

# Chapter 1

## Project charter

The project is being undertaken for learning purposes in order to simulate the actual work done in the MUST method for the course Business Processes and Organisation, Fall 2013, at the IT university of Copenhagen. The project will not produce any final products other than a business case and associated appendix. The project will be supervised by Nina Boulus-Roedje and Elisabeth Broe Christensen.

### 1.1 Purpose of project charter

The project charter defines the objective of the project and what work has to be done to reach this objective, as well as which resources the project team needs from DANX and which deliverables the company will receive.

The project charter serves as a contract between the project team and DANX, such that everyone involved in the project has the same view of the vision, assumptions, planning, resource consumption and boundaries of the project.

### 1.2 Premise

#### **Background**

DANX is a Nordic transportation company. They specialize in express delivery the following day within 7 AM. DANX operates in Denmark, Sweden, Norway, and Finland, and is managed by DANX Nordic.

#### **Scope**

The project group decided to scope the project in such a manner that the proposed area for improvement only applies to internal communication to the

IT-department and not external. In other words this means that customers will still have the same high degree of service and availability from all IT-staff whereas the internal communication should be handled in a fashion where the developer stress is reduced or avoided.

Technical factors

### **1.2.1 Critical factors**

#### **Critical success factors**

- The time spent on development must be increased by 10% after five years.

#### **Critical preconditions**

- It must be possible for the project group to observe how the flow of DANX is on a regular day.
- The project group can conduct interviews with relevant persons in order to obtain knowledge about DANX.

### **1.2.2 Assignment and Objective**

The IT-development department of DANX serves many purposes, some of which are crucial for delivery of the company's service.

However the department handles problems which are less relevant for the delivery of the service, which has potential to be optimized\* or removed from the responsibilities of the IT department.

Employees of the IT development department spend time on prioritizing, investigating and solving problems that are not related to IT development and customer service, which can be reduced.

How do the employees of the IT development department reduce the time spent on solving problems that are not related to IT development or customer service?

The problem is solved if the IT-department uses 15% less time on solving problems not related to IT-development or customer service one year after the solution has been deployed.

\*time spent of solving problem reduced.

## Methods

A solution to the problem is proposed based on research including interviews of certain employees and observations of activities relevant to the problem.

## SWOT

Strengths, Weaknesses, Opportunities, and Threats. Strengths and weaknesses are internal in the company, where opportunities and threats are external factors.

Strengths	Weaknesses
Lots of failover backup plans, resulting in 99.5% on-time delivery	Lots of internal programs.
Lots of PUDOs and FLS.	The IT-development department has to spend time on IT-support tasks
Opportunities	Threats
Go to other ELSA companies, and obtain know-how	Restricted access to customer IT-system APIs

As seen on the SWOT table the IT-development department has to spend time on IT-support tasks. This time could have been spent on developing integration for a client, which eventually could leave to more income.

### 1.2.3 Agreements and coordination

The project groups contact person in DANX is marketing manager Malene Vig Hjarnaa. she will be responsible for providing contact to other employees inside the company and making the required resources available. Malene can be contacted on +45 ..., during regular office hours, i.e. 0900-1600.

### 1.2.4 Stakeholders

The stakeholders of this design project is the IT department of DANX. They are the ones who will be immediately affected by the project.

### 1.2.5 Intermediate products

**Project charter**

**Strategic alignment report**

# Chapter 2

## Strategic alignment report

The following section will cover the strategic information on DANX. First it will cover the strategic goals of DANX, their target group, their value propositions, and the rest of the business canvas. Then the report will talk about the environment and make a SWOT and competitor analysis to find strong and weak sides of DANX, which will be analyzed later in the in-depth phase. Additionally it will describe the work domains and the different departments affected by our solution.

### 2.1 Business strategy

In this section business strategy of DANX is analyzed. It contains information about key values, goals and challenges. DANX has a general business strategy aimed at ensuring their customers get their spare parts fast and on time, and also ensure good support whenever there is a problem.

