

Royal Swaziland Sugar Company | Swaziland | Agriculture | Intelligent Business Applications

# The sweet taste of IoT

**'Nothing grows in the office, it's really important that people have the information they need, where they need it, when they need it.'**

**Rob Coombe**, Group IT  
Manager, Royal Swaziland  
Sugar Corporation

## Summary

The Royal Swaziland Sugar Corporation (RSSC) needed to cut costs and improve efficiencies in order to improve their competitiveness. This required that they look to technology to transform the way they ran their business.

By using sensors in key areas, they were able to, not only cut costs, but also make decisions that would improve the efficiency of the entire organisation. This included monitoring all parts of the sugar production process.

Having access to data from sensors across its operations allows the RSSC to use information to make decisions that deliver real business value and adapt to changing market demands.

## Vision

### Why Royal Swaziland Sugar Corporation needed to embrace IoT

With low global sugar prices impacting on the RSSC's ability to compete, they looked towards technology to optimise production processes. By adding the power of the Internet of Things (IoT) to their existing SAP platform they were able to transform key areas of their organisation.

They identified four business cases that could use IoT to improve the business on an incremental and strategic level: vehicle logistics and the inbound cane, how they could monitor and improve crop growth, water automation, and the factories themselves. The RSSC had already invested in some sensors but they were not focused on how they could use the data collected for strategic benefit.

These areas were identified through a series of design thinking workshops that brought together the farmers and the engineers to flesh out the business case and select the areas that would have the biggest return on investment.

## Which technologies?

- EPaas SAP Analytics Cloud
- SAP Leonardo

## Which services?

- Intelligent Workplaces
- SAP Vehicle Insights Cloud Platform
- SAP Cloud Analytics
- IoT Edge Computing
- Bulk Water Management application
- Hosted services

## Which partners?

- SAP
- Intel

**'We are looking at being one of the best sugar companies in the world and we believe that Dimension Data and is the company that will help us get there.'**

**Nick Jackson**, Managing Director, Royal Swaziland Sugar Corporation

## Transformation

### How they took advantage of IoT

Monitoring an operation that spans over 20,000 hectares is no simple matter. However, through the strategic use of sensors the RSSC is able to monitor key parts of their operations. This includes monitoring the position and performance of the trucks moving the sugar cane from the farms to the mills, including driver performance and fuel consumption. Another pilot project is reviewing the flow of water in the two main rivers used to irrigate to the farms to ensure better water utilisation and dam storage.

This includes reducing irrigation in areas where there has been sufficient rainfall. In addition, they are able to use drones and satellites to monitor the growth of crops and this helps optimise yields and predict production levels. All this data helps them to ensure that they understand what the performance of the business is across all the vital parameters.

## Results

### What real-time data provides to Royal Swaziland Sugar Corporation

Having access to live data allowed the RSSC to use the data it collected to improve its decision-making processes. With the various IoT systems reporting to a central point they are able to have a better view of their operations than ever before.

This lets them plan their production schedules, by knowing exactly where every truck bringing cane to the factory is at any time. Being able to assess potential yields gives them the ability to forecast production and through this understand what the performance of the company is likely to be over time.