

BUSINESS INTELLIGENCE SOFTWARE SUITE

OVERVIEW

C21 Systems provides an advanced and comprehensive software solution designed to maximise Productivity and Profitability across a wide range of industry sectors.

The system is modular and scalable with nine individual modules available.

When several modules are utilised we can create a C21 'Business Hub' with all factors of your operation within a single system.

Multiple sites can be linked to create a 'Group Hub' with your entire operation at your fingertips.

C21 MODULES

- Business HUB
- Production Analysis.
- Machinery Analysis.
- Maintenance Management.
- Inventory Control.
- Knowledge Vault.
- Photo-Navigation.
- C21 TV.
- Automatic Purchasing & Delivery Systems (APDS)

INDUSTRIES

- Manufacturing
- Processing
- Mining
- Engineering
- Service
- Franchising
- Retail
- + More

WHY OUR CLIENTS USE C21.

STREAMLINE OPERATIONS

Bringing all aspects of business into one with advanced Business Intelligence reporting of all key factors

FASTER REACTIONS

C21 gives Business Managers the ability to see and react instantly to changes and issues which would otherwise be unseen at source.

CONTINUOUSLY IMPROVE

Ability to Track/ Trace / Trend and Predict. Benefits and Adverse Reactions are easy to identify with full Dashboard-Driven Analysis.

CLOUD CAPABILITY

With our dedicated Apple / Android Apps, staff can work remotely with instant analysis. Business Managers can also see Production and Maintenance aspects 'live' from any location, direct to their smartphones.

BOARDROOM BLISS

Full, cross-site analysis from the boardroom PC. 'Live' and Interactive.

TYPICAL BENEFITS

- Reduced Operating Costs across multiple factors.
- Increased Utilisation.
- Improved Quality.
- Increased Performance.
- Reductions in Product Waste.
- Improved Product Tracking.
- More Effective Maintenance.
- Improved Machinery Efficiency.
- Increased Utilisation.
- Reduced Stock Holding.
- Better Customer Service.
- Improved R&D.
- Better Staff Training.
- More Productive Meetings.
- Improved Communications.
- Reduced Labour Hours.
- Paper-Free Working Environment.

C21 MODULES

Introducing our new 'Plug and Play' Live Data-Capture Unit.
 'Live' Production Capture and Analysis has never been easier. Simply plug your own sensors or contacts into our unit for instant / Live monitoring and analysis of whatever aspects you desire, all sent through its own 4G or Wi-Fi connection.
 It can also capture Analogue signals or gather your data from an existing PLC.
 See your operation running Live with full Analysis, Tracking and Trending via Browser Dashboards or our Smart-Phone Apps.
 Yet another great innovation from C21 Systems.



Production Analysis

With C21 at your fingertips, all Performance Data is just a click away, wherever you are located.
 C21 can also link all sites across your organisation to give great inter-site (Group) analysis too.



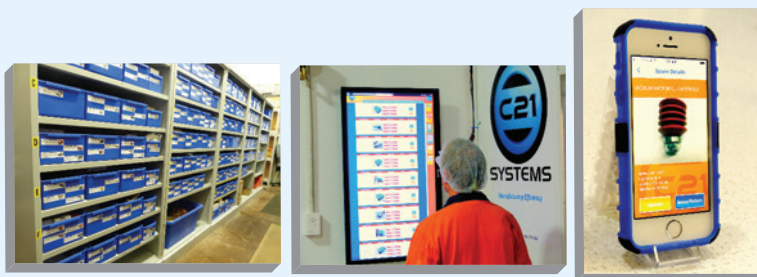
Machinery Breakdown Analysis

Record, Analyse and Display all Unplanned Stoppages throughout your entire operation.
 Successful Maintenance can be acknowledged as your Breakdown Trends reduce and your Efficiencies begin to soar.



Inventory Control

The future of Inventory Control is here!
 Modern, Powerful, Highly Efficient yet Simple and Easy to use, which is the C21 core ethos.



