



Business Optimisation



Supply Chain & Inventory Management Improvement

Client TAFE SA

Project Supply Chain and Inventory Management

Location Tonsley, South Australia

Duration 13 Months



TAFE SA is South Australia's largest vocational education and training provider, offering more than 1,300 qualifications to 70,000 students annually. Operating from five campuses across metropolitan Adelaide, South Australia as well as multiple campuses in regional SA. The flagship campus for TAFE SA is the \$120 million state-of-the-art Tonsley facility, located on the redeveloped Mitsubishi site.

The Tonsley campus, opened in 2014, offers a range of courses including trade certificates in the building, construction and furnishing industries. Bringing these trades together at Tonsley gives students the unique opportunity to learn and work together, as they are required to do in the real world.

To ensure the wide range of tools, materials and equipment are available for teachers and students as required across the building and construction courses, TAFE called in the SAGE Automation Business Optimisation team to develop an effective and efficient supply chain system.



After detailed analysis of the current situation, key operational improvements, including three new systems and processes were recommended to TAFE, which included;

1. Introduction of the Kanban* System to improve availability of stock in workshops and the material flow between warehouse to workshops
2. Implementation of 5S** and Visual management to eliminate time wasted in searching for tools and materials in the workshops
3. Standardisation of tools, materials, and processes.
4. Re-configuration of warehouse management system and process to eliminate unnecessary stock transactions and material movements, double handling, and cost visibility

The tailored system was developed and trialled first in the carpentry workgroup, and then rolled out across the other trades during a 13-month project. The pilot was critical in developing streamlined and workable process as well as achieving successful change management with stakeholders. The key factor for success of this project was engaging the management and education teams during the project duration.

Stakeholders from senior management through to trades students have realised efficiencies gained in managing and maintaining stock, improved tool and material availability, as well as exposing students to industry best practice in tools and material management and visual workplace.

“Apart from the efficiencies and enhanced level of organisation they have influenced both in the workshop and the store area, we are starting to observe a significant cultural shift”

Alison Roberts, Director
Mining, Engineering & Transport and Building & Construction, TAFE SA

Key Results

- Reduction in number of stock items from 14,000 to 2,500
- Significant reduction in time taken to carry out stock-take
- Improved accuracy in stock on hand data
- Less than 5% variance in stock-take results
- Increased efficiency in warehouse management
- Elimination of material shortages for student projects during workshop activities
- Significant reduction in material movements between warehouse and workshops
- Adopted process by all 5 trade workgroups and warehouse
- Storage improvements resulted in a safer environment for teachers and students
- Reduction in errors by students and damage of tools



TAFE now has an efficient and effective materials handing process, which has resulted in the smooth running of TAFE and an enhanced learning experience for students who will lead the building and construction industry in the years to come.

*Kanban is an inventory control system developed by Toyota in the 1940s to improve manufacturing efficiency. It is highly regarded as supporting production systems as a whole and promoting ongoing improvements.

** The 5S workplace organisation method derives from five Japanese words seiri, seiton, seiso, seiketsu and shitsuke, which translate to Sort, Set in Order, Shine, Standardise and Sustain.

"The business optimisation team are patience and professionalism exemplified. They respectfully provided the leadership to enable change."

Alison Roberts, Director
Mining, Engineering & Transport and Building & Construction, TAFE SA



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