



## INTELLIGENT TECHNOLOGIES FUEL THE 4TH INDUSTRIAL REVOLUTION FOR IM&C

The fourth industrial revolution is upon us. Digitization and connected digital networks are giving birth to a new economy where data is the fuel, rapidly evolving technologies like machine learning, artificial intelligence, block chain, and the Internet of Things (IOT,) among others, are the enablers, and delightful, customer experiences separate winners from losers.

While makers of industrial machinery and components (IM&C) may not be top of mind when we hear the term “digital transformation,” the reality is that the opportunities for them to leverage technology and data to create desired, impactful and fundamental change are profound. As fiscal and social drivers steer the world from linear to circular economies, the companies that win the future will reimagine how resources will be consumed, recycled and reused. And in an era where trust is an important differentiator, both industrial enterprises and individual consumers will purposefully choose providers with hardened supply chains and transparency at every stop along the way.

With all of this in mind, IM&C manufacturers have a special opportunity to leverage technology and data to transform their business and revenue models from simply selling products to selling products, smart products and services in many different combinations. Those who succeed will become what SAP calls Intelligent Enterprises.

In Intelligent Enterprises, technology and data feed intelligence, which in turn feeds process automation and innovation, unleashing opportunities to create new customized products for segments of one, increase revenues and efficiencies, operate more cost-effectively, and exhibit behaviors of caring global citizens. Experiences of all stakeholders are improved for all.

And while it might seem dramatic to say that companies who fail to become Intelligent Enterprises could face extinction, the reality is that those who don’t are, probably, self-selecting out of the Fourth Industrial Revolution.

The good news is that such companies seem to be in the minority. In its report, **SAP Industries White Paper | Industrial Machinery and Components**, SAP shared the following insight from a recent Forrester Research study, “95% Of cloud decision-makers at discrete manufacturing firms believe in the importance of software that integrates across an end-end value chain in an industry cloud. Clearly this end-to-end approach is a marketable differentiator for IM&C companies.

**So the question of the moment is how do IM&C companies get from where they are now to a future in which most of their revenues will come from services (ranging from simple after-sales services to outcome-as-a-service and everything in between,) highly customized digitalized services that address a segment of one, personalized solutions at scale, monetization of data assets, and other means that may not have yet been imagined.**

**Or, in other words, how do companies transform into “intelligent enterprises” for industrial machinery and components.**

SAP argues that the answer lies in paying attention to five priorities:

- **Customer Centricity** that reaches beyond understanding the people who buy, use, or pay for your products to knowing how your customer uses them to serve their own customers. This way when consumer behavior changes, IM&C companies will proactively have their customers' backs. A similar strategy applies to understanding customer journeys, creating omni-channel communications and building collaborative and 360-degree relationships powerful enough to differentiate.
- **Serving a Segment of One**, at scale, becomes not only possible but also practical when rigid platforms systems and processes are replaced by those that can be "smartly" configured, personalized and customized and then refined through insights gleaned through machine learning.
- **Digital Smart Products** with embedded software can not only be configured to meet new or changing requirements, reduce rework, and potentially speed time-to-market, but they can also become revenue generators by offering digital services.
- **Digital Supply Chain and Smart Factory** to help companies make adjustments on the fly as may be warranted by unanticipated variances in supply, external conditions, changes in the configuration of customer orders among other things.
- **Servitization and New Business Models** which IM&C makers might leverage to extend or create entirely new kinds of services such as data-as-a-service, insights-as-a service, products-as-a-service, outcome-as-a-service and similar configurations that promise better understanding of customers, opportunities to sell add-ons and so on.

It is recommended that industrial manufacturing and components companies who plan to lead the fourth industrial revolution focus on these priorities while embracing intelligent technologies such as machine learning, artificial intelligence, block chain, the Internet of Things and so on to transform their businesses. Done right, these companies will emerge as intelligent enterprises which, by definition, have the ability to learn from their environment, to make better decisions based on that learning, to anticipate the need for decisions before problems actually occur, and to do all of this automatically and at scale.

Complex as all of this might seem, SAP has created an Intelligent Enterprise roadmap to help enterprise managers to begin their transformational journeys with the right "end" in mind. Productized frameworks and a variety of industry-specific digital reference architectures for IM&C companies are also available, complete with best practices and deployment options that optimize for continuous innovation with a focus on intelligent outcomes.

For companies who are in a hurry, need industry-specific process expertise with data analytics, or simply want to insure that the right digital reference architecture is identified, defined and delivered, SAP offers help. In that same context, there is also a model-company approach which can simplify and increase the speed of the digital transformation journey.

With so many good options available here, there is only one awful choice to make. Namely, opting out of the journey.

As you continue on reading SAP's Intelligent Enterprise overview for the IM&C industry, it is important to keep in mind the critical connections between best practices, architectures and an organizations approach to digital transformation. We believe that SAP has provided a roadmap to serve as a key reference document for the IM&C industry; especially those looking to out maneuver the competition and outperform the industry continuously into the future. [Download the white paper today and get started.](#)

