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Failure Demand at Telefonbanken, SEB

Master of Science Thesis in the Master Degree Program Quality and Operations Management

JESPER J. WALLENIOUS

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Division of Operations Management
CHALMERS UNIVERSITY OF TECHNOLOGY
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ABSTRACT

As a consequence of the increased demand on the services of SEB's national contact centre (Telefonbanken) and the difficulties in reaching set KPI targets by organic growth Telefonbanken has identified a need to address customers who return with the same errands more than once. This thesis aim at identifying these contacts and give an explanation as to why they occur.

SEB is working with a lean implementation program in improving processes and eliminating waste in processes. Literature suggest that for a service setting when customers' return due to the failure of the organization to do something or do something right for the customer this is to be considered failure demand, waste in the system.

By listening in on customer contacts in the main service group at Telefonbanken this failure demand is identified, the causes researched and suggestions as to what Telefonbanken can do to decrease this type of demand is given. At the same time an identification of the types of errands that Telefonbanken handle has been carried out and suggestions on how to analyze and further improve operations is presented.

The methodology used is a mixture of qualitative research and quantitative. The sample is representative of the population of customer contacts that Telefonbanken handle in a year and the sample is analyzed in a qualitative manor, researching the causes of the discovered failure demand.

It is revealed that some 12 % of all contacts at Telefonbanken are failure demand and out of that close to 30 % is due to Telefonbanken. Causes for this failure demand are concluded to be the lack of identification of the true customer demand, the lack of informing the customer of a time frame for the errand and the lack of ownership of errands as well as the mismatch in the customer promises vis-à-vis the knowledge present at Telefonbanken at any given time.

Key words: Call center, Contact center, Lean, Lean Service Management, Waste, Failure Demand

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SAMMANFATTNING

Som en konsekvens av att SEB's kundcenter, Telefonbanken, upplever ett ökat tryck på efterfrågan och svårigheten i att uppnå satta mål genom organisk tillväxt har det identifierats att kunder återkommer i samma ärende mer än en gång. Denna Masteruppsats har som mål att identifiera vilka dessa kontakter är och ge en förklaring till varför de uppstår.

SEB jobbar med ett eget Lean-program för att förbättra processer och eliminera "waste". Enligt litteraturen skiljer sig Lean-begreppet "waste" mellan tillverknings- och serviceindustrin. För ett serviceföretag är kunder som återkommer på grund av företagets oförmåga att skapa värde för kunden definierat som Felaktig eller Falsk efterfrågan (FE) och definieras som "waste" i systemet.

Genom att lyssna på kundkontakter i den största servicegruppen på Telefonbanken identifieras FE, dess orsaker utreds och förslag på vad Telefonbanken kan göra för att minska den här typen av efterfrågan presenteras. Samtidigt har de olika typer utav ärenden som Telefonbanken hanterar identifierats och den utsträckning i vilka de förekommer presenteras. Gällande det sistnämnda presenteras förslag på hur Telefonbanken kan fortsätta att jobba med undersökningen och analysen för att ytterligare förbättra sina processer.

Metoden som används i arbetet är en blandning av kvalitativa och kvantitativa. Det stickprov av kundkontakter som har använts representerar det verkliga utfallet av kontakter som Telefonbanken hanterar under ett år och är analyserat kvalitativt för att hitta vilka kontakter som faller under kategorin FE.

Slutsatsen är att ungefär 12 % av alla kundkontakter är FE och att Telefonbanken är ansvariga för knappt 30 % av dessa. Orsaker för den av Telefonbanken skapade FE är misslyckandet i att identifiera grunden till varför kunderna kontaktar Telefonbanken, misslyckandet i att informera kunden om tidsperspektivet i det pågående ärendet samt avsaknaden av ägandekänsla för ärenden.

Nyckelord: Kundcenter, Kundtjänst, Lean, Lean Service Management, Waste, Failure Demand, Falsk Efterfrågan

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Preface

During this project I have spent a lot of time at Telefonbanken in Göteborg where I have gathered all the data for the study. All results have been discussed and approved for publication and both my conclusions and recommendations are in many ways based on what is possible for Telefonbanken to continue research and implement in the day to day business.

The project has been carried out in cooperation and under supervision of Johan Egelstedt and Ebba Grenner at SEB and Associate Professor Mats Winroth at Chalmers, who also acted as examiner of the thesis. Together with my friends, family and fellow students who have aided me in this work they deserve a sincere thank you.

Finally this research would not have been possible if not for the patience and cooperation of the operators at Telefonbanken who let me sit next to them during the data gathering. Thank You.

Göteborg August 2011

Jesper Wallenius

1 Introduction

This chapter will provide an introduction to the thesis work focusing on the Aim and Purpose of the thesis. A general background to the problem addressed is given in the Problem description and the chapter is concluded by the delimitations that apply.

1.1 Operations strategy – Capacity and Performance

General management of organizations often fall under the category of Operations Strategy, defined as “the activity of managing the resources and processes that produce and deliver goods and services” by Slack and Lewis (2008). In other words, Operations Strategy concerns how to manage your resources to best fit the performance objectives set by your customers need and the market as a whole. Factors that are of importance in the area are amongst others, cost, flexibility, quality and speed. These are generic for most settings, manufacturing or service, private or public sector. What differ are the market and customer requirements. In a service setting quality might be perceived as the way the provider acts in the contact with a customer whereas in a manufacturing setting technical specifications or durability might be the greatest concern (Slack & Lewis, 2008).

Operations strategies focus on a long term perspective, organizations set long term targets and aim to reach them. In doing so there are both conventional and unconventional strategies and philosophies to utilize, depending on the size and maturity of both the market and the organization itself. These strategies or philosophies have developed from early industrialisms Scientific Management up till today’s more commonly used Total Quality Management (TQM) or Lean Production and Service Management (Lean). Both TQM and Lean are customer focused. Main principles include exceeding customer expectations by improving quality of products and processes and both are long term commitments focused on the continuity of improvements.

Lean has been developed form Toyota Production System (TPS) and translated into other areas than the mass production setting where it was developed, amongst them into the service sector. By the reduction of waste, any operation that does not add value to the intended customer, the aim is to optimize the use of an organizations resources reconnecting to the field of Operations Management.

The concept of waste in Lean is defined for a manufacturing setting; it in many ways derives in the notion that the produce is tangible. Common types of waste in literature are for instance inventory, including work in progress and changeover times, the time it takes to set up “the manufacturing” to do different things. When you look at a service setting inventories are often impossible to keep due to the inherit intangibility of the produce and for specific services as the financial industry the set up time is close to zero since there is no machinery that needs setting up; to translate the concept of waste literary will not work (Seddon, 2003).

In his book from 2003 John Seddon introduces another concept of waste in service settings. The notion is that all demand put on a system from a customer can be divided into two types; Value and Failure demand. The Value demand is demand that is wanted and the Failure demand is demand created by the system itself from the failure

of doing something or doing something right for the customer (Seddon, 2003). If the customer feels the need to return with the same errand more than once due to the failure of resolving the errand the first time the system has created waste, increased the pressure on the system and created a sub-optimization of the system.

1.2 Problem description at Telefonbanken

Telefonbanken, SEB's national contact center, receives about 2.5 million customer contacts per year, a number that due to both an increased demand as well as operational growth has increased with some 60 % since 2007 (Stockelid, 2011).

To ensure quality and deliveries Telefonbanken utilizes Key Performance Indicators (KPI) in the customer contacts. Because of the ever increasing number of contacts the main focus has been on the KPI availability, i.e. how many of the possible customer contacts that is being taken care of. In the main service group, this KPI has been set to 95 % but Telefonbanken has had trouble in reaching it.

There are continuous efforts in reaching the set goals for availability at Telefonbanken, for instance hiring more personnel for specific service groups. In general all efforts aim at answering more calls from customers, i.e. to increase capacity, but it has been identified that there is a need to look at what kind of calls can be avoided, to increase availability by reducing the number of incoming calls, reducing repeat calls, and to ensure that every errand is resolved in a first contact.

Another important KPI is used to measure perceived quality from the customer point of view. To measure this Telefonbanken ask customers to answer a questionnaire designed by an external consultancy firm¹. The answers to two of the questions point out that there is a failure in helping all customers in the first contact. Said questions are:

[in your contact with Telefonbanken] Did you get an answer to your question and your problem solved? (82 %)

Was this the first time that you contacted Telefonbanken with this problem? (75 %)

The percentages indicate the figures for 2010². It should be mentioned that the benchmarking standard for these figures are somewhere between 80 – 85 % according to Bright. Telefonbanken is not lagging behind the competition but there is room for improvements.

With these questions it is clear that somewhat around 20 % of customers were not helped by Telefonbanken and about the same number of customers felt that they had to contact SEB with the same question more than once, they have to return to SEB out of necessity to get their errand solved. Adding to this is the number of customers who feel that their errand has been resolved but notice later that it has not. Together with

¹ Bright Navigator. They utilize an analysis tool that evaluates KPI's with customer contact intensive organisations. Focus areas are for instance quality and efficiency, employees and customers. Every analysis include a benchmarking to ensure an outer reference (Bright, 2011)

² The percentages indicate the number of positive answers during 2010, i.e. how many that answered that they got their question answered and problem solved and that it was the first time they contacted SEB with this problem. The figures for January 2011 are 83 % and 77 % respectively.

the failure in reaching the availability this adds up to a noticeable number of customer contacts with room for improvements.

By putting the two KPI's together the conclusion can be drawn that if the number of customers that do not need to return with their errands decreases, the availability outcome will increase by a reduction of customer contacts at the same time as customers are helped with their errands in a first contact thus becoming more satisfied.

In their own analysis, Telefonbanken has identified two categories of anomalies that lead to customers returning to SEB and Telefonbanken out of necessity instead of free will. These two categories are: (1) the customer returns to Telefonbanken since the problem was not solved during the first contact or attempt to contact and (2) the customer contacts Telefonbanken after receiving some communication from SEB, e.g. in the form of mailings or through the internet office, or to express an opinion. Both anomalies would lead to customers answering negatively on the above mentioned questions. Two scenarios were drawn up:

1. A customer returns to Telefonbanken with an already handled but not resolved errand or with an errand that the customer has tried to contact Telefonbanken with but not succeeded
2. A customer contacts Telefonbanken because of a un-clear communication from SEB or negative publicity focused on SEB or financial areas in general

Out of these two scenarios three solutions were proposed:

1. Active coaching to ensure continuous follow up on the customer contacts
2. Quick response for deviations from the set forecast utilizing set routines
3. A qualitative analysis of what factors drives customers to return or contact out of necessity instead of free will

The first two solutions are ongoing efforts at Telefonbanken through the work with SEB's lean service management program, SEB Way, and by the routines that Telefonbanken follow with job descriptions and coaching.

The third solution is the focal point of this thesis. By conducting a qualitative analysis in what kind of errands customers return more than once and by identifying the underlying factors that Telefonbanken can affect the aim is to help Telefonbanken reducing the number of unnecessary customer contacts and aid in reaching the set KPI targets.

1.3 Aim and Purpose of the Thesis work

By gathering data through listening in on customer contacts with Telefonbanken and through a qualitative analysis this thesis aim at identifying in what contacts Telefonbanken fails to create value for their customers, to identify the Failure demand. The thesis is limited to the main service group, where the bulk of all customer contacts at Telefonbanken take place. Some efforts have been made to ensure that the data sample reflects the whole population to be able to draw conclusions about the extent of the problem.

1.3.1 Aim

- To identify and categorize the Failure demand experienced at Telefonbanken, SEB
- To identify the underlying factors that are manageable by Telefonbanken and suggest actions to reduce the Failure demand that is due to the actions of Telefonbanken

1.3.2 Purpose

- To aid Telefonbanken in the strive to reach its business goal of availability by reducing the number of customer contacts and at the same time manage to create greater customer value in the remaining contacts

1.4 Delimitations

To delimitate the work and be able to draw relevant conclusions the focus of this research has been on the main service group at Telefonbanken. The service group receives the bulk of all incoming calls. Due to integrity regulations the possibility to listen to recorded customer contacts was made impossible and with the set time restraints this made it impossible to use a random sample of customer contacts.

2 Frame of Reference

In this chapter the theoretical framework of this thesis is introduced. It starts of with how call centers traditionally are managed. Further the concept of Lean is introduced, moving through the development of Lean Service management and ending up with the introduction of the concepts of Value and Failure Demand The chapter ends with introductions to qualitative and quantitative research and a brief oversight of the methodology for the thesis.

2.1 Traditional call center management

Traditionally in call center management the same measures³ or KPIs are used but the relationship between these and customer satisfaction is argued (Marr & Perry, 2004 and Feinberg et al, 2000). In their study of how the commonly used measures are related to customer satisfaction Feinberg et al (2000) found that the relationships between many of the measures and customer satisfaction were non-existing. Out of 13 tested measures only seven of them showed relations with customer satisfaction and out of those only two showed significant statistical relations. These two are Number of errands that are solved at the first contact and Abandonment rate (Feinberg et al, 2000). Marr and Perry (2004) claim that many call centers have fallen into the trap of believing that these commonly used 13 measures are measures of customer satisfaction when they are actually measures of efficiency.

