



Strategy to Reality

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Turn your Strategy into Reality with TXM

Welcome again to the TXM E-Newsletter for October 2008. If you wish to discuss the topics further or are interested in how TXM can help your business, please don't hesitate to contact Tim Mclean on 0404 480 517 or email us at info@txm.com.au. You can also learn more about TXM and what we do by visiting our website at www.txm.com.au.

Tim McLean—Principal, TXM

Is it Time to Re-think Sourcing from Asia?

In the past month the Australian dollar has fallen by 20% against the US currency. This currency movement is just one among a range of factors that are shifting the competitive balance for product sourced from Asia. Wage inflation is starting to impact Asian producers, while fuel costs and high demand are driving freight costs up. Labour and environmental regulation are tightening (thankfully) and this is also impacting costs. In many cases Asian producers are becoming more choosy about the work they do and smarter about pricing products. This is making life harder for low volume, high complexity buyers like many Australian companies. Sourcing offshore also brings a number of inherent costs and risks that are rarely factored in to cost saving calculations. These include higher inventory levels with associated increased costs of storage, working capital and obsolescence. The cost of poor quality is also significantly higher in a long import supply chain than with a local supplier. Finally the costs involved in establishing and maintaining offshore supply relationships are considerable and should be included in any analysis of low cost sourcing. For buyers there are still opportunities to save cost by sourcing in Asia. However careful planning and analysis is required. Products with high labour content, low levels of customization and low freight costs are likely to offer savings when sourced from good Asian suppliers with an effective and "lean" supply chain. In addition, despite all the bad press, the quality and sophistication of Asian manufacturers continues to improve. Just don't expect the savings to come as easily in future and make sure you consider all the costs involved in sourcing off shore. When you do a detailed analysis you may well find that cheapest and best supplier may be just around the corner, not 10,000km away.

Learn How to Compete with China

Tim McLean and other leading speakers will talk on "Improving Competitiveness" at "Ausplas 2008" at the Melbourne Exhibition Centre on October 9th. See the attached Ausplas Flyer for details

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Above: A "Shadow Board" is a very simple technique to slash "looking time" provided it is maintained.

"Looking Time" a Major Source of Hidden Waste.

Last week I was talking with the owner of a major Australian engineering company who had identified "looking time" as a major source of waste in his business. He asked his top machinists and operators to video tape themselves in production and during changeovers and highlighted the time that was spent looking for things. The amount of time involved was startling. In addition the video clear showed the level of frustration experienced by the workers when they could not find a critical piece of tooling, information or material. No one wants to spend their day looking for things yet it is amazing how much time this non-productive activity consumes. Looking time can be dramatically reduced with some very simple improvements.

5S is the key lean tool for reducing looking time. By identifying what is needed in a work area, where it needs to be stored and how to maintain that standard, 5S can ensure that the right tools and equipment are always available when needed. It is also fairly cheap and simple to implement. Beyond 5S systems of visual control such as kanban and load levelling systems ensure that the right materials and information are always in the right place at the right time. So next time you are on the shop floor ask your operators how much time they spend looking for things—you may discover a big improvement opportunity you didn't even know existed.

Talk to the TXM team about eliminating Looking Time

Understanding Capacity

What is the production capacity of your business? It is surprising how few manufacturers can answer this question. Even for those who can provide an answer, it is likely to be inaccurate.

Why Does Understanding Capacity Matter?

Many business decisions are based on assumptions about the capacity of your business. For example your decisions to purchase new equipment, take on new business, add another shift or relocate your business will all be based on your actual or perceived level of capacity. The consequences of not understanding capacity can therefore be very serious—taking on business you can not service, purchasing equipment you do not really need or disrupting your business with an unnecessary relocation and the costs of a building that is too large.

How do you Measure Capacity

There are many ways to look at capacity in your business. In planning for sales growth you need to consider “demonstrated capacity”. That is, the actual rate of output that has been achieved in recent history, allowing for inefficiency. This ensures that if efficiency does not improve your customers will still get their product on time. Of course when efficiency improves you may be able to get ahead of demand, in which case your increased “demonstrated capacity” will provide further opportunity to grow sales. When considering investments however you should evaluate “nameplate” capacity to determine the hidden potential of your assets due to inefficiency. If this is poor then a focus on improving efficiency through reducing set up time, unscheduled downtime, speed loss and defective product may provide much better returns for your business than investing in new equipment. It is also important to realize capacity changes over time as you add machinery or improve efficiency. Therefore you need to put in place a process that regularly reviews your capacity and compares this to your future demand for products. This process is commonly called Sales and Operations Planning.

Consider the Whole Chain when Calculating Capacity

For a multi-step process your capacity will be limited by the slowest step in that process, the constraint. At TXM we like to look along the entire production process (or “Value Stream”) from shipping of finished goods back to supply of raw materials. We compare each step in this process to a common yardstick called Takt Time, or the rate of customer demand. So if we sell eight units per day from our factory and operate one, eight hour shift our takt time is one hour. Therefore every step in the production process needs to be able to produce at least one unit per hour. A simple bar graph (called a line balance chart) can compare the actual output of each production step (cycle time) with takt time and quickly highlight bottlenecks.

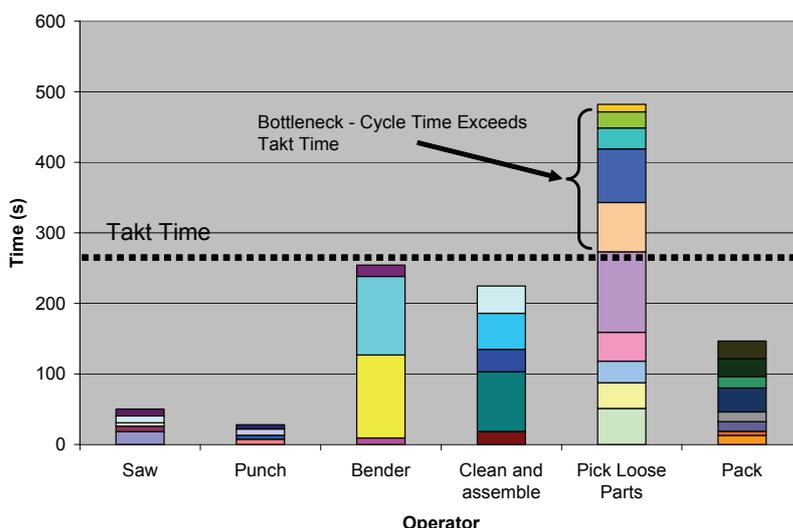
Take into Account Human as Well as Machine Capacity

There may be many steps where the rate of production is determined by people and not machines. In this case you need to know accurately normal rate of production for these processes. “Standard Work” is an excellent process for achieving a consistent output and eliminating waste and inefficiency in processes where people set the pace (see TXM E-News April 2008). People can also be a constraint away from the production line. At one company I spoke to recently capacity is limited by the ability of administration and engineering staff to process customer orders and design data. This can be hard to measure, but the consequences of overloading these functions will be just as devastating for customer service as a bottleneck in production. Standard work and value stream mapping can help identify and improve office capacity constraints.

Understanding your capacity is vital to managing a successful manufacturing business. We can assist you to understand and increase the capacity of your business.

Do you Know Someone Else Who Would be Interested in This Newsletter?

Feel free to forward this to your friends and colleagues and let us know their email address and we will add them to the distribution list for the next issue. Contact us at info@txm.com.au



Above: A Line Balance Chart is a very simple tool to visualize capacity and bottlenecks across a whole production process. In this case the “pick loose parts” step is the bottleneck and can not keep up with customer demand