#### 2.1.1 Canvas

[Henvis til CANVAS]

Fast delivery, overnight delivery and guaranteed pre 7am. delivery are key values of DANX in order to keep their customers satisfied and keep growing[citation needed. Mail fra bob]. These values are only possible to their extent because of the key resources of DANX, Field Stock Locations and Pick-up/Drop-off locations, which greatly help DANX drivers to deliver fast and on time, and it allows customers to even pick up spare parts themselves. The two last mentioned values are what separates DANX from other logistics companies and gives them an edge in regards to companies mentioned in the customer segment. Companies which require fast and/or reliable delivery or just need external storage of spare parts are those that DANX focus on and will try to acquire.

DANX also has key values of fast and efficient IT support, as well as fast implementation of new customers into the IT systems of DANX, and even if new

customers have not yet been integrated into the IT systems of DANX, they will start delivering from the day the new customers' former contract expired. These values are more focused on good customer service which is an important resource for DANX. Satisfied customers helps DANX gain new customers with mouth to mouth between companies.

### 2.1.2 Goals

DANX has a general growth strategy ie. they want to gain 25-30 customers each year. Starting this year DANX is focusing on profit. Last year they had a profit of 10 million danish kroners, and a revenue of 250 million DKK. This year, It is expected that the revenue will increase to at least 300 million DKK and the profit to 20 million DKK. The overall goal is to have a revenue of at least 500 million DKK and a profit of eight to ten percent within 3-4 years.[Citation needed. Mail fra bob]

Since one of the key selling points of DANX is their pre 7 am delivery, they strive to deliver plus 99% of the packages before 7 am.

### 2.1.3 Values

Reliability, Equality, Quality, Flexibility, Creativity, Availability and Pride are the seven values that DANX operate with[citation needed. Mail fra Bob T].

**Reliability** DANX keeps their promises, correct their mistakes and proactively informs their customers.

**Equality** Customers, partners and colleagues are all equals and treated with the same respect.

**Quality** Customers are not taken for granted. 100% is strived for in everything that is done. This ensures that customers of DANX can live up to their customers high expectations.

**Flexibility** - All employees and partners are expected to have a flexible mindset.

**Creativity** As pioneers DANX has to think outside the box to create solutions for the needs of their customer. DANX is constantly looking for ways to improve.

**Availability** DANX ensures the availability of all their customers spare parts through each employee's personal care

**Pride** DANX takes pride in in everything they do. They are proud of their customers, company and their people.

### 2.1.4 Challenges and problems

It is cumbersome for the management of DANX to analyze the problems the customers request help with and how often a certain problem occurs[citation needed]. Furthermore it is difficult to collect information about a certain customer, e.g. how often they request help with a problem and what type of problems they need help with. No documentation for customer support means that it is impossible for DANX to track how many requests they receive, how fast they are resolved, and how much support the individual customer requests. This makes it hard to detect any weaknesses in the customer support which is crucial for the service level.

The structure of requests for help regarding internals at DANX is non existent, which leads to Lasse using up to several minutes identifying the actual problem[citation needed]. If the requests for help follows a predefined and clear structure, it would be easier to identify the actual problem.

DANX has no access to customer APIs\*, therefore they have to make multiple systems. This leads to a lot of manuals for the employees at DANX, and getting to know all the systems for a new employee can be a slow process\*. If DANX had access to customer APIs it would be easier to integrate the different systems into a single one.

Documentation of the work being done by the IT department is at an absolute minimum\* making it impossible for managers to check what is actually being done, if the work is being done on time etc. It can also be a problem if a system is developed and needs to be changed 3 months later. This can result in a complete re-written module for that system[6].

Neither the IT department nor the operational department have any KPIs\*, making it difficult to asses whether or not things are going as planned. It can also serve as a de-motivating factor to the employees as they do not know if they are doing good or bad. It also makes it hard to figure out why it is going good or bad in the individual department.

