



Cybersecurity@CEPS Summit 2018

Quo vadis EU?

Giorgio Mosca

Director Strategy & Technologies

Bruxelles, 6th December 2018



Leonardo is a global high-tech company and one of the key actors in Aerospace, Defence and Security worldwide

DIVISIONS



RESULTS 2017 in €mln.

Revenues	11,527
New Orders	11,595
Order Backlog	33,578
R&D	1,539
Workforce (no.)	45,134

4FOUR
DOMESTIC
MARKETS



About **150**
countries use our
products, systems
and **services**



Quo vadis "digital world"?

processes

Artificial intelligence ,
Robotics, Biotechnologies,
Blockchain, Distributed
ledger, Energy capture,
storage and transmission,
Geoengineering,
ubiquitous linked sensors,
Neurotechnologies, Space
technologies , New
computing technologies,
Virtual and augmented
realities

From human reactions to machines' proactiveness

Maintenance

Preventive
maintenance
(time-based)

Predictive
Diagnostic

**Corrective
maintenance**

Remote Monitoring

Data Analysis &
Diagnostic

Smart Alerts

Customised
Maintenance

Predictive
Maintenance

**Condition-based
maintenance**

Neural Networks /
Machine Learning

Advanced Sensors

IoT & Cybersecurity

Digital Twins

Digital maintenance

Maintenance in the digital era

Field Service &
Lifecycle

**Maintenance,
Repair &
Overhaul**

Dynamic update of
configuration

Digital Spare Parts
Catalogue

Configuration Mgmt

Improved
