

EngC

ENGINEERS
DE CATALUNYA

Comissió Indústria 4.0

Promotors

ABB KUKA

RENISHAW
apply innovation™

SCHAEFFLER

Schneider
Electric

UOC

Amb el suport de

ACCIÓ
Generalitat
de Catalunya

endesa

BARCELONA INDUSTRY Week

Software HM2018



III FÒRUM INDÚSTRIA 4.0

Divendres, 1 de juny del 2018

Espai Endesa - Barcelona

Sr. Michael Loughlin

Grup de treball de Software, Anàlisi i Integració

#forumI40 - #EspaiEndesa

Hannover Messe 2018 #HM18

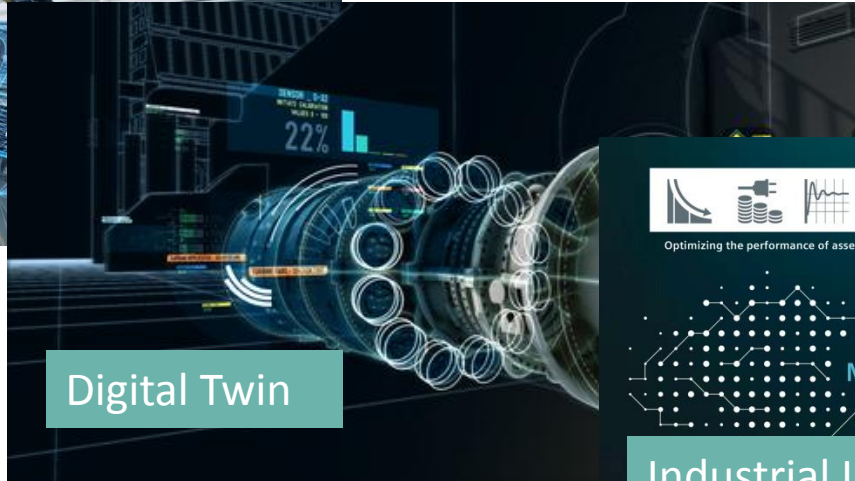
“Digital Enterprise: Implement now”