Many of the companies DANX are delivering spare parts to, have their main storage department in either Holland[1] or Germany[2]. When a customer orders a spare part with pre 7 am. delivery, the spare part is picked up at their storage department by DANX and shipped to where the customer needs it. If the spare part is going to another country than Denmark the part is transported by plane some of the way. This is a potential challenge because the plane can be delayed or have no room for cargo.

## 2.2 Environment

In this section the environment is analyzed. Firstly the competitors of DANX are investigated and secondly a SWOT analysis is conducted.

## 2.2.1 Competitor analysis

### Competitors

The main competitor of DANX is a special service within TNT called TNT innight. Just as DANX, TNT innight provides delivery of items within 7 am the following day. TNT also targets some of the same segments as DANX such as:

- The car industry where they deliver spare parts to manufacturers and repair shops.
- The medical industry where they make deliveries to hospitals
- Farmers during the harvest season

Some of the advantages TNT has:

- A larger company and brand
- Their own flight routes[7] from Bruxelles to Jönköping, Helsinki, Oslo, and Billund

A larger brand makes the company more trustworthy, and ease the process of getting new customers. This is a threat to DANX since DANX wants to get more customers as a part of their business goal.[citation needed.]

Their own flight routes are a major factor as this grants faster delivery time, and a better quality compared to DANX. If one of DANX flights are canceled the goods are likely to be delayed, whereas this will not happen to TNT.

Some of the disadvantages TNT has:

- A slower customer integration than DANX [Reference til Andreas tlf. samtale med TNT]

By not having the resources or know-how on how to integrate customers within 2-3 days, TNT may lose important customers with urgent needs.

Another new competitor is HIT[5][8]. This is a relatively new competitor which started September 1st 2013[9]. HIT provides the same service as DANX namely pre 7 am. delivery during the night.

One of HIT's advantages is they have a lot of companies to back them up such as posten.se and Postdanmark A/S. This increases the capital in the company which is very important especially in the beginning, to make sure that the infrastructure of the company can be setup correctly.

A disadvantage is that the company is newly started and thus does not have any good reputation which is important in this niche. Furthermore a newly started company will not have much experience compared to the existing ones on the market, which may lead to worse quality.

As HIT is a newly started company they should have easier establishing company strategies, KPIs, and goals compared to DANX, which lacks this information.

## Substitution

Another competitor with a possible substitutional service would be FedEx[10]. FedEx is offering a similar service on a national basis where you can send a national priority package. It will usually be delivered within 12 am the following work day, depending on where the package is going from and to. While this is not entirely the same service as DANX provide, some customers who have a need to send national packages may choose this option, since the time may be the same as DANX if they happen to be shipping at that time, and that the price may be slightly cheaper. The customer is able to check the time of delivery when they request the delivery on FedEx's website.

## New market entrants

There are already a few existing companies which in the future, might be interested in expanding their service and providing pre 7 am. delivery. Some of these companies are DHL and UPS.

This would require a lot of internal restructuring of DHL and UPS, but since the only major players are DANX and TNT it should be possible to gain some of the market share. The companies would also have to change their goals to aim for a lot higher quality when delivering pre 7 am. They also have advantages in form of their size, brand, and current customer base.

Instead of going after the customers of DANX, they could also be targeting new segments such as southern Europe. There may be complications entering this market though, since DANX is in the ELSA partnership, which means their partners operate in the southern part of Europe. OBS

### 2.2.2 SWOT

Strengths	Weaknesses
Customer integration within 3 days	No documentation on customer support requests
Lots of PUDOs and field stock locations	No documentation on customer support requests
Strong brand	No documentation on the work being done in the IT development department
Lots of small subcontractors	No KPIs or goals for the IT department
Direct support	No KPIs in the operation department
Opportunities	Threats
Gain work experience at ELSA partners	Flight routes



