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Digital Transformation and Economic Growth: A Study of Emerging Economies

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ABSTRACT

The concept of digital transformation has proven to be one of the strongest sources of economic growth and social evolution in the emerging economies in the period 2015-2025. It is the process of combining digital technologies with the internet, artificial intelligence (AI), big data, cloud computing and digital payment systems into economic and social processes. This paper examines how the digital transformation has affected the growth of the emerging economies and particularly India, China, Brazil and South Africa based on recent data and trends in statistics. The research relies on secondary sources that are based on government reports, international organizations and research databases. The major indicators that will be utilized in this analysis are internet penetration, digital payment transactions, employment trends, e-commerce growth, social media usage and the role played by the digital economy in the GDP. The tables, bar and pie charts, percentages method and other suitable statistical tools and techniques were use to analyze the data. The results indicate that there is a positive relationship between economic development and digital transformation.

The use of the internet in emerging economies rose tremendously during the study period. To take an example, the number of internet users in India increased to approximately 900 million by 2025, upping by 300 million in 2015, but China reached 1 billion as well. This connectivity has helped boost the fast development of digital services, online education and e-commerce platforms. Indian market in e-commerce has grown to about 150 billion USD by 2025 as compared to around 20 billion USD in 2015, which is a changing consumer behavior and rising digitalization. Electronic payments have also depicted impressive growth and more so following the introduction of systems such as the UPI in India. The amount of digital transactions grew between 1716 crore in 2019 and more than 13,500 crore in 2025, which means that the financial inclusion is better and fewer transactions rely on cash. The digital economy has become significant in the national economies with a contribution of more than 11 percent in India and more than 40 percent in China.

Nonetheless, the effects of digital transformation on the employment are ambivalent. Although the automation and artificial intelligence have decreased the number of people required to work in the routine and low-skill jobs, new employment opportunities have been developed in the fields of information technology, data analytics, and digital marketing. The study indicates that approximately 30-40 percent of the jobs in the emerging economies are in the danger of being automated and this highlights the importance of developing skills and education. Socially, digital transformation has enhanced communication, education and medical services. The number of social media users in India alone rose to 500 million in 2025 as compared to 140 million in 2015 and the average time spent on social media more than doubled to above 3 hours. Meanwhile, there are still issues of the digital divide, cyber security risks, misinformation and social inequality. As an example, in 2025, the access rate to the internet in urban areas was approximately 85 per cent and in the rural areas was approximately 55 per cent and there is a distinct disparity.

The paper concludes that digital transformation is an important factor in fostering economic growth, innovation, and social development among emerging economies. Nevertheless, it does not bring equal benefits and such issues as inequality, unemployment and digital exclusion should be tackled. Thus, robust governmental policies, investment on digital infrastructure and inclusive policies are necessary to secure sustainable and balanced development in the digital age.

Keywords: Digital transformation, Economic growth, Innovation and Financial inclusion
JEL Codes: O33, O40, O00, G21

INTRODUCTION

Digital transformation is one of the most significant processes that bring change to the world in the 21st century. It entails the application of digital technology in enhancing processes, services and systems in various sectors. Digital transformation is affecting all spheres of life, including banking and education, healthcare and governance. The emergence of digital technologies has formed a new form of economy that is call the digital economy. This is a data-driven economy, an interconnected and innovative economy. Recent research states that digital technologies, such as artificial intelligence and big data, are turning into new factors of production along with land, labor, and capital. Digital transformation is not an economic phenomenon; it is a social phenomenon as well. It transforms the manner in which individuals interact, gather information and engage in the society. Hence, this should be examined in the context of its economic and social implications. Digital transformation refers to doing things in a novel, digital manner and it has a very close relationship with the digital revolution. The latter introduces massive opportunities and challenges in the sphere of the economy, innovation, education, health, governance, and lifestyles (Muhleisen, 2018).

Digital transformation is now among the most significant factors of growth and development in the modern global economy. The digital revolution starts at large scale in the economy in the end of the 20th century when the Internet started to be utilizing in the economy. The beneficial impacts of the digital economy are apparent in an infinite number of fronts. To begin with, digitalization contributes to the economic growth, although the influence magnitude varies depending on the research methodology used in the study and geographical structure (Molinari and Torres, 2018; Solomon and van Klyton, 2020).It entails integration of digital technologies in both economic and social systems to enhance efficiency, productivity and innovation. Digital transformation has been taking up by emerging economies at an accelerated rate in recent years, as they are developing countries with the increasing markets. The countries like India, China, Brazil, and South Africa have witnessed tremendous development of digital infrastructure, internet penetration and digital services. As an example, the number of internet users in India has grown by approximately 300 million to over 800 million by 2015 and 2025 respectively. On the same note, China boasts of more than 1 billion internet users, thus, it is the biggest digital market globally. These developments have altered the manner in which companies conduct business and the way individuals relate with the economy.

