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Course 15. Enterprise Management in Digital Economy

Module 1: Business perspective to understand the digital economy and its influence

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Curriculum Development
of Master's Degree Program in
Industrial Engineering for Thailand Sustainable Smart Industry



Module 1: Business perspective to understand the digital economy and its influence

List of topics

- A. How digital economy innovations and its social context impacts different types of businesses?
- B. Digitalization in the context of needs, markets, channels, products and services and management and organizational set-up - identification of different way digital era changes the business
- C. How the pace of changes affects the business in the digital economy: New business imperatives
- D. Organizational structures and management functions of today: reshaping structures, combining resources and competences and building relations

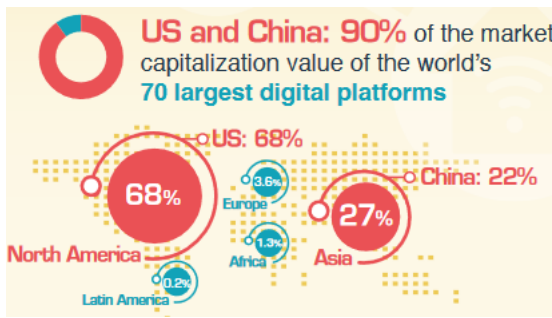
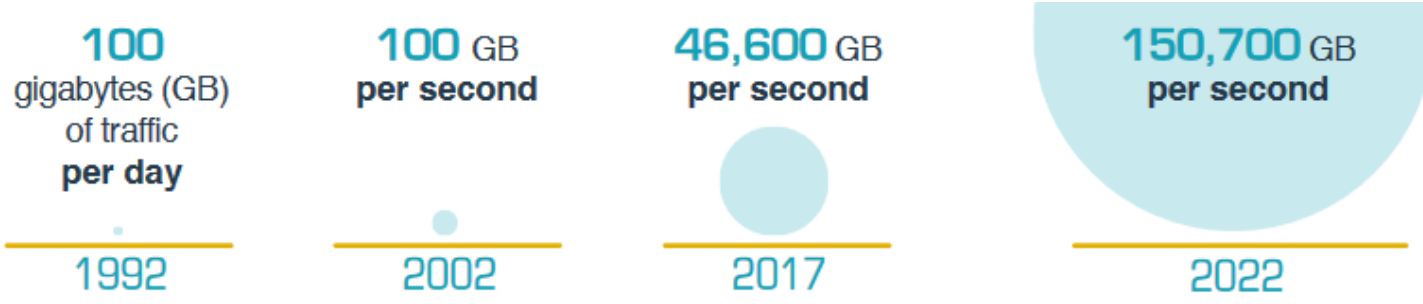


M1: Digital Economy

Trends in digital economy

1. Development of data-driven technologies
2. Increase of global Internet traffic
3. High concentration of digital economy in 2 countries (China and U.S.)
4. Huge digital division

- Blockchain
- Data analytics
- Artificial intelligence
- 3D printing
- Internet of Things
- Automation & Robotics
- Cloud computing



Half of the world remains offline

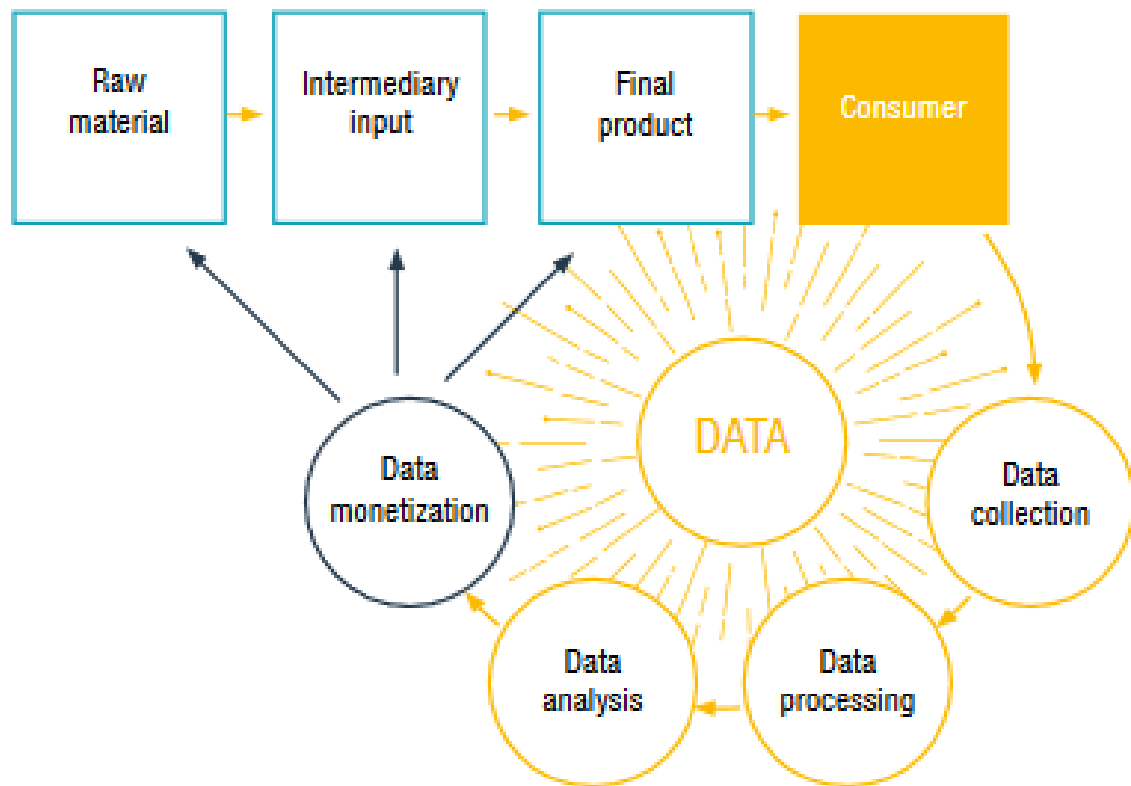
In **LDCs** only **1 in 5** people are online