Maintenance

**MRO Plus, Smart
Maintenance**

3D Robotics

Selective Laser Melting
Additive Manufacturing

Augmented Reality

Smart Tracking

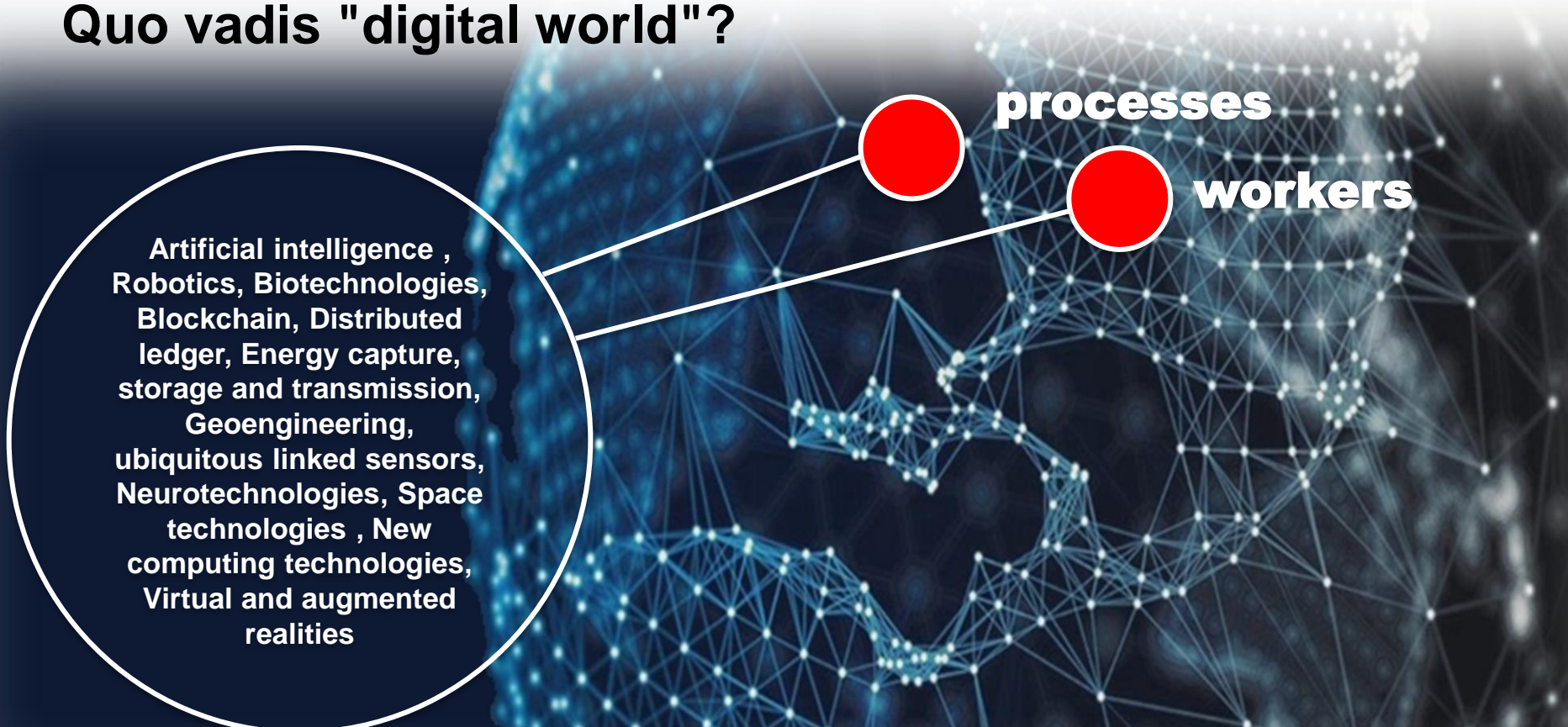
Smart Safety

Yesterday

Today

Tomorrow

Quo vadis "digital world"?



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realities

processes

workers

From risk to awareness

*Anticipating a finding of the currently on-going Research of the
Information Security & Privacy Observatory
of the Politecnico di Milano*

"Distractions and low awareness of personnel represent for 82% of Companies the vulnerability that in last 12 months mostly raised their cyber risks exposition.

Coherently, 56% of surveyed organizations defined a training plan on information security and privacy themes with annual reach and 26% with multi-annual reach"



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realities

processes

workers

(mal)workers

From digital pioneers to industrial perpetrators

In the beginning (2011)...

- Hacktivism
- Espionage
- Frauds
- *virus, spamming, phishing, defacement, DDoS, ...*

Attacks
+240%

Costs
+500%

Now (2018)...

- Crime
- Targeted attack groups
- State actors
- *ransomware, warfare, botnets, coinmining, APTs, underground e-commerce, ...*

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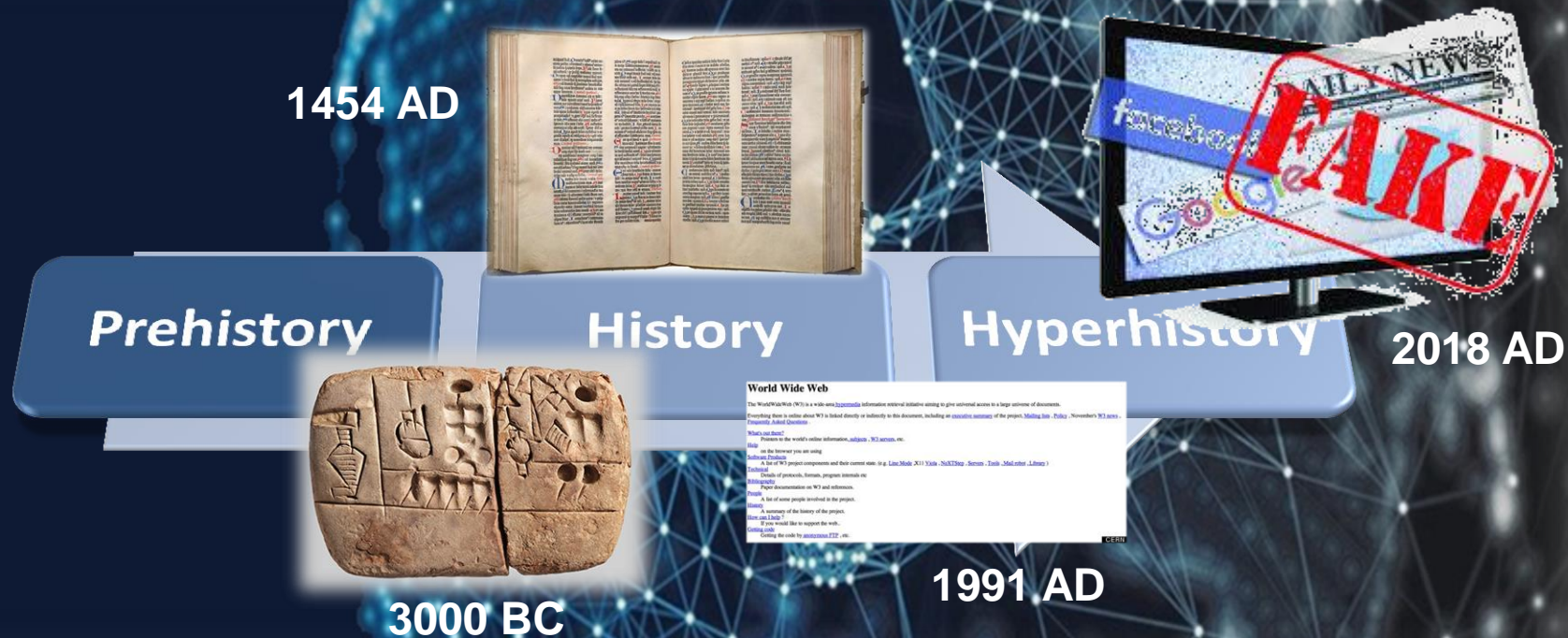
processes

