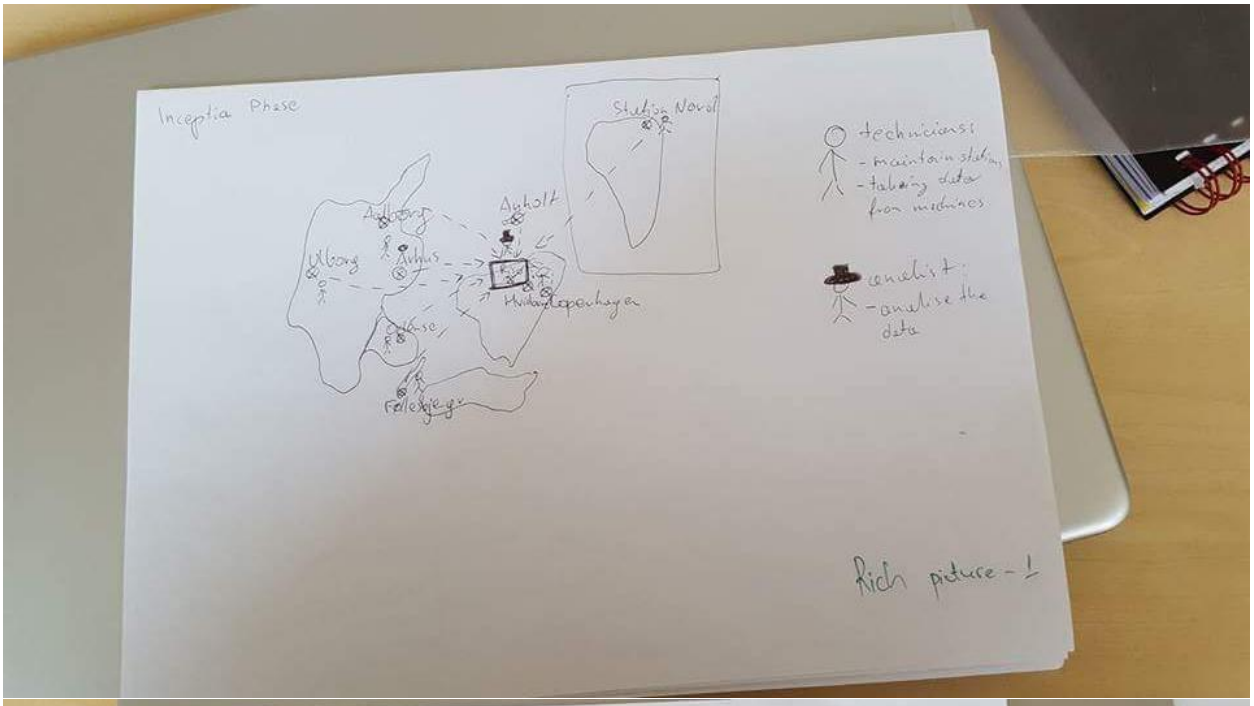
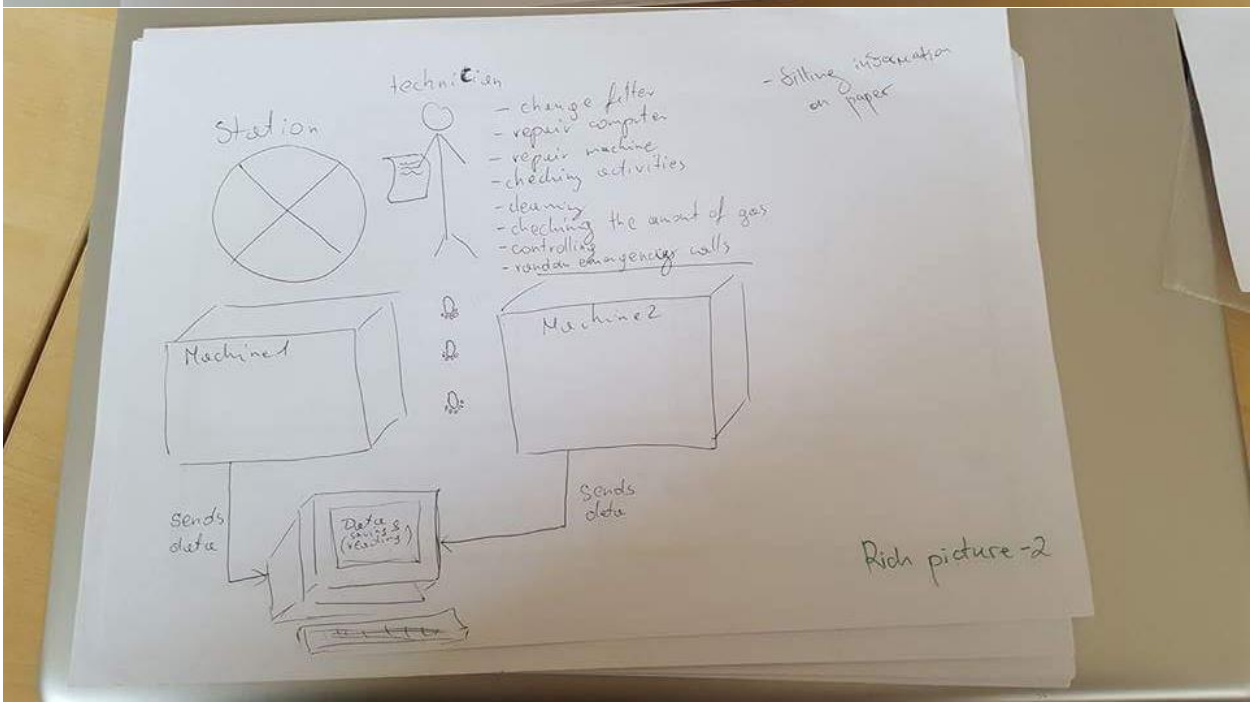
BUSINESS PART



