



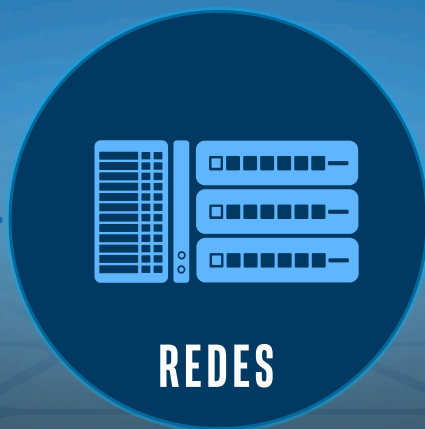
# DO DISPOSITIVO A NUVEM DE FORMA INTELIGENTE

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Technical Evangelist



# IOT ONIPRESENTE... POR QUE AGORA?



CUSTO DOS  
SENSORES **2X**  
ÚLTIMOS 10 ANOS<sup>1</sup>

CUSTO DA  
BANDA **40X**  
ÚLTIMOS 10 ANOS<sup>2</sup>

CUSTO DE  
PROCESSAMENTO **60X**  
ÚLTIMOS 10 ANOS<sup>3</sup>

1. IDC  
2. MCI/EDC, The Digital Universe of Opportunities  
3. Goldman Sachs



# IOT

## ENABLING TRANSFORMATION

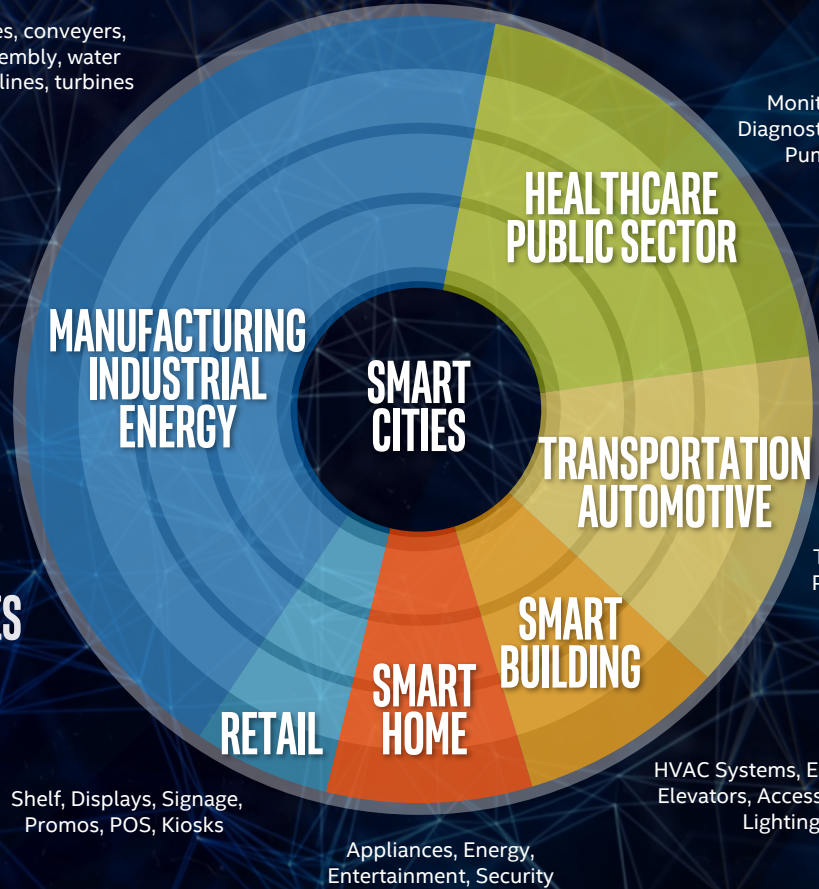
**PREDICTIVE MAINTENANCE**

**SAFETY & SECURITY**

**PRESCRIPTIVE SERVICES**

**INVENTORY & ASSET MANAGEMENT**

Pumps, valves, conveyers,  
motors, assembly, water  
systems, pipelines, turbines



Monitoring, Imaging,  
Diagnostic, Surgical, Beds,  
Pumps, Implants

Ships, Vehicles, Fleets,  
Traffic Sys, Rail, Bus, Taxi,  
Parking, Tolls, Signs, Tags

