

Headlines

- Global IoT Platforms Market 2019, by Frost & Sullivan
- Microsoft IoT Signals: How are leaders approaching implementation?

Take a look at the complexity of IoT Platforms and discover the Solution Leaders

IoT Platforms are the Bridge between Operations Technology (OT) and Information Technology (IT)

ARM	PLATFORM (CLOUD)	AT&T	Enterprise Application Management Business	AWS	EDGE COMPUTING Real-time Incident Management	Ayla Networks
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Take a look at the complexity of IoT Platforms and discover the Solution Leaders.

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CEO & co-Founder
at e2mos
Acting Chief Editor



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Sierra Wireless Announces Strategic Collaboration with Microsoft to Develop one of the Industry's First Full-Stack IoT Solutions

Sierra Wireless edge-to-cloud solutions integrated with Microsoft Azure IoT Central will simplify and accelerate time-to-value for enterprise IoT projects

Vancouver, Canada-June 11, 2019

Sierra Wireless (NASDAQ: SWIR) (TSX: SW), the leading provider of fully integrated device-to-cloud solutions for the Internet of Things (IoT), today announced a strategic collaboration with Microsoft to provide one of the industry's first full-stack IoT solutions. Sierra Wireless' new [Octave™ edge data orchestration solution](#) has been successfully connected with Microsoft Azure IoT Central. Once in production, the solution will simplify and accelerate the process of getting edge data to the cloud, enabling enterprises to achieve the value of IoT for the industry 4.0 world. In addition, Sierra Wireless intends to migrate its existing cloud infrastructure from AWS to utilize Azure's full complement of cloud services.

Azure IoT Central is a software-as-a-service (SaaS) solution that lets customers build and deploy production-grade IoT applications in hours without cloud computing experience or specialized skills. Octave merges edge devices, network, and cloud APIs into a single platform that securely extracts, orchestrates and acts on data from remote assets at the edge to the cloud. The integration will enable customers to focus on building their business rather than reinventing technical infrastructure, which dramatically reduces costs and development time from several months to days.

René Link, CMO and SVP, Corporate Strategy and Go-To-Market Operations, Sierra Wireless, said: "The combination of Sierra Wireless' full suite of IoT solutions and Azure IoT Central addresses a critical gap in the marketplace. We've consistently heard from customers about how complex it is to integrate IoT technology, which takes time and focus away from their core business. This collaboration creates a category-of-one IoT solution that will accelerate edge data into the cloud, allowing enterprises across the globe to monetize IoT."

Tony Shakib, Principal Group PM Manager, Azure IoT, Microsoft, said: "As a leader in integrated IoT solutions, Sierra Wireless' edge-to-cloud capabilities are an ideal complement to Microsoft Azure IoT Central. Together with Microsoft's Azure IoT Central offering, this strategic collaboration will enable cloud developers to deploy secure, intelligent and reliable IoT device connectivity and collect data as an extension of their Azure IoT Central experience."

Roger Entner, Founder and Lead Analyst, Recon Analytics, said: "The Sierra Wireless integration with Microsoft will unlock the IoT's true potential for the tens of thousands of businesses that are struggling with the complexity of IoT, stitching together components into bespoke solutions that take months, often years to deploy. Joint solutions from Sierra Wireless and Microsoft will enable a company's existing cloud developers to tap into the IoT and easily connect their edge devices to their Microsoft Azure infrastructure."

Sierra Wireless Octave is currently in preview with lead customers. For more information and to apply for the preview program, visit: <https://www.sierrawireless.com/octave>. To contact the Sierra Wireless Sales Desk, call +1 877-687-7795 or visit <http://www.sierrawireless.com/sales>.

About Sierra Wireless

Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is an IoT pioneer, empowering businesses and industries to transform and thrive in the connected economy. Customers Start with Sierra because we offer a device to cloud solution, comprised of embedded and networking solutions seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide rely on our expertise in delivering fully integrated solutions to reduce complexity, turn data into intelligence and get their connected products and services to market faster. Sierra Wireless has more than 1,300 employees globally and operates R&D centers in North America, Europe and Asia.

For more information, visit www.sierrawireless.com.

Connect with Sierra Wireless on the IoT Blog at <http://www.sierrawireless.com/iot-blog>, on Twitter at @SierraWireless, on LinkedIn at <http://www.linkedin.com/company/sierra-wireless> and on YouTube at <http://www.youtube.com/SierraWireless>.

New power switching regulator with the industry's lowest quiescent current extends battery life in Internet of Things designs



TI's 60-nA IQ buck converter increases efficiency and shrinks solution size in a variety of battery-powered industrial and personal electronics applications

DALLAS, July 15, 2019 /PRNewswire/ -- Texas Instruments (TI) (NASDAQ: TXN) today introduced an ultra-low-power switching regulator with the industry's lowest operating quiescent current (IQ) at 60 nA – 1/3 that of the nearest competitive device. The TPS62840 synchronous step-down converter delivers very high light-load efficiency of 80% at 1- μ A load, which can enable designers to extend the battery life of their systems, or use fewer or smaller batteries to shrink their overall power supply solution size and reduce cost. Additionally, the new DC/DC converter's wide input voltage (VIN) range of 1.8 V to 6.5 V supports a variety of battery chemistries and configurations. For more information, see www.ti.com/TPS62840-pr.