workers

(mal)workers

knowledge

From information to knowledge to misinformation



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realities

processes

workers

(mal)workers

knowledge

habits

From "meet & greet" to "link & tweet"

APR 2018

DIGITAL AROUND THE WORLD IN Q2 2018

THE LATEST STATISTICAL INDICATORS FOR INTERNET, SOCIAL MEDIA, AND MOBILE USE AROUND THE WORLD

TOTAL
POPULATION

7.615
BILLION

URBANISATION:
55%

INTERNET USERS



4.087
BILLION

PENETRATION:
54%

ACTIVE SOCIAL MEDIA USERS



3.297
BILLION

PENETRATION:
43%

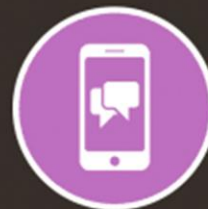
UNIQUE MOBILE USERS



5.061
BILLION

PENETRATION:
66%

ACTIVE MOBILE SOCIAL USERS



3.087
BILLION

PENETRATION:
41%

SOURCES: POPULATION: UNITED NATIONS; U.S. CENSUS BUREAU; INTERNET: INTERNETWORLDSTATS, IITU, EUROSTAT, INTERNETLIVESTATS, CIA WORLD FACTBOOK, MIDEASTMEDIA.ORG, FACEBOOK; GOVERNMENT OFFICIALS, REGULATORY AUTHORITIES; REPUTABLE MEDIA: SOCIAL MEDIA AND MOBILE SOCIAL MEDIA: FACEBOOK; TENCENT; WKONTAKT; KAKAO; NAVER; DING; ICPSR; SIMILARWEB; KEYWORD ANALYSIS: MOBIER; OSINT INTELLIGENCE: DOODLE, FRIGSON, KEYWORD ANALYSIS, LITV, TRIPADVISOR, TRAVELERS, THE BIG DATA SOCIETY, DISCUSSION, LACER.

**Hootsuite**

we
are.
social

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technologies , New
computing technologies,
Virtual and augmented
realities

