
AWS
re:Invent

IOT203

Defining your strategy for a successful Internet of Things (IoT) implementation

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Principal Specialist Solutions Architect, IoT

AWS

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12% 70%

Agenda

Challenges

Phase 1 – Idea

Phase 2 – Prototype

Phase 3 – Production

Takeaways



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Challenges posed by IoT projects

Lack of vision

Skill shortage

Lack of strategy

Incomplete requirements

No clear business case

Constrained analytical capabilities

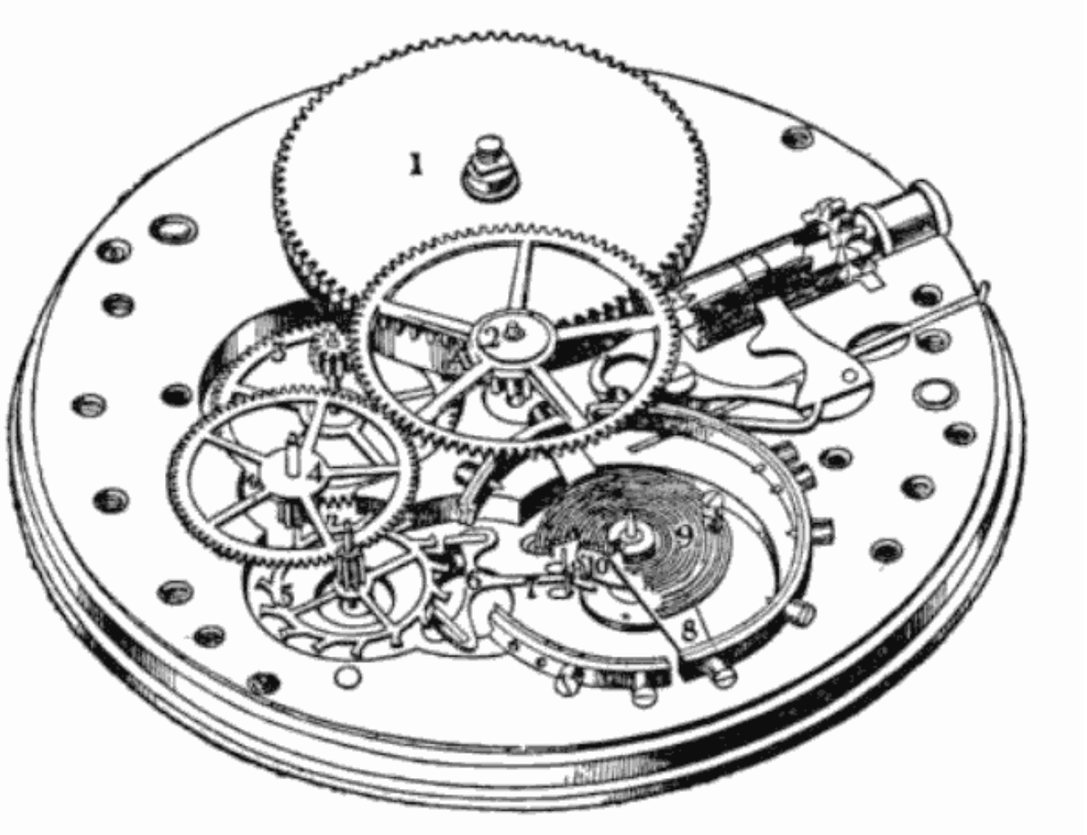
Security concerns

Complexity

Data management

IT/OT	Business technology
Slow-cycle, annual planning	Fast-changing
Certainty	Uncertainty
Resource driven	Outcome driven
Complicated problems	Complex problems




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10

Phase 1 – Idea



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IoT



"We innovate by starting with the customer and working backwards"

Jeff Bezos

Founder and CEO, Amazon

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Press release

Wi-Fi 6 Is Here—Amazon Introduces All-New eero 6 Series Mesh Wifi Systems Starting at $129

Share

September 24, 2020 at 1:50 PM EDT

The fastest eero series yet—eero Pro 6 and eero 6 deliver Wi-Fi 6 performance and a built-in Zigbee smart home hub

SEATTLE--(BUSINESS WIRE)--Sep. 24, 2020-- Amazon.com, Inc. (NASDAQ: AMZN) today introduced the newest additions to the eero family—eero Pro 6 and eero 6. These all-new mesh wifi systems feature Wi-Fi 6, the latest technology delivering faster speeds, higher performance, and better support for simultaneously connected devices. eero Pro 6 and eero 6 are available for pre-order starting today on amazon.com/devices and www.eero.com, and will be available later this year.