Lead Theme #HM2018: Connect and Collaborate

Hannover Messe 2017 #HM2017

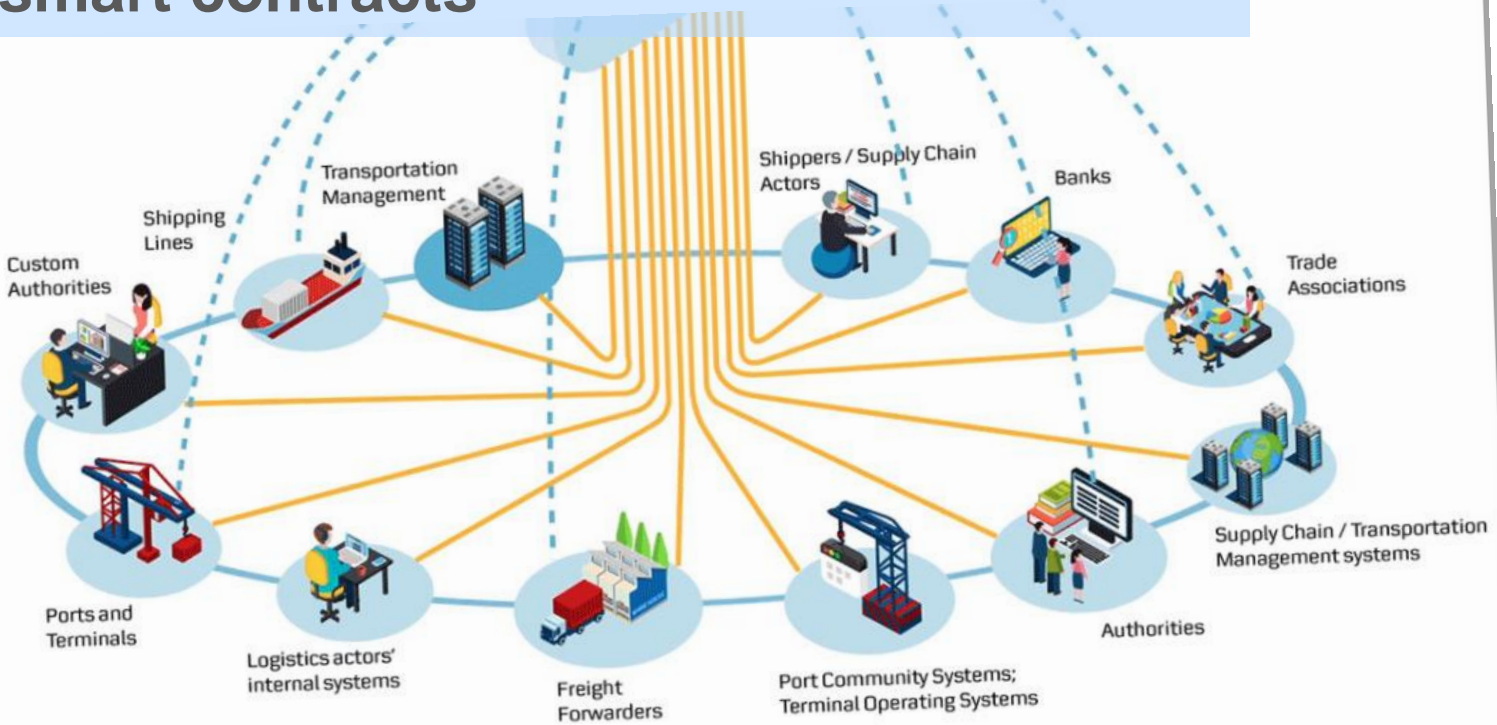


#HM2018 Trending topics

#Blockchain

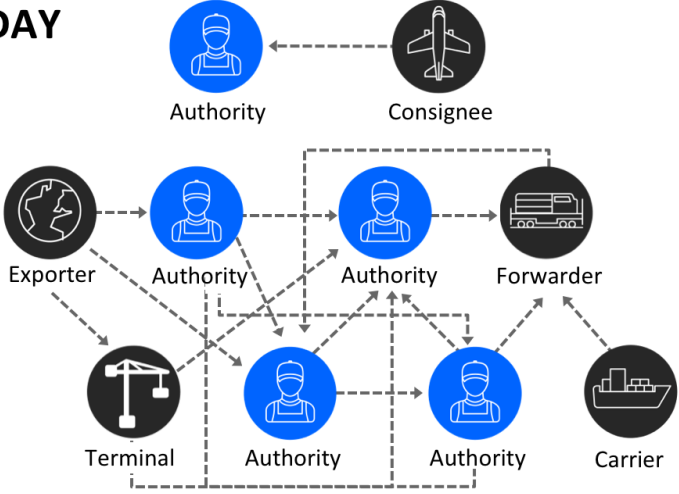


