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The machine builder’s guide to delivering new value

Monetize the IoT with new business models and revenue streams

Introduction

The industrial Internet of Things (IIoT) is helping original equipment manufacturers (OEMs) and machine builders gain full transparency of their machines and operations, on a local and global scale. With this capability, these organizations are beginning to implement digital business models that create revenue and deliver new value to customers.

In this guide, we'll help you understand and evaluate five new ways to monetize the industrial IoT as well as demonstrate the value they deliver.

Maintenance as a service

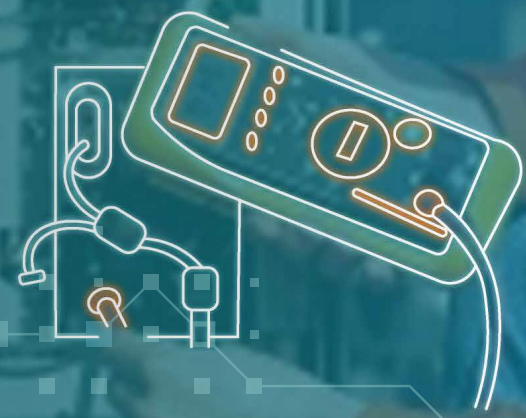
Today's consumers want guaranteed uptime and their machines maintained by someone who knows them well. With IIoT-enabled factory assets, OEMs can implement condition monitoring. Doing so allows them to develop key performance indicators (KPIs) to identify when factory assets are operating outside of normal conditions. These anomalies often indicate the need for maintenance or performance adjustments.

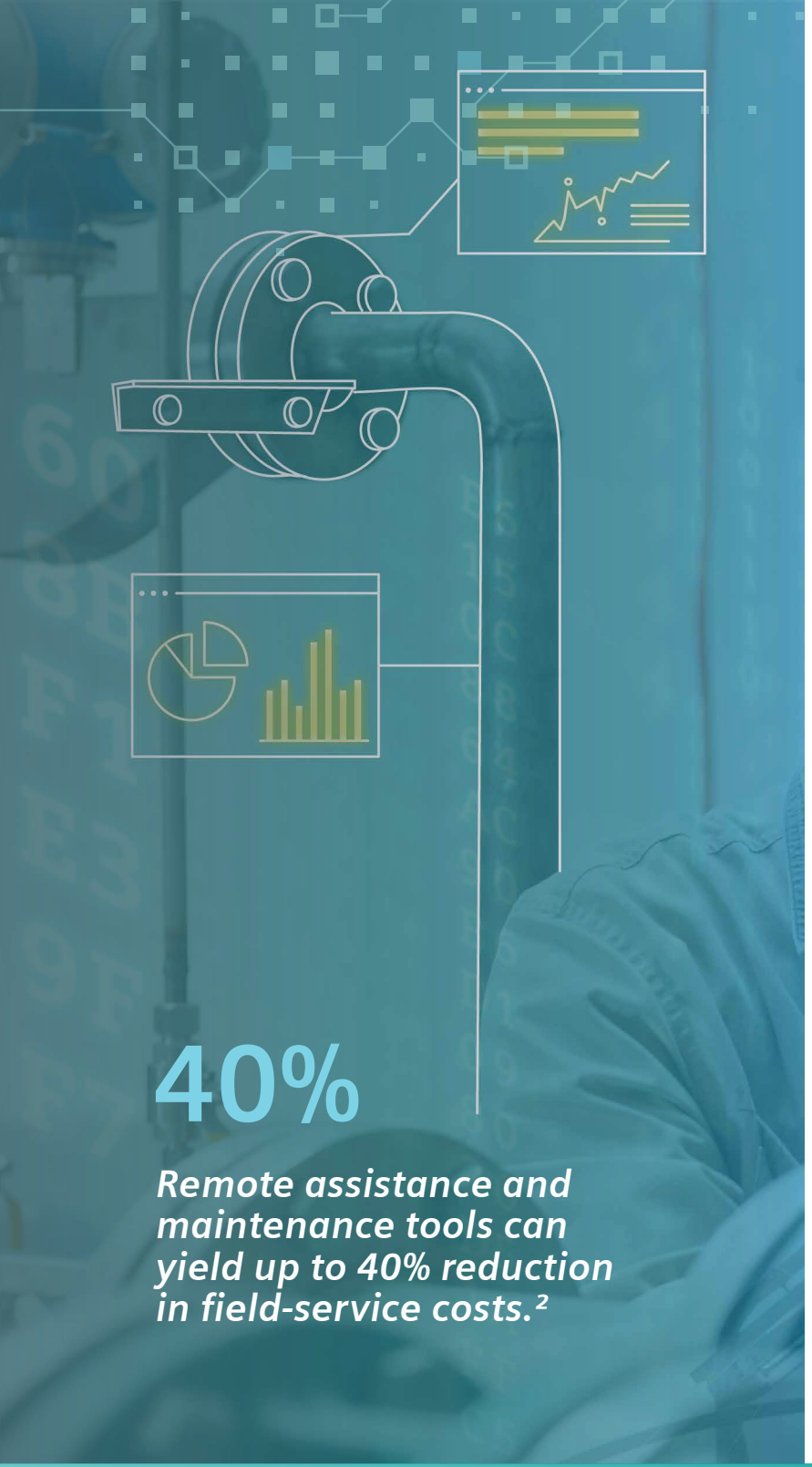
Understand when parts will need to be serviced or replaced