Digital transformation has a strong connection with economic growth since it enhances productivity, cost reduction, and it opens up new opportunities. Moreover, the organizational customers and suppliers conduct the digitalization changes the way of business. It has a thoughtful influence on the enhancement of the efficiency of the business activity (Riter and Pedersen, 2020). There are also issues like inequality, automation-induced unemployment, and security issues associated with it. This paper will examine the good and bad sides of the digital transformation in the developing economies.

Objectives of the Study

The main objectives of this research paper are:

- To understand the concept of digital transformation
- To examine the role of digital transformation in economic growth
- To analyze the impact of digital transformation on the economy

RESEARCH METHODOLOGY

The study is based on secondary information, which has been obtained through government reports, international organizations, research papers, journals and statistical databases. The analysis is descriptive and analytic in nature in order to learn trends, relationships and effects. The analysis of data between 2015 and 2025 is performed to determine the trends in the digital transformation and economic development. The tables, bar and pie charts, percentages method and other suitable statistical tools and techniques were use to analyze the data.

Concept of Digital Transformation

Digital transformation is the use of digital technologies to enhance processes, services, and systems. It encompasses artificial intelligence, cloud computing, block chain, and the Internet of Things technologies. Through these technologies, businesses are able to work more efficiently and be innovative at all times. Another result of digital transformation is the emergence of the digital economy where data and technology are major growth contributors. Government policies, investment in the digital sector by the private sector and growing consumer demand have facilitated digital transformation in emerging economies.

Digital Transformation and Economic Growth

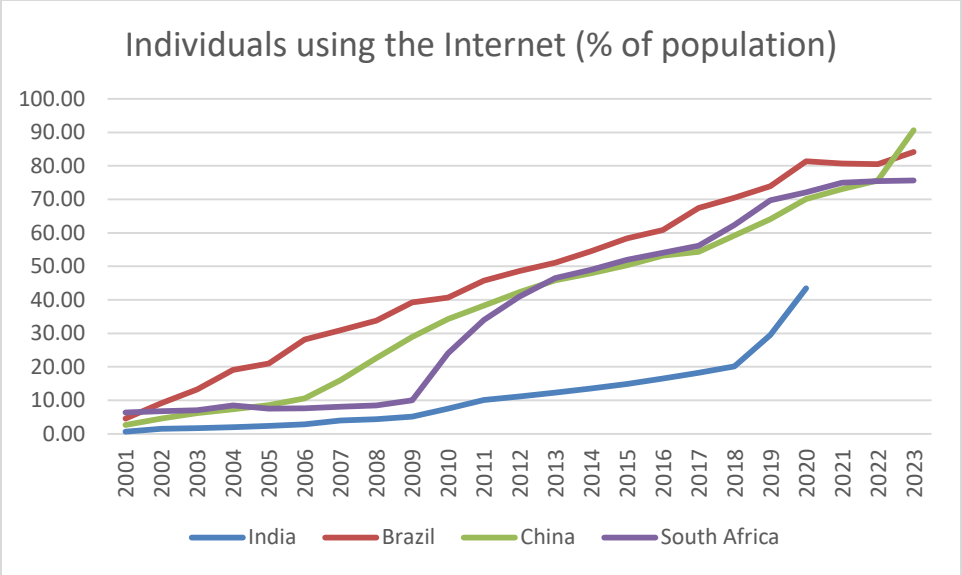
Digital transformation has been increasing at a high rate in emerging economies. The internet penetration has been on the rise and more people are accessing the digital services. Internet users in India grew up more than 800 million by 2025, as compared to 300 million in 2015. Internet penetration in Brazil was approximately 75 and South Africa was approximately 70.There is also the growth of digital payments. The number of digital transactions in India has soared with the launch of UPI in 2016. In 2025, nearly all volumes of transactions are done by digital payments. Likewise, digital payment systems in China such as Alipay and WeChat Pay control the market.The e-commerce has expanded considerably. The e-commerce market of India was growing to more than 100 billion dollars in 2023 and 2015, whereas China e-commerce market is rising to over 2 trillion dollars.

Table 1: Digital Transformation and Economic Growth in Emerging Countries

Country Name	India	Brazil	China	South Africa
2001	0.66	4.53	2.64	6.35
2002	1.54	9.15	4.60	6.71
2003	1.69	13.21	6.20	7.01
2004	1.98	19.07	7.30	8.43
2005	2.39	21.02	8.52	7.49
2006	2.81	28.18	10.52	7.61
2007	3.95	30.88	16.00	8.07
2008	4.38	33.83	22.60	8.43
2009	5.12	39.22	28.90	10.00
2010	7.50	40.65	34.30	24.00
2011	10.07	45.69	38.30	33.97
2012	11.10	48.56	42.30	41.00
2013	12.30	51.04	45.80	46.50
2014	13.50	54.55	47.90	49.00
2015	14.90	58.33	50.30	51.92
2016	16.50	60.87	53.20	54.00
2017	18.20	67.47	54.30	56.17
2018	20.08	70.43	59.20	62.40
2019	29.52	73.91	64.08	69.70
2020	43.41	81.34	70.05	72.11
2021	------	80.69	73.05	74.97
2022	55.90	80.53	75.61	75.46
2023	------	84.15	90.60	75.66

