

# Intelligent manufacturing



By Sean O'Sullivan  
Otago University and  
managing director of  
Empower Software.  
seansos@ihug.co.nz

This article profiles twelve manufacturers involved in shop fitting, commercial joinery, kitchens, furniture and fabrication who have invested in PCs on the factory floor along with job and time tracking and job scheduling systems. It includes manufacturers' comments on implementation, the benefits to their business and net factory productivity gains.

## Comace - Shop Fitters (Adelaide)

"We track all factory staff on our factory PCs and even our installers via cell phone texting live (tracks include job start and job finished times live). Within three months of using time tracking and labour management software production increased from 45% to 75%, which has increased our productivity by 30%. The system is nothing short of remarkable and it has been a catalyst for growth and easier management of our business. It has enabled us to be a lot more productive in the

factory and competitive in the market place".



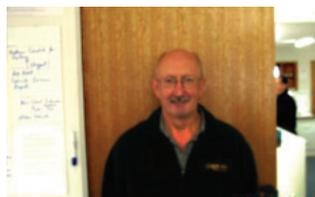
Paul Williams, owner manager

## Capeview Building Products - Kitchens and Cabinets (Melbourne)

"Capeview Building Products put PCs on the factory floor and time tracking system in April 2009. In one area we had 2.5 staff, which is now down to 1.5 staff – a 66% increase in the productivity of this work centre.

"I have started using this system at the input stage of our production line and we are seeing reduced times and labour requirements, which are allowing me to move my focus and labour to the bottlenecks within the joinery department. I will then focus on these areas for productivity improvements. Employees cannot argue with the factual information the system is giving us.

"The main thing I like about this system is its ability to track times and productivity of individual employees rather than a team of employees. Our goal is to maintain factory staff numbers and increase our available factory capacity, production and sales."



Jim Grist, production manager.

## Broadview Aluminium - Windows (Sydney)

"To carry out due diligence prior to investing in this system, I and two of my key production managers visited four kitchen, furniture and window manufacturers, who were long terms users of the time tracking and labour management system. We were impressed with the capability of the system and the marked improvement the system has made to all the businesses in both factory productivity and bottom line profit.

"In the first week of implementing the system here at Broadview, we have made marked improvements to specific productivity issues, which needed to be addressed. Awareness of budgeted times on jobs and completion of jobs within that budgeted time is now a priority for both factory staff and management, which was not the case before. This system is a fantastic tool and we are confident that the system will transform our factory productivity, competitiveness, market share and overall profitability

"The system is inexpensive to put in and we are confident it will pay for itself very shortly and many times over. Time tracking and labour management systems are clearly the way of the future for manufacturing."



Mark Marsden, owner manager.

## Aneka Kitchens (Canberra)

"Why have I gone PC Time Tracking in my Business? PC time tracking in the office has enabled my business to capture the time that the office staff spends on clients before the production/manufacturing stage. This has helped in making the office staff more aware that their time is a valuable commodity too, just like the factory workers. It has also enabled them to become more focused on trying to complete jobs/set tasks within the budgeted time (something they never cared about before) and this has helped in reducing the office downtime and unaccountable time.

"It is a great tool to use for monthly employee evaluations and it also lets me know which clients take up the most time (or too much time) with the office staff. With this captured office time, I now have the data to accurately back-cost jobs – something I could never do before.

"In the near future I plan to provide bonuses to office and factory staff and have this directly linked back to their time tracked 'budget versus actual time and productivity percentage– two key KPIs for employees."



Rod Tyson, owner manager.

## Angelo Petkovic Cabinets (Perth)

"The bottom line is that time sheets are an out-dated system. They are difficult to → 18

← 18... Intelligent manufacturing

maintain and really provide you with an inaccurate picture of the amount of time taken to do jobs in the workshop.

"Labour is our biggest cost and the most likely cost to blow out. Up-to-the-minute reporting of labour times is critical to ensuring jobs are completed within budgeted time for both factory staff and management. PCs on the factory floor and the time tracking system actually gives you up to the minute information and motivate staff to work hard to meet the budgeted times on jobs. There is no doubt in my mind that in the near future the majority of Australian kitchen, furniture, and joinery manufacturers will be using PCs on the factory floor and time tracking software because without it they will NOT be able to remain cost competitive."



Jason Petkovic, owner manager.

### Alby Turner Kitchens (Adelaide)

"After 'time-tracking' for a number of years using paper time-sheets, with no ability to budget and track times in production, only retrospectively, we made the move to a computerised time tracking system a number of months ago. We've already found considerable increases in productivity and output, which has increased our factory productivity by 15% (to date), and, just as importantly, better reward those who are more productive and conscientious.

"The automated system also means that less time is wasted on the data-entry itself

(both in the factory and office), better control over breaks, the data itself is more accurate and the guys know approximately how long they're expected to take per job.

"We were already time-tracking but the new system has exposed our old method as being clumsy and inaccurate."



Rob Turner, owner manager.

### J and D Cabinet and Joinery (Sydney)

"In manufacturing kitchens labour is both our largest and our most variable cost. Time tracking software is the only tool that has enabled us to properly schedule jobs and manage our labour cost. Using PCs on the factory floor and time and labour management software J and D Cabinets management and factory staff are now very much time oriented and productivity focused. Our core business is labour management and we job cost labour times on each job and each stage of each job so we identify problems and find solutions. By formally identifying productivity problems and solutions with staff and management we employ continuous improvement of our core business which is labour management. Time tracking factory productivity software has taken our business to the next level of professionalism and factory productivity."



Jim Lazaroa, owner manager.

### CC Kitchens (Mount Gambia, SA)

"You can not manage what you can not measure. Furthermore, you can not manage with measurements, which you know are inaccurate and only available days after production has occurred. Time sheets that my factory staff used to fill out at day end are too slow, too inaccurate and did not allow us to manage productivity.