These features plus its selectable functions enable the TPS62840 to help engineers solve critical design challenges in many battery-powered, always-on industrial and personal electronics applications – including narrow-band Internet of Things (IoT), grid infrastructure equipment and wearables – that require more flexibility, an extended wireless range, improved accuracy and reduced electromagnetic interference (EMI).

The TPS62840 joins TI's portfolio of highly integrated, low-IQ DC/DC converters that enable designers to maximize power delivery in the smallest possible solution size.

The world's lowest I_Q power switching regulator for battery-powered applications



Key features and benefits of the TPS62840

- **Longer battery life, very high light-load efficiency:** A lower IQ draw delivers longer battery life for systems with very light loads (less than 100 μ A), and those operating primarily in standby/ship mode (not switching). The low IQ of the TPS62840 enables its 80% efficiency at a 1- μ A load, which is up to 30% better than competitive devices.
- **Selectable modes enhance performance, lower overall cost:** The TPS62840's selectable mode and stop functions improve noise performance and reduce signal distortion. These benefits can help lower the solution cost because designers can achieve system requirements without using more expensive precision signal-chain components, sensors or radio solutions to perform the same functions. The mode pin allows for continuous conduction mode, also called forced pulse-width modulation mode, to improve ripple or noise performance and lessen the impact on transmissions in sensitive radio-frequency applications. The stop pin turns off all switching to reduce EMI or ripple, and minimizes distortions passed to precision signal-chain, measurement, sensors or wireless connectivity components.
- **Smaller solution size:** Engineers can use the new switching regulator to cut their battery count in half or use smaller batteries in their design. For example, designers can save up to 16,980 mm³ using four AAAs instead of four AAs.
- **Flexible VIN broadens applications:** The TPS62840's wide range of 1.8 VIN-6.5 VIN accommodates multiple battery chemistries and configurations, such as two lithium manganese dioxide (2s-LiMnO₂) cells in series, single-cell lithium thionyl chloride (1xLiSOCL₂), four-cell and two-cell alkaline, and lithium polymer (Li-Po).

Package, availability and pricing

Pre-production samples of the TPS62840 are now available through the TI store in the following packages: [8-pin small outline no-lead \(SON\)](#), measuring 1.5 mm by 2.0 mm; [6-pin wafer chip scale package \(WCSP\)](#), measuring 0.97 mm by 1.47 mm. An 8-pin thermally enhanced package (HVSSOP), measuring 3 mm by 5 mm, will become available later this year. Pricing starts at US\$0.85 in 1,000-unit quantities. The [TPS62840-1DLCEVM55](#) and [TPS62840-1YBGEVM56](#) evaluation modules are available for US\$49 each.