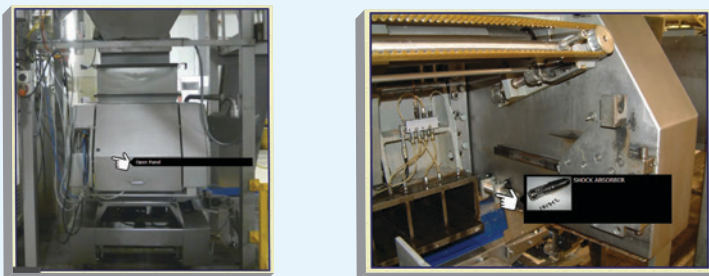
Planned Maintenance (CMMS)

Using the latest programming technologies, C21 provides fast, highly effective solutions for your everyday Maintenance Planning activities.



Photo-Navigation

Locate Machinery Parts by 'virtually navigating' your machinery, opening guards, removing pieces, exploding assemblies all on a mouse click.



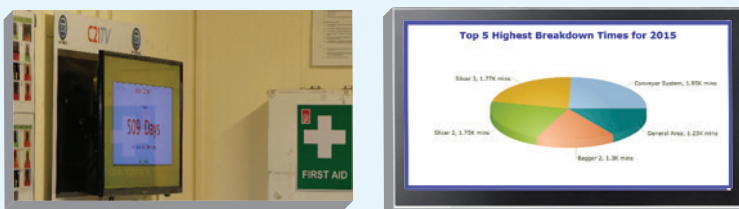
Knowledge Module

An Electronic Knowledge Vault to store useful information with easy access for your employees.
 Risk Assessments, Machine Settings, Drawings etc.
 Also Video-Enabled to bring your procedures to life!



C21 TV

A new and exciting communications concept.
 Broadcast live, dynamic company information, performance charts, messages, stats, directly to your employees, clients or customers anywhere across the globe.



Automatic Purchasing & Delivery System

APDS is a super-efficient delivery add-on for the C21 Inventory Control Module.
 We can monitor your Inventory, order and deliver your items for you, directly into your stores area.



PRODUCTIVITY BENEFIT

Productivity and Profit go hand in hand.

Maximising productivity within given boundaries will most often extract the best profit margin.

C21 Systems offers businesses the tools to run more efficiently, review and predict more accurately and also perform to an optimum level.

TYPICAL FOCUS

- Streamline procedures with a fully digital and 'live' system.
- Autonomously capture, process and analyse any data a client might already be gathering.
- Capture all key aspects of an operation with full, dashboard driven analysis.
- Place your Managers and key personnel on the pulse, with 'live' reporting to their smartphones.
- Predict and improve process and/or machinery performance through advanced analysis.
- Promote staff ownership with excellent, companywide communications via C21TV.
- Standardise procedures and improve staff training and knowledge retention with the C21 Knowledge module.
- Ensure consistent performance with 24/7 tracking and trending of all key aspects.
- Improve machine performance with better maintenance management.

HOW C21 CAN HELP

OPTIMISE PLANT WITH OEE ANALYSIS

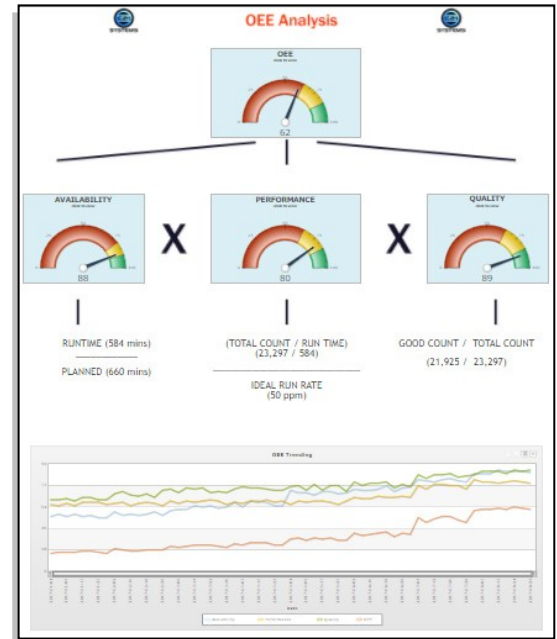
OEE (Overall Equipment Effectiveness) is a great benchmark to look into because it includes most production aspects such as Utilisation, Performance and Quality.

World Class OEE is considered to be 85%. Typical OEE is the mid 60's.

Many operations find that they are way below this but were unaware of how to measure and track such performance aspects.

C21 Systems can track and trend a facility's OEE very easily with our Plug & Play production capture unit and a current OEE will be established.

