

Briefing

Socio-Economic effects of digital trade and artificial intelligence on EU industries including their value chains and EU imports and exports with major trade partners

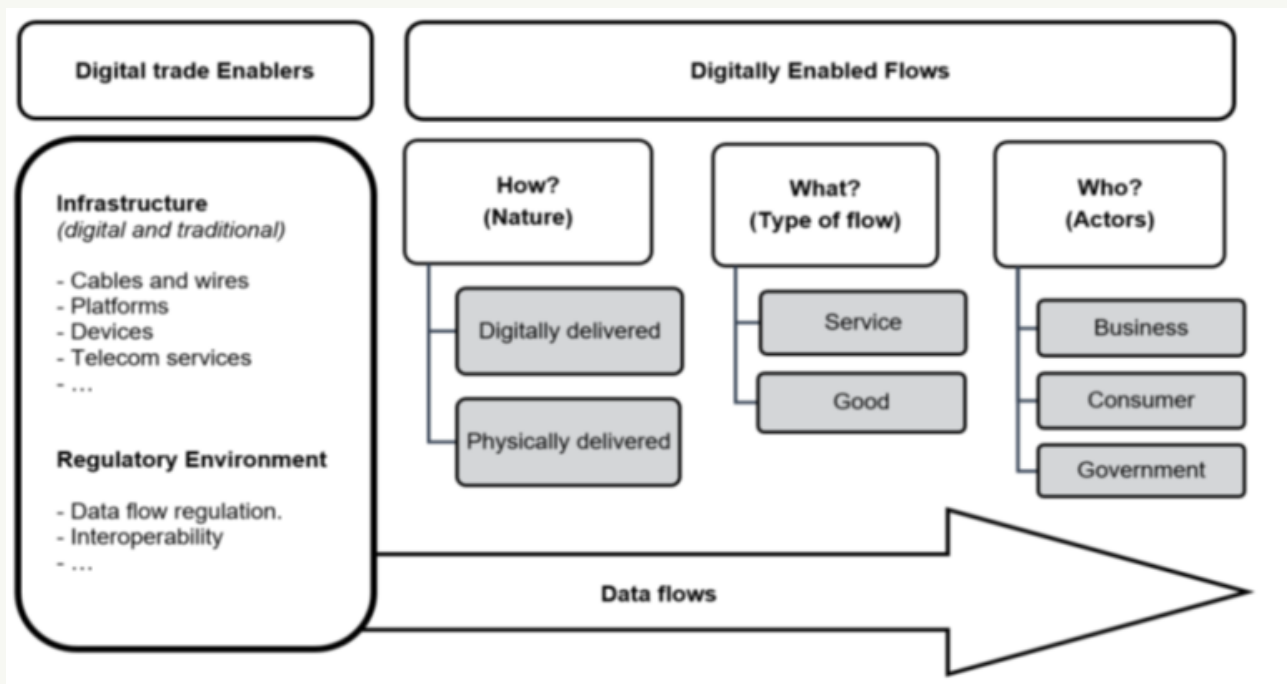
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Outline

- What is digital trade?
- The drivers of digital trade are changing
- Impact on digital trade
- Socio-economic effects
- Policy implications

Digital trade: what is it?

- DT is not new, but it is taking new forms
- DT comprises digitally enabled international transaction in goods and services
- The OECD typology has become standard reference:

