

Boost Productivity through Material Efficiency

Improve the use of raw materials by eliminating production errors and defects. It is a sustainable strategy for growth.

By Stephen Grech, Director, Doing Business Better

Businesses are always seeking to improve the way they operate. Many are proactive and constantly search for new technology to drive efficiency and growth, some excel in customer service and others produce quality products.

Despite businesses proactively looking at ways of becoming better at what they do, there is always opportunity to become more efficient, reduce production lead times, and minimise waste caused by production errors.

Do you know the value of production errors? Do you know how much material waste is in your rubbish bins? What type of materials has the business been throwing out and for how long? How much time and money has production errors impacted on the bottom line?

If this figure is higher than you prefer it to, then there is an opportunity to improve production processes, deliver on time, within specification and within budget.

When a manufacturer pays for material waste to be collected, the costs will be much higher than simply the collection fees.

What are the real costs to business of errors becoming material waste?

The real cost of production errors is not just the price paid for the items in the bin. This is only the starting point. Administration costs, procurement, freight, transportation, manufacturing, labour time, warehousing, and associated utility costs such as water, gas and electricity all need to be added.

Measuring your product waste gives you an insight into how well your business is performing. The more product waste, the higher the costs. The more product

waste, the less productive output, which impacts profitability, and therefore the less competitive a business has become.

Raw materials and value-added products are thrown in the bin as waste for many reasons. Parts or components can be cut too long or too short, there may be incorrect size, colour or wrong labelling. There are also situations where goods are damaged in transportation, production or storage leads to imperfections and ultimately rejection.

When there are errors and defects as a result of a deviation from specification, there is also a corresponding opportunity to do business better, improve and implement more efficient standard operating procedures.

If staff are performing tasks in different ways, then variability becomes your enemy. If the end-to-end process has not been mapped in detail, then there will be better ways of reducing lead time, reducing costs and increasing productive output, and the utilisation of machines and labour.

Understanding how much product is wasted and thrown out is the key to becoming more competitive and profitable. Reducing or eliminating wasted product will drive down production lead time, reduce labour costs, and reduce costs of production including water, electricity and gas.

How much does your waste cost the business each year through poor processes? Measuring your waste baseline and calculating the real cost to business of the inefficient use of materials is the starting point to reducing costs of production.

The next step is to map and document your key business processes so you can identify main contributing causes of errors, defects, double handling, delays and re-work. Once you understand where your processes create material waste, you can then use methods such as Lean Manufacturing and error proofing techniques to minimise or eliminate the waste and non-productive activity.

Process mapping is a practical technique to design more productive and efficient systems and processes.

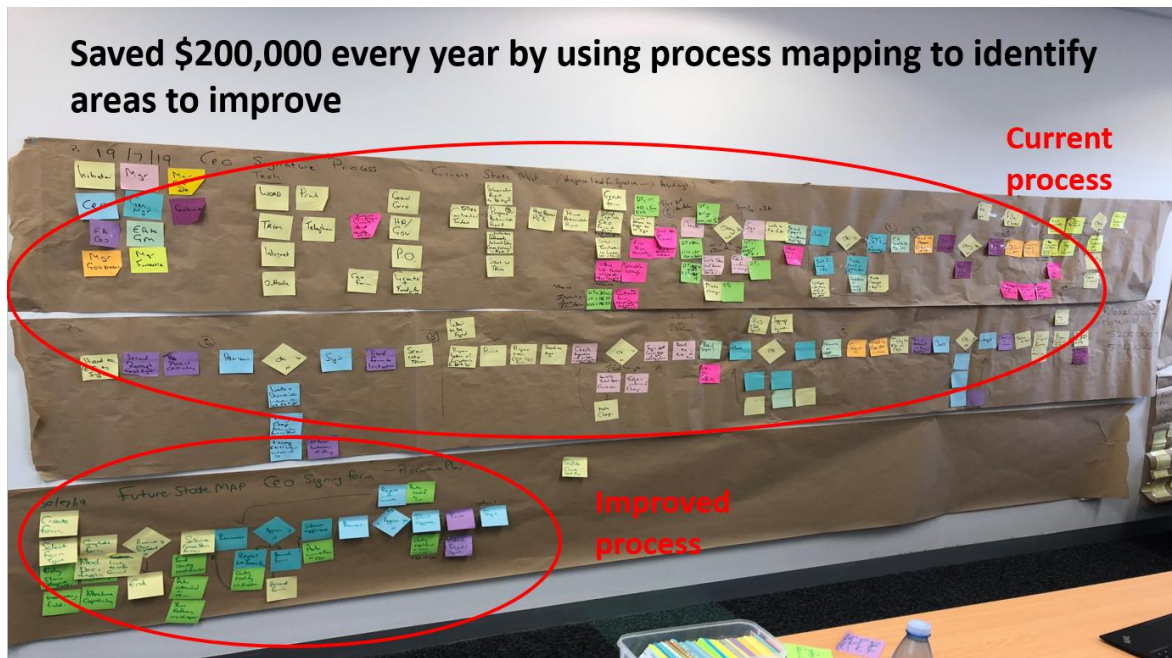


Figure 1 - Detailed process mapping enables identification of areas to improve. Examine the current process and create a new and improved process

Once improved processes have been designed, the next step is to create standard operating procedures everyone can use to maintain quality and sustain the savings in material efficiency and quality improvement. Every 1% of waste reduction generates significant savings in labour, electricity, water and gas charges. Join the war on waste and cut the cost to business by improving material efficiency rates through more productive, standardised processes and procedures.

Doing Business Better is a registered Victorian State Government Boost Your Business Service Provider. Victorian State Government grants are available to eligible businesses in the Manufacturing, Advanced Manufacturing, Food Innovation and Social Enterprise industries to become more productive.

Contact Stephen Grech on email sgrech@doingbusinessbetter.com.au or telephone Stephen Grech on 0448403094 to arrange a free Business Review and estimation of savings your business could generate through more efficient use of materials.

Virtual Lean Thinking training and consulting is available during COVID-19 to upskill staff, create internal capabilities and make process improvements. On site face to face consulting and training is also available.

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