Blockchain: Change shipping documents into smart contracts

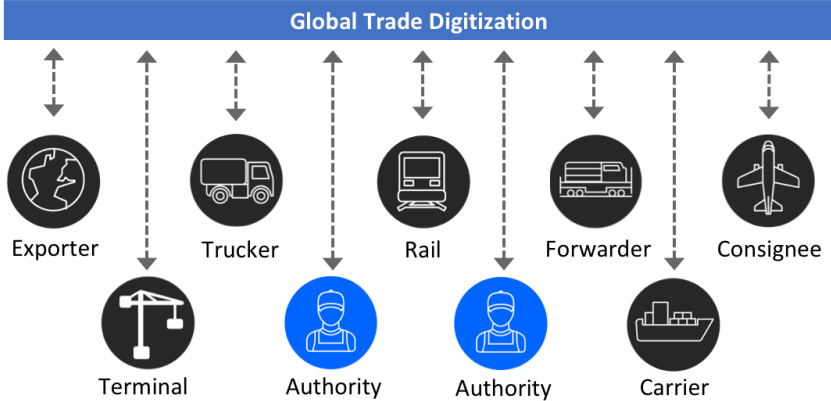


Blockchain: IBM + MAERSK

TODAY



FUTURE

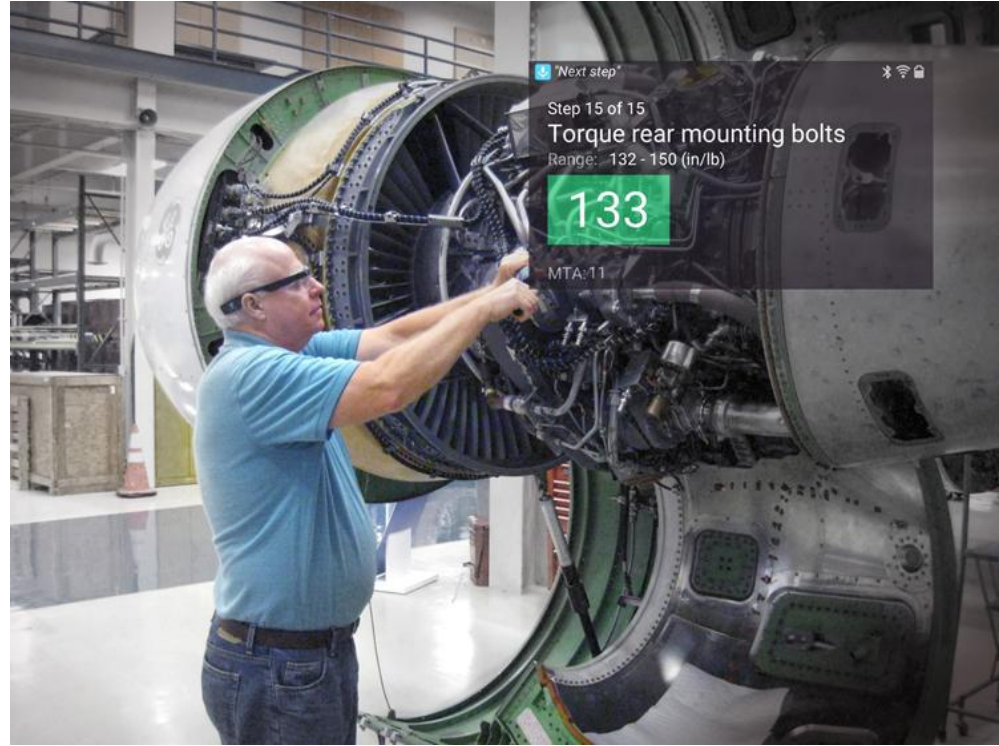


[Source: IBM]