## **Strengths**

- Customer integration within 3 days is a lot better than their competitors. When a customer's previous contract expires they need a new one as soon as their old one expires, and if the other companies cannot provide that due to the IT solution not being ready on time, they will lose a customer to (possibly) DANX.
- PUDOs and field stock locations are expensive to establish. Fortunately DANX had a customer that was willing to pay for them to be set up. This means DANX now can offer this service to other customers as well in order to improve their service.
- Lots of small subcontractors means it is easy for DANX to remove and add new sub contractors in busy periods/seasons.
- Direct support is very important as a part of the quality and service DANX provides to their customers. This allows the customer to call or email Lasse directly with questions related to the integration between the IT systems of DANX and the IT systems of the customer.

## **Weaknesses**

- With new customers comes new systems, leading to the training of new employees taking longer time[citation needed. ref til tidligere]. Besides the training of new employees, the current employees must also learn the new systems. Increased training time and ongoing training of existing employees leads to increased cost when expanding.
- With the rapid expansion DANX is experiencing it is difficult to assess if their high quality service is retained, if they can not measure how well a certain department is performing.

## **Opportunities**

- DANX can gain free experience from their ELSA partners which they have not done yet\*. This is a way to learn more about alternate methods which may be better, and make them stand stronger on the northern market. [Reference til GERT's første interview hvor der snakkes om ELSA]

## **Threats**

- The lack of own flight routes means that DANX is dependant that the flights are not delayed, and that they accept their cargo. If they do not, the delivery will be delayed which causes bad reputation and quality.

## 2.3 Work Domains

DANX Nordic is situated in Vallensbæk, Denmark. The company has organisations in Sweden, Norway, Finland and Denmark.

Within each organisation there is a flat structure, where one regional director is sitting at the top, followed by an operations manager and a sales manager. At the bottom we have a number of contracted drivers responsible for the final delivery of the spare parts - these are independent of DANX but are hired to carry out their bidding.

The nordic branch is different from the regional organisations in the sense that it has an IT-department and a marketing department. These are used by all regional organisations and the centralisation of these aligns DANX different departments both in IT as well as marketing and customer relations.

For this project the important departments to consider are:

### 2.3.1 IT department

The IT department at DANX consists of Lasse, the head of IT development department, and three employees. The department develops IT systems, such as the TrackIT system, which is used in all of the departments of DANX and is developed by the IT department. They also integrate with customers systems. When DANX gets a new customer the IT department make sure that it will only take a few days before they have fully implemented the integration between IT systems of DANX and the customer's IT system, in order to properly create new contracts and shipments with the new customer. The department also develops any new software necessary or required by the operation or, if possible, requested by an employee.

They are also responsible for any internal and customer support related to software inside DANX, such as the TrackIT system and the software implemented in order to connect and communicate with customers systems. This support helps with using the systems and correct bugs when they occur. They give support by email and phone, and if it is customer support, the operational department will typically have received it first and read it through and then forwarded it to the it department afterwards if it is not something they can handle themselves.

The IT department is an important work domain to focus on as they have several inefficient work practices\* and the department is not following the growth that the rest of DANX as mentioned earlier all while the department is of vital importance to DANX regarding their competitive strengths.

The it department is an important work domain to focus on as they are the main support for customers and internal staff regarding complications with internal systems, so any solutions proposed by this project will be based upon the workflow of the it department and it will likely have some impact on the work processes currently in use.

Lasse is a key resource for DANX because he is responsible for integrating new customers. This is a very important activity for DANX and one of its key strengths, which means that it can conflict with the business goals to gain new customers. Seeing that Lasse is the only person able to integrate them, it either becomes a bottleneck for the business goals, or DANX could increase the time spent on creating the customer integration. Lowering the standards would mean DANX lost a strength compared to their competitors.

### **2.3.2 Operational department**

The head of the operational department is Gert Phillipsen, the Operations Manager.

