



DIGITAL TECHNOLOGY GROWTH AND DEVELOPMENT IN CURRENT ERA

Ms. M.PunithaNaayaki,* Ms.S.Saranya* Dr.D.ShanthiRevathi**

* BBA IB (1st year)Nehru Arts and Science College, Coimbatore.

**Assistant Professor, School of Management, Nehru Arts and Science College, Coimbatore.

Abstract

Digital Economy refers to an economy that is based on digital technologies. The growth, integration and sophistication of information technology and communications is changing our society and economy. Digital technology in the form of the Personal Computer and the Internet has already transformed work, education, government, entertainment, generating new market opportunities and having a major economic impact across a broad range of sectors. No doubt, the digital economy has the risks and problems of Security and Privacy which are more in the case of India subject to internal and external risk. The roll out of e-Government services in India is currently lightly well, but policies of digital inclusion should play an advanced role in this development, in order to encourage the bridging of the 'digital divide'. Limited availability of Internet infrastructure, High cost of access and usage, Lack of awareness and low digital literacy, Narrow range of applications and services and unfavorable business environment.

Keywords: *Digital economy, growth, development. Technology.*

Introduction

Economic growth is an increase in the production of goods and services in an economy. Increases in capital goods, labor force, technology, and human capital can all contribute to economic growth. Economic growth is commonly measured in terms of the increase in aggregated market value of additional goods and services produced, using estimates such as GDP.

The factors of production are the resources used in creating and producing a good or service and are the building blocks of an economy. The factors of production are land, labor, capital, and entrepreneurship, which are seamlessly interwoven together to create economic growth. Improved economic growth raises the standard of living by lowering production costs and increasing wages.

Review of Literature

The study of the question of the relationship between economic growth and directions of development is characteristic of economists of various schools and individual researchers. The relationship between the dynamics and growth rates of the economy was studied by J. Schumpeter, and the problem of state policy of stimulating national development was considered by F. List. Institutional economists, developing the approach of J.Schumpeter, noted the important role of the technological factor in economic growth, described the relationship between basic technologies and the nature of the economic development of society.

In Uzbekistan, various aspects of economic growth are reflected in the scientific works of I.I.Iskandarova, A.M. Kadyrova, N.M. Makhmudova, A.F. Rasuleva, G.K. Saidova, S.V. Chepel, I.S. Tukhlieva, T.Sh. Shodieva, M.M. Irmatova, D.V. Trostyansky and others. A number of questions remain in the position of measures reflecting only certain stages in the cyclical development of advanced states, but they did not concern transition economies, while others proceed from the national and social characteristics of individual CIS countries and do not provide answers to the most important problems of the quality of economic growth of transformation systems. Important aspects of this problem and, in particular, the content of the quality of economic growth, The ratio of the quality of growth and economic development, the determination of priorities of state policy regarding the problem of optimal growth, etc., remain insufficiently studied.

Digital Economy

The digital economy refers to economic activity that uses electronic communication and digital technologies to provide goods and services. The main building blocks of the digital economy are



- The internet. This enables firms to offer goods for sale and enables consumers to browse for goods that they need.
- E-mail. Electronic communication enables very cheap, instantaneous communication across the world. It can be used to send information and requests very quickly.
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- Digital payments – credit cards, Apple Pay, Google pay, bitcoin, bank transfer. A digital economy is moving us towards a cashless society.
- Automation. Increasingly the digital economy relies on AI, mass use of electronic data and automated technology
- Social media. To a lesser extent, social media is an aspect of the digital economy. With individuals using it share recommendations about business.

Digital economy Vs Traditional economy

The traditional economy is based on physical shops, goods and cash payments. Over time, the traditional economy has adopted aspects of the digital economy, e.g. traditional firms taking debit cards, then selling online. As the digital economy evolved, some firms missed out on having a physical shop altogether, and selling straight from an e-commerce site, delivered to consumers homes. Some digital services now have no physical goods. For example, Netflix and Spotify do not need to use any physical goods but has everything streamed through the internet.