Proactively order parts to have on hand, or to ship to customers

Service customer machines to achieve more optimal performance levels

$3.9B ***Expected condition monitoring market size by 2025[1]***





40%

Remote assistance and maintenance tools can yield up to 40% reduction in field-service costs.[2]

Machine optimization as a service

Machine optimization as a service differentiates your offerings and gives customers confidence that your products will achieve their production goals. By monitoring machine usage within a customer factory, you can understand the impact different variables have on its performance and health. Then you can work with the customer to optimize operations and thus, increase factory output.

- Increase machine availability by keeping it in proper operating parameters
- Improve efficiency to minimize waste and maximize throughput
- Optimize machine utilization to ensure all machines are used at proper capacity

Pay-per-use or leasing options

IIoT gives you the ability to serve customers who want more flexible pricing options, or who cannot afford to wholly own a machine. By collecting data based on how the machine is used, you can implement and uphold pay-per-use pricing models and lease machines.

Acquire new customers by implementing pricing models that align with demand

Create recurring revenue streams for machines in production

Widen margins by shifting original equipment revenues to service revenues

$21.6B ***was the equipment as a service market in 2019. IoT Analytics GmbH projects this market to grow at a 35% CAGR through 2025.*** [3]

39%

of surveyed organizations utilize predictive analytics to identify product problems and manage their warranty performance.[4]

Dynamic warranties

With a lack of operational data, it can be difficult to gauge whether customer warranty claims are valid. IIoT-enabled machines and parts give you the visibility you need to verify machines are being used within warranty specifications. Plus, you can change the warranty terms based on customer usage.

- Reduce costs induced by invalid warranty claims
- Offer warranty extensions for machines that are not heavily used
- Raise warranty prices for machines that are over-used and prone to failure