#AR/VR/HMI



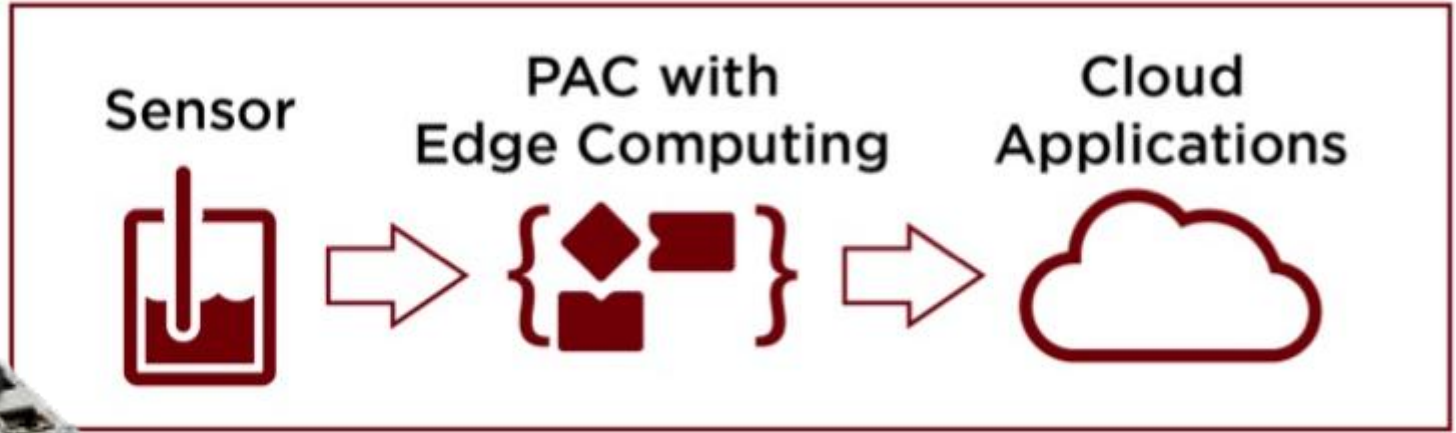
Augmented Reality / Virtual Reality / HMI



Upskill's Skylight
Augmented Reality (AR) Project

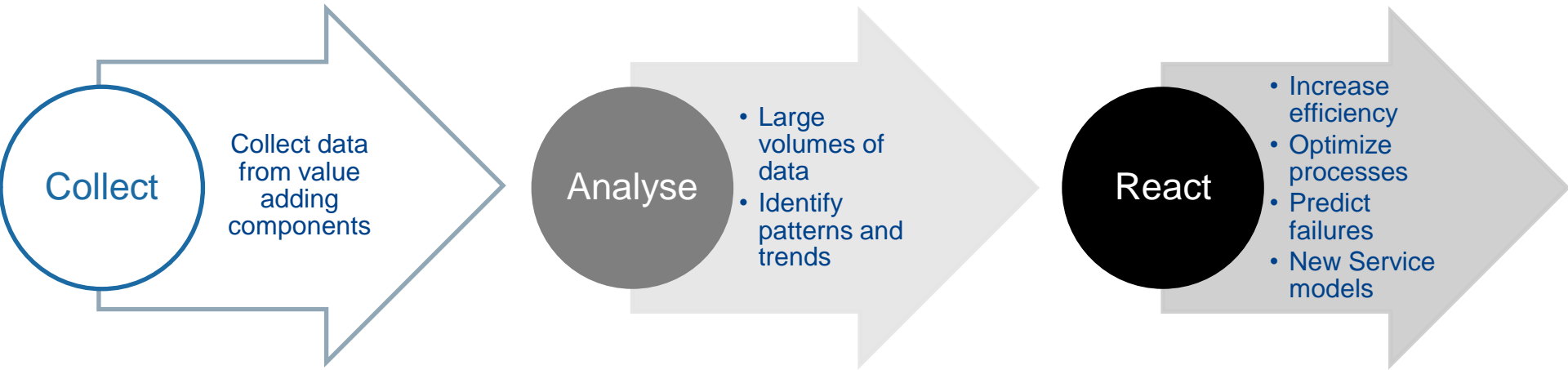
#EdgeComputing

Ex: OPTO22



- *reduce the amount of data sent to the cloud*
- *decrease network and Internet latency*
- *improve system response time in remote mission-critical applications.*

#Digitalization



“companies with digitization technologies are increasing their productivity at work by up to 30 percent.”

(VDI Study for Hannover Messe 2017)

The digitization value chain

Machine Manufacturers



Value
Added
Services

Software Companies



SAP – Leonardo



Automated Asset Management

Remote Asset Maintenance

IoT for Inventory

Makerspace

Build your own innovation on SAP Cloud Platform with SAP Leonardo IoT Foundation

- hiselberg
- wenglor
- PEPPERL+FUCHS
- METTLER
- ztec

SAP – Leonardo. Krones – Bottling on demand



SAP – Leonardo. Krones – Bottling on demand

Krones partners with the likes of SAP and Microsoft, whose systems are already used by Krones clients, to provide added value from software which nowadays can not be provided by machines alone.