Traditional Economy	Digital Economy
Factories	Data centers/cloud computing
High Street shops	Internet website
News paper ads/word of mouth	Social media reviews
Transportation	E-sales ,digital downloads
Banks and cash points	E-Banking
Schools ,textbooks	E-learning, E-books
9-5commute	Working from home
Physical asserts	Google ranking/brand image
Construction	Website development
Real-estate	Domain ownership
Cash - cheque payment	E-payment, cashless society

Examples of the Digital Economy:

- **Airbnb** – This enables tourists to book online. It has also made it possible for individual households to let out their house/room to tourists. Before the digital economy it was not practical.
- **Amazon** market place/Ebay.
- **Netflix** – This enables consumers to purchase tv-series and films over the internet, without need for any physical good.
- **E-commerce site** – E.g. Economics help, selling e-books for economics revision.

Advantages of the Digital Economy



Greater information. The internet has enabled consumers to have greater information and choice. For example, it makes it easier to compare prices between firms. It also brings information to a person's fingertips. This is particularly important for tourists going on holiday. Before the digital economy, it might not be possible to find the prices of hotels and bus timetables.

Saves time. Before if you needed office supplies, you would have to make a journey into town and purchase. Now, you can make an order over the internet and it will arrive the next day. This saves business labour costs.

Reduced costs. Firms can save on renting buildings by running most of business through the internet. A digital economy enables firms to cut out an aspect of the retail chain and send personalized goods direct from factory or warehouse to people's goods, rather than through shops. This enables lower costs and lower prices.

Personalization. A digital economy allows greater personalisation than would be possible under traditional economy. For example, a traditional shop would only have room to stock a certain number of colours and sizes, but with the digital economy, a consumer can choose any preference and then the product can be custom-built e.g. 3D printer. For example, custom clothes that have particular sizes and colours to match individual preferences.

Lower barriers to entry. In some markets, aspects of the digital economy make it easier for new firms to enter. If an entrepreneur has an innovative idea that catches on, they can create a new product which challenges traditional firms. The digital economy has brought many new services which were inconceivable before, such as online home deliveries for grocery to dating apps.

Creates significant data which can give new insights. The mass production of data can help inform governments and charities about what is happening in the economy. For example, in tracking of COVID-19 spread, the use of an app on mobile phones may indicate where local hotspots emerge.

Benefits for developing world. The digital economy is opening up opportunities for the developing world. For example, computer programmers in India can easily underbid western counterparts, leading to new job opportunities and higher income in India.

Enables people to work from home. The digital economy has been a huge asset during the COVID lockdown. Without digital technologies, the decline in economic activity would have been even greater. The digital economy gives greater scope for people working from home and having greater flexibility in their hours (which may suit parents with children). Working from home can reduce contact and spread of a virus. It can also help reduce traffic congestion and pollution.

Problems of Digital Economy

1.Monopoly power. Despite the potential for new start-ups, many aspects of the digital economy have become dominated by firms with monopoly power. For example, Amazon has cornered the market for online sales, meaning many firms have to go through the Amazon market place to reach consumers who go to Amazon out of habit. Similarly, Google and Facebook have all developed very strong brand loyalty and market share in their respective markets. This has made a few tech giants very profitable. With monopoly power, Google are able to charge high prices for online advertising and Amazon have the market power to undercut traditional booksellers.

2.Less community. A traditional bookshop can act as a focal point for local community. It may hold events, book signings and individuals may enjoy the experience of browsing physical books. With the digital alternative undercutting traditional firms, old fashioned bookshops are forced out of business. Although books may be cheaper, we have lost physical interaction between sellers and buyers which was an important aspect of the buying experience.

3.Addictive nature of technology. Whilst, in theory, the internet can save time, e.g. finding bus times is much easier with internet than paper copies, this time saved may be outweighed by the time we waste checking Facebook, twitter, internet searches. Also, the sheer volume of information can cause us to drown in information



and lose sight of what we actually need. More choices do not necessarily lead to better outcomes. When faced with a bewildering range of outcomes, we can take time to decide and it becomes easier to procrastinate.

4.Privacy issues. Harvesting and using data has become big business. Face book collects a large range of data on its users and this has been bought by political interests who can give very targeted political ads to its users.

5.Bypassing of labour laws. The digital economy has created a trend towards using self-employed freelancers, who are not protected by the same labour laws. For example, delivery drivers for Deliveroo and Uber drivers have often been employed on zero-hour contracts. This enables firms to cut labour costs, be more flexible, but it can leave workers without sick pay or employment protections.