By using these measures call center managers will be able to shower you with statistics of how customers act or are forced to act, but they will not be able to answer how the customer felt or even how the handler thought the customer felt (Gilmore, 2001).

The traditional measures placed on a call center service are tangible and quantitative measures rather than measures of what the customer has experienced, as Gilmore (2001) explains in figure 1. Further, Gilmore (2001) shows that in order to reach a high overall quality of the deliveries of a call center, there is a need to focus on both tangible and intangible measures to reach both high efficiency and high customer satisfaction.

³ Include: ASA (average speed of answer), *queue time*, *resolution on the first call* (percentage), *abandonment rate*, *average talk time*, *adherence*, *average work time after call*, *calls blocked* (percentage), *abandonment time*, *personnel turnover*, *total calls*, *service levels* (calls answered in x seconds divided by total number of calls)

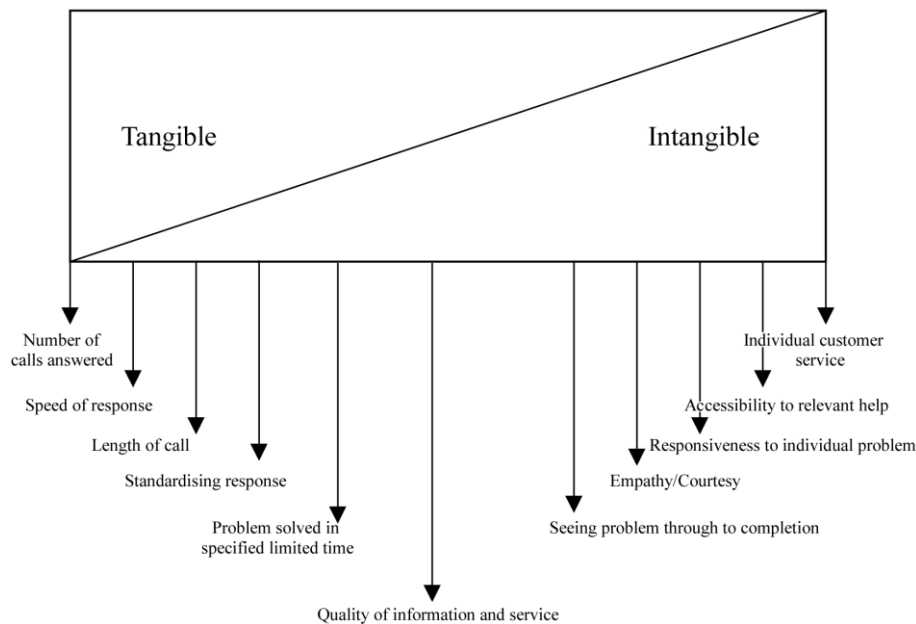


Figure 1 Tangible and intangible dimensions of call center service delivery (Gilmore, 2001)

2.2 Lean production and service

Lean production as a concept gained widespread attention through *The Machine that Changed the World* (Womack et al, 1990) and with its background in Toyota and their production system, TPS, it is focused on manufacturing companies. In the years following, many adoptions and views on what the concept of Lean production constitutes were presented but there seemed to be one common denominator – the focus on manufacturing companies and especially on high volume or mass producing manufacturing companies (Åhlström, 2004).

Translation of management or functioning production systems into other areas of production has historically always been present; examples include mass production of education as a difference to an apprentice system or outsourcing services to low cost production areas following the notion of economies of scale. Compared to manufacturing, the service sector has always seemed to be innovation laggards when it comes to management or production systems (Bowen & Youngdahl, 1998).

In their article from 1998, Bowen and Youngdahl argue that recent success stories in the development of service design and delivery are in fact adoptions of Lean production into what they call “‘Lean’ Service”. They use examples such as Shouldice Hospital and Southwest Airlines, both companies that in a way mass produce a very narrow service and both best practice companies’, factors that may affect the generalizability of the translation of Lean production into the service sector (Bowen, Youngdahl, 1998).

In order to translate or to be able to adopt Lean production into a service environment you need a general idea or description of Lean production. In the literature today there are many and quite widely spread descriptions of the lean principles. Åhlström (2004) has in his article used the deliberately simplified and general description of the principles that follows:

- The elimination of waste
 - Elimination of everything that does not add value to the product or the customer
- Zero defects
 - Make everything right the first time⁴. Quality assurance is the responsibility of everyone and is not being controlled separately after production.
- Pull instead of Push
 - The starting point of manufacturing is a customer order; the order is passed backwards through the production process.
- Multifunctional teams
 - Enabling maximum use of operators' potential through multi-task performance with the support of broad job specifications and appropriate reward systems.
- Decentralization of responsibilities
 - Reduction of hierarchical levels and pushing all responsibility down to the lowest levels of the organization.
- Vertical information systems
 - Real time communications directly between relevant decision makers.
- Continuous improvement
 - Perfection is the only goal. Ongoing improvements done by operators them self.

Most literature concerning the translation of the Lean principles into a service application mention interpretation and situation awareness as an important factor. In his article Åhlström (2004) utilize four different types of service operations to investigate the contingencies to the applicability of the principles to service operations. Contingencies are found to be dependent on the characteristics of a service compared to a good and the characteristics of the specific service (Åhlström, 2004). Characteristics of services are identified by Grönroos (1990) as:

- Services are more or less *intangible*
- Services are *activities* or a *series of activities* rather than things
- Services are at least to some extent *produced and consumed simultaneously*
- The customer participates in the production process at least to some extent

All characteristics as well as the findings by Åhlström (2004) point out that the customer involvement and the inability to store a service makes each service the subject of a new translation of the principles. At the same time his findings point out

⁴ Compare with “first call resolution” in a contact center setting

that some characteristics make services more suitable for a Lean approach than traditional manufacturing; since most services are produced and consumed simultaneously there is a greater need for decentralization of responsibilities and since it cannot be stored there is always some form of pull instead of push, this however not precluding the storing in the form of cues (Åhlström, 2004).

2.3 Value and Failure demand

In the early stages of the translation of Lean production into the service sector, companies were encouraged through management literature to employ a manufacturing approach of industrialization through standardization of its operations; encouraged to instead of adopting Lean to the service setting, adopting the service to Lean (Seddon et al, 2009). Through this came the separation of ‘front’ and ‘back’ offices introduced by Chase in his article from 1978 that is still used today. The argument of the separation is that high customer contact creates systems that are harder to control; systems decoupled from outside influence are easier to optimize, schedule and forecast (Chase, 1978).

John Seddon has, in several articles and books, sometimes collaborating with others, (2005, 2008, and 2009) and mainly focusing on call center operations, introduced and criticized what he calls the “core paradigm” of conventional service management. He presents the three questions that preoccupy management in service organizations:

- How much work is coming in?
- How many people have I got?
- How long do they take to do things?

Seddon argue that managers in this type of organization assume that “people need to be commanded and controlled” and that scripts, procedures, targets standards, inspection and compliance are the managing tools used to govern these organizations. The main focus of these tools is the management of cost and efficiency⁵ and they represent a factory view of service work, sorting it by type and creating a cue or an inventory of customers instead of goods – creating waste (figure 2). Generally, to manage customer service and satisfaction the focus is on service levels (Seddon et al, 2009). This represents the adoption of the service to Lean principles, not the other way around.

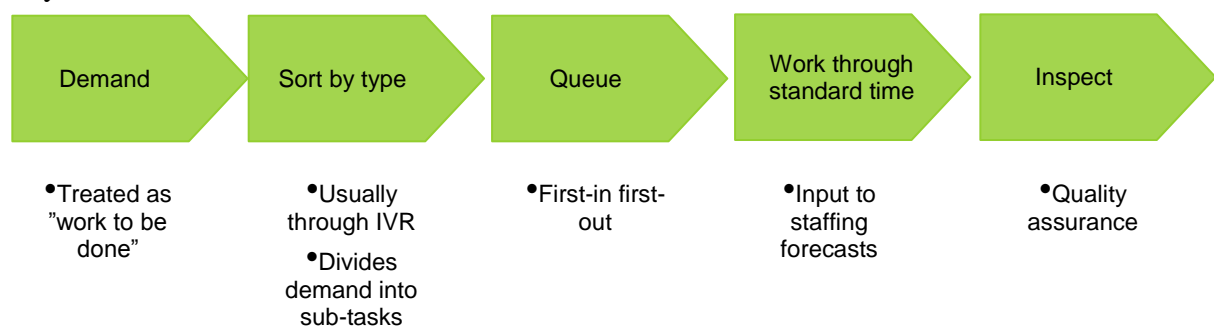


Figure 2 Industrial archetype for factory service management (Seddon et al, 2009)

⁵ See section under "Traditional call centre management"

2.3.1 Creation of demand

During this work, the focal point has been the customer journey; how the process of contacting SEB looks from a customer perspective. The process of contacting SEB and Telefonbanken starts with a demand. A customer feels the need to contact the bank and SEB tries to encourage customers to seek contact through the appropriate channels (figure 5).

From the customer's point of view, a demand occurs and is identified as non-solvable without the help of SEB. The customer decides to pick up the telephone and contact SEB. He or she is greeted by a welcoming message in English with a language choice (Swedish or English) and a message that asks if you are looking for someone particular or if you want to talk to Telefonbanken. If you don't make any choice or choose Telefonbanken you are met with three new choices: if your matter concerns loans, debit cards, or any other bank errand. The last choice is presented as "press # or hold". In a typical errand the customer goes by default and end up with a handler at Telefonbanken. The customer presents the errand and is asked to identify with a specific identification system⁶ used by SEB. If identified the handler helps the customer with his errand and the customer journey ends. This is a best case scenario.

The characteristics of a service as well as the specific fact that service organizations often experience a high degree of input uncertainty (Bowen & Jones 1986) creates a different setting than in a manufacturing facility. In a manufacturing facility all demand, placed on the system, is work that has to be done and waste is something that can be found in how work is done. In a transactional service setting demand placed on the system can be waste as well and even create more wasteful activities (Seddon et al, 2009).

Seddon et al argue that there, on the highest level are two kinds of demand, 'value' and 'failure' demand. Value demand is demand that an organization wants on its system and Failure demand is waste-demand. As an example, in the above described generic example both the customer and Telefonbanken believe that they have accomplished a solution and in every KPI Telefonbanken considers this as a successful⁷ contact. If the demand would re-occur for the customer, making the feeling of having been helped diminish or if the customer was expecting some form of confirmation that is not received, the customer contact Telefonbanken again. This is demand that an organization does not want to be placed on its system i.e. Failure demand. For Telefonbanken this second contact would also be considered a successful customer contact in every KPI under the same premises and with this Telefonbanken would have created more work to do for itself without noticing.

In financial services, Seddon (2003) states examples where Failure demand account for well over 20 % of all demand placed on a system and that most Failure demand come from a lack of being able to handle the aforementioned variation in the demand put on a system. In other words, if your system can handle most errands in a first contact, you decrease the number of times a customer needs to contact you thus creating more satisfied customers and more time for your handlers to help new customers.

⁶ A Digipass, the main identification method used at Telefonbanken.

⁷ Under the assumption that the contact is answered and handled in accordance with the set KPI targets.

2.4 Quantitative data gathering

Quantitative studies have been the dominant strategy in business research from the beginning and even though qualitative studies have become increasingly used since the mid-80s it remains influential in most areas (Bryman & Bell, 2003). Quantitative studies entail the empirical investigation of a phenomenon via statistical techniques – by using numbers you conclude results. In short, Bryman and Bell (2003) describe a quantitative study a starting off in theory, deducting a hypothesis and then testing the theory.

Some basic concepts of quantitative studies are (Bryman & Bell, 2003):

- Reliability – consistency of measures
 - Stability
 - Will the measure hold over time
 - Internal reliability
 - Consistency of results across items within a test
 - Inter observer consistency
 - Consistency of results depending on the tester
- Validity – does the measures measure the right thing
 - Face validity
 - Does the results on the face reflect the truth
 - Concurrent validity
 - Does the results concur with other known results
 - Predictive validity
 - Same as concurrent but set in future results
- Causality – cause and effect
 - Asks the question not only if something has happened but also why it did.
- Generalizability – can the results be translated into a larger setting
 - Most quantitative research is carried out with a sample of a population, generalizability concerns if the results can be translated to the whole population
- Replicability – reduction of bias and objectivity
 - If the experiment was carried out by someone else, would the results be the same

By definition a sample is a subset of a population. To use an example most surveys you see before an election is based on a sample; since it is nearly impossible to ask every voter in forehand what he or she will vote you ask a few persons out of the whole population and draw a conclusion based on their answers. When doing this choosing your sample so it reflects the population becomes imperative. Usual ways of choosing a sample are probability sample, non-probability sample and representative sample but the choice of a sample can often be controlled by outer circumstances; time, cost or opportunity. A representative sample tries to reflect the population as

much as possible and is considered to give the best results depending on how well it represents the population as a whole (Bryman & Bell, 2003).