From there C21 provides the tools for a business to target the flaws within their operation. This can be from many areas such as poor maintenance, poor production planning, relaxed run-rates, high waste etc.



CROSS-SITE ANALYSIS WITH A BUSINESS SCORE CARD SYSTEM

With a multi-site operation, Group Managers and Company Directors can view and analyse all sites as a collective, with direct comparisons between all sites key factors.

This is very easy to do when using the C21 Business Score Card system.

On a site level, all KPI's within all departments are gathered. These scores are combined to give an overall performance score for each site.

This shows which sites are performing the best at particular aspects and which sites are in need of improvement within those areas.

Because all sites are linked it also makes it very easy for sites to share information and learn from each other on improvement methods.

Clicking on a site will also take you to all KPI and Performance Scores across site and by Department. This can even drill down to Individual Performance Targets.

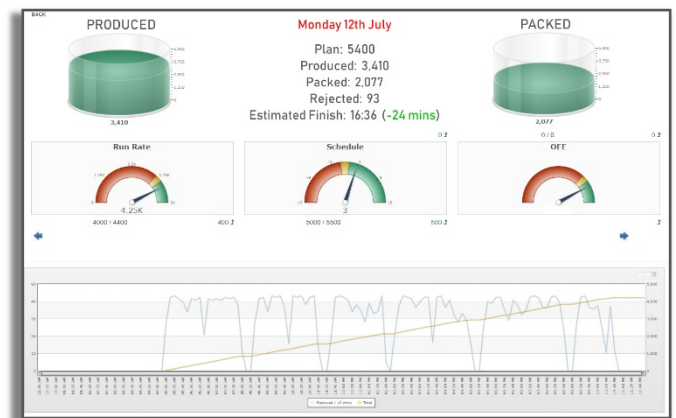


STREAMLINE OPERATIONS DIGITALLY

C21 has the ability to link most operations digitally within any type of business. The advantages are obvious and of huge benefit to how a business can run, increasing productivity and reducing man hours from processing data.

- Removes most paper from the process and the work place.
- Removes manual data processing of paper and/or spreadsheets.
- Reduces faulty data handling due to processing errors.
- Speeds up operations with 'live' links between production stages.
- Allows Business Managers to see exactly how production is progressing.
- Allows Maintenance Managers to view plant issues as they are happening.
- Reports and stats are now dynamic and instant with little or no further processing required.

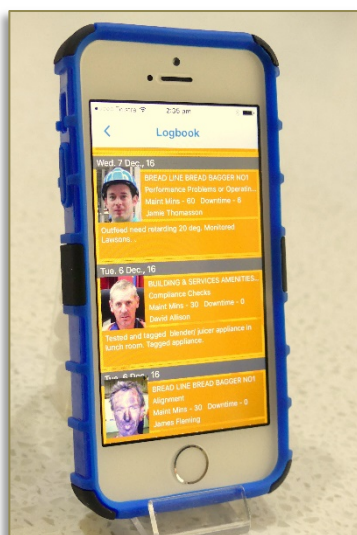
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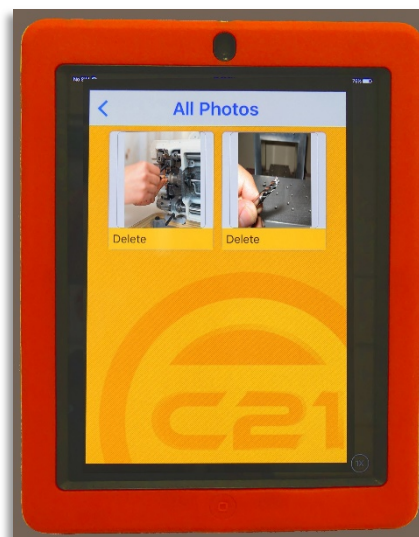
IMPROVE MAINTENANCE

C21 has a highly innovative CMMS (Computerised Maintenance Management System). The system has been developed with maintenance crews at all levels to create an incredibly user-friendly system. The 'user focus' is of a high priority throughout all of C21's software. The efficiency and productivity generated from such a system is what C21's developers constantly strive for. Maintenance Crew can work autonomously and far more productively. Machinery can reach optimum utilisation with fewer breakdowns and lower repair times, your crew will have time to spare for continuous improvement, 5S, TPM or any such higher maintenance programs. Staff retention is also higher with an efficient environment and a state-of-the-art maintenance system to work with.

