%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>8%</td>
<td>15%</td>
<td>8%</td>
<td>31%</td>
<td>38%</td>
<td>13</td>
</tr>
</tbody>
</table>

### B. Agents knowledge and courteousness

<table>
<thead>
<tr>
<th>Method</th>
<th>% 1</th>
<th>% 2</th>
<th>% 3</th>
<th>% 4</th>
<th>% 5</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
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<td>3%</td>
<td>20%</td>
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<td>45%</td>
<td>107</td>
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<tr>
<td>Telephone</td>
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<td>4%</td>
<td>8%</td>
<td>32%</td>
<td>56%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>7%</td>
<td>9%</td>
<td>22%</td>
<td>37%</td>
<td>25%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
<td>38%</td>
<td>38%</td>
<td>13</td>
</tr>
</tbody>
</table>

### C. Agents ability to meet knowledge needs

<table>
<thead>
<tr>
<th>Method</th>
<th>% 1</th>
<th>% 2</th>
<th>% 3</th>
<th>% 4</th>
<th>% 5</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>7%</td>
<td>5%</td>
<td>12%</td>
<td>23%</td>
<td>52%</td>
<td>107</td>
</tr>
<tr>
<td>Telephone</td>
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<td>4%</td>
<td>8%</td>
<td>24%</td>
<td>64%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>10%</td>
<td>14%</td>
<td>18%</td>
<td>37%</td>
<td>21%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>0%</td>
<td>8%</td>
<td>15%</td>
<td>31%</td>
<td>46%</td>
<td>13</td>
</tr>
</tbody>
</table>

### D. Meet expectations

<table>
<thead>
<tr>
<th>Method</th>
<th>% 1</th>
<th>% 2</th>
<th>% 3</th>
<th>% 4</th>
<th>% 5</th>
<th>Total answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat</td>
<td>7%</td>
<td>5%</td>
<td>20%</td>
<td>22%</td>
<td>47%</td>
<td>107</td>
</tr>
<tr>
<td>Telephone</td>
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<td>8%</td>
<td>4%</td>
<td>24%</td>
<td>64%</td>
<td>25</td>
</tr>
<tr>
<td>Eva/Web</td>
<td>11%</td>
<td>16%</td>
<td>21%</td>
<td>24%</td>
<td>28%</td>
<td>97</td>
</tr>
<tr>
<td>E-mail</td>
<td>8%</td>
<td>15%</td>
<td>8%</td>
<td>8%</td>
<td>62%</td>
<td>13</td>
</tr>
</tbody>
</table>

On question 1A concerning **general experience** we can see that
77% are satisfied or very satisfied with Chat,
96% are satisfied or very satisfied with Phone,
54% are satisfied or very satisfied with Eva,
69% are satisfied or very satisfied with Email,

On 1B **Agents knowledge and courteousness** we can see that:
83% are satisfied or very satisfied with Chat,
88% are satisfied or very satisfied with Phone,
62% are satisfied or very satisfied with Eva,
76% are satisfied or very satisfied with Email,

On 1C Agents ability to meet knowledge needs
75% are satisfied or very satisfied with Chat,
88% are satisfied or very satisfied with Phone,
58% are satisfied or very satisfied with Eva,
77% are satisfied or very satisfied with Email,

On 1D Meet expectations
67% are satisfied or very satisfied with Chat,
88% are satisfied or very satisfied with Phone,
52% are satisfied or very satisfied with Eva,
70% are satisfied or very satisfied with Email,
In all these comparisons we can see a clear pattern that the customers are the most satisfied with Telephone and the least with Eva.

Question 2

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
<th>No answer</th>
<th>Tot answers</th>
</tr>
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<td>1%</td>
<td>23%</td>
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</tr>
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<td>0%</td>
<td>16%</td>
<td>0%</td>
<td>25</td>
</tr>
<tr>
<td>Eva</td>
<td>68%</td>
<td>13%</td>
<td>16%</td>
<td>2%</td>
<td>97</td>
</tr>
<tr>
<td>Email</td>
<td>62%</td>
<td>0%</td>
<td>38%</td>
<td>0%</td>
<td>13</td>
</tr>
</tbody>
</table>

A very similar situation here with the difference that email actually has a slightly lower ‘approval rating’ than Eva. 13 % of the respondents that were asked questions when using Eva answer that they will not use Eva again. 38 % of the respondents that were asked questions when using email answer that they are not sure if they will use email again.

Question 3

<table>
<thead>
<tr>
<th>3 Kindly rank the different channels available for contacting SAS:</th>
<th>Very angry smiley %</th>
<th>Angry smiley %</th>
<th>Neutral smiley %</th>
<th>Happy smiley %</th>
<th>Very happy smiley %</th>
<th>N/A</th>
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</tr>
<tr>
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<td>1%</td>
<td>13%</td>
<td>26%</td>
<td>54%</td>
<td>1%</td>
<td>105</td>
</tr>
<tr>
<td>E-mail</td>
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<td>35%</td>
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<td>11%</td>
<td>10%</td>
<td>105</td>
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<tr>
<td>Telephone</td>
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<td>25%</td>
<td>22%</td>
<td>4%</td>
<td>105</td>
</tr>
<tr>
<td>Eva/Web</td>
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<td>16%</td>
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<td>6%</td>
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<tr>
<td></td>
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<td>Telephone</td>
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</table>

<table>
<thead>
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<th>Chat</th>
<th>Email</th>
<th>Telephone</th>
<th>Eva/Web</th>
</tr>
</thead>
<tbody>
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<td>15%</td>
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<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
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</tbody>
</table>

Conclusions

Chat

81% of the respondents are satisfied and very satisfied respectively and “knowledge and courteousness via chat” (73%), “ability to meet your knowledge needs via chat” (75%), “how well did our chat service meet your expectations” (69%)

74% of the respondents are willing to contact SAS by chat again.

Chat users clearly are more satisfied when using chat, and Eva/Web is clearly ranked last. Chat 80%, E-mail 44%, Telephone 47%, Eva/Web 26%

Telephone

96% of the respondents are satisfied and very satisfied respectively (total experience) with the dialogue via telephone, ”knowledge and courteousness” (88%), “ability to meet knowledge needs” (88%), ”meet expectations” (88%)

84% of the respondents are willing to contact SAS by telephone again.

Respondents clearly are more satisfied when using telephone, Chat is ranked last. The amount of respondents using telephone that are satisfied and very satisfied with each channel is as follows: Chat 16%, E-mail 56%, Telephone 88%, Eva/Web 32%

Eva/Web

54% of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via SAS Eva and ”knowledge and courteousness” (62%), ”ability to meet knowledge needs” (58%), ”meet expectations” (52%). This shows that over half of the respondents are generally satisfied or very satisfied with Eva service and a bit more pleased with the Eva’s knowledge and courteousness.
68% of the respondents are willing to contact SAS via Eva again.

Respondents using Eva are about equally satisfied and very satisfied when using Eva/Web, telephone and e-mail. Chat is clearly ranked last. Eva users that are satisfied and very satisfied with each channel is as follows: Chat 39%, E-mail 50%, Telephone 50%, Eva/Web 55%.

**Email**

69% of the respondents are satisfied and very satisfied respectively (general experience) with the dialogue via e-mail, ”knowledge and courteousness” (76%), ”ability to meet your knowledge needs” (77%), ”meet expectations” (70%). An absolute majority of the respondents are generally satisfied or very satisfied with the e-mail service. They are a bit more pleased with the agents’ knowledge and courteousness.

62% of the respondents are willing to contact SAS via e-mail again.

Respondents using e-mail are the most satisfied and very satisfied when using telephone, Chat is ranked last just behind Eva/Web. E-mail users that are satisfied and very satisfied with each channel are as follows: Chat 46%, E-mail 61%, Telephone 61%, Eva/Web 54%

**Comparison – chat, telephone, Eva/Web and e-mail**

**On general experience** we can see that respondents that are satisfied or very satisfied amount to: 96% with Phone, 77% with Chat, 69% with Email and 54% with Eva.

On 1B **Agents knowledge and courteousness** we can see that respondents that are satisfied or very satisfied amount to: 88% with Phone, 83% with Chat, 76% with Email, and 62% with Eva.

On 1C **Agents ability to meet knowledge needs** we can see that respondents that are satisfied or very satisfied amount to: 88% with Phone, 75% with Chat, 77% with Email and 58% with Eva.

On 1D **Meet expectations** we can see that respondents that are satisfied or very satisfied amount to: 88% with Phone, 67% with Chat, 70% with Email and 52% with Eva.

In all these comparisons we can see a clear pattern that the customers are the most satisfied with Telephone there’s and almost even match between chat and email they are the least satisfied with Eva.

**Evaluation of SAS concluded survey**
Suggestions and comments from the researchers to make future surveys even more useful:

- Normally in a customer satisfaction survey the questions should contain different levels of the word satisfied. In the SAS survey it is problematic to translate this directly the respondents don’t necessarily connect a smiley to satisfaction.
- Also here a bit problematic to link this directly to satisfaction. It would be more beneficial to have a general question with the wording: "Tell us how satisfied you are in on a scale from 1-5 (or even better 1-10) where 1 represents very dissatisfied and 10 represents very satisfied”.
- It’s generally not advisable to mix different concepts in the same question.
- In order to draw more conclusions we would need to see the answers from each individual respondent.
- The format of the data is lightly different on the Excel sheets, sometimes it percentages and sometimes it is decimal numbers. This leaves room for errors.
- When the customer is asked to rank which channel they prefer. Eva and Web is bundled together. It would be more beneficial to know who prefers the web and who prefers Eva.
- Why were web users not surveyed as a fifth channel? It would be useful to know how satisfied they are.
- Also, as we only had 25 answers on the telephone channel and 13 email channel in comparison to 100 on the other two channels the results are indicative rather than conclusive, for future surveys it would be beneficial to reach at least 100 on each channel.

**Suggestions for future surveys**

Run these kind of surveys on an ongoing basis (perhaps yearly of even quarterly, and when some major changes have been done) to get clear indications on how the different channels relate to each other and how Eva is improving when improved, with the following considerations:

- Make the survey a full CSI, customer satisfaction survey, (NKI) meaning the questions should contain different levels of the word satisfied not smileys.
- Have a general question with the wording: "Tell us how satisfied you are in on a scale from 1-10 where 1 represents very dissatisfied and 10 represents very satisfied”.
- Make sure that ‘Raw Data’ is available in order to see answers from each individual respondent.
- Make sure the format of the data in each channel is exactly the same to not leave room for errors.
- Don’t bundle channels together in question.
- Add web as a fifth channel.
- Run the surveys until 100 responses are reached for each channel.

