

The Internet of Things: What It Takes

GENKEY-04

Kip Compton, Mike Flannagan, and Tony Shakib

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The Internet of Things

What it Takes

The Internet of Things: Technology Platform



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Kip Compton
Vice President, IoT Systems
and Software Group, Cisco

The Internet of Things: Power of Analytics



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Mike Flannagan
Vice President and General
Manager, Data & Analytics
Business Group, Cisco

The Internet of Things: Vertical Solutions



.....

Tony Shakib
Vice President, IoE Vertical
Solutions Group, Cisco



The Digital World. What's Ahead.



Point-of-Sale



Taxi



Hotel



Bookstore



Print Advertising



Car



Music



U B E R



Bookstore



Print Advertising



Car



Music

Digital Disruptors



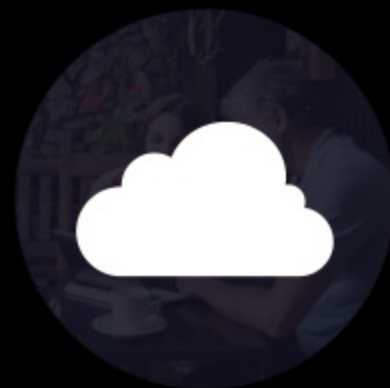
Social



Mobile



Data



Cloud

Internet of Everything

39%

of the world
population
is connected

Technology
powers

80%

of **business**
processes

13B

connected
things

More **data** in
one year than
in previous

5000



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IoT Technology Platform. What it Takes.

Cloud and Fog
Analytics
Security and
Identity Management
Open and
Programmability
(APIs)
Ease of use
and Management



Applications



App Enablement

Event
Management

Workflow /
Rules Engine

Video
Sensing

Data Normalization
and Modeling

Protocol
Mediation

Enterprise App
Integration



Infrastructure

Software Defined Networking
Network Compute Storage



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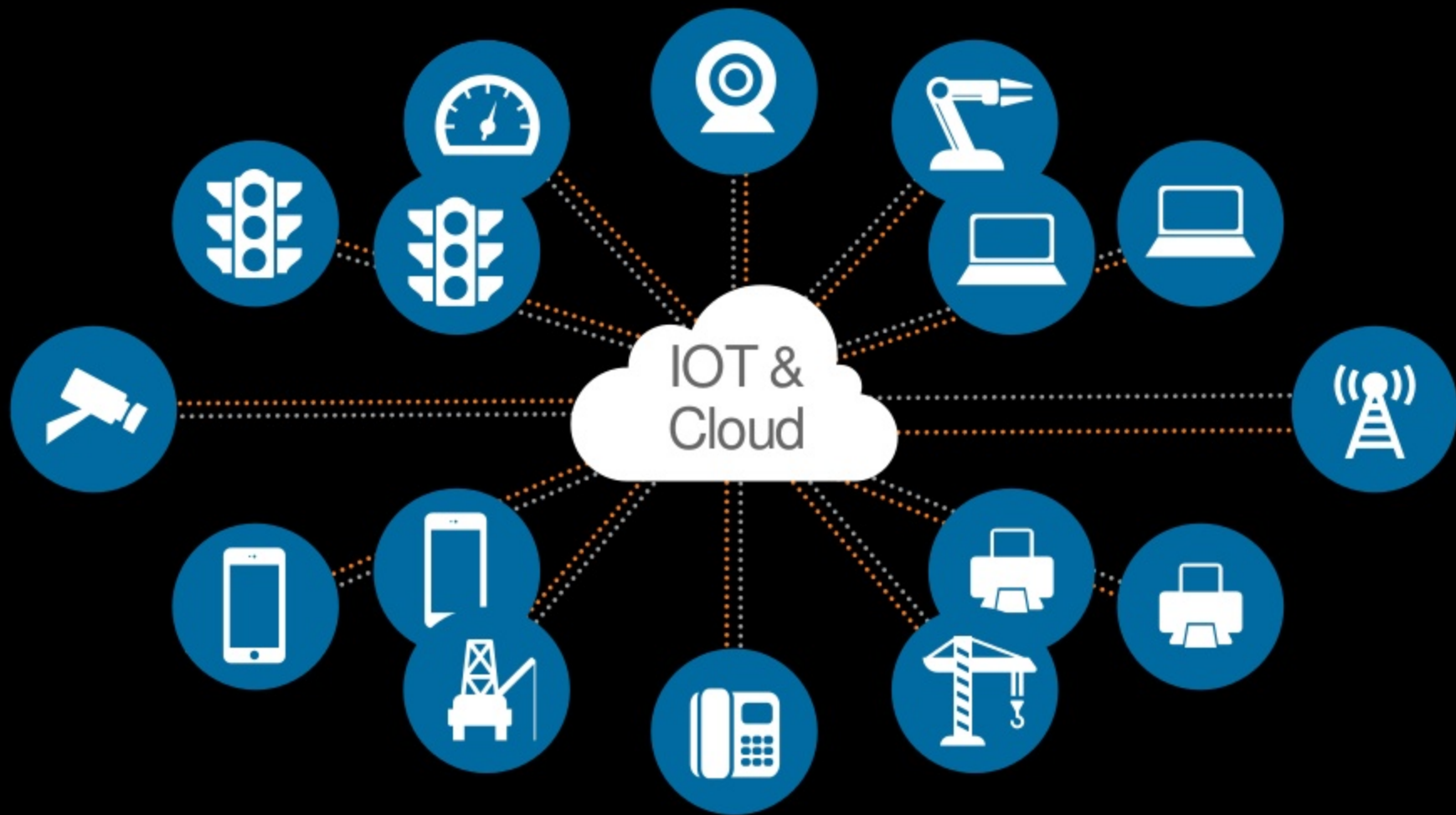
Software Defined Networking
Network Compute Storage