2.5 Qualitative data gathering

Qualitative research emphasizes words rather than quantification in the collection and analysis of data (Bryman & Bell, 2003). It focuses more on in depth questions and reasoning behind specific behavior. Main research methods within the qualitative discipline are Participant observation, where the researcher is immersed into a social setting to observe and gather data; Qualitative interviewing, in depth interviewing (structured or unstructured) often with specialists in the subject that is analyzed; Focus groups, unstructured interviews in groups; Language-based approaches, discourse and conversation analysis and finally Collection and qualitative analysis of texts and documents.

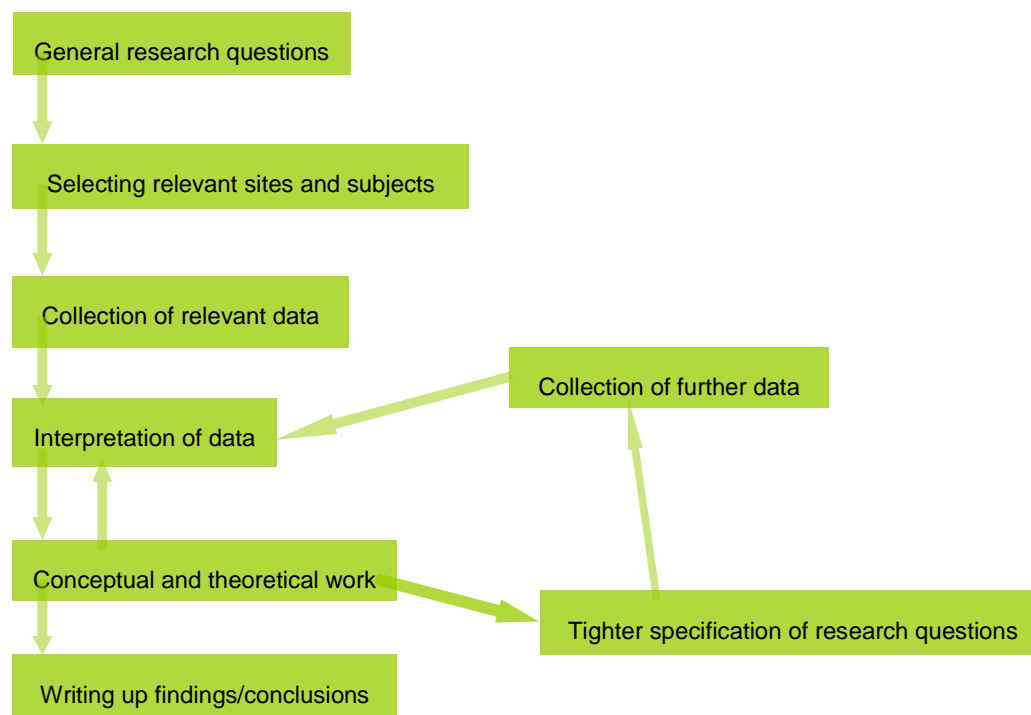


Figure 3 Outline of main steps in qualitative research (Bryman & Bell, 2003)

Figure 3 shows the model in which Bryman and Bell (2003) propose the setup of a qualitative study. Notable is the iteration surrounding the interpretation of data. Since the qualitative approach is in many ways about understanding a subject the more expertise gained the more it is possible to refine the research and be able to find more accurate results (Bryman & Bell, 2003).

2.6 Research Methodology

The project scope in this work has been an adoption of the PDCA cycle (figure 4). Under the first stage descriptions and definitions necessary for the continuous work were made. For instance what the main objectives are and the definition of what Failure demand is specifically for Telefonbanken. Further how to collect the data was decided regarding the data gathering and sample. Following this stage was the actual gathering of data and the categorization and analysis of it. In this stage there was a control function as to going back to listen to all other conversation customers had in

the same errand, making sure that earlier contacts in the same errand had been made. The last stage was the underlying factors, possible actions for Telefonbanken to reduce the Failure demand and the summarizations of other implications and recommendations that had occurred during the research.

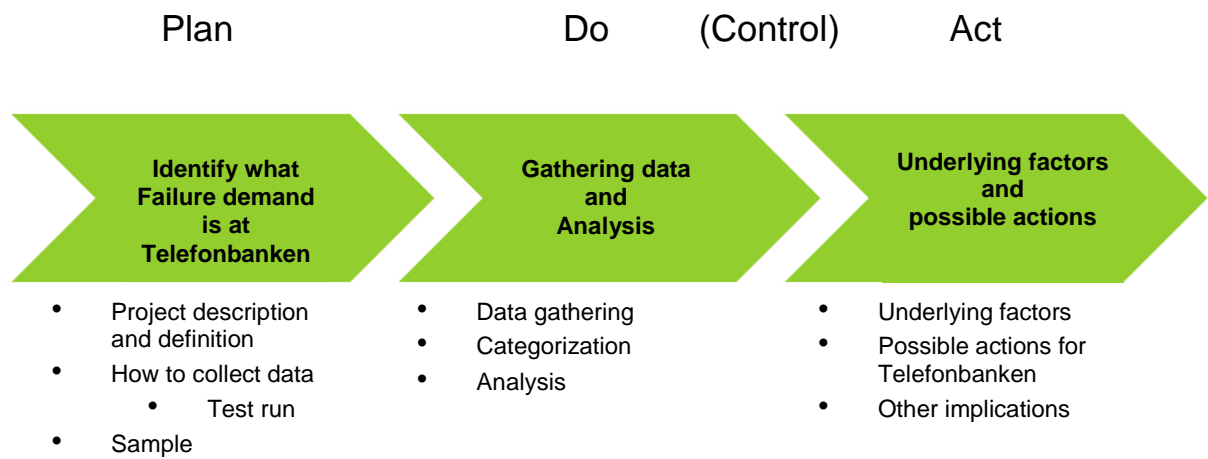


Figure 4 Methodology

3 Execution

This chapter contains the empirical parts of the thesis. It starts with an introduction to SEB and Telefonbanken. Further there is a specific description of what Failure demand is at Telefonbanken and how the data was gathered. The data gathering is divided into on qualitative part and one quantitative describing how the sample was selected. Finally there are some specific examples of Failure demand customer contacts to provide insight to the problem.

3.1 SEB

SEB Group, founded in 1856, is a north European financial actor present in ten countries and with presence in strategic markets globally. The group employs about 17.000 employees and has close to 400 branch offices. Other contact channels include internet, social media, and a call center with 24h availability. The organization is divided into five major branches: Merchant Banking, Retail Banking, Wealth Management, Life, and Baltic. In total the group has about 4 million private customers, 2.600 large companies and financial institutions, and 400.000 small and medium sized companies. In total SEB Group have 200 million customer meetings per year (SEB, 2011).

Within SEB Retail banking handles the relationship with private customers and small to medium sized corporations. There are three major means of contact between the bank and the customer described in the strategic picture in figure 5. The customer chooses to contact the bank depending on demand and type of errand.



Figure 5 Retail banking

3.1.1 The national contact center – Telefonbanken

Telefonbanken operates the national contact center and the social media channel for all private and small to medium sized corporate customers under Retail Banking. In figures, Telefonbanken carries out about 2.5 million customer contacts per year, a number that has been increasing from just above one million since 2007 with annual expansion in all service groups. Telefonbanken employs about 500 employees (400 FTE) and is geographically spread between two locations with its main facility in Gothenburg.

Telefonbanken operates different service groups for different types of errands. The main service group is the general group called “the customer service group”⁸. Beside this group there are two other large groups, one for mortgages and one for corporate errands. Smaller groups, for errands concerning debit cards, if you are looking for a specific person at a branch office or if there are other specific occurrences⁹ that generate a surge of demand from customers, are also employed.

⁸ Kundtjänstslingan

⁹ For instance large changes to the repo, media focus on specific events concerning SEB or other events that cannot be controlled by SEB

Handlers on the main service group should be able to help customers with everything that can be done at a branch office. Obvious exceptions are cash handling and occasions where customers cannot identify themselves properly over telephone.

3.1.2 SEB Way

In 2006 SEB launched a Group-wide program, SEB Way, with the aim of creating a culture of continuous improvements and to achieve operational excellence. The program is a step-by-step learning process to become better and more efficient in the day to day work.

SEB Way is backed up by Lean Service Management creating new and improved working routines, spending less time on unnecessary processes and administration and standardizing where suitable. By paying attention to problems and solving them as a way of improving how work is carried out and by encouraging initiatives the focus is on supporting the business in reaching its business goals.



Figure 6 Focus areas of SEB Way with targets

SEB Way is implemented by means of deep transformations or fundamental transformation within each division in the Group. A transformation is a six or twelve week process to achieve a step change towards the business goals (figure 6). It is supported by internal consultants, navigators, and targets the four areas of:

- Process Efficiency
- Performance Management
- Skill Building & Work Organization
- Mindset and Behavior

The transformations should be a large step improvement as such but is not the key focus for the program. The implementation of a system and an infrastructure that

enables and drives continuous improvement to create long term sustainability is the key element in the way of working.

One of the earlier departments in SEB Retail where SEB Way got involved was Telefonbanken. Early transformations included both management systems following traditional lean principles as reduction of waste as well as overviews of IT support systems. Telefonbanken has kept active in the continuous work with improvements that transformations aim at implementing and has hired former navigators to fill key positions in its' organization (Stockelid, 2011).

As a result of this, Telefonbanken is shifting focus away from the more traditional management styles and KPI's that can be found in nearly every contact or call center (Marr & Perry, 2004) and more towards customer experience, amongst others through first call resolution (Stockelid, 2011). As a part of this, supporting tools are being and have been developed at Telefonbanken. First of, as in nearly every organization working with Lean implementations, every unit or team at Telefonbanken has communication boards where problems can be shared, solved or escalated to another level at weekly meetings. This is part of the lean principle of decentralization of decisions to the closest level to the customer and to improve communication and information between both team members and non-team members (Åhlström, 2004).

Another tool that has been developed is a template for customer contacts, a target picture of how a contact should be carried out and what it should include¹⁰. Major parts in the template include to repeat what has been done so far and to ensure that the customer is heard, in other words that the right thing is done for the customer.

3.2 Specific definition - Failure demand at Telefonbanken

There is a need to have a specific definition of what Failure demand is at Telefonbanken based on the generic principles presented by Seddon (2005). In short the generic principles are that any demand that fails at delivering value for the customer is Failure demand. Seddon and colleagues in their literature (2005, 2008, 2009) base a lot of their examples in call centers and argue that the main source of Failure demand or waste if you want, is the handing around of customers; either through Interactive Voice Response (IVR) or by “dumbing-down” the first point of contact creating handovers when customers have more than one specific question or a more complex errand – the problem of handling variety in demand.

The specific definition of Failure demand at Telefonbanken is based on the fact that customers return with the same errand more than once, contact SEB based on some sort of communication from SEB that has the customer feeling the need to contact or the expectation of SEB to contact a customer that SEB fail to fulfill.

The definition used in this work to identify Failure demand at Telefonbanken has been:

- Demand caused by the failure to create value for a customer in a previous contact
- A customer return with the same errand more than once

¹⁰ The template is a substitute for a script, something that many call centres use to ensure deliveries in call centre activities (Marr & Perry, 2004). The template admits a large degree of freedom compared to a script and contains generic suggestions on how to conduct a customer contact.

- A customer expects a contact or delivery that has not been met
- A customer contacts Telefonbanken out of necessity rather than free will

In the process of gathering data, when any of these has been identified the contact has been deemed as Failure demand, waste, in the system.

3.3 Gathering data

All data was gathered by listening in on live customer contacts. All incoming contacts are handed out to free handlers with enough randomness to ensure that no bias will occur even if sitting with just one handler listening in. None the less for the purpose of this thesis two out of six teams that only man the main service group was chosen with a dice and in those teams the person best fitting the data gathering template was chosen to listen in on. None of the handlers are able to influence what customer contacts to handle. In appendix I the data gathering template can be found. In average each handler answer something about 7 contacts per hour. If the number indicated for each specific hour is under that the contacts was divided over the hour evenly.

3.3.1 Qualitative study

To ensure that the wanted data was obtainable several test runs were executed during the Plan-phase (figure 4). As Bryman and Bell (2003) suggest in figure 3 there is a need for an iterative loop when working with a qualitative study. The test runs as well as the actual gathering of data were conducted by listening in on customer contacts live when they occurred. The test runs started out unprejudiced to get an understanding of customer behavior during the contacts and what possible data was obtainable.

Very soon it was clear that customers have an inclination to explain why they are calling thus stating if they have been in contact with SEB earlier or has expected a contact that has not occurred. Equally early it was clear that customers do not separate one department of SEB from another; they state “You” as the whole of SEB regardless department. This is not surprising since it would be impossible for customers to have deep knowledge of SEB’s organizational structure. As a result of these early iterations and as a positive side effect of listening to the contacts live, as soon as a customer stated that they’ve had a previous contact the handlers asked the customer to specify when the contact had been made and with whom. This made it possible to get an idea of from where in SEB the Failure demand was created.