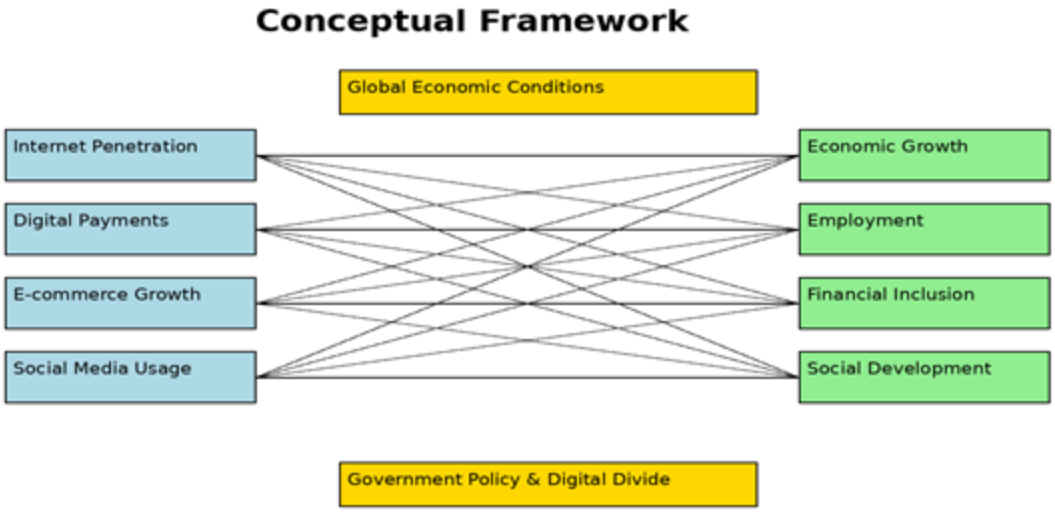
Source: World Bank Report

The influence of digital transformation on the growth of the economy is strong and positive. It enhances productivity since it allows businesses to automate their operations and cut on expenditure. Firms are able to achieve more output using less input resulting in increased efficiency. Research where digitization has been identifying to have a broadly positive correlation with economic growth employs various metrics of digitization (Deloitte, 2021). Nevertheless, most of these studies have concentrated on the role of single digital indicators, including measures of broadband penetration (Banerjee et al., 2020), mobile telephony (Toader et al., 2018), or internet usage (Myovella et al., 2020).



Source: World Bank Report

Figure 1: Digital Transformation and Economic Growth in Emerging Countries



Source: Author's analysis based on literature review and empirical data from various sources including World Bank and RBI

Figure 2: Conceptual Framework of Digital Transformation's Impact on Economic Outcomes

In the emerging economies, the digital economy forms an increasing portion of GDP. It is contributing over 11 percent of GDP in India and forecasted to hit 20 percent by 2030. In China, more than 40 percent of GDP is in the digital economy. Innovation is also encouraged by digital transformation. Technology firms and start up establish new markets and opportunities by developing new products and services. Digital transformation has demonstrated quantifiable effects to the economic growth and social development in countries. The real impact of the internet can be seeing with the help of different statistical indicators, including internet penetration, digital payments, GDP growth and employment trends.

