Shodhshauryam, International Scientific Refereed Research Journal
© 2023 SHISRRJ | Volume 6 | Issue 1 | ISSN : 2581- 6306

# Progress of Digitalisation and DPIPS In India Relative to G20 Countries

Dr. Neha Jaiswal
Assistant Professor, Commerce, Rajiv Gandhi South Campus, BHU, Uttar Pradesh, India

**Article Info**

**Publication Issue :**
January-February-2023
Volume 6, Issue 1

**Page Number :** 136-144

**Article History**
Received : 01 Jan 2023
Published : 20 Jan 2023

**ABSTRACT** - According to digital report survey, the contribution of the internet to India's technology sector is set to expand, from the present 48% to 62% in 2030. Simultaneously, the digital economy will also contributing 4–5% to the Gross Domestic Product which more than double that number, nearly 12–13%. India digital economy offers a opportunities for digital marketing, digital transformation, digital public infrastructure (DPI) and digital cooperation to the Global South, in general, and the G20 countries, in particular. This study examines the performance of digital public infrastructure and platform (DPIP) in different states in India. Further this study also analyzes the quality of e-governance and digital tools for Health and Education sector in India. For this purpose, the published data has been used and analyzed accordingly.

**Keywords** - Progress, Digitalisation, Dpips, India, Relative,G20, Countries

INTRODUCTION –

The Government of India launched the "Digital India" in July 2015 to improve online infrastructure and increase internet accessibility among citizens to empowering the country more digitally advanced. The purposes of the initiatives are to establish a secure and stable digital infrastructure, deliver digital services and to ensure that every citizen has access to the Internet. The government's increased focus to create a digitally empowered economy which will be benefited to all sectors and core digital sectors such as information technology & business process management, digital communication services and electronics manufacturing. The various key initiatives have been taken by government like: *Aadhaar,* DigiLocker, MyGov, BharatNet, Smart Cities, Common Service Centres (CSCs), Digitisation of Post Offices, Universal Access to Mobile, Public Wi-Fi Hotspots, India Stack, Pradhan Mantri Gramin Digital Saksharta Abhiyaan (PMGDISHA), e-Health, E-education to helped the country achieve significant digital progress.

India has also launched a multilingual “Stay Safe Online Campaign” for its citizens’ safety in the online world while making digital payments. This applies to all age groups of society. The G20 Digital Innovation Alliance (G20-DIA) identifies and implements the various digital innovative technologies developed by the startups of the G20 nations and other non-member countries as well that shall be beneficial for mankind in education, health, agriculture and economy. India also plans to develop the digital services sector.

India has developed a large number of digital, financial, transactional, and payment solution through Aadhaar, eKYC system, Direct Benefit Transfer (DBT), and the Unified Payment. The core strength of our digital platforms is that they are public platforms based on democratic values and zero cost. This is a strong thrust on digital public goods and good image in the phase of India’s G20 Presidency.

There is no doubt that digital transformation has been further accelerated by the impacts of the COVID-19 pandemic and the widespread use and dependency on digital technologies. The digital economy, the digital infrastructure, e-commerce and other digital payments and services segments can be the country's biggest growth-driver and can contribute as much as 25 percent of the incremental GDP by the time India becomes a USD 7-trillion economy by FY29.
This study highlights the positive effect of digitalization after pandemic in Digital economy. This study also analyse the adoption of digital tools in e-Governanace, e-Health and e-Education in different states in India.