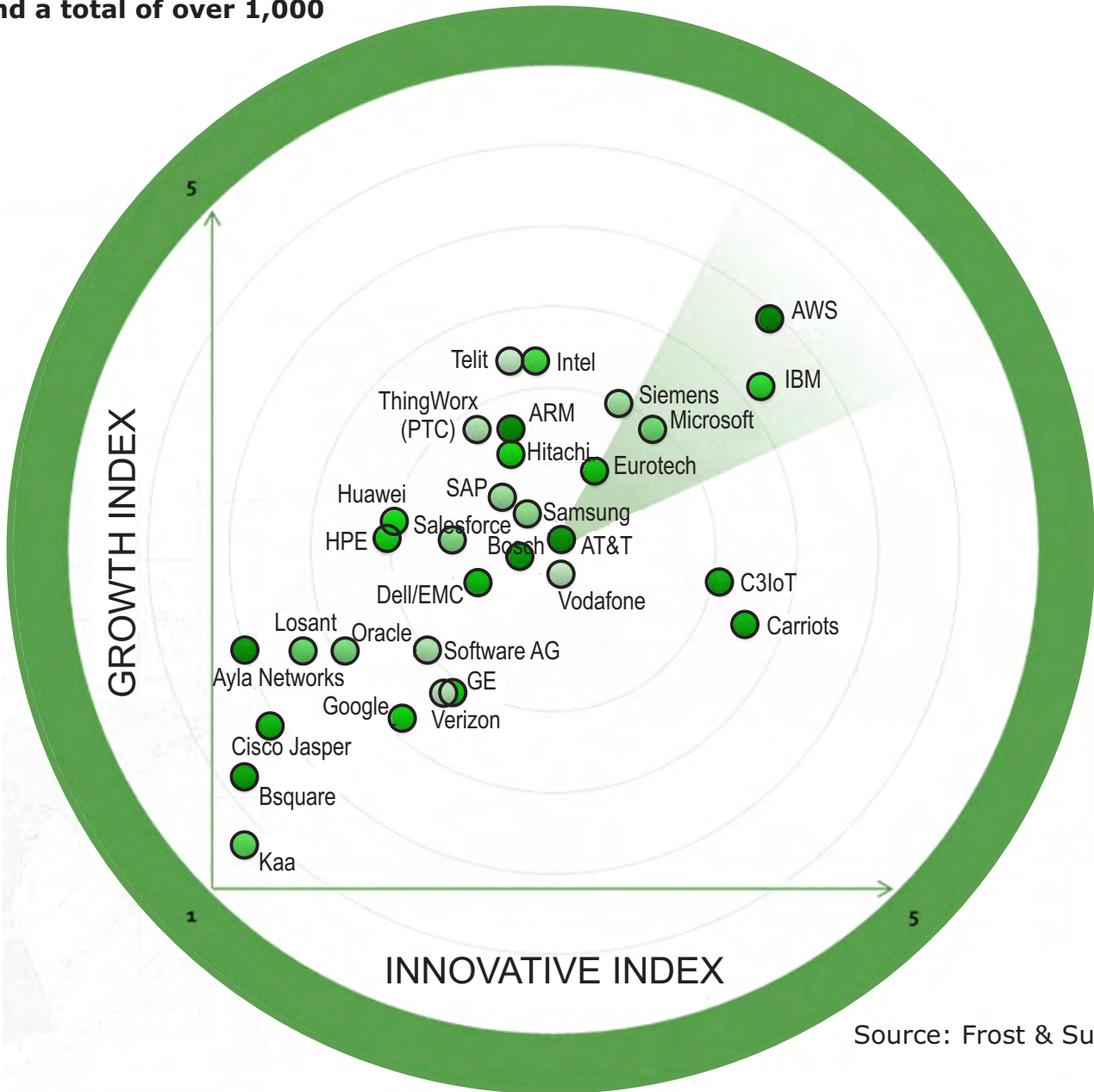
Learn more from TI's power experts

- Download the data sheet for the [TPS62840 step-down converter](#).
- Read these short articles:
 - "[Do all rails need low IQ?](#)"
 - "[Deciphering low IQ: Using WEBENCH® to design near 100% duty-cycle for ultra-low power applications.](#)"
- Download the reference design, "[Powering narrowband wireless modules for IoT applications with LiMnO₂ cells.](#)"
- See the extensive range of power designs in [TI's reference design library](#).
- Learn about TI's diverse selection of low-power [DC/DC switching regulators](#) and TI's comprehensive portfolio of [power-management products](#).
- Search for fast, verified answers and design help from TI experts in the [TI E2E™ Power Management forum](#).

Global Internet of Things (IoT) Platforms Market, 2019

With over 60 billion connected devices expected to be in existence globally by 2024, IoT is a complex ecosystem that integrates information technology (IT) with operations technology (OT) to generate data that can be analyzed to increase revenues and improve business productivity. IoT platforms are building blocks of IoT solution offering multiple services such as application enablement, device management, and connectivity management.

The 29 IoT Platform Leaders out of 400 with true platform capabilities and a total of over 1,000



Source: Frost & Sullivan

Frost & Sullivan leveraged in-depth analysis built on the 360-degree research methodology and evaluated over 1,000 platforms globally. The team of analysts and experts then determined 400 companies to have true platform capabilities across multiple vertical markets and consumer segments. Finally, the 29 companies selected by Frost Radar represents the leaders in the industry that provide a wide range of services and solutions that are at the cutting edge of innovation and growth in this highly fragmented market.

Download the Frost Radar https://go.frost.com/LA_PR_FValente_IoTRadar_Apr19

Access the complimentary tracking solution that identifies top 29 companies with true platform capabilities across multiple verticals and IoT applications.

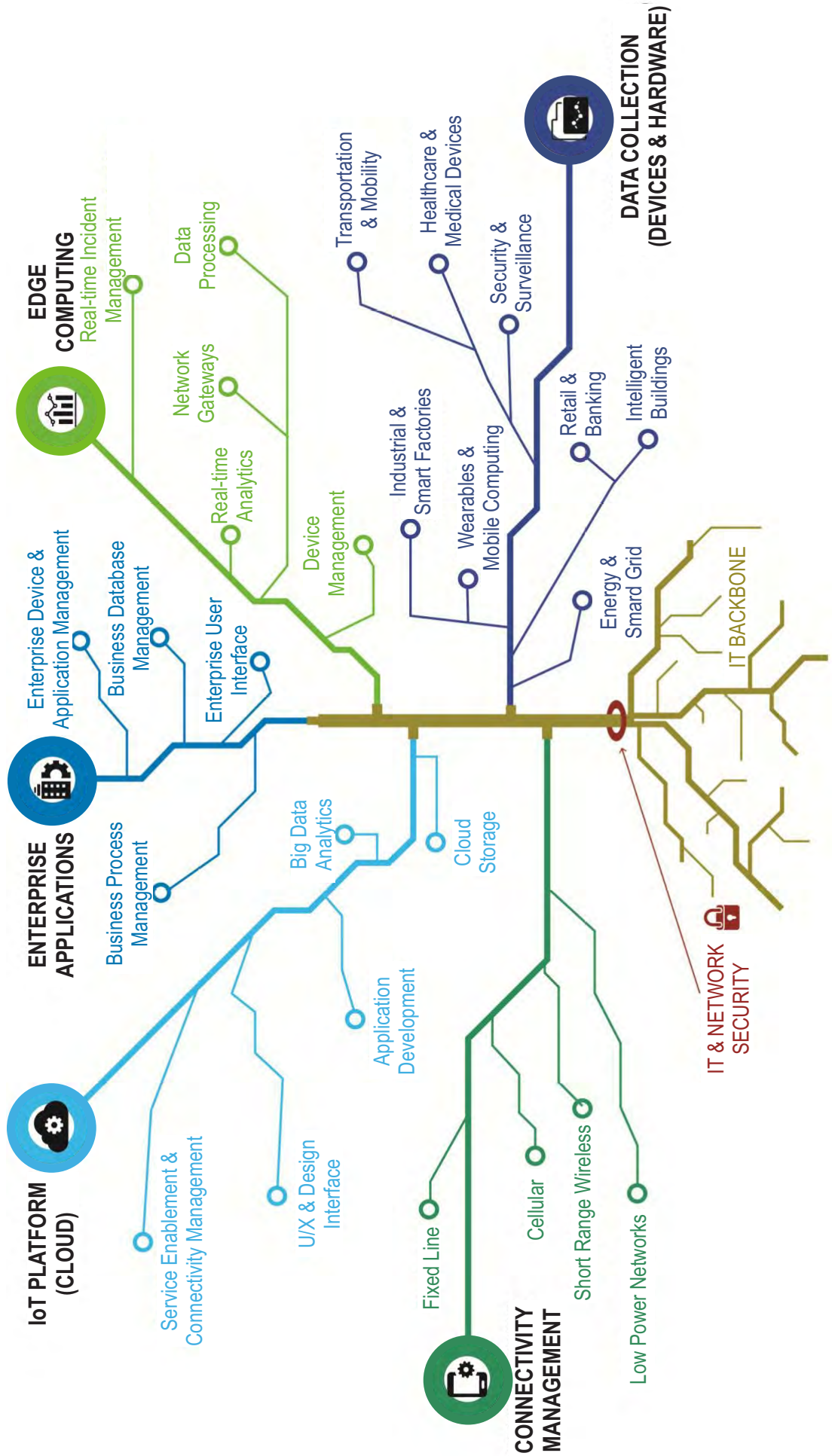
IoT Platform System Overview Diagram: see next page