**The Survey**
Chatt
4. Välkommen till en undersökning om SAS chattservice! Vänligen rangordna din upplevelse kring följande:
   a. Din totala upplevelse av dialogen med oss via chatt
   b. Agentens kunskap och bemötande via chatt
   c. Agentens förmåga att tillgodose dina kunskapsbehov via chatt
   d. Hur väl motsvarade vår chattservice dina förväntningar
5. Kommer du att kontakta oss via chatt igen?
   a. Ja
   b. Nej
   c. Vet ej
6. Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:
   a. Chatt
   b. E-mail
   c. Telefon
   d. Fråga Eva/webb

Telefon
4. Välkommen till en undersökning SAS telefonservice! Vänligen rangordna din upplevelse kring följande:
   a. Din totala upplevelse av dialogen med oss via telefon
   b. Agentens kunskap och bemötande via telefon
   c. Agentens förmåga att tillgodose dina kunskapsbehov via telefon
   d. Hur väl motsvarade vår telefonservice dina förväntningar
5. Kommer du att kontakta oss via telefon igen?
   a. Ja
   b. Nej
   c. Vet ej
6. Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:

   a. Chatt
   b. E-mail
   c. Telefon
   d. Fråga Eva/webb

Eva
1 Välkommen till en undersökning om Fråga Eva! Vänligen rangordna din upplevelse kring följande

   e) Din totala upplevelse av dialogen med oss via Fråga Eva
   f) Fråga Evas kunskap och bemötande
   g) Fråga Evas förmåga att tillgodose dina kunskapsbehov
   h) Hur väl motsvarade Fråga Eva dina förväntningar

2 Kommer du att kontakta oss via Fråga Eva igen?
   d) Ja
   e) Nej
   f) Vet ej

3 Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:

   e) Chatt
   f) E-mail
   g) Telefon
   h) Fråga Eva/Webb

Mail
1 Välkommen till en undersökning SAS e-mailservice! Vänligen rangordna din upplevelse kring följande

   e) Din totala upplevelse av dialogen med oss via e-mail
   f) Agentens kunskap och bemötande via e-mail
   g) Agentens förmåga att tillgodose dina kunskapsbehov via e-mail
   h) Hur väl motsvarade vår e-mailservice dina förväntningar

2 Kommer du att kontakta oss via e-mail igen?
   d) Ja
   e) Nej
   f) Vet ej

3 Vänligen rangordna de olika kanalerna som finns för att kontakta SAS:
e) Chatt
f) E-mail
g) Telefon
h) Fråga Eva/Webb

Mark
Questions:

Entity

General Questions:

- What does SAS do? What is your business? (strategy/goals/values)
- How do you generate revenues?
- Who are your main stakeholders?
- What do you do for your customers?
- How do you want customers to perceive SAS?
- What expectations do customers have about SAS?
- What is good service according to SAS?
- What is good service according to you customers?
- Who are your main competitors?,
- Which are your main strengths compared to your competitors?

Eva (Avatar), web page and customer relations Specific Questions:

Please tell me what you do at SAS?
What does a typical day consist of for you?
In which ways do your customers currently communicate with you?
In which ways does SAS want to communicate with the customers?
Which strategy does SAS have in when it comes to communicate with the customers?
In your opinion – how would your customers prefer to communicate with you?
Which type of information do the customer require?
Which services can the customers perform on the web page.
Which services would the customers like to do thorough the web page?
How do you come in contact with / work with:
  a. web page?
  c. Eva?
Can you tell us a little bit more about the Eva project?
When was Eva installed
What were the reasons for getting Eva
How does she work?
How does it affect you?
How well does:
  a. web page
  b. Eva
  work in your opinion?
Do you have any suggestions for improvements?
What is Eva’s role in relation to the manual customer service?
Have you noticed any changes since you introduced Eva? What kind of changes?
Has the manual customer service experienced any changes since you introduced Eva?
What? Could you give me an example?
What is your customers’ opinion about the manual customer service?
What is your customers’ opinion about Eva?
What is your customers’ opinion about your web site?

NKI Specific Questions

- How do you measure quality in what you do?
- Do you use NKI-measurements?
- Why do you measure it?
- How do you measure it?
- What questions do you ask customers?
- How often do you measure it?
- How many customers answer it?
- What do you do with the results?
- In what way do customers notice any change based on your NKI-studies? Could you give me an example?
- What is the latest result of your NKI and how has it changed?
- What is positive thing of doing NKI-studies? Is there anything negative?
- Is there anything you would like to change regarding your NKI-studies? What?
- What is a satisfied customer for you? How can you tell that your customers are satisfied? Could you give me an example?
- How do you turn a dissatisfied customer to a satisfied? Could you give me an example?
Sammanfattning av Intervjuer 9:e Maj, 15:e och 19:e Juni 2010

Respondenter och tider:

9-10 Sven-Erik Bergström, miljöchef.
10-11 Lillemor Ekberg, webbredaktör
11-12 Pelle Pellby, kommunalråd och kommunstyrelsens ordförande
13-14 Kerstin Guth, Informationschef
14-15 Pia Karlsson, Verksamhetskontroller
15:e juni Ralf Sundhäll, informatör (telefonintervju)
18:e juni Mikael Höglund, IT Utvecklare (telefonintervju)

Första Intervjuomgången av personal och politiskt tillsatta i Marks kommun utfördes av Håkan Alm och har även spelas in digitalt och lagts på en web folder för gemensam åtkomst för alla i projekt teamet (ftp://www.alm.bz/Mark/Intervjuer/).

Håkan försökte att ställa frågor som bjuder in respondenden till att 'sköta pratandet' och fylla i med naturliga följdfrågor för att få så uttömmande svar som möjligt men har samtidigt försöka styra dialogen och försöka hålla den inom ämnet (medborgarkontakten) och på rätt nivå.
Frågor:

Allmänna inlednings frågor:

- varför finns egentligen en kommun till?
- för vem skall man verka?
- vad skapas det för värde för de man finns till för?,
- hur kan man bedöma och mätta kvalitet i det som görs?,
- finns det konkurrens mellan olika kommuner?,
- vilka är de faktorer som Marks kommun vill framhålla ställt i relation till vad andra kommuner framhåller?

Medborgar kontakten specifika frågor:

- Beratta vad du gör i kommunen?
- kan du berätta hur en dag ser ut för dig? Vilken kontakter har kommunen idag med medborgarna?
- Vilka kontakter vill kommunen ha med medborgarna?
- Vilken strategi har kommunen avseende information till medborgarna?*
- Enligt er uppfattning - Vilka typer av kontakter vill medborgarna ha med er?
- Vilken typ av information efterfrågar medborgarna?
- Vilken typ tjänster vill medborgarna kunna göra genom er hemsida?
- Hur kommer du i kontakt med / jobbar du mot:
  a. hemsidan
  b. Mark 24 projekten?
  c. Elin?
- Kan du berätta lite vad Mark24 är för något?
- Vilken roll fyller det i kommunen?*
- Kan du berätta lite om projektet Elin?*
- Hur påverkar det dig / er?
- Hur bra funkar:
  a. Hemsidan
  b. Elin (enligt din uppfattning?)
- Har du några förslag på förbättringar?
- Berätta vad du gör i kommunen?
  
  Jag är miljöchef och har ett team på 16 personer som sysslar med miljö- , hälso- och naturvårdsfrågor . Inom dessa områden hanterar vi livsmedelsärenden, tillsyns-, tillstånds och anmälningsärenden inom miljöbalken - exempelvis ansökningar om värmpump eller avlopp - djurskyddsfrågor samt skydd av känslig natur. Vi svarar också för kommunens expertkunskap inom dessa områden och servar därmed bygglovskontoret med underlag inom plan- och byglovsfrågor.

- kan du berätta hur en dag ser ut för dig?
  
  En stor del av mitt arbete går ut på att leda och koordinera med mina medarbetare men jag har även viss direkt kontakt med medborgaren och företagen i några fall. Stor tid åtgärder även till koncernövergripande samordningsfrågor.

- Hur kommer du i kontakt med / jobbar du mot:
  
  a. hemsidan
  

  Elin (enligt din uppfattning?)
  

Har du några förslag på förbättringar?


Vi jobbar just nu intensivt med något som kallas ‘en väg in’ vilket kan bli en utökad fysisk lokalitet - och telefonist tjänst där kommunen har tänkt att ha personal som tar emot folk och samtal och där man kan hjälpa till med och svara på många fler allmänna frågor än vad nuvarande receptionist kan och som därmed kan avlasta våra medarbetare på avdelningarna och låta dem ägna sig åt mer kvalificerade arbetsuppgifter.

Håkans kommentar.

Sven Erik Bergström nämner behovet av ett bättre blankett system.

Förslag:

Om man har alla blanketter elektroniskt (och kan fyllas in online) så kan ju medborgaren fylla i blanketten elektroniskt, skriva ut den skriva under den och sedan skicka den till kommunen. Kommunens anställda behöver då bara vänta på den påskrivna versionen och trycka på GODKÄNN i systemet när den påskriva pappersversionen har kommit…
10-11 Lillemor Ekberg, webbredaktör

- Berätta vad du gör i kommunen?
  Jag har jobbat 1 år på detta jobbet, innan på badhuset, även där som webbredaktör. Jobbar nu 50% med lokalbokningar och 50% som informatör då jag arbetar med Websidan, Elin, intern och extern information, jag gör även annonser till tidningar.

- kan du berätta hur en dag ser ut för dig?
  Antingen bokningen eller information där jag även koordinerar (och stöttar) med andra webbredaktörer såsom bibliotek, badhus osv. jobbar med Elin, samlar in info och skickar vidare. Ralf sköter själva start sidan på hemsidan.

  c. Elin?
  Tillsammans med en kollega så uppdaterar jag frågor och svar på Elin. En gång i månaden uppdaterar vi frågor som ej har svar.

- Hur bra funkar:
  a. Hemsidan
  Inte så bra. T.ex. saknar jag en anpassad sida för olika grupper (e.g. turist, bofast, företagare, yngre äldre) hemsiadn nu har bara en och samma ‘look’ för alla. dessutom är sidan svårreadierad och det är ibland svårt att hitta den info man söker.
  Navigationen kan också ibland uppfattas som något förvirrande av besökarna eftersom länkarna ligger på höger sida vilket många är ovan vid. Ett annat exempel är att man inte kan boka lokaler via sidan för tillfället, det skulle Mark 24 kunna fixa.

  b. Elin (enligt din uppfattning?)

Har du några förslag på förbättringar?
Man borde satsa mer på att förbättra informationen i kontakten mot medborgaren, speciellt med hemsidan.
11-12 Pelle Pellby, kommunalråd och kommunstyrelsens ordförande

Allmänna inlednings frågor:

- varför finns egentligen en kommun till?
  Kommunen har, utifrån lag mm, rätt att ägna sig åt gemensamma angelägenheter för människor som bor och lever i kommunen, för de allra flesta kommuner innebär det att mest resurser läggs på att tillgodose behov inom förskola, skola och äldreomsorg, för att kunna göra detta kan kommun ta ut skatt.

- hur kan man bedöma och mäta kvalitet i det som görs?,
  Det är mer och mer vanligt med brukarundersökningar inom de olika områdena t.ex. social tjänsten och äldreomsorgen. Kvalitetet är ett komplext begrepp, vi arbetar mer och mer med indikatorer, vi försöker också se på sambanden mellan kostnad och kvalitet.

- finns det konkurrens mellan olika kommuner?

- vilka är de faktorer som Marks kommun vill framhålla ställt i relation till vad andra kommuner framhåller?
  Läget för det goda livet, att du i Marks kommun kan leva och uppfatta ett sammanhang som präglas av företagsamhet, trygghet, miljö, natur, bra livssammanhang,

- Beratta vad du gör i kommunen?
  Jag är Kommunstyrelsens ordförande, kommunstyrelsen uppgift är att leda och övergripande samordna kommunens hela verksamhet.

- Hur kommer du i kontakt med / jobbar du mot:
  a. hemsidan
  Jag tittat på vår hemsida varje dag, och på medborgardialogen försöker jag snabbt svara om det berör kommunstyrelsen. Webben är en kraftkälla för information som vi ska satsa mer på i framtiden. Vi kan med webben svara på enklare frågor, hämta blanketter mm och på så sätt frigöra tid för mer kvalificerade arbetsuppgifter för personalen, ett sätt att använda resurser smartare helt enkelt.

  b. Mark 24 projektet?
  Idag i huvudsak att ge information, vi vill utveckla till en kommunikation med medborgare och kommun. Andra kommuner har kommit längre. Vårt system duger inte riktigt ännu, det finns enkla uppgifter som mer bättre elektroniska lösningar skall främst ge en förbättring av servicen till medborgarna och i andra hand förhoppningsvis leda till en besparing. Över tid tror vi att detta är lönsamt. Kan vi arbeta effektivare med detta kan resurser också disponeras till annat.

