SAP IOT for the Cut-flower Industry

Mellifera Protea Farm is just one of many African Farms that provides cut-flowers to the global market. In order to ensure our product arrives at the flower auction in Holland in the best possible state the cold storage chain must be maintained as consistently as possible. This creates a benefit of higher prices for the farmer and a better/ long lasting product for the consumer.

The objective of using the SAP Leonardo platform would be to utilize a small number of sensors that are linked with flower batch information, and that are placed in the flower boxes to monitor the temperature and geo location of the Flowers throughout their journey from farm to auction floor (See Figure 1). The sensor data would need to be stored at the edge and retrieved once in contact with a receptor on the auction floor that would activate the transmission of the data. This data would be processed using the Leonardo IOT Bridge and analytics in the cloud to identify breaks in the cold chain that would negatively affect cut flower appearance, price and consumption. A baseline measure of negative cost impact can result in a 50-100% sales loss as flowers are either significantly price reduced or destroyed.

By utilizing the SAP IOT data analytics, feedback on cold storage abnormalities can be provided to the relevant logistics partners, insurance claims lodged and payments made.

In summary the use of SAP Leonardo, with IOT within this agricultural process can improve product delivery, ensure product value and ensure customer satisfaction. Thereby generating better returns for the Farmer and the agricultural industry in Africa. This is vital to sustain employment and improve living standards across the continent.

Figure 1: SAP Cut Flower IOT Model