The test runs also indicated that a lot of errands could be categorized, not only as Failure demand or not but also out of type of errand. This together with the quantitative nature of the data gathering made it possible to see in what extent the type of errands are represented at Telefonbanken.

The types of errands identified during the test runs and the gathering of data are the following:

Autogiro	Digipass	Låneskydd - blanco	Kontonummer	Saldoförfrågan	Överföring
Avslut av tjänster	Dödsbo	IKP	Kontoutdrag	Samtalet bröts	
Betalning	E-faktura	Information	Kort	SEB Life	
Betalservice	E-legitimation	Inkasso	Mötesbokning	Utbetalningsavi	
Bolån	Lösenord E-handel	IPS	Pensionsfrågor	Utlandsbetalning	
Check	Enkla lånet	Klagomål	Personalförmåner	Växel	
Deklaration	Enkla Vardagen	Kontakta	Placeringskonto	Öppettider	
Depåärenden	Fullmakt	Kontantuttag	Ringer för annan	Öppna konto	

Table 1 Types of errands identified¹¹.

Another result of the test runs was the template for the gathering of data. All titles used in the final version were tested in previous test runs and all information needed was found to be apparent in the conversations with the customers. The titles of the template are the following:

- Date of contact
 - Date and time of the contact
- Serial number
 - To keep the contacts apart, starts with 1 and increases with 1 for each contact
- Customer number
 - Specific customer id, only recorded if deemed as Failure demand
- Number of errands
 - Number of errands that the customer has in the initial phase of the contact, not including demand that occur during the contact
- Number of “new” errands
 - Not Failure demand
- Number of “old” errands
 - Failure demand
- When
 - If “old” errand; how many days ago was the last contact
- With who
 - If “old” errand; with who was the last contact
- Type of errand
 - According to Table 1
- Notes
 - Free notes about each specific contact, including short description of the errand

The template can be found in appendix II filled out with all the data.

¹¹ These types are many times product names or known concepts at Telefonbanken, for a translation into English, see appendix IV.

3.3.2 Quantitative study

As mentioned in the delimitations the possibility to use a random sample did not exist, but in many ways customer behavior is predictable making the possibility for a representative sample apparent. There is a feeling for in what type of errands customers contact Telefonbanken over time besides the types presented in table 1, repetitive with events such as the yearly tax review, changes to the repo or just the end of each month when most bills are due. The above mentioned are examples where history shows an increase in demand for the services of Telefonbanken. Events that lower demand are usually not finance-related but rather major holidays, vacations or just sunny weather. Adding to this there are more unpredictable events that change the demand, large media surges in finance related topics have a noticeable effect on demand usually increasing it quite unpronounced.

By looking at how Telefonbanken answered customers from the first of September 2010 to the 28th of February 2011 in figure 7 we can see this behavior.

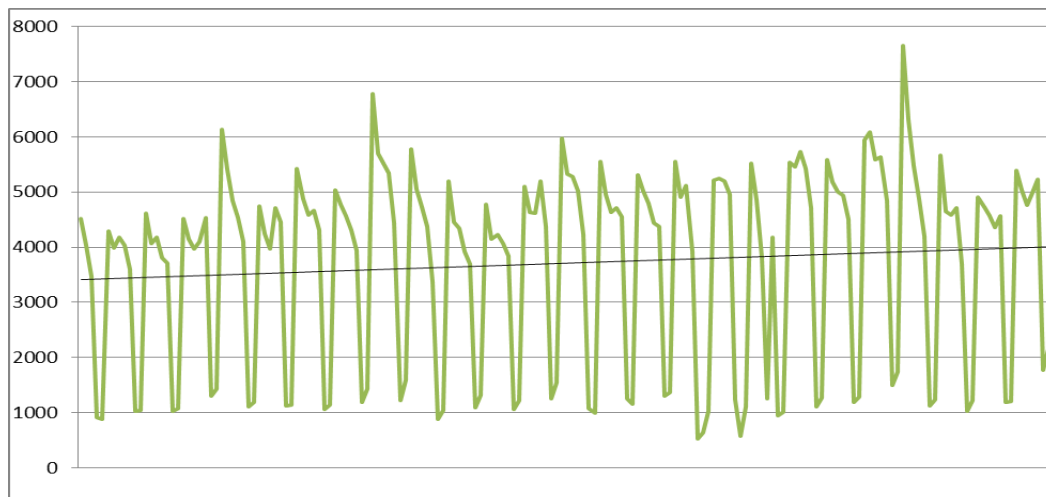


Figure 7 Number of answered calls per day 2010-09-01 to 2011-02-28 (horizontal axis is timeline)

First of there is a general increase in demand over the time period. Second we can see an increase of demand in the end of each month with the clear exception of the holidays where demand decrease. Further there are similarities in how customers behave during the weeks, clear decreases in demand during the weekends and higher demand in the beginning of the weeks.

By taking a closer look we can see that the behavior is to some extent predictable during a standard month, a month without any predictable demand increase or decrease according to the above mentioned specific occurrences.

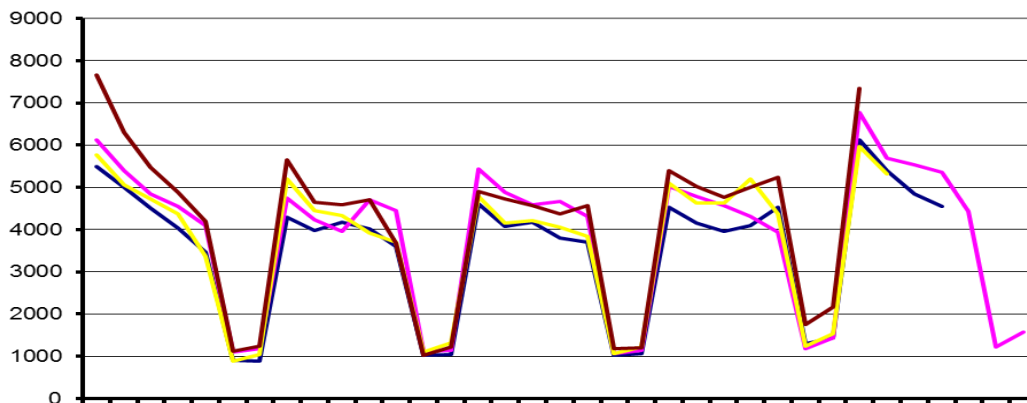


Figure 8 Number of answered calls per day September, October, November 2010 and February 2011 (horizontal axis is timeline, each line represents one month)

Figure 8 shows four generic months (September, October, November 2010 and February 2011) adjusted so that every month start with a Monday (un-adjusted in appendix III). Here the differences in demand are easy to see over the period. The demand is greater in the beginning and the end of the month. The weekends represent an apparent drop in demand and the differences during the week are also noticeable.

It is tempting to draw the conclusion that the increase in demand during the turn of the month is due to a increase in demand regarding billing questions and transfers and even though the peak in demand is around the turn of the month the vast majority of customer contacts are during the other weeks during the month; it is more interesting to continue looking for predictable behavior during the more generic weeks of the month.

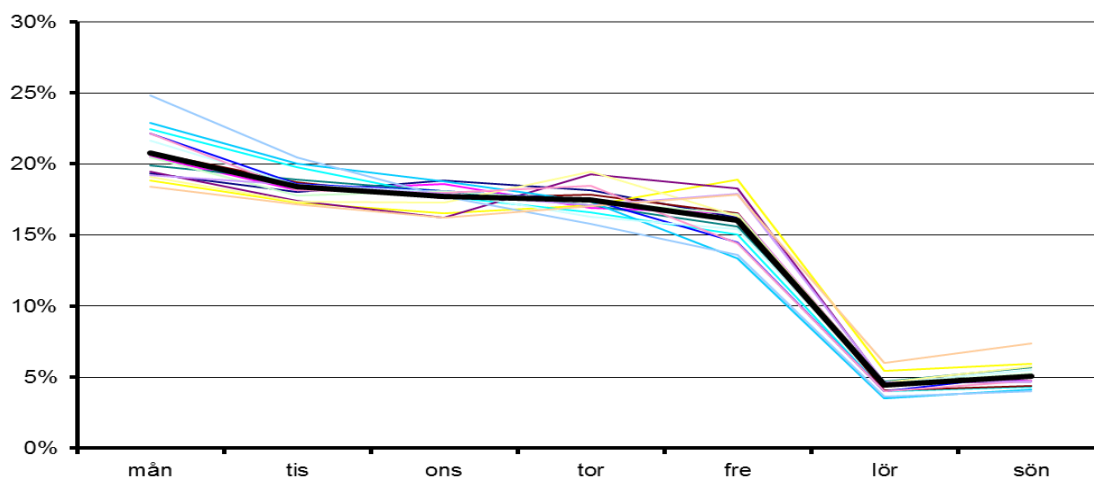


Figure 9 Number of answered calls per day for each week the same months as in figure 8 (horizontal axis is timeline)

Figure 9 depicts the percentage of contacts answered each weekday compared to the total number of contacts for the corresponding week. The thicker line is an average curve. Again it becomes apparent that customer demand is highest in the beginning of

the week with a sharp decrease towards the weekend. The average line is a good representation of the demand in an generic week which gives a good base in creating a sample. The sample, disregarding its size should consist of contacts with the following spread (table 2):

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
21%	18%	18%	17%	16%	4%	5%

Table 2 Percentage of answered calls per weekday for the same period as in figure 8

The customer predictability continues when looking at each specific day. Telefonbanken measures the number of contacts answered for each 15 minute period. To create a realistic chart for the data collection it was translated into 1 hour periods instead. In figure 10 the 15 minute periods are shown as the area in the graph and each stack represent the corresponding one hour period. The numbers are based on the same period as used in figure 7.

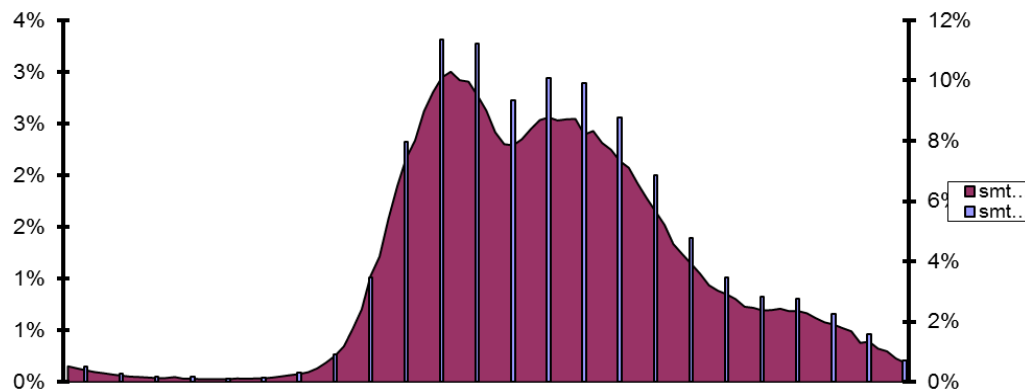


Figure 10 Percentage of calls per hour resp. quarter of an hour for the same period as in figure 7

With the data from figure 9 and 10 a table for the sample was created. Based on generic months and weeks it gives a good representation of how customers contact Telefonbanken.

