

# Cisco Internet of Everything

## Innovare con un Trilione di Opportunità Convegno ANIMP

Alberto DEGRADI

Senior Manager

[adegradi@cisco.com](mailto:adegradi@cisco.com)

Follow me on Twitter @albertodegradi

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# Viviamo in un Mondo Digitale



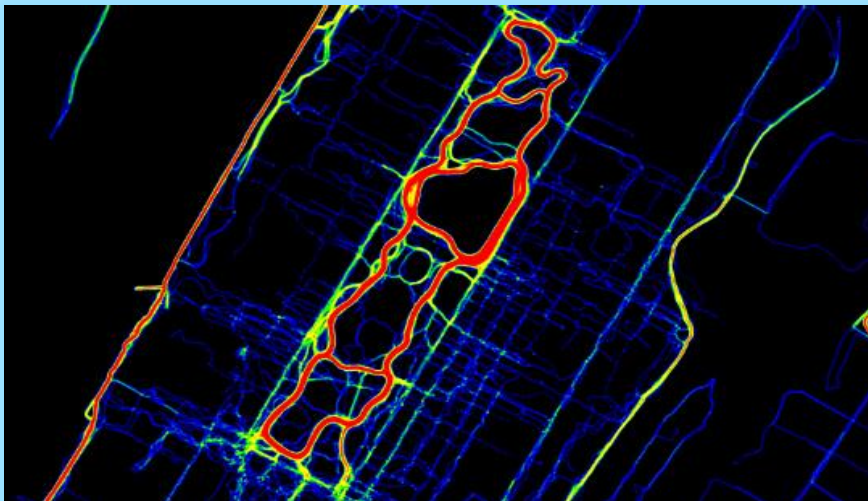
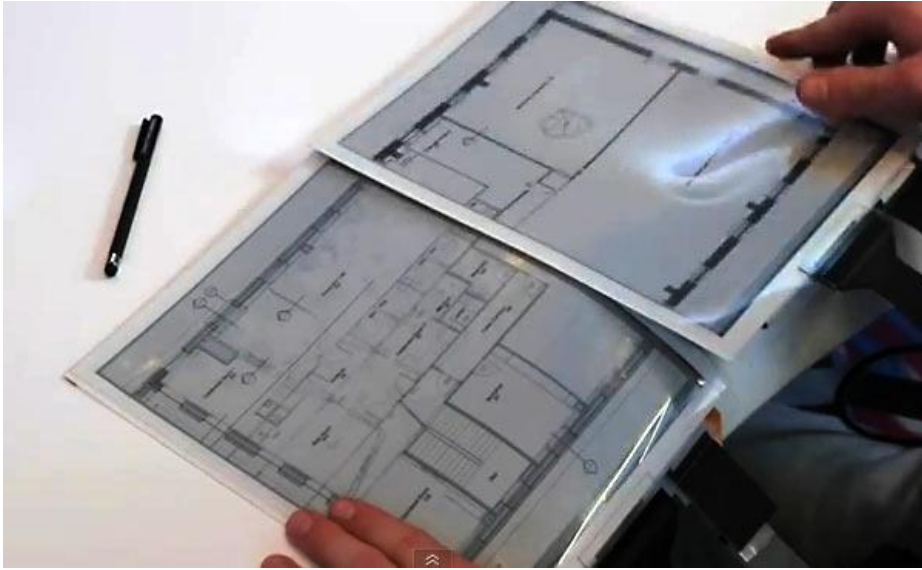