Gender gap is the widest in the poorest economies



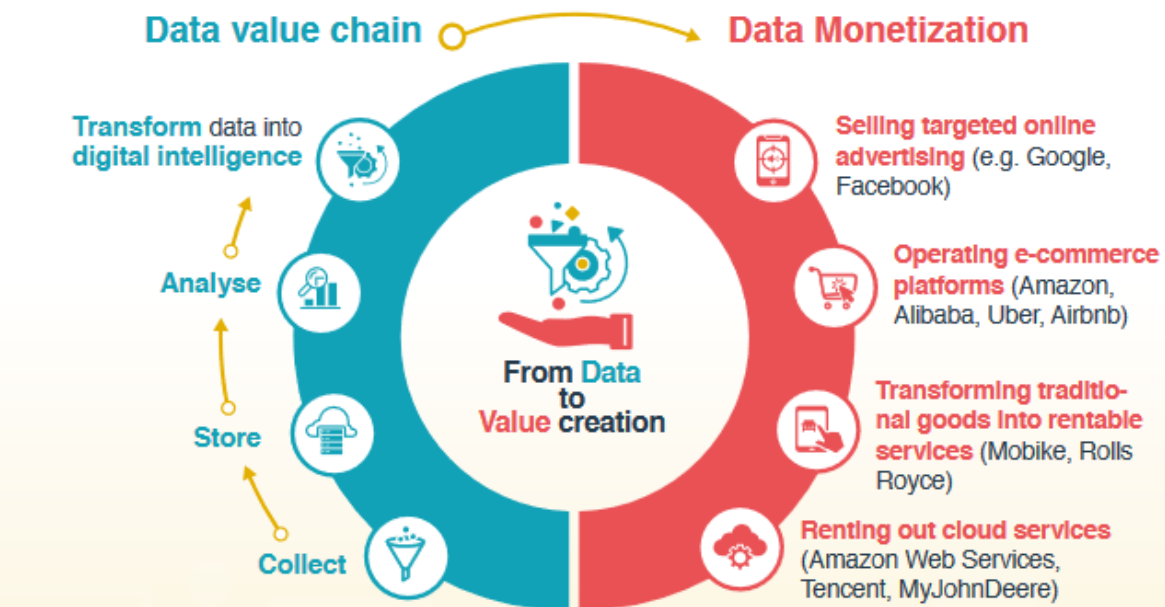


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(UNCTAD 2020)

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Four dimensions to consider



Different actors to consider

Assessing the scope for value creation needs to consider the **possible impacts** on different **actors**:





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Actors and impacts of Digital Economy


	Digital sector/economy	Digitalized economy
Individuals as users/consumers/workers	ICT/digital services jobs New forms of work	New jobs vs. New skills / Job losses Efficiency gains/ lower prices / better choices
MSMEs	Greater inclusion Increased competition New opportunities	Platform-enabled market access Lost opportunities due to automation New roles and opportunities
Multinational enterprises / digital platforms	Investment opportunities Enhanced productivity Greater control of value chain New opportunities in sharing economy	Emergence of platforms with data-driven business models Efficiency, productivity and quality gains Increased competitive advantage and market power
Governments	Attracting investments Tax revenues Lost customs revenues	Increased efficiency through e-services Unclear impact on tax revenue Data driven opportunities to meet SDG



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Technologies and emerging opportunities


-  Blockchain
-  Data analytics
-  Artificial intelligence
-  3D printing
-  Internet of Things
-  Automation & Robotics
-  Cloud computing




Co-manufacturing
Co-design



SMART manufacturing



Data-driven services
Connectivity



VR and AR services





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New features of business development

The most visible directions of developing business to customer relationship in digital economy could be summarized by its features as:

- Shared
- On-demand
- Collaborative

(SMITH, 2016)





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Challenges for business development



(SAP, 2015)

