

World Experience of Development Trends of Digital Economy

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Abstract. The Digital Economy also referred as the New Economy. It refers to an Economy in which digital computing technologies are used in Economic Activities. The term 'Digital Economy' was first mentioned in Japan by a Japanese professor and research economist in the midst of Japan's recession of the 1990s. In the west the term followed and was coined in [Don Tapscott's](#) 1995 book, *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*.^[2] This was among the first books to consider how the Internet would change the way we did business.^[3] In this new economy, digital networking and communication infrastructures provide a global platform over which people and organizations devise strategies, interact, communicate, collaborate and search for information. More recently,^[7] Digital Economy has been defined as the branch of economics studying zero marginal cost intangible goods over the Net.

Key words. Digital, economy, branch, experience, country.

Introduction

As shown by the experience of leading countries, digital technologies can be transformational for development generating economic and social benefits for people, businesses and governments. Digital technologies now provide opportunities for inclusive and sustainable economic growth, in all sectors of the economy. It is important for countries to undertake structured efforts to create and harness the benefits of digital economy in order to realize greater job creation, increase country competitiveness, allow for greater diversification and catalyze innovations in service delivery to improve the lives of their citizen. Russian Federation has made good progress on leveraging the digital revolution to

meet its development challenges. The country is already well positioned to take full advantage of opportunities offered by advanced digital technologies. By adapting and defining the digital economy in a context specific to the Russian Federation and by leveraging its already strong technology foundations, Russia can create a unique niche for itself and position itself as an emerging global leader in Digital Economy.

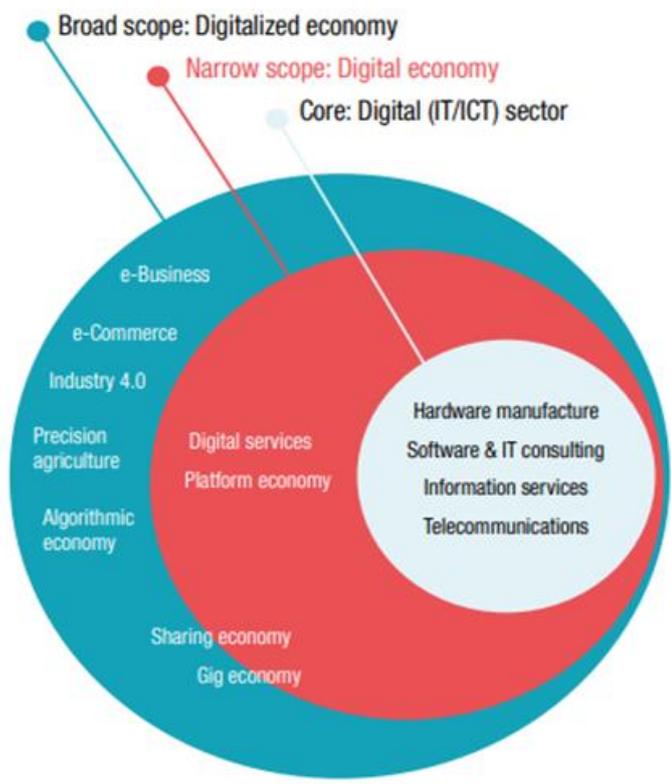
Main part

The concept of digital economy is evolving all the time because of its multifaceted and dynamic nature and due to the transformational power of digital technologies. For instance, the Australian government defines a digital economy as “the global network of economic and social activities that are enabled by platforms such as the Internet, mobile and sensor networks”¹. Digital economy is defined by Oxford Dictionary as “an economy which functions primarily by means of digital technology, especially electronic transactions made using the internet”². The digital economy is sometimes called the Internet Economy, the New Economy, or Web Economy³. It is often perceived as conducting business through markets based on the internet and the World Wide Web⁴. According to OECD, the digital economy enables and executes the trade of goods and services through electronic commerce on the internet⁵. European Union consider digital economy as “the single most important driver of innovation, competitiveness and growth in the world”⁶. The Economist Intelligence Unit and IBM joint study defines digital economy as one that “can provide a high quality of ICT infrastructure and harness the power of ICTs to benefit consumers, businesses and governments”^[7]. According to the UK Government, digital economy includes the manufacture of digital equipment, publishing, media production and computer programming⁸. The recent studies highlight diffusion of the digital economy within the whole economy and claim that “it can no longer be described as a separate part, or subset, of the mainstream economy”⁹. It goes beyond e-commerce and e-business and includes doing business, conducting communications and providing services across all sectors including transport, financial services, manufacturing, education, healthcare, agriculture, retail, media, entertainment and business using digital technologies. Digital economy plays a significant role in accelerating global economic development, enhancing productivity of existing industries, cultivating new markets and industries, and achieving inclusive, sustainable growth¹⁰. At the same time, the digital economy is becoming a powerful catalyst and a driver of inclusiveness, by linking communities to each other in a sort of “global village”, sharing information, ideas and products, and allowing countries to rise up the value chain [11].

