

Digital India - Ambedkar's Vision and Modi's Provision

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Abstract

The global economy is presently going through the fourth industrial revolution, which is also known as the digital revolution. India is taking giant strides in leading the world in this domain. The "Digital India" campaign was launched by the government of India to uplift the usage of technology in India. The objective was to make Government services easily available to the citizens electronically by improving its online infrastructure all over the country. This Digital India movement connected many inter-disciplinary fields and brought them under a single umbrella, thus resulted in a rapid increase in digital services encompassing all areas of life including financial transactions, health, education, governance, taxation and so on. cutting across all sections of people in the country. Prime Minister Mr. Narendra Modi launched the campaign on July 1, 2015. The initiative aims at connecting rural India with the help of high-speed internet connectivity.

The major outcome of this digital revolution that many fail to comprehend, however, is the eradication of the social and economic discrimination that has been prevalent in the country since ages. The Father of the Indian Constitution, Babasaheb Dr. B.R. Ambedkar, worked tirelessly to eradicate these social evils like caste system and gender inequality that majorly contributed to the discrimination. What Ambedkar envisioned and worked relentlessly for is now being accomplished by the digital revolution. This has consequently caused immense human advancement in the last septennial. This paper collates the digital initiatives of the Government of India under the leadership of Narendra Modi with Ambedkar's ideologies and outlines how Narendra Modi is realising Ambedkar's India — a land of equality, liberty and equal opportunity. This paper is the first to propose this collation and brings to light how engineering marvels like digitalisation can accelerate India towards fulfilling Ambedkar's vision. This paper also outlines the author's (Dr. Ambedkar Chair Professor, A.U.) adequate knowledge and working experience on Dr. Ambedkar's thoughts and works and proven commitment to the cause of Social Justice.

Keywords: Digital Revolution, Babasaheb Bhimrao Ambedkar, Narendra Modi, e-governance, economic progress, equality, liberty, Social Justice.

I. Introduction

The Indian constitution is founded on the firm principles of democracy. The Father of the Indian constitution, Babasaheb Dr B.R. Ambedkar emphasised that for democracy to thrive successfully, the first and foremost essential element is equality [1]. There should not be an oppressed class and there should not be a suppressed class. He envisioned an ideal society based on liberty, equality and fraternity. That being said, the Indian post independence history has been marked by many governmental and societal transformations that have in many ways changed the face of the nation. These transformations, however drastic they may have been, have not been able to eradicate the deep rooted evils of economic and social divide that permeates every nook and corner of the country. Thus it goes to say that the India that Ambedkar envisioned had not been realised.

However, India is all set to change that scenario. Of all the societal transformations that have in many ways changed the face of humanity, the one transformation that is permeating the world today is the paradigm shift from manual to digital technology. The Government of India, under the leadership of Prime Minister Shri. Narendra Modi initiated the Digital India campaign in 2015 to

create a digitally empowered nation where services and governance can reach every nook and corner of the country even to the last citizen with no respect to social or economic discrimination [2, 3]. The promulgation of smartphones and internet usage for daily services and a vociferous government led digital movement has seen a surge in the number of citizens who reap the benefits of digitalisation. There are more than 60 crore internet users from urban and 35 crore rural areas and India has seen a surge of more than 45% in internet users since 2019; there is a 54% increase in the use of smartphones from 2010 to 2020 [4]; it is a volcanic increase.

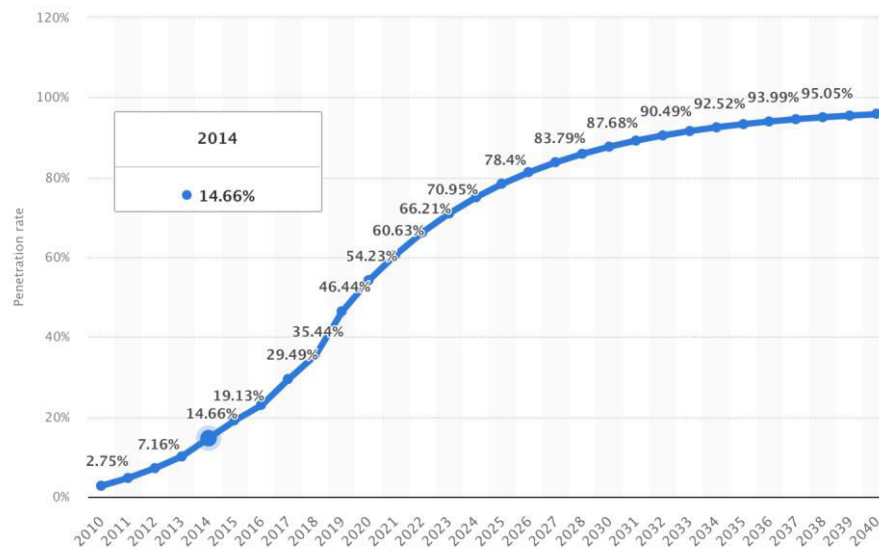


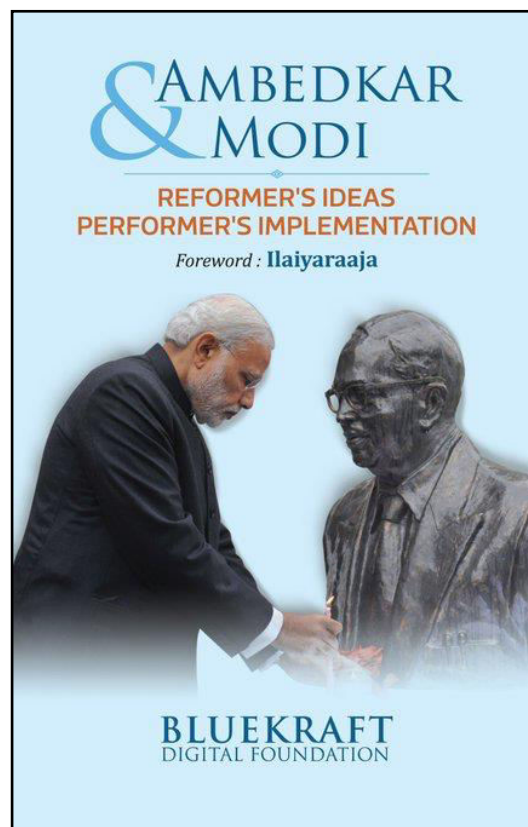
Figure 1: Percentage increase of smartphones in the Indian market with projection until 2040.

Almost all services which were once done manually by humans are now accomplished by digital technology; thus the digital divide between people and governance has been eradicated. The biggest impact of zeroing the digital divide is the zeroing of the social and economic divide. Digitalisation has nearly eradicated discrimination. The rich and the poor, the outcasts and the upper castes all have now equal access to all services. The architect of Digital India, Prime Minister Modi, while addressing the Digital India Week 2022 at Mahatma Mandir in Gandhinagar, proclaimed that India has set an example of how revolutionary the use of technology is for the entire humanity in the form of Digital India campaign [5]. It is needless to say that Narendra Modi, has not only created a provision for India's economic advancement and quality of life but also eradicated the social evil of discrimination and corruption coming in the way of equality, liberty and freedom and