- Hur bra funkar:
  a. Hemsidan
  Den är modernare jämfört med tidigare, men ibland är det svårt att hitta info.

  b. Elin (enligt din uppfattning?)

Har du några förslag på förbättringar?
Vi måste förbättra vår kännersamhet såsom skolor och äldreomsorg och även vad gäller elektroniska hjälpmedel. Vi måste ha en bra entre även elektroniskt via hemsida osv.
Vi har lagt en hel del pengar på teknologi, men ibland är det svårt att hitta stöd i kommunstyrelsen för alla investeringar. Ibland har vi fokuserat på fel saker. Men på det stora hela har vi nog satsat rätt och tillräckligt och måste fortsätta i denna riktning. Vi är bättre på infrastruktur såsom kommunikation och utrustning än med informationen för tillfälle.

Vad är ‘En väg in’?

Allmänna inlednings frågor:

- varför finns egentligen en kommun till?
  Att kommuner finns är från början ett Riksdagsbeslut, man vill ge makten åt folket, delegera och decentralisera. Kultur och näringslivet

- för vem skall man verka?
  Kommunmedlemmar, besökare, företag. Alla på denna geografiska plats.

  - Beratta vad du gör i kommunen?

  - kan du berätta hur en dag ser ut för dig?
    Jag skriver en hel del och jobbar med grupper. 10 timmar per vecka är jag bollplank, 20 timmar jobbar jag utvecklingsarbete och 10 timmar jobbar jag med att följa upp beslut.

  - Vilken typ av information efterfrågar medborgarna?

  - Hur kommer du i kontakt med / jobbar du mot:
    a. hemsidan
      Är involverad i att publicera service åtaganden på hemsidan. Använder hemsidan som anslagstavla.
    b. Mark 24 projektet?
    c. Elin?
      Jag var projektledare för Elin och jobbar fortfarande med dess statistik.
    d. en väg in
      en plats där man får svar på många frågor (70 till 80 procent). Frigöra tid från specialister. Detta är dock ännu inte beslutat

  - Hur bra funkar:
    a. Hemsidan
      Hemsidan är bra på vissa delar men andra delar tycker jag inte vi ger bra info. Svårt avvägande att lägga ut namn eller funktioner på olika ansavarsområden.

 Vi skall svara på samtal och email inom 2 dagar. Vi är 90% framgångrika med bra svar.

 b. Elin (enligt din uppfattning?)
14-15 Kerstin Guth, Informationschef

- Beratta vad du gör i kommunen?


- kan du berätta hur en dag ser ut för dig?


- Vilka kontakter har kommunen idag med medborgarna?

Förr fick jag många frågor inom alla frågor nu är det mindre eftersom många blir besvarade av hemsidan. En gång per kvartal (Var tidigare 10 månader per år) sitter de förtroendevalda på biblioteket för att träffa medborgarna. En gång per år, i samband med ett ordinarie sammanträde, åker fullmäktige ut till en av kommunens orter för att träffa folk. Denna gången blir det Sätila. Mycket personliga möten och telefon.

- Vilka kontakter vill kommunen ha med medborgarna?

Kommunen vill ha kontakt med medborgarna på medborgarnas villkor. Vi skall vara synliga och vi skall vara tilgängliga per telefon. Vi skall vara med på de platser där det händer något.

- Enligt er uppfattning - Vilka typer av kontakter vill medborgarna ha med er?

Invånarna och företagen vill ha svar på sina frågor snabbt. Många vill också prata. Vi är ganska bra på telefonkontakt.

- Hur kommer du i kontakt med / jobbar du mot:
  a. hemsidan


  b. Mark 24 projektet?


c. Elin?

Ralf Sundhäll 15:e juni (telefonintervju)

- Beratta vad du gör i kommunen?

- kan du berätta hur en dag ser ut för dig?

Vilka kontakter har kommunen idag med medborgarna?
Web, tidningen osv.

- Vilken typ av information efterfrågar medborgarna?
  De vill ha skräddarsydd info för respektive grupp. T.ex. jobbsök, dagis osv.
- Vilken typ tjänster vill medborgarna kunna göra genom hemsidan?
  Söka bygglöv, Söka dagis, skaffa rabatterad kollektivtrafik för högskolestudenter. Mer interaktion behövs. Man skall kunna göra saker själv på hemsidan inte bara läsa.

- Hur kommer du i kontakt med / jobbar du mot:
  a. hemsidan
     I huvudsak jobbar jag med koordinering och administration av hemsidan.
  b. Mark 24 projektet?
     Väldigt lite, men t.ex genom Elin och genom hemsidan. Sitter ej med i någon av projektgrupperna.
  c. Elin?
     Jobbar enligt min arbetsbeskrivning med Elin 1.5 timma per vecka, men kollar henne nästan varje dag.
- Kan du berätta lite vad Mark24 är för något?
  Jag tror att det är bra och viktigt men det skall inte gå för fort. Man skall ha visionen och Mark24 kommer ha en viktig roll. Det är bra att vara förberedd för samhället blir mer och mer digitaliserad.

- Kan du berätta lite om projektet Elin?"

- Hur paverkar det dig / er?
  I längden skall hon se till att vi slipper svara på de enkla frågorna.

- Hur bra funkar:
  a. Hemsidan
     Man skall kunna göra saker själv på hemsidan inte bara läsa. Den behöver alltså bli mer interaktiv.
  b. Elin (enligt din uppfattning?)

200

Har du några förslag på förbättringar?

18:e juni Mikael Höglund (telefonintervju)

- Berätta vad du gör i kommunen?

Ny på posten (sep 2006, men anställd sen 1997 i Marks kommun) IT utvecklare och strateg, att hjälpa förvaltningar att utveckla e-tjänster och även visa vad nyttan är för medborgaren. Jag är en översättare av tekniska möjligheter och tar strategiska beslut om diverse system i kommunen som personal och förvaltningsystem Jag utvecklar dessutom kravspecar.

- kan du berätta hur en dag ser ut för dig?


- Vilka kontakter har kommunen idag med medborgarna?


- Vilka kontakter vill kommunen ha med medborgarna?


- Vilken strategi har kommunen avseende information till medborgarna?"

Trenden är att hemsidan blir viktig tillsammans med bättre telefonservice. Man skall kunna få mer svar direkt och inte bara bli kopplad. Min vision är att man kan koppla ihop dessa medier.

- Vilken typ av information efterfrågar medborgarna?

Mycket är skola och omsorg men även näringsliv och miljö.

- Vilken typ av tjänster vill medborgarna kunna göra genom er hemsida?

Idag finns vissa etjänster som lokalboking och boklån jag tror medborgarens vill kunna gör mycket mer. Till exempel mer kontakt med skola på olika sätt och bättre lokalbokning.

- Hur kommer du i kontakt med / jobbar du mot:

a. hemsidan


b. Mark 24 projektet?


c. Elin?


- En väg in

Jag har gjort en ekonomisk analys och vet en hel del om denna. Medborgaren skall få bättre svar snabbare och vi skall bli bättre internt. Större kundmotagning och på så
sätt frigöra handläggare för mer kvalificerade arbetsuppgifter. Andra kommuner har kommit längre. En riktig bra ide. En väg in och Mark24 kommer påverka arbetsprocesserna mer än något annat i Marks kommun. Hemsidan och telefonkommunikation skall kopplas samman mycket mer. En stor utmaning är att hålla all information uppdaterad.

Har du några förslag på förbättringar?

Vi måste på ett konkret sätt försöka få brukaren i fokus. Vi pratar ofta om det men det blir ofta ändå förvaltningsgränserna som styr. En annan utmaning är att det inte får kosta mer men ändå bli bättre. Vi måste ha bättre förståelse för vad som kommer att hända och vilka möjligheter framtiden erbjuder. Vi måste bli duktiga på att ge service. Vi är inte dåliga idag men måste bli ännu bättre.
Citizen Workshops

MARK24: Reflektioner avseende medborgarstudier

Närvarande: Mikael Lind, Nicklas Salomonson och Mikael Brems samt fyra pensionärer

Tidpunkt: 2010-09-25, 13:00 – 16:00

Lokal: Marks kommunhus, Kinna

Målgrupp: Pensionärer


1) Fas 1: Karaktärisering av målgruppens livssituation samt identifiering av problem och mål
2) Fas 2: Generering av scenarier
3) Fas 3: Prövning av scenarierna genom elektronisk kontakt
4) Fas 4: Gemensam värdering och metodologisk reflektion

Fas 1: Karaktärisering av målgruppens livssituation samt identifiering av problem och mål

Under denna del så försökte vi att fånga den livssituation som det innebär att vara pensionär. Vi inledde med att fråga hur länge de varit pensionärer (och om det var en känslig fråga) och vad de arbetat med tidigare. Arne hade varit pensionär i tre år och varit lärare. Karin uttryckte att hon blivit pensionär nyss och också varit lärare inom grundskolan.
Det framkom senare att hon gått i pension i för tid eftersom hon tillsammans med maken bestämt att när han gick i pension så skulle hon också göra det. Hon uttryckte att hon hade några bekanta där någon i paret gått bort och de därmed aldrig fick någon tid tillsammans som pensionärer. De ville inte riskera att hemma i samma situation. Sven hade varit pensionär i 10 år och arbetat som kanslichef inom kommunen. Lars som tidigare arbetat som egen företagare inom grus och entreprenad var pensionär sedan 12 år. Samliga bor ”hemma”, har make/hustru och har inte hjälp av kommunen (hemtjänst eller liknande).

Vi bad dem därefter beskriva sin vardag. I det fall någon hade svårt att beskriva detta bad vi denne prata om vad hon/han gjort igår.

Arne Andersson – pensionär sedan c:a 10 år, f.d. grundskolelärare i kommunen (arneandersson@mail14.calypso.net). En typisk dag för Arne innebär att han efter frukost läser tidningen noggrant och därefter ofta tar en promenad. Arne är föreningsaktiv och har därför ofta protokollskrivning att ta hand om (åt Sveriges Pensionärs Förening (SPF)). Kommunikationen med en del av de andra i föreningarna sker via e-post, men inte alla. En typisk dag innehåller ofta en eller flera aktiviteter där bridge och fotboll är två stora intressen. Han läser många dagstidningar och gick föregående kväll tillsammans med kamrater i SPF på matchen mellan Elfsborg och Hammarby. Han påpekade att av någon anledning förlorar Elfsborg alltid när han går på deras matcher (☺). Han spelar även bridge via SPF.

Karin Granberg – nybliven pensionär och f.d. grundskolelärare i kommunen (karin.granberg@mark.se eller sorenfag@telia.com). Hon har som nybliven pensionär fortfarande kontakt med sin gamla arbetsplats, Öxabäcksskolan där hon vikarierar emellanåt. Hon ägnar sig åt bowling som medlem i en bowlingförening och bowlar även med Pensionärs Riksorganisation (PRO), boule, linedance, har intresse för mat och vinprovning (som anordnas av PRO) och betonade sitt intresse för att läsa mycket böcker (där hon använde mycket av de låneserviceaktiviteter (de olika biblioteken, bokbussen)) som tillhandahålls av kommunen. Hon lyssnade även gärna på musik och ställde ibland upp som vikarierande lärare om hennes gamla skola ringde. Hon söker och köper mycket på nätet, bl a resor men vill inte gärna betala via nätet för hon litar inte på det. Hennes man betalar dock gärna på nätet.