"PC screens on the factory floor and our time and production tracking provides us with instant times on the completion of each job with breakdown into stages of each job and the staff involved. This has been the key to us maximising staff and job productivity. Accurate budgeted time to actual time statistics on jobs enable us to cost and quote new work with much more accuracy. Time tracking has a wide range of optional production and productivity reports at our fingertips.

"It is greatly beneficial to be able to report and analyse accurate labour statistics regularly, broken down into annually, monthly, weekly, daily and then by team or by process. The system has certainly highlighted the areas of our business that needed improvement. There is no comparison between doing it the old, hard, inaccurate way with time sheets that staff filled out and the new way using PCs and time tracking software with live accurate information.

"This is the only system to actually get your staff focused on budget times and achieving the budgeted times. Time tracking is vital to our business."



Richard Haynes, owner manager.

### M.A.R.S. (Riverland, S.A.)

"I employ 25 tradesmen here at M.A.R.S. I have been in this game for 30 years. Productivity and profitability had been struggling for years and I was considering selling the business as I had had enough.

"I put cheap second hand PCs on my factory floor and wired them up and purchased **Time Tracking and Labour Management** software late last year. We have been using the system for six months now and have turned our factory productivity on its ear, increasing it by an absolute minimum 30%.

"This factory productivity increase has taken us from being in the red to significantly in the black. My accountant phoned me recently and advised me our figures are a lot better and asked why this was. I told him it was because we had put in factory productivity software and he was impressed. By progressing our use of the system further we expect to increase our factory productivity to 50% minimum within the next six months.

"I dedicated a full weekend to figuring the system out and I am glad I stuck to and made it work as time tracking is the best thing I have done in my business since owning the business in 1987. Today M.A.R.S is a much more competitive and stable business looking at growing sales, factory staff and annual profit.

"The best advice I can give anyone attempting to manage any engineering or manufacturing business, and attempting to manage staff today, is come and see the system working in my → 20

# PRODUCTIVITY

← 18... Intelligent manufacturing

factory and talk to my staff, management and myself".



Peter Morelli, owner manager.

## Advisor on Factory Systems (Adelaide)

"I have been involved in manufacturing for 40 years and previously owned a commercial furniture business with 40 staff here in Adelaide. I have carried out extensive due diligence on time tracking and labour management systems that can provide up to the minute reporting on all aspects of production and productivity. These systems allow production management to control manufacturing rather than manufacturing controlling production management.

WE WANT TO KNOW...

- » Is your company celebrating a milestone?
- » Has your company had a recent achievement that you're proud of?
- » Has your company been awarded an honour recently?

If you can answer **YES** to any of the above scenarios, then we want to hear from you, so that we can share your good news with the industry.

**Contact: Vicky Cammiade - Editor**  
 Email: vicky.cammiade@elitepublishing.com.au  
 Phone: +61 3 9844 1728  
 Fax: +61 3 9844 5300

"I have recommended a local system to five manufacturers who have put the system in. In terms of return on investment the price of the system is small. Furthermore, it is simple and quick to implement and use. If I were to go back to manufacturing today, and trying to monitor production and motivate factory staff, I would definitely be investing in and using this labour management software".



Brendan Hannah, managing director

## Rose and Heather Furniture (Auckland)

"We design and manufacture high end kauri furniture, have been in business for twenty six years and we own five of our own stores in Auckland, Sydney and Melbourne.

"We invested in PCs on the factory floor and time tracking software three years ago. When we used time sheets, our staff used to look busy – but were not productive. Our new time tracking system has shown us that staff were previously working at less than half pace. Factory staff enjoy seeing times budgeted on the factory computer screens and they enjoy beating those times.

"Twenty five staff have been reduced to 21 staff saving \$130,000 a year in wage costs. At the same time production has increased by more than 50%. Factory productivity overall had increased by a minimum of 60%. Consequently our

annual profit had increased substantially.

"We now have a great team. Management and factory staff are all in the same boat and rowing in the same direction, with everyone in the business now time focused and highly productive. We are a far more effective team with live and accurate production and productivity information."



Willy McGregor, general manager manufacturing

## Phoenix Aluminium (Auckland)

"If we had not implemented time tracking software 11 years ago, I am pretty confident that we would not be in business today. Eleven years ago we had 26 factory staff and were struggling with being productive. Solely with the use of time tracking software, we reduced staff down to 10.5, at the same time increasing output. This saves us in excess of \$40,000 a month in wage costs and the system has allowed us to build the company back up to 30 factory staff.

"Our factory staff are happy as they get paid a significant bonus based on their individual monthly productivity figures.

"In running two manufacturing operations today and after employing some 30 factory staff for coming up 18 years now, I am strongly of the view that putting in time tracking and labour management software 11 years ago was the best thing we ever did.

"My advice to other manufacturers is: if you continue to manufacture anything in today's environment without PCs in the factory and time tracking software 'you have rocks in your head' and I would be happy to discuss the topic with anyone."



Jon Martin, managing director.

## Summary

Of the 23 manufacturers recently surveyed who use PCs on their factory floors and time tracking software, the business improvement statistics are:

- average manufacturer's increase in factory productivity is 42%;
- lowest manufacturer's increase in factory productivity is 15% (saving \$140,000 in annual wage cost);
- highest manufacturer's increase in factory productivity is 160% (profit increased by 400%).

Note that, for example, a 10% only increase in your factory productivity will generate you an estimated 32% increase in your annual profit. And, for example, a 20% only increase in your factory productivity will generate you an estimated 62% in your annual profit.

If you have any comments or questions I welcome your contact at seansos@ihug.co.nz or phone Sydney 02 8011 3281 -S-