Case Study

Pepsi Line One SCADA
“Taking the opportunity to Improve plant performance during Control system asset replacements”
Background

Modern demands of the Food & Beverages market require additional Production flexibility to trial new recipes, run seasonal campaigns and accommodate a wider range of products. In many cases, the plant was originally designed to run on a single product and contains legacy assets.

When the replacement of legacy assets is inevitable, don’t miss on the opportunity to improve the plant performance.

Case Study

Line One is a bottling facility consisting of 4 manufacturing processes controlled locally using PLC and legacy HMIs.

- Bottle Making
- Labelling
- Filling
- Packing
SCADA Application

As part of the removal of legacy assets (HMIs), using the Wonderware suite of products we developed a Client/Server SCADA application providing an integrated view and control of the line. The same application was deployed in the control room and on shop floor using panel mounted touch screens.

In addition to fundamental monitoring SCADA features, we were able to introduce a number of validation rules (Production related KPIs, Traffic Light on equipment)

We organised a number of interactive workshops attended by all future users of the system. This allowed Peak42 to identify the information to be made available on SCADA for each user role.

By providing automation expertise guidance through the process we were able to establish a set of project requirements. We converted these further in a robust design during the Functional definition stage of the project.

The outcome is a system that overcomes legacy asset replacement problems and provides at the same time added value:

- Performance improvements.
- Operational improvements.
Whilst this information is useful on SCADA, access from shop floor and control room environment may not always be practical.

**Mobile Dashboard (Ipad, Tablets and PC)**

We wanted to provide the plant managers with secure access to high level plant data anywhere.

BYOD, Bring Your Own Device, we’ve been busy developing an app based prototype (iOS, Android, HTML) to give plant visibility anywhere.

**Zero Remote Access connection** to the site network, this mobile solution is 100% secure and provides very intuitive views of the information allowing rapid decision making.
**Significant Operational Benefits**

**Savings (£)**  
TCO and administration of a single SCADA system vs maintenance of several legacy assets.

**Simplified Management**  
Security Granularity, Default views for different roles within the organisation

**Simplified Disaster Recovery**  
Addressed at IT level using imaging techniques.

**Improved Performance**  
Visibility in real time of Production KPI and validation rules have improved the efficiency of the lines and reduced the complexity of its operation.

---

**Consultancy during the front end makes a difference**

Consultancy Impact is our unique way of engaging during the FEED study to ensure that the control system will meet our customers’ requirements. This is particularly relevant when the requirements are not fully established.
DON’T:
Replace legacy assets with the “next new model” without taking the opportunity to re-assess the site requirements and changes in the operation since the system was initially installed.

DO:
Perform a simple front end analysis of your requirements. Are there any production difficulties you can address? What about improving operational performance through the visualisation of KPIs? With the above in mind, select the replacement infrastructure and accompanying software services wisely.

We help our customers to save money and increase performance in the area of process and plant automation. We do this through the unique combination of Systems Integration, Consultancy and Performance Management services using our team of control system experts.

Our customers include major players in the Pharmaceutical, Utility, Food, Nuclear and Chemical sectors and also R&D companies who recognise our ability to listen to their needs. If you are interested to find how this could benefit you or your customers, please visit www.peak42.com or contact Michael Thomas (mthomas@peak42.com)

“There have been numerous process improvements since this project took place. The obsolescence issue of course has been addressed. But more importantly, we introduced a range of visual KPIs and other validation flags which help us to run the facility more efficiently.”

Control System Manager (Pepsico)