IoT Platforms are the Bridge between Operations Technology (OT) and Information Technology (IT)

IoT Platform System Overview Diagram

Source: Frost & Sullivan

IoT Platforms are the Bridge between Operations Technology (OT) and Information Technology (IT)





Aeris Chooses Google Cloud Platform for Fusion IoT Network™

First step in long-term partnership, development of new technologies and integrated solutions, and collaboration in go-to-market activities

SAN JOSE, CA – Oct 22, 2019 – Aeris, a technology leader in the Internet of Things (IoT), today announced that it has chosen Google Cloud Platform (GCP) as the infrastructure provider for the Fusion IoT Network, one of the first-ever intelligent global solutions for connecting IoT devices across 2G, 3G, LTE, LTE-M, and NB-IoT. The multi-year partnership between Aeris and GCP will focus on advancing cutting-edge IoT cellular connectivity, delivering significant steps forward in security, operational efficiency, and customer choice and flexibility. [Note to editors: See also, "Aeris Announces Fusion IoT Network," announced today.]

The recently announced Fusion IoT Network turns the traditional IoT cellular connectivity model upside down – breaking application and connectivity silos, enabling an unparalleled level of feature innovation, and delivering game-changing advantages to enterprise customers. To deliver these benefits, the Fusion IoT Network leverages a multi-technology, cloud-native network infrastructure – a complete suite of cellular network elements purpose-built for IoT, including an HLR/HSS, PCRF, SMSC, AAA, PGW, and OSS/BSS subsystems. Based on over a decade of development and more than 50 patents, these network elements are hardened with real-world experience, processing more than 1 billion transactions per day with telco-grade reliability.

Aeris chose GCP as the cloud infrastructure and platform for the Fusion IoT Network based on critical advantages in managed Kubernetes, global IP network superiority, reliability, cost efficiency, and ML/AI innovation over other cloud providers. For example, GCP's Virtual Private Cloud IP network provides a distinct advantage to Aeris through its global performance and flexibility. Likewise, the Google Kubernetes Engine (GKE) has been instrumental in making Aeris' transition to Kubernetes easier, faster, and more cost-efficient.

The migration of the Fusion IoT Network to GCP is the first step in a multi-year collaboration in technology, enabling simpler, faster, and more reliable IoT deployments, and in joint go-to-market to bring these advantages to a large segment of joint IoT customers.

Please visit Aeris for more information: <https://www.aeris.com/>

Aeris recognized by Frost & Sullivan as IoT Platform of the Year for the second time

NEW DELHI, India, June 24, 2019 (GLOBE NEWSWIRE) -- Aeris Communications, a pioneer in the Internet of Things (IoT) and M2M technologies, today announced that it has been conferred the prestigious 2019 Frost & Sullivan India ICT Award for "IoT Platform Vendor of the Year", for the second year in a row. Benchmarked against the highest standards in the industry by the analysts, the award recipients represent the best-in-class.

Aeris is being recognized for its demonstrated leadership in the space of new product introduction and innovation, remarkable achievement in enabling its customers to attain their business transformation with outstanding efforts towards customer experience, growth goals, breadth of products and solutions and its service value, major customer acquisitions and customer service experience as well as revenue growth through its innovative Aeris® IoT Platform. The IoT Platform from Aeris has been serving as the cornerstone for diverse IoT projects across the world. In the last three years, it has been gathering traction in the Indian market with projects as diverse as electronic mobility, insurance and finance, logistics, connected vehicles, utilities, smart cities, smart manufacturing and even connected solutions for agriculture.

