Machine builder opportunities and challenges in the new digital world

Smart design and engineering
Measuring the marketplace pulse

Survey of machine builders and factory end users reveals a need for enhanced, more open connectivity

Schneider Electric surveyed over 400 worldwide machine builders and factory end users in 2015. The questions they answered all centered around what their machines and plants would need to look like in 2020, if their businesses were to sustain growth and boost productivity. Their feedback has shaped (and will continue to shape) Schneider Electric digitized solution investments.

Key requirements identified included:

- Tools that could accommodate a younger, less skilled, and less experienced workforce
- A need for simpler integration through open software connectivity and more open field buses
- A need for whole lifecycle support of the products they purchase

“Digital transformation requires individuals, teams, and often entire companies to identify new values that may change or replace the vast amount of habits, norms, and culture deeply embedded in many established companies.” - ARC Advisory Group
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Machine builders identify key digitization challenges

Changing technologies and business models require a realignment of resources, but will enable faster time-to-market

Although trends such as Industry 4.0 are compounding the quantity of data available for driving new levels of factory and machine productivity, machine builders are challenged with how to drive business value from this data.

In addition, new, more lean business models are emerging from new regions of the globe such as China and Japan. An uptick in acquisitions means that many companies are now shifting from a regional business focus to a global one.

On the technology side, machine builders will soon be tasked with building voice recognition, image recognition, augmented reality, and other AI-driven technologies into their machines. As a result, they will be faced with talent and resource challenges. However, partnerships with key technology suppliers will help to ease these burdens as no one organization can handle the challenges of digitization alone.

“Companies that rely only on their current success may be slow to adopt new measures and adapt to the changing environment.”

- ARC Advisory Group
New opportunity: service-driven business models

Cloud-based monitoring tools now enable machine builders to sell guaranteed machine performance

Machine builders are digitalizing their operations in order to improve the speed of their engineering, commissioning and maintenance tasks. New cloud-based tools, such as EcoStruxure Machine Advisor, open doors for machine builders to offer new services, like mining machine performance data, to help end users improve productivity. Some are seizing the new opportunities by enhancing their traditional ways of doing business. Others are reinventing their processes as a result of the new possibilities that digitized technologies present.

Schneider Electric has launched Schneider Electric Exchange, a marketplace where OEMs and other partners can be linked globally to either access resources for project implementations or to offer resources to support ongoing third-party projects. In this large global pool of collaborators, the open Schneider Electric EcoStruxure architecture acts as the framework for facilitating transition to these new “coopetition” business models.

Visit Schneider-Electric Exchange

> More about the dedicated OEM program
Machine Builders, industry stakeholders and technology manufacturers are entering a new era. Industry 4.0 places new demands on all parties and, at the same time, is opening doors to higher productivity, new business growth opportunities, and new service business models.

Schneider Electric is well positioned to support machine builders and manufacturers with digital transformation by offering expertise in open IIoT-ready architecture platforms such as EcoStruxure for Machine Builders, which link connected hardware and software products such as TeSys island, Modicon M262, and EcoStruxure Machine Advisor to both the cloud and to local edge environments. Together these technologies support machine builders, throughout the machine lifecycle, by reducing time-to-market by up to 30% through simplified design and engineering, by driving 40% faster commissioning integration, and by generating up to 50% in diagnosis and corrective action time savings.

“Transformative technologies, in combination rather than in isolation, will help enterprises address tangible operational challenges and create new business models.” – IHS Markit
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Full IIoT machine integration with unprecedented efficiency.

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