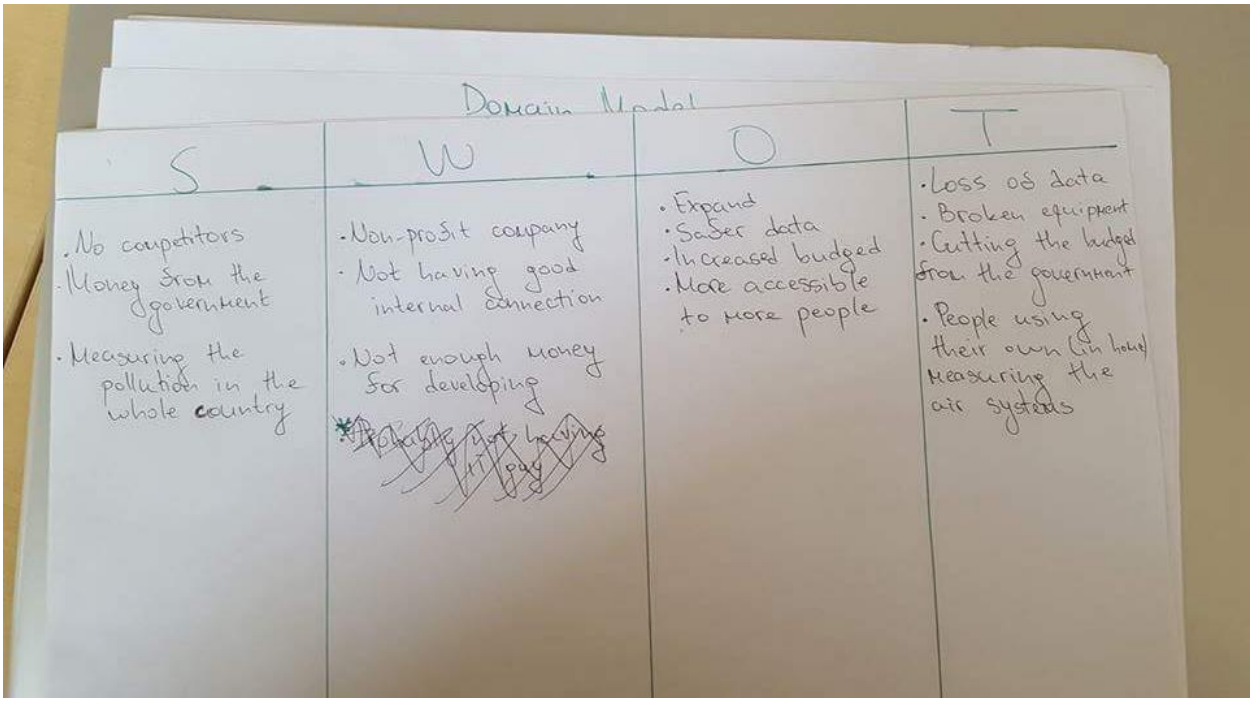


Rich Picture Description

Arhus university, Department of Environmental Science is responsible for running 15 air measurement stations in Denmark and Greenland. The stations are located in different measurement buildings along roads and in public buildings.

On the stations, there are different air measurement monitors and one Windows computer used for data acquisition and internet access.

Technicians service the stations. They visit the stations once a week or once a month. Technicians usually make some maintenance work and do some registration and leave some message if there is a problem. In some cases, they need to register values from reading of flow, temperature, and they need to register if there is a problem. At the end he saved the information and finalized the job.



SWOT

A type of analyses that help is place our business, company or product among others. SWOT stands for Strengths, Weaknesses, Opportunities and Threats.

The first two are usually seen as internal to the company. The strength represents the advantages, unique service, something that's done better than by other competitive companies. On the contrary, the weaknesses are the drawbacks of the company, something that we should aim to improve.

Strengths:

1. The only system that measures the air pollution in Denmark, no competitors
2. Measuring and analyzing the data for 20 years – an enormous data base of air measurement data
3. Receives money from the government and funds – a constant amount which means it has a stable resource

Weaknesses:

1. Non-profit company
2. As it gets money only from the government, it doesn't have extra resources for development
3. No knowledge about up-to-date Windows programming

4. No efficient system for managing the instruments maintenance – time consuming

Opportunities and Threads are factors that are considered as external. The opportunities are potential or future advantages of our business. Factors that would improve our services. On the other hand, threats may have a negative impact. Threats may be new technology, competitors or other changes.

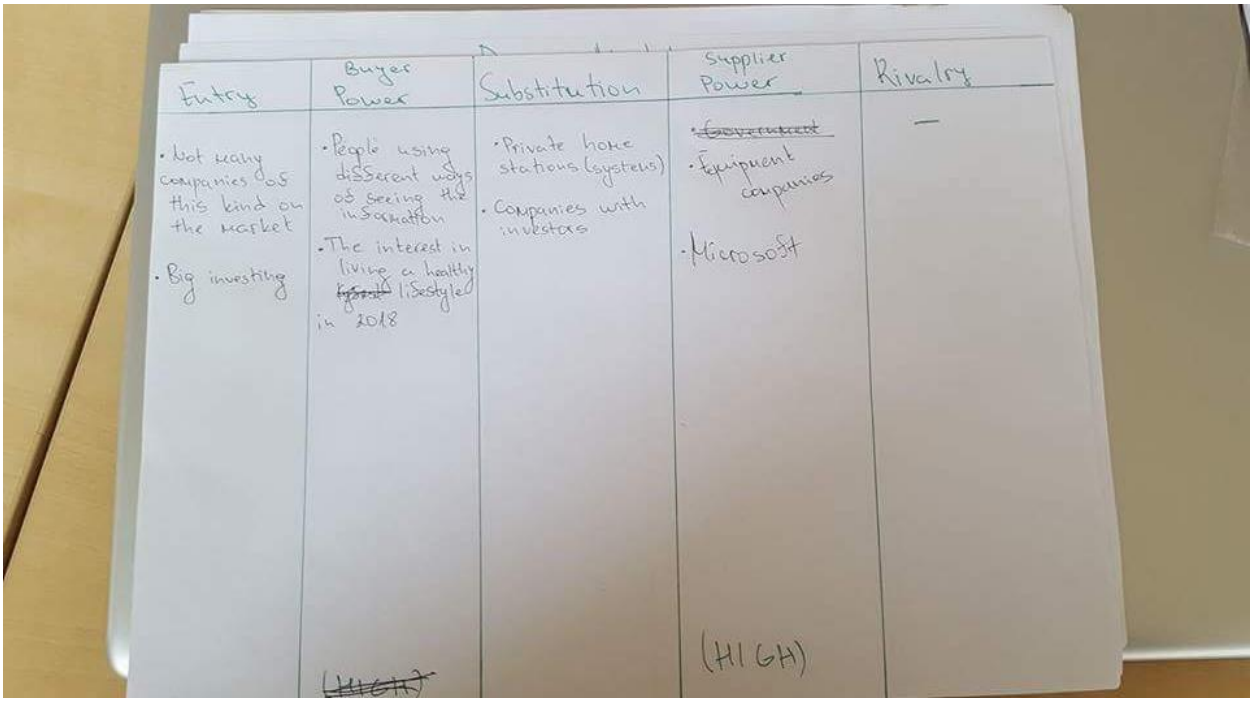
Opportunities:

1. Using students up-to-date knowledge about programming for this application
2. Use a program that would make their work reliable and faster
3. Make the data more accessible for the people – weather forecasts on the TV, radio emissions, newspapers etc.

Threats:

1. A fragile system that will result in loss of data
2. A false data gathered from a broken equipment at the stations
3. A shortage of money from the government
4. Another private companies – if the government decides to sell the already stored data

Overall, this analysis help us to evaluate and improve our product.



Porter's Five Forces

In case of getting the knowledge of important factors that may have an influence on the company we use Five Forces analysis. It can help us to understand the overview of the market that company is in, about competitors, if there are some and about the position on this market.

We can use Five Forces to learn how powerful is particular segment and about the balance of the business.

<u>Threat of entry:</u>

- Not many companies of this kind on the market
- Big investing

<u>Buyer power:</u>

- People using different ways of seeing the information
- The interest in living in a healthy lifestyle

<u>Threat of substitution:</u>

- Private home stations (systems)
- Companies with investors

<u>Supplier power:</u>

- Equipment companies

- Microsoft

Rivalry:

- No competitors

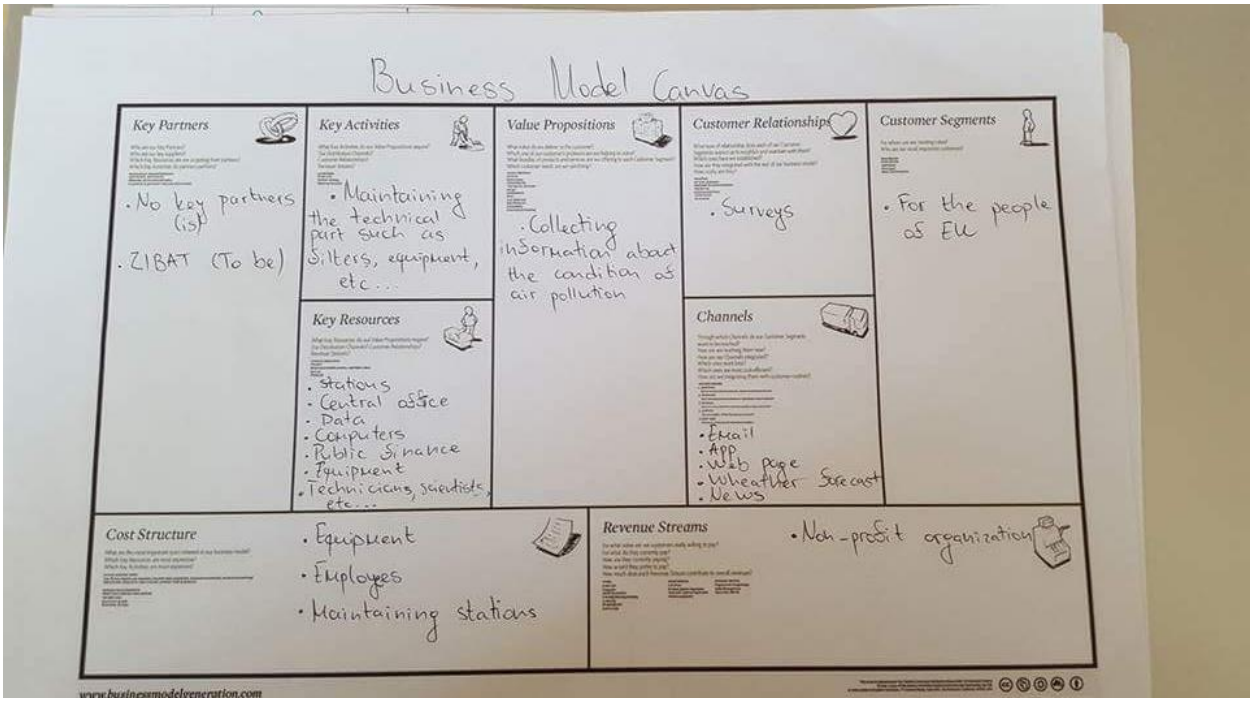
On one hand there are not many companies on this kind of market, but on the other way if someone would like to enter then it would involve big amounts of finances. But in overall threat of entry is low.

Nowadays people like to have a healthy lifestyle. Living in area that pollution of the air is low is a great idea and lots of people like to know about their environment. They can easily get those information from e. g. weather forecasts or different kind of applications that gain the information from company's stations. Now people seems to like to invest in such systems due to their healthy lifestyle.

