THE SMAC STACK
HITTING MANUFACTURING WITH THE RIGHT TECHNOLOGY
A vulnerable sector

The manufacturing industry has been expanding for the past eight months, according to the Australian Industry Group Performance of Manufacturing Index. This is due, in part, to the weaker Australian dollar. But the sector remains vulnerable to international market conditions, continuing competition from cheaper overseas manufacturers, and the possibility of the dollar strengthening¹. This is due, in part, to the persistently-strong US dollar. The sector remains vulnerable to international market conditions, continuing competition from cheaper overseas manufacturers, and the possibility of the dollar continuing to strengthen. It's critical for manufacturing companies to take steps now to protect their businesses against these external forces.

Transformation is essential

The entire supply chain ecosystem must therefore transform to meet these demands. To remain economically viable, retailers need to sell more products faster, and at competitive prices. This puts pressure on distributors to shorten delivery times and, in turn, on manufacturers to accelerate production cycles.

The ability of overseas manufacturers to do this, and keep costs low, has been a major stumbling block for Australian companies. Lower wages and fewer compliance requirements make it easy for organisations in some countries to keep costs staggeringly low without compromising on output. Australian manufacturers have had to look to innovation and value-add to compete with these businesses.

This has been difficult in an industry that has traditionally been slow to embrace change. This is understandable given these significant changes mean that manufacturers would need to re-tool and re-skill. The costs and time required to do this effectively means many manufacturers are reluctant to commit to new techniques and technology too soon. Yet paradoxically, manufacturing is often the bellwether for new processes, since it's an industry in which waste and errors carry a high cost.

Now, there is a range of new technology helping manufacturers drive higher customer engagement and growth opportunities. Early adopters have been able to increase efficiencies and reduce costs through embracing the new customer-first culture.

Known as the SMAC Stack, these new technologies include social, mobile, analytics, and cloud. It is an essential toolkit for manufacturers looking to grow even as the manufacturing industry struggles as a whole.
Social

As consumers become better-educated about their product choices and options, they have come to expect products on demand. Manufacturers who can understand this demand and respond to it efficiently are likely to lead the way. Social media provides a valuable window into consumer preferences and experiences, which savvy manufacturers can use to change their processes, materials, and approaches.

Mobile

The increasing availability of mobile apps aimed at the enterprise can help manufacturers gather the information they need to make better decisions, faster. Company representatives can use iPad and smartphone apps to gather information about product performance in the field. This information can then be used to decide whether certain products should be discontinued, manufactured in larger volumes, or changed to suit customer preferences.

Analytics

While manufacturing organisations are usually noted for their ability to minimise waste through lean processes, some are still subject to seasonal or other variations. This can make it difficult to apply lean techniques with consistent results. Advanced analytics provides the granular approach manufacturers need to smooth out these fluctuations.

Gathering big data is just the first step. Analysing it effectively is where the value lies. The resulting insights can reveal patterns, opportunities, and areas of concern much sooner than would otherwise have been apparent. Manufacturers can potentially identify process variables to significantly increase yield without materially increasing costs. They can also use information gathered from social media and other sources to accurately predict consumer demand for particular products, adjusting outputs appropriately.

If a manufacturer can predict these demand spikes more accurately than its competitors, it may find itself the only source for an in-demand product, potentially increasing revenue and creating new business opportunities.

Cloud

Manufacturers need to be easy to work with for other members of the supply chain. This often means responding fast to demand and meeting short time-to-market schedules. Cloud-based solutions are part of the answer.

Cloud-based systems are fast to roll out and don’t depend on internal computing capabilities. This lets manufacturers ramp up as needed. It also makes it easier for manufacturers to: gather and analyse company-wide intelligence; use collaboration platforms that enable Vendor Managed Inventory (VMI); accelerate product development; manage sales channels more effectively; automate customer service for cost and time savings; and streamline key areas of operation.1

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ERP remains essential

In addition to new technologies, manufacturers should reconsider their use of established systems to maximise the benefits. Enterprise resource planning (ERP) systems are essential for manufacturers.

ERP provides visibility, traceability, quality management, and planning capabilities that let manufacturers minimise costs. Manufacturers looking to optimise capacity, respond to market demand, and manage supply chain dynamics tend to benefit from ERP solutions.

If manufacturing organisations aren’t getting value from existing ERP implementations, it could be worth getting professional advice. It may be time to upgrade or there may be additional features that aren’t being used to their full potential.

How to hit the SMAC and invest in the right technology

So how do today’s manufacturers choose the right technology? There are a wide range of ERP solutions available, ranging from monolithic ERP solutions to mid-market and enterprise ERP solutions for specific sectors of the manufacturing industry. There is no one-size-fits-all solution and the choice isn’t just about price. It’s important to look at a variety of parameters: depth of functionality, future development path, flexibility to adapt to changing business models, integration with existing systems, cloud versus on premise as well as overall usability. All these factors need to be considered if a manufacturer is to choose the right technology for them.

Most importantly, any technology decision should be made in consultation with the right business partner. UXC Eclipse, a CSC Company is the global leader in delivering successful Microsoft ERP solutions using 100% Microsoft technology. UXC Eclipse can offer pre-implementation services, business process mapping and advice on the best technology roadmap for manufacturers as well as case studies that offer testament to their successful Microsoft Dynamics ERP projects.

American manufacturers can compete with overseas competitors by carefully choosing their technology partner and investing in the right mix of solutions. This must be undertaken within a manufacturing culture that has shifted to a customer-first approach.
Today’s manufacturers are adopting new technologies that directly align with and support their business strategies, seeking competitive advantage through packaged ERP systems such as Microsoft Dynamics ERP.

UXC Eclipse, a CSC Company is the Microsoft Dynamics Gold Partner of choice for successful ERP and CRM implementations and consulting services, supporting 2700 customers internationally. We understand that long-term success is about more than software and technology – it’s about understanding our customers. That’s why we offer more to our customers; ISO9001 quality certified methodologies to support project implementations, business process management to define and map requirements, business analytics to make sense of valuable data and technical consulting to ensure every site is optimised either on premise or in the cloud.

Our customer satisfaction and 97% customer retention rates are legendary. Most importantly we understand our customers’ business – that’s why we were awarded Microsoft Dynamics Industry Partner 2015.

Contact UXC Eclipse to discuss your project requirements today.

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