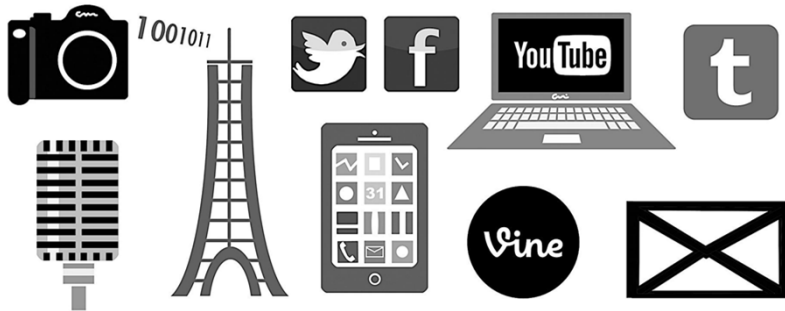




Department
for Culture
Media & Sport



Digital Skills for the Digital Economy

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Role of DCMS and the Digital Economy Unit

1. DCMS leads on digital skills across UK Government



2. Wider digital remit includes - broadband, spectrum, future technology, cyber security and media and telecoms



PWC - Will robots steal our jobs ?

- Up to 30% of UK jobs could potentially be at high risk of automation by the early 2030s
 - US (38%) or Germany (35%), but higher than Japan (21%).
- Risks highest in transportation and storage (56%), manufacturing (46%) but lower in sectors like health and social work (17%).
- For individual workers, the key differentiating factor is education.
 - Risk of automation only around 12% for those with undergraduate degrees or higher
- AI and robotics will both create some totally new jobs and, through productivity gains, generate additional wealth and spending
- Net impact of automation on total employment is therefore unclear. Rise in average incomes due to the productivity gains, but benefits may not be evenly spread



Industrial Strategy Green Paper

- Work in partnership with industry to deliver an ambitious agenda across breadth of advanced manufacturing sectors
- Focusing on skills - building skills for the future with a focus on the importance of digital, analytics, whole systems engineering
- Invest in infrastructure to support digital connectivity and energy usage
- Invest in science, technology and innovation

Juergen Maier (CEO Siemens UK) - review of industrial digitalisation to consider how UK industry can benefit from the accelerated adoption of digital technology across advanced manufacturing



UK Government's Digital strategy

1. **Connectivity**
 - Broadband networks and new generation of mobile technology
2. **Skills and inclusion**
 - Digital skills for individuals and companies across the country
3. **Tech sector and innovation**
 - Supporting technologies and getting regulatory regime right
4. **Digitisation of business**
 - Supporting businesses to use digital technology and data
5. **Cyber security**
 - How the £1.9bn investment will help guarantee a safe and secure digital economy
6. **Government services**
 - Improving public services like transport, police, the NHS, and schools through digital transformation
7. **Data**
 - Opening up government data - better social outcomes and public trust



