

Digital Economy And Its Economic Importance

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Abstract:

The rapid spread of digital technologies is transforming many economic and social activities. However, widening digital divides threaten to leave developing countries, and especially least developed countries, even further behind. A smart embrace of new technologies, enhanced partnerships and greater intellectual leadership are needed to redefine digital development strategies and the future contours of globalization (Digital Economy Report, 2019)

Keywords: Digital, Internet, Economy

Introduction:

The Internet is profoundly shaping modern society. It facilitates interconnectivity between individuals and information, and has important impacts on society, the economy and culture. At no other time in history has global communication and access to information been so pervasive. The Internet began as an important tool for improving communication but has transformed into a universal technology supporting all sectors across the economy. In fact, the Internet is now widely considered a fundamental infrastructure in almost every country around the world, in much the same way as electricity, water and transportation networks. To evoke the key economic role that the Internet has gained in recent years, the term Internet economy has become a widely used expression.

The World Economic Forum, 2015 defines digital economy as a recently emerging phenomenon, given the estimates of double-digit annual growth around the world, particularly the global South (WEF, 2015). The origin of the term ‘digital economy’ can be traced to Don Tapscott’s *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* (Tapscott, 1996), where the focus was specifically on internet as a reflection to its emergence as a mainstream technology in 1990s. Later definitions however, added technologies such as mobile, sensor networks (DBCDE, 2009), cloud computing and big data (DETF, 2016).

Tapscott (1996) argued that the digital economy encompasses two generations of economic activity. The first was informational. It comprised of basic tasks such as putting up static information on websites. And the second related to communication that reflected the more interactional activities enabled by the Internet. However, late in the 20th century, the US

Commerce Department's report, 'The Emerging Digital Economy', placed IT-enabled business activities into its definition (Margherio et al. 1999). This was made more explicit in 2000 in the edited volume, *Understanding the Digital Economy* (Brynjolfsson & Kahin 2000a) in which both editors and contributors (Brynjolfsson & Kahin 2000b, Kling & Lamb 2000) incorporated e-commerce into the scope of the digital economy; this being the period of the dot.com bubble.

Rumana Bukht & Richard Heeks defines the digital economy as "that part of economic output derived solely or primarily from digital technologies with a business model based on digital goods or services". The definition has a blurred boundary but it is also flexible enough to incorporate digital and digital business model innovation over time (Bukht & Heeks, 2017).

Main components of the digital economy:

The digital economy is becoming increasingly inseparable from the functioning of the economy as a whole with digital technologies supporting ever more transactions. There are three broad components of a digital economy:

- i. Core or Foundational aspect of the digital economy comprising of fundamental innovations, core technologies and infrastructures.
- ii. Digital and Information Technology (IT) sectors
- iii. A wider set of digitalizing sectors, such as e-commerce