Increasing Internet Usage and Economic Implications

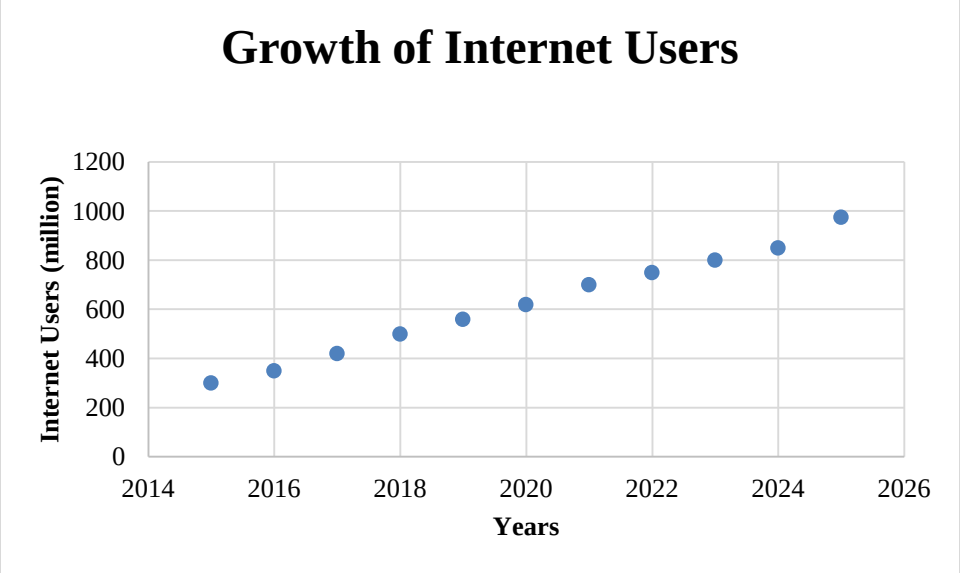
The use of internet has been on the rise in the past decade all over the world. In India, the internet users increased by approximately 250 million in 2014 to over 900 million in 2025. This growth has directly contributed to the development of digital services, e-commerce and online education. An empirical investigation reveals that internet penetration leads to a growth of 1-1.5 percent in GDP when it is increased by a percentage of 10 in developing nations. This is a clear indication that digital connectivity is a powerful force of economic development. The digital countries are the more productive and innovative they are likely to be.

Table 2: Growth of Internet Users

Year	Internet Users (million)
2015	300
2016	350
2017	420
2018	500
2019	560
2020	620
2021	700
2022	750
2023	800
2024	850
2025	975

Source: RBI Reports

The information provided in Table 2 demonstrates that there is a steady and substantial growth in the number of internet users between the year 2015 and 2025. As of 2015, there were approximately 300 million internet users, which kept growing up to 350 million in 2016 and 420 million in 2017. This early growth reflects the early development of digital connectivity, which was assist by the proliferation of smart phones and cheap internet services.



Source: RBI Reports

Figure 3: Growth of Internet Users

The internet has been growing at a fast pace between 2018 and 2020, with the number of internet users increasing by 500 million in 2018 to 620 million in 2020. It is the time when the development of digital infrastructure and the growth of interest in online services were powerful. The growth became even more significant after 2020, mainly due to the COVID-19 pandemic, which forced people to shift towards online platforms for education, work, communication, and entertainment. Consequently, internet users grew by a drastic figure of 800 million as compared to the previous 700 million in 2021 and 2023 respectively.

The trend is on the increase in the later years to 850 million and about 975 million in 2024 and 2025 respectively. This indicates that the internet penetration is heading towards saturation levels and a big percentage of the population is become digitally connected.

Digital Payments and Financial Inclusion

Digital transformation has enhanced financial inclusion through accessing banking services to people who were not initially included. Digital payment systems and mobile banking enable individuals in the rural regions to contribute to the economy.

Table 3: Trend in Total Digital Payment Transactions

Year	Total Digital Payment Transactions Volume (in crore)	Total Digital Payment Transactions Value (in Rs. lakh crore)
2019	1716	795
2020	2257	708
2021	3687	890
2022	5709	1037
2023	8234	1198
2024	11131	1431
2025	13520	1536

Source: RBI Reports

Table 3 indicates that there is a robust and steady increase in digital payment transactions in the volume and value between 2019 and 2025. In 2019, the total of digital transactions was 1,716 crore, and it's worth was 795 lakh crore. It went up to 2,257 crore in 2020, though the overall value dropped marginally to Rs.708 lakh crore. This drop in value could be explained by the COVID-19 pandemic, in which individuals had more transactions with low values rather than high ones. Since 2021, the volume and the value of the digital payments have been growing quickly. The volume of transactions increased dramatically, as it was 3,687 crore in 2021 and then 5,709 crore in 2022 and indicates a significant movement toward digital payment systems. This growth continued further, reaching 8,234 crore in 2023, 11,131 crore in 2024 and 13,520 crore in 2025. Simultaneously, the total value of transactions also grew steadily in 2021 (Rs.890 lakh crore) to 2025 (Rs.1536 lakh crore). The data shows clearly that online payment systems are no longer considered something exotic and are now used in everyday life. The high growth rate in the transaction volume indicates that individuals are now paying more through digital payments even on small and routine payments. The growth has been enabled by the development of mobile internet, government initiatives, and the popularity of such platforms as UPI.