	Måndag	Tisdag	Onsdag	Torsdag	Freitag	Lördag	Söndag	
00:00 01:00	0,10%	0,09%	0,09%	0,08%	0,08%	0,02%	0,02%	
01:00 02:00	0,05%	0,05%	0,05%	0,04%	0,04%	0,01%	0,01%	
02:00 03:00	0,04%	0,03%	0,03%	0,03%	0,03%	0,01%	0,01%	
03:00 04:00	0,03%	0,03%	0,03%	0,03%	0,03%	0,01%	0,01%	
04:00 05:00	0,02%	0,02%	0,02%	0,02%	0,02%	0,00%	0,01%	
05:00 06:00	0,03%	0,03%	0,03%	0,02%	0,02%	0,01%	0,01%	
06:00 07:00	0,06%	0,05%	0,05%	0,05%	0,05%	0,01%	0,01%	
07:00 08:00	0,21%	0,18%	0,18%	0,17%	0,16%	0,04%	0,05%	
08:00 09:00	0,77%	0,68%	0,66%	0,63%	0,59%	0,17%	0,18%	
09:00 10:00	1,72%	1,51%	1,47%	1,39%	1,31%	0,37%	0,41%	
10:00 11:00	2,41%	2,12%	2,07%	1,95%	1,84%	0,52%	0,57%	
11:00 12:00	2,31%	2,04%	1,98%	1,87%	1,76%	0,50%	0,55%	
12:00 13:00	1,91%	1,69%	1,64%	1,55%	1,46%	0,41%	0,46%	
13:00 14:00	2,10%	1,85%	1,80%	1,70%	1,60%	0,45%	0,50%	
14:00 15:00	2,04%	1,80%	1,75%	1,65%	1,56%	0,44%	0,49%	
15:00 16:00	1,83%	1,61%	1,57%	1,48%	1,39%	0,39%	0,44%	
16:00 17:00	1,46%	1,29%	1,25%	1,18%	1,11%	0,31%	0,35%	
17:00 18:00	1,02%	0,90%	0,88%	0,83%	0,78%	0,22%	0,24%	
18:00 19:00	0,74%	0,65%	0,64%	0,60%	0,57%	0,16%	0,18%	
19:00 20:00	0,61%	0,53%	0,52%	0,49%	0,46%	0,13%	0,14%	
20:00 21:00	0,58%	0,51%	0,50%	0,47%	0,45%	0,13%	0,14%	
21:00 22:00	0,47%	0,42%	0,40%	0,38%	0,36%	0,10%	0,11%	
22:00 23:00	0,33%	0,29%	0,28%	0,26%	0,25%	0,07%	0,08%	
23:00 00:00	0,14%	0,13%	0,12%	0,12%	0,11%	0,03%	0,03%	

	måndag	tisdag	onsdag	torsdag	freitag	lördag	söndag	
00:00 01:00								
01:00 02:00								
02:00 03:00								
03:00 04:00								
04:00 05:00								
05:00 06:00								
06:00 07:00								
07:00 08:00	0,3%	0,3%	0,3%					
08:00 09:00	0,69%	0,69%	0,69%	0,69%	0,69%			
09:00 10:00	1,74%	1,74%	1,39%	1,39%	1,39%			
10:00 11:00	2,43%	2,08%	2,08%	2,08%	2,08%			4,17%
11:00 12:00	2,43%	2,08%	2,08%	2,08%	2,08%			
12:00 13:00	2,08%	1,74%	1,74%	1,74%	1,39%			
13:00 14:00	2,08%	2,08%	1,74%	1,74%	1,74%			
14:00 15:00	2,08%	1,74%	1,74%	1,74%	1,74%			
15:00 16:00	1,74%	1,74%	1,74%	1,39%	1,39%			
16:00 17:00	1,39%	1,39%	1,39%	1,39%	1,04%			3,82%
17:00 18:00	1,04%	1,04%	1,04%	0,69%	0,69%			
18:00 19:00	0,69%	0,69%	0,69%	0,69%	0,69%			
19:00 20:00	1,39%			1,39%				
20:00 21:00	1,39%			1,39%				
21:00 22:00	0,69%			1,04%				
22:00 23:00	0,69%			1,04%				
23:00 00:00								

Figure 11 Adjusted table for data gathering

Keeping in mind that the collection was to be done live and the limited timeframe the table was simplified (figure 11). The divisions of evenings and weekends were partly

due to the limitations but also indications from the test runs that customers contact with errands of more ad-hoc character or less rush later in the week as well as later in the evenings.

Due to time restraints mentioned in the delimitations the sample size was set to 300 customer contacts representing a standard week spread out over the data gathering period set in April and May of 2011¹² respectively. The template can be found in appendix I.

3.4 Specific examples - Failure demand created by Telefonbanken

These are specific examples of customer contacts chosen to illustrate where Telefonbanken can manage the factors that contribute to the creation of Failure demand. Each example is presented in chronological order with an indication of the time between the specific contacts. None of the contacts are with the same handler. For more details, the call logs are found in appendix II.

3.4.1 Example 1

Contact 1:

The demand that occurs in this errand is that a customer, both private and corporate, wants to cancel the product package (Enkla Vardagen) that she is paying for in her private engagement as she has another bank that cover her needs as a private customer. She implies that she never uses her private accounts and that her debit card is free so the handler cancels her package.

Contact 2: (+2.5 months since first contact)

In the package that was cancelled there are products that when in the package are paid for through the package but once removed the products themselves are debited the customers' account once a year. This includes a debit card, a card that the customer has not used for some time and probably has thrown away in the belief that it was cancelled. The card she is referring to in the previous contact is most probably her corporate card. The customer, who does not use her account, gets a letter from SEB saying that her account has been overdrawn. She once again contacts us to ask why we have overdrawn her in her head dormant account. The handler helps her to cancel the product that has been debited and refund the amount.

Contact 3: (+4 months since first contact)

Another product is debited the customers' account and the story repeats itself. She contacts us and the handler cancels the product and refunds the debited amount. The handler also asks if the customer want to cancel the account totally. After a discussion it is clear to the handler that the customer wants to keep the account but have it dormant, no services or products connected to it. She wants to keep the account for

¹² During this period there were pauses in the gathering due to both Easter and the yearly tax review. The specific dates for all gathered data can be found in appendix I and II

future use with no fees associated to it right now. The handler helps her cancel all products and the errand is solved.

3.4.2 Example 2

Contact 1:

The customer wants to buy premium bonds. A buy order is issued and it is mentioned in prepermission that the account day is on a specific date at the end of the month (+26 days).

Contact 2: (+6 days)

The customer returns with the question why no money has been transferred from her account and why she cannot see the bonds in her depot in the IKP¹³. The answer is that the transaction will not be completed until the account day (set by the issuer of the bonds) and that the bonds will not show up in the IKP because of the specific depot service that the customer is using.

3.4.3 Example 3

Contact 1:

The customer contacts Telefonbanken to ask about an ongoing mortgage errand. He has been trying to reach the responsible handler at the branch office without hearing anything back for some time. The customer needs a rapid response regarding changes in the agreement with the seller of the house. Since it is an ongoing errand an e-mail is sent to the branch office, the specific handler and the customer is promised that he will return within a day.

Contact 2: (+2 days)

Customer has yet not heard anything from the handler at the branch and need to get in contact urgently. This time contact with the branch office is sought with the customer waiting on the line. The person who answers at the branch passes the message along to the specific handler. A reminder is sent by e-mail both to the branch office collective address as well as to the specific handlers address.

3.4.4 Example 4

Contact 1:

The customer wants to change two things in the terms of a loan (Enkla Lånet); the amortization and the fixation time. One of the changes is handled and the customer is asked to return the following day to handle the other change.

Contact 2: (+1 day)

The customer returns and the other change is handled.

¹³ IKP – the internet office for private customers

4 Analysis

The analysis chapter describes the analysis of the data gathered. The main focus is on the Failure demand created by Telefonbanken and that Telefonbanken can affect. Examples of Failure demand that has been found is given together with references to the Theory chapter on what has created the Failure demand and why it is unwanted in the system. General conclusions on what Telefonbanken can do to avoid the creation of Failure demand are presented. Further there is a presentation of the types of errands that Telefonbanken receive in the main service group.

4.1 Failure demand at Telefonbanken

To be able to measure customer satisfaction there is a need for both tangible and intangible measurements and KPIs on a system (Gilmore. 2001). The tangible measures at Telefonbanken show that there is a shortage in reaching the set goals for availability or abandonment rate and that some 20 % of customers feel that they have not gotten their errand solved or have to return with the same errand more than once, the tangible measures that Feinberg et al (2000) found to be related to customer satisfaction.

Traditionally the reduction of waste is one of the major lean principles that apply in the creation of customer satisfaction, when everything done creates value for the customer the customer is satisfied (Åhlström, 2004). Inventory is one major source of waste and in a service setting inventory is primarily customers' stored in queue and handover of work that increases work in progress (Åhlström, 2004 and Seddon et al, 2009). The reduction of both would therefore have an impact on customer satisfaction.

Seddon (2009) use a different perspective on waste since a service setting differs from the traditional manufacturing setting where Lean was developed. He argues that waste on a service system such as Telefonbanken is the demand put by customers on the system due to the inability of the system to do something or do something right for the customer – Failure demand. The total share of Failure demand at Telefonbanken was found to be just above 12 % (figure 12) of the total number of customer contacts in the sample, with the definition of Failure demand at Telefonbanken. Roughly translated with the total number of customer contacts for last year this translates into just above 150.000 contacts per year or near to 1.5 months of operations for Telefonbanken.

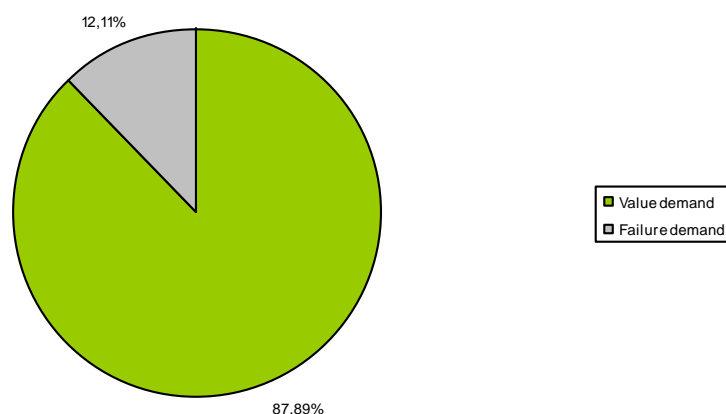


Figure 12 Percentage of Failure demand in the sample

As stated in the Problem description and the Aim and Purpose of this thesis the Failure demand that is created by Telefonbanken is the focal point of the analysis. As is shown in figure 13 Telefonbanken is the second largest creator of Failure demand that is noticeable at Telefonbanken. The largest creator of Failure demand is actually mailings¹⁴, the focus of another large project at SEB in order to decrease occasions where customers feel that it is necessary to contact SEB.

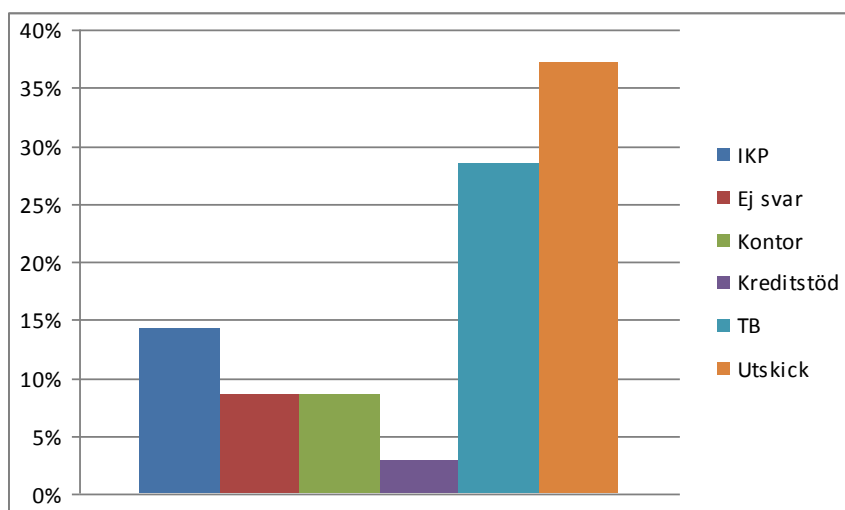


Figure 13 Failure demand in the sample divided by source

By breaking down the total share of Failure demand the Failure demand created by Telefonbanken is close to 43.000 customer contacts per year. That is calculated that every Failure demand contact is resolved by the second contact, something that was found not to be true¹⁵.

¹⁴ All mailings from SEB to customers excluding advertising or mailings in order to increase sales. In some ways the data for “Ej svar” could be sorted in under Mailings as well since it represents the lack of mailings, when customers were expecting mailings that they did not receive.

¹⁵ See example 1 in the specific examples.

4.1.1 Specific examples – analysis

Example 1: This chain of contacts exemplifies how Telefonbanken does the same task three times thereby creating Failure demand and inflicting waste in the system. As stated a first call resolution would improve customer satisfaction as well as the efficiency for Telefonbanken (Fienberg et al, 2000) and would at the same time reduce the risk of creating waste in the form of Failure demand. In the tangible measures used by Telefonbanken all of the above mentioned contacts are considered to be successful contacts, the only place where the knowledge of the customers' unsatisfaction is present in the system is with the specific handlers of contact two and three where the argument for a mix of tangible and intangible measures of Gilmore (2001) is proven right.

Example 2: The errand could have been resolved in the first contact by giving information about the next step in the process, by making sure that the customer understands the timing of the errand and has knowledge about her depot services, so just as in example one a first call resolution would improve both customer satisfaction as well as efficiency (Fienberg et al, 2000). Failure demand is created increasing pressure on the system in the form of more customer contacts (Seddon et al, 2009).

Example 3: The errand could be solved quicker either by giving the customer the direct number to the handler at the branch or by trying to solve the errand at Telefonbanken (the service group for mortgage errands). Failure demand is created by handing over an errand creating waste in the form of work in progress (Seddon et al, 2009 and Åhlström, 2004).

Example 4: With the knowledge to solve both changes the first contact would have been sufficient. Another solution would have been to, with a clear time frame explained to the customer, gather enough information to be able to hand the errand over to a colleague and then from Telefonbanken return to the customer with the errand solved. Creation of Failure demand is done by the handing over of an errand (Seddon et al, 2009) and a first call resolution would solved the issue, as repeated above (Feinberg et al, 2000).