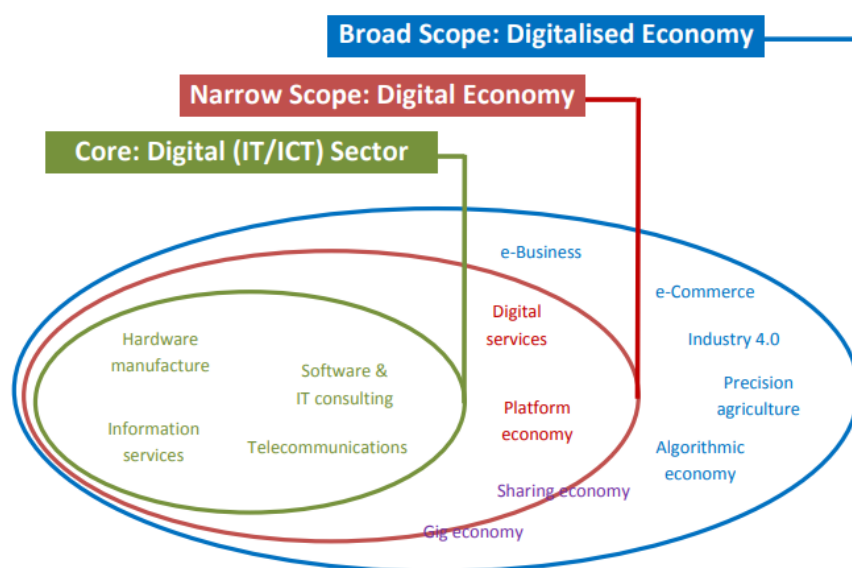


Figure 1: Scope of Digital Economy

Source: Rumana Bukht & Richard Heeks, 2017

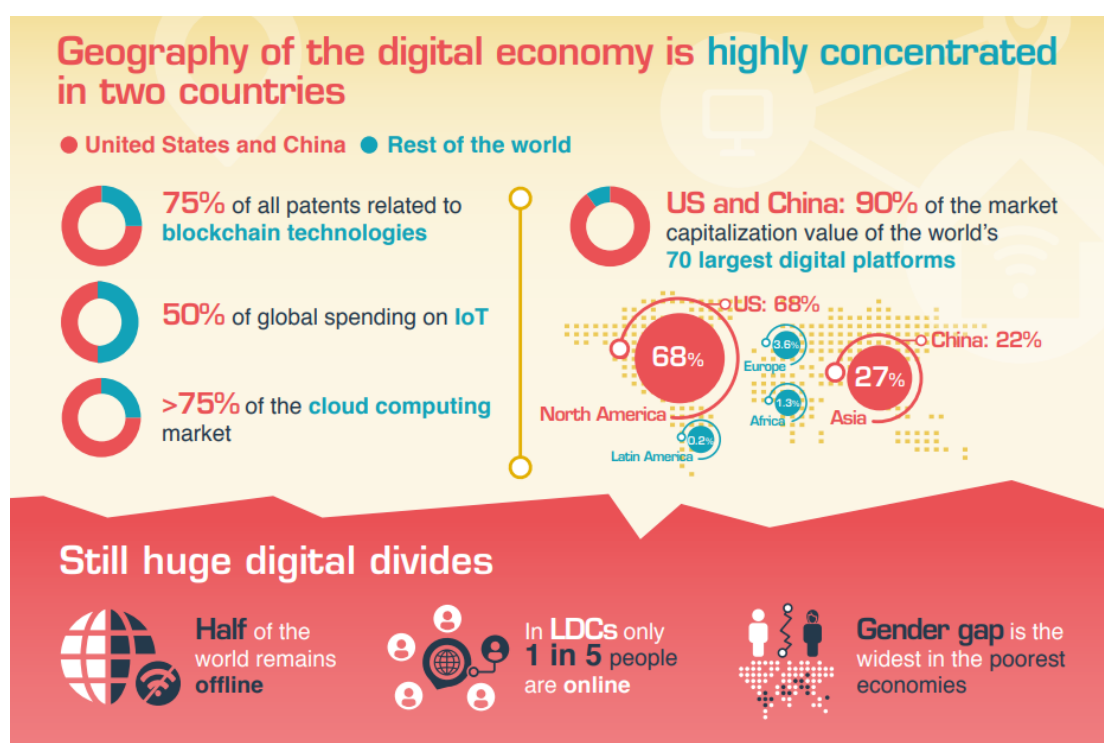
The digital economy continues to evolve at breakneck speed, driven by the ability to collect, use and analyze massive amounts of machine-readable information (digital data) about practically everything. These digital data arise from the digital footprints of personal, social

and business activities taking place on various digital platforms. Global Internet Protocol (IP) traffic, a proxy for data flows, grew from about 100 gigabytes (GB) per day in 1992 to more than 45,000 GB per second in 2017. And yet the world is only in the early days of the data-driven economy; by 2022 global IP traffic is projected to reach 150,700 GB per second, fueled by more and more people coming online for the first time and by the expansion of the Internet of Things (IoT) (Digital Economy Report, 2019).

The digital divide:

The development of digital economy is highly uneven geographically. There is a huge gap between the under-connected and the hyper-digitalized countries. According to the Digital Economy Report of 2019, only one in five people uses the internet in least developed countries (LDCs) compared to four out of five in developed countries. In other areas, such as capabilities for harnessing digital data and frontier technologies, the gap is considerably wider. For example, Africa and Latin America together account for less than 5 per cent of the world's colocation data centers. If left unaddressed, these divides will exacerbate existing income inequalities. It is therefore essential to consider how developing countries may be affected by this(r)evolution in terms of the creation and capture of value, and what should be done to improve the status quo (Digital Economy Report, 2019).