Next segment shows what kind of substitution the company could have. Due to nowadays' boom for a heath life, people are making their own little stations in their own areas such gardens, just to have the best information. Such movement can cause loss of will to get those information from company's researches. Other thread could be a company with investors. More money, better equipment can influence people's choice of from they gain those information.

Even though the company does not have any special partners, they have few very important suppliers such companies from where they can get their equipment and Microsoft, because of the application where everyone can easily access stations' information about the pollution.

In such a small market, a non-profit company run by government has no competitors, so rivalry segment is low.



Business Model Canvas

We created the Business Model Canvas for our company to show how it works by using all nine segments that are connected and work perfectly together. We did it by talking and discussing with each order every aspect of the work flow of the company. We managed to reduce the information to the point that is going to be easy for everybody to understand and visualize the goals and strategies behind our company and product.

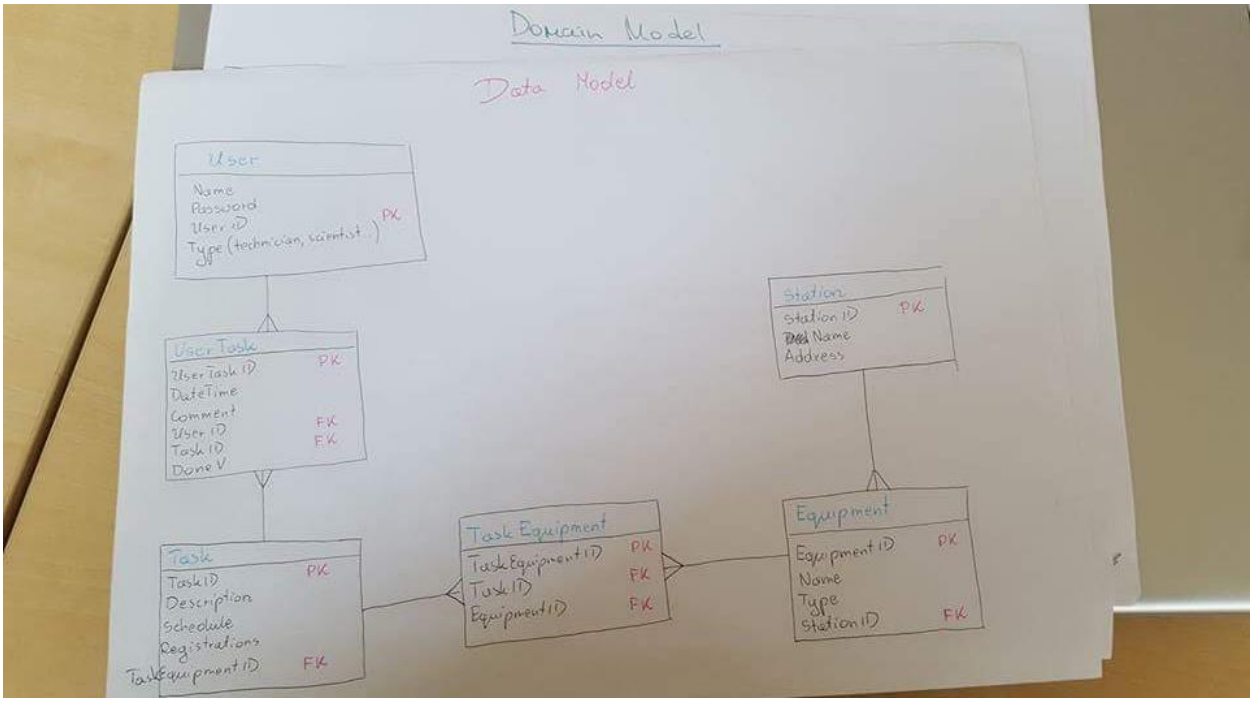
1. **Customer segment** – The key to create an effective and successful business model is to figure out who is our targeted customer. There are different types of customers in the market that have specific needs and characteristics. Our company provides services to the people of the European Union. This means that our targeted customers is the Mass Market because this displays a wide view of potential clients. Nowadays the majority of people are trying to live a healthier life and because of that more and more people are using different ways to get information about the environment around them. Our company, for example, provides a way to see what the air on every day basis contains around you.
2. **Customer relationship** – For every business is of a significant matter to have a great relationship with their customers. It's very important for a company to decide what type of relationship to build with their customers. The customers in our company are involved via surveys which are helpful for the future development of the company and our product.
3. **Value proposition** – We are meeting our customer needs by providing various elements such as newness and performance. This is the main difference between us and our competitors. We are providing to our customers' efficiency by collecting information

about the condition of the air – coarse and fine particles in the air and keeping this information up to date with the help of our technicians and scientist who are making this possible. Furthermore, we are making sure that all of the collected information is accurate and updated on time.