4.1.2 Conclusions

The errands in the examples above are different in character, following the specific nature of service demand. They reach from the closure of a service to changes in loans, demanding different sets of knowledge from the handler but all falling under what Telefonbanken should be able to handle at all times during the day and be able to handle with the customer still in the phone.

There are three different areas that are apparent in the examples, three areas where Telefonbanken can improve to solve the issue of customers feeling the need to return with the same errand:

- To ensure what the customer actually want to do – the true demand
- To inform the customer of the time-frame and the next step in the process
- To ensure that the knowledge of the handler cover all areas and routines – ownership of errands

In the first example the first two handlers help the customer with the stated errand; to cancel the requested products. The customer is temporarily satisfied, both the customer and Telefonbanken feel that they have resolved the errand. In many ways there are similarities in the second example; both parts feel that they have succeeded. The Failure demand occur when the customer discover that the errand was not solved in the way they had expected or the expectations of the solutions are not fulfilled.

In both examples this is easily preventable; in the first example Telefonbanken need to understand why the customer want to cancel the, in this case, product package. Knowledge of what will happen after the package is cancelled may not be apparent for the customer. In this case, to inform the customer that the included products in the package will still be debited but separately will most likely prevent the Failure demand from occurring. An easy question as to why the customer would like to cancel the package could also give some clues that the customer does not want to use the account anymore and that every service connected to the account should be terminated.

In the second example the problem of ensuring if the customer understands what is going to happen or what the next step in the process is going to be return. The handler use a bank-term (account day) with no emphasis on its importance or explanations of what it implies and in the second contact it becomes apparent that the customer has not understood the implications of the term. To end the first contact with a repetition of what has been done and to add when the next step in the process is taking place, to walk the customer through the process, will minimize the risk of the customer returning with the questions we can see in the example.

The third example points out the difficulties with handing over contacts between different parts of the bank as well as the lack of feelings of ownership of an errand from the handlers' point of view. Telefonbanken promise that something will happen that cannot be guaranteed from Telefonbanken. The problem is solvable either by handing the customer the direct number to the contact person at the branch office or by trying to reach a colleague at the branch but the main problem is the lack of ownership of the errand. If the customer contacts Telefonbanken then the owner of the errand, until the customer and the contact at the branch meet or speak, must be Telefonbanken.

The last example is purely an example of that Telefonbanken fail in upholding the same competence level at all times of the day all year around. This is either solved by educating personnel or by changing the promise to customers that everything should solved at every time during the day, to make it okay to have a colleague return to the customer with the errand solved within a specified time frame..

Conclusions found in the analysis of the contacts that are deemed to be Failure demand caused by Telefonbanken and where there are factors that Telefonbanken can manage to reduce the Failure demand are:

Telefonbanken needs to ensure that they in every customer contact understand what the true demand is and not only what the customer state that the errand is about. As seen in the examples customers are not always clear on the implications of an action so it is up to Telefonbanken to interpret the demand.

Telefonbanken needs to ensure that the next step in the process is clear for the customer, as well as the time frame. One way could be to repeat everything that is agreed upon, in terms that are understandable for the customer, to decrease the possibilities for misunderstanding.

Telefonbanken needs to increase the feeling of ownership of errands, to ensure that every errand is resolved to the maximum extent before dropping it or handing it over to another instance of the bank. This goes hand in hand with explaining the next step in the process for the customer before ending the contact.

Telefonbanken should ensure that the offered service always is available or that Telefonbanken can return with the errand solved within a set timeframe.

In all cases the solutions mean that the handling time for the first contact will increase but in the end the errand will take less time to handle for Telefonbanken and, as in the first example, actually four months less time for the customer. As mentioned, each of the contacts described here are separately treated as successful contacts in the eyes of Telefonbanken but just above half of them are seen as successful in the eyes of the customers.

4.2 Categorization of errands

Large volumes of all errands handled are of the same type, as stated the demand put on the system is somewhat predictable. In figure 14 the volumes are shown under each category. Five categories stand for 50 % of all incoming errands.

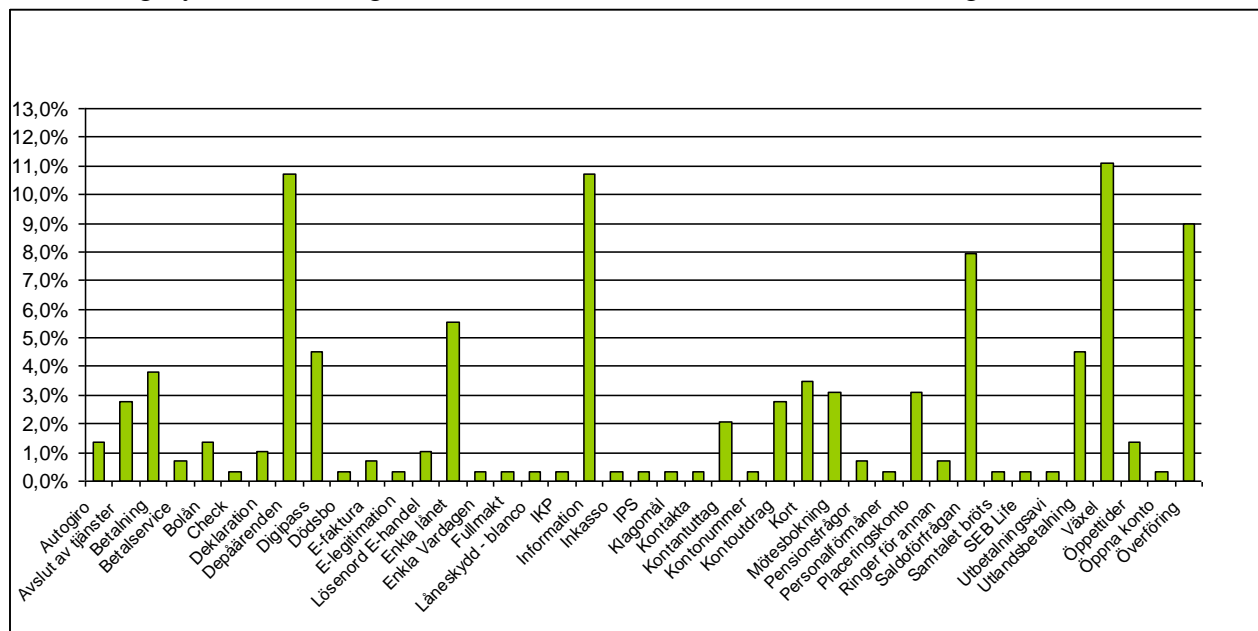


Figure 14 Percentage of contacts under each type of errand

As argued one of the main drivers of waste is inventory and in service systems this is translated into work in progress, handovers or as Seddon deem it; Failure demand (Åhlström, 2004 and Seddon et al, 2009). Some 11 % of all incoming contacts fall under the category Växeltjänst (exchange), customers who has ended up under in the wrong service group or need to be switched to other departments in SEB than Telefonbanken. During the period that the data was gathered one of the smaller service groups, the one concerning wanting to talk to a specific person at a branch office, was implemented¹⁶. From that day all incoming customer contacts under that service group was discarded. The data gathered show that percentage wise the number of customer that fall under the category grew rather than declined after this date¹⁷, something that the data is inconclusive to explain even though the number of customers that want to be redirected to specific persons at branch offices declines after the implementation. No causality can be confirmed. For now, what the data show is that most customer contacts that fall under the category of Växeltjänst are re-directed to either other service groups or other queues in other departments.

Under this category there are roughly two sub-categories; 1) the customer is switched to another service group within Telefonbanken building up the queues in this service group thus creating Failure demand that is not shown in this thesis but that would end up in a similar manor in a comparative study on the other service groups (Seddon et

¹⁶ Implemented on the 20th of April 2011

¹⁷ The total amount showed in figure 14 is 11.1 %. Up to the 20th of April the number is 8.7 % and after that 14.1 % for the rest of the period.

al, 2009) and 2) the customer is switched to other departments¹⁸ of SEB, end up in new queues and again create Failure demand or waste.

The errand types of Depåärenden (Depot errands) and Information (General Information) are errands where customers typically need help with more complicated affairs concerning stock exchange or bonds or have general questions of opening hours at branch offices, if a specific currency still is viable or have questions about mailings that SEB has sent out, something that falls under the Failure demand category of Utskick (Mailings). Besides the last mentioned type of errands this is all demand that is wanted, Value demand put on the system (Seddon et al, 2009). The errands under Enkla Lånet (unsecured loans) fall under the same, Value demand.

The last two big categories Saldoförfrågan (account balance) and Överföringar (transactions) are related and in many cases quick and easy standard errands that can be handled easily both on IKP and on smart phone applications or an automated self-service using IVR. These categories become a grey area. Both are demand that we want to have put on the system, that is they do not fall under any of the waste categories that are defined nor Failure demand (Feinberg et al, 2000, Åhlström, 2004, Seddon et al, 2009) but moving more of them towards automated services would increase the possibilities of helping other customers with more complicated errands, something that would improve customer satisfaction for other customers as well as for most of the customers in these categories by reducing the abandonment rate and improving availability (Feinberg et al. 2000).

4.2.1 Conclusions

Handing around of customers is to be considered waste in a service system (Seddon et al, 2009). In the case of Telefonbanken 11 % of all customer contacts, the ones sorted under Växel, are waste (Åhlström, 2004) and become Failure demand put on other service groups or departments in SEB (Seddon et al, 2009).

In the case of the categories of Saldoförfrågan and Överföringar there are room for improvements although further research is needed to see if there are sub-categories under the two. An example; a customer who does not have the possibility to check the balance of an account in any other way than by telephone put Value demand on the system but a customer who have the possibility to use IKP or any other service to check the balance put Failure demand on the system (Seddon et al, 2009). Given that the process of identification is more time consuming over the telephone than on any of the self-service applications the probability of waste in the process is high. This type of waste is not covered in this thesis but a further investigation from Telefonbanken is recommended.

¹⁸ Most of these errands concerned MasterCard's or insurances that both have separate departments within SEB. The total number of these calls can be found in appendix II.

5 Recommendations

Failure demand is waste in a service setting (Seddon et al, 2009). This thesis has aimed at identifying and categorizing the Failure demand experienced at Telefonbanken and to identify the underlying factors that are manageable by Telefonbanken and suggest actions to reduce the Failure demand that Telefonbanken can implement.

Failure demand have been found at Telefonbanken, both derived from own actions as well as from other departments in the bank. A quantification of the Failure demand put on the system by Telefonbanken give that somewhere between 40.000 and 45.000 customer contacts per year should be avoidable by measures that can be taken by Telefonbanken.

The concluded areas where Telefonbanken can improve to lower the experienced Failure demand are:

- To ensure what the customer actually want to do – the true demand
- To inform the customer of the time-frame and the next step in the process
- To ensure that the knowledge of the handler cover all areas and routines – ownership of errands

Telefonbanken has aided by the SEB Way methodologies developed a template of how a customer contact should be carried out. This template has for the purpose of this thesis work four interesting points. Under the headlines of Understanding the customer need, Solution through best practice and Summarize the following points are stated:

- Use support questions to fully understand the root cause of the customers errand
- Choose a solution that avoid that the problem re-occurs
- What have we done and what is the timeline
- Ensure that the customer understand you

When matching these four pointers against the areas that can lower the experienced failure demand we see that they overlap. By following this template in every customer contact reduction of the Failure demand should be achieved.

In addition to the use of the template Telefonbanken should continue on the already initiated path of moving more towards having KPIs that measure perceived customer satisfaction, either by the customer, something that according to most studies is hard to do (Feinberg et al, 2001), or by the handler, a measure that in a face validated way should reflect the customer satisfaction in some way. Measures of efficiency are not redundant but they should not be used to reflect the performance of handlers but rather on the support staff.

One measure that is found to be directly related to customer satisfaction (Feinberg et al, 2001) is First call resolution, a measure that is not implemented yet but that Telefonbanken aim at utilizing (Stockelid, 2011). One of the areas where Telefonbanken can improve is by increasing ownership of errands, something that a first call resolution can aid. With today's use of the Communication boards I suggest that they are used for the measurement of this. By days end each handler write up

each errand that they have not been able to solve, anonymous if wanted. By doing this and keeping track of how many errands that are written up both the extent of the problem as well as the specifics of each will be brought up to light. Every week each problem will be addressed in the teams and in this way each team member will learn how to handle the problem the next time and the problem should have started a journey towards extinction. This will not work without the compliment of the Template, as we have seen sometimes both customer and handler believe that the errand is solved but with both processes in place most of the areas for improvements are covered.

Recommendations regarding the types of errands and the division of them are already addressed under conclusions but to summarize: The two or three types of errands that are worth to look further into are Växel and Saldo/Överföringar.