## RESEARCH METHODOLOGY

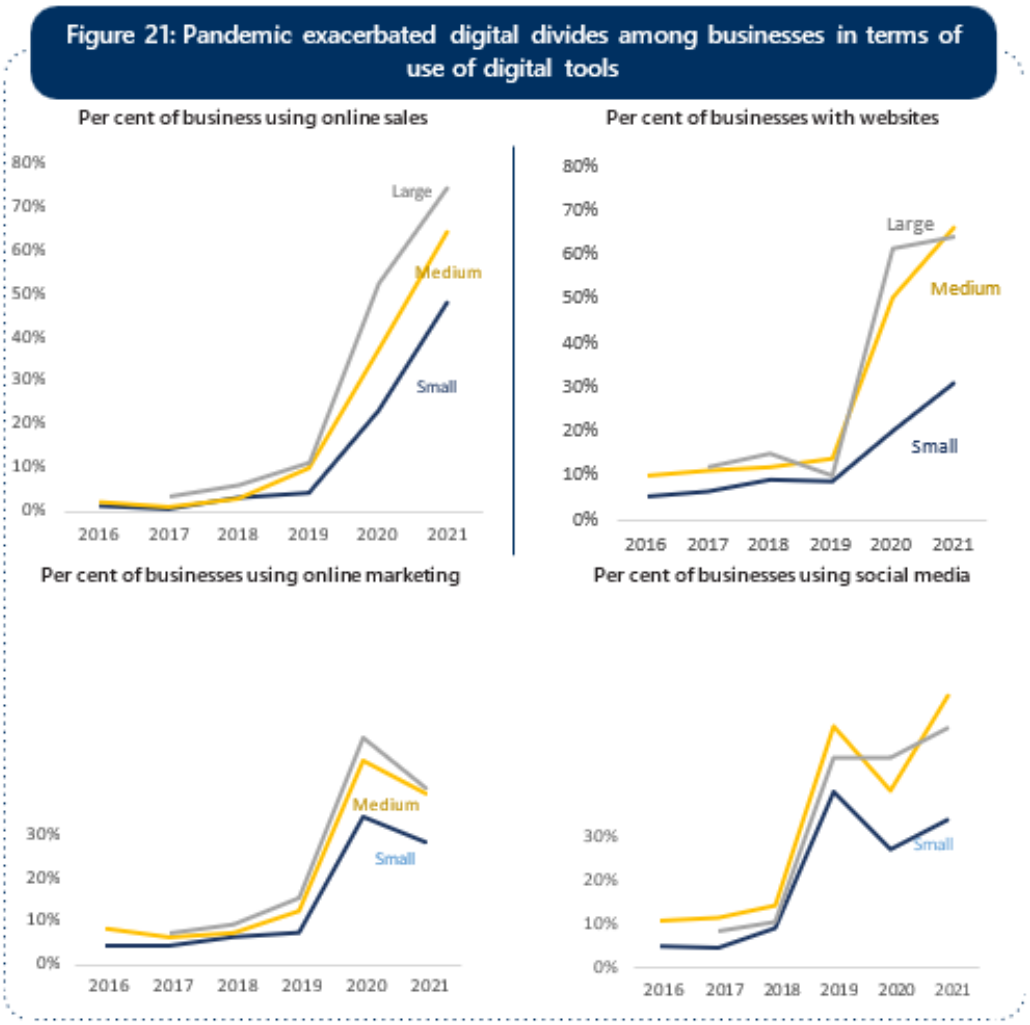
The study is totally based on descriptive in nature which explore and analyse the quality of digital infrastructure and platform in India in e-governance,e-Health and e-Education. For this purpose, the secondary data has been used and collected from various reports, published articles and government notifications on digital platform. The raw data has been further analysed through descriptive statistics and presented in tabular and diagrammatic form. The recent data has preferred for the purpose of the study.

OBJECTIVES OF THE STUDY

1. To analyse the effect of pandemic in adoption of digital tools among firms in India.
2. To critically analyse the impact of digitalization on quality of e-Governance services in different states in India.
3. To examinee the adoption of Digital tools for health and education sector in different states in India.
4. To explore the redefining and empowering of Digital Public Infrastructure and Platforms (DPIPs) in India.

ANALYSIS AND INTERPRETATION

1. The pandemic exacerbated divides in adoption of digital tools among firms



While divides in internet access have narrowed across firms by size, the gap has widened in the adoption of digital tools and services (see Figure 1). While many large companies already had a digital transformation plan, others accelerated the digital integration of their customers and supply chains. Online selling, online marketing and websites saw an increase during the pandemic, generally more so for larger firms and those in the services sector. Despite the rise, the post-pandemic difference between big firms and small firms rose to 26 per cent for online sales, 33 per cent for websites, 12 per cent for online marketing and 21 per cent for social media presence. Except for online sales, the services sector had the highest adoption with a rise to 43 per cent in websites, 37 per cent in online marketing and 45 per cent in social media presence. However there are signs of some reversion in the use of digital technologies, with a few businesses returning to pre-pandemic ways of operating.

## 2. IMPACT OF DIGITALISATION ON E-GOVERNANCE IN DIFFERENT STATES IN INDIA.

According to the UN E-Government Survey (2020), India scored a value 0.85 in the Online Services Index, which ranges from 0 to 1, Telecommunication Infrastructure Index (0.35) and Human Capital Index (0.59) – the lowest amongst all G20 countries. This was the 10th highest score amongst the G20 countries. Consistent with this, the 2021 National e-Governance Service Delivery Assessment (NeSDA) also showed improvements in the performance of state and central ministry service portals. The most used e-governance services like applications for caste, income, domicile and death certificates, payment of utilities, and scholarship applications. There is a need to build institutional capacity and the skills of government employees for effective utilisation of digital technologies by government entities.

