









DIGITALEUROPE

Turkey – January 2019

DIGITALEUROPE represents more than 35,000 businesses across Europe

We are the voice of the Digital Technology Industry



Vision - A European Union that nurtures and supports digital technology industries, and that prospers from the jobs we provide, the innovation and economic benefits we deliver and the societal challenges we address.

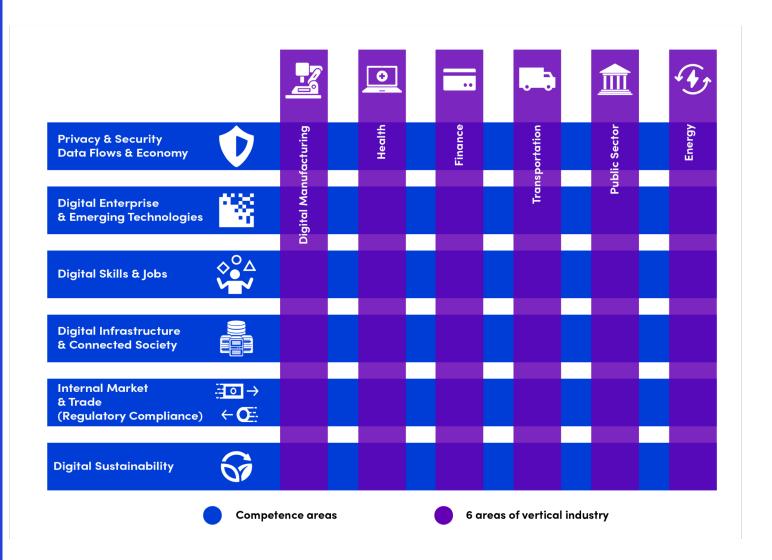


Mission - To foster, on behalf of our members, a business, policy and regulatory environment in Europe that best realizes our vision. We will achieve this by working as positive partners with a wide range of stakeholders.





Competence & Service Matrix





The 5 Cs For Europe's success



Capital



Competences



Common market



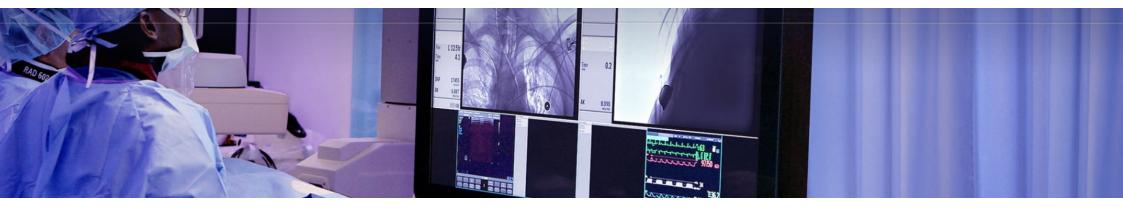
Culture



Cohesion



Use cases – benefits of technology



Philips – AI in clinics and hospitals With the clinical introduction of digital pathology, pioneered by Philips, it has become possible to implement more efficient pathology diagnostic workflows. This can help pathologists to streamline diagnostic processes, connect a team, even remotely, to enhance competencies and maximise use of resources, unify patient data for informed decision-making, and gain new insights by turning data into knowledge. Philips is working with PathAI to build deep learning applications. By analysing massive pathology data sets, we are developing algorithms aimed at supporting the detection of specific types of cancer and that inform treatment decisions.



Use cases – benefits of technology



Schneider Electric – AI for industry applications Schneider Electric has used AI and machine learning in various sectors. In the oil and gas industry for example, machine learning is steering the operation of Realift rod pump control to monitor and configure pump settings and operations remotely, sending personnel onsite only when necessary for repair or maintenance – when Realift indicates that something has gone wrong. Anomalies in temperature and pressure, for instance, can flag potential problems, even issues brewing a mile below the surface. Intelligence edge devices can run analytics locally without having to tap the cloud — a huge deal for expensive, remote assets such as oil pumps. To enable this solution an AI model is previously trained to recognise correct pump operation and also different types of failures a pump can experience, the AI model is deployed on a gateway at oil field for each pump and is fed with data collected at each pump stroke. Then, it outputs a prediction regarding the pump state. As we mimic the expert diagnostics, predictions can be easily validated, explained and interpreted.