The operations department is the main department, both in regards to internal coordination of packages as well as customer support requests. They propagate support requests when they are unable to fix the issues.

The control tower is part of the operational department and is always open. It serves as a reliable contact for their customers and ensures that any problems that may hinder delivery of spare parts are addressed.

Currently the operational department has no KPIs or business goals which is preventing the management, Gert, and the employees for knowing when the department is doing good or less good. This is a potential problem seeing that the operation department is representing DANX when handling customer issues.

Aside from the customer support the operation is also responsible for managing the different sub contractors, either when something goes wrong, or if a driver is insecure on how to proceed.

### **2.3.3 IT support department**

The IT support department of DANX consist of 2 employees. Their job is to maintain internal support regarding hardware problems. They share email with the IT development department.

### **2.3.4 Conclusion**

As the IT department is a significant bottleneck for DANX it might be worth analyzing in the in-depth analysis. The problem is that the fast integration and good customer support values of DANX are dependent on Lasse because he is the only person with full insight into the IT systems that supports these values.\* This means that as DANX grows the workload on Lasse will increase to a point where he can no longer keep up.

Unfortunately it is very difficult to train/employ an additional “Lasse”, since Lasse needs to spend time on this, that he does not have. It is not feasible to extend the

deadlines of Lasse's work as customers need it right away, and that this is one of main strengths of DANX.

# Chapter 3

## Solutions

In this chapter the suggested solutions to the problem are assessed.

### 3.1 Vision summaries

Our envisioned changes can be divided into two categories, where the first category is a tailored system and the second being an off-the shelf software solution. Short summaries of what functions each system can complete will be described in the following sections.

#### 3.1.1 Tailored system

The tailored system is envisioned in two different degrees, where the first one is a basic version that has a lesser impact on current work practices than the second. The second system has the addition of solutions to the problems and labelling to support queries that retrieve specific solutions. One of the stakeholders, Gert Philipsen, has expressed that he is interested in such an addition to the system[3]. Henceforth we shall refer to them as the basic tailored system and the extended tailored system.

#### 3.1.2 Off-the-shelf system

The off-the shelf solution is a system named Kayako [?]. It is a highly customizable software solution, which is used widely by organisations [?].

More detail on both systems will be provided in this chapter. First we will describe all the common aspects the systems have and later we will go into detail with each system.

## 3.2 Requirements

The next section will describe what requirements are needed to alleviate the issues which we have identified in the preliminary studies. These requirements are common for all the solutions and are needed to solve the problem.

### High-level requirements

#### AR1

The system must allow some users to evaluate customer support requests, such that the customer support performance of employees can be assessed.

#### AR2

The system must allow some of its users to view unfinished customer support requests.

#### AR3

The system must not change the way customers communicate with DANX.

### Requirements

#### R1

The system must allow its users to create a ticket that includes information about:

- The person responsible for solving the problem or initially responsible for propagating the problem.
- The customer and contact information, including preferable contact method.
- Description of the problem and attached emails and/or files that relates to the problem.
- Time and date of creation.

#### R2

The system must allow its users to edit the following information about a ticket:

- The description of a problem and attached files and/or email.
- The customer, contact information and preferable contact method.
- The person or department responsible for solving or propagating the problem.

- Whether it is solved or not.

### **R3**

When a problem has been propagated to a department or a person, the related persons must be notified.

### **R4**

The system must allow its users to browse tickets based on search parameters that are relevant to the evaluation of the customer support.

### **R5**

The system must allow its users to create customer and supporter entities, such that when a ticket is created, an entity can be selected to avoid the need to write all of the information about a supporter or a customer.

## **3.3 Basic tailored system**

### **3.3.1 Changes in work practices**

The management at DANX will, with the proposed ticket system, be able to generate reports based on different criteria in order to evaluate the employees and work flow. To make such reports useful the management must act based on the results. In other words they must find time to optimize when a potential problem is discovered, or else the system has no advantages.