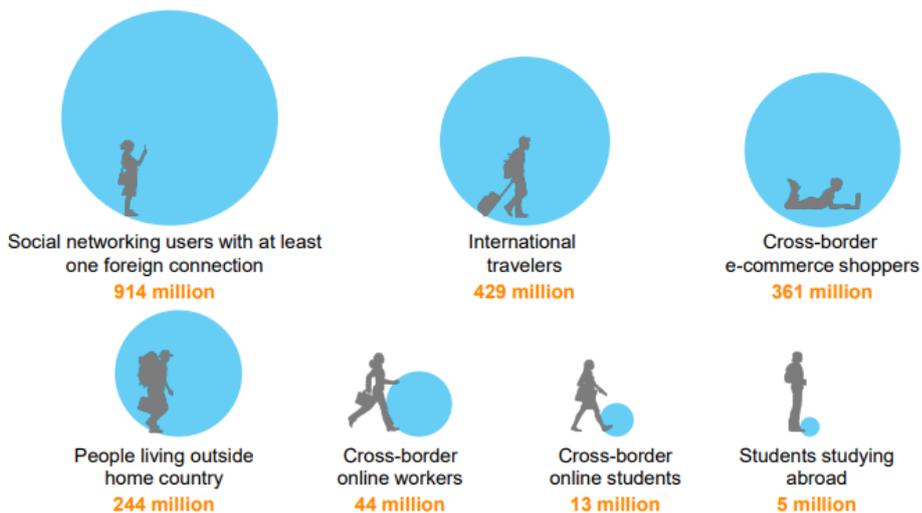
An unprecedented access to mobile digital technology

20 years ago, access to knowledge and technology was restricted to a lucky few in the developed countries. Internet has democratized knowledge once accessible only to presidents of state or scientists, while the smartphone phone revolution has empowered people around the world in ways not possible before. Today, thanks to this exponential growth of mobile technology, a teenager living in India or Ghana or any other country can potentially build the next Facebook and change the world. Once known as a laggard in technology, Africa leapfrogged to mobile digital technology in an incredible manner, becoming the global mobile money epicenter in just a few years. From innovative financial services to digital healthcare, e-learning products and services, revolutionary agricultural systems or disaster response, mobile technology has enabled emerging markets to produce pioneering ideas tackling our world's biggest challenges. The rise of entrepreneurial ecosystems doing business for good The growing young population in emerging countries is not only increasing consumption. This new generation of tech-empowered entrepreneurs is shaping new ways of working and interacting with society, striving to build a brighter future for their countries and the world. Sama Group, for example, helps cultivate Impact Sourcing, using digital technology to deliberately give work to people in need and moving them out of poverty. Startups like Totohealth in Africa, help transform family health by using SMS and voice technology to help reduce maternal mortality, child mortality and detect developmental abnormalities in early stages. These companies and startups are a living proof that production conditions in emerging markets can be improved by creating sustainable value chains and designing progressive labels of social and environmental standards. Moving beyond GDP statistics to build innovative development projects Earlier this year, the World Economic Forum published an insightful article by Diane Coyle, Professor of Economics, at the University of Manchester, urging the world to rethink current GDP calculations and to acknowledge that many African, Asian and Latin American economies are not as poor as we may think. Current GDP calculations «take no account of phenomena such as globalization, or the mobile phone revolution in the developing world.» Alternative weighs are in development but it will take time for them to become mainstream. Needless to say, an inaccurate interpretation of global development patterns may have profound implications on policy shaping and the outcomes of international development and humanitarian work. Understanding the world we live in by considering these trends in technology and global entrepreneurship is critical for anybody aspiring to do excellent work in international cooperation and striving to have a positive impact in the world.

Figure 1.1. A representation of the digital economy



Individuals engaging globally, increasingly enabled by digital



Conclusion

The Digital Economy uses a tenth of the world's electricity.^[25] The move to the cloud has also caused the rise in electricity use and carbon emissions by the digital economy. A server room at a data center can use, on average, enough electricity to power 180,000 homes.^[25] The Digital Economy can be used for mining Bitcoin which, according to Digiconomist, uses an

average of 70.69 TWh of electricity per year.^[26] The number of households that can be powered using the amount of power that bit coin mining uses is around 6.5 million in the US.^[26]

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