# L'innovazione digitale è continua





# L'innovazione digitale è continua

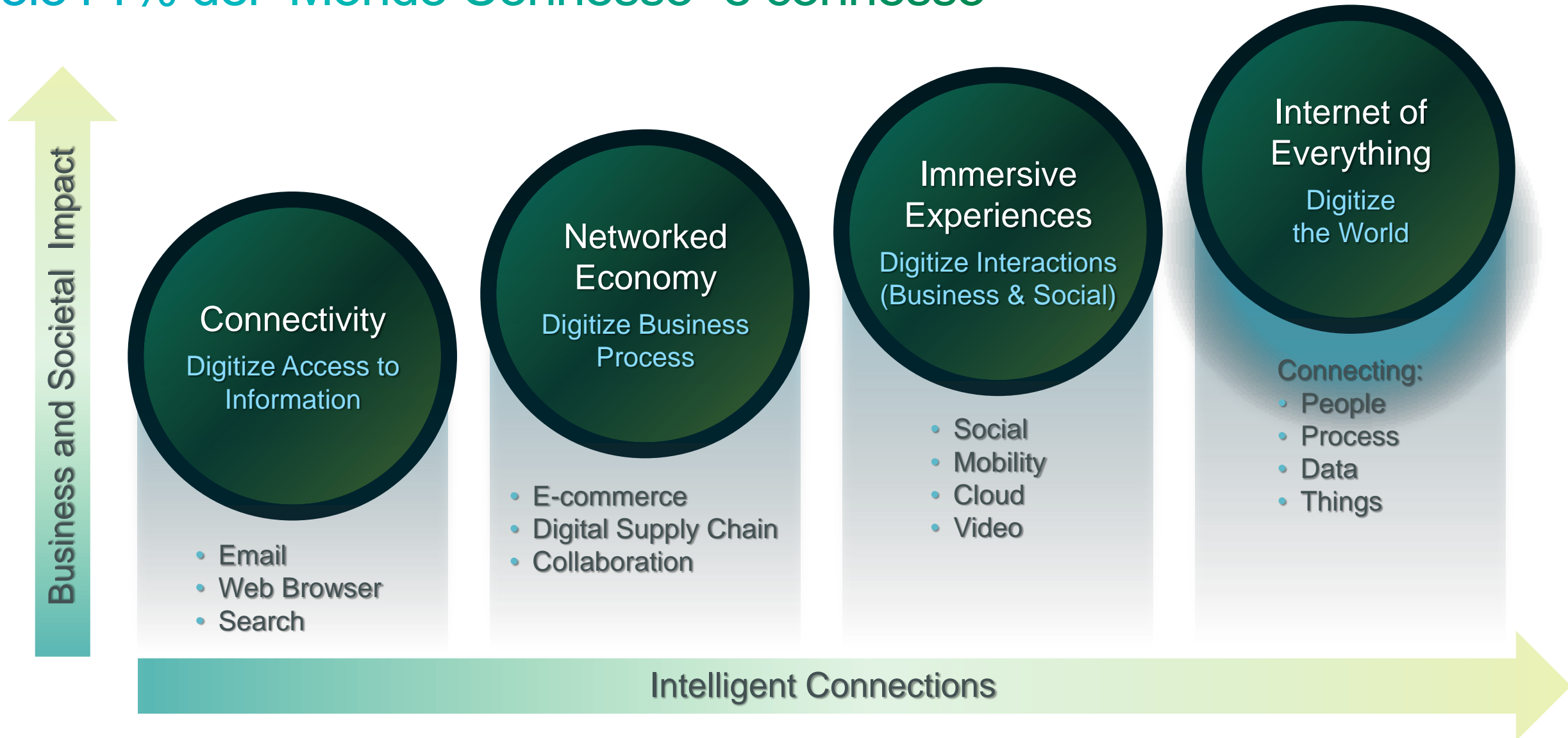


# Ma Viviamo Veramente in un Mondo Connesso?



# Evoluzione di Internet

## Solo l'1% del "Mondo Connesso" è connesso



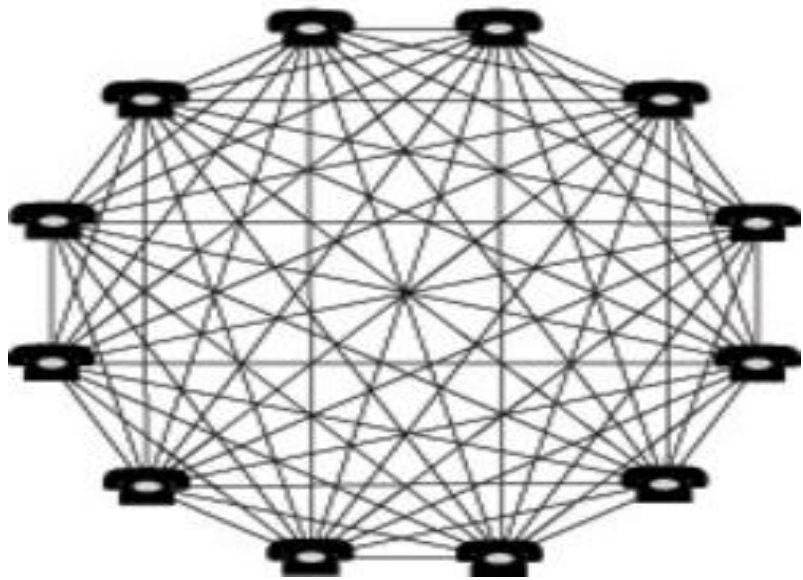


# Internet of Everything vs. Internet of Things

Creare Valore spostando “*Persone, Processi, Dati e Cose*” su IP