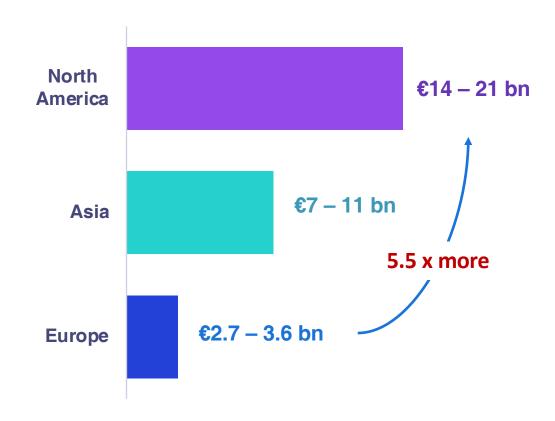




Europe's private investment in AI is lagging behind

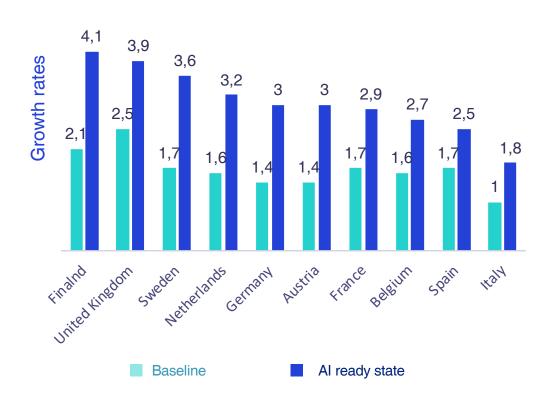
- 1. Make sure Europe wakes up and invest in Al skills, innovation etc.
- 2. Avoid over-regulation on Al hampering growth and affecting other areas.
- 3. Prevent a fragmented EU regulatory landscape, between Member States and globally.

Private investments in AI





Economically, by 2035 Al has the potential to double annual growth rates of many European countries



For every job disrupted by digital technology, 3.7 new jobs will be created

Source: Accenture and Frontier Economics, 2017





Digital is the only real growth driver

15.5% of the Global Economy was Digital in 2016

2.5x The Digital Economy grows 2.5 times faster than the global economy

Return on Investments (RoI) in digital yield 6.7 greater results than non-digital investments

Source: Oxford Economics, 2017

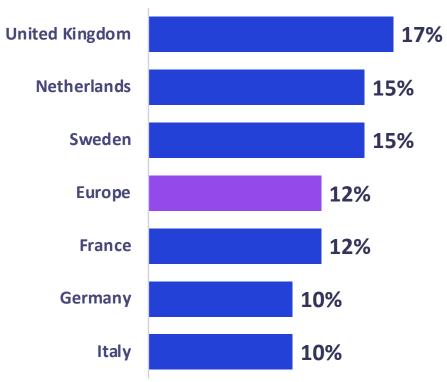


Europe has a lot of potential...

The Digital Single Market could accelerate GDP growth, adding €375 billion to €415 billion each year and providing a common platform to allow domestic firms to achieve scale.

But Europe still has a long way to take full advantage of digitalisation



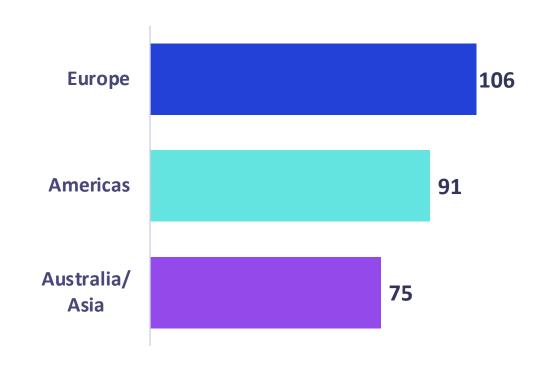


Source: McKinsey Global Institute (2016)



It is time for Europe to capitalise on its lead and develop a strong strategy to fully take advantage of digitalisation and become a world leader.

Europe is a world leader in robot density



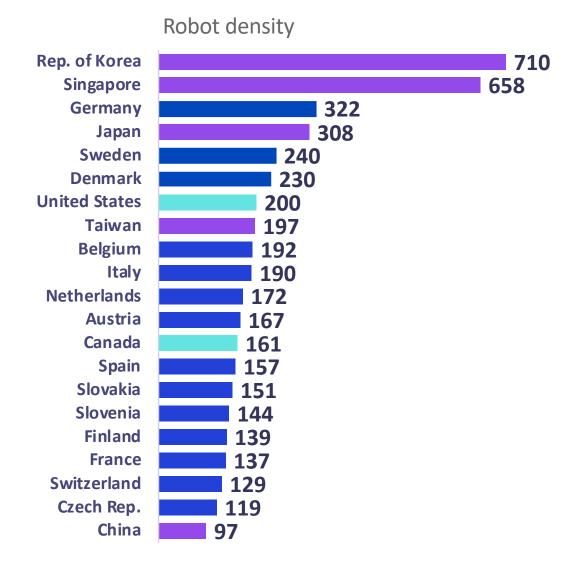
Source: International Federation of Robotics (2018)



But there is still room for improvement...