Things

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IoT Cloud Challenges



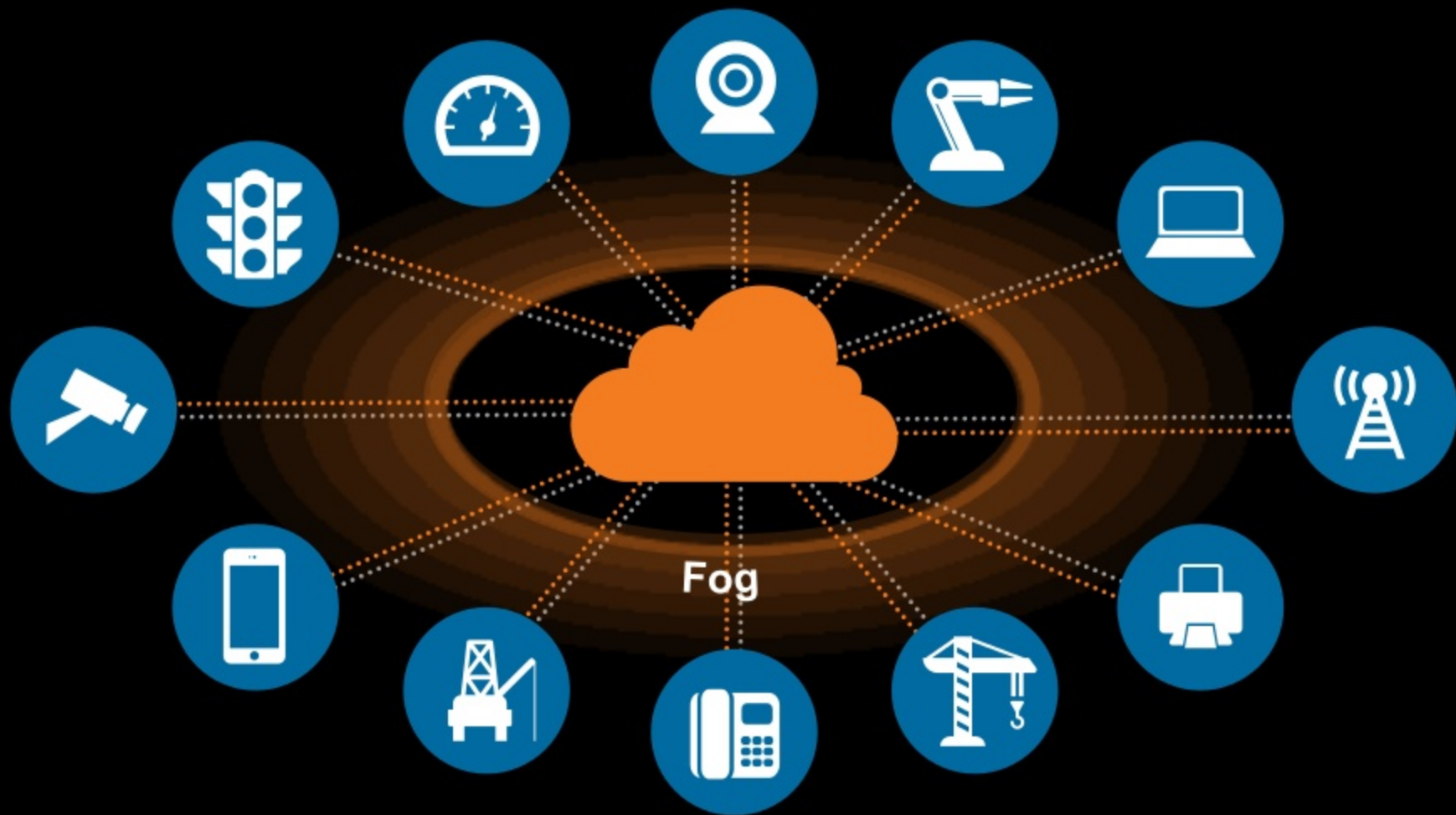
Oil
Platform
Limited Bandwidth



Manufacturing
Robot
Latency

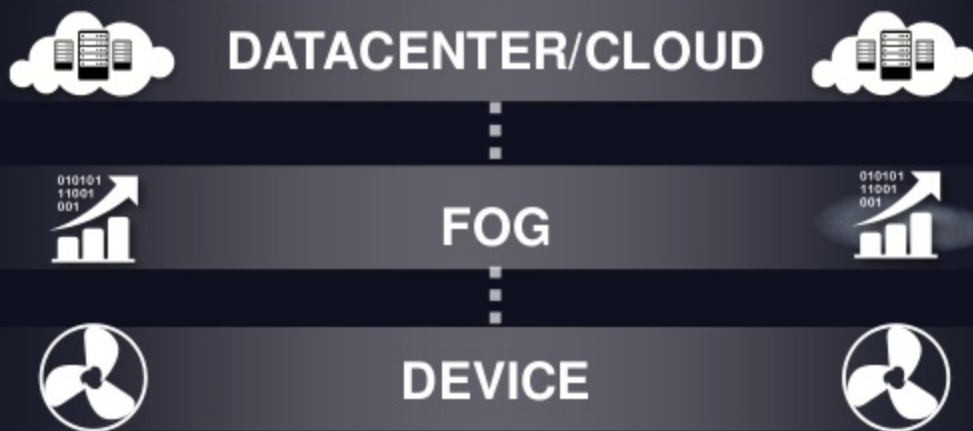


Construction
Crane
Network Reliability



IoT Requires Distributed Computing

IoT Computing Model (Data Volume, Security, Resiliency, Latency)



Solutions for Cloud Challenges



Oil
Platform

Limited Bandwidth



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Security Challenges

Traditional Security Challenges

Increased Attack Surface
Information Breach
Data Privacy

Smart Objects

6 Devices
Per Person

130 Sensors
Per Person

IoT Security Challenges



Superior Visibility

Advanced video analytics, remote management, and multi-site event correlation



Granular Control

Differentiated policy enforcement across the extended network



Advanced Threat Protection

Comprehensive cyber security threat detection and mitigation



Actionable Intelligence

Internetworked security solutions for superior intelligence and rapid response



Automated Decisions

Machine-to-machine enabled security control with no human intervention required