The employees providing the customer support has to undergo several organisational changes. The most significant change in practice is ticket creation when a customer reports a problem. This is only necessary for employees handling the customer communication. This is usually the employees of the control tower, but it can be others, like the head of the IT development department.(reference til appendix indepth current work practices) The receiver of the problem report must specify the customer and describe the problem, and instead of using email or phone to propagate the problem, he or she must specify a department to propagate it to. The employees of a department must check for customer support requests because someone has to handle the request when it is propagated to a department.(Dette skal skrives videre når der er blevet snakket med gert) Any employee providing customer support must edit a ticket if the information is erroneous or new information is acquired about the problem. Employees solving problems must mark a ticket solved after they have provided a solution to the problem.

### **3.3.2 Employee qualification**

The employees that are going to use the new system will require some new qualifications. First and foremost, all employees who do customer support, should be

able to use the new system's functionality. In order to use it, employees have to write tickets which requires some specific qualifications. An employee must be able to identify right customer which the ticket is regarding. The employee must be able to attach relevant e-mails and files to the ticket in order to keep all relevant data in the system. This follows an ability to write a proper description of the problem in order to give everyone who might read it a good understanding of what problem this ticket contains. The employees should also be able to identify the responsibilities of the 2 different IT departments in order to be able to propagate the tickets properly. The management department of danx should be able to use the proposed IT system to complete task which can be used to get performance statistic for all of DANX customer support, the individual departments performance or the performance of specific employees. It should also be possible to investigate which customers require most support. In order to do this they should be able to use search filters in the program to help them find the data required. These filters should include the functionality eg. to find response times for an employee, find out which tickets are being propagated from the IT department to IT support and vice versa, find tickets based on timeframe, response status for companies and the percentage of tickets which a department have handled/propagated.

## **3.4 Extended tailored system**

This section contains additional information about the extended system. The requirements, changes in work practices and qualifications described above also applies to this system.

### **3.4.1 Additional requirements**

#### **R6**

The system must allow its users to attach a solution to the ticket, and a label that identifies the problem. The solution must be able to include both text, files and emails.

#### **R7**

The system must allow its users to browse solutions based on search parameters, that includes the label that identifies the problem.

### **3.4.2 Changes in work practices**

Employees that provide customer support can with the addition of the extended system find solutions to problems, which changes the workflow. Instead of propagating or solving the problem directly, the employee might search for solutions to problems first, and reflect in the problem description that such a search has been



done, if it is propagated.

A new practice that is introduced is that the employee has to fill out when an issue has been resolved. When the issue is resolved the employee simply finds the request and fills in the solution to the problem.

### **3.4.3 Employee qualification**

The employees that solve customer problems and therefore close tickets must acquire some additional qualifications to use the extended system. If the problem is not correctly labeled, they must provide the correct label to make search for the solution easier. This requires that the employee knows the labels that relate to the problem that they are solving. The employee must document the solution in the form of text and possibly references to files and emails in such a way that another employee with the same problem can solve a similar problem from the description. All users of the system must be able to use the functionality to search for solutions, and have a common understanding of the problems that each label covers.

The employees that are going to use the new system will require some new qualifications. First and foremost, all employees who do customer support, should be able to use the new system's functionality. In order to use it, employees have to write tickets which requires some specific qualifications. An employee must be able to identify right customer which the ticket is regarding. The employee must be able to attach relevant e-mails and files to the ticket in order to keep all relevant data in the system. This follows an ability to write a proper description of the problem in order to give everyone who might read it a good understanding of what problem this ticket contains. The employees should also be able to identify the responsibilities of the 2 different IT departments in order to be able to propagate the tickets properly. The management department of danx should be able to use the proposed IT system to complete task which can be used to get performance statistic for all of DANX customer support, the individual departments performance or the performance of specific employees. It should also be possible to investigate which customers require most support. In order to do this they should be able to use search filters in the program to help them find the data required. These filters should include the functionality eg. to find response times for an employee, find out which tickets are being propagated from the IT department to IT support and vice versa, find tickets based on timeframe, response status for companies and the percentage of tickets which a department have handled/propagated.