When looking at countries individually, Europe is the most present in the top 20 countries...

But Korea is still leading the way.

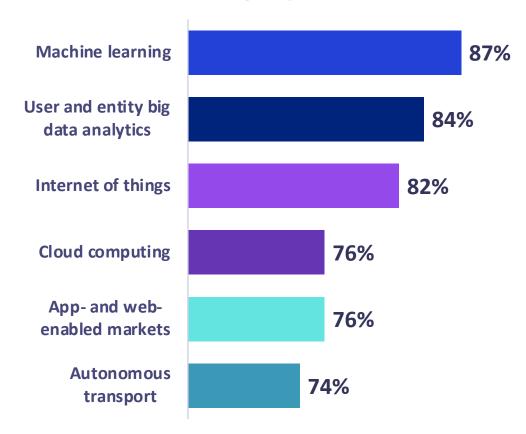


Source: International Federation of Robotics (2018)



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87% of manufacturers plan to adopt machine learning by 2022



Source: World Economic Forum, 2018

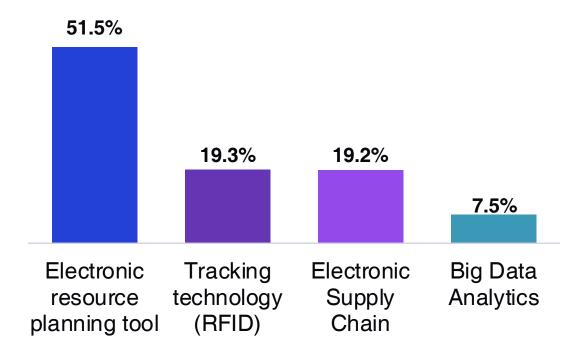
Manufacturing sector refers to industries in Automotive, Aerospace, or Supply Chain & Transport



Although, in practice, manufacturing industries could make better use of digital technologies

Less than 10% of European manufactures make use of big data analytics

% of manufacturing enterprises that use a set of digital technologies



Source: **Eurostat**

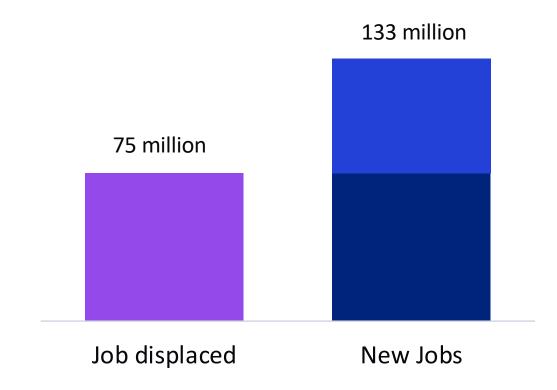




A net positive impact of automation on the labour market

While digital transformation will displace many jobs and profit certain profiles, the overall impact will be a net positive.

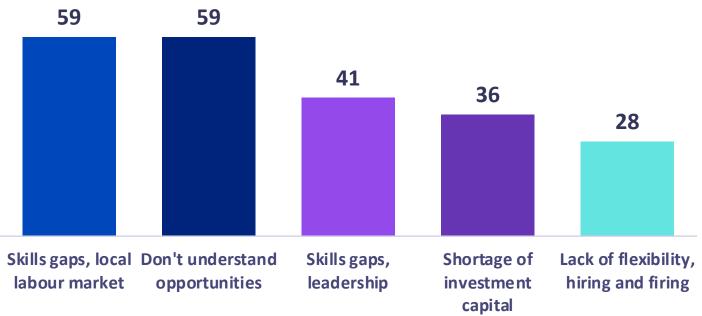
Automation will create 58 million more jobs than it will displace



Source: World Economic Forum, 2018



In the manufacturing sector, skilled digital labour is the principal barrier to the adoption of new technologies