Getting fast, reliable coverage throughout your home is easy with the eero 6 series, which offers Wi-Fi 6 coverage for more than 75 devices simultaneously. Featuring a built-in Zigbee smart home hub, the eero 6 series connects compatible devices on your network so you don't need a separate Zigbee hub. Plus, eero Pro 6 and eero 6 work with your existing internet service, and are backward compatible with all eero generations, making it easy to expand or upgrade your network.

"Customers need reliable home wifi now more than ever. Many of us are working from home, helping kids with online learning, keeping in touch with friends and family, and streaming and gaming in 4K—often at the same time," said Nick Weaver, Co-Founder and CEO of eero. "The eero 6 series is the fastest eero series yet, giving our customers the speed and reliability of Wi-Fi 6 at an affordable price."

Choose The Right eero 6 System for You

With an elegant, compact design that blends into any décor, you can mix and match eero devices to create a custom system that's right for your home. New options include:

Customer Questions

1. Who is the customer?
2. What is the customer’s problem or opportunity?
3. What is the most important customer benefit?
4. How do you know what customers need or want?
5. What does the customer experience look like?

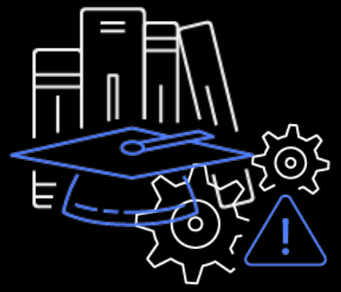
https://www.quora.com/What-is-Amazons-approach-to-product-development-and-product-management?ref=http://www.product-frameworks.com/

Phase 2 – Prototype



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Prototyping phase



Lack of skills

Engage AWS Prototyping team and partners



Time spent on building the infrastructure

Build on solutions and managed services



Undertakings that are too complex

Focus on quick wins



“If you’re good at course correcting, being wrong may be less costly than you think, whereas being slow is going to be expensive for sure.”

Jeff Bezos

Founder and CEO, Amazon

“Letter to Shareholders,” 2017

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PROGLOVE

"Besides their exceptional technology, AWS has supported us in all stages of developing this product . . . Their prototyping team offered recommendations that helped us build our first product. We estimate that this insight saved us 12 weeks of work, improved our solution, and accelerated our go to market."