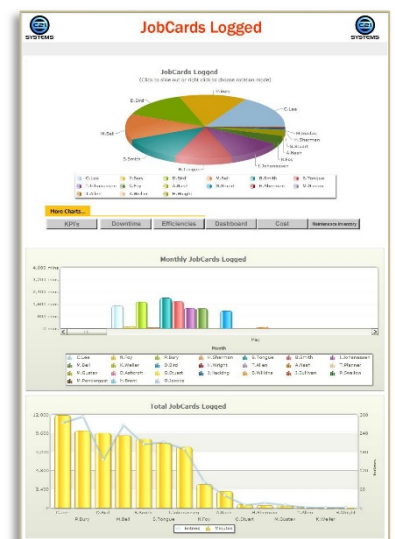
PLANT ISSUES LIVE TO YOUR SMARTPHONE



CREWS CAN WORK AUTONOMOUSLY AND LIVE VIA IPAD



FULL LIVE REPORTING



ECONOMIC BENEFIT

Economic benefits can always be gained through identifying and eliminating in-efficiencies within an operation.

C21 can do this with monitoring to ensure those gaps do not re-appear.

TYPICAL LOSSES

- Poor Plant Utilisation
- Poor Labour Utilisation
- Manual Data Gathering
- Manual Processing
- Waste Product
- Process Waste
- Over Producing
- Recall Costs
- Poor Inventory Control
- Poor Maintenance Planning
- Overtime
- Unclear Supplier Stats.

HOW C21 CAN HELP

OPTIMISE PLANT UTILISATION

C21 Systems can record your OEE (Overall Equipment Effectiveness) 'live' with our own Plug & Play Instant Production Analysis Unit. This can be a completely stand-alone system utilising its own 4G or WIFI connection.

The unit will capture Product Count (compared with schedule), Utilisation, Run-Rate, Product Waste, Start-Up delays, Finish Delays, Machinery Stoppages (with Fault Tracking).

This will give a 'live' OEE with full Tracking, Trending and Analysis of how you can improve your machine utilisation.



COST SAVING – HIGHER OUTPUT

Maximise profit through optimising plant Utilisation, Performance and Quality.

MANUAL DATA GATHERING

Remove manual data gathering and analysis with a fully 'live' digital system. Your whole operation can now be live and seamless. As data is added at one point it can be utilised immediately at other places with no lags across the operation.

C21 will also analyse data dynamically for tracking, reporting etc. All on demand.

Add 'C21 TV ' to broadcast your performance live to the workforce. No more paper charts stuck to walls!



COST SAVING - REDUCED LABOUR HOURS

Reduce large amounts of manual data processing with a dynamic, digital system.

PROCESS WASTE

C21 has proven to help reduce waste within major manufacturers by up to 50% within a small period of time. This is achieved with clever capture and analysis of the facility. C21 has the ability to identify and alert at the source of the problem or can analyse a complete facility with bottleneck identification throughout the plant.



COST SAVING - REDUCED PROCESS WASTE

Reduce waste with an intelligent monitoring system with live error reporting.

INVENTORY CONTROL

Reduce your stock levels with dynamic control based upon Actual Usage, Predictive Usage, Supplier Lead Time etc.

Release huge revenue from you Maintenance Stores with efficient stock management. Multi Sites can also link their Inventory Database together, reducing many items on shelf which can be transferred between plants. This is also useful if you need to find an item in a hurry.



COST SAVING - REDUCED STOCK

High initial returns with continuous savings thereafter.

REDUCED PRODUCT WASTE

Leading Brand Manufacturer installed C21 Production Analysis within one of its major facilities within Australia.

Plant was producing 20M units of bread per year with a peak monthly waste percentage of 15.3%, a potential 3.06M units waste per year.



COST SAVING - PRODUCT WASTE

With the help of C21 Systems they were able to steadily reduce the percentage to 7.52% within 6 months. That is a 51% decrease in waste with a potential saving of 1.56M units. The company calculates a unit cost at \$1 per unit equating to a potential cost reclaim of \$1.56M per year.



COST SAVING – BAD PRODUCT BATCHES

The product alone is worth \$330 per batch without factors such as running costs to mix, bake and package. Also, the extensive costs involved with product recalls and the loss of faith within the market. Bad batches could occur several times per day. C21 eliminated a very high percentage of bad product batches.