[Markus Tischer, Krones]





Microsoft



Google



Amazon AWS



IBM



SIEMENS



SCHNEIDER
ELECTRIC



HPE



...

The digitization value chain

Machine Manufacturers



IT Companies

Value
added
Services



ABB: Ability



Oil, Gas & Chemicals



Mining



Utilities



Manufacturing



Microgrids



Water / wastewater



Transport



Data centers



Intelligent buildings



Connect Benefits

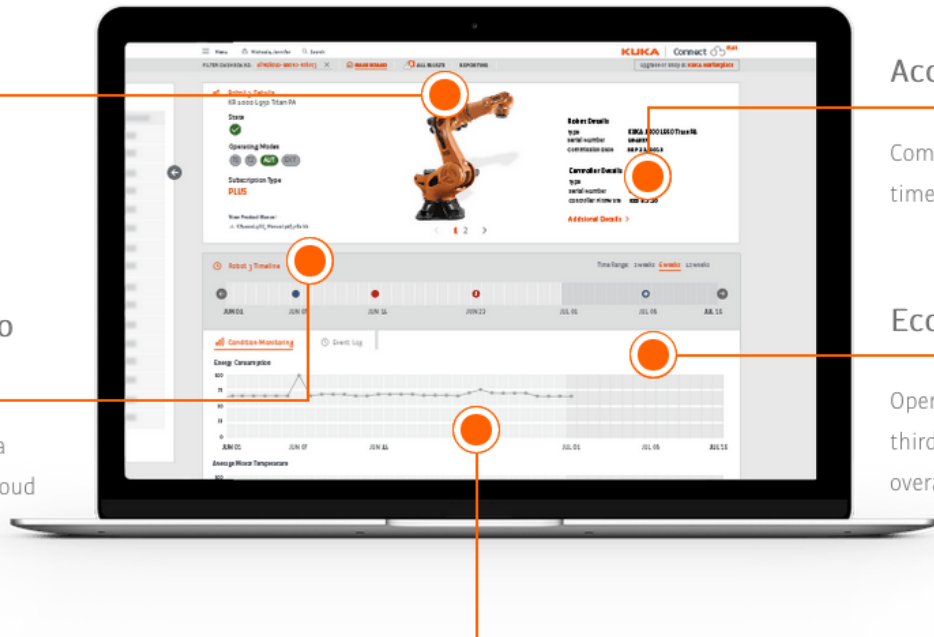
KUKA Connect is an innovative platform that provides the proper foundation and building blocks for instant access to critical data and characteristics of KUKA robots.

World-class UI/UX

User-friendly, responsive and customizable

Secure data transfer to the cloud

Architecture enables secure data encryption from robots to the cloud



Access and analyze data

Comprehensive robot data with real-time notifications

Ecosystem of possibilities

Open API infrastructure promotes third-party collaboration to enhance overall experience

