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**From *Sensors to Outcomes*
How IoT and Predictive Analytics
Can Help Monetize Digital Operations**

Unlocking business opportunities with
innovative digital solutions



“IoT has been the subject of considerable hype for years, but as the business and technology landscapes have evolved, more organizations are moving fast to turn IoT-enabled capabilities into strategic advantages.”

The Internet of Things (IoT) has become more than a vision. It is rapidly becoming a reality as more organizations put in place sensor-enabled devices and intelligent systems that connect things with people and processes—to help drive efficiencies and unlock new opportunities.

As the IoT reality takes shape, organizations of all sizes are automating processes, streamlining work, boosting productivity, enhancing customer engagement, getting ahead of inventory issues, proactively maintaining assets, and more.

Many of them are transforming factories into “smart factories” by applying robotic process automation and machine learning to increase productivity. Others are extending the art of the possible to create new business models to generate new

revenue channels. And some are even doing more than simply leveraging the familiar tools of automation and decision-support systems. They are working to tightly integrate processes with leading-edge information technologies to tap the full potential of IoT—turning big amounts of data from a growing number of sensors and machines into huge results.

On the cusp of something bigger

IoT has been the subject of considerable hype for years, but as the business and technology landscapes have evolved, more organizations are moving fast to turn IoT-enabled capabilities into strategic advantages. Why IoT now?

For one, the **cost of implementing IoT solutions continues to decrease.** Sensors, platforms, licenses, and other

components involved in IoT solutions are becoming more affordable, making it easier for organizations to define their business cases.

Second, the **platforms are now mature**, allowing organizations to deploy stable technologies to build flexible yet secure IoT applications. New technologies such as in-memory computing enable previously impossible solutions and applications such as predictive analytics for big amounts of data.

Third, many organizations have shifted toward becoming digital service companies, and they are viewing **IoT capabilities as a strategic enabler.** Their leaders understand that they must act promptly or miss a window of opportunity and, as a result, likely lose market share.

A few reservations about IoT

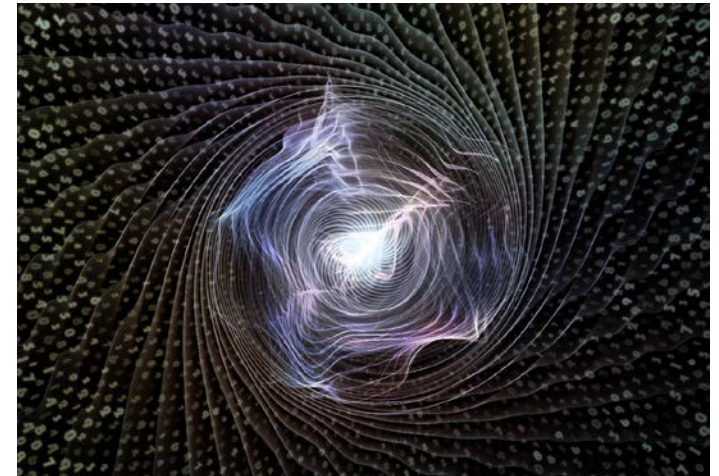
Not all business leaders are rushing headlong into the IoT fray, however. Some are holding themselves back as they watch the IoT ecosystem develop—or they are being held back by other forces.

Hype hang-ups?

Leaders at some organizations may not view IoT as transformative. Rather, they continue to see it as hype, believing that it does not provide the value promised. Their reluctance can mean that they miss opportunities to innovate and grow.

The reality is that IoT business models are active across industries today, with many leading organizations already having taken advantage of leading-edge capabilities.

“SAP® Leonardo combines adaptive applications, big data management, and connectivity in packaged solutions across lines of business and industry use cases.”



Complexity qualms?

Many organizations believe that implementing IoT solutions can be very complex. Enterprise leaders may struggle to formulate a strategy for leveraging IoT solutions. And even if they do develop a vision and a strategy, they might not be sure how to get started—how to execute their plan.

The reality is that offerings such as SAP Leonardo can provide a framework to quickly get started. SAP Leonardo combines adaptive applications, big data management, and connectivity in packaged solutions across lines of business and industry use cases—ranging from connected products, assets, and infrastructures to vehicle fleets, markets, and people. It effectively provides a suite of solutions that help reduce com-

plexity for the enterprise. Leveraging SAP Leonardo for IoT, however, will still require insights, industry-relevant tools, and in-house capabilities to define and execute your IoT strategy and deliver measurable business benefits.

Maturity misgivings?

Leaders at many organizations also might believe that IoT is still very low on the maturity curve. They might have particular concerns about security and data management capabilities.

