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**Automation Proposal for Klaus’ Operations**

**10/17/18**

**Box #88**

Klaus’ farm is looking to automate many processes concerning their farming system. This will help the farm become more efficient and bring in larger profits. There are many opportunities when it comes to the automation of farming systems. One way Klaus can better the production of his farm is by monitoring his livestock. Klaus has a total of 80 dairy cattle and 5 bulls. Therefore, Klaus’ livestock are a huge burden within his farm system. The selected model aims to track the livestock so farmers are aware when the livestock stray from their herd. It additionally effectively tracks certain conditions of the livestock.

This process achieves a few goals to better the production of Klaus’ farm. First, this system will identify animals which are sick so they can be taken away from the rest of the heard and prevent the spread of the disease. The second goal of this system is to lower the cost of labor by being able to locate all the herd and thus reduce the amount of required labor (Ray). Although these benefits sound great, there are few challenges which Klaus will need to consider before implementing this overall beneficial system.

This system will be automated through the effective use of sensors. One difficulty associated with implementing the idea of sensors with the cattle, is actually instrumenting the cattle with the sensors (Ray). The suggested process is placing the sensor on the livestock’s collar. However, this may not be efficient for all types of animals. One alternative outlined by Ray in his article on this process, is planting a bluetooth ear tag on the livestock. A second difficulty associated with this automation process is “selecting a wireless technology with enough battery power to last the lifespan of the animal” (Ray). The best way to solve this problem is by associating this process with a reliable company. Ray suggests using Symphony Link.

There are many different options when it comes to choosing a company which will effectively monitor your livestock. One effective company which will accomplish this tall order is Sensaphone. This company will “monitor all conditions across your entire livestock environment. Your controls system alerts you to any changes in your facility” (Sensaphone). In addition to monitoring your livestock’s conditions and location, Sensaphone will alert the farmer to other conditions. These conditions include “rising/falling air temperatures, poor ventilation, high CO2 levels, high humidity levels, power failures, and equipment failures (circulation fans, ventilation systems, heaters and air conditioning, etc.)” (Sensaphone).

Whether Klaus’ chooses Sensaphone or another company to automate the health and locational status of his livestock, one thing is certain- this automation is a must. It will effectively track anything which Klaus will need to know about his livestock and overall help the continual production of the goods and services of his farm. This automation has a proven success in the study previously mentioned, so there is no doubt that the same result will come for Klaus.

**Work Cited:**

Ray, Brian. “An In-Depth Look At IoT In Agriculture & Smart Farming Solutions.” Link

Labs, [www.link-labs.com/blog/iot-agriculture](http://www.link-labs.com/blog/iot-agriculture).