Sven Håkansson – pensionär sedan c:a 10 år, f.d. kommunsekreterare (Bockagatan10@hotmail.com). Han betonar att han alltid lagar frukost. Sven börjar sin dag med att läsa två dagstidningar för att därefter äta frukost. Därefter blir det ofta skrivbordsarbete då han liksom Arne är aktiv i föreningssivet, skrivbordsarbetet består av kontakt med andra i föreningarna genom e-post och telefon. På frågan vad det är för papper så nämner han att han är ordförande i PRO Skene med 600 medlemmar vilket genererar en del pappersarbete. En typisk dag är ofta fylld av några aktiviteter såsom orientering, promenader, vattengympa eller Rotarymöten. Sven vill gärna kunna söka information på Internet om olika aktiviteter och snabbt kunna ta del av olika nämnders protokoll för att kunna påverka olika beslut genom sitt engagemang i pensionärsföreningen. Bland annat är han ofta involverad i att arrangera poängpromenader och då är det viktigt att få alla fakta rätt. Till detta är Google ett utmärkt verktyg.
Lars von Braun – pensionär sedan 12 år, f.d. egenföretagare (lvb@vonbraun.se). Lars lager också en ”stadig” frukost. Lars har tidigare ägt ett företag som sysslande med transport och olika kross och grusprodukter. Han äkte under denna dag (läs igår) till sin firma och skrev över den på sin son. Han uttryckte ”ju mindre man har kvar när man lämnar detta livet, desto mindre risk för bråk bland de efterlevande”. Han beskriver sig själv som lite av en enstöring och tycker inte att föreningslivet lockar så mycket. Det som upptar det mesta av hans tid, förutom de vardagliga sysslorna såsom att handla, är trädgården och hans motorcykel. Lars var tidigare aktiv flygare i Örestens flygklubb och hade då ett eget motorplan. Numera är han fortfarande medlem men flyger inte aktivt själv. Han är också medlem i SPF. Under den dag som han berättade om så mekade han med sin motorcykel och klippte gräset. Därefter handlade han och såg sedan på nyheterna. Han är medlem i SPF och är även med i Örestens flygklubb där han motorflugit under lång tid tidigare i sitt liv. Lars var också involverad i diverse trafiksäkerhetsfrågor som involverade kommunen.

Med tanke på efternamnet (och email addressen@vonbraun.se) så verkar det troligt att han och/eller hans familj också är involverad i att sälja Italienska sportbilar i Sverige!

När vi frågade om de varit inne på kommunens hemsida svarade de jakande. De hade även uppmärksammat webbassistenten Elin. Sven uttryckte att ”hon är ju korkad”.

Under denna del lyftes också ett antal problem fram som man upplevde. Vårt spontana intryck var att det inte var många problem egentligen, utan dessa pensionärer upplevde sin tillvaro som ganska god. Däremot när vi började skrapa på ytan så visade det sig att man upplevde:

• att det var tråkigt i ens umgänge när folk gick bort eller blev demente (vänner försvinner och/eller blir sjuka)
• att tiden inte alltid räckte till för allt man skulle göra
• en dålig feedback från kommunen när man rapporterade ärenden. Man blir inte tillräckligt hörd ibland.
• att e-postkallelser underlättar men att det inte var tillräckligt många i pensionärtilltill dragarnas styrelser som hade e-post, d.v.s den tekniska mognadsgraden/intresset varierade från pensionär till pensionär. I PRO styrelse var det bara 2-3 stycken som hade e-post.
• Ibland är det svårt att få tag på folk när man ringer dem och det tar tid innan de ringer tillbaka.
• att olika förvaltningar har olika rutiner och att man ofta får kontakta flera personer innan ärendet är löst. Lars gav exempel på att en påtalad grop i vägen tar lång tid att åtgärda och att en enkel fråga om tömning av sopor tog väldig lång tid att lösa. För det senare problemet med sophantering uppfattar man att kommunen komplicerar ibland saker i onödan.
• att det ibland var problem att boka tider för olika lokaler. Arne uttryckte bl a att kommunen det är OK att prioritera basket och ungdomar men det behöver inte innebära att man totalt exkluderar andra aktiviteter. Han är med i Skene motionärer.
• att olika nämnder/tjänstemän agerar olika. En del bekräftar t.ex. att de tagit emot skrivelser andra inte.
• att en del personer fortfarande ogärna betalar via nätet (en företroendefråga!)

För denna del (fas 1) ägnade vi cirka 50 minuter av mötet.

Egna reflektioner
Den målgrupp av pensionärer som vi hade framför oss idag visade sig sammantaget vara mycket aktiva. För deras del handlade mycket om att ”leva i nuet” och engagera sig i en mängd olika aktiviteter. Det visade sig att denna grupp även var mycket måna om att ha en insikt om vilka evenemang som sker i kommunen samt att också vara måna om att ha en god miljö (infrastrukturell – såsom gator etc.) kring sig. Fungerade inte detta var man som pensionär inte sen att rapportera om detta. Liknande observationer (läs behovet att som pensionär göra felanmälan) har också identifierats i andra projekt (MIT, AVANTI etc.). Intressant att notera, utan att vi då vi genomförde workshopen inte hade någon information om detta.

En intressant reflektion här är att en den typen av pensionär som vi träffade här i Skene är betydligt mer ‘internet savvy’ än en genomsnittlig Thailändsk tonåring. Att alla dessa fyra var så med i utvecklingen var en mycket positiv överraskning.

Del 2: Generering av scenarier
Under den andra delen av mötet så inledde vi diskussionerna med att fika och att hitta typiska situationer då det fanns en önskvärdhet gällande en interaktion med kommunen – detta som en del i den typiska livssituationen. Följande situationer identifierades (med sina innebörder):

• **Att reservera och låna en bok.** Denna situation innebar att man som medborgare ville ha en möjlighet att låna eller reservera en bok på nätet.

• **Att boka en lokal.** Detta scenario innebar att man skulle boka en lokal för en aktivitet som var knuten till en förening eller en privat aktivitet som ett födelsedagskalas (mer kollektiva engagemang). Exempevis linedace eller bridge. Detta blev särskilt tydligt under mötet med tanke på att två av pensionärerna (Arne och Sven) är mycket aktiva i pensionärsföreningar som ordnar aktiviteter.

• **Att få återkoppling.** T.ex. när någon form av förfrågan ställdes till eller rapport lämnades till kommunen.

• **Att genomföra felanmälan.** T.ex. genom felanmälan av ett hål i gatan.

• **Att skapa en prenumeration på intressanta händelser/saker (nyhetsflöde).** Att få automatiskt besked om att det man är intresserad av har uppdaterats eller lagts ut på nätet, t ex nya protokoll avseende (från valfri nämnd eller annan händelse) i olika frågor som man är intresserad av.

• **Att leta reda på en ”Hört talas om”- aktivitet.** Att kunna söka efter aktiviteter, t ex en jazzfestival, som anordnas inom kommunen. Intresset uppstår för att någon annan kanske har nämnt att detta är på gång.

• **Att få information om mina intressanta aktiviteter.** Detta scenario uttryckte behovet av att kunna få information om de aktiviteter som passade ens egen personliga profil.
• **Att göra en evenemangsreservation.** Detta scenario innebar att man skulle planera och boka resurser för att genomföra en viss aktivitet ett visst datum och säkerställa att det inte krockar med andra evenemang.

• **Att köpa biljetter.** Detta scenario innebar att man skulle köpa biljetter till lokaltrafiken för en viss sträcka som man skulle ta sig.

**Del 3: Prövning av scenarierna genom elektronisk kontakt**

När vi enats om scenarierna bad vi pensionärerna att sätta sig framför datorerna som var påslagna. Internet hade startats upp åt dem med BTs hemsida som start. Därefter tog vi ett scenario i taget och lät var och en av pensionärerna skapa någon form av egen historia kring detta. Mikael L., Mikael B. och Nicklas försökte cirkulera mellan dem och lyssna på hur de konkretiserade sitt scenario samtidigt som vi också försökte att fånga upp de hinder och möjligheter med tillämpningen av en elektronisk kontakt som krävdes för att lösa de behov som stipulerades i respektive scenario.

Så … för respektive scenario gjorde vi så att någon av oss gav ”ramarna” för det scenario som skulle prövas. Pensionärerna tog då scenariot och ”försökte att sätta sig in i den situation som detta innebar” och försökte sedan använda kommunens tillhandahållna elektroniska kontaktinstrument för att på så vis kunna se vilket stöd som hemsidor och Elin skulle ge. För respektive scenario kunde följande hinder och möjligheter identifieras.


• **Att boka en lokal.** Alla hittade efter lite letade fram till lokalbokningen och skickade via hemsidan ett meddelande om att man ville boka en lokal. Redan efter 15 min kommer en bekräftelse på en av bokningarna: "tyvärr är inte ängshallen ledig mellan 19-20, sök gärna lediga tider via hemsidan." Flera uttryckte att det hade varit bättre om man direkt kunde se lediga tider i lokalerna. Man gjorde 7 till 8 bokningar totalt. Ingen i gruppen hittade nämligen den interaktiva bokningstjänsten på hemsidan där sådan information finns.

• **Att få återkoppling.** Alla försökte göra en felanmälan om en gata och att få en återkoppling på denna. Det var lätt för samtliga att hitta dit och man upplevde att det var bra info samt lätt att skicka in en felanmälan men man fick ingen återkoppling om att meddelande skickats eller inte. Samma sak gäller att boka en
Några intressanta reflektioner som vi gjorde var att:
- denna målgrupp arbetade inte spontant med Elin utan gick direkt på hemsidan.
- De förväxlande vid flera tillfällen rutan för sökfunktionen med ”Fråga Elin”-rutan
- De saknade en direkt respons att mailet skickats iväg och att kommunen kommer att behandla det
- De uppskattade att svar på vissa mail kom så fort ändå. Den spontana reaktionen var att det ”måste väl vara automatsvar” som genereras. När sedan Mikael B. berättade att sä inte var fallet så var man mycket imponerad av den supporten som detta innebar.
- På alla kontaktformulär på hemsidan står det att man skall skicka e-post. Detta är inte sant då det är ett kontaktformulär som inte kräver någon e-post.
- Om det står text i sökrutan och man även skriver en fråga till Elin och klickar på ”fråga Elin” så blir det resultatet från sökmotorn som kommer upp och inte det från Elin.
- Under tiden för scenariona var det en person som använde adressen www.markskommun.se istället för www.mark.se och började söka på denna trots att det inte var kommunens hemsida. Den första adressen är någon annan som har lagt beslag på!

Del 4: Gemensam värdering och metodologisk reflektion
Efter det att vi hade genomfört dessa mer interaktionsorienterade studier så gick var det dags att avsluta mötet. Klockan var nu 15:45 och vi kände att det var oerhört viktigt att också visa respekt mot att de kommit i tid och faktiskt ställt upp med sina reflektioner. Diskussionen i denna del av mötet innebar både en reflektion av vad som gick att utläsa av den elektroniska kontakten.

Gruppen diskuterade på Mikael Linds initiativ om det är något värde för Marks kommun att ha en hemsida:

- Lars använder den inte så mycket, men tycker den är lätt att hitta på.
- Sven tycker att det är viktigt ha en hemsida och att det är lätt att hitta på den men uttrycker att det inte är det på alla ställen på kommunens hemsida. Det finns andra kommuner som har bättre hemsida.
- Karin tycker det är positivt att låna böcker via nätet och att man kan prenumerera på olika tjänster.

Alla var överens om att det ofta är bättre att använda nätet än telefon eftersom man ända sällan kan få ett svar direkt via telefon. Många gånger måste kommunen ringa tillbaka ändå och då är det bättre att använda nätet för denna kommunikation.

Alla tyckte att evenemangssidorna är fattiga med information och att mark.se är inte den naturliga kanalen för detta utan det är BT eller Markbladet.

