

OT – Beyond the Hype, What strategies can protect your organization, *today*?

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BEWAK BB 68

What Most People Think of IoT

Connected "piggy" bank with mobile app

ICPooch - Dog treat dispenser with video chat

Dog fitness tracker

Connected "doggie" door

Trash bin posts to Facebook

Connected egg tray

WiFi connected beer home brewing kit

Spectator worn sports jersey that vibrates

"Internet of Things, it's not just putting RFID tags on some dumb thing. It's about embedding intelligence so things become smarter and do more than they were proposed to do."

Nicholas Negroponte, 2014

Internet of Things

OT

Industrial

Cities

Plants

Metering

Cars

Safety

Creating
Value
from
Data

OT

Consumer

Home

Fitness

Wearables

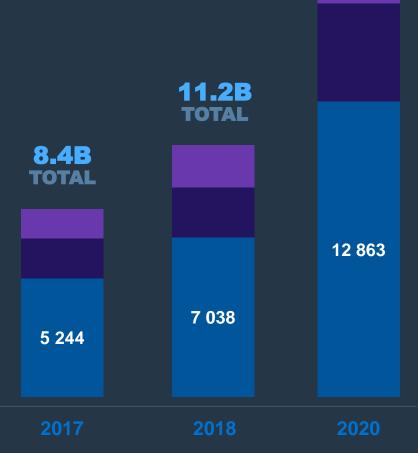


How big is the trend?

Business Vertical Specific

Business Cross-Industry

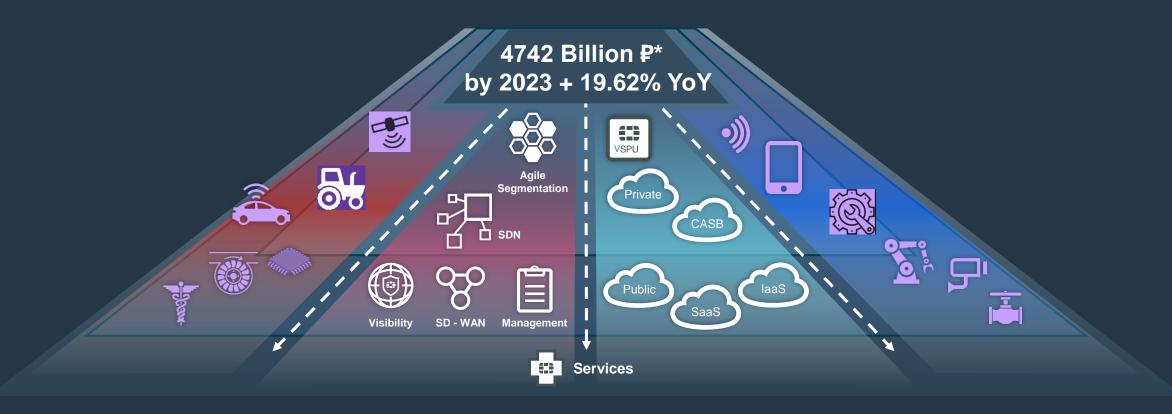
Consumer





20.4B TOTAL

In the New Ecosytems Where are the Things?



EMBEDDED

INFRASTRUCTURE

CLOUD

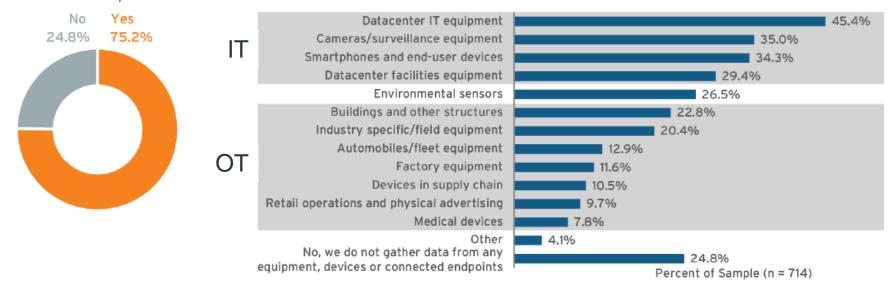
CYBER-PHYSICAL



Where is the data coming from?

