Analysis

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Introduction:

The food production industry in the Netherlands has always been a big part of the country. It not only provided them with good income, but also gave them a name as the second largest food producing country in the world. The Netherlands does not have that much landmass. Due to this, they opted to build large greenhouses as an efficient production method. These greenhouses are met with some problems, because their systems are quite old and they do not have the proper manuals to be dealing with these systems. Both with production and troubleshooting. Aside from that, they also want to implement a more organic way of production. This analysis was conducted in order to fix a majority of these problems; Which problems can be fixed now and which problems can be fixed in the near or far future.

For this document we will be analyzing the company: Everlast Agro B.V.

Source: Business case

Problems:

Interviews and surveys were conducted and shared with us. From these interviews we could already identify some problems within the company. These were the following problems:

1. The technology(monitoring system) is “old”. It is indeed still functional because of the employees, but this technology could be automated for starter.
2. The company that implemented this technology no longer exists, and they did not leave any documentation behind on the inner workings of the system.
3. They want their products to be more sustainable without hurting their monetary gains too much.

Solutions:

With all of this information we can get to work. For each problems I will give a solution. I will also like to add that problem 1 and 2 can be counted as 1 problem and for those problems I have a singular solution. I will first give the ideal solutions (can be implemented with the right amount of budget and in the near/far future) to the companies problems, then I will give the more practical/realistic solutions (can be implemented with the companies current budget and now or near future).

Here are solutions that can be implemented right now:

1. For the first and second problem it would more or less be the exact same solution.

   This new system has to collect, process, calculate and send this data back to the user within the company. Instead of click a button to fix the error in the greenhouse (expensive), the user would simply have to look at the data, see where the error is located and then go to that specific greenhouse and then fix the problem. This would be more efficient use of the employees time instead of walking to each greenhouse individually, then to the consoles individually, finding the problem then fixing it. the user would know when to use the data, because the new system would send a notification/signal if something is wrong.

2. The third problem is a little bit trickier because stakeholder 3 (see appendix), who focuses on mainly the sustainability of the company, didn't give too much information on how this could be fixed. She mentioned that for example the company needs to use less polluting fertilizers and wasting less water and energy.
   She did mention that the workers need to walk the consoles for about 30 minutes before getting that data. That is 30 minutes of wasted energy that could be used better.
   So one solution for problem 2 is the same solution used in problem one. A system where they can easily just open up their laptop, get the data and then go from there.

Here are the solutions that can be implemented in the future:

1. For the first and second problem, most people can agree that a new system should be set in place. This new system has to be able to do the following:
   - Collect, process, calculate and send data throughout the various parts of the greenhouse and send this to a network so that anyone with access to it, can see it whenever or wherever they are.
   - The workers tend to walk around a lot to collect data from the greenhouses in order to know what they have to do for example open/close the water valve or raise/decrease the temperature.
     The new implemented system should be able to do all of this using an interface/app/website within the companies server. So for example with the click of a button the valve will open with a certain % or with the same click it would raise or lower the temperature.

2. With solution number one, the company more or less fixed solution number 2 as well, partly at least.

There is still more to be done for the companies, but just like this we fixed the problems which are causing the company to have their current big time problems.

If you want more information as to why these solutions are the final conclusions, you can consult the appendix.

Appendix:

Stakeholder analysis:

In order to fix these problems let's look at what the stakeholders of the company think. They were the ones providing the interviewer with these complaints so naturally, you would think they have some solutions. They are not supposed to have these solutions at first. Otherwise they wouldn't need us to do our jobs. So let us see what they think:

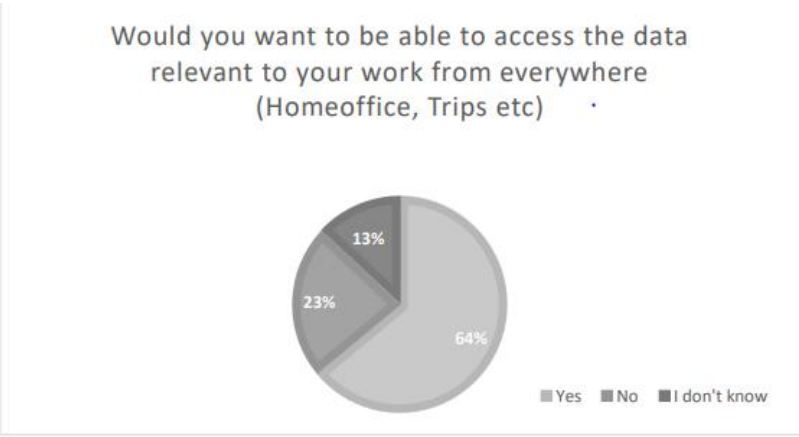
Stakeholder 1:

Frank de Vries, managing Director Everlast Agro B.V.