6.Environmental costs. It is a mistake to think that the digital economy implies a ‘green solution.’ Data centres use electricity and cause CO2 emissions. In the US, data centres account for around two per cent of U.S. electricity use in 2014. (link) A bigger potential cost is how the digital economy encourages a ‘throw-away’ culture. E.g. the planned obsolescence of mobile phones and computers, encouraging consumers to buy new models, leading to greater use of raw materials.

Four Key Areas of Impact of Digital on Economy:

Economic Growth

In the digital age, all producers and consumers use digital inputs — from digital technologies and infrastructure to digital services and data — in all activities, to create value. As a result, digital economies have become key contributors to Gross Domestic Product (GDP), significantly impacting economic growth. China’s digital economy, for example, has been growing rapidly in recent years and has become a vital driver of the country’s GDP. Standing at US\$5.4 trillion in size, China’s digital economy generated 40% of its GDP in 2020 and helped the country overcome the challenges posed by the COVID-19 pandemic, with an overall growth rate of 9.6%.As such, numerous countries have already recognized the significance of the digital economy and several have made it a cornerstone of their growth and recovery strategies. For example, China has made the digital economy a core component of its national strategy for 2021–25. Similarly, Australia’s AU\$800 million Digital Business Plan is a key part of its economic recovery strategy, aiming to become a leading digital economy by 2030. This plan is projected to increase Australia’s annual GDP by AU\$6.4 billion by 2024.²

Employment Creation:

Creating jobs and involving the labor force in nation-building has long been the focus of governments across the world. In the digitally dominated post-COVID-19 economy, the fundamental shift in the ways work is done will create new challenges for the development of skills. However, this shift will also present opportunities for job creation. The rise of the sharing economy is an excellent example in this respect. Almost nonexistent a decade ago, this sharing economy today provides millions with viable livelihoods. For example, China’s sharing economy grew 1.3% year-on-year in 2020 and presently has an estimated labor pool of 6.31 million.³ Elsewhere, it’s estimated that American technology company, Uber, employs 3–4 million drivers worldwide.⁴ The rise of the sharing economy has far-reaching effects in tackling global unemployment, which has risen to 6.5% in 2020, up from 5.4% in 2019, caused by the COVID-19 pandemic.

Reaching the Underserved

Rapid economic growth and urbanization have created economic divides within national boundaries, giving rise to unequal wealth distribution and underserved, remote communities. For decades, global organizations and governments have tried to address this divide through diverse means. While technology has always been a vital tool, the rise of the digital economy has revitalized efforts to bridge the gap. Indeed, in the digital economy, people can more cheaply access products and services from any location.



Today, 93% of the world's population has access to a mobile broadband network, with 4G networks covering 85% of people. At the same time, access to data is becoming more and more affordable. In 2019, the cost of mobile broadband services in 95 countries was less than 2% of monthly gross national income per capita, the standard set by the United Nations (UN). Another 48 other countries are close to achieving this standard, with local mobile broadband packages presently costing 2–5% of monthly gross national income per capita.⁶

SME Development

Small and Medium-Sized Enterprises (SMEs) are significant parts of the global economy, accounting for 90% of all businesses and generating more than 50% of all jobs worldwide.⁷ Most of these businesses operate in select sectors, including retail and wholesale, travel and tourism, and manufacturing. It's precisely these sectors that have been heavily disrupted by the advent of the digital economy. For example, digital commerce is shaking up retail, the sharing economy is disrupting travel and tourism, and the Fourth Industrial Revolution (Industry 4.0) is impacting the manufacturing industry.

Conclusion

The concept “global economy” refers to all economic transactions done on the internet. Though with the coming of digital economy competition and productivity has increased in the market. Moreover, it drives innovation and job opportunities, as well as economic growth, are achieved. Thus, you need to understand the digital economy as a whole and the impact of the digital economy as a whole for a better and developed future. “At least 40% of all businesses will die in the next 10 years... if they don't figure out how to change their entire company to accommodate new technologies.” — John Chambers, Cisco

“The Trust Economy methodology demystifies trust building in the context of today's intricately connected, digitally powered, always-on world.”-Philipp Kristian Diekhöner.

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