Enterprises Collect a Wide Array of Endpoint Data

Does your organization gather data from any equipment, devices or other connected endpoints?



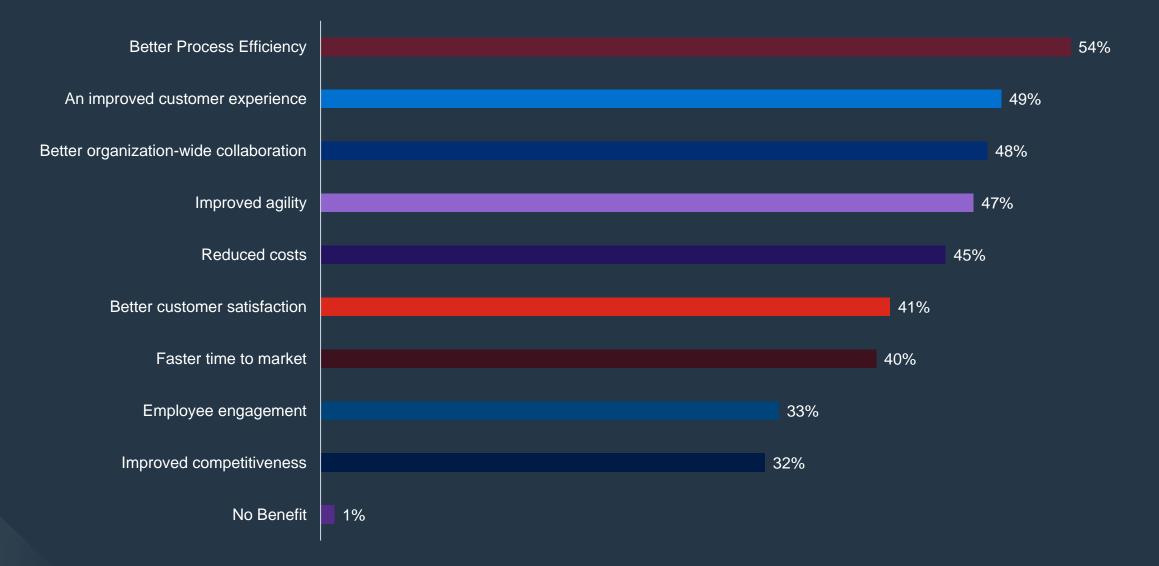
Enterprises generate a tremendous amount of endpoint data – including from IT platforms, mobile devices and a variety of operational and line of business systems.



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Source: 451 Research's Voice of the Enterprise: Internet of Things, Organizational Dynamics 2017

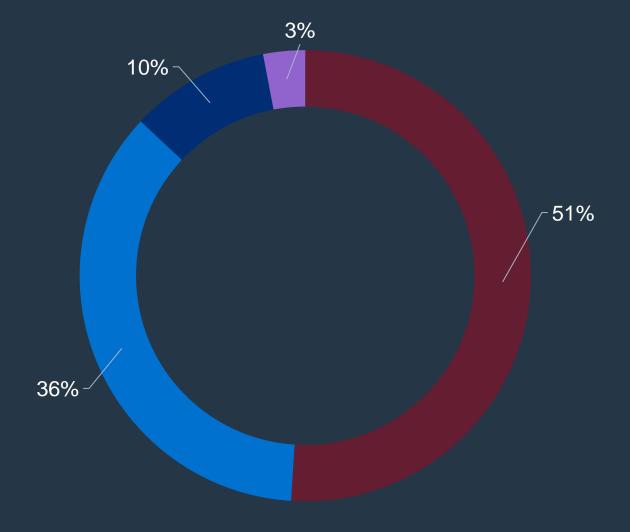
What for?