Using time-line volume/waste tracking, waste patterns were identified within several areas. For example, of the clients' three packaging lines a very high waste spike was identified on one line upon product changes. After discussions with the production team their change-over procedure was revised to ensure the line was always ready for product upon change-over. A significant drop in waste was gained from this. They had run this way for many years until C21 identified the issue.

EFFICIENT MAINTENANCE

This is a double-edged sword. Good Maintenance does of course save money but the efficiency of the Maintenance System itself varies massively from system to system and poor systems are expensive to run.



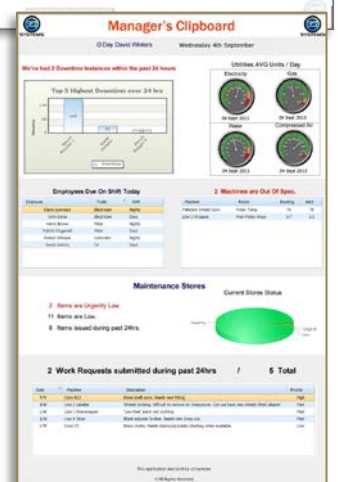
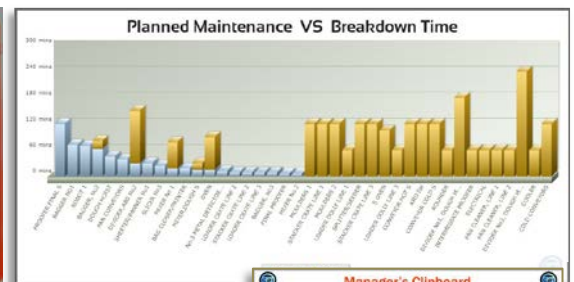
COST SAVING – OPTIMAL UTILISATION

C21 targets and identifies problems across your entire plant with tracking of every problem on every machine. The solutions are available to your Reliability Managers in a very easy, common sense manner with the best systems available to keep your plant running well



COST SAVING – EFFICIENT MAINTENANCE

C21 removes all paper processing and also analyses maintenance data, measurements itself. C21 also gives the best systems for your crew to do their job more efficiently and effectively. The result is thousands of labour hours saved through less manual processing and better working practices.



CASE STUDY / TESTIMONIAL

INSTALLATION

C21 Systems, site installation into a household-name, Major-Brand company with a number of manufacturing sites throughout Australia.

The system accesses performance and production control systems across site and consolidates them into one central HUB. The system also reads their existing on-site systems and provides its own built in modules where required.

Data is collected via several methods which include Automatic Processing of client's existing spread sheets, Interfacing with the client's existing in-house Database, Direct connection to client's machinery and PLC Network and Direct input from Operators and Maintenance Crews via PC, iPad, iPhone or Android devices (via C21's own Smart Apps).

A dedicated PLC interface was installed to gather Production Machinery Faults & Alarms, Product Counting and Tracking, Batched Ingredients Delivery, Weights, Temperatures, Energy Consumption and other key processing data. Once captured the data is then automatically processed into C21's Instant, Dynamic Dashboards and Interfaces.

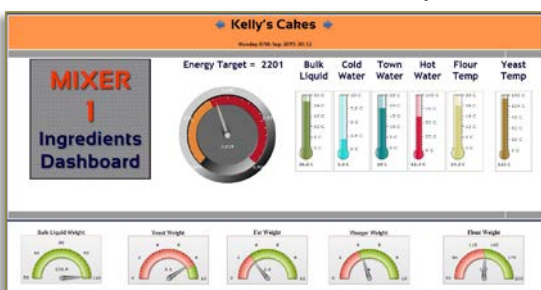
This gives Managers and Operators easy, hands-on performance analysis of Production, Maintenance, Engineering and other key result areas. Not only can the team access the information on site but access to the system can be gained anywhere globally via PC or Smartphone Apps.

BENEFITS

- Daily graphical Production Run Dashboards – More efficient production meetings.
- Detailed Process Dashboards – Improved quality, reduced product waste.
- Accurate Machinery Analysis – Improved efficiencies, reduced product waste.
- Effective Preventative Maintenance Control - reduced plant downtime.
- Batch Ingredients Tracking – Reductions in usage variances, improvements in product quality.
- Improved Process Traceability – Improved quality accountability.
- Electronic Maintenance System – Accurate and easily accessible information.
- Highly Efficient Stores System – Reduced stock holding, reduced mean time to repair.

