



Digitizing the physical world

Transform your business with IoT enabled by KPMG and PTC

The Internet of Things (IoT) is driving business transformation now.

As IoT rapidly digitizes the physical world, enterprises and governments are leveraging data from connected devices to transform their businesses and operating models—improving decision making, driving greater efficiency, increasing profitability, and unlocking new revenue streams.

To enable IoT, devices, sensors, networks, and systems transform to become one connected ecosystem designed to generate new business value. Interconnected devices collect environmental and behavioral data that can be visualized and analyzed. Humans and systems monitor and analyze this data to inform more accurate business decisions and improved customer interactions. At maturity, intelligent IoT solutions are able to autonomously take action based on data insights, providing the ability to automate some business functions.

IoT brings value to all industries, but especially impacts industrial manufacturing, automotive, aerospace and defense, retail, and other supply-chain-driven organizations. It presents opportunities to drive new business value across the ecosystem in areas that include:

- Exposing new revenue opportunities
- Transforming operating models, people, culture, and processes
- Improving customer and stakeholder experiences
- Reducing costs and increasing profitability and productivity
- Reducing cybersecurity and privacy risks
- Increasing asset utilization
- Leveraging data and intelligent automation for better business outcomes and decision making.

KPMG LLP and PTC's strategic alliance will help enterprises capture these opportunities and stay ahead of the competition. It combines KPMG's strategic vision and professional services with PTC's leading, field-tested industrial IoT platform (ThingWorx) as well as augmented reality (AR) and product lifecycle management (PLM). These combined capabilities help to prepare your organization for the Industry 4.0 revolution with well-designed products, smarter environments, and enhanced customer experiences. Let KPMG and PTC help you converge the physical and digital worlds to realize the promise of Industry 4.0.

KPMG: Breadth of experience and leadership in IoT

KPMG has been helping its clients navigate complex, interconnected technology long before the phrase *Internet of Things* was coined. Decades of experiences have led to an industry-tailored approach to developing, deploying, and managing IoT solutions. KPMG provides its clients with streamlined, secure, integrated business solutions to help protect their business and customers.

KPMG's IoT services bring together specialists in business, technology, and risk and leverage subject matter knowledge across all the firm's advisory teams—Management Consulting, Deal Advisory, Risk Consulting, and Tax Advisory—to help clients realize the full value of smart, connected things. The firm's IoT leadership team enables stronger collaboration, quality of delivery, and innovation for clients. Working as a single delivery team, KPMG's experienced professionals deliver holistic solutions and broad services in strategy, design and build, implementation, and postimplementation.

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With considerable strategic input and big project management experience, KPMG attained Winners Circle status in the HFS Blueprint Report: Internet of Things Services 2018.

PTC: Unlocking the power and value of IoT

A global software company founded in 1985, PTC enables companies to design, manufacture, operate, and service things for a smart, connected world. Its leading industrial IoT platform and field-tested solutions drive digital transformation by helping companies create entirely new business models. The bleeding edge tech that fuels these transformations includes:



Industrial IoT. A broad platform with a complete set of capabilities, PTC's ThingWorx can help you quickly and easily build robust IoT solutions; manage all your smart, connected assets; and use artificial intelligence and machine learning to generate new insights from connected devices. ThingWorx has been recognized for excellence by analysts Forrester and ABI Research.



Augmented reality (AR). With practical applications in manufacturing, service, and sales, PTC's Vuforia provides leading computer vision technology, robust tracking capabilities, and breadth of platform support.



Product lifecycle management (PLM) software. PTC's Windchill consolidates and delivers product data from various enterprise systems to the stakeholders who need it most. The PLM capabilities can be coupled with IoT and AR for more thorough design review.

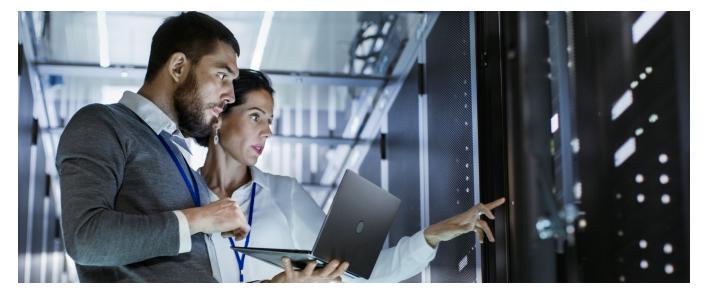
Driving Industry 4.0 with smart, connected operations and products, PTC's IoT, augmented reality, and PLM offerings feature open platforms, architecture, and connectivity.

An IoT solution to transform your business

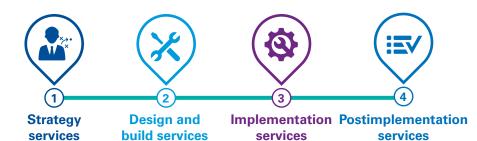
Connected, data-driven IoT technology provides businesses with insight, but when combined with AR and PLM, companies can truly transform their businesses and create new value propositions. KPMG's broad, connected services leverage PTC technologies to create a healthy, holistic IoT ecosystem that promotes growth, provides competitive insights, and creates business opportunities.

KPMG's IoT team provides leadership and guidance in the following areas:

- Risk Management, including cyber and physical security planning such as public safety monitoring and surveillance
- Asset management, monitoring and managing the location, condition, and usage of equipment and machinery
- Customer service, tailoring personalized experiences and services based on locations and behaviors
- Predictive maintenance, monitoring equipment usage and status to optimize maintenance and repairs
- Supply chain management, managing supply chain operations from sourcing to payment processing
- Inventory management, tracking inventory levels and managing warehouse operations.



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KPMG's IoT engagement capabilities range from strategy to postimplementation services. These capabilities are supplemented by PTC's IoT, AR, and PLM technologies to create a truly differentiated service offering.

- Strategy services guide the development of a strategic roadmap and supporting business case for achieving business objectives through IoT and related technology solutions.
- Design and build services help you to create specifically designed solutions taking into consideration your organization, culture, processes, internal systems, digital strategy, and risk profile. The goal is to design a solution that helps you realize tangible business value.
- Implementation services unlock the value of the designed IoT solution and integrate it into the existing IT infrastructure. KPMG can also help you accelerate new technology adoption through business process redesign and organizational changes required to transition to the new system.
- Postimplementation services provide you with the necessary foundational capabilities and skill sets to manage and maintain your new IoT solution with a sustainable operating model.

Together, KPMG and PTC can help you envision, design, implement, and sustain your IoT solution.

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KPMG excels at strategy, visioning, and big project management. Their understanding of smart cities is strong. They are professional, responsive, and supportive and leverage their tax and banking expertise to advantage.

> —Pareekh Jain, Senior Research Vice President, HFS Research



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Is the KPMG and PTC solution right for my business?

Consider these questions as you evaluate IoT technology:

- What value can IoT unlock for my organization?
- How do I manage and exploit the data flowing through my business?
- How do I protect my IoT system against cyberattacks?
- How can I monetize my data and capitalize on IoT-enabled assets?
- How can IoT optimize my facilities to reduce costs and be more operationally efficient?
- How do I maintain a competitive advantage and protect my core business from outside disruption?

What will transformation accomplish?

Some of the goals of IoT-based business model transformation include:

- Accelerating growth
- Elevating performance and profitability
- Managing risk and regulation
- Enhancing compliance reporting and transparency
- Improving the customer experience
- Increasing operational efficiency
- Streamlining processes to remove friction
- Drive product innovation
- Increase competitive advantage.

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