

Lean Manufacturing Australia – Marcus Ward

Senior Consultant

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Current Business	Lean Manufacturing Consultancy. I am the senior Consultant at Lean Manufacturing Australia.
Client Base	Small to Medium Enterprise (SME) and Larger Enterprise Manufacturers and Engineers
Credentials and CV	My Lean Manufacturing career has spanned 26 years to date Toyota - production roles 5 years then production management roles 8 years, 13 years total, 1992 to 2005. Toyota has their

	<p>own management training school in house. Over 8 years I sat and passed 33 of Toyota's formal lean manufacturing and related management courses with 98% or greater pass rate, this grade placed me top of class or second to top of class consistently over 8 years. Over 13 years at Toyota I learnt, "lived and breathed" the "Toyota Way" of Lean Manufacturing, Kaizen and Just In Time Manufacturing (JIT)</p> <p>SME lean consultant in Australasia for 13 years, 2005 to 2018 current; I have consulted to and work closely with a long list of progressive SME and larger enterprise Australian manufacturers and engineers, from west to east coast, applying "The Toyota Way"</p>
<p>What is Lean Manufacturing</p>	<p>Lean Manufacturing is a written plan to: eliminate all forms of daily wastage from the manufacturing process; and to maximise daily workflow and production</p>
<p>What is Factory Shop Floor Data Collection Software</p>	<p>Factory shop floor data collection software is the tool that tracks on the factory floor and reports live accurate times continuously though the day on all; manufacturing tasks, downtime jobs and wasted time.</p> <p>I advise all my manufacturing and engineering clients it is imperative to use tablets on the factory floor and factory shop floor data collection software to maximise production and productively, and particularly when adopting lean manufacturing.</p> <p>It is pointless to have a lean manufacturing plan without having a tool that reports accurate times throughout the day on all: manufacturing tasks, downtime jobs and downtime or wasted time.</p> <p>Where manufacturers and engineers currently do not in any way record their times on each job or they have their factory staff fill in time sheets at day end this will compromise daily production being maximised and will compromise any lean manufacturing initiative.</p> <p>It is imperative in the year 2018 for all</p>

	<p>Australian manufacturers and engineers to use tablets on the factory shop floor and factory floor data collection software. Manufacturers and engineers operating without tablets on the factory floor and without factory shop floor data collection software operate at unnecessary substantially higher labour times and labour costs on jobs.</p>
<p>What is Industry 4.0?</p>	<p>For manufacturing and engineering 'Industry 4.0' is about using Information and Technology to drive production and factory productivity</p>
<p>2018 Today - How do Australian Manufacturers and Engineers record and manage their labour times on jobs currently?</p>	<p>I estimate that in Australia currently 90% or more of SME and larger enterprise jobbing shop manufacturers and engineers are managing their businesses either by:</p> <p>1 use of manual time cards (ie known in the industry as “cheat sheets”, “lie sheets” or “crime sheets”) where factory staff at the end of the day attempt to remember both the jobs they worked on and the times they spent on each of their jobs throughout the day, which in many cases involves factory staff guessing then filling in their: start time, finish time and time taken on each job. I advise that the most times recorded by factory staff on such time cards are 20 to 50% inaccurate, don't motivate factory staff to work quicker, reports are 1 or 2 days after production so little or no use speaking with factory staff about and such inaccurate job times should not be used by management for quoting. This group who use manual time cards I estimate would total <u>25%</u> of all manufacturers and engineers. Or</p> <p>2 not tracking their factory staff times on jobs at all. This group who don't record time on jobs at all I estimate would total <u>65%</u> of all manufacturers and engineers.</p>

	<p>Both groups of manufacturers and engineers outlined above are operating “blind” or practically “blind”, as they are operating as manufacturers and engineers did well over 100 years ago in Australia, without live and accurate factory staff times on jobs.</p> <p>Now increasing numbers of Australian jobbing shop manufacturers and engineers are investing in the technology of <u>tablets on their factory floor and the use of Add On Software</u> for tracking their jobs and factory staff live. I can advise that manufacturers and engineers who do <u>not</u> invest in the technology of tablets on their factory floor and staff and job tracking software will operate at 20 to 30% higher labour times and labour costs on all jobs, and going forward they will continue to be significantly less cost competitive and significantly less successful in their quoting and securing jobs in their local market place.</p>
<p>Production Increases Witnessed</p>	<p>I have four manufacturing and engineering clients who have used Empower factory shop floor data collection and job scheduling software for four years to date.</p> <p>My clients with both lean manufacturing and use of Empower Factory Productivity & Scheduling Software have reduced their labour times on jobs therefore reduced their labour cost on jobs as follows:</p> <ul style="list-style-type: none"> • All of my clients have reduced their labour times and labour costs on their jobs by 20% • Most of my clients have reduced their labour times and labour costs on their jobs by 20 to 30% • My top client has reduced their labour times and labour cost on their jobs by 68% <p>I have seen and used a number of factory floor data collection software tools over the</p>