processes

workers

(mal)workers

knowledge

habits

psychology

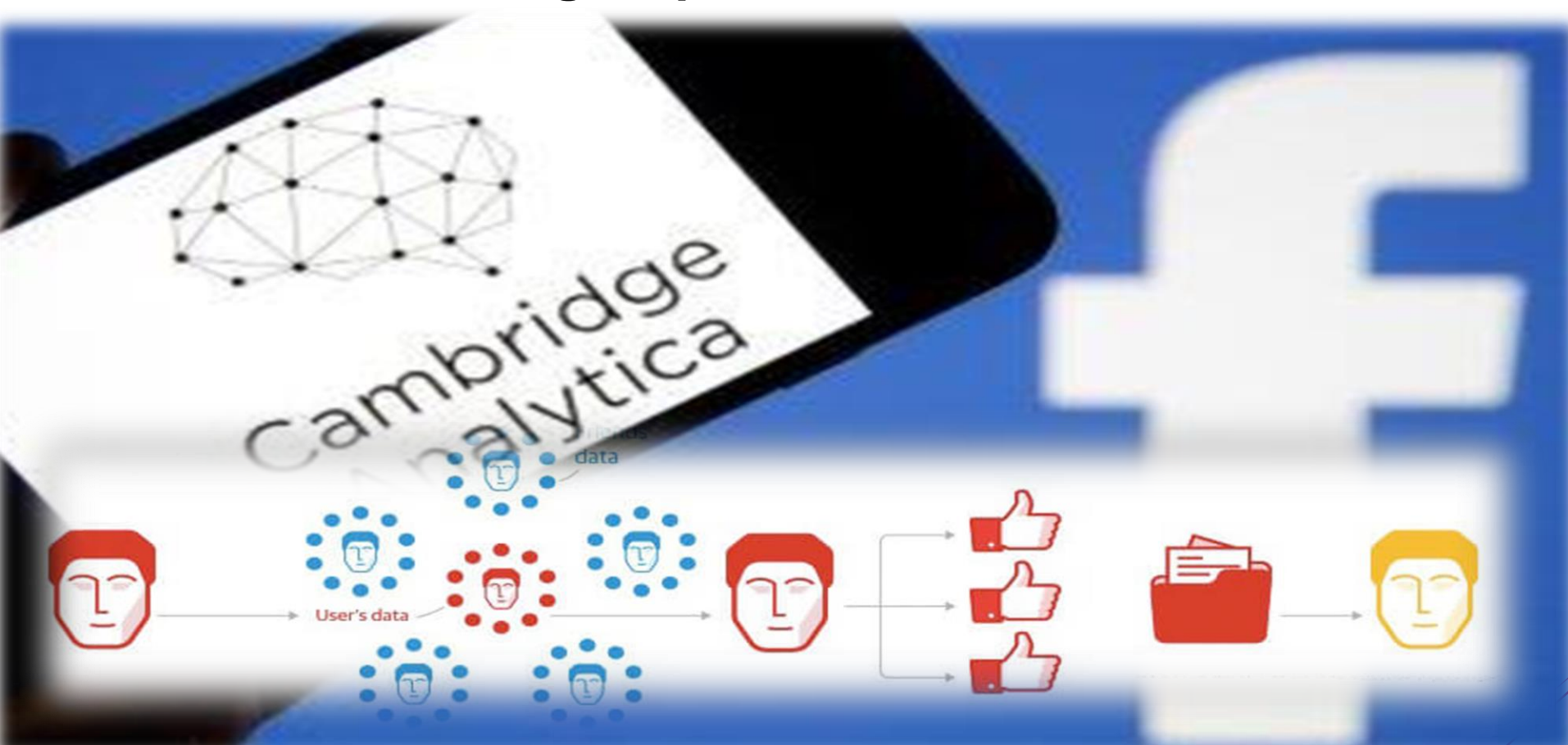
Is Google making us stupid? Nicholas Carr, Aug 2008



IS
Google
MAKING
US
Stoopid?

WHAT THE INTERNET IS DOING TO OUR BRAINS

Is Facebook making us predictable? , Apr 2018



Quo vadis EU?



Hyperhistorical societies are dependent on Digital technologies, therefore are vulnerable to cyber disruptions and require cyber security

Are we going in the right direction?



Are we going in the right direction?



Technology Network
Coordinate
Funds Policies

HORIZON
EUROPE

INDUSTRY
4.0
(IIoT
security)

DIGITAL
EUROPE

PESCO

ISF

CERF

FSR
FESR

NIS
PSD
free

ROI

CYBER
RANGE

HPC

CERT-EU,
ENISA, EDA,
EC3, EASA,
ESA, ...

MEMBER
STATES
CISRTs

DIGITAL
AUTONOMY

ACTION PLAN
AGAINST
DISINFORM.

COREPER
(IPCR)
EAAS (CD kit)
OCSE (CBM)

INITIATIVE
ELECTORAL
INTERFER.

TEU
TFEU

Giorgio Mosca

Director Strategy & Technologies
Security & IS, Leonardo

THANK **YOU** FOR YOUR ATTENTION



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