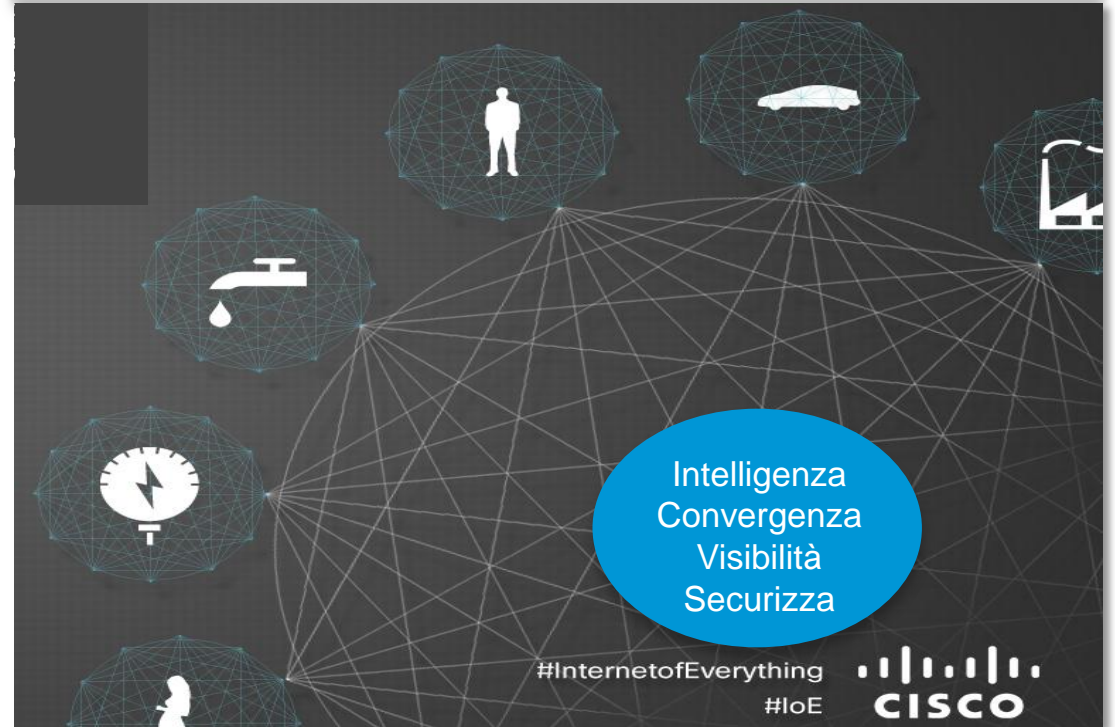
Orchestrazione e Visibilità di sistemi precedentemente discreti.

## Internet of Things



Source: Cisco IBSG, 2013

## Internet of Everything



Everyday things connected...

#IoE

Cars



Stop lights



Buildings



Lighting





#IoE



Glasses



Quantified Self



Smart fabrics

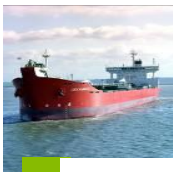


Pills

How we connect will change radically...