## **3.5 Off-the-shelf system**

The off-the-shelf solution, Kayako[11], can be used as the basic or extended solution, because its functionality covers all the requirements described in the previous sections. Here we will not account for the SaaS solution with a monthly (or yearly)

payment.

The off-the-shelf solution described in this section is found on <http://www.kayako.com/>. This product is made for providing support to an end user, but can easily be configured to work as an internal report system without the need for additional modules or code.

### **3.5.1 Changes in work practices**

The changes in work practices are the same as for the extended or basic tailored system depending on how it is used.

### **3.5.2 Employee qualification**

The off-the-shelf solution distinguishes itself from the tailored solutions in the sense that more employee training is required. This is due to the complexity of the system. Employees might have a hard time identifying what is relevant to their task, when its cluttered with a lot of unnecessary items. [?]

The reports generated by the system must be coded by someone from the IT development department, using a “kayako query language”. This language will needed to be learned in order to update/add the reports.

A person should also be responsible for configuring the solution once it is bought. This is not a service kayako offers [?]. This can be a hideous task due to vast amount of configurable options in the solution.

## **3.6 Advantages**

The management at DANX will, with the proposed ticket system, be able to generate reports based on different criteria in order to evaluate the employees and work flow. The reports can for example be used to evaluate the following points:

- How fast the individual employees answer different types of problems. This enables for ongoing training of the employees.
- Which problems an employee is able to solve. Also enables for ongoing training of employees and ultimately makes employees able to solve instead of propagate problems.
- Detect if the employees propagate the tickets to the correct departments and correct the employees if they do not.
- Find unresolved tickets, in order to fix the problem within an acceptable timeframe. This should increase customer satisfaction as well as response times.

The customer support KPIs can be used to make sale to potential customers more likely because some of them demand documentation for customer support.[4]

### **3.6.1 Specific for extended tailored system**

If the advanced ticket system is chosen, it is, in addition to the simple ticket system, possible to evaluate the following points:

- Detect how fast a certain type of problem, determined by a tag in the ticket system, is answered.
- Investigate where certain types of problems are solved, thereby possibly cutting unnecessary links away from the propagation chain.
- Detect if an employee is unable to fix a problem that they are supposed to be able to solve.
- Find a solution to a problem already solved and thereby save time.

### **3.6.2 Specific for off-the-shelf**

In addition to the extended tailored system the off-the-shelf solution has a significant benefit, namely updates. The first year of updates are free, and each additional year is 40

## **3.7 Disadvantages**

Besides the advantages, the ticket system will inevitably have some disadvantages. The disadvantages include but is not limited to:

### **3.7.1 Common for all system**

- Employees must learn to use the system.
- It takes extra time to create and update the tickets.

### **3.7.2 Specific for extended tailored system**

This disadvantage is in addition to the ones described above.

The employees who solves the problem must document the solution to the problem. This can require additional time for important employees. The time of employees that solve the most problems of a department probably provides more value per hour for DANX, and because it is the solver of the problem that has to document it, it can be time of higher value that is spent.

### 3.7.3 Specific for off-the-shelf system

The following disadvantage applies for the off-the-shelf system, in addition to the disadvantages described above. Learning to use the system might take longer time because the additional functionality of Kayako makes the UI more cluttered and less user friendly.

If DANX requires additional functionality at some point the system may not support this, and DANX is dependant on the provider to implement this.