Man såg heller inte Elin som den naturliga vägen för att hitta.

Sven tror man måste lära sig att formulera frågorna rätt och tycker inte att hon fyller någon funktion alls idag. "Hon är korkad" var en av hans första kommentarer angående henne. Frågor måste kunna ställas i klartext till henne.

En viktig del av de reflektioner som formulerades under denna slutfas var att pensionärerna uttryckte viken av att de satsningar som kommunen gör vad gäller den service som skall tillhandahållas (i detta fall elektronisk kontaktverksamhet) så är det oerhört centralt att det görs satsningar inom prioriterade områden (där man verkligen kan bli bra!). Under mötet diskuterades också om det var naturligt att placera lokalbokning och bibliotek under kultur och fritid. Efter genomförandet av workshopen ser vi som medverkande att detta är en viktig fråga att diskutera. Ord och formuleringar som används inom kommunen kanske ibland tas som självklara för de som gör detta, men kanske inte för de som hemsidan riktas till. En av deltagarna (Lars!) som aldrig jobbat inom kommunen verkade vara den som hade svårast att hitta på sidan.

Innan vi avslutade frågade vi också om deras intresse i att bidra till situationsförumet. Vi bestämde att vi skulle försöka att sammanfatta dagens insikter, skicka dessa till pensionärerna för deras reflektioner för att sedan lägga ut dessa som en trigger på
situationsforumet och då också be dessa pensionärer att börja identifiera nya situationer. Därefter skulle vi via olika kanaler be andra att börja göra liknande reflektioner.

När vi avslutade delade Mikael B. ut biobiljetter till samtliga pensionärer och vi tackade för deras medverkan.

Som en kul grej sprang vi sedan ut och berättade för lokalbokningen (någon tjej där) vem vi var och vad vi höll på med (d v s alla dessa meddelanden som hade kommit till dem). Hon tyckte att det var kul och vi uppmanade henne om att inte säga något till de andra. En annan intressant reflektion om detta var att när det kommit en 5-6 mail från Mikael.Lind@hb.se så började någon som satt i en koordinerande roll att reagera på att Mikael.Lind@hb.se verkar vilja ha många lokaler – ”detta inte vara rätt” – varför man slutade att svara på mailen. Frågan är vilken typ av ”säkring” av att det verkligen är en seriös förfrågan/anmälan som kommer sker?

Övergripande omdömen
Man kan utan tvekan konstatera att den grupp pensionärer som vi träffade är mycket aktiva. De letar efter aktiviteter att göra och tre av pensionärerna var också starkt engagerade i olika typer av föreningsliv. Föreningslivet innebar också att man utförde minst var oerhört intresserad av att både engagera andra i sociala aktiviteter och att vilja ta ett ansvar för den situation som rådde i kommunen.

Under del 3 av mötet, då pensionärerna använde datorerna för att arbeta, skickades också ett antal fingerade meddelanden till olika delar av kommunen. Bland annat handlade det om att göra lokalbokningar och rapportera om bristande kvalitet i vägar etc. I samband med dessa meddelanden användes Mikael.Lind@hb.se som avsändande mailadress i det meddelande som skickades till kommunen. Intressant att notera är att ett svar levererades på de flesta av dessa frågor inom en timma. En viktig fråga att senare gå vidare med är att undersöka hur dessa meddelanden hanteras internt av olika producenter i kommunen. Dagen efter mötet meddelade Mikael B bl a att: ”en intressant sak är att ingen verkar veta vart felanmälningarna kring gator och vägar tar vägen om det görs via hemsidan.... Ska gräva vidare i detta!”

Dagens citat:
"Sigårdsgatan sönderregnad . meterdjupt dike i halva vägbanan". Fick vi inte fart på kommunen med detta så vet jag inte vad vi ska göra...

Metodologisk reflektion
Detta sätt att bedriva medborgarstudier är förknippat med en hel del utmaningar samtidigt som mycket värdefull information kunde utvinnas. Det är ett arbetsätt där deltagarna på olika sätt uppmuntras att delta i diskussionen. Deltagarna blir engagerade, de ges möjlighet att komma med omgående feedback och kan även reflektera och relatera till övriga deltagares erfarenheter och upplevelser. På så sätt nås en "on-going and real-time validation” av materialet. En risk med detta är givetvis att de påverkar varandra och inte vill ”sticka ut” från mängden utan istället håller med. Här får forskarna göra en bedömning om risken föreligger och försöka möjliggöra för alla att komma till tals. Vi uppfattar att vi
i detta fall lyckats väl, där vi lät respektive individ komma med både egna reflektioner och också engagera sig i att tillsammans skapa en bild av vad som skedde. Målgruppen visade sig även bestå av som vi uppfattade självständiga individer som i olika situationer i livet inte tvekar att uttrycka sin mening. Genom att videofilma fångas sekvenser av handling som annars är svårt att nå med enbart ljud, t ex ageranden, ansiktssuttryck och kroppshällning framför skärmen har vi också skapat ett material som går att gå tillbaka till.

En mycket intressant dimension är att vi klarade på att förhållandevis kort tid få en hyfsad uppfattning om vad det innebär att vara (i detta fall) pensionär (en viss typ av medborgare i Marks kommun) för att sedan hantera/diskutera några centrala situationer som faktiskt inträffar. Därefter, tack vare en väl fungerande teknik, lyckades vi också få till en situation som innebar att respektive pensionär kunde pröva att realisera sina behov genom att använda de elektroniska kontaktmöjligheter som gavs och därefter enskilt och i grupp reflektera över hur väl det elektroniska kontaktinstrumentet fungerar som tillhandahålls av Marks kommun. Detta innebar att vi lyckades med att kombinera användningen av ett antal olika instrument och tekniker för att få de insikter som vi fick under denna kväll. Det, kanske någorlunda ambitiöst, formulerade upplägg gick faktiskt att realisera. Samtidigt kan vi säga att vi t ex inte har scenarierna dokumenterade på detaljnivå etc., men detta kanske inte är en nödvändighet för denna studie. Det viktiga är dock att vi som utgångspunkt tog den livssituation som dessa pensionärer befann sig i.

Frågan är nu – hur går vi vidare – från denna situation (i detta i eller i kommande delprojekt) gällande exempelvis:

- Hur genomföra en kvantitativ undersökning bland övriga pensionärer? Här kan man säkert gå via SPF och PRO, men hur säkerställer vi ytterligare kompletterande reflektioner från en annan målgrupp och validering av de reflektioner som vi hittills gjort? Är detta intressant i detta skede av studien?
- Hur säkerställer vi att (delar) av innehållet och kanske en fördjupning och konkretisering på en sådan nivå så att andra kan ta del av detta inför sina reflektioner på det situationsforum som skall sättas upp? Behöver vi för detta syfte göra scenarierna betydligt mer utförliga?

Gruppen tyckte det var ett bra sätt att jobba för att få fram synpunkter och ställde sig positiva till att vara med och fortsätta reflektera i ett Internetforum vars adress de kommer att få via e-post.

2010-10-02

**MARK24: Reflektioner avseende medborgarstudier**

Underrubrik: "Jag visste inte att man kunde göra så mycket på hemsidan!"

Närvarande: Nicklas Salomonson och Mikael Brems samt fyra ungdomar

Tidpunkt: 2010-09-27, 17:45 – 20:30
Lokal: Marks kommunhus, Kinna

Målgrupp: Ungdomar

Fyra bärbara datorer fanns uppriggade av Mikael Brems före mötet och han gjorde även i ordning videokameran. Mikael B meddelade att de med mycket kort varsel (dagen innan mötet) hade lyckats få tag i fyra ungdomar som ville delta i studien. Vi (Nicklas och Mikael B) diskuterade kort våra reflektioner från första mötet (070925, pensionärer) och konstaterade att upplägget var bra och att inga direkta förändringar behövdes. Före mötet samma dag hade Ralf meddelat inloggningsuppgifter till det situationsforum som nu skapats. Vi lade till det som en extra punkt på kvällens agenda.


De var liksom pensionärerna en aning reserverade till en början, kanske till och med lite mer reserverade än pensionärerna, men blev senare mer engagerade i diskussionen. Mötet strukturerades enligt följande:

5) Fas 1: Karaktärisering av målgruppens livssituation samt identifiering av problem och mål
6) Fas 2: Generering av scenarier
7) Fas 3: Prövning av scenarierna genom elektronisk kontakt
8) Fas 4: Gemensam värdering och metodologisk reflektion

Fas 1: Karaktärisering av målgruppens livssituation samt identifiering av problem och mål


Hanna Bryfors är 17 år (QBOB@hotmail.com) och går Mediaprogrammet på Kunskapens Hus (Marks Gymnasium). Hanna går En typisk vecka för Hanna innebär att hon går till skolan (bor nära) och sedan kommer hem för att äta. Hon går sedan till stallet (tar 15 min att gå) för att sköta om en häst (halvblod) som hennes hon hyr. Hon är inte med i någon hästförening. Kvällen ägnas även till läxläsning (sällan förekommande) och tv-tittande. Hon pratar även med kompisar per mobil och ”vanlig” telefon, skickar sms och chattar ca 1 tim/dag via MSN. Helgerna ägnas åt kompisar och hästen. År medlem i tjejföreningen vilket är ett initiativ med 10-15 tjejer i gymnasieålder vars syfte är att vara goda förebilder


Amanda är 14 år (aiB_amanda@hotmail.com) och går på högstadiet i Engskolan. Hon går till skolan och kommer hem och åter. Tidigare spelade Amanda både fotboll och basket men har slutat att aktivt utöva dessa sporter. Hon beskriver sig som ”inte idrottsintresserad” men tittar ibland på fotboll och basket. När de senare i etapp 3 sökte vad som gick att göra i Mark så letade hon upp Marbo baskets hemsida. Hon ägnar mycket tid vid datorn (några timmar/dag, chatten via MSN) och åt att träffa kompisar. År medlem i tjejföreningen. Chatten handlar mycket om ”vad gör ni?” och ”vad har ni gjort idag?”. Hon använder också något som heter bilddagboken.se (en community) där hon chatten och lägger in bilder på sig själv och kompisar. Hon har inte bestämt vad hon ska läsa på gymnasiet.


På frågan vad de gör i skolan så nämnde Caroline: ”Träffa kompisar och dricka O’boy” vilket utlöste en del skratt. De har fått mailadresser till lärare men det verkar vara ganska nyligen och de har inte använt det. Ingen av dem använder Facebook. Då ingen uttryckligen nämnde att de är ute på fester ställdes en fråga om det. De brukar åka till Kullaberg som
öppnar 21 och stänger vid 02.00. De brukar åka hem när det stänger. Transportmedlet dit och hem är vanligtvis buss.

De använder ibland Internet till att köpa saker, dock inte ofta. Exempel på detta är byxor och skor. Caroline hade köpt en tröja en gång.


- Tid är en bristvara. Det är ”stressigt att hinna med allt”.
- De skulle vilja ha mer affärer i Kinna. De ville ha köpcenter och Caroline nämnde att någon mer sportaffär med cyklar osv. (finns tydligen en) vore bra.
- De vill ha mer saker att göra. Laserdome, skatehall, utomhuspool och gocart var några förslag. Nu upplever det att det inte finns så mycket att göra. Sommaren tillbringar de vanligtvis i Varberg och de åker ibland till Borås.
- Allt är så dyrt också var en annan kommentar.
- ”Öppna Skene Fritidsgård igen!” Nu sitter de mycket på McDonalds och hänger utanför Frölish som är en korvkiosk i Skene.
- Det är svårt att veta vart man skall vända sig i kommunen.
- Vi tror inte kommunen bryr sig så mycket om oss.