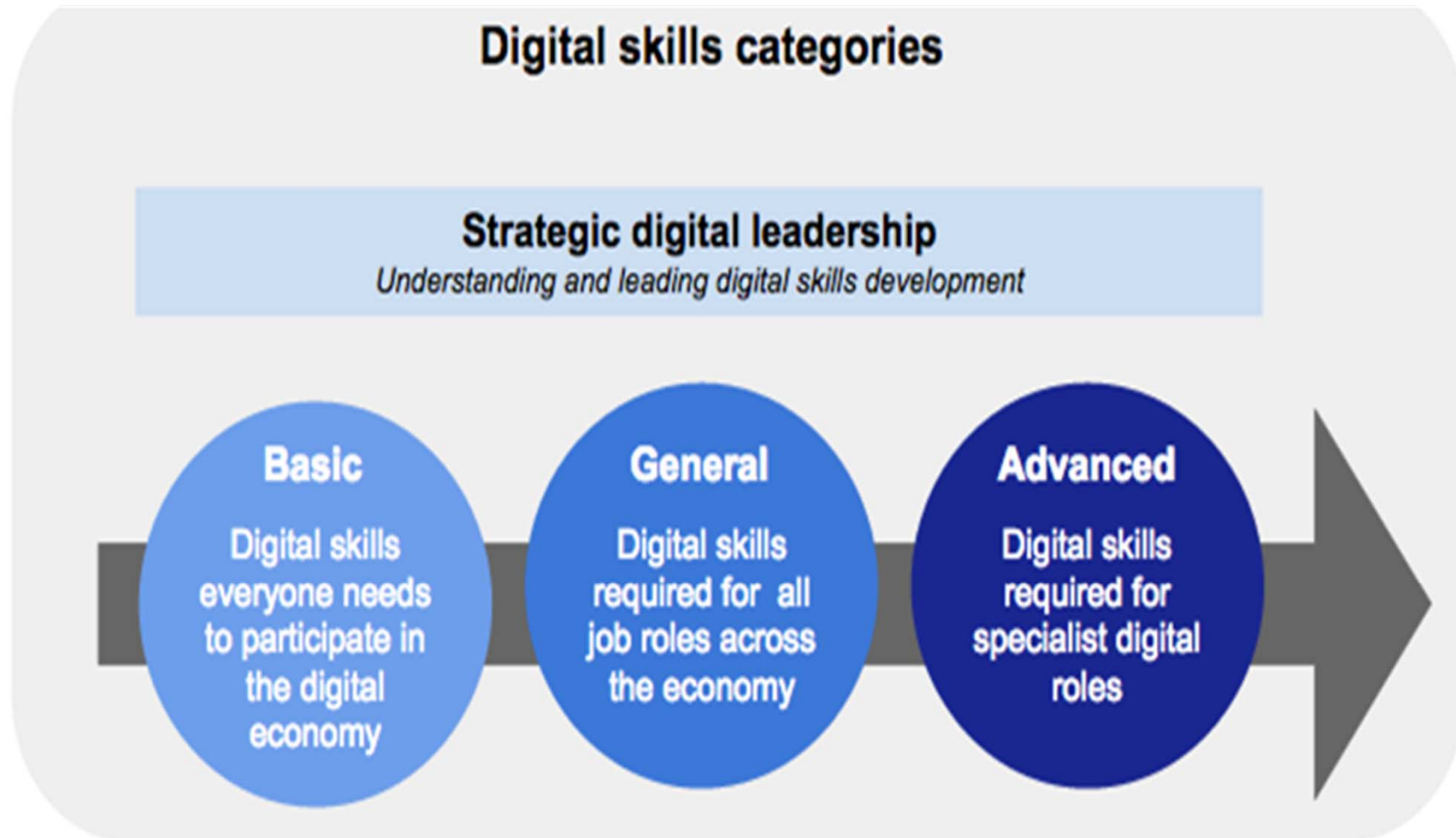
Importance of Digital Skills

Opportunities and threats

- Digital skills key to digitising industry and taking new opportunities
- Also equipping workforce to adapt to changing skills requirements as technology advances and automation replaces some jobs