## 3.8 Implementation strategy

This section describes the recommended implementation strategy. The purpose of this is to have a structured approach for developing the proposed system, make sure it meets the requirements and roll out the system in DANX. Finding a developer of the new system will be the first thing to do, if a tailored solution is chosen. In-house development is an option, but given that the IT department has enough work as it is, it would not be appropriate or clever to assign them with a completely new system to develop. During the development of the new system, it is important to continuously ensure that it is the right system that is being developed. This means that some DANX employees are going to spend time on evaluating the new system, via mockups and/or prototypes and confirm that it is heading in the right direction. This is important to do, in order to make sure that the system meets the requirements and is understandable to the DANX employees. When the system is developed and about to be rolled out, there are several approaches to be considered. Firstly it is possible to just make an all out installment of the system. This means that over a small time gap, all employees who might use the system, should have it available at their workstation and start using it from that moment. This has the advantage of being incredibly fast and easy, but it will increase the chances that the system will fail.

Another way to roll out the system is to do it incrementally. Choose a sample of employees who are going to use the system and start by giving them the system and incrementally increase the amount of employees who are using the system until everybody has it. This has the advantage that only some employees will need support to get started and then as others will need support, they can receive it from their colleagues who have already used it for some time. This has the disadvantage of being slow and creating several workflows. During the time where only some employees use the system, employees with and without the system will have to do something different in their work practices, this will trouble communication in and between departments. Given that it is relatively few employees who are going to employ the system and DANX has an anarchistic approach to management, the all-out solution will be the ideal choice for deploying this system. The risk of the system failing is not so big under these circumstances. Before the deployment of the system, all employees will have to receive training in how to use the system,

as described in section 3.4.3. These training sessions should be planned as close to the deployment of the system, in order to prevent employees from forgetting too much before they start using the system. At last, all source code of the new system should be handed over to the IT department of DANX, in order for them to be able to maintain it and for DANX not to be bound to the developers of the system any further.

In regards to staff training, the extent will be the affected departments. The control tower, the operation and the IT department.

There are two ways to conduct the training. Either a full seminar where all the staff of the affected departments is attending or train a few employees in every department and have them train the others.

Since DANX has a 24/7 hour hotline(control tower), its not sustainable to pull this department out for training.

## 3.9 Finances

Sovsen starter her (barely)

//Advantages/disadvantages when letting control tower identify and handle requests(and logging them) Implementation wise the tickets can be created at two departments in DANX, either at the control tower which is the first place customers usually call or at the operations department.

Advantages when creating tickets at the control tower is that they are able to capture all information provided by the customer. If they were to listen to everything, and then call the operations department, which then created the ticket, some of the information might be lost in the process.

# Bibliography

- [1] Malene(0 - 21:03), Gert(21:03 - 1:13:20) & Lasse(1:13:20 - slut).3ga - Time 24:47 DANX henter i holland og leverer i danmark inden klokken 7
- [2] Malene(0 - 21:03), Gert(21:03 - 1:13:20) & Lasse(1:13:20 - slut).3ga - Time 43:00 Henter i Salzgitter syd for hannover 15:30 og leverer nord for Stockholm inden 7 næste morgen
- [3] Gert #2 2-2.3ga - Time 02:17  
*[...], så skal man altså også have løsningsdelen med, hvornår det er løst og sådan, før det har en værdi der. Og hvis man ikke gør det, så føler jeg at det mister meget af sin værdi.*
- [4] *“Nogle potentielle kunder vil gerne se support KPIer.”*
- [5] Malene(0 - 21:03), Gert(21:03 - 1:13:20) & Lasse(1:13:20 - slut).3ga - Time 09:23
- [6] Lahib.3ga - Time 13:00
- [7] [http://www.tnt.com/express/da\\_dk/site/home/vores\\_services/TNT\\_innight.html](http://www.tnt.com/express/da_dk/site/home/vores_services/TNT_innight.html)
- [8] <http://www.postnordlogistics.dk/da/Sider/hit.aspx>
- [9] <http://www.posten.se/en/Logistics/InNight/Pages/home.aspx>
- [10] <http://www.fedex.com/dk/shipping-services/domestic/>
- [11] <http://www.kayako.com/>
- [12] <http://www.kayako.com/company/customers/>