At the state level, there is significant variation in the number of e-government transactions per person amongst states at similar levels of connectivity. As per the NeSDA report, States like Rajasthan, Gujarat and Madhya Pradesh, which have high NeSDA scores, see much lower levels of e-government transactions per person, compared to Haryana and West Bengal. Overall, the states of Haryana, West Bengal, Telangana, Punjab, Andhra Pradesh and Tamil Nadu stand out in the number of e-government transactionsper person in the state.

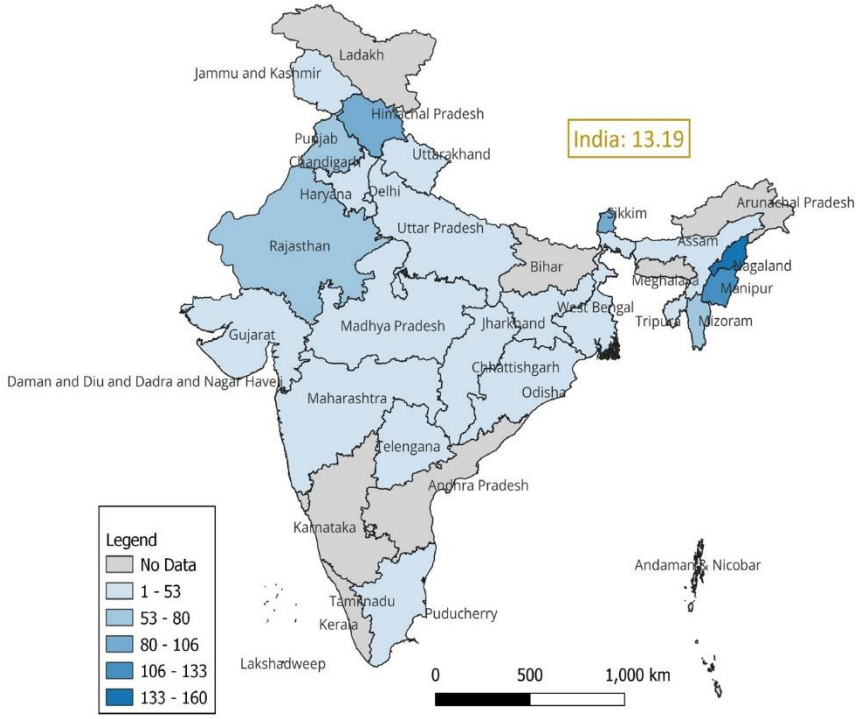
3. Adoption of digital tools for health and education are limited and regionally dispersed

The government's focus on using digital connectivity and digital tools for access to basic services such as health and education are limited and regionally dispersed. According to the UDISE+ 2020-21 report, only 31 per cent of government schools have functional computer facilities and 14 per cent have internet access at the national level. Regionally, states such as Arunachal Pradesh, Assam, Bihar. Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Tripura, and Uttar

Pradesh have less than 5 per cent of government schools with internet connectivity. For smart classrooms, the all-India average stands at 1 smart classroom per 758 secondary students in government and government-aided schools (see Figure 3). This sort of stark variation is also visible for digital health IDs, the linking of electronic health records, and the availability of tele-consultation services (refer to the case study on Ayushman Bharat Digital Mission in Part II of this report). While the national penetration rate for health IDs is 21 per cent, state level penetrations rangefrom 4 per cent (Meghalaya) to 42 per cent (Andhra Pradesh).