Free service available with zero software installation

Schneider Electric

IN ONE ARCHITECTURE

Eco truxure™

Smart  truxure
BUILDING

Infra  truxure
DATACENTER

Power  truxure
POWER
DISTRIBUTION

Machine  truxure
INDUSTRY

Plant  truxure
INDUSTRY



The digitization value chain

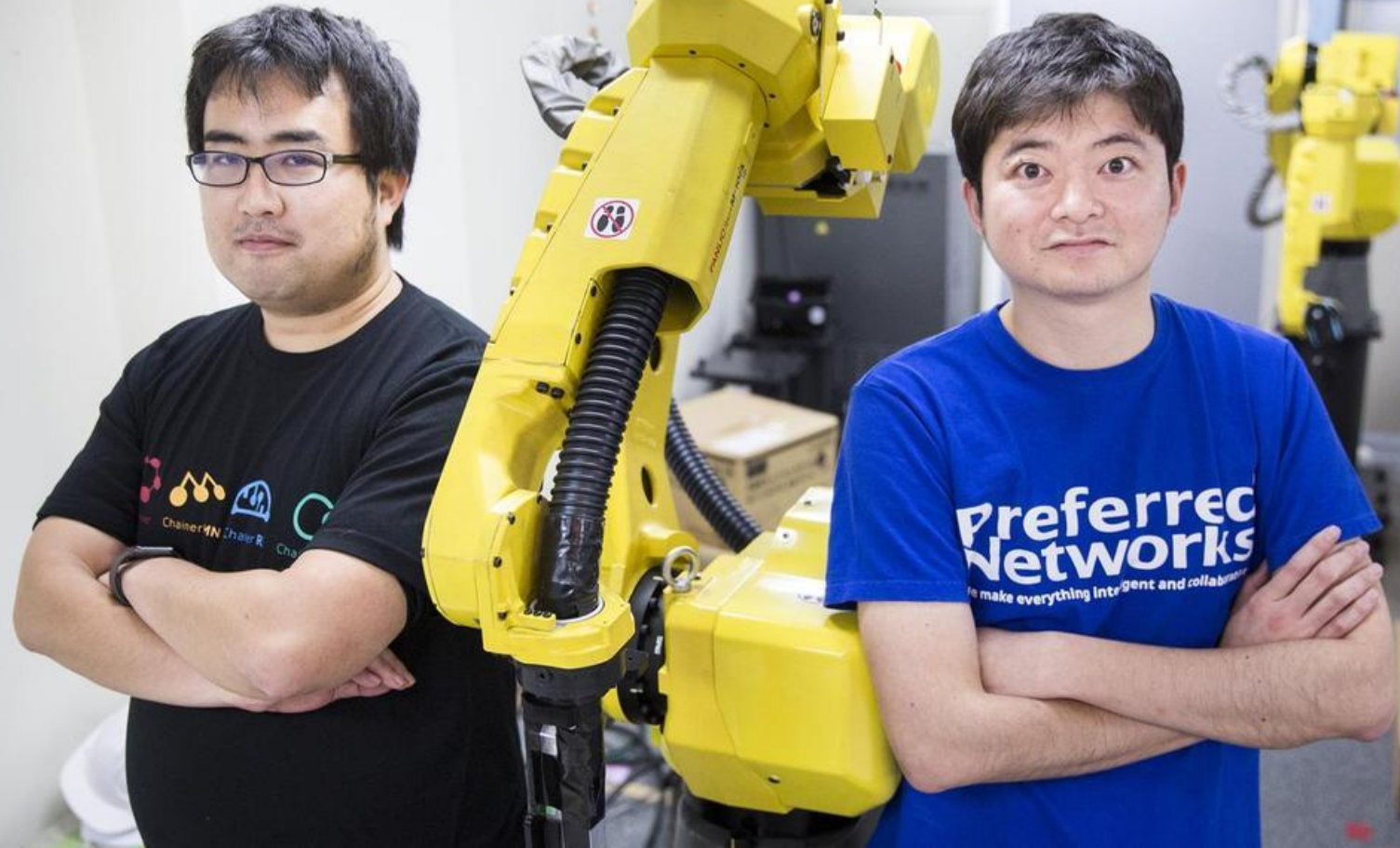
Machine Manufacturers



IT Companies



Preferred Networks - valorada en 2.000 M\$



The Bottom Line...

**Hi ha molta plataforma
IoT i no totes les
plataformes son iguals**

**La decisió de
proveïdor / partners és
igual d'important que
l'estratègia digital**

THE REAL 4.0



#HM2018

**Software sí, però
maquinària/mecatrònica,
també**