Frost & Sullivan Awards is a global program that recognizes outstanding industry achievements by companies across the world. The 17th year of Frost & Sullivan's India ICT Awards lauded companies for their exceptional growth and market strategies, product development abilities, competitive advancement skills, technology innovation, dedicated customer focus and achieving landmarks to deliver business outcomes using Digital and Disruptive technologies in the Indian market. The award jury included reputed business and technology stalwarts from the industry who selected the award winners based on a unique 3 staged, structured, metrics-based evaluation process.

Please visit Aeris for more information: <https://www.aeris.com/>

IoT Signals

SUMMARY OF RESEARCH LEARNINGS
2019



BACKGROUND

The Internet of Things (IoT) is transforming the way people live and work. Beyond just the smart devices you use every day, IoT is revolutionizing the way companies do business –allowing them to become faster, smarter, safer, and more efficient.

Microsoft has been at the forefront of IoT, innovating and investing as IoT continues to gain traction worldwide. The IoT Signals report was created to give the industry a holistic view of the IoT ecosystem –providing insight into adoption rates as well as benefits and challenges.

The goal of the IoT Signals report is to better serve our partners and customers, as well as help business leaders develop their own IoT strategies.

Microsoft commissioned Hypothesis Group, an insights, design, and strategy agency, to execute the IoT Signals research.

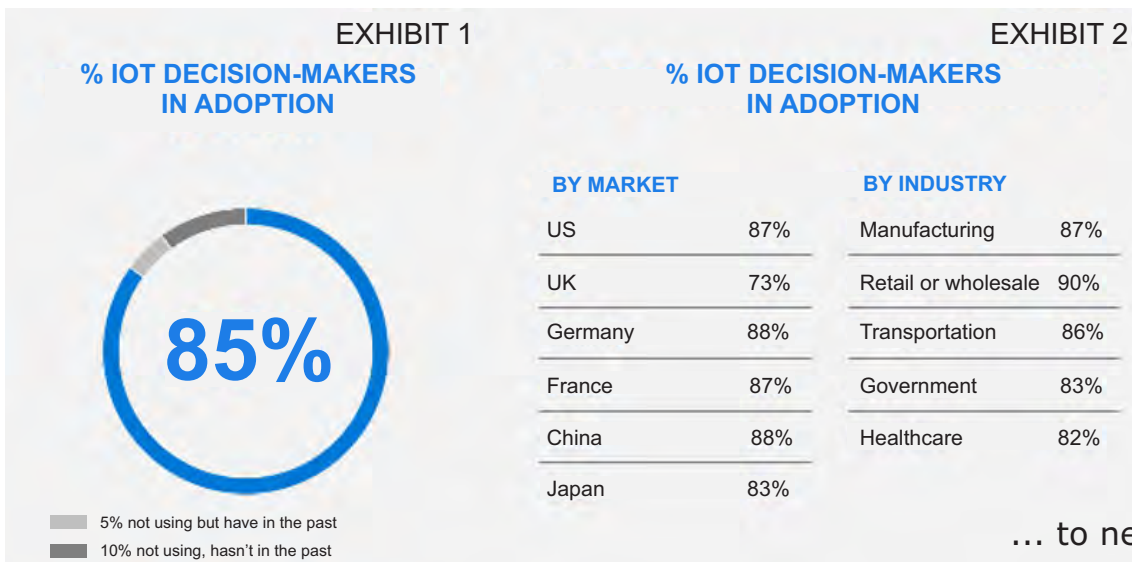
A 20-minute online survey was conducted with over 3,000 decision makers at enterprise companies across the US, UK, Germany, France, China, and Japan who were currently involved in IoT. The research included business decision makers (BDMs), IT decision makers (ITDMs), and developers from a range of industries such as manufacturing, retail/wholesale, government, transportation, healthcare, and more.

IOT: THE BIG PICTURE

In the commercial arena, the Internet of Things continues to grow in popularity. Business decision makers, IT decision makers, and developers at enterprise-size commercial organizations are incorporating IoT into their businesses at high rates, and the overwhelming majority is satisfied with the business results. As an outcome, companies are increasingly eager to adopt IoT.

The enthusiasm for IoT adoption is global, and it also crosses industries. Among the enterprise IoT decision makers we surveyed, 85% say they have at least one IoT project in either the learning, proof of concept, purchase, or use phase, with many reporting they have one or more projects currently in 'use'. **(See Exhibit 1.)**