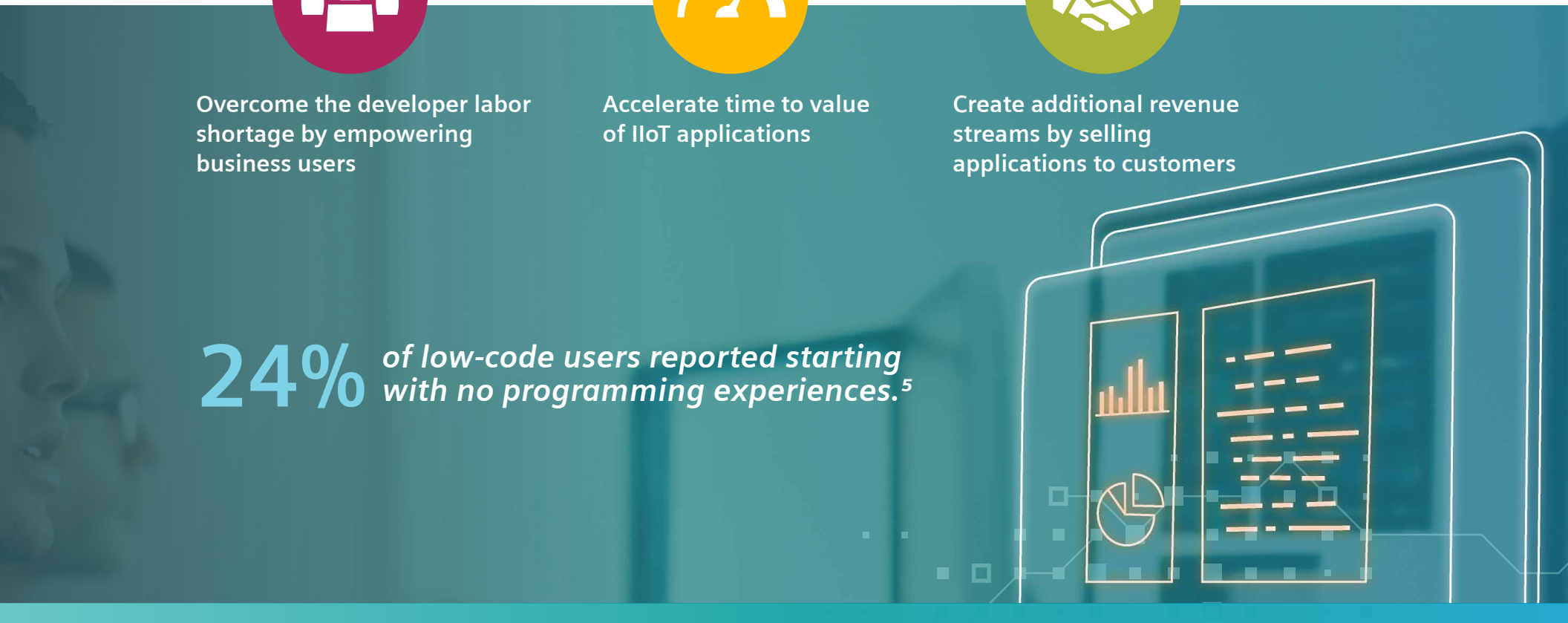
Low-code application development

A low-code application development platform empowers non-technical users to build and deploy IIoT applications for a given use case. Developing a custom application means you can quickly get your IIoT system working the way you need it to. It also provides the opportunity to create and productize newly developed applications to generate new revenue.

Overcome the developer labor shortage by empowering business users

Accelerate time to value of IIoT applications

Create additional revenue streams by selling applications to customers



24% ***of low-code users reported starting with no programming experiences.[5]***

Explore the possibilities of IIoT with MindSphere

MindSphere is Siemens' industrial IoT as a service solution that connects every machine and system in the enterprise to deliver better productivity and efficiency. With this level of connectivity, you can gain complete transparency into assets deployed in customer plants to begin offering new value. Built on Mendix, the low-code development platform, MindSphere will continue to innovate to unlock additional use cases as the technology landscape evolves.

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To learn more about new, IIoT-enabled business models

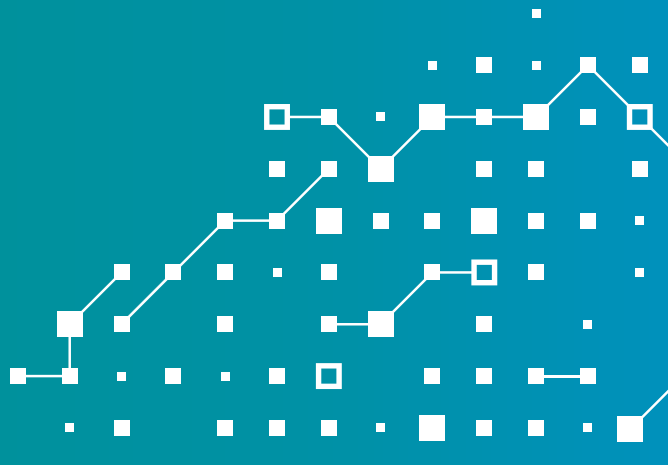
visit www.siemens.com/mindsphere

Notes:

1. **Machine Condition Monitoring Market Forecast to 2025 - Industrial Internet of Things (IIoT) to Unfold New Growth Avenues**
https://www.globenewswire.com/news-release/2020/01/30/1977312/0/en/Machine-Condition-Monitoring-Market-Forecast-to-2025-Industrial-Internet-of-Things-IIoT-to-Unfold-New-Growth-Avenues.html

2. **Coronavirus: Industrial IoT in Challenging Times**
https://www.mckinsey.com/industries/advanced-electronics/our-insights/coronavirus-industrial-iot-in-challenging-times

3. **Warranty Management: Converting Challenges to Market Differentiators**
https://www.logisticsmgmt.com/wp_content/oracle_wp_warranty_121013final.pdf

4. **Equipment as a Service Market Report 2020-2025**
https://iot-analytics.com/product/equipment-as-a-service-market-report-2020-2025/#:~:text=The%20Equipment%20as%20a%20Service%20(EaaS)%20Market%20Report%202020%2D,sizing%20and%20analysing%20the%20market.

5. **Low-Code Application Development Trends**
https://www.mendix.com/blog/infographic-low-code-application-development-trends/