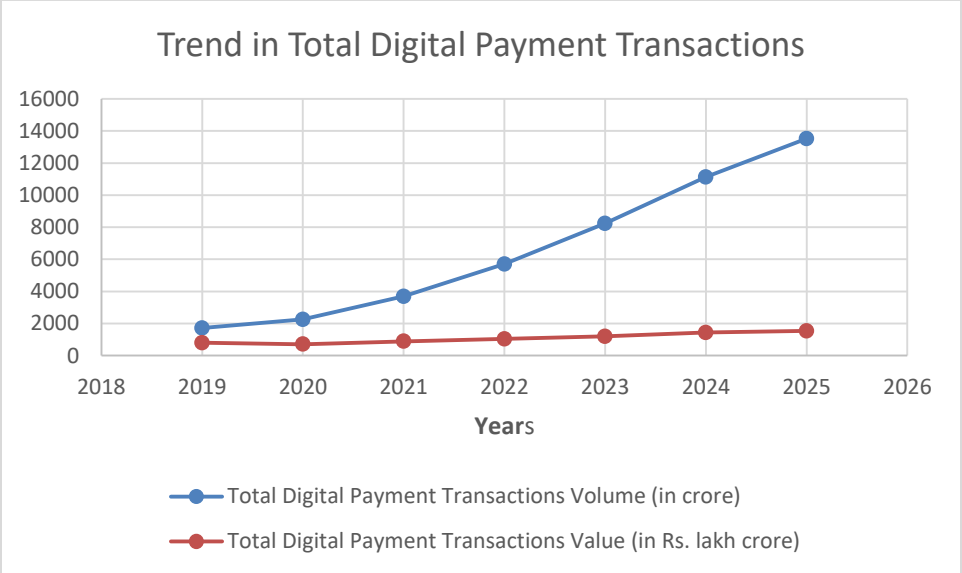


Figure 4: Trend in Total Digital Payment Transactions

Online payment systems have changed the way finances are done, particularly in emerging markets. The digital payment transactions have grown considerably in India due to the efforts such as UPI (Unified Payments Interface).

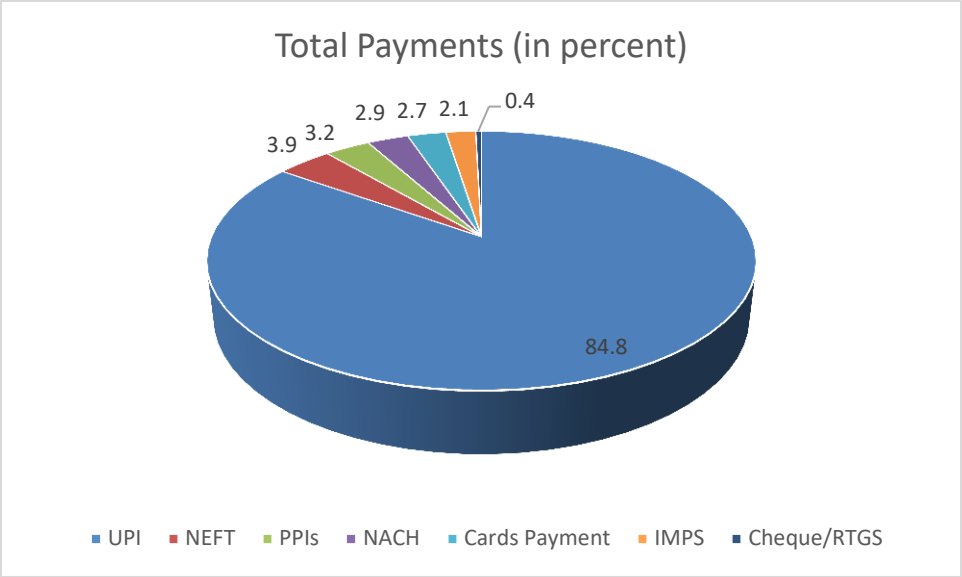
Table 4: Share of Payment Instruments in Total Payments

Payment Instruments	Total Payments (in percent)
UPI	84.8
NEFT	3.9
PPIs	3.2

NACH	2.9
Cards Payment	2.7
IMPS	2.1
Cheque/RTGS	0.4

Source: RBI Reports

The table 4 & figure 5 data represents the distribution of various payment instruments in total digital payments. It makes it clear that UPI (Unified Payments Interface) is predominant in the digital payment system and covers 84.8 percent of all transactions. This shows that UPI has been the most desirable form of payment since it is convenient, fast, and easy to use on small and large payments. Compared to other payment methods, other methods of payment share a significantly smaller portion. NEFT takes 3.9 percent followed by PPIs (Prepaid Payment Instruments) 3.2 percent and NACH at 2.9 percent. The card payments constitute 2.7 and the IMPS constitute 2.1 percent of all payments. The most commonly used methods including cheque and RTGS have the lowest share of about 0.4 percent witnessing a major drop in usage.



Source: RBI Reports

Figure 5: Share of Payment Instruments in Total Payments

This is a significant change of the traditional banking systems into digital and mobile-based payment systems, which is evident in the data. The massive domination of UPI indicates that financial transactions have become accessible and easier to the general population due to digital transformation. It is also a sign of greater financial inclusiveness because even minor value deals can be made virtually.Digital payments have increased at a very fast rate in India and billions of transactions are made each month. This decreases the amount of cash that is used and enhances transparency. This is demonstrated by a rapid growth in which digital transformation enhances financial inclusion and thus the rural people are able to access banking services. It reduces dependency on cash and increases transparency in the economy.