Keith Ball
VP Engineering, Proglove



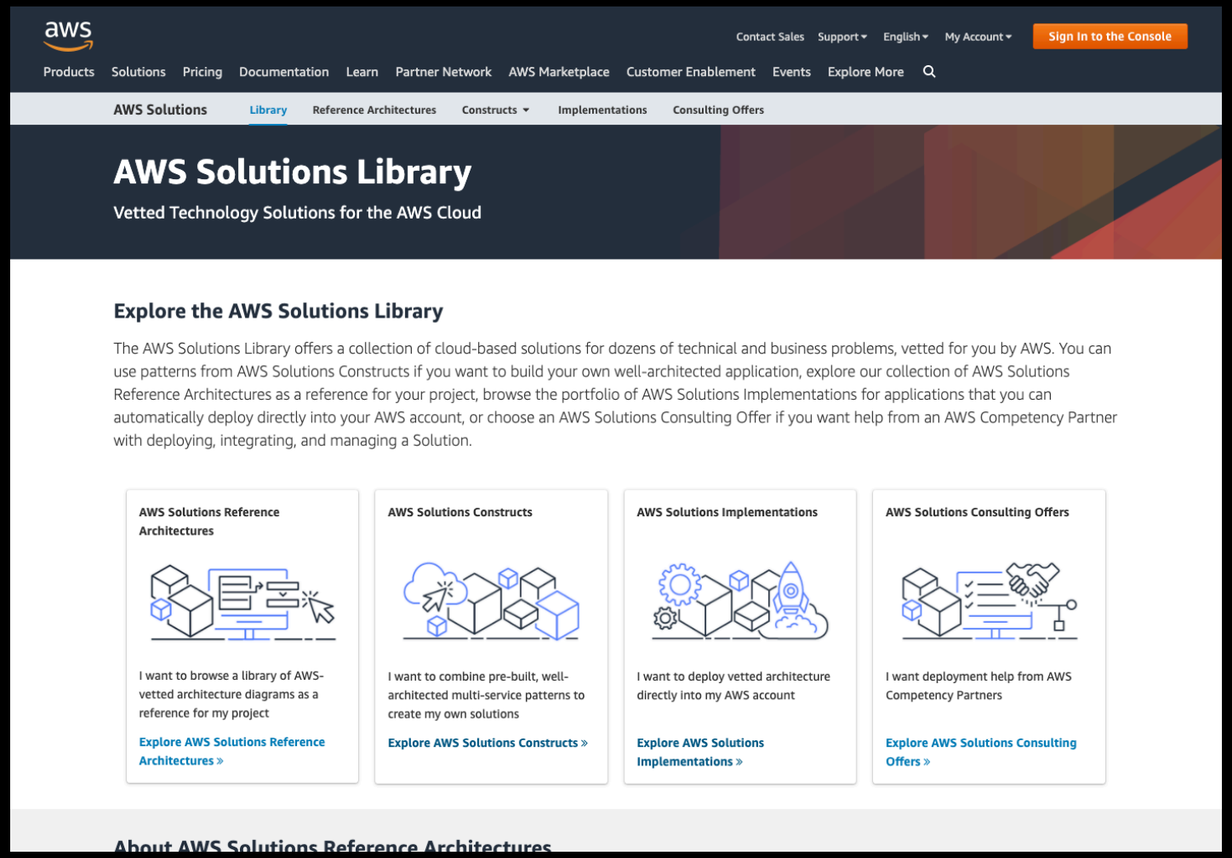
SCANIA

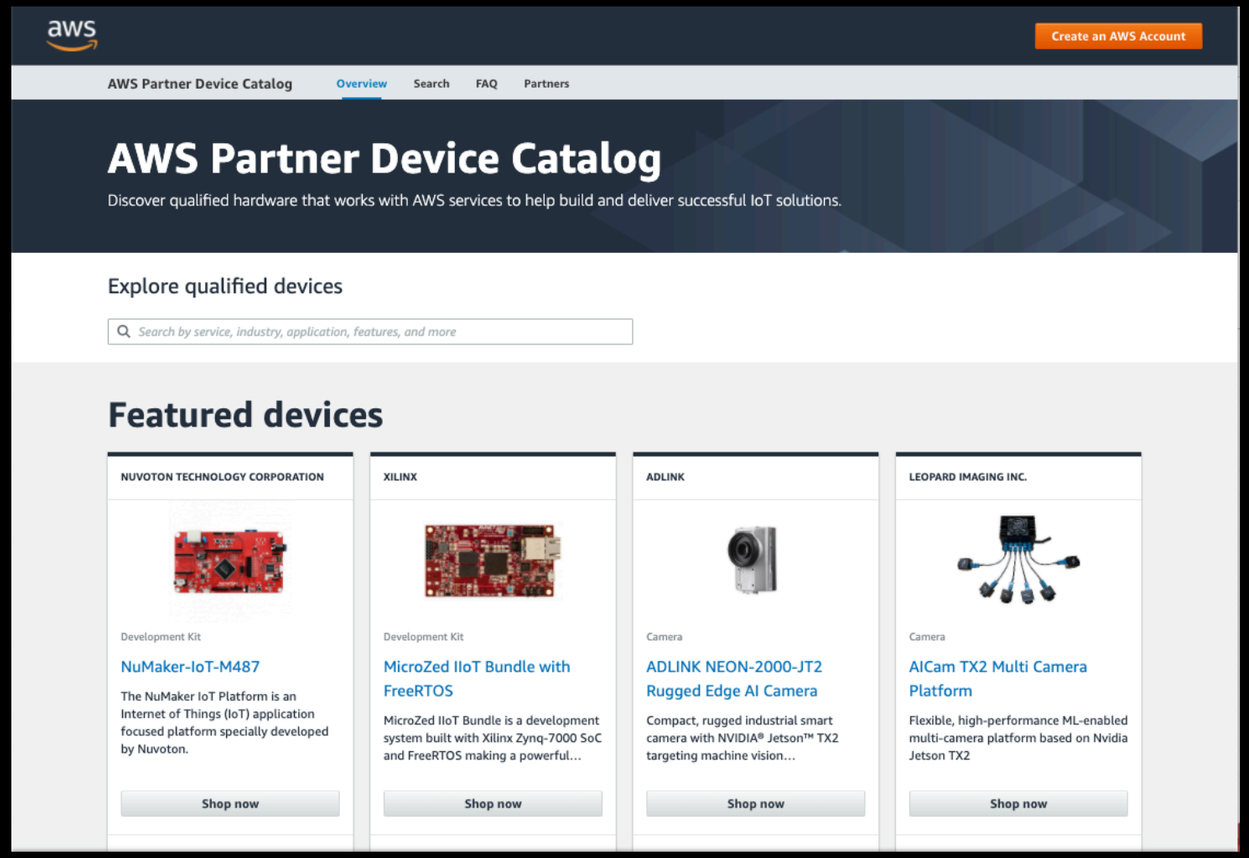
3-day onsite visit
Half a day follow-up
2 weeks to prototype