Ca 45 min ägnades till denna fas.

**Egna reflektioner**

Ungdomarna verkar sammantaget ägna mycket tid åt att chatta och umgås med kompisar. De nämner flera olika communities men MSN verkar vara den mest använda. Noterbart är att de inte spontant nämnde att de skickar e-mail när vi frågade om vad de gör när de sitter framför datorn. Skolan tar givetvis mycket tid i anspråk men det är inget de nämner mer utförligt när man ber dem berätta vad som händer under en dag och vecka. De lyfter inte heller fram så mycket fritidsaktiviteter i form av sport. Hanna ägnar sig åt hästar och Caroline springer ibland. Tjejföreningen verkar vara en viktig länk för sammanhållning och för att göra saker ihop. De vill kunna göra mer saker men känner sig hindrade av att de upplever att det inte finns så mycket att göra i Skene och Kinna. Vi uppfattade inte att de hade några tydliga önskemål om vad kommunen kan göra mer än att det borde finnas mer att göra i samhället.

En annan intressant iakttagelse är att ungdomarna uppfattade att inte kommunen var speciellt intresserade av vad de tyckte och att de inte tyckte kommunen gjorde så mycket för dem. När vi träffade pensionärerna tyckte de att det var ungdomarna som prioriterades till stor del. Hittills verkar det som de vi prtat med tycker att kommunen gör mer för andra än för dem själva.
Del 2: Generering av scenariier
Del två av mötet inleddes med att fika och att identifiera typiska situationer då det fanns en önskvärdhet gällande en interaktion med kommunen – detta som en del i den typiska livssituationen. Vi upplevde att detta var något svårare att identifiera jämfört med mötet med pensionärerna. Följande situationer identifierades (med sina innebörder):

- **Att få information och interagera med skolan på olika sätt.** Detta scenario innebar att man som ungdom ville kunna ha fler möjligheter att interagera med skolan och få information om vad som är på gång. En möjlig skolcommunity diskuterades också.
- **Att få fram information om fritidsaktiviteter.** Scenariot var att de skulle träffa kompisar och komma på något att göra i Mark.
- **Digital förenings-/medlemskommunikation.** Detta scenario innebar att man skulle genomföra kommunikationen mellan medlemmar i en förening.
- **Att kunna få information om skolval och studieinriktningar.** Scenariot handlar om att kunna informera sig om de kommande val man ska göra till gymnasium eller högskola.
- **Att kunna söka information.** Detta scenario innebar att man skulle söka information om kommunen, eller annan information som behövs i ett skolarbete.
- **Att kunna påverka kommun och samhälle.** Scenariot gick ut på att de ville kunna lämna förslag på sådant som de vill förbättra i Skene/Kinna.

Ca 45 min ägnades till denna fas.

Del 3: Prövning av scenarierna genom elektronisk kontakt
Efter sammanställningen av scenariier satte sig ungdomarna framför var sin dator. Liksom förra gången var BTs hemsida startsida. Vi inledde respektive scenario med en kort återkoppling till del 2 och bad dem fundera på och se vad som var möjligt att lösa via Marks hemsida. Samtidigt som de arbetade med respektive scenario så ställde vi frågor till dem om hur de agerar. Syftet med det var att försöka få dem att ”tänka högt”; att försöka fånga deras resonemang samtidigt som de utför handlingarna via hemsidan. På så sätt kunde vi också identifiera vad de ”elektroniska begränsningar” de stötte på bestod av. Vi gav därmed ramarna för respektive scenario som skulle prövas och så fick de själva försöka lösa detta genom kommunens hemsida. För respektive scenario kunde följande hinder och möjligheter identifieras.

- **Att få information och interagera med skolan på olika sätt.** Scenariot var att använda [www.mark.se](http://www.mark.se) som startsida för att leta sig fram till information om sin skola och möjlig interaktiv skolkontakt. Hanna kom på att det inte fanns så mycket info utan går istället till gymnasiets egna hemsida, (Kunskapens hus) men länken fungerade inte. De tyckte det var bra att få fram information om matsedeln. På frågan om de använt det någon gång svarade en: ”Jag har inte tänkt på det faktiskt.” Hon skulle kunna tänka sig att använda detta i framtiden. Amanda hittade bilder på hur Ångsskolan ser ut. Hon såg inte någon större användning av det: ”Jag vet ju hur det ser ut.” Hon kunde dock tänka sig att skicka adressen till dem som är intresserade av hennes skola. Ytterligare områden som identifierades var skoltransporter och adresskatalog (till dem som jobbar på skolan, bl a telnr och e-
mail). Det senare tyckte de var jättebra om de ville ha tag på någon. De tyckte sammantaget att det var lätt att hitta information om skolan. På frågan om de ville ha ett forum för att ställa frågor så tyckte de att det vore bra, t ex vad man kan läsa på skolan. En av dem använde Elin för att få fram vad man kunde läsa. Hon använde först orden Marks gymnasium men hittade inget. Hon prövade istället ”Vad kan man läsa på Marks gymnasium?” och hamnade då under kategorin ”Barn och utbildning”. Hon tycker inte att hon fick svar ändå. På frågan om man skicka en fråga till någon så sa en att man kan gå in under kontakt (http://www.mark.se/mark_templates/Page.aspx?id=144). Hon hade inte helt lätt att identifiera vem hon skulle skicka till. Hon gick istället till konsumentvägledningen innan hon återvände till Kontakt och skickade ett mail till Marks kommun (avs nicklas.salomonson@hb.se). Två dagar senare erhölls följande svar:

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>>> <susanne.sabel@mark.se> 10/01/07 8:58 >>>

Hej Nicklas!
Om du vill veta mer om Marks gymnasieskola kan du gå in på vår hemsida och läsa om alla våra program. Adressen dit är;

www.marksgymnasieskola.se

Du är också välkommen att höra av dig till mig eller Carina Johansson så kan vi boka tid för ett samtal.
Vänliga hälsningar

Susanne Sabel
studie- och yrkesvägledare

Marks kommun
Marks gymnasieskola

Utbildningsförvaltningen
Besöksadress: Varbergsvägen 6, 511 62 SKENE
Postadress: 511 80 KINNA
0320-21 73 97
Fax:0320-21 73 74
mailto:susanne.sabel@mark.se

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En kommentar om Elin här var ”man kommer inte riktigt dit man vill.” Denise hittade information om fritidsgårdar, bl a öppettider och att från 1 oktober har Skene fritidsgård stängt och att de hänvisar till Kinna. Hon hade valt att ringa för att få reda på varför då hemsidan inte gav några svar. Hon valde dock att fråga Elin: ”Varför är fritidsgården i Skene stängd?” På frågan om hon fick något svar om det sa hon: ”Nej, det står inte.” En annan av ungdomarna sa att de fick reda på det igår. Det var inte så många där och det var för dyrt.


**************
Hej nicklas!

hej
**************

Det är således den specifika sidan man tipsar om. Det var svårt att hitta länken tyckte de övriga och skulle hellre ha haft länken mer synlig.

Man skulle vilja ha en gästbok/forum för att hjälpa varandra att hitta saker som är på gång och på så sätt fått hjälp från kommunen att arrangera detta.

Gruppen tyckte att det hade varit bra med ett forum där man kan få en samlad bild av olika programinriktningar på gymnasiet och grundskolan och man tycker att Elin är bra, men att hon svarar konstigt ibland.

- **Digital förenings-/medlemskommunikation.** Detta scenario innebar att man skulle genomföra kommunikationen mellan medlemmar i en förening. Hanna söker på hemsidan efter deras egna tjejförening men hittar inget. Caroline frågar Elin och blir hänvisad till att söka föreningsregistret men hittade det inte direkt då de sökte på ”tjejföreningen”, utan först efter att ha sökt på ”tjejföreningen”. Dock saknades mycket kontaktuppgifter, men efter ett tag kom man på att man kunde klicka på namnen för att skicka e-post vilket de tyckte var svårt att veta att man skulle göra.
En av medlemmarnas mamma var kontakt person vilket de tyckte var bra. Ingen hade en aning om detta register men tyckte att det var en välligt bra funktion när man väl hittade det men tyvärr saknades en hel del uppgifter i registren.

- **Att kunna få information om skolval.** Scenariot handlar om att kunna informera sig om de kommande val man ska göra till gymnasium eller högskola. Amanda provade direkt att söka på google och hittade studieval.nu som hade mycket bra info, hon trodde spontant inte att kommunens hemsida hade något att erbjuda. Denise letade på kommunens hemsida via sök och Elin men fick inga träffar alls som var relevanta. Prövade därefter google och fick då svar direkt till marksgymnasieskola.se Hanna försökte nå gymnasiets hemsida genom [www.mark.se](http://www.mark.se) men hittade bara trasiga länkar till [www.komvux.skola.mark.se](http://www.komvux.skola.mark.se) samt [www.kunskapenshus.mark.se](http://www.kunskapenshus.mark.se). Denise försökte hitta olika program på gymnset och Elin svarade med en korrekt sida men länken fungerar inte. Sammanfattningsvis så var det svårt att hitta denna information via kommunens hemsida, det är lättare via google och söktermen ”plugga vidare”, men tyvärr är träffarna inte lokalt knutna vilket gör det svårt att hitta fram till Marks gymnasieskola, särskilt när ordet ”mark” har multipel betydelse i sökmotorsammanhang.


- **Att kunna påverka kommun och samhälle.** Scenariot gick ut på att de ville kunna lämna förslag på sådant som de vill förbättra i Skene/Kinna. Hanna ville direkt skicka ett mail till kommunen för att säga att det behövs mer att göra på helgerna. Hon hittade en e-mailadress till kommunstyrelsen och skrev följande (i Nicklas namn):

> Hej Kommunstyrelsen ()!

På detta fick hon (Nicklas) följande svar två dagar senare:

***************
Hej Nicklas!


Jag hoppas att du ska hitta något som passar att göra på helgerna.

Hälsningar

Pia Karlsson
Kultur- och fritidschef

MARKS KOMMUN
Kultur- och fritidsförvaltningen
Besöksadress Boråsvägen 40, Kinna
Telefon vx 0320-21 70 00
Telefon direkt 0320-21 70 16
Mobiltelefon 0703-76 71 29
Telefax 0320-100 91
e-post pia.karlsson@mark.se
www.mark.se
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Liksom vid tidigare användning av kontaktformulär saknades en bekräftelse på att meddelandet var skickat. Caroline försökte få reda på varför Skene fritidsgård stängdes men hittade ingen självklar digital kommunikationskanal eftersom det bara fanns telefonuppgifter och växeln hade stängt sedan länge.

Hanna frågade Elin om det finns någon shopping i Mark, men fick bara ett svar på vad mark är. Hon önskade svar i form av en lista på affärer där man kan shoppa.

På frågan om hur man kan tänka sig att felanmäla saker som inte fungerar i skolan så trodde samtliga att det är lättare att kontakta en lärare om något är sönder, tex. En dator än att göra en felanmälan digitalt eftersom det nog ändå inte är någon som läser sådana mail.