**Figure 4: Adoption of digital tools for education is limited**

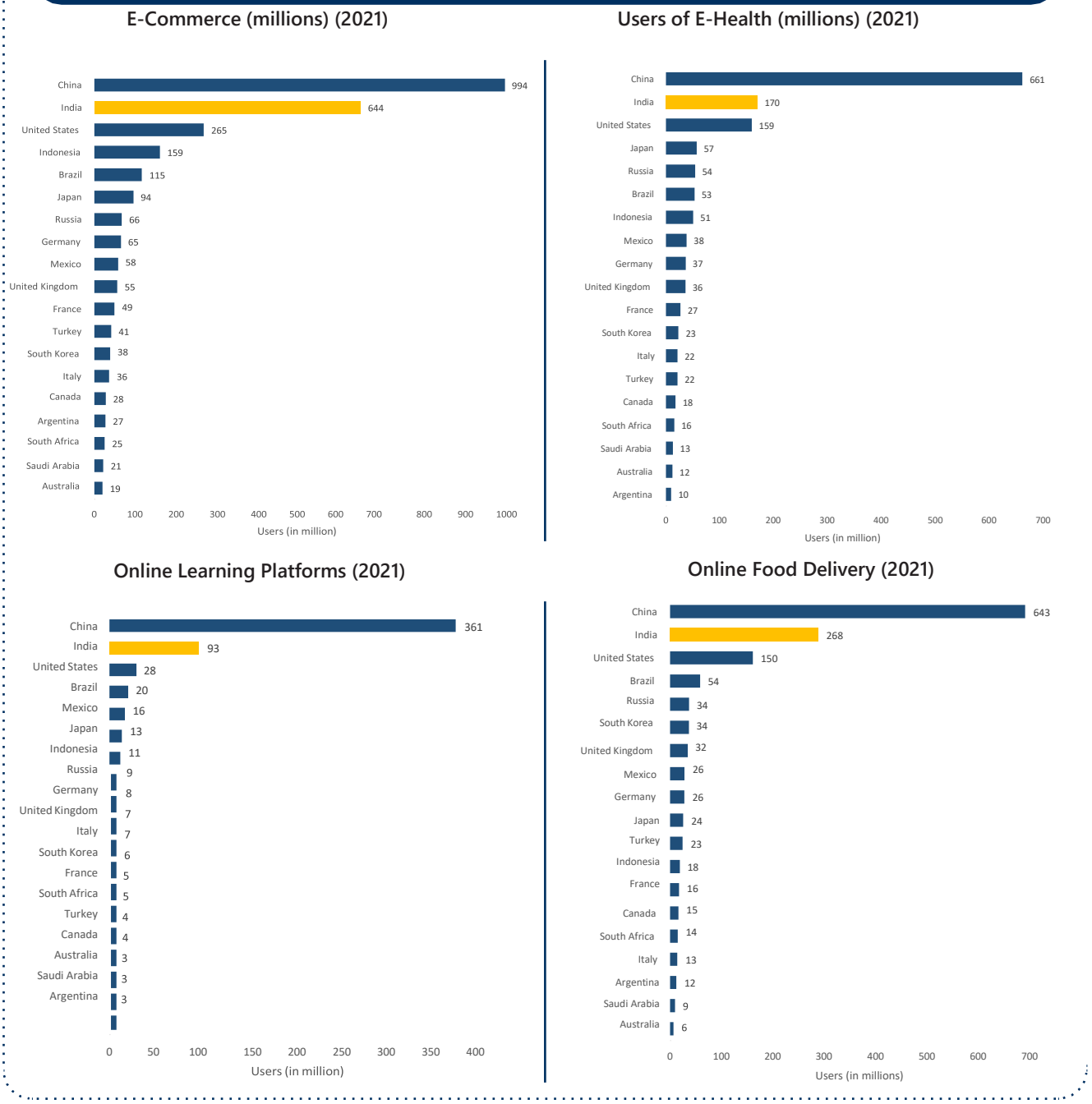
**Number of smart classrooms approved at the secondary level between 2020-2022 per 10,000 students in government and government aided schools**




Source: Rajya Sabha Unstarred Question No. 2762 and UDISE+ 2020-21 Report

Notes: Smart classrooms approved under the centrally sponsored scheme of Samagra Shiksha during the two year span of 2020- 2022. The number of smart classrooms at the secondary level are normalised by the number of students in secondary schools (grade 9-10) in government and government aided schools in 2021 (UDISE+ 2020-21).

**Figure 3: India is now the second largest market for a wide range of digital activities**

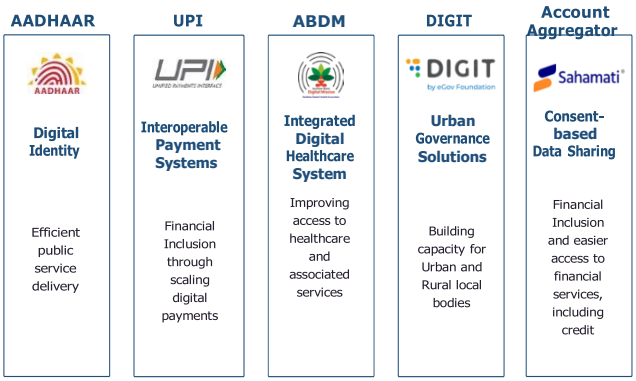



Source: Statista Market Forecast (2021)