Errands under Växel are to be considered Failure demand. The Failure demand is not noticeable in the service group that this thesis has focused on but the handing around of customers create work in progress and queues – waste (Åhlström, 2004 and Seddon et al, 2009). Since such a large amount of the total number of errands in the main service group are found to be Växel this should be further addressed by Telefonbanken. One possible explanation of this is the communication by SEB of the telephone number to Telefonbanken. It is communicated in nearly every mailing and communication regardless of the subject, something that drives customers to use Telefonbanken as an operator or switch board; this creates a lot of the contacts under Växel.

Saldoförfrågan and Överföringar are errands that can be handled with other means than Telefonbanken. As mentioned, these contacts can be seen as both Value and Failure demand. In this thesis the results are inconclusive as to the degree of what is to be considered what. Further research is recommended to get a clearer picture as of what type of customers that use Telefonbanken for this type of errands and if there can be something done to help them utilize more effective means.

References

Bowen, D.E., Jones, G.R. (1986) Transaction Cost analysis of Service management Effectiveness. *Academy of Management Review*. Vol. 11 no. 2

Bowen, D.E., Youngdahl, W.E. (1998) 'Lean' service: in defence of a production-line approach" *International Journal of Service Industry Management*, Vol. 9 Iss: 3, pp.207 – 225

Bright (2011) http://www.bright.se/11/page.asp?page_id=7881&type=display, 2011-08-02, 13:36.

Bryman, A., Bell, E. (2003) *Business Research Methods*. Oxford University Press, New York, NY

Chase, R.B. (1978) Where does the Customer fit in a Service Operation. *Harvard Business Review*. Vol. 56 no. 4 pp. 137-142

Deming, W.E. (2000) *The New Economics For Industry, Government, Education*. MIT Press. Cambridge, MA

Feinberg, R. A., Kim, I-S, Hokama, L. (2000) Operational determinants of caller satisfaction in the call centre. *International Journal of Service Industry Management*. Vol. 11 no. 2 pp. 131-141

Gilmore, A. (2001) Call centre management: is service quality a priority? *Managing Service Quality*. Vol. 11 no. 3 pp.153-159

Grönroos, C. (1990) *Service Management and Marketing*. Lexington Book. Lexington, MA

Marr, B., Perry, S. (2004) Performance management in call centres: lessons pitfalls and achievements in Fujitsu Services. *Measuring business excellence*. Vol. 8 no.4 pp.55-62

Ohno, T. (1988) *Toyota Production System*. Productivity Press. Portland, OR

SEB (2011) www.seb.se 2011-08-17 10:05

Seddon, J. (2005) *Freedom from Command and Control*. Vanguard Press, Buckingham

Seddon J. (2008) *Systems Thinking and the Public Sector*. Triarchy, Axminster

Seddon, J., O'Donovan, B., Zokaei, K. (2009) Rethinking Lean Service. Paper published at <http://www.systemsthinking.co.uk> (2011-06-15)

Slack, N., Lewis, M. (2008) Operations strategy. Financial Times Prentice Hall. Harlow

Stockelid, D (2011) Conversations with Daniel Stockelid, deputy Head of Telefonbanken, spring of 2011

Womack, J.P., Jones, D.T. and Roos, D. (1990) The Machine that Changed the World, Rawson Associates, New York.

Åhlström, P. (2004) Lean service operations: translating lean production principles to service operations, *Int. J. Services Technology and Management*, Vol. 5, Nos. 5/6, pp.545–564.

Appendix

I - Template for data collection

	14							15							16							17							18							19																																															
	04-apr	05-apr	06-apr	07-apr	08-apr	09-apr	10-apr	11-apr	12-apr	13-apr	14-apr	15-apr	16-apr	17-apr	18-apr	19-apr	20-apr	21-apr	22-apr	23-apr	24-apr	25-apr	26-apr	27-apr	28-apr	29-apr	30-apr	01-maj	02-maj	03-maj	04-maj	05-maj	06-maj	07-maj	08-maj	09-maj	10-maj	11-maj	12-maj	13-maj	14-maj	15-maj																																									
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II - Gathered Data

datum	Klockan	Smt	Antal ärenden	Nya	Tidigare	När	Med vem	Typ av ärende
2011-04-05	7	8	1	1				Överföring
2011-04-05	8	9	2	1	1			Depåärenden
2011-04-05	8	9	3	1	1		Utskick	Depåärenden
2011-04-05	9	10	4	1	1	1	TB	Enkla lånet
2011-04-05	9	10	5	2	2			Depåärenden
2011-04-05	9	10	6	1	1			Saldoförfrågan
2011-04-05	9	10	7	1	1			E-faktura
2011-04-05	9	10	8	1	1			Klagomål
2011-04-05	10	11	9	1	1			Överföring
2011-04-05	10	11	10	1	1			Depåärenden
2011-04-05	10	11	11	1	1			Utlandsbetalning
2011-04-05	11	12	12	1	1			Depåärenden
2011-04-05	11	12	13	1	1			Växel
2011-04-05	11	12	14	1	1			Lösenord e-handel
2011-04-05	13	14	15	1	1			Placeringskonto
2011-04-05	13	14	16	1	1			Depåärenden
2011-04-05	13	14	17	1	1			Mötesbokning
2011-04-05	14	15	18	1	1			Depåärenden
2011-04-05	14	15	19	1	1			Växel
2011-04-05	14	15	20	1	1			Enkla lånet
2011-04-05	14	15	21	1	1			Växel
2011-04-05	14	15	22	1	1			Ringer för annan
2011-04-05	15	16	23	1	1			Betalservice
2011-04-05	15	16	24	1	1			Växel
2011-04-05	15	16	25	1	1	1	4 TB	Mötesbokning
2011-04-05	15	16	26	1	1			Öppettider
2011-04-05	15	16	27	1	1			Betalning
2011-04-06	8	9	28	1	1			Saldoförfrågan
2011-04-06	8	9	29	1	1			Saldoförfrågan
2011-04-06	9	10	30	1	1			Deklaration
2011-04-06	9	10	31	1	1			Depåärenden
2011-04-06	9	10	32	1	1			Pensionsfrågor
2011-04-06	9	10	33	1	1			Placeringskonto
2011-04-06	10	11	34	1	1	1	14 TB	Avslut av tjänster
2011-04-06	10	11	35	1	1	1	1 IKP	Avslut av tjänster
2011-04-06	10	11	36	1	1	1	1 Utskick	Information
2011-04-06	10	11	37	1	1			Depåärenden
2011-04-06	10	11	38	1	1			Överföring
2011-04-06	10	11	39	1	1	1	7 Ej svar	Enkla lånet
2011-04-06	11	12	40	1	1	1	0 TB	Depåärenden
2011-04-06	11	12	41	1	1			Pensionsfrågor
2011-04-06	11	12	42	1	1			Kontantuttag
2011-04-06	11	12	43	1	1			Mötesbokning
2011-04-06	11	12	44	1	1			Avslut av tjänster
2011-04-06	11	12	45	1	1			Utlandsbetalning
2011-04-07	7	8	46	1	1			Saldoförfrågan
2011-04-07	8	9	47	1	1			Saldoförfrågan

2011-04-07	8	9	48	1	1					Enkla lånet
2011-04-07	9	10	49	1	1					Överföring
2011-04-07	9	10	50	1	1					Överföring
2011-04-07	9	10	51	1	1					Mötesbokning
2011-04-07	9	10	52	1	1					Växel
2011-04-07	9	10	53	1		1	7	TB		Överföring
2011-04-07	10	11	54	1		1	6	TB		Depåärenden
2011-04-07	10	11	55	1		1	2	Utskick		Information
2011-04-07	10	11	56	1		1	1	Kontor		Mötesbokning
2011-04-07	10	11	57	1	1					Växel
2011-04-07	10	11	58	1	1					Check
2011-04-07	10	11	59	2	2					Placeringskonto
2011-04-07	11	12	60	1	1					Betalning
2011-04-07	11	12	61	1	1					Mötesbokning
2011-04-07	11	12	62	1	1					Ringer för annan
2011-04-07	14	15	63	1	1					Öppettider
2011-04-07	14	15	64	1	1					Avslut av tjänster
2011-04-07	14	15	65	1		1	1	Utskick		Information
2011-04-07	14	15	66	1	1					Placeringskonto
2011-04-07	14	15	67	1	1					Digipass
2011-04-11	12	13	68	1	1					Information
2011-04-11	12	13	69	1	1					Mötesbokning
2011-04-11	12	13	70	1	1					Depåärenden
2011-04-11	13	14	71	1	1					Information
2011-04-11	13	14	72	1		1	14	Utskick		Depåärenden
2011-04-11	13	14	73	1	1					Digipass
2011-04-11	13	14	74	1	1					Mötesbokning
2011-04-11	13	14	75	2	2					Lösenord e-handel
2011-04-11	13	14	76	1	1					Kontantuttag
2011-04-11	14	15	77	1	1					Dödsbo
2011-04-11	14	15	78	1	1					Kort
2011-04-11	14	15	79	1	1					Depåärenden
2011-04-11	14	15	80	1		1	1	Utskick		Saldoförfrågan
2011-04-11	14	15	81	1	1					Depåärenden
2011-04-11	14	15	82	1	1					Utlandsbetalning
2011-04-11	15	16	83	1	1					Avslut av tjänster
2011-04-11	15	16	84	1		1		Utskick		Kontoutdrag
2011-04-11	15	16	85	1		1		Utskick		Kontoutdrag
2011-04-11	15	16	86	1	1					Information
2011-04-11	15	16	87	1	1					Betalning
2011-04-11	16	17	88	1	1					Saldoförfrågan
2011-04-11	16	17	89	1	1					Växel
2011-04-11	16	17	90	1		1	11	Kontor		IPS
2011-04-11	16	17	91	1	1					Enkla lånet
2011-04-12	12	13	92	1	1					Placeringskonto
2011-04-12	12	13	93	1	1					Utlandsbetalning
2011-04-12	12	13	94	1	1					Överföring
2011-04-12	12	13	95	1		1	1	Utskick		Kontoutdrag
2011-04-12	12	13	96	1	1					Växel
2011-04-12	13	14	97	1	1					Saldoförfrågan
2011-04-12	13	14	98	1	1					Överföring
2011-04-12	13	14	99	1	1					Växel

2011-04-12	16	17	100	1	1					Saldoförfrågan
2011-04-12	16	17	101	1		1	1	IKP		Avslut av tjänster
2011-04-12	16	17	102	1	1					Saldoförfrågan
2011-04-12	16	17	103	1	1					Information
2011-04-12	17	18	104	1	1					Depåärenden
2011-04-12	17	18	105	1	1					Växel
2011-04-12	17	18	106	1	1					Överföring
2011-04-12	18	19	107	1	1					Depåärenden
2011-04-12	18	19	108	1	1					Saldoförfrågan
2011-04-13	12	13	109	1	1					Utlandsbetalning
2011-04-13	12	13	110	1	1					Information
2011-04-13	12	13	111	1		1	7	IKP		Enkla lånet
2011-04-13	13	14	112	1	1					Information
2011-04-13	13	14	113	1	1					Överföring
2011-04-13	13	14	114	1		1	x	Utskick		Kontoutdrag
2011-04-13	13	14	115	1	1					Överföring
2011-04-13	13	14	116	1	1					Depåärenden
2011-04-13	14	15	117	1		1	1	TB		Enkla lånet
2011-04-13	14	15	118	1	1					Avslut av tjänster
2011-04-13	14	15	119	1	1					Fullmakt
2011-04-13	14	15	120	1	1					Information
2011-04-13	14	15	121	1	1					Enkla lånet
2011-04-13	15	16	122	1	1					Växel
2011-04-13	15	16	123	1	1					Överföring
2011-04-13	15	16	124	1	1					Depåärenden
2011-04-13	15	16	125	1	1					Saldoförfrågan
2011-04-13	15	16	126	1	1					Autogiro
2011-04-13	16	17	127	1		1	5	Kreditstöd		Enkla lånet
2011-04-13	16	17	128	1	1					Saldoförfrågan
2011-04-13	16	17	129	1	1					Öppna konto
2011-04-13	16	17	130	1	1					Saldoförfrågan
2011-04-15	13	14	131	1	1					Överföring
2011-04-15	13	14	132	1		1	14	Utskick		Information
2011-04-15	13	14	133	1	1					Information
2011-04-15	13	14	134	1	1					Avslut av tjänster
2011-04-15	13	14	135	1	1					Växel
2011-04-18	10	11	136	1	1					Betalning
2011-04-18	10	11	137	1	1					Kontantuttag
2011-04-18	10	11	138	1	1					saldoförfrågan
2011-04-18	10	11	139	1	1					Enkla lånet
2011-04-18	11	12	140	1	1					Information
2011-04-18	11	12	141	1	1					Växel
2011-04-18	11	12	142	1	1					Information
2011-04-18	11	12	143	1	1					Information
2011-04-18	12	13	144	1	1					Kontoutdrag
2011-04-18	12	13	145	1	1					Utlandsbetalning
2011-04-18	12	13	146	1	1					Kontantuttag
2011-04-18	12	13	147	1		1	14	TB		Enkla lånet
2011-04-18	16	17	148	1	1					Växel
2011-04-18	16	17	149	1	1					Överföring
2011-04-18	16	17	150	1	1					Deklaration
2011-04-18	16	17	151	1	1					Kort