# Un Campo di Applicazione Infinito

## Energy Saving



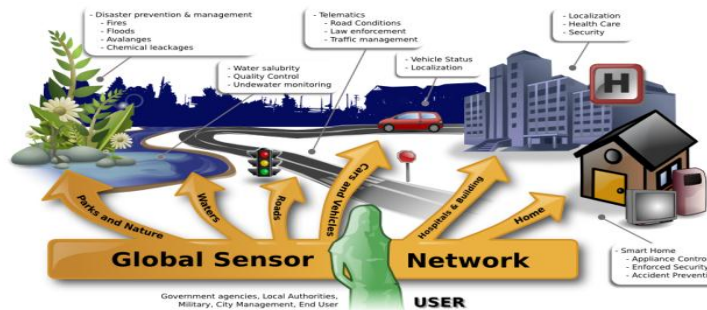
## Difesa

“Trying to determine the market size for the Internet of Things is like trying to calculate the market for plastics, in 1940. At that time, it was difficult to imagine that plastics could be in everything.”

Prof. Michael Nelson,  
Georgetown University



## Smart Grid



## Smart Home



# Convergenza: Opportunità per Creare un nuovo Valore



Information Technology

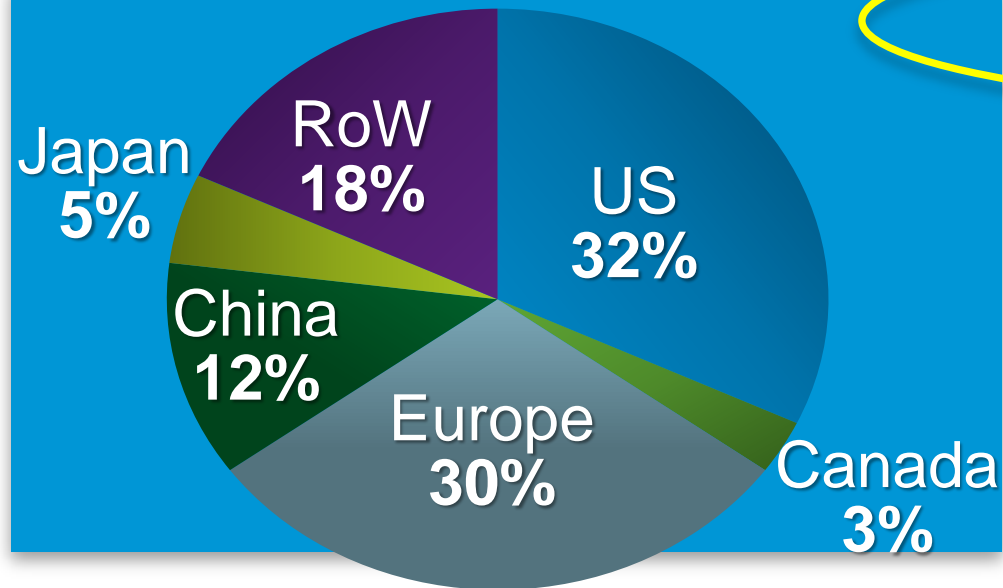
IoT

Operations Technology

Nuovi Modelli di Business

# Qual'è il Valore Totale?

## \$14.4 TRILLION\*



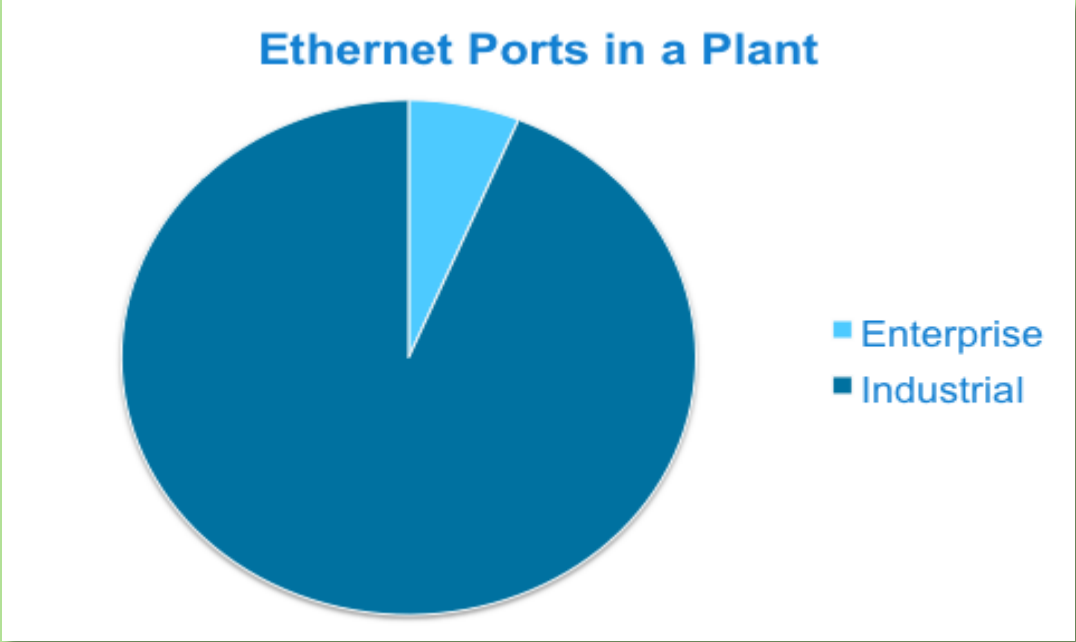
Industrial	27%
Retail Trade	11%
Information	9%
Finance / Insurance	9%
Healthcare (private sector only)	7%
Education Service (private sector only)	6%

Less than 1% of industrial machines/things connected today!



# Porte Ethernet nel Manufacturing

On the average, there is a ratio of 5:1 to 15:1 industrial devices to enterprise within a manufacturing plant



“As manufacturers replace legacy network systems and look for areas to streamline on a common solution, ARC sees a tremendous opportunity for growth of EtherNet/IP applications.”

Craig Resnick, Research Director, ARC Advisory Group

### Enterprise Devices

- IP Phone
- PC
- Printers
- Servers

### Industrial Devices

- Sensor
- Controller/PLC
- I/O
- HMI
- Meter
- Machines
- Vehicles
- Robots
- Scanner
- Phone
- RFID Tag

# Soluzioni per Manufacturing

L2/3 switching & routing



VPN/Firewall/ASA  
M2M Routers (819)



Secure remote diagnostics  
via WAN to datacentre /  
support centre



Video  
Analytics



Unified comms for  
operator interface



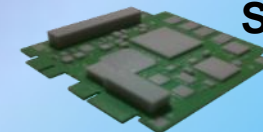
Context aware  
solutions



Wireless  
Sensors



DMS for operator  
interface & training



Embedded  
Solutions (eg 5915)



