CASE STUDY

Chopping away tedious manual processes with intuitive and modern technology

ELEMENT 8

KNOW YOUR LIMITLESS

PRODUCTS:	INDUSTRY:	INTEGRATOR:	END USER:
IGNITION	TIMBER	AFRILEK	UCL SAWMILL

01 Introduction

Based in Glenside in the picturesque KZN midlands, UCL Sawmill has been supplying South Africa and Export markets with quality pine products since 1935. The trees are grown on their own farms, as well as neighbouring timber farms - of which the owners are mostly shareholders in the company. For this reason, the raw material provided to the mill is of exceptional quality. Over the years, the Sawmill has grown to become an important part of the local economy by ensuring sustainable and reliable movement of timber from growers and lumber to customers.

04 Results

By having an automated system providing accurate measuring of their logs, Sawmill is able to save a lot of money on supplier payments and labor. In the first year alone, the company has saved over R120 000. An automated process also means no more manual work and no human error. The employees are now able to focus on more meaningful work in other areas of the business.

Instead of spending a month putting it together, reports are now created within 5min and any data that needs investigating is immediately flagged. The Ignition SQL module also allows them to look at reports on various log management dashboards, to see a summary of each individual grower's log lengths, assisting them in quality checking. Sawmill can even go so far as to do a comparison on weight vs cubes - is the density the same as other logs, and if not does an investigation need to be launched.

With 17 users on the system, each with their own permissions, everyone has instant access to what they need without being overwhelmed with data. Ignition has helped Sawmill gain control and oversight over their business.

02 Problem

Though the Sawmill had come a long way, and played an important part in the local economy, it was still running a manual system with paper processes. Creating a simple report would take a whole month, which meant there was a constant backlog of reporting. This made it hard to recognise issues, patterns or check the quality of the logs.

Besides the quality, the length of each log is particularly important as well, but because the mill was running on manual processes, the best they could do were estimations. This led to logs being classified into the wrong categories, which eventually led to higher than necessary business costs.

03 Solution

Sawmill did their research and explored multiple historian software, before ultimately deciding on Ignition. A PLC system was implemented to collect all data and assist in creating accurate and timely reports for all business areas such as operations, finance and general production.

A SCADA lets them see real-time data of all their boilers and kilns, making it easy to detect anomalies and take action. Acting as an aggregator of systems, the Ignition SQL bridge module enables their ERP system to get data directly from the weigh-bridge. Now all related information is generated in one place, and is available at a glance.

05

1 Boiler **4** Kilns	**3** Dashboards	**15** Reports generated daily
7 Screens	**17** Users	Hosted locally, but can be connected to remotely via VPN (commissioning and development, troubleshooting happens remotely)
		Microsoft SQL Database	**150** Tags