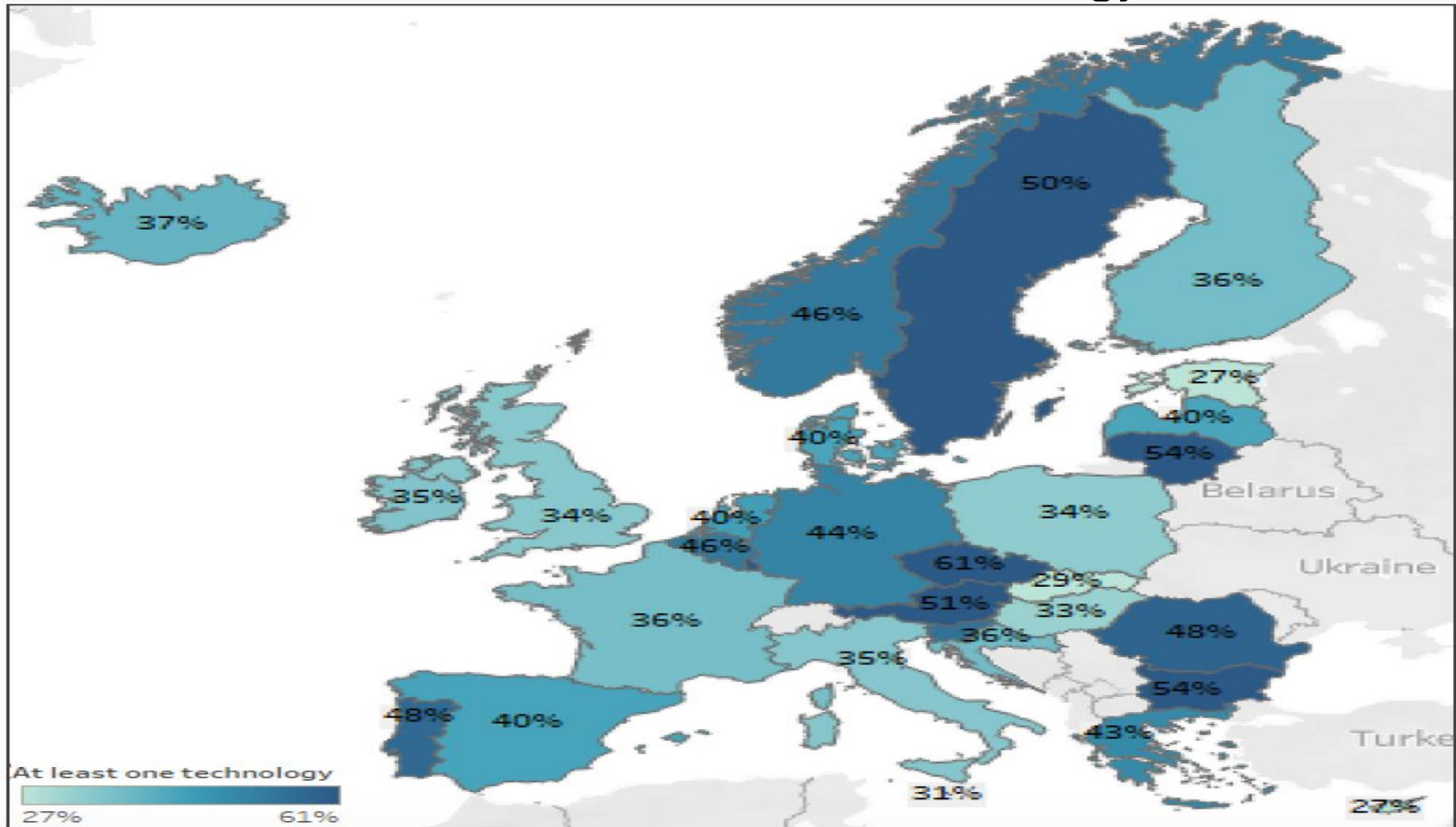


Enablers are changing rapidly

- Exponential rise in digital technology
 - Computing power
 - Collecting and storing data
 - Internet bandwidth
- Use of AI by EU enterprises according to EU Enterprise Survey (2020):
 - 42% already use at least one AI technology
 - 25% already use at least two AI technologies

Adoption across EU countries

% of firms that use at least one AI technology



Data flows play a key role

- Data analytics and data flows can increase the benefits from trade thanks to personalisation of services and products
- But data pose two types of problems
 - Privacy risks => privacy rules
 - Concentration
 - Data concentration => sharing rules
 - Firm concentration => competition policy rules

Digital trade: how big is it?

- Unfortunately, there is no reliable estimate of the importance of DT by national or international institutions
- Hence, we don't really know what is the share of DT in global trade nor how fast it is growing
- However we know that
 - DT plays a crucial role in GVC trade, which accounts for a large share of trade in **manufacturing**
 - But DT associated with GVC trade was and is still is mainly physically delivered
 - Digital delivery of trade is probably more important, but less visible in **services**, where the main changes will occur
 - The Covid-19 situation as an accelerator

Socio-economic effects on the manufacturing sector

- The phase of digital transformation that started 20-30 years ago led to a rapid increase in the fragmentation of manufacturing production and a huge increase in GVC trade, especially between advanced and developing countries
- The new phase of DT, which involves also AI and 3DP will have a big impact on manufacturing production and employment, but probably less on trade
- 3DP may increase or decrease trade in goods

Socio-economic effects on the services sector

- Digital services trade is already a reality
- But it is likely to increase a lot more as digitally delivered transactions become even easier
- AI increases the tradability of services and ushers the possibility of 'telemigration'
- Advanced economies like the EU could witness big changes in services employment akin to what happened in manufacturing previously

Policy implications

- Implications for domestic policies:
 - Education, both formal and informal, including retraining
 - Countries with flexi-security policies are best equipped to deal with changes
 - These policies are expensive and require sufficient resources, including by taxing digital activities
- Implication for EU trade policy
 - Some countries outside the EU (like Brazil, China and India) maintain high barriers in digital services trade
 - The EU has an interest in lowering these barriers
 - WTO rules on DT will help but will need to be supplemented by bilateral and/or regional trade agreements