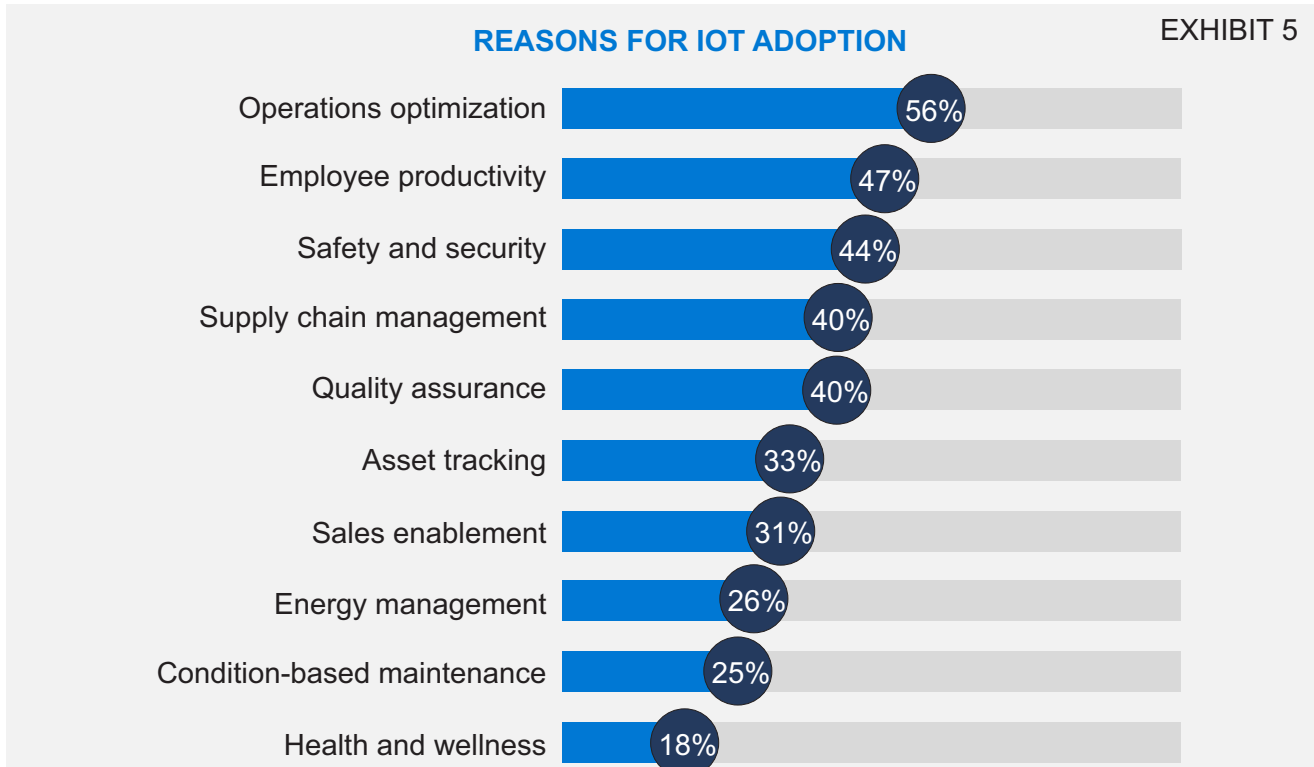
Adoption rates are similar across surveyed countries (US, UK, Germany, France, China, and Japan) and core industries (manufacturing, retail/wholesale, transportation, government, and healthcare). **(See Exhibit 2)**



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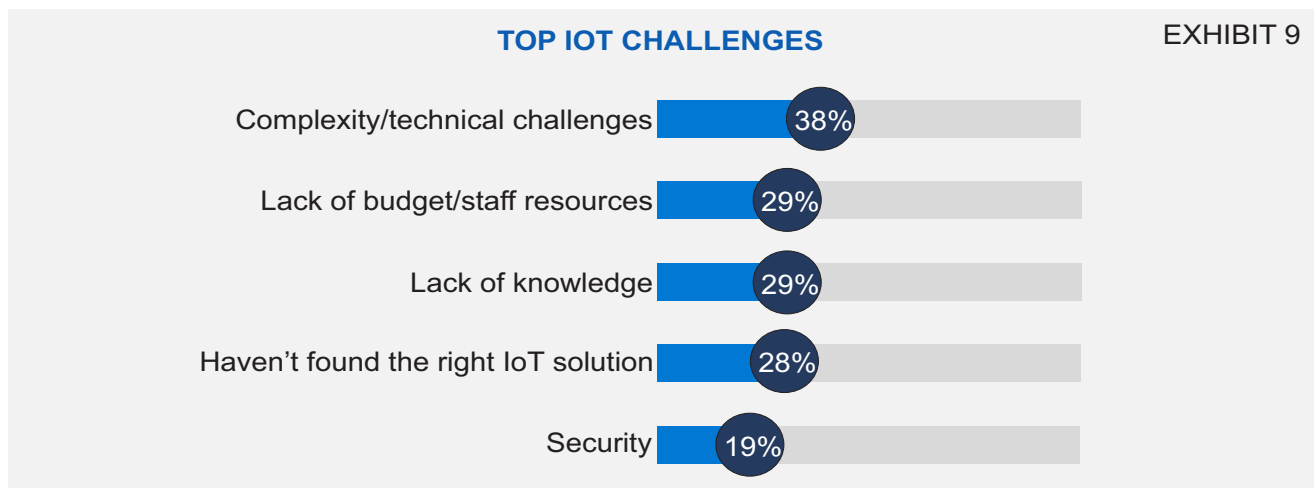
WHY ADOPT IOT?

On average, companies cite three to four major reasons that led them to adopt IoT. Efficiency and productivity are key motivators; the top two reasons that companies implement IoT are operations optimization (56%) and improvement of employee productivity (47%). The next most common use cases are safety and security, which 44% of companies view as top reasons to utilize IoT. 30% to 40% of enterprise companies also adopt IoT to manage supply chain, assure quality, track assets, and enable sales. On the whole, BDMs and developers view IoT as a way to streamline processes and work more efficiently. **(See Exhibit 5)**


WHAT ARE THE CHALLENGES OF IOT ADOPTION?

