# The Impacts of Automation in the Dairy Industry TUS Joseph Clifford, K00270163

# **Aim of the Project**

The Aim of the dissertation is to highlight the benefits and drawbacks of installing automation on the average family run dairy farm.

- 1. Create a literature review.
- 2. Carry out surveys and interviews to gather information.
- 3. Research and analyse relevant case studies.
- 4. Discuss all the different types of automation and the effects it having on the dairy industry.
- 5. Create a concept of cost and the systems needed to implement the automation.

# **Types of systems**

There were 3 main types of automation I focused my dissertation on.

- 1. Milking robots used to milk the cows robotically no labour needed.
- 2. Calf feeders used to feed calves in the most efficient and labor-saving way.
- 3. Lely Vector which is used to robotically feeding the cows on the farm.

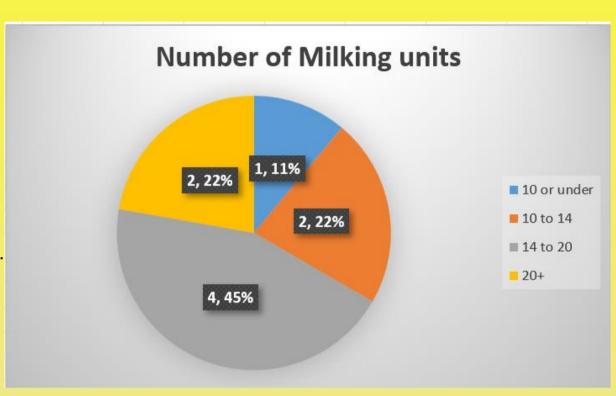


Lely Vector

# **Gathering Data**

I covered the 3 systems and found out what were the benefits and the drawbacks of all the systems. I did this through a survey which I sent out to farmers to see what kind of systems they had on there farms.

### Survey



I also created a list of interview questions which I asked a number of farmers and I got a great insight into the figures and percentages I wouldn't have gotten from doing a survey. I had 21 responses and got a lot of information from these responses that I didn't have before I started my research.

### Conclusion



From completing this dissertation, I feel like all the farmers I interviewed or surveyed had the same idea that the implementation of automation on there farms had nothing only benefits in terms of their everyday running's of the farm.

Its not only for the farmer that there is a massive benefit but the animals too in terms of yield and healthiness and well being of the animals because the such advanced monitoring of them on the automatic systems.

I think from my findings that automatic systems on the farm are a good job in terms of well being and profit for the farmer.

Cow health and production has

improved

Yes

1,8%

### Interview

I created a list of interviews and I went to 3 farms and asked the farmers and relevant information I wanted to find out in order for them to help me with my dissertation. I got a lot of information in terms of figures such as yield in crease since installing the robot. They were also able to give me costs of installing all the systems on there farms and if they had to make any changes to the existing yard I felt these were all questions I wouldn't have been able to ask in a survey.



Lely Robotic Milker



Automatic Calf Feeder