Caroline skrev en fråga till Elin om att klaga på skolan och fick svar, men bara om grundskolan och inte gymnasiet.
Några intressanta reflektioner som vi gjorde var att ungdomarna:

- Blev positivt överraskade att Marks kommuns hemsida innehöll mer information än de förväntat sig och dessutom visste om. Ett exempel på det var att de i föreningsregistret (http://www2.mark.se/booking/Foreasp/Forestart.asp) fanns väldigt många olika föreningar som de inte kände till, t.ex kaninavel. Ett annat exempel var skolmatsedeln.
- Ungdomarna arbetade inte spontant med Elin utan det var först när vi frågade om de testat Elin som de prövade. När de väl identifierat denna möjlighet så uppfattar vi att de såg Elin som spännande och testade ställa frågor till henne frekvent.
- De uttryckte inte spontant att de saknade en respons att mailen gått iväg. När vi frågade om det sa en: ”Ja, det hade väl vart bra. Så man inte går och väntar på mail.” Vid fråga om e-handel nämnde hon att hon brukar få besked att varan är packad och när den är på väg.
- Det hade varit bra med en gästbokfunktion så man lättare kan få kontakt med kommunen.
- Det tyckte det är bra att man kan kla v Elin så hon blir dukligare.
- En av ungdomarna såg det som naturligt att istället googla fram information om vilka möjliga utbildningar som fanns efter gymnasiet.

Ca 60 min ägnades till denna fas.

**Del 4: Gemensam värdering och metodologisk reflektion**

Efter prövningen av scenarios bad vi ungdomarna sätta sig i mitten igen för en avslutande värdering och metodologisk reflektion av workshopen som sådan och sättet att utvärdera den elektroniska kontakten.

I denna gruppen ungdomar kändes det lite svårare att få feedback jämfört med pensionärerna. Och de flesta svar vi fick var antingen Ja eller Nej på direkta frågor. Det framgick dock under dessa timmar att de ansåg att de tyckte mark.se hemsida hade en hel del mer att ge än de förväntat sig och de lyckades hitta en hel del information som de ansåg sig ha använding för.

Vad gäller Elin så använde de som sagt henne först efter att vi nämnt henne. Vi fick inträkket av gruppen att de tyckte Elin bara delvis hjälpte eftersom hon ofta pekade till fel sak och inte gav speciellt uttömmande svar.

De sa också att om de skulle kontakt någon lärare eller någon i kommunen så föredrog de email framför telefon eftersom de då inte skulle störa personen i fråga, och denna skulle kunna svara när han/hon hade tid.

Innan vi avslutade mötet tillfrågades ungdomarna om de kunde tänka sig att använda ett nyskapat situationsforum där de kan bidra med ytterligare reflektioner och insikter. De ställde sig positiva till detta och Mikael B lovade att skicka dem inloggningsuppgifter till forumet.
Mikael B. lämnade avslutningsvis två biobiljetter var till dem och vi tackade för deras medverkan.

**Övergripande omdömen**

Samtliga av dessa är inte speciellt förvånansvärt vana vid att använda datorer och internet och inte det minsta rädda att prova divese elektroniska verktyg. Det var också kul att se att de i sin tjejförening engagerade sig i att anordna aktiviteter (såsom innebandynatta). Eftersom det ju var en av de områden de själva så brister i inom Marks kommun så kan man ju konstatera att de lever som de lär.

Dagens citat:
"Jag visste inte att man kunde göra så mycket på hemsidan!"

**Metodologisk reflektion**

Vid föregående träff med pensionärsgruppen gjordes ett antal reflektioner:

- deltagarna uppmuntras till att delta i diskussionen och har möjlighet att lämna omgående feedback
- de kan relatera till övriga deltagares erfarenheter
- viktigt att låta alla komma till tals
- ljud- och bildinspelning ger en detaljriktedom i materialet
- metodupplägget fångade hyfsat väl ”vad det innebär att vara pensionär”
- pensionärerna kunde pröva att realisera sina behov genom att använda de elektroniska kontaktmöjligheterna


I dokumentationen från workshopen med pensionärerna ställde vi oss också frågan om hur vi går vidare från denna situation (i detta i eller i kommande delprojekt). Det gäller givetvis även ungdomarna:

- Hur genomföra en kvantitativ undersökning bland övriga ungdomar? Här kan man möjligtvis gå via olika ungdomsföreningar men en högre svarsfrekvens (och bredare urval än just medlem) erhålls nog om vi riktar in oss på målgruppen elever/studenter och att utskick görs med det som utgångspunkt. Inspiration kan säkert erhållas från tillvägagångssättet i e-Me-projektet. Liksom vid pensionärsstudien behöver vi dock ställa frågan hur vi säkerställer ytterligare kompletterande reflektioner från en annan målgrupp och validering av de reflektioner som vi hittills gjort? Är detta intressant i detta skede av studien?
- P g a kort varsel bestod målgruppen av enbart tjejer. Vad skulle killars upplevelse bestå av? Skillnad mellan könen?
- Hur säkerställer vi att (delar) av innehållet och kanske en fördjupning och konkretisering på en sådan nivå så att andra kan ta del av detta inför sina reflektioner på det situationsforum som finns? Behöver vi för detta syfte göra scenarierna betydligt mer utförliga?

Reflektioner gjorda av

Nicklas Salomonson
Mikael Brems
Håkan Alm

**MARK24: Reflektioner avseende medborgarstudier**

_Skulle hellre ringa nummerupplysningen än att sätta på datorn för att få kontakt med skolan_

Närvarande: Mikael Lind och Pia Karlsson samt två barnfamiljsmammor

Tidpunkt: 2010-10-01, 18:10 – 21:00

Lokal: Marks kommunhus, Kinna

_Målgrupp: Barnfamiljer_
Pia mötte Mikael i dörren till Marks kommunhus. Denna gång skulle övningen köras i ett lite mindre rum, därför var det lite mer ont om plats. Pia inledde vår diskussion med att nämna att det hade börjat att pratas lite bland personalen om ”vad är det egentligen de håller på med? – på sista tiden har vi fått en del dumma frågor!” Mikael passade då också på att presentera upplägget på slutrapporten för Pia (som är den som har stridit för att vi fokusera metodfrågor i arbetet). Rent spontant tyckte hon att det kändes bra med indelningen – detta är metodkomponenten, så här gjorde vi, dessa resultat nådde vi samt följande reflektioner kan vi göra. Pia uttryckte behovet av att titta över att skapa något som är tillämpbart i nya sammanhang.


9) Fas 1: Karaktärisering av målgruppens livssituation samt identifiering av problem och mål
10) Fas 2: Generering av scenarier
11) Fas 3: Prövning av scenarierna genom elektronisk kontakt
12) Fas 4: Gemensam värdering och metodologisk reflektion

**Fas 1: Karaktärisering av målgruppens livssituation samt identifiering av problem och mål**

Denna del inleddes med att först fråga Gunilla om vad hennes liv som barnfamiljmamma bestod i. Vi tillämpade här både principen att hon fick berätta vad hon själv tyckte för att sedan övergå i att tala om hur föråra veckans fredag såg ut. Följande karakterisering av Gunillas liv kunde utläsas.

*Gunilla - optikerassistent som bor i villa i Kinna med man och två döttrar 4 och 9 år tel.0320-10723*

En vanlig dag ringer klockan vid kvart i sex, Gunilla sätter fart på barnen med kläder och frukost (mannen har då redan äkt). Hon skjutsar sedan barnen först till skolan och sedan vidare till dagis. Skolan börjar 08:10. Arbetstiderna i optikerbutiken innebär arbete från kl. 8.45 till 18.00. Under dagen är det många tidsbokade kunder som dagen anpassas efter. På eftermiddagen är det mannen som hämtar barnen (mormor och morfar bor i Kinna och ställer upp om det behövs) och som har middagen klar vid sjutiden. Med tanke på längden


Kommunikationen med skolan sker via föräldrarmöten och utvecklingsamtal varje termin. Läxorna finns nedstoppade i en mapp i ryggsäcken.


Gunilla har även fått förfrågningar på jobbet om att skicka ut tider med sms – så hon upplever att tekniken kommer allt närmare vardagen. Man kan inte boka tid med mejl hos optikern där hon jobbar.


Gullan - tandhyginist (i Viskafors) som bor i villa i Kinna med man och en tolvårig dotter och en nioårig son gullan.stromhall@vgregion.se


Om Gullan inte kan komma så måste hon lämna återbud till patienterna om man inte kan komma. Om Gullan blir sjuk (eller VAB) ringer hon hem till receptionisten som går till arbetet lite tidigare och ringer återbud till hennes patienter.

Gullan jobbar till fem två dagar i veckan och då går 9-åringen hem från fritids vid 4 tiden. Jobbar annars halva dagen. Sena dagar är det mat och läxor som gäller. Tidiga dagar

Pojken spelar fotboll med Örby samt innebandy med innebandyklubben. Vill gärna gå på basket, var och tittade på B-laget med Marbo men det var för mycket gap och skrik så nu är han tveksam.

Barnen lägger sig vid 21, för de vuxna blir det tv-soffan på kvällen eller träning på Kinna hälsostudio alternativt kursverksamhet. Barnen bäddar sängen och plockar ur diskmaskinen ett par dagar i veckan.


Gullan vittnar också om en god kontakt med skolan genom föräldramöten och utvecklingsamtalen. Hon mailar dessutom fröken om hon oroar sig om något och får då svar nästan omgående.

Datorn hägrar mycket för barnen, framförallt MSN. Datorn finns på tolvåringens rum, dottern gör engelskaglosorna på datorn och spelar musik samtidigt. De vuxna betalar räkningar och söker resor, samt köper resor och kollar på IKEA. De vuxna har mobiltelefon. 12-åringen och nioåringen har en som de kan använda när de har behov. 12 åringen använder den mycket och vill ha en egen.

Vad som framgick klart och tydligt från diskussionen var att ingen av dem hade speciellt stor datorvana. De hade helt enkelt inte tid utan det var snarare barnen (särskilt Gullans 12-åring) som använde datorerna. Han använde gärna MSN och Bilddagboken.se. Gullan hade dock en egen mailadress som hon använde på jobbet (hennes arbetsgivare uppmuntrade också användning av datorer). Gullan hade varit inne på Marks kommuns hemsida ganska nyligen och tyckte att Elin var bra att interagera med.

Under denna del försökte vi också fokusera på ett antal problem som man upplevde. Probleminventeringen blev dock inte lika tydlig som den som genomfördes med pensionärerna. Vårt spontana intryck var dock att dessa två personer var mycket upptagna med att få ihop sina familjeliv, där en stor del gick åt till att säkerställa att barnens aktiviteter flöt på bra (körning till olika aktiviteter etc.). Här kunde vi också notera en
skillnad mellan Gunilla och Gullan – Gullans barn var involverade i betydligt fler aktiviteter. De problem (och möjligheter) som vi fångade var:

- att det var besvärligt att få kontakt med skolrelaterad personal. Här gav inte det elektroniska kontaktmediet inte tillräckligt stöd. Detta kan i och för sig bero på bristande datorvana hos Gullan och Gunilla.
- att det är svårt att få information om de aktiviteter som erbjuds i kulturskolan. Gullan sa att hon till och med hade gått via Borås kommuns hemsida för att få fram information
- i övrig flöt livet på och de använder sig främst av Borås tidning och Markbladet för information och av telefonen för kontakt.
- En av tjejerna tyckte att det alltid var för kort varsel med besökande teatersällskap och gästföreläsningar och trodde att hon skulle deltaga betydligt mer om om hon fick lite mer förvarning
- Det var väldigt svårt att anmäla sig till sångensemblen.

För denna del (fas 1) ägnade vi cirka 50 minuter av mötet.

**Egna reflektioner**


Livet som barnfamilj verkar dock vara extremt hektiskt med allt planerande och skjutsande samt att det finns lite tid över till att bara umgås själva. Gullan uttryckte att ”om det är så att vi kan unna oss en sådan lyx så kanske vi försöker att träffa någon på lördagskvällen”. Således är man som barnfamilj också starkt beroende av att det anordnas aktiviteter som är av intresse för familjen.