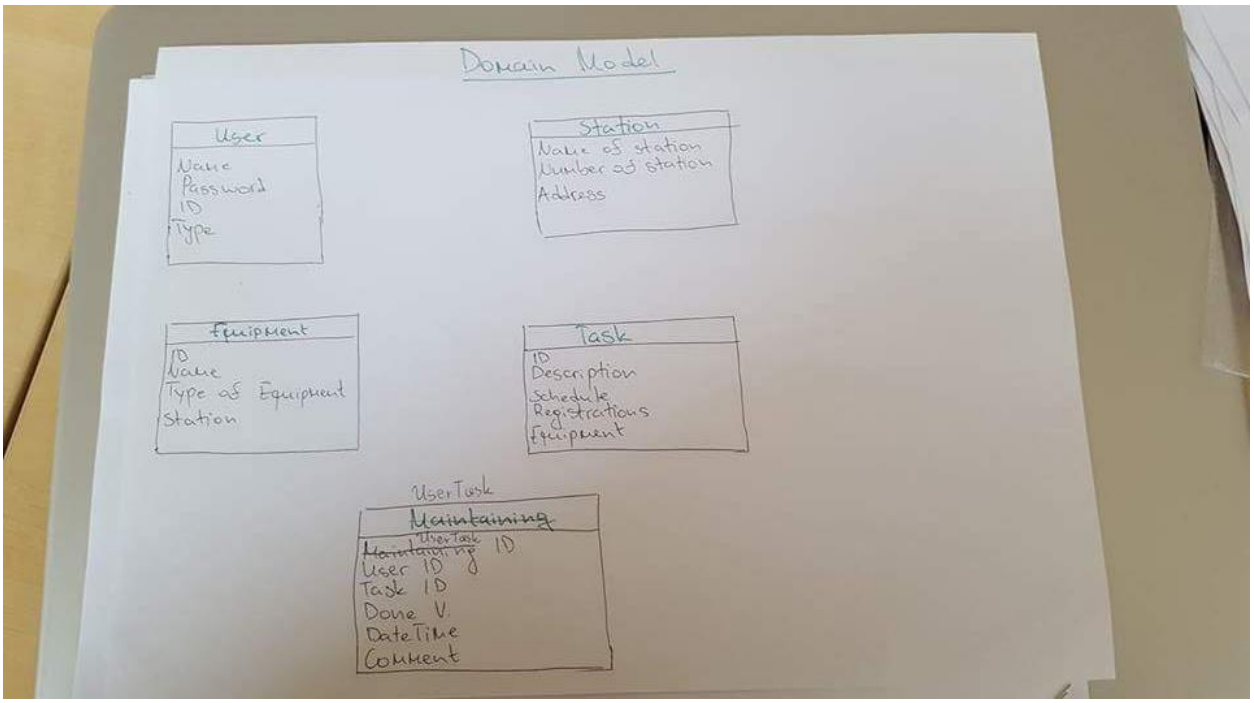
4. **Channels** – Every successful company delivers their value propositions to their targeted customer through different channels. All effective channels are fast, efficient and cost effective. Moreover, a company can use its own channels or their partner channels as long as the channels meet those requirements. StationLog is used up to date channels which are effective and tested channels such as emails, our application and web page, different sources of information like weather forecast and news which are available both on the Internet and various different TV channels. With them our company is accessible everywhere and this way we are convinced that our researches and information reach everyone.
5. **Key partners** – This is one of the most significant segments in order to create a business to work. By having a partner and creating buyer-supplier relationships, a company can focus easily on the core activities of the company. Also, it could reduce costs. StationLog will not have any partners for now, but in the future ZIBAT could become their partner. With the help of ZIBAT and their smart, hard-working and goal-oriented students, StationLog will have a better developed system for both customers and working team. ZIBAT will provide a solution to main problems and needs which is going to be highly used in the near future.
6. **Key activities –** A company must do a lot of things in order to work perfectly. For example, StationLog is using three significant segments in order to make this happen – production, problem solving and a platform. All of those are related between each other by one thing – the main activity of StationLog – maintain the technical parts of the stations. First of all, everything starts with a platform – continuously developing the equipment in the stations in order to get better and accurate results faster about the air. Secondly, this is where the problem solving comes – in the maintaining of stations is included changing the filters and many other tasks that the technicians should complete to keep the work flow going. Additionally, it comes the production – this is the final results that are delivered to the customers in the form of information in which is included all the previous processes and additional information.
7. **Key resources –** Those resources are needed to create value for the customer. StationLog is using all types of resources – **physical, intellectual, human and financial**. Physical resources are in the form of stations, central office and computers, without them the company could not exist. Intellectual in the form of future partnership with ZIBAT and the data that StationLog provides. Human in the form of technicians who maintain all the stations and equipment and of course scientists who analyze the collected data. Finally, the financing in the form of public finance and more specifically money provided from the government since StationLog in non-profitable company.

8. **Cost structure –** Another core segment in the Business Model Canvas because describes the most important monetary consequences while operating. This is the money that StationLog spends to work. For example, StationLog spends money on employees such as paying their salary and making sure that they have a big enough team of people, for equipment because StationLog depends a lot on their equipment to collect data. Last but not least, maintaining the stations because as we said this is the core part of StationLog's work.
9. **Revenue Streams –** This is the way that companies gain income from the customer segment. Since StationLog in non-profitable organization, there is no income. All of the company's money goes for our cost structure.

DATA MODEL



DOMAIN MODEL



<StationLog>
Vision

Usage note: There is procedural guidance within this template that appears in a style named InfoBlue. This style has a hidden font attribute allowing you to toggle whether it is visible or hidden in this template. Use the Word menu Tools→Options→View→Hidden Text checkbox to toggle this setting. A similar option exists for printing Tools→Options→Print.

1. Introduction

Our team is developing an application for the Department of Environmental Science at Aarhus University. It should be interactive and reliable. Its main goal is to help the company to manage the information gathered from the technicians – performed task, technicians name, time etc. Now they are writing down notes and then log them at the end of the day in an Excel table which may result in misinformation or loss of data. Moreover, they should know which task should be performed every time. The application aims to give them a list with to-do tasks for the specific day and station so that there is no confusion.

2. Positioning

2.1 Problem Statement

[Technicians have a problem using their current program because it is disorganized, slow and time-consuming. We are going to enhance the actual program for more practical, user-experience friendly and efficient.]

The problem of	*Maintaining the tasks*
affects	*Technicians*
the impact of which is	*Slow work flow, time-consuming and disorganized*
a successful solution would be	*Organized application*

2.2 Product Position Statement

[*We are designing a product for technicians who supervise and maintain the stations. The (product Name) is a Windows App that is going to provide a complete solution for handling and checking technician`s tasks unlike the actual application that they are using. Our product will be quicker, user-experience friendlier, and with a more stable data storage.*

For	*Technicians and scientists*
Who	*Supervise the stations and maintain them*
The (Stationlog system)	*Is a inefficient system*
That	*Is not fully-developed and too time-consuming*
Unlike	*Properly working application*
Our product	*Will provide a better solution to this*

[*It is necessary to upgrade the actual system in order consume less time and mental energy for the technicians and provide a better platform where they can visualize the progress of their job.*

.]