Automation and Employment Trends

Digital transformation has altered the mode of employment. The effect of digital transformation in the employment sector is both positive and negative. On the one hand, it generates new employment in the field of IT, data analysis, and digital marketing. Conversely, it decreases employment in the conventional industries because of automation.

Table 5: Employment Trends and Automation &Technology Impact

Year	Unemployment Rate (in percent)	Employment Trends	Automation & Technology Impact
2015	5.6	Slow growth, informal jobs high	Very low automation
2016	6.0	Slight disruption (demonetization)	Start of digital jobs
2017	5.5	Job recovery begins	IT & platform jobs rise
2018	5.3	Growth in service & gig work	Automation begins in industries
2019	5.4	Stable but slow job creation	AI & robotics adoption starts

2020	8.0	Job loss due to COVID-19	Digital jobs increase rapidly
2021	7.0	Recovery phase	Remote work & automation expand
2022	6.0	Strong job growth	AI tools used in business
2023	5.5	Employment increases significantly	Automation in hiring & production
2024	5.4	Stable labor market	Advanced AI adoption
2025	5.3	Improved employment conditions	High automation & AI integration

Source: RBI Reports

Research indicates that approximately 3040 percent of the jobs in the emerging economies are automatable. They also create new employment opportunities particularly to the skilled workers though. This brings out the role of education and skills building.

Table 5 indicates the dynamics of the employment rates and effects of automation and technology during the span of 2015 to 2025. During the first years, 2015-2017, the unemployment rates did not go above 5.5 to 6 and the labor market was filled with low-skilled and highly un-automated jobs. At the time, the digital transformation was in its early stage, and the novel digital employment appeared very gradually.

The employment situation was improving moderately in 2018 through 2019, with the unemployment rate dropping slightly to 5.3 to 5.4. Simultaneously, progress in automation in industries occurred and such technologies as artificial intelligence and robotics were implemented. An increase in service industries and gig employment also came to the fore meaning that the nature of employment has changed. This was significantly interrupted in 2020 by the COVID-19 pandemic that increased unemployment to extremely high levels at 8 percent. Many individuals were rendered jobless, more so in the traditional areas. However, it is also during this time that the digital transformation is increasing and hence the number of digital and online jobs is increasing at a very high rate.

Since 2021, the situation in the employment sphere improved slowly. Unemployment decreased from 7% in 2021 to around 5.3% in 2025. Remote work, digital platforms and automation were also developed during this recovery phase. The year 2022 and 2023 saw robust job growth particularly in the technology related industries and the adoption of AI tools in business processes.Later on, between 2024 and 2025, the labor market stabilized where unemployment stood at 5.3-5.4. Nevertheless, automation and AI were on the high level, and production, hiring, and business processes were highly integrated.It demonstrates that the digital transformation needs the adaptation of the workforce. Employees must improve their competencies in order to be pertinent in the labor market.

E-commerce Development and Customer Behavior

One of the rapidly growing industries is e-commerce because of digital transformation. The e-commerce market in India has been developing at a fast-paced rate. Table 6 demonstrates that the e-commerce market will grow steadily and rapidly in the period between 2015 and 2025. The e-commerce market reached a valuation of 20 billion USD in 2015, which grew slowly to 25 billion USD in 2016 and 35 billion USD in 2017. This is a nascent growth as it is the beginning of the digital age, which is backed by growing internet penetration and the emergence of online shopping systems. Between 2018 and 2020, the market was further growing by huge proportions with a growth of 45 billion USD in 2018 to 64 billion USD in 2020. The period demonstrates the growth of consumer confidence toward online shopping, the enhanced digital payment systems, and enhanced delivery services. It further accelerated in 2020, which led to the rise because of the COVID-19 pandemic, which prompted people to abandon offline shopping in favor of online shopping.