"We're impressed with the speed of the solution. We can now retrieve the operational data and fault codes of a truck in less than 1 minute"

Workshop personnel
Scania

Solutions and devices





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Highlights

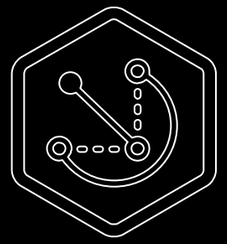


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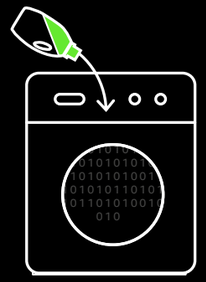
AWS IoT Solution Reposit...

Get started with AWS IoT solutions

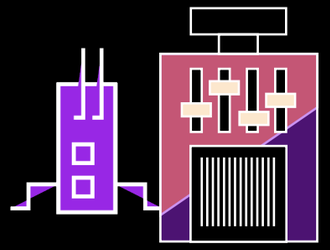
AWS IoT Greengrass Machine Learning Inference (MLI) Solution



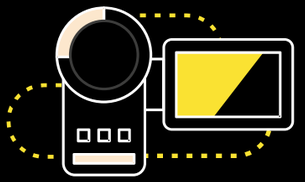
AWS IoT Smart Product Solution



AWS IoT Connected Factory Solution



AWS IoT Camera Connector



Explore AWS IoT solutions at:

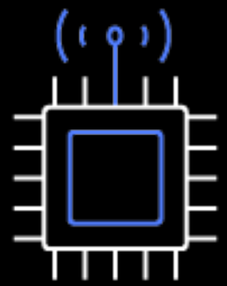
aws.amazon.com/iot/solutions

Phase 3 – Production



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Going into production challenges