3. Stakeholder Descriptions

3.1 Stakeholder Summary

Name	Description	Responsibilities
Technicians	*People who maintain the stations*	*The technicians are in charge of changing the filters, monitor and other equipment, calibration of flow and different measurements and change of gas bottles. Furthermore, they have more emergency responsibilities when occur when there is power outage or monitor breakdowns. Moreover, they have to register visits.*
Scientists	*People who take the data and analyze it.*	*The scientists are the people who do the quality control of data.*

3.2 User Environment

[Detail the working environment of the target user. Here are some suggestions:

Number of people involved in completing the task? Is this changing?

How long is a task cycle? Amount of time spent in each activity? Is this changing?

Any unique environmental constraints: mobile, outdoors, in-flight, and so on?

Which system platforms are in use today? Future platforms?

What other applications are in use? Does your application need to integrate with them?

This is where extracts from the Business Model could be included to outline the task and roles involved, and so on.]

The technicians normally works alone. He visit the station that has to be supervised and proceed to execute the tasks that he has in his task-list. The amount of time spent in each activity is relative. Once he has done all the activities he will proceed to register the actual status, provide some extra information in messages and save the information in order to let it be accessible from any other peer of the network.

4. Product Overview

4.1 Needs and Features

[Avoid design. Keep feature descriptions at a general level. Focus on capabilities needed and why (not how) they should be implemented. Capture the stakeholder priority and planned release for each feature.

The product will be able to sort the tasks by date and station, register them as done, writing some additional messages, saving the data, synchronizing with the database and provide accessibility from any point of the network.]

Need	Priority	Features	Planned Release
Sorting	Very high		
Registration	Very high		
Adding messages	Very high		
Saving data	Very high		
Synchronizing	Medium		
Accessibility	High		

5. Other Product Requirements

[At a high level, list applicable standards, hardware, or platform requirements; performance requirements; and environmental requirements.

Define the quality ranges for performance, robustness, fault tolerance, usability, and similar characteristics that are not captured in the Feature Set.

*Note any design constraints, external constraints, assumptions or other dependencies that, if changed, will alter the **Vision** document. For example, an assumption may state that a specific operating system will be available for the hardware designated for the software product. If the operating system is not available, the **Vision** document will need to change.*

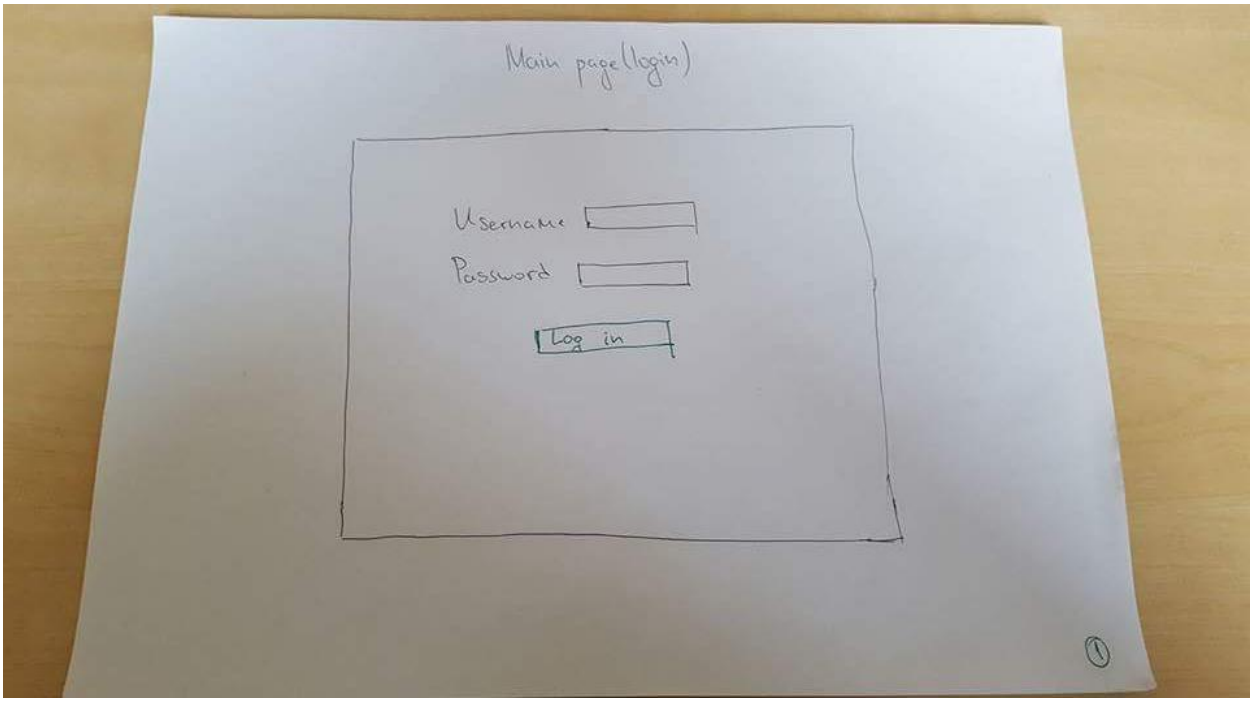
Define any specific documentation requirements, including user manuals, online help, installation, labeling, and packaging requirements.