LIVE BATCH DATA

Problems with ingredients delivery are identified and acted upon immediately with the live dashboard view. Previous batches can also be searched to show any issues.



DAILY PRODUCTION REPORT



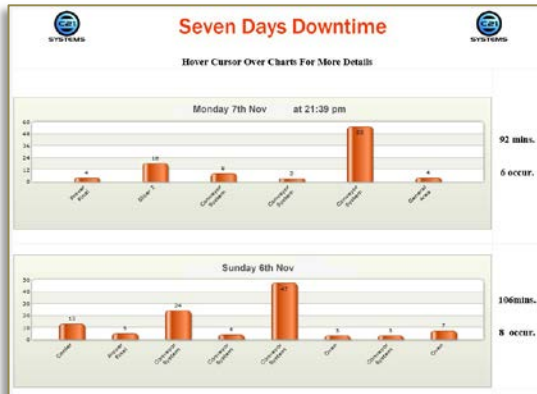
LIVE PERFORMANCE TRACKING

Live tracking of Product Count, Run-Rate, Uptime Run-Rate, Utilisation and OEE, alongside all key production data.



PRODUCTION BREAKDOWN TRACKING

Captured by C21 with full fault tracking of ALL MACHINERY on site. Vital for Continuous Improvements and Reliability Management.



INVENTORY SYSTEM

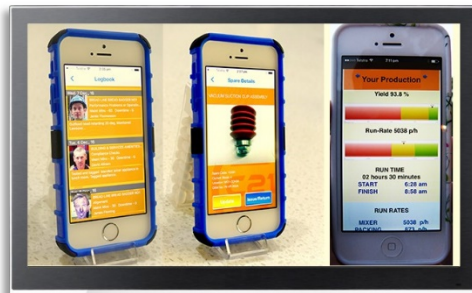
Full Stores installation for the Plant Maintenance Department. Highly efficient, paper-less system. Full item tracking with Usage and Failure Predictability Analysis. Maintenance Crew also find items in situ via their Smartphones.



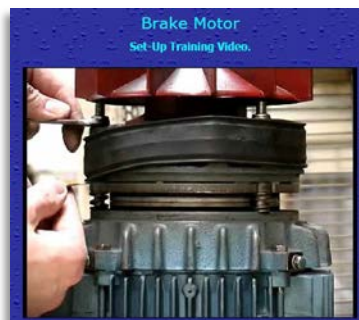
A COMPLETELY LIVE SITE.

From the Production Floor, Ingredients Deliveries, Maintenance Scheduling, Engineering Reports, Dispatch Data, Quality, Health & Safety Information. All aspects of site from one system, direct to the people who need the information. Very much utilising the 'INDUSTRY 4.0' concept.

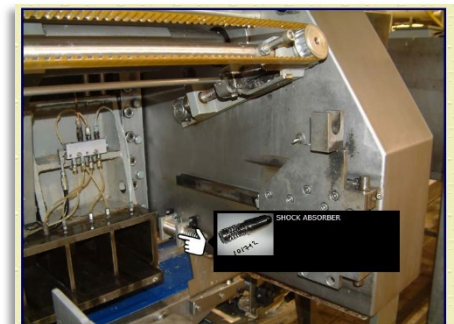
PRODUCTION / MAINTENANCE REPORTING



VIDEO TRAINING



MACHINERY PHOTO-NAVIGATION



TESTIMONIAL

The featured Company's Regional Hub Manager for Western Australia, South Australia and the Northern Territory explains the benefits the system has brought to his operation:

"The system has completely opened up our performance data across site. What data we previously had still required large amounts of manual processing. Now we easily log into C21 and all the key performance data is right at our fingertips. Not only can we monitor performance in real time, the C21 system also allows us to chart and trend KPI data in a highly interactive way.

Through C21's dynamic data management system we now have the ability to provide our Process Improvement Specialists and Continuous Improvement teams with easy access to accurate data making them much more effective. Another great benefit of the C21 system has been that our Daily Production Meetings are now based around on-screen visualisations of our production run and we can also review and visualise other key departmental information across the site.

The impact and benefit has been substantial and as a result, the system has also been installed into other sites within Queensland and New Zealand and I am keen to extend the system into the other sites within my region also".