Despite its success, IoT is not without challenges. Both for companies striving to get IoT projects off the ground and for companies looking to use IoT more, the roadblocks are often the same: complexity and technical challenges, security concerns, and lack of talent and training.

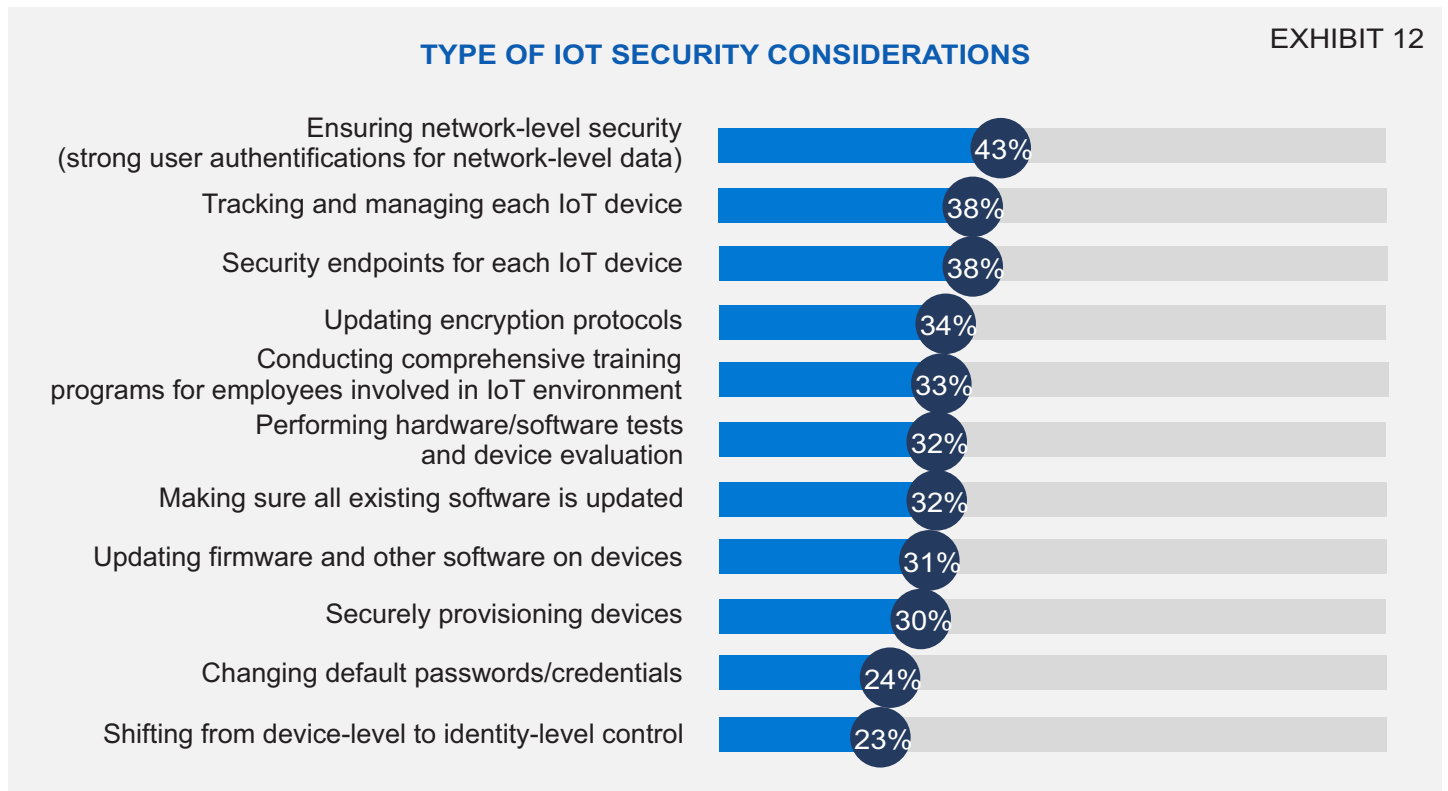
Companies who want to utilize IoT more find that complexity and technical challenges are their biggest barriers: 38% of companies say these are the reasons they aren't using IoT more. Lack of budget and staff resources (29%), lack of knowledge (29%), and difficulty finding the right solution (28%) are the next most common roadblocks. Security is also a challenge (19%). **(See Exhibit 9)**