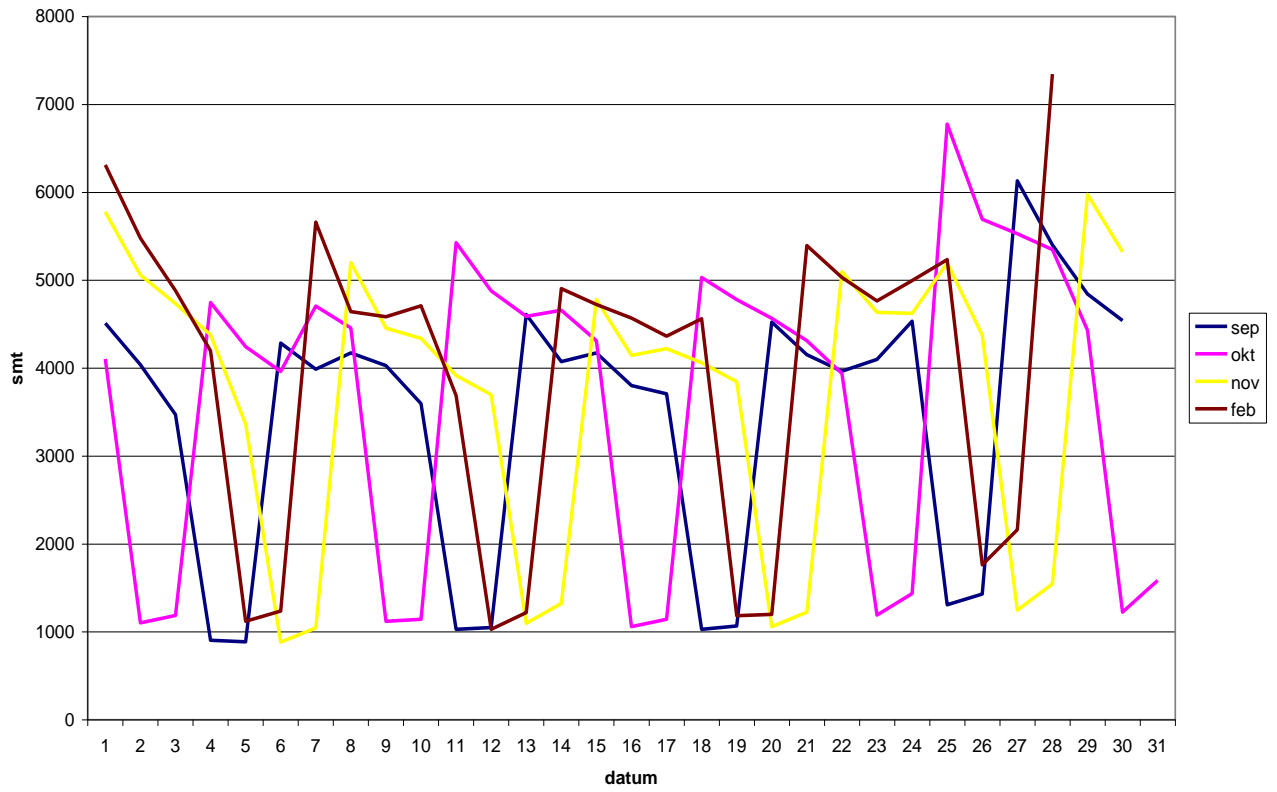
2011-04-18	17	18	152	1	1					Överföring
2011-04-18	17	18	153	1	1					Samtalet bröts
2011-04-18	17	18	154	1	1					Betalning
2011-04-18	18	19	155	1	1					Kort
2011-04-18	18	19	156	1	1					Personalförmåner
2011-04-20	17	18	157	1	1					Saldoförfrågan
2011-04-20	17	18	158	1	1					Saldoförfrågan
2011-04-20	17	18	159	1	1					Placeringskonto
2011-04-20	18	19	160	1	1					Inkasso
2011-04-20	18	19	161	1	1					Depåärenden
2011-05-04	17	18	162	1	1					Växel
2011-05-04	17	18	163	1	1					Information
2011-05-04	17	18	164	1	1					Saldoförfrågan
2011-05-04	17	18	165	1	1					Digipass
2011-05-04	18	19	166	1		1	4	Utskick		Depåärenden
2011-05-04	18	19	167	1	1					Låneskydd - blanco
2011-05-04	19	20	168	1	1					Information
2011-05-04	19	20	169	1	1					Växel
2011-05-04	19	20	170	1	1					Autogiro
2011-05-04	19	20	171	1	1					Enkla lånet
2011-05-04	20	21	172	1	1					Överföring
2011-05-04	20	21	173	1	1					Kort
2011-05-04	20	21	174	1	1					Deklaration
2011-05-04	12	13	175	1	1					Växel
2011-05-04	12	13	176	1	1					Växel
2011-05-04	12	13	177	1	1					Växel
2011-05-05	11	12	178	1	1					Överföring
2011-05-05	11	12	179	1	1					Växel
2011-05-05	11	12	180	1	1					Digipass
2011-05-05	12	13	181	1	1					Kontantuttag
2011-05-05	12	13	182	1		1		Ej svar		Enkla lånet
2011-05-05	12	13	183	1	1					Information
2011-05-05	12	13	184	1	1					Placeringskonto
2011-05-05	12	13	185	1		1	3	Kontor		Mötesbokning
2011-05-05	13	14	186	1	1					Saldoförfrågan
2011-05-05	13	14	187	1	1					Utlandsbetalning
2011-05-05	13	14	188	1	1					Saldoförfrågan
2011-05-05	13	14	189	1	1					Öppettider
2011-05-05	13	14	190	1	1					Kort
2011-05-05	15	16	191	1	1					Växel
2011-05-05	15	16	192	1	1					Växel
2011-05-05	15	16	193	1	1					Växel
2011-05-05	15	16	194	1	1					Betalning
2011-05-05	15	16	195	1	1					Saldoförfrågan
2011-05-05	16	17	196	1	1					Växel
2011-05-05	16	17	197	1	1					Information
2011-05-05	16	17	198	1	1					Enkla lånet
2011-05-05	16	17	199	1	1					Betalning
2011-05-05	17	18	200	1	1					Utlandsbetalning
2011-05-06	12	13	201	1	1					Digipass
2011-05-06	12	13	202	1	1					Information
2011-05-06	12	13	203	1	1					Kontonummer

2011-05-06	12	13	204	1	1						Utlandsbetalning
2011-05-06	14	15	205	1	1						Utbetalningsavi
2011-05-06	14	15	206	1	1						Kontoutdrag
2011-05-06	14	15	207	1	1						Depåärenden
2011-05-06	14	15	208	1	1						Depåärenden
2011-05-06	14	15	209	1	1						Öppettider
2011-05-06	14	15	210	1	1						Kort
2011-05-06	15	16	211	1	1						Autogiro
2011-05-06	15	16	212	1		1	2	TB			Kontakta
2011-05-06	15	16	213	1	1						Växel
2011-05-06	15	16	214	1	1						Kontoutdrag
2011-05-06	16	17	215	1	1						Växel
2011-05-06	16	17	216	1	1						Information
2011-05-06	16	17	217	1	1						Lösenord e-handel
2011-05-06	18	19	218	1	1						Depåärenden
2011-05-07	9	10	219	1	1						Betalning
2011-05-07	9	10	220	1	1						Växel
2011-05-07	10	11	221	1	1						Information
2011-05-07	10	11	222	1	1						Saldoförfrågan
2011-05-07	10	11	223	1	1						Överföring
2011-05-07	10	11	224	1	1						Depåärenden
2011-05-07	11	12	225	1	1						Växel
2011-05-07	11	12	226	1	1						Betalning
2011-05-07	11	12	227	1	1						Autogiro
2011-05-07	11	12	228	1	1						Överföring
2011-05-07	11	12	229	1	1						Digipass
2011-05-07	11	12	230	1		1	1	IKP			Depåärenden
2011-05-08	13	14	231	1	1						Information
2011-05-08	13	14	232	1	1						Överföring
2011-05-08	13	14	233	1	1						Växel
2011-05-08	13	14	234	1	1						Digipass
2011-05-08	14	15	235	1	1						Digipass
2011-05-08	14	15	236	1	1						Enkla lånet
2011-05-08	15	16	237	1	1						Digipass
2011-05-08	15	16	238	1	1						Bolån
2011-05-08	15	16	239	1		1	7	Ej svar			Kort
2011-05-08	15	16	240	1	1						Digipass
2011-05-08	15	16	241	1	1						Överföring
2011-05-09	19	20	242	1	1						E-faktura
2011-05-09	19	20	243	1	1						Utlandsbetalning
2011-05-09	19	20	244	1	1						Utlandsbetalning
2011-05-09	19	20	245	1	1						Depåärenden
2011-05-09	20	21	246	1	1						Enkla lånet
2011-05-09	20	21	247	1	1						Enkla Vardagen
2011-05-09	20	21	248	1	1						Bolån
2011-05-09	20	21	249	1	1						Bolån
2011-05-10	10	11	250	1	1						Kontoutdrag
2011-05-10	10	11	251	1	1						Växel
2011-05-10	10	11	252	1	1						Information
2011-05-10	11	12	253	1	1						Depåärenden
2011-05-10	11	12	254	1	1						Betalservice
2011-05-10	11	12	255	1	1						Växel

2011-05-13	8	9	256	1	1					Information
2011-05-13	8	9	257	1	1					Information
2011-05-13	9	10	258	1	1					Digipass
2011-05-13	9	10	259	1	1					Växel
2011-05-13	9	10	260	1	1					Depåårenden
2011-05-13	9	10	261	1		1	1	TB		IKP
2011-05-13	10	11	262	1	1					SEB Life
2011-05-13	10	11	263	1	1					E-legitimation
2011-05-13	10	11	264	1	1					Information
2011-05-13	10	11	265	1	1					Information
2011-05-09	8	9	266	1	1					Digipass
2011-05-09	8	9	267	1	1					Saldoförfrågan
2011-05-09	10	11	268	1	1					Överföring
2011-05-09	10	11	269	1	1					Överföring
2011-05-09	10	11	270	1	1					Betalning
2011-05-09	11	12	271	1	1					Depåårenden
2011-05-09	11	12	272	1	1					Placeringskonto
2011-05-09	11	12	273	1	1					Kort
2011-05-11	20	21	274	1		1	1	IKP		Utlandsbetalning
2011-05-11	20	21	275	1	1					Överföring
2011-05-11	20	21	276	1	1					Placeringskonto
2011-05-11	21	22	277	1	1					överföring
2011-05-11	21	22	278	1	1					Bolån
2011-05-11	21	22	279	1	1					Kort
2011-05-09	21	22	280	1	1					Kontantuttag
2011-05-09	21	22	281	1	1					Digipass
2011-05-09	22	23	282	1	1					Kort
2011-05-09	22	23	283	1	1					Depåårenden
2011-05-12	20	21	284	1	1					Överföring
2011-05-13	11	12	285	1	1					Utlandsbetalning
2011-05-13	11	12	286	1	1					Information
2011-05-13	11	12	287	1	1					Information
2011-05-13	11	12	288	1		1	x	Utskick		Information
2011-05-13	11	12	289	1	1					Betalning

292 88% 12% 4,6

III - Figure 8 Un-altered



IV - Types of errands in English

Avslut av tjänster – Cancellation of products
Betaling – Payment
Betalservice – Payment services
Bolån – Mortgage
Check – Check
Deklaration – Tax return
Depåärenden – Depot errands
Digipass – Identification system for customers used by SEB (Product name)
Dödsbo - Estate/Inheritance
E-faktura – Electronic invoice
E-legitimation – Electronic identification
Lösenord E-handel – Password for debit cards concerning on-line commerce
Enkla Lånet – Unsecured loan (Product name)
Enkla Vardagen – Product group (Product name)
Fullmakt – Power of attorney
Låneskydd - Blanco – Insurance for unsecured loans (Product name)
IKP – The internet office
Information – General information
Inkasso – Collection
IPS – Individual Pension
Klagomål – Complaints
Kontakta – The customer wants to get in contact with a branch office
Kontantuttag – Cash withdrawal
Kontonummer – Account number
Kontoutdrag – Account statement
Kort – Debit card
Mötesbokning – Meeting at a specific branch office
Pensionsfrågor – Pension
Personalförmåner – Personnel benefits
Placeringskonto – Savings account (Product name)
Ringer för annan – Calling on behalf of someone else
Saldoförfrågan – Account balance
Samtalet bröts – Connection lost
SEB Life – SEB's department for insurance (Product name)
Utlandsbetalning – International payment
Växel – Exchange (Telephone exchange)
Öppettider – Opening hours
Öppna konto – Customer wants to open an account