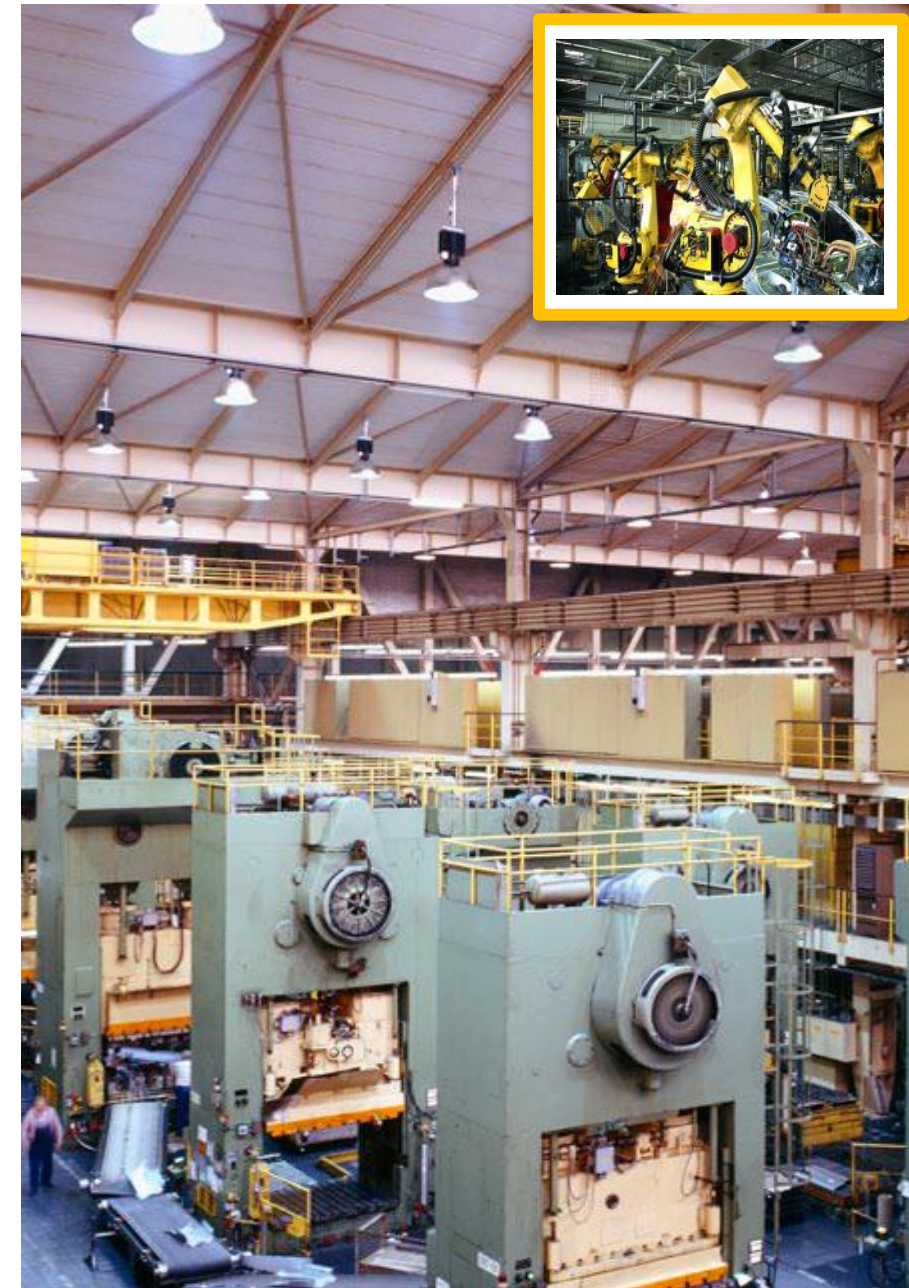


# IoE Manufacturing

Transformare oggetti discreti in oggetti monitorati  
Manutenzione programmata

Discrete Manufacturing Industries include:

- Automotive
- Consumer Packaged Goods
- Aerospace
- Industrial Equipment
- Medical Devices
- High Technology
- Most of Life Sciences, Mining





# Qualche Esempio!

# IoE: Manutenzione Preventiva



RICAMBIO ORDINATO  
AL FORNITORE

The image shows a computer monitor in a control room. The monitor displays a blue interface with a white box containing the text 'RICAMBIO ORDINATO AL FORNITORE'. Below the text is a small line graph with a red line. The background of the monitor shows a control room with multiple computer monitors and an office chair. A sign on the wall in the background reads 'WHEN FIRE ALARM SOUNDS CALL 011'.





Ricambio disponibile e  
messo in spedizione



Dennis  
designer

files sent  
caricamento file  
begin production  
inizio produzione

MODIFY

Ryan  
client







3:45pm



# recovery of the field



00:00:58

**braccio robotico**  
modello n. 7864952

shipping **centre**

3D PRINTER

beginning



robotic arm base  
estimated time of  
completion is two  
hours. Deliver  
immediately after







no operation



# Innovare con un Trilione di Opportunità

“Change that creates a new dimension of performance”

Peter F. Drucker



“Beyond innovation lies *disruptive innovation*, which actually changes social practices – the way we live, work & learn.”

John Seely Brown



Questo e molto altro è possibile!  
Se si fa un investimento strategico...



# INTELLIGENT NETWORK

# DGnaarøde?