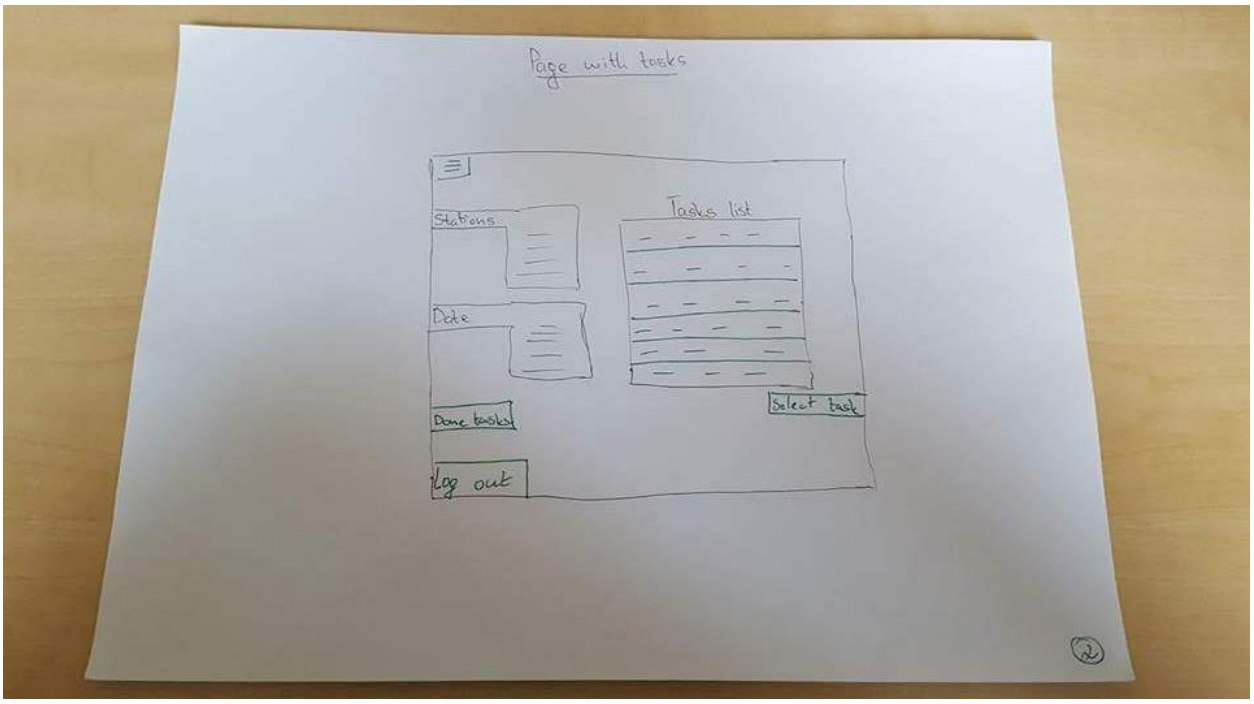
Define the priority of these other product requirements. Include, if useful, attributes such as stability, benefit, effort, and risk.

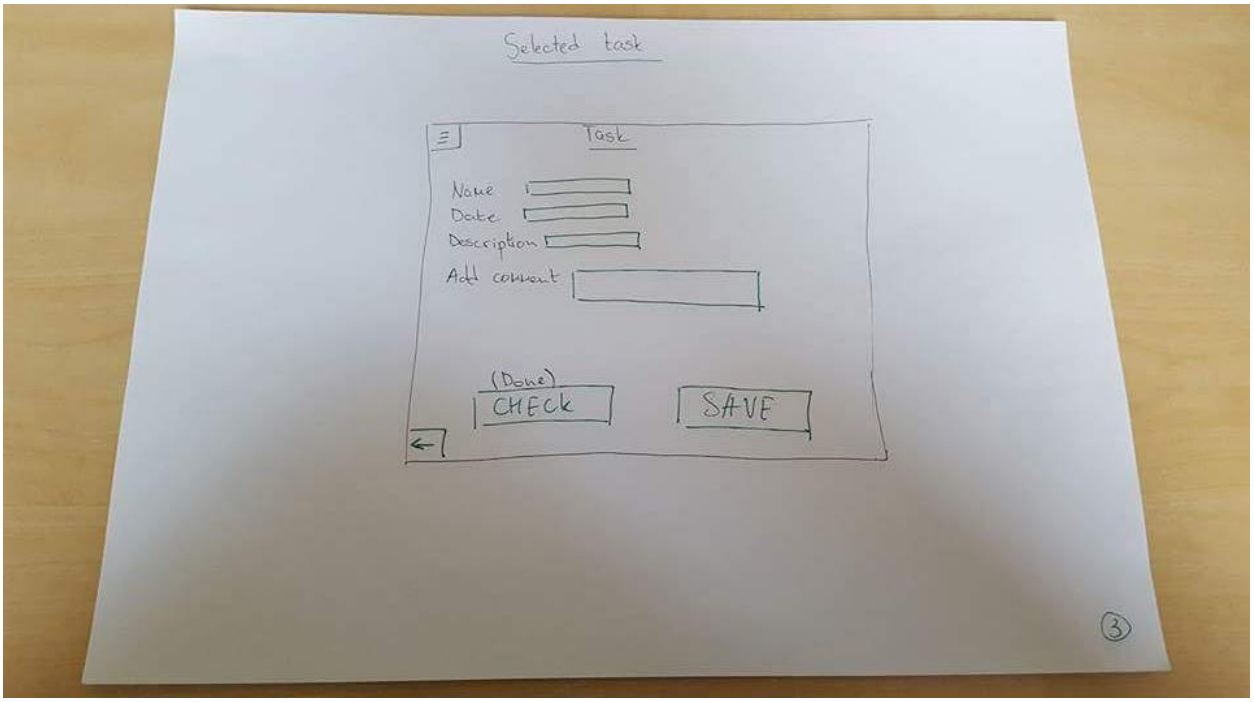
The product will be a Windows App that can be run in (which platforms can be run?). The Database will be hosted by Microsoft Azure.]