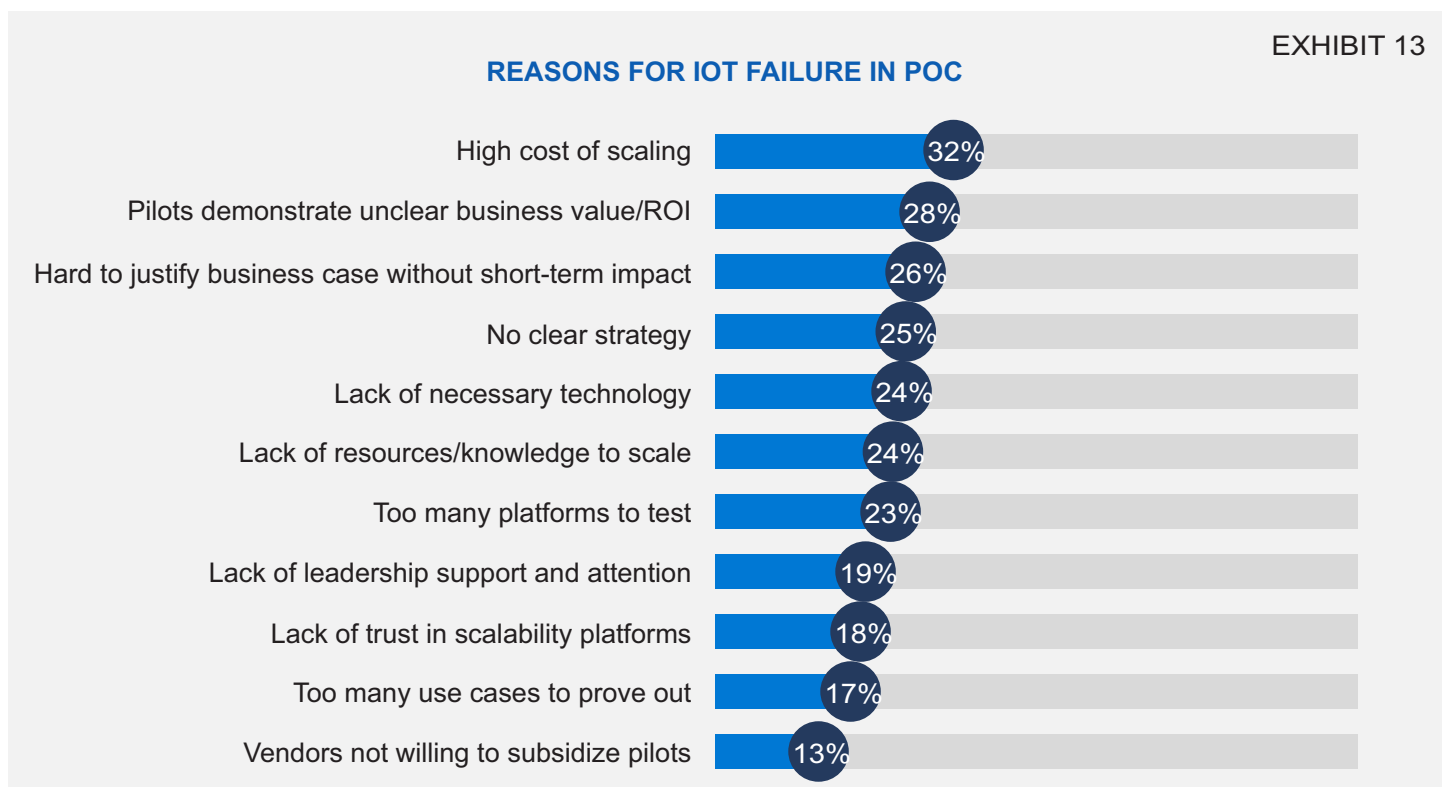
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TYPE OF IOT SECURITY CONSIDERATIONS

Security concerns around IoT adoption are universal: 97% of companies are concerned about security when implementing IoT (though this is not hindering adoption). Collectively, the top security priority is software/firmware management (e.g. encryption protocols –34%, hardware/software testing –32%, and updating software and firmware –31%). **(See Exhibit 12)**


REASONS FOR IOT FAILURE IN POC

Our findings show that IoT adopters believe around one-third of IoT projects fail in proof of concept (POC), often because implementation is expensive or the bottom-line benefits are unclear. Among those who have had IoT projects stall in the trial stage, the top reason is the high cost of scaling—32% of businesses cited this as the main issue with getting their projects off the ground.



Edge Hardware for IoT

[Webinar On-demand](#) sponsored by:



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Increased computing power at the network's edge is bringing myriad advantages, making predictive maintenance and AI tenable for remote, industrial applications. According to some studies, more than half of IoT Adopters expect to be analyzing complex data sets at the edge in the next three years. Advances in hardware are driving development, and this session will cover the breadth of the edge, from intelligent actuators/sensors, through data aggregation, into edge IT pre-processing.

Speakers:



Thorsten Milsmann, Director Internet of Things, worldwide, Hewlett Packard Enterprise

Thorsten Milsmann at Hewlett Packard Enterprise responsible for the IoT Sales worldwide, including GTM with partners. His responsibility is also managing the internal IoT program across all HPE sales and delivery organizations specifically HPE PointNext. He is consolidating the market and customer requirements as well as the definition, validation and commercializing of the solution portfolio.

After graduation as MBA at University of Mannheim he held various sales roles before joining HP in 1998, since he was in several sales and sales managements positions in Germany and Eastern Europe and was HPs Global Account Manager for MunichRe Insurance.



Sara Brown, Vice President of Marketing, Multi-Tech Systems Inc.

Sara Brown is responsible for all marketing communications at IoT systems provider MultiTech. Brown is a strategic marketing professional dedicated to driving quantifiable business results with data-driven outreach to IoT/M2M user markets. For nearly 20 years, she's boosted revenue of organizations big and small; including Sierra Wireless, Telit, and Wavecom.