Source: World Economic Forum, 2018

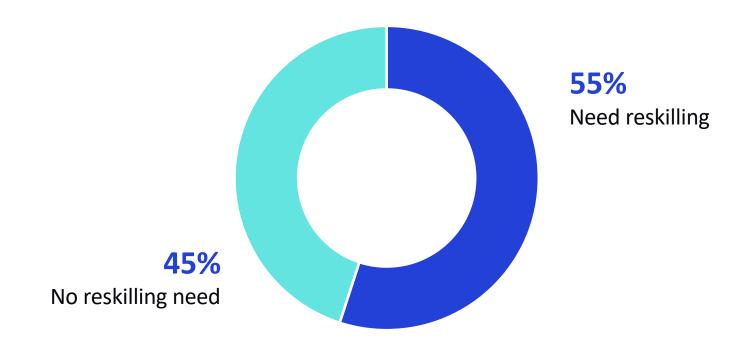
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- When determining job location decisions, companies overwhelmingly prioritise the availability of skilled local talent
- Many manufacturers are also held back by their inability to see the opportunities derived by robotisation



More than half of employees in the manufacturing sector will need reskilling by 2022

- In some case (13%), reskilling would take less than a month
- But for 12% of employees, reskilling could take more than a year



Source: World Economic Forum, 2018

Manufacturing sector refers to industries in Automotive, Aerospace, or Supply Chain & Transport



Data analysis and Artificial Intelligence Specialists will become the most in-demand jobs in manufacturing



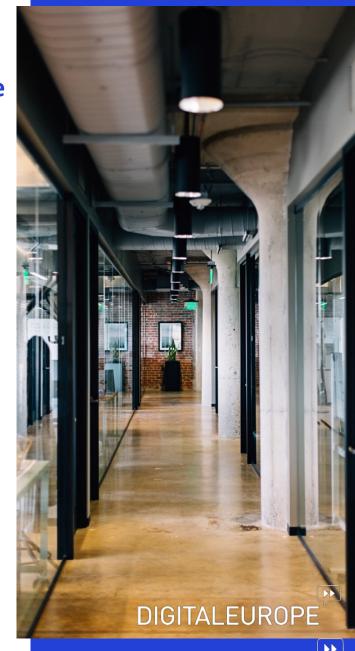
- Data Analysis and Scientists
- Al and Machine learning Specialists
- Process Automation Specialists



- Assembly and Factory Workers
- Data Entry Clerks
- Client Information and Customer Service Workers

Source: World Economic Forum, 2018

Manufacturing sector refers to industries in Automotive, Aerospace, or Supply Chain & Transport



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Latest developments

Brexit & Digital Taxation



Brexit

- Parliament defeats May's deal
- Main options:
 - Go back to the table and delay article 50
 - No-deal Brexit
 - 2nd referendum



Digital Tax

- Group of EU countries keep on rejecting the Tax Plan
- Unlikely to be completed before EU elections
- Risk of countries developing their own initiatives (specifically: Italy, Spain, Britain & France)



Current files

Key ongoing files and whether they are expected to be completed for the EU elections



Free flow of Data (FFoD)

- FFoD Regulation adopted to remove non-personal data localisation rules in the public sector of EU member States
- PSI Directive forces the release of public sector data
- Ongoing Free Trade Agreements increasingly require data protection rules



European Investments

- Inc. Horizon Europe, the Digital Europe Programme & funding for digital skills
- Final agreed amounts being reviewed by the EP & Council
- Unlikely to be completed before EU elections



Consumer package (D)

- Inc. Omnibus & Collective redress
- Currently being reviewed by the EP & Council
- Unlikely to be completed before EU elections



E-evidence package (R-D)

- Currently being review by the EP & Council
- Unlikely to be completed before EU elections



Current files

Key ongoing files and whether they are expected to be completed for the EU elections



ePrivacy (R)

- EP report adopted, Council internal work
- Unlikely to be completed before EU elections



Cybersecurity

- Cyber Security Act creating pan-EU certification will be completed before EU elections
- EIDAS/eID DIGITALEUROPE NTAs running pilots in countries such as Poland



Copyright (D)

- In trialogue negotiation
- Unlikely to be adopted before EU elections



GDPR (R)

Adopted (implementation)



Upcoming files

In 2019, we will likely see the following files come up:





Regulation in the context of AI & Robotics (ethics/transparency, data access, skills/jobs, liability)



New enforcement powers for DG COMP and NCA

(data access, ownership, mergers & antitrust)



Increased liability and responsibility on platforms

(re-opening eCommerce Directive, removal of terrorist content)



Ecodesign package

A package composed of around 10 new regulation relevant to the IT sector





Thank you & get in touch!



21 February - Brussels

www.mastersofdigital.org