Device manufacturing



Connectivity



Device lifecycle

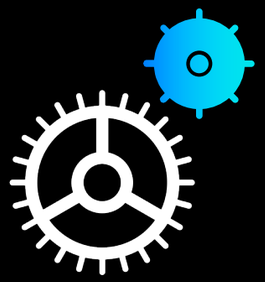


Security



Geographical footprint

AWS Well-Architected Tool



Operational excellence



Security



Reliability



Performance efficiency



Cost optimization

How AWS can help

175+

Services

1000s of customers

AWS Professional Services



Resources

AWS IoT Services

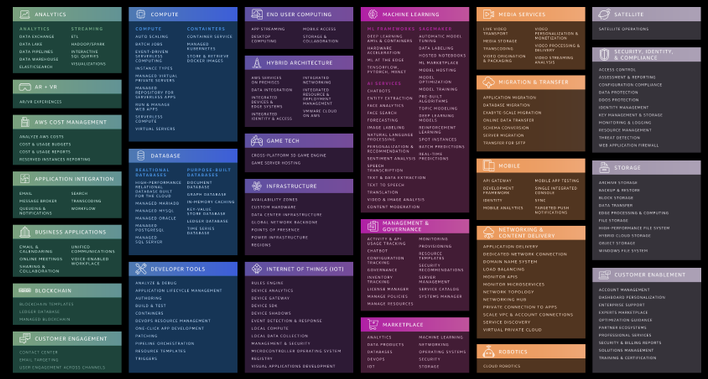
AWS IoT SiteWise

AWS IoT Analytics

AWS IoT Events

AWS IoT Things Graph

Analytics Services



More than 175 AWS services

AWS IoT Core

AWS IoT Device Management

AWS IoT Device Defender

Connectivity & Control Services

Intelligence and outcomes

Device Software

FreeRTOS

AWS IoT Device SDK

AWS IoT Greengrass

AWS IoT Device Tester

AWS Professional Services



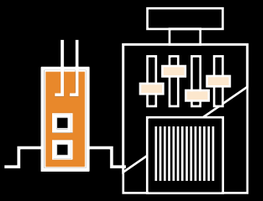


Get started with AWS Professional Services offerings

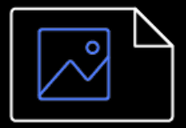
- Proven solutions packaged based on best practices developed over 1000s of engagements
- Designed to deliver predefined customer outcomes
- Everything you need – playbook, content artifacts, references, and guidance
- Leverage AWS Professional Services' standardized delivery methodology



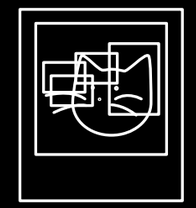
Connected product



Connected factory



IoT discovery and design



Computer vision and ML at Edge on AWS

Learn more about AWS Professional Services at:

aws.amazon.com/professional-services

Growing AWS IoT Partner Community

Device/Edge

Silicon

NXP, ST, Silicon Labs, intel, Infineon, Qualcomm, nuvoTon, Marvell, Microchip, Renesas, Xilinx, Espressif, NVIDIA, Nordic Semiconductor, MediaTek, Cypress, Realtek, Texas Instruments

OEM/ODM/CM

Siemens, Hewlett Packard Enterprise, CloudRAIL, Rigado, machineshop, GE, Logic Supply, libelium, Digi, rexroth A Bosch Company, lenovo, Bosch, muRata, acer, Shoreline IoT, Laird Technologies, Celestica, Jabil, Foxconn, Sercom

Connectivity & Control

Gateway

technicolor, Logic Supply, ADLINK, Laird Technologies, DELL EMC, Advantech, Moxa, Opto 22, Lenovo, Eurotech, Foghorn, kepware

Network/Carrier

twilio, Soracom, verizon, Quectel, mnubo, at&t, Asavie, eseye, T-Mobile, amdocs, EMnify

Solutions, Analytics & ML/AI

ISV (Analytics / ML)

SAP, Autodesk, rescale, Hitachi Inspire the Next, 42Q, vertex, splunk>, TULIP, Ayla Networks, inductive automation, Software AG, infor, GE, cadence, ZeroLight, modjoul, PEGA, Beckhoff, Siemens, ptc

Global SI

accenture High performance. Delivered., TCS, wipro, Cognizant, Tech Mahindra, HCL, slalom, Infosys, TATA Consultancy Services, Deloitte.

Regional SI

REPLY, Atos, trek10, LUXOFT, Crayon, FUJISOFT, ONICA, KOLON BENIT, solstice, VOSTOK, TensorIoT, Persistent

Takeaways



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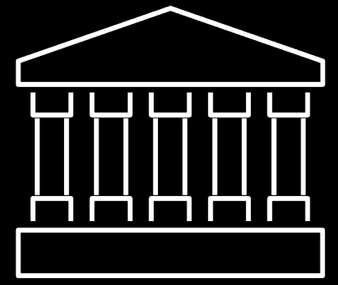
Your next [IoT] project



Focus on business outcomes



Deliver results



Build on solid foundations

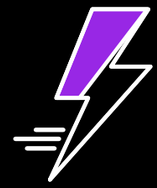
Learn more

AWS IoT-Core Partners



aws.amazon.com/iot-core/partner-services

AWS IoT Solutions



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AWS IoT Professional Services



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Learn how iRobot easily handled a 20x traffic spike with AWS IoT



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