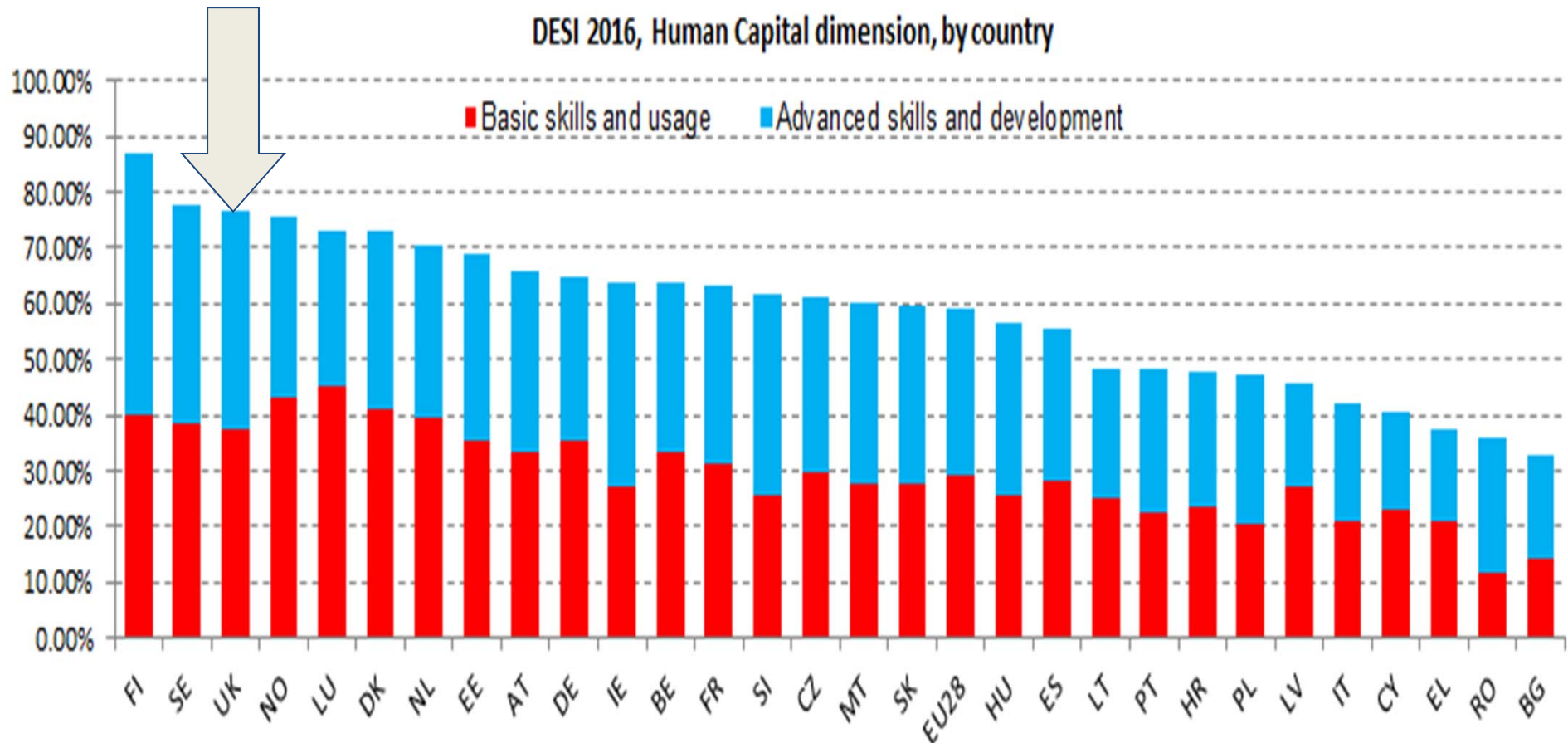


What are digital skills?





EU Comparison



Source: European Commission, Digital Scoreboard



Scale of the digital skills challenge



- 23% of UK adults lack basic digital skills (12.6 million)
- Within 10 years predicted that 90% of jobs will require an element of digital skills
- In 2015, 72% of large companies and 49% of SMEs reported tech skills gaps
- 1 million new people will be needed for UK digital roles by 2023

Severe shortages - cyber security and data analysts

Only 18% of IT and Telecoms professionals were women



Digital skills - national interventions

Action across skills pipeline

1. Digital inclusion
2. Digital Entitlement
3. Schools
4. Further Education
5. Higher Education
6. Digital Apprenticeships and Digital Degree Apprenticeships

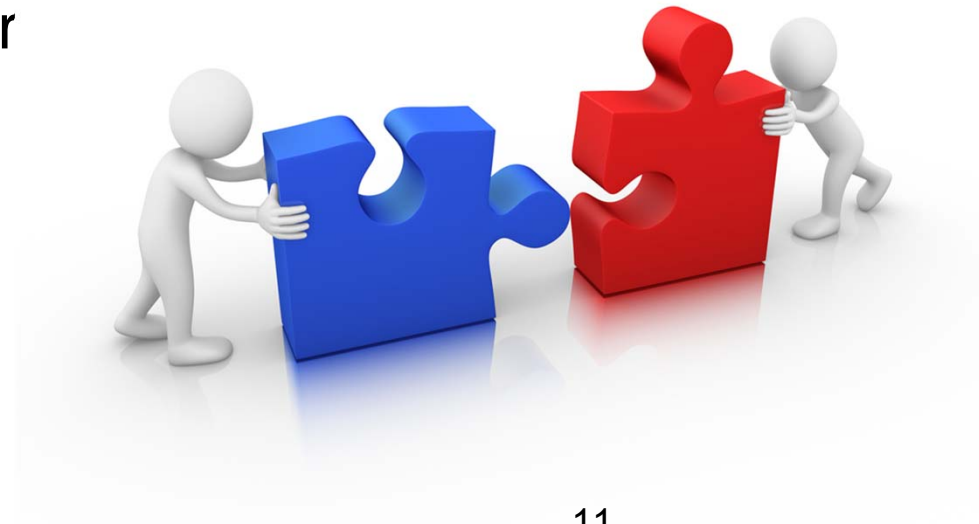




Whose responsibility is it?

DCMS research – ***Digital Skills for UK Economy*** set out that meeting digital skills challenge is a shared responsibility

- Government
- Employers
- Education sector
- Local Networks





Digital Skills Partnership

- Over 4m digital skills training opportunities
- Working together - a more collaborative, coordinated and targeted approach to digital skills

Life Long Learning

- Strategies recognise the impact of rapid pace of technological change means digital skills need to constantly develop to keep pace
- Budget 2017 announced spending of up to £40 million to test different approaches to help people to retrain and upskill throughout their working lives.