**Del 2: Generering av scenarier**

Under den andra delen av mötet så tog vi fika samtidigt som vi försökte att hitta typiska situationer då man som barnfamiljsförälder var beroende av att gå i interaktion med kommunen – detta som en del i livssituationen och (förhoppningsvis) för att säkerställa en god livssituation. Följande situationer identifierades (med sina innebörder):

- Att hitta mailadressen till fritidsfröken, för att ställa en fråga
- Att göra sjukanmälan av barn: En på dagis och en på skolan
- Att finna fram information om profilprogram på högstadiet.
- Att hyra en idrottslokal och leka med barnen en lördagseftermiddag.
Att göra anmälan till musikskolan för nioåringen
Att hitta öppettider återvinningscentralen samt att hitta återvinningsstationer
Att begära minskning av soptunna, kompost
Att söka tillstånd att stå på torget och sälja bröd för klassresa.
Att begära och fråga om snöskottnning
Att hitta vårdcentraler vid sjukdom och följande situationer som dock aldrig testades nedan på grund av tidsbrist:

- Att hitta höstens teaterbesök och gästföreläsare. Man upplevde att man alltid visste för sent och skulle tycka det var fint att få längre förvarning.
- Att kolla kolla huruvida Örbys fotbollsträning är inställd.
- Att kolla hur och när man reser kommunalt från Kinna till Varberg och från Örbyskolan till Kunskapens Hus och vad det kostar.
- Att anmäla och få hjälp med en vattenläcka vid en akut situation som även inkluderade strömavbrott
- Att utföra jordvärmeansökan
- Att hitta karta över Mark- som visar kommunens gångstråk/promenadstigar

**Del 3: Prövning av scenarierna genom elektronisk kontakt**

När vi hade enats om ett antal lämpliga scenarier bad vi Gullan och Gunilla sätta sig framför datorerna som var påslagna. Det var ett visst problem med Gullans dator i början, men sedan kom de igång. Vi tog ett scenario i taget och bad dem köra det för att sedan tillsammans reflektera över vårdet som kommunens elektroniska gränssnitt kunde tillhandahålla. Pia satt då bakom personerna och försökte fånga intryck genom fangningar dessa direkt i dina datorer. För respektive scenario gjorde vi så att någon av oss gav ”rama” för det scenario som skulle prövas. Barnfamiljerna tog då scenariot och ”försökte att sätta sig in i den situation som detta innebar” och försökte sedan använda kommunens tillhandahållna elektroniska kontaktinstrument för att på så vis kunna se vilket stöd som hemsidor och Elin skulle ge. För respektive scenario kunde följande hinder och möjligheter identifieras:

- **Att hitta mailadressen till fritidsfröken, för att ställa en fråga**
  Om man går via fritidshemmen så hittar man ingen information kring personalen, däremot om man går till skolorna så går det att hitta avdelningar och kontaktinformation. Informationsgraden varierar dock mellan skolorna (exempelvis har Gullbergsskolan mer info än strömskolan).

- **Att sjukanmäla barn: en på dagis och en på skolan**
  Det var enkelt att via skola gå vidare och hitta ”rätt” skola och därmed telefonnummer och i något fall e-postadress, på en skola fanns det endast telefonnummer till rektorn vilket inte kändes så naturligt. Respondenterna skulle hellre ringa nummerupplysningen än att sätta på datorn.

- **Att hitta information om profilprogram på högstadiet. Musik respektive idrott**
  De försöker att gå via rubriken grundskola till en organisationsskiss, men där blir det stopp. Eftersom båda vet att det är Ångsskolan som är intressant väljs denna sedan och
konstaterar att det inte står så mycket om profilen. Detta sker efter att i princip ha varit inne i vartenda dokument under Ängsskolan (hittade dock dokument med exempelvis läsårstider och aktuellt för en viss vecka). Således ges ingen god vägledning inför val av profilprogram.

• **Att hyra en idrottslokal och leka med barnen en lördagseftermiddag**
  Går till kultur och fritid och vidare till på lokalbokningen och skickar i väg ett kontaktformulär som innebär att det skickas e-post till lokalbokningen, alternativt går via fråga Elin (fråga: var kan jag hyra en idrotsshall i kinna och hamnar då på sidan med lokalbokning) och hamnar i lokalbokningen och skickar iväg ett kontaktformulär. Ingen hittar till sidan där det går att se på lokalutbudet och lediga tider. En gick via Elin och en via klickandet, det gick precis lika snabbt. Det saknas en bekräftelse om mailet/meddelandet har kommit fram, det tyckte båda hade varit bra.

• **Att göra anmälan till musikskolan för nioåringen**

• **Att hitta öppettider återvinningscentralen samt att hitta återvinningsstationer**

• **Att begära minskning av soptunna, kompost**

• **Att söka tillstånd för att stå på torget och sälja bröd för klassresa**
• **Att fråga om snöskottning**

• **Att hitta vårdcentraler när barnet blir sjukt**
Båda går till rubriken vård och omsorg och vidare till hälso och sjukvård (efter att den andra respondenten frågat Elin om vårdcentral utan framgång). Där finns det två länkar en om hälso och sjukvård i Mark vilket leder vidare till vårcentralen och en som länkar till SÄS som då landar på sjukvårdsupplysningen. Det går ganska snabbt, men det är otydligt vilken länk som leder till vårcentralerna.

Några intressanta reflektioner som vi gjorde var att:
- Gullan använde rent intuitivt Elin medan Gunilla valde att söka på vanligt sätt. Deras datorovana ledde också till att de hela tiden tittade i vänsterkanten av skärmen och det tog då tid för dem att upptäcka händelser på nedre högerdelen av skärmen.
- Även denna målgrupp förväxlade vid flera tillfällen rutan för sökfunktionen med ”Fråga Elin”-rutan
- På de flesta frågor till Elin så kommer det även en länk till en aktuell sida, det gjorde att när det inte kom någon länk trodde inte Gullan att hon hade fått något svar från Elin. Hon hade inte uppmärksammat att Elin svarade på frågorna.
- Intressant att notera var att Gunilla rent intuitivt gick in på [www.markskommun.se](http://www.markskommun.se) istället för att gå in på [www.mark.se](http://www.mark.se). Hon uppmärksammade då inte ens att det var fel ställe som hon kommit till.
- Både Gunilla och Gullan hade svårt med att rubriken i högerkolumnen hela tiden varierade, blev mycket frustrerade över att en rubrik som fanns för en stund sedan hade försvunnit.
- Deras barn använder datorerna mer spontant, men det finns ett motstånd som vuxen som dock successivt kommer att förändras. Mer och mer användningsområden skapas och det blir därför mer intressant att använda nätet i stället för telefonen.

**Del 4: Gemensam värdering och metodologisk reflektion**
Efter det att vi hade genomfört dessa mer interaktionsorienterade studier så var det dags att avsluta mötet. Klockan var nu 20:45 och vi kände att det var oerhört viktigt att också visa respekt mot att de kommit i tid och faktiskt ställt upp med sina reflektioner. Diskussionen i denna del av mötet innebar både en reflektion av vad som gick att utläsa av den elektroniska kontakten och upplägget kring studien.

Man kan också konstatera att kvaliteten i den elektroniska kontaktverksamheten är i föregående fall så bristfällig så att inte uppgiften som de hade att lösa inte gick att lösa. Några exempel är:

- kunskapens hus länkades inte ordentligt från kulturskolan – även om det såg ut som om detta skulle vara möjligt
- kvaliteten på information om skolorna varierar (Gullbergs- och Strömskolan hade sina presentationer), men exempelvis Ångskolan hade väldigt lite information och det fanns ingen information kring profiler inom högstadiet
- Elin kan hjälpa till förvånansvärt mycket enligt denna målgrupp, vilket kan ha att göra med en bristande datorvana!
- användarna hade svårigheter att se högermenyn samt vissa undermenyer.

Innan vi avslutade frågade vi också om deras intresse i att bidra till situationsforumet. Vi bestämde att vi skulle försöka att sammanfatta dagens insikter, skicka dessa till mammorna för deras reflektioner för att sedan lägga ut dessa som en trigger på situationsforumet och då också be dessa andra barnfamiljsmammor att börja identifiera nya situationer. Därefter skulle vi via olika kanaler be andra att börja göra liknande reflektioner. Gullan och Gunilla sade dock att det kunde bli svårt att göra detta med tanke på hur sällan de läste mail och det lätt kunde bli liggande utan åtgärd.

När vi avslutade delade Pia ut biobiljetter till de två och vi tackade för deras medverkan.

Efter mötet kom det återigen några mail som innebar att kommunen svarade på de förfrågningar som ställdes under kvällen. Det känns som om att man som ”svarare” på dessa frågor är lite mer uppmärksam nu där man dels ställer frågor om det finns ett allvar bakom frågan och dels att man svarar snabbare nu (och på alla frågor!). Intressant att notera är också att det är flera mottagare som får dessa meddelanden. Bland annat så får Pia alla mail för kännedom som går till kultur- och fritid, men detta är mer för att ha en insikt i hur hög trafiken är och inom vilka områden.

**Övergripande omdömen**

Barnfamiljer är extremt upptagna. De har mycket att göra, och nästan allt kretsar kring familjelivet. Dessa två personer var nog mycket representativa för denna medborgarkategori. Båda var ganska datorovana, vilket vi inte riktigt hade räknat med för denna medborgarkategori. I och med detta så var de inte heller så intresserade av att använda datorn till hjälp i vardagen. Ett exempel var att det är lättare att ringa barnens tränare och kolla om träningen är inställd eller flyttad än att koppla upp datorn och kolla där.

Båda tryckte dock på att barnen har datorintresse och att de tror att de kommer att använda datorn mer framöver när allt fler tjänster finns tillgängliga.

**Dagens citat:**

”Skulle hellre ringa nummerupplysningen än att sätta på datorn för att få kontakt med skolan”

”Elin är toppen!”
**Metodologisk reflektion**

Denna övning genomfördes med bara två respondenter. Man skulle förmodligen kunna säga att bilden som de gav därigenom inte blev lika variationsrik. Dock blev nog spridningen i åldrar på barn lyckligtvis ganska bra. Samtidigt kan vi konstatera att vi ändå inte hann med att köra alla situationer som identifierades under fas 2. Förmodligen fick vi också en djupare förståelse för dessa två personers livssituation och med tanke på att både Pia och Mikael befann sig i en liknande situation själva så var det förmodligen så att representativiteten blev god ändå. Annars är ju en av poängerna att ha med fyra personer viktigt för att säkerställa identifiering både av likheter och skillnader mellan olika personers livssituation och behov av tjänster. För Håkan, som är en svensk som inte har bott i Sverige på snart 15 år, så är det fantastiskt intressant hur lika erfarenheterna är och hur naturligt alla ser många av problemsställningarna trots olika yrkesmässiga och geografiska situation (gäller även Pia och Mikael) och hur jag ibland nästan känner mig som en utomjordling. I alla fall vad gäller t.ex. sophämtning, kollektiva transporter och inte så förvånansvärt snöröjning och bergvärme. Däremot, den eviga utmaningen att få dygnets 24 timmar att räcka till känns igen mycket väl…

Under genomförandet av fas 1 av övningen så fokuserades inte problem lika mycket som det gjordes under de två tidigare workshoparna. Detta innebar att det blev svårare att hantera övergången mellan livssituationen och identifieringen av situationer (mellan fas 1 och fas 2). Problemdentifieringen blev mer implicit vid denna workshop.

Även om inte alla situationer kördes så känns det viktigt att ha identifierat fler situationer än de som prövades vid datorerna. Mikael fick känslen att det var erfarenheterna om hur barnfamiljsmammorna betedde sig och erfarenheter från användning av den elektroniska kontaktytan skulle bli liknande de som redan identifierats om vi hade haft tid att köra fler situationer.

Reflektioner gjorda av

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