## 4. Redefining and Empowering Digital Public Infrastructure and Platforms (DPIPs) In India

Digital Public Infrastructure and Platforms (DPIPs) requires redefining for spreading of public service delivery in India's development story. New system is like an inter-connected expressway on which new processes and platforms are being rapidly built, if a person is left out of the base structure, she faces the risk of exclusion from the entire ecosystem, exacerbating existing divides. Similarly, DPIPs carry the risk of concentration, especially if they enjoy regulatory advantage and become public monopolies. Finally, given the amount of data likely to pass through and stored in DPIPs, they will become the natural targets of criminals and hostile entities, carrying with them the risk of security and privacy. Five DPIPs that are currently in operation in India, namely, aadhaar, Unified Payment Interface (UPI), Ayushman Bharat Digital Mission (ABDM), Digital Infrastructure for Governance, Impact & Transformation (DIGIT), and the Account Aggregator (AA) Framework. Each case study presents an analysis of benefits and risks that have emerged from their implementation. The benefits focus on aspects of inclusion, efficiency and innovation while the risks raise concerns of exclusion, concentration, and security and governance among others. Some case studies provide relevant international comparisons, weighing the advantages and disadvantages of alternate models.

Figure 5: Five DPIPs that are redefining India's development story

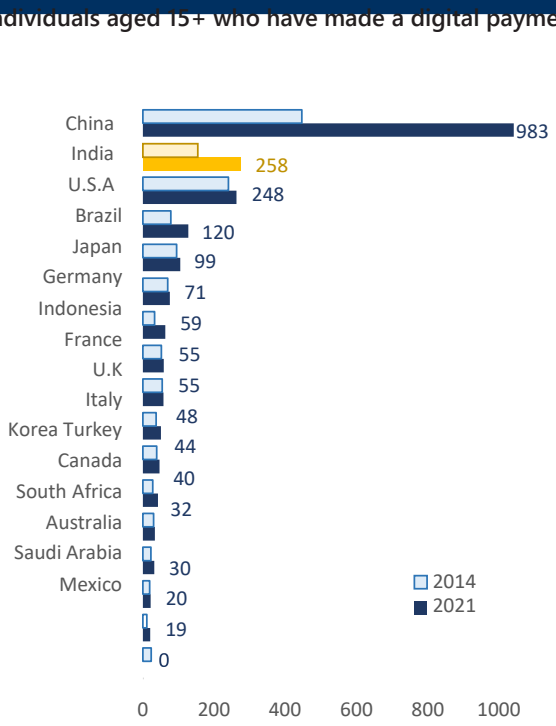



Note: The Sahamati logo represents the Account Aggregator Framework

There has been a sharp rise in adoption across a wide range of digital activities such as digital payments, e-commerce, online learning, food delivery, etc. According to the World Bank, more than 80 million adults in India made their first digital merchant payment after the start of the pandemic. In the third quarter of 2022-23, India recorded 23 billion transactions. Recent estimates

suggest that roughly 300 million Indians are using UPI, making India the second largest digital payment system in the world after China. Despite low per capita income figures, the total annual value of digital transactions is higher than that of many developing countries as well as higher than of countries like Canada and Australia.

**Figure 6: India is now the second largest digital payment market in the world**




Source: World Bank Findex Database (2021) for per cent of population (age 15+) that made or received digital payments, and World Bank Data Bank for population values.

**CONCLUSION** - On the basis of above analysis, it is concluded that every economy is totally based on Digital Technologies. India is the growing economy to expand the digital platform for their users at world level with minimum and zero cost. India will also focus on bridging the digital divide and ensuring greater benefits from digital technologies and transformation. India's digital economy has witnessed a tremendous rise in the last decade and it is hoped that it shall effectively create a citizen-centred digital economy with the cooperation of all the G20 and the First World countries. G20 presidency in India provides the various dimension of the digital economy like digital economy, data economy and the intangible economy.

REFERNCE

1. India News, India News Live and Breaking News Today | Hindustan Times
2. mgi-digital-india-in-brief-april-2019.pdf (mckinsey.com)
3. Digital India | IBEF
4. Internet economy to become 12–13% of GDP by 2030: Report - The Hindu
5. Digital economy can contribute 25% GDP by FY29: NaBFID chairman KV Kamath (indiatimes.com)
6. Digital India and G20: Projection of Indian Leadership in the Global South | Diplomatist