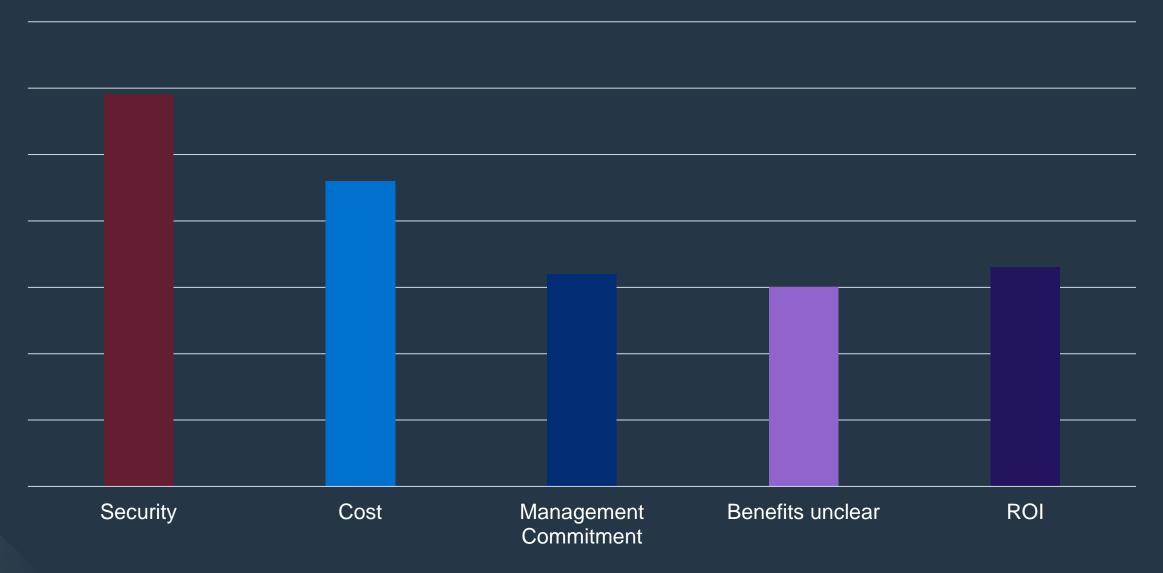
How Mature? is their Strategy

- Fully Implemented
- Partially Implemented
- Under review and needs funding
- Are/will developing a plan





Challenges





"Security by design is a mandatory prerequisite to securing the IoT macrocosm, the Dyn (Mirai) attack was just a practice run."

James Scott, Sr. Fellow, Institute for Critical Infrastructure Technology

There is **ONE** IoT Security Solution...





Rule #1: Start with the Device





Rule #2: Secure Connectivity









3G/4G/5G LTE-M NB-IoT

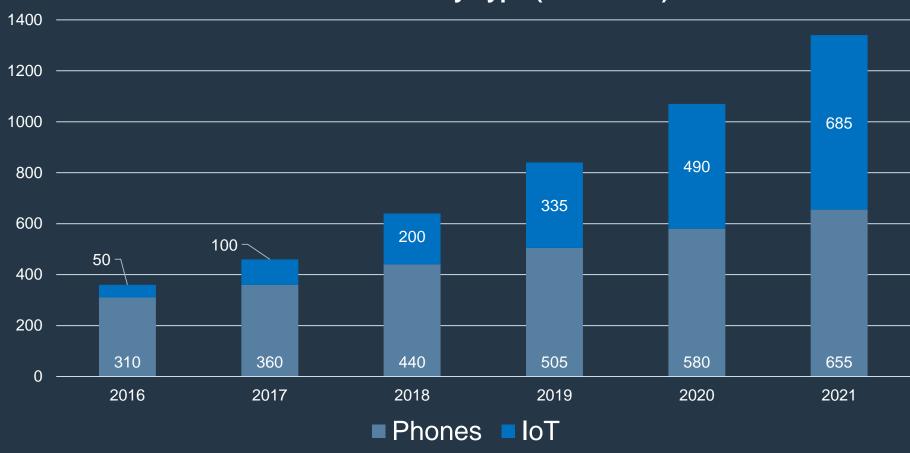
Sigfox LoRa

wiSUN

IoT Platforms/ Edge Computing

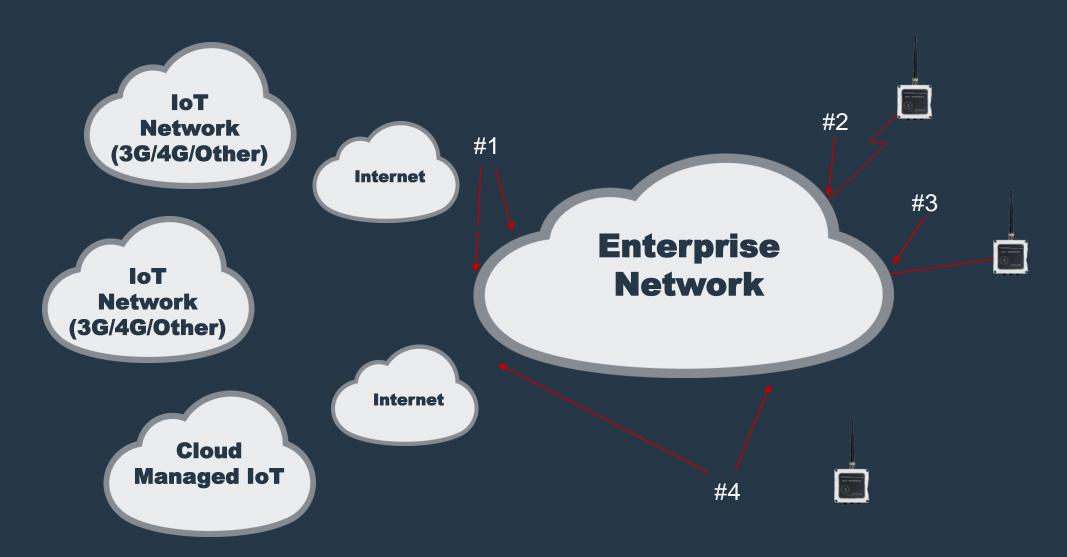
More IoT traffic than the phones

IoT Connections by Type (in millions)*





Rule 3: Enforce your Security Strategy to IoT Traffic





Rule #3 Apply Security as Close as Possible to the Device Turn the edge into a platforms for Distributed Security

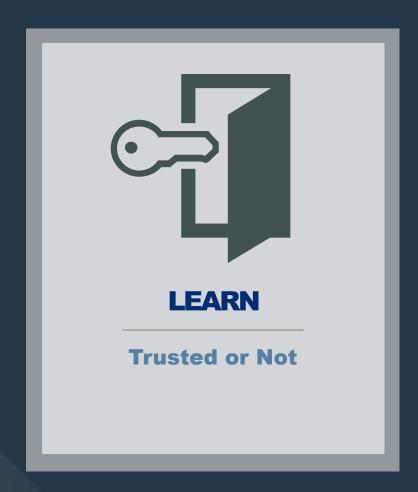
Edge is Best to Secure IoT

Where is you IoT Data Analyzed?





Rule # 4: The Holy Trinity of IoT Protection









Digital Innovation Is Creating Increased Risk and Disruption

Infrastructure to support digital changing rapidly

EXPANDING ATTACK SURFACE



ADVANCED THREATS USING AI & ML



ECO-SYSTEM COMPLEXITY



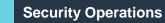


Security-driven Networking Protects The Entire Digital Infrastructure

Multi-Cloud Security Device, Access, and Application Security

Network Security





BROAD

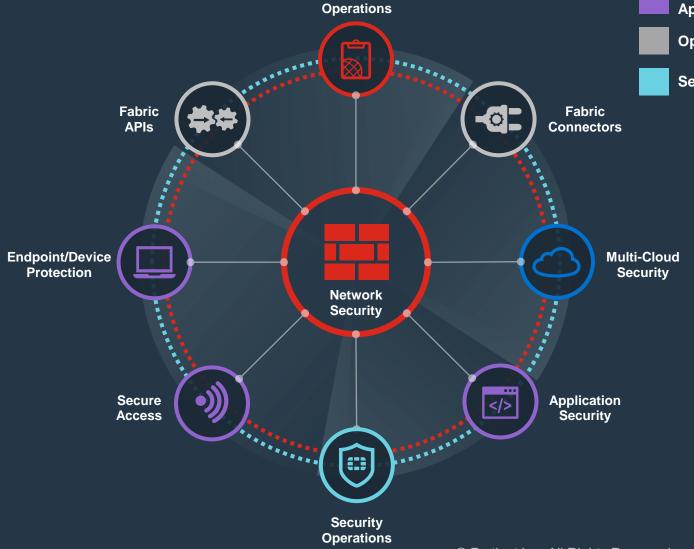
Visibility of the entire digital attack surface

INTEGRATED

Al-driven breach prevention across devices, networks, and applications

AUTOMATED

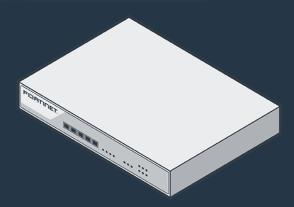
Operations, orchestration, and response



Increased Learning Granularity

FortiNAC

Network Access Control

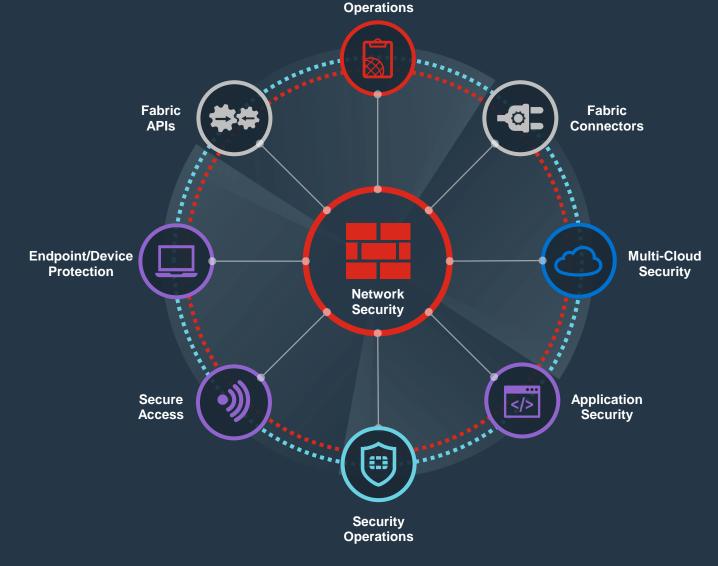


- Identify and profile all endpoints, IoT devices, users, & applications
- Segmentation based on endpoint characteristics and behavior
- Continuous risk assessment and automated responses for dynamic network control across 3rd party devices

NAC for the Fortinet Security Fabric

FortiNAC Integrates With

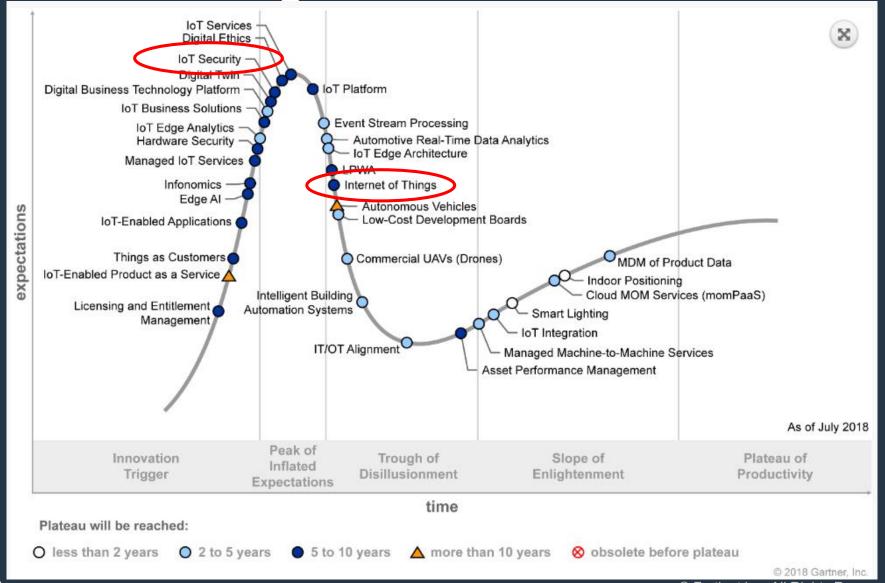
- Network FortiGate
- Management & Analytics FortiSIEM
- Secure Access -FortiSwitch
- Secure Access FortiAP
- Secure Access FortiWLC



Network



Where is IoT Heading – Gartner 2018



"We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run".

"Amara's Law"

FERTINET

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