Figure 2: geography of the digital divide



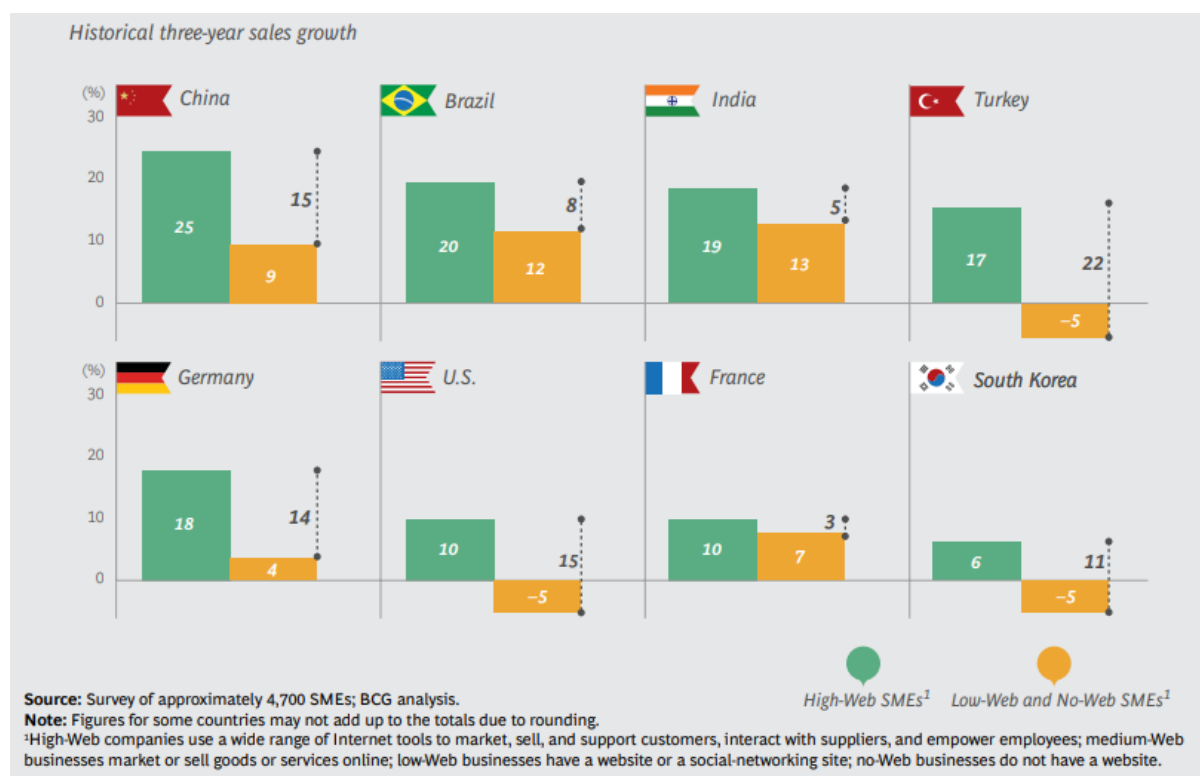
Source: Digital Economy Report, 2019

Effect of digital economy in a country:

In many developed and developing countries, companies with high-web are twice as likely to have a national and international customer base as opposed to selling only locally as their low or no-web counterparts (Dean, et al., 2012). Boston Consulting Group in their report of March 2012 identified five value levers that explained the internet advantage for small and medium enterprises (SMEs):

- i. Expansion of geography; as internet creates a borderless world for many SMEs, where they can access and compete with larger, multinational companies, which were previously out of reach.
- ii. Enhanced marketing; as online marketing yields valuable data about consumers and their preferences and thus, targeted advertising and offers could be made.
- iii. Improving customer interactions through social media where companies could engage in real time dialogue with customers, that helps build loyalty and boost sales.
- iv. Companies can grow quickly without requiring large infrastructural investments by accessing the cloud-based tools.
- v. Easier and quicker staff recruitment, and thereby tapping a global talent market.

Figure 3 below shows comparative result of some countries with high web and low or no web small and medium enterprises:



Other than those mentioned above, there are certain other economic and social benefits of going digital in the economy. Chakraborty in her study in 2020 states how investing in internet can have positive impact on social and economic sustainability (Chakraborty, 2020). There is a huge impact of digital and internet economy upon education, healthcare and government services.

Conclusion:

Sustainable economic growth is a critical concern worldwide. The development of a digital economy contributes to sustainable economic growth. Because of the nature of its products and services, one that can create significant benefits for society as well. The key to secure internet's economic and social benefits is- cooperation among the industry, regulators, and government policymakers. Government has a central role to play (Chakraborty, 2020).

Although improving, the traditional dimension of the digital divide in terms of digital connectivity and readiness to benefit from the digital economy is still of concern in many developing countries, especially the LDCs. The current trends of new technologies being concentrated in a few countries and controlled by relatively few companies have implications for the ability of both developing and developed countries to participate in the technological learning processes needed to catch up and thrive in the digital economy (Digital Economy Report, 2019).

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