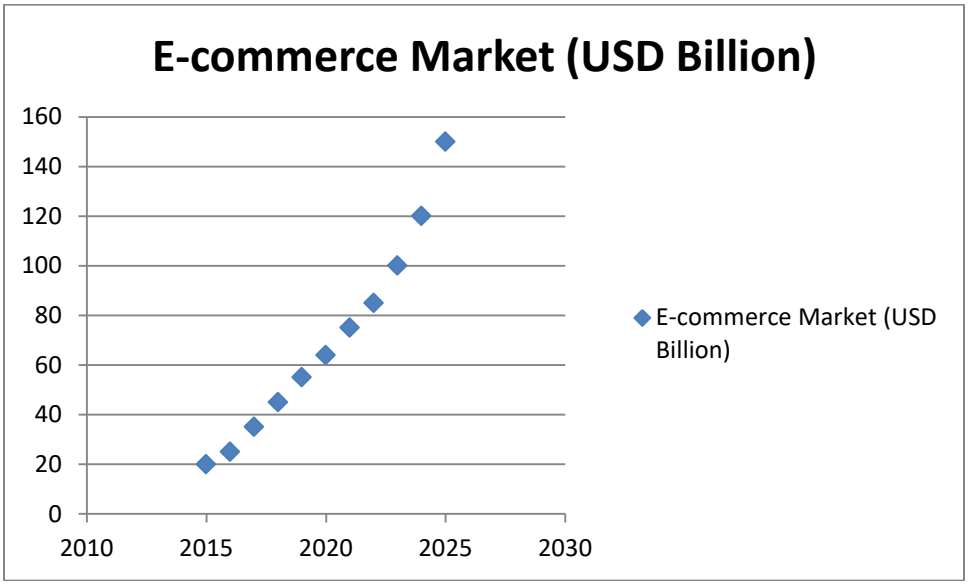
Table 6: Growth of E-commerce Market

Year	E-commerce Market (USD Billion)
2015	20
2016	25
2017	35
2018	45
2019	55
2020	64
2021	75
2022	85

2023	100
2024	120
2025	150

Source: RBI Reports

The e-commerce market is growing swiftly since 2021, as the market increased to 75 billion USD in 2021 and 150 billion USD in 2025. This implies that the market has doubled in five years and it is on a high upward trend. This has been supported by factors like smart phone usage, cheap internet, digital payments and increased products availability. The changing consumer behavior is evident in this growth. Individuals have chosen online purchasing as convenient, more advantageous, and broadened. It has also provided a new platform of selling products online by small businesses.



Source: RBI Reports

Figure 6: Growth of E-commerce Market

Social Media and Communication Trends

The use of social media has gone up. Social networks and messaging applications have transformed the way people interact.

Table 7: Growth of Social Media Users

Year	Social Media Users (million)	Average Daily Usage (in hours)
2015	142	1.5
2016	168	1.8
2017	196	2.0
2018	240	2.2
2019	290	2.3
2020	350	2.5
2021	400	2.7
2022	450	2.8
2023	480	3.0
2024	490	3.1
2025	520	3.2

Source: RBI Reports

Table 7 indicates that the number of social media users and the average number of hours spent on social media continues to rise significantly between 2015 and 2025. As of 2015, the user base was 142 million with an average time per day of 1.5 hours. This figure slowly rose to 168 million in 2016 and 196 million in 2017, which points to the rise in the popularity of social media platforms.

The use of social media increased at a fast pace between 2018 and 2020. The number of users has gone up by 240 million in 2018 to 350 million in 2020, with the daily usage also increasing to 2.5 hours instead of 2.2 hours. The period is an

indicator of better internet connectivity, availability of smart phones, and the growing presence of social media in communication and entertainment.This growth is even more evident since 2020, primarily because of the COVID-19 pandemic, which made people more dependent on digital platforms. Users of social media grew by 480 million (2023) versus 400 million (2021) and daily use went to 3 hours. The users had reached 520 million by 2025 with an average daily usage of 3.2 hours.It has increased the level of connectedness but has also brought about issues of misinformation, privacy, and mental health concerns.

Digital Divide Analysis

Table 8 presents the trend of the internet penetration and the difference between urban and rural access between the years 2015 and 2025. In 2015, internet penetration was 23 percent, 40 percent in the urban and 12 percent in the rural areas. This implies that the digital divide was high and the majority of rural people lacked access to digital services. Between 2016 and 2019, the penetration of the internet grew slowly between 27 percent and 40 percent, and the urban and rural access to it improved. Nevertheless, urban-rural distance was still very large, with urban areas always being more connecting and with more infrastructure than rural ones. In the year 2020, digital access was greatly improved. In 2023, the number of people who have access to the internet has grown to 65 percent, and rural access to the internet grew to 44 percent, compared to 44 percent in 2020. This change can be attributing to the rise in smart phone usage, government efforts and the rise in the significance of digital services in the COVID-19 era. Consequently, the digital divide gap decreased and became moderate. Later in the years, 2024 to 2025, the internet penetration was 71 and 74 respectively. The urban access extended to 85 and rural access to 55. The gap is closing but still there, which shows that the rural regions are still behind the urban areas in terms of digital connectivity. This gap demonstrates that digital transformation is not equally distributed. Less educated and rural populations still have trouble in the way of accessing digital services.