The reality is that solutions such as SAP S/4HANA®, the modern digital core ERP, and SAP® Cloud Platform have reached a very high level of maturity—with solutions already deployed on top for many use cases across multiple functions and industries, providing

direct benefits and business value for leading organizations. Enhanced options available on the SAP Cloud Platform—through SAP®’s recent acquisitions of PLAT.ONE and Altiscale in 2016—have helped to accelerate the addition of new capabilities to enhance edge computing for IoT and manage big data processing in the cloud.

Toward answers: SAP Leonardo

Putting to rest your big reservations about IoT realities, complexity, and maturity can be a great start. But you will still have a lot of questions to address if you plan to move forward effectively and strategically with new digital IoT capabilities. Consider the following strategic questions:

- How can I best leverage the data generated by devices—to tightly connect

the resulting intelligence with my core and extended business processes?

- How can I increase efficiency of existing processes by leveraging the data collected by IoT devices?
- How can I enable intelligent, interconnected systems to drive processes, not just to monitor them?
- How can I get full visibility into my operational performance?
- How can I best use predictive analytics to identify potential hazards and proactively respond?

In seeking to answer these questions, many organizations might consider SAP Leonardo, which offers a comprehensive portfolio of IoT products and services, including IoT business and technical

“As you begin working to deploy SAP Leonardo as part of a comprehensive IoT strategy, more potential bottom-line benefits can start to materialize.”

services, that can help organizations realize tangible IoT benefits and accelerate digital transformation.

New technology alone, however, will not deliver the edge you require for competing in the evolving digital economy. IoT capabilities can strategically enable new operational capabilities or even business

models—so any IoT initiative should be driven by business considerations, not IT.

Bringing IoT value into focus

As SAP customers begin working toward the IoT vision and incorporating solutions such as SAP Leonardo, what are the tangible benefits they can expect to achieve? For starters, SAP Leonardo can:

- Allow you to extend core ERP capabilities by connecting devices and sensors with business processes
- Offer a scalable solution to allow for future extensions and growth
- Provide data integrity and security along the data and process flow
- Enable predictive and adaptive scenarios,

leading to operational productivity and, as a result, lower costs

- Allow for new scenarios that help you develop net-new business models

And as you begin working to deploy SAP Leonardo as part of a comprehensive IoT strategy, more potential bottom-line benefits can start to materialize, including:



Customer and market growth

- New and enhanced revenue channels
- Increased loyalty with customers via an omnichannel experience



Business model innovation

- Upselling of high-margin products and services, based on buying trends
- Pay-per-use models for capital equipment



Operational cost reduction

- Increased operational efficiency with predictive and adaptive manufacturing
- Lower costs from using secure, agile cloud computing offerings



Enhanced business insights

- Optimization of ordering, shipping, and billing at sales and global distribution centers
- Monetization of IoT-driven analytics



Partner collaboration

- Enablement of hyper-connected business and partner networks
- Secure data sharing with channel partners, for joint product offerings



Regulatory compliance

- Efficient inspection of large asset bases, using IoT and mobile solutions
- Avoidance of regulatory fines, thanks to timely and reliable compliance

Six steps to sustain you on an IoT journey enabled by SAP Leonardo

There are plenty of ways to get started on an IoT transformation powered by solutions such as the SAP Leonardo platform. But six key steps can go a long way toward helping you realize value throughout the journey.

1. Formulate a clear vision and strategy on how IoT can help support your business
2. Define a roadmap that can bridge the gap between business demands and IT capabilities
3. Start with one scenario to demonstrate value and to provide critical experience you can use on the rest of the journey
4. Leverage proven frameworks and solutions
5. Take advantage of preconfigured solutions that can help jump-start projects and accelerate value
6. Consistently measure the value of the implementation—to demonstrate the business case for investing in IoT capabilities

One more big step

Launching new IoT capabilities with SAP Leonardo requires guidance as well as assistance in developing a vision, a strategy, and a business case. It also requires help with execution—from technology implementation to ongoing support. Deloitte's long-standing relationship with SAP and our co-innovation efforts with SAP mean we understand the potential of SAP solutions—like SAP Leonardo—as well as how they can meet the demands of the evolving digital economy.

Deloitte's industry-relevant IoT experience, proprietary accelerators, and preconfigured solutions and SAP Leonardo micro-services at the ready, mean we can help you quickly transform SAP S/4HANA or existing SAP ERP systems into an extended digital IoT platform—one that can align with SAP's strategic product direction.

With advanced technical capabilities and a global network of more than 16,000 business and technology professionals focused on SAP, Deloitte can provide a full spectrum of services for accelerating your digital journey. Whether you're looking to develop new business models, align IoT apps with broader digital transformation goals, or assess risks before developing an IoT strategy, Deloitte can provide focused guidance geared toward results.

Let's talk

If you're ready to do something new with SAP Leonardo and leading-edge digital IoT capabilities, we should talk. Contact us to get the conversation started.

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