Mr. de Vries' main focus on the company is to deal with mostly (potential) customers, clients and potential investors. So his main focus is to make money for the company. In order to give these people what they need, Mr. de Vries needs the data that every greenhouse can produce. Even better, in the form of graphs and tables.

He himself cannot get this data, so he contacts one of his employees to acquire this data for him. This employee needs time in order to get all of this data, so that Mr. de Vries can give a proper presentation to his customers, clients and investors. He usually does not have this time to wait. He would like to have the data ready and set for him to use at any given moment.

He thinks that the companies monitoring system is old, because although it was new back in the day, now he thinks that this data should be available to him at the click of a button on his phone or his laptop.



Since the company that implemented the system no longer exists, it can be quite difficult to do so. Naturally Mr. de Vries thinks that implementing a new, more modern system can benefit the company in the long run.

When it comes to a more organic approach, he does not mention much about the importance of being organic. Mostly the fact that the company has competitors and if they don't do their jobs all year round, people will lose their jobs and food will be wasted. So if we could fix their problems and be organic doing, by all means we could go ahead and do so.

Source: Interview_1.pdf

Stakeholder 2:

Stan Meijer, Employee at Everlast Agro B.V.

His position in the company is to pose as one of the companies engineers. He is also the shift leader for the greenhouses. So he works mostly on the premises of the companies greenhouses.

As someone that works on the premises of the company, he needs to maintain the humidity, temperature, water management and so on. He sometimes needs to walk to 3 individual consoles per greenhouse in order to acquire data for his boss. This is just one of the 5 greenhouses he has to manage along with other employees. This process takes a lot of time.

He, like his boss, also thinks that the companies monitoring system is old. He thinks the company would do him and his co-workers a huge favour by investing in a new monitoring system. This would ease the workload for them. He thinks this time could be better spend doing other things. He proposed his own solution to the problem, which is to invest in a system that you don't need to walk up to all the consoles in order to get the data, rather to just have the data sent straight to a systems.

When it comes to the current systems age, he thinks that the system is old, but he and his co-workers can keep the system running. However due to not having any proper documentation on the system, they cannot for example fix the system if there was a huge fault. Or at least update it to a newer version. So an investment in a new system would be optimal.

When it comes down to being organic, unlike his boss, Mr. Meijer does see the importance of being organic and would want their product to be organic. However they can only do so much to have organic products. The employees try their best the keep the greenhouses as green as they can get, but they too can only do so much.

Source: interview_2.pdf

Stakeholder 3:

Veronica Bakker, Stakeholder at Everlast Agro B.V.

Her position in the company is to focus on the sustainability and impact of the company. Not to mention she is part of the board of directors, so she cannot just be ignored.

She works mainly to send the sustainability of the company in a better directions. She says companies, like her own, don't care to much about wasting water, energy

or polluting soil. She knows that the system in place is very old. She also knows that their employees typically can't or don't want to go into the greenhouses to check the consoles for the data. She does not know the details, but she does know that there are solutions. So she made a proposition to invest in a new system and for once the board of directors agreed with her she says.

Lastly being organic for Mrs. Bakker is extremely important. She mentioned how she has a degree in sustainable agriculture, so naturally this is where her passion lies. She thinks that companies like hers should be more aware of the earth and be more sustainable and less wasteful. In the future, the company will sell less but better quality products. She thinks that the customers are willing to pay a little bit extra as long as they have the knowledge that what they're buying is best for the planet.

Source: Interview_3.pdf

As everyone in the interview has mentioned and checking data from the interview, it would seem that the majority of the company would want such a system in place.