Table 8: Digital Divide Analysis

Year	Internet Penetration (in percent)	Urban Access (in percent)	Rural Access (in percent)	Digital Divide Gap
2015	23	40	12	Very High
2016	27	44	15	Very High
2017	30	50	18	High
2018	35	55	21	High
2019	40	59	25	High
2020	44	64	29	Moderate
2021	51	70	35	Moderate
2022	57	73	40	Moderate
2023	65	79	44	Moderate
2024	71	83	49	Narrowing
2025	74	85	55	Still Exists

Source: RBI Reports

Digital transformation & Social Impact

Society has been transformed by digital transformation in numerous ways. Social media and messaging applications have made communication quicker and more effective. Online learning has enhanced education and telemedicine has enhanced access to healthcare. Table 9 indicates the digital transformation that transformed the society between 2015 and 2025. Initially in 2015 and 2016 people did not have much access to things and could only interact in simple forms. Then came the digital payments and people started finding more about digital transformation, which was the beginning of a major change in the society. Between 2017 and 2019, increasingly more people began using things. They took the internet to communicate with one another as the digital services became more accessible. This is the period when social media emerged as a source of information. Individuals were increasingly accessing their phones and were learning more about digital education, which indicates that people were becoming increasingly reliant on technology in their lives.

Table 9: Social Impact of Digital Transformation

Year	Social Impact
2015	Limited digital access, basic communication
2016	Start of digital payments, awareness increases
2017	Growth in online communication & services
2018	Digital education & mobile usage increase

2019	Social media becomes information source
2020	COVID-online education& telemedicine boom
2021	Remote work, online learning expansion
2022	Digital service widely used in daily life
2023	Digital economy & social platforms dominate
2024	AI- based services, digital governance
2025	Fully digital lifestyle, high connectivity

Source: RBI Reports

There was a significant shift in 2020 due to the COVID-19 pandemic. Online learning and telemedicine were also extremely popular at this period, as individuals had to use the services to obtain the things they required. This tendency persisted in 2021 when individuals work remotely and study online making digital tools a significant aspect of everyday life. Since 2022, digital services became a daily routine and by 2023, the digital economy and social networks began to take over the experiences of communication between people. The emergence of new technologies such as intelligence and digital governance in 2024 made the digital transformation even more powerful. By 2025, the society was digital and connected where individuals carried out most of their activities such as communicating with one another and learning, online shopping and receiving services. This also however generated such issues as addiction, misinformation and social inequality.

DESCRIPTIVE STATISTICS

The table 10 provides a statistical overview of the most important variables with not only stability in employment but also a rapid rise in digital sectors. The mean of the unemployment rate is 5.91 percent with a low standard deviation (0.85) which shows that the unemployment rate was relatively stable over the study period. The positive skewness (1.89) indicates that there are occasional spikes in unemployment whereas the kurtosis (3.12) indicates that the values are concentrated around the average

Table 10: Descriptive Statistics

Variable	Mean	Standard Error	Median	Standard Deviation	Sample Variance	Kurtosis	Skewness	Range
Unemployment Rate (in%)	5.91	0.26	5.50	0.85	0.73	3.12	1.89	2.70
E-commerce Market (USD Billion)	70.36	12.32	64.00	40.85	1668.45	-0.23	0.67	130.00
Social Media Users (in million)	338.73	41.81	350.00	138.67	19230.62	-1.67	-0.13	378.00
Internet Penetration (in %)	47.00	5.40	44.00	17.92	321.20	-1.36	0.25	51.00

The average growth of the e-commerce market is 70.36 USD billion and the standard deviation is high (40.85), indicating a high growth and variability of the market. The skewness is positive (0.67) showing an upward trend over the period, which is supported by a large range of 130. Likewise, the mean of social media users is large (338.73 million) with a standard deviation (138.67) which is rapidly increasing. The skewness (-0.13) is nearly zero, which means that growth is balanced, and the kurtosis (-1.67) is negative, which means that the values are not concentrated around a specific value. The mean of the internet penetration rate is 47 with moderate variability. The positive skew (0.25) indicates gradual improvement in the data, whereas negative kurtosis (-1.36) shows the data are evenly distributed.

Thus, the table shows that there is a stable unemployment and a good and stable growth of digital indicators, which puts an emphasis on the growing role of digital transformation in the economy.

CONCLUSIONS

The research finds out that digital transformation has contributed to economic growth and development in the emerging economies in the period of 2015 to 2025. This has enhanced the growth of internet-based services, e-commerce, and online platforms since the number of internet users is steadily rising. The development of digital payments, and primarily the leadership of UPI, underscores the transition to a cashless economy and enhanced financial inclusion. The e-commerce has also exhibited high growth in terms of emerging consumer behavior and providing businesses and job opportunities. The

effect on jobs is however two-sided, with automation and artificial intelligence eliminating low-skilled employment and generating the need of skilled personnel. These points find out the necessity of the skill development and education.

Digitally, communication access to information and services such as education and healthcare have been better. Simultaneously, there are such concerns as misinformation, privacy, and digital inequality. There is still the digital divide between city and country albeit minimized.

In general, the digital transformation positively affects economic and social growth, yet the policy, enhanced infrastructure, and skills development should be inclusive to make sure, that the benefits of the transformation will be distribute among all the layers of the society.

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