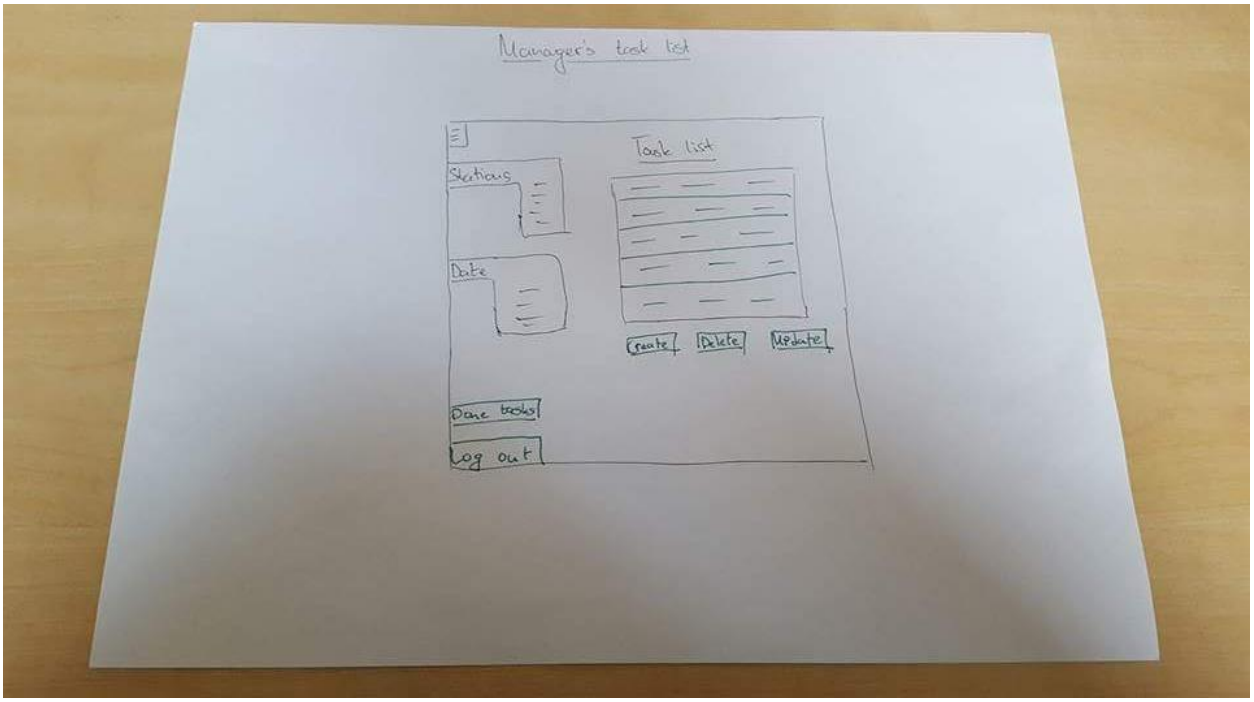
Requirement	Priority	Planned Release
Windows available	Very high	----
Storing the data	Very high	

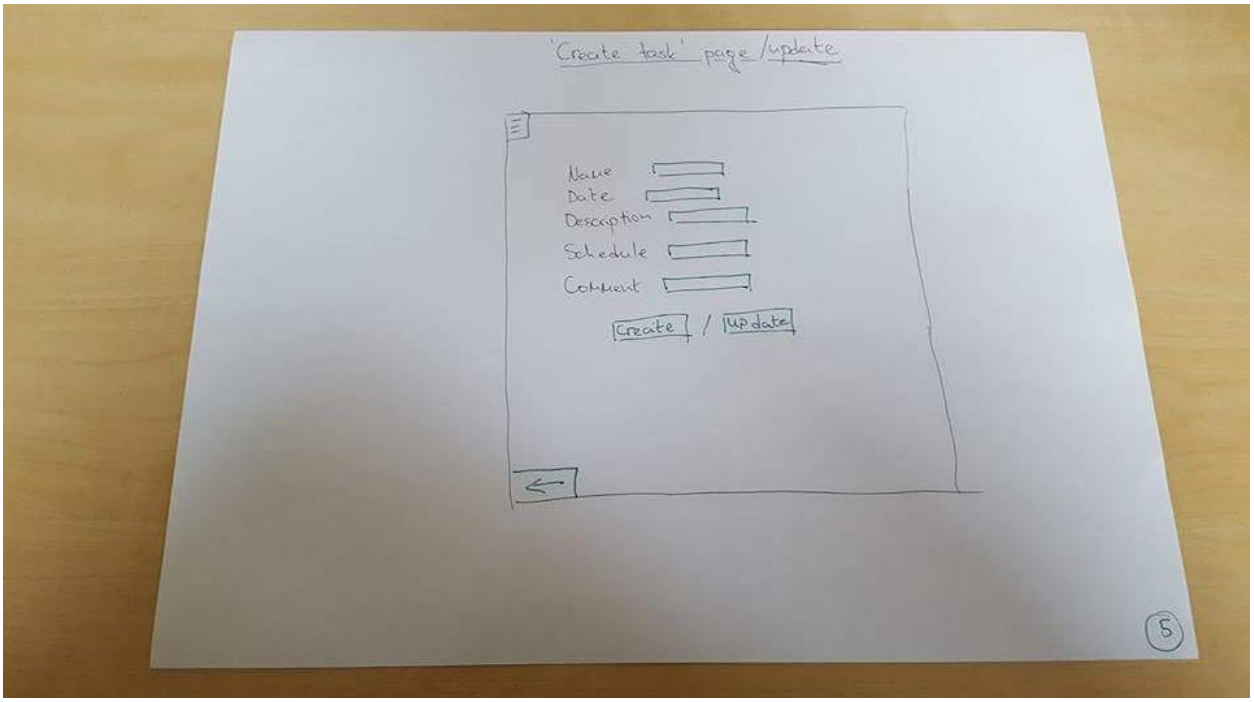
UI DESIGN PROTOTYPE(PAPER)






Selected task
Task
Name
Date
Description
Add comment
(Done)
CHECK
SAVE
3


Manager's task list
Task list
Sections
Date
Create
Delete
Update
Done tasks
Log out


'Create task' page /update
Name
Date
Description
Schedule
Comment
Create / Update
5