	<p>years both here in Australia and the UK, none as good as Empower Software</p> <p>I have recently recommended Empower Software to twelve of my manufacturing and engineering clients</p>
<p>Add On Software?</p>	<p>Empower factory shop floor data collection and scheduling is Add On software that can interface seamlessly with leading Australian accounting software including; MYOB Accountright, MYOB Live or MYOB Essentials, Quickbooks and Xero and ERP accounting software including; Accredo, MYOB Advanced, MYOB Exo and MYOB Greentree.</p> <p>Empower Software can also be used as stand alone software</p>
<p>What is involved in implementing Empower Factory floor data collection Software</p>	<p>Empower Software is simple to implement and simple to use</p>
<p>What are the main drivers to maximising Profitability in manufacturing and engineering?</p>	<p>The 3 Main Key Performance Indicators (KPIs) and drivers that maximise the profitability of all jobbing manufacturers and engineers:</p> <ol style="list-style-type: none"> 1. Factory staff meeting and not exceeding their budgeted labour times on weekly <u>Downtime tasks</u> 2. Factory staff meeting and not exceeding their budgeted labour times on weekly <u>Manufacturing tasks</u> 3. <u>Accuracy of Budgeted labour times in quotations</u> and any pricelist related products <p>Without tablets on the factory floor and without factory shop floor data collection software, none of these 3 KPIs can be tracked and reported with any accuracy and none can be reported live, therefore none can be managed well.</p> <p>To achieve and maintain a high performance high productivity culture in manufacturing and engineering factory tablets and factory shop data collection software, and effective use of it, is a necessity.</p>

How I use Factory Shop Floor Data Collection & Scheduling Software in my role as Lean Manufacturing Consultant?

For my Lean Manufacturing consultancy work with clients I simply run the Empower Software reports I require for jobs or time period. These Empower reports outline with accuracy all times involved in: Downtime jobs, Manufacturing tasks and Wasted time. Myself and company management table and discuss the data in the reports to make informed management and planning decisions. Empower Software is cloud and web based, this allows me to monitor client performance from any where any time.

What I like about Empower Factory Productivity & Job Scheduling Software

1. factory staff are fully engaged in using Empower and see their expected times and achieved times on jobs on their tablets on the factory floor, this reduces time wastage and drives and maximises daily productivity and production. This allows factory staff to continuously perform at their very best
2. production management have a proper tool to schedule all their jobs and to report accurate and live times and job status. Production management can see and address issues instantly. This allows Production management to perform continuously at their very best
3. Empower Software has 200 standard screens and reports on all possible aspects of production and Lean Manufacturing performance
4. Job scheduling is included
5. Internal DIFOT and external DIFOT reporting (ie Delivered In Full On Time) is included
6. Software development progresses at a rapid rate
7. Empower has a team of manufacturing experts available to every client. This guarantees new clients successful implementation of their software and in short time frame and guarantees high level on going support
8. Empower has set client training program for 2018 and beyond so all manufacturing clients have option of regular and on going training from manufacturing experts in their State and city close by. This guarantees manufacturers maximum training, therefore maximum use of the software and therefore maximum gains from tool
9. Factory staff performance reviews are factual, as discussions are based on their individual staff member's Empower reports
10. Quoting management see accurate actual times on jobs reported. This is necessary to refine labour times and labour costs on jobs in all future quotes
11. Daily and weekly Downtime and time Wastage is reduced substantially. All Manufacturing times and manufacturing costs on jobs throughout the day reduce substantially

Please feel free to email any questions you may have. If you prefer to phone to discuss any points please email me and we will schedule a time and I welcome our phone discussion

Yours Faithfully

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