HVAC Systems, Escalators,  
Elevators, Access Control,  
Lighting

Appliances, Energy,  
Entertainment, Security

Shelf, Displays, Signage,  
Promos, POS, Kiosks



# AS 3 FASES DA IOT



**CONECTADO**



**INTELIGENTE**



**AUTÔNOMO**

# CONECTAR O DESCONECTADO

## MOVER OS DADOS



Sensores simples

Infraestrutura de rede



Data Center / Nuvem



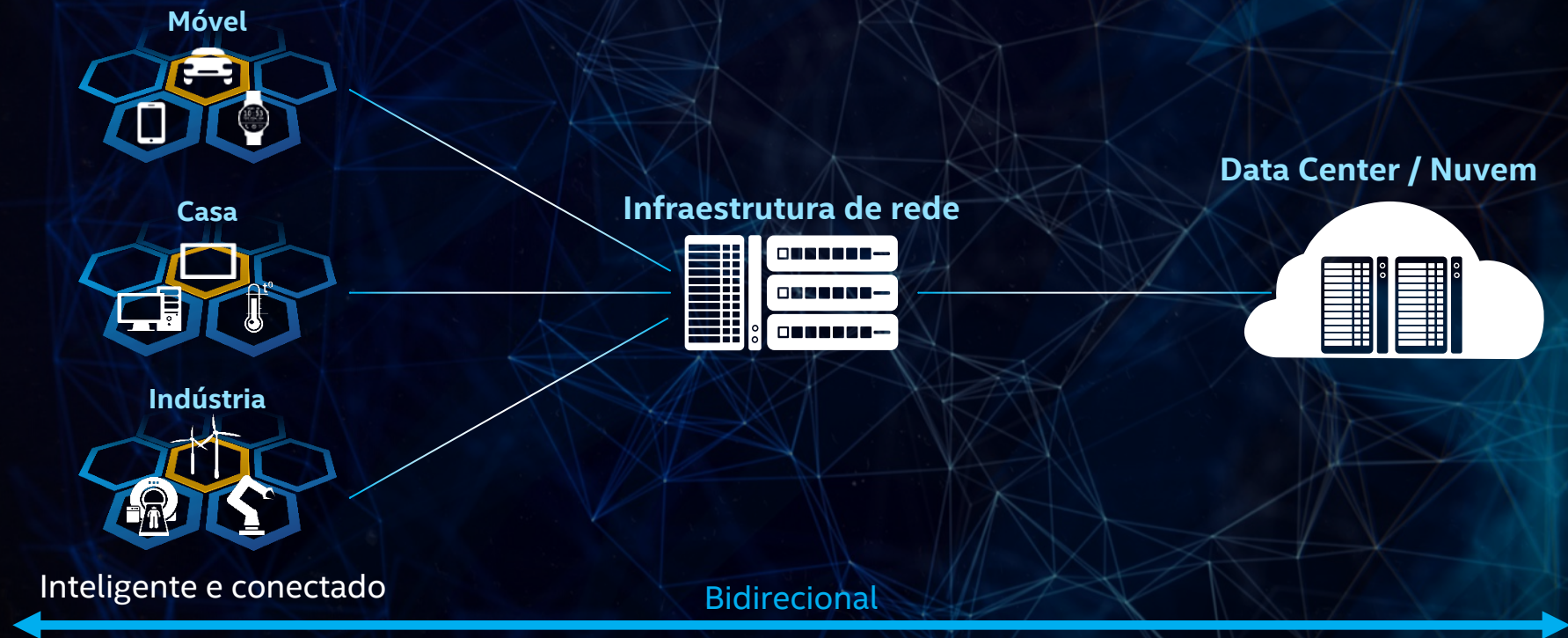
Uma direção





# COISAS INTELIGENTES E CONECTADAS

LEVAR OS DADOS PARA O COMPUTADOR



# MUNDO AUTÔNOMO DEFINIDO POR SOFTWARE

## MOVER A COMPUTAÇÃO PARA O DATA CENTER





# CHALLENGES

## TECHNICAL POV



**SECURITY AND TRUST**



**INTEROPERABILITY**



**INTEGRATION OF OT/IT**



**ADVANCED ANALYTICS**

## BUSINESS POV



**SOLUTION SCALABILITY**



**COST/ROI**



**SECURITY AND PRIVACY**



**FRAGMENTED SOLUTIONS**

# INTEL'S IOT APPROACH: THINGS THROUGH CLOUD

## THE INTEL<sup>®</sup> IOT PLATFORM

REFERENCE ARCHITECTURES  
PORTFOLIO OF PRODUCTS



**THINGS**



**NETWORK**



**CLOUD**

## OUR APPROACH

CREATE VERTICAL  
SOLUTIONS

+

BUILD ON HORIZONTAL  
PLATFORM & PRODUCTS

+

BUILD  
STRONG ECOSYSTEM



# ECOSYSTEM PARTNERS



A person is shown from a side profile, focused on their work. They are holding a smartphone in their right hand, which displays a software interface for a Raspberry Pi. In their left hand, they hold a Raspberry Pi board with several colored jumper wires connected to it. The background is a workshop or lab setting with a blue desk mat, a laptop, and various electronic components. The lighting is soft and focused on the person's hands and the device they are working on.

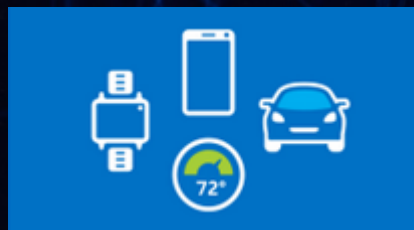
**INSPIRE**  
**DEVELOPERS**

**4.5 MILLION**  
**IoT DEVELOPERS BY 2019**





# IoT building blocks



Things



Gateway



Network and Cloud

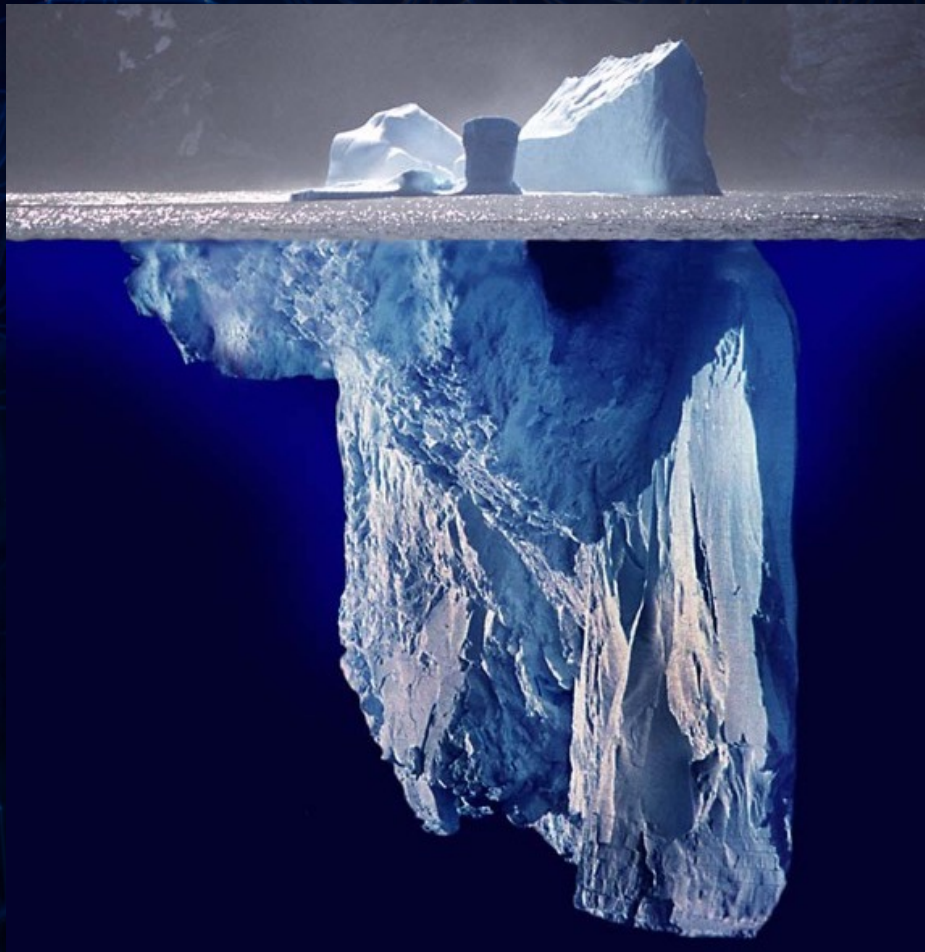


Services Creation and  
Solutions Layer

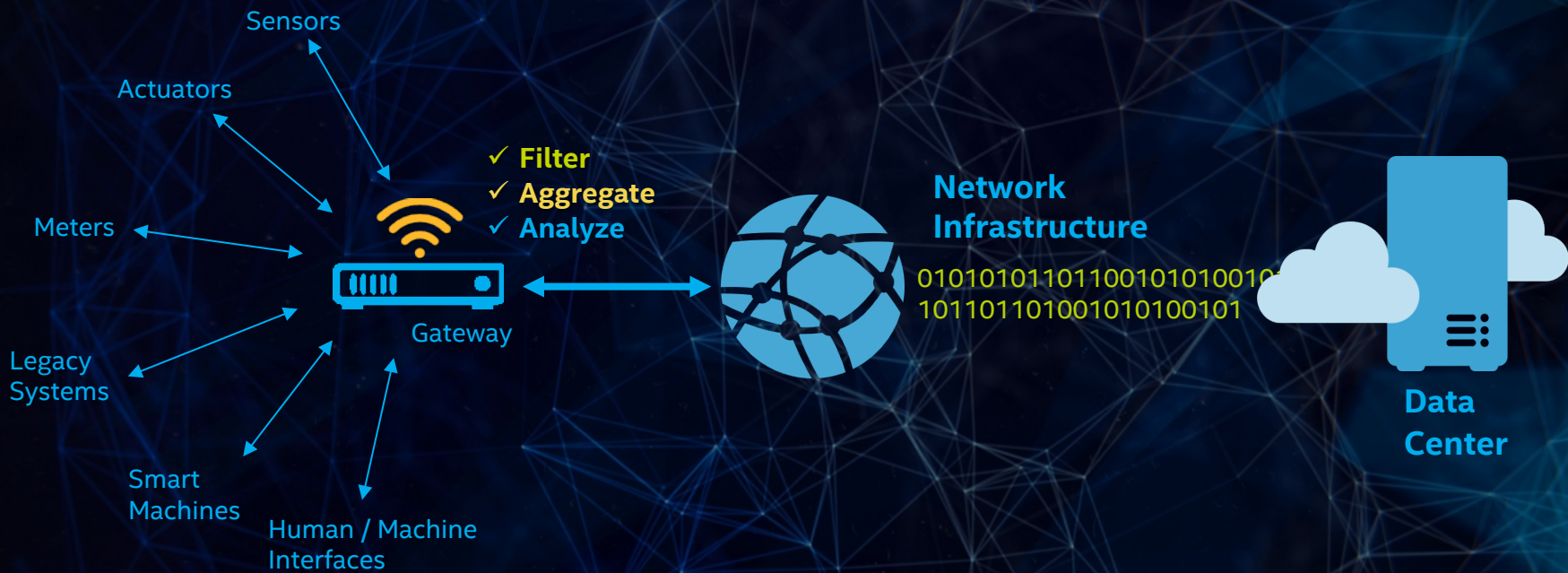
Data

Information











# Intel Gateway Expanding Portfolio

## Optional Capabilities and Services

*Capabilities & Services (Cloud, Manageability, Security, Analytics)*

Open Source & Commercial  
Operating System

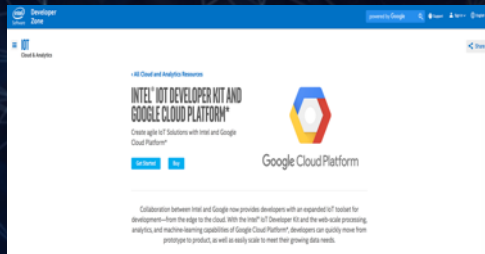


# INTEL IOT DEVELOPER ALLIANCE PROGRAM

BETTER  
TOGETHER

- INTEL IOT DEVELOPER KIT PRECONFIGURED FOR ALLIANCE PARTNERS, TO RAPIDLY MOVE FROM PROTOTYPE TO PRODUCT
- INTEL AND ALLIANCE PARTNERS PROVIDE PROFESSIONAL DEVELOPERS WITH A COMPLETE SET OF IOT TOOLS
  - IDEs, CODE SAMPLES, HOW-TO GUIDES, ETC.

[SOFTWARE.INTEL.COM/IOT](https://software.intel.com/iot)



# O QUE A INTEL TRAZ PARA IOT?

**PLATAFORMAS E TECNOLOGIAS INTEL**

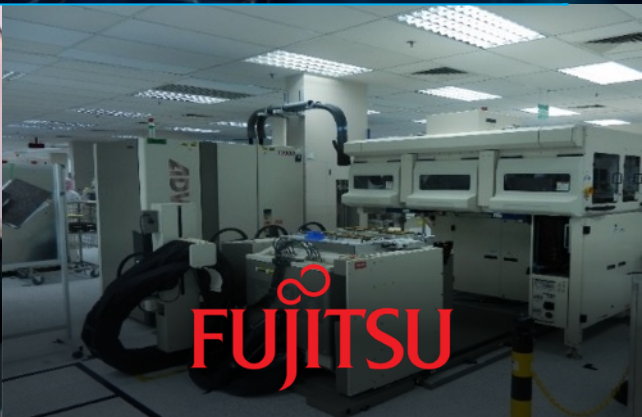
**ECOSSISTEMA PARA ESCALAR, CONSTRUIR SOLUÇÕES VERTICAIS**

**PADRÕES E LIDERANÇA DE CONSÓRCIOS DE PADRONIZAÇÃO**





# IoT IN ACTION





# RESPONSIVE RETAIL



**Levi's**

CHALLENGE WITH OVERSTOCKS AND STOCK-OUTS

IMPROVED STORE INVENTORY ACCURACY

3% IMPROVEMENT = 1% SALES UPLIFT



**BETTER  
SHOPPING EXPERIENCE**

# SMART TRANSPORTATION

# SAIA®



VEHICLE SENSOR  
DATA IS COLLECTED



## RISING FUEL COSTS, DRIVER SAFETY, MAINTENANCE COSTS



7% INCREASE IN FUEL  
EFFICIENCY

\$15M SAVINGS/YEAR



REDUCED MAINTENANCE  
COSTS



IMPROVED  
DRIVER  
SAFETY

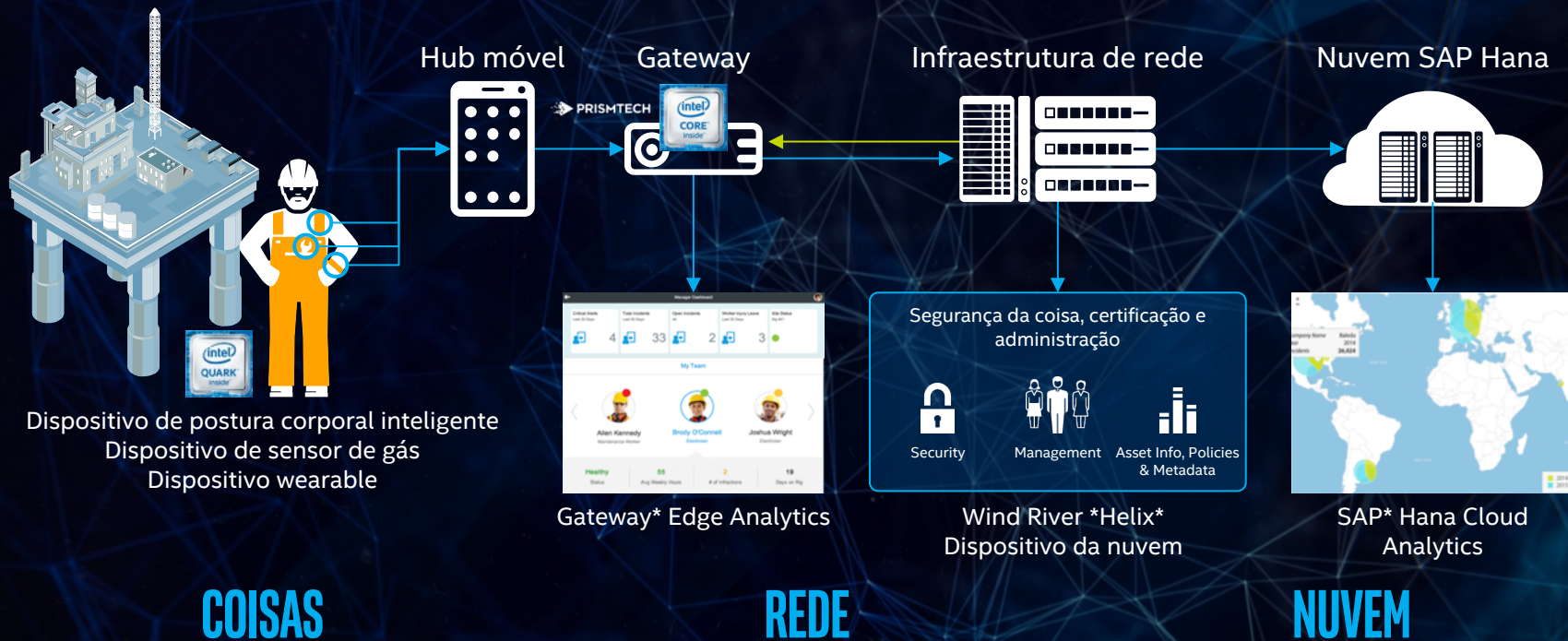
CO<sub>2</sub>

REDUCED CO<sub>2</sub>  
EMISSIONS





# SAP\*: LIMITE INTELIGENTE PARA HANA PLATAFORMA INTEL® IOT E A PLATAFORMA DA NUVEM SAP HANA



\*Outros nomes e marcas podem ser considerados propriedade de terceiros.

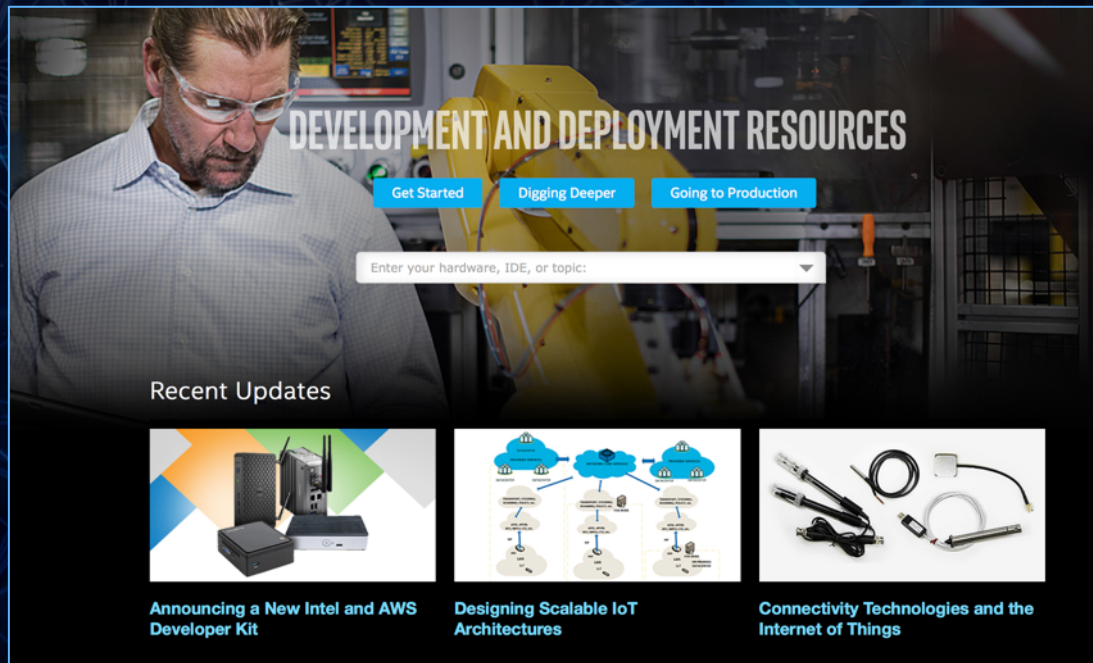


# CAMINHO RÁPIDO, FLEXÍVEL E ESCALÁVEL PARA SOLUÇÕES DE IOT

Links para:

- Guias introdutórios
- Kits de desenvolvimento
- Exemplos de soluções e de código
- Fóruns, webinars, e meet-ups

<https://software.intel.com/iot>






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Enter your hardware, IDE, or topic:

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-   
**Announcing a New Intel and AWS Developer Kit**
-   
**Designing Scalable IoT Architectures**
-   
**Connectivity Technologies and the Internet of Things**

# SAIBA MAIS: ESTUDOS DE CASO

Internet of Things Case Studies, Snapshots, and Blueprints

f in t v



## Building an End-to-End Smart City Bike System

Supported by Intel, Advantech, and Microprogram, YouBike® scales to more cities in Taiwan and Asia.

[Watch the video >](#)

## IOT SOLUTIONS ACROSS INDUSTRIES

See snapshots, case studies, and blueprints for real-world innovative IoT solutions.

ACESSE MAIS CASOS DE ESTUDO E SOLUÇÕES.



# OBRIGADO !

Twitter/ Facebook- HOMEMBIT

Facebook – INTEL SWBRASIL



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Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase. For more complete information about performance and benchmark results, visit [intel.com/performance](https://www.intel.com/performance).

Intel® technologies' features and benefits depend on system configuration and may require enabled hardware, software, or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure. Check with your system manufacturer or retailer, or learn more at [intel.com](https://www.intel.com).

Intel does not control or audit third-party benchmark data or the web sites referenced in this document. You should visit the referenced web site and confirm whether referenced data is accurate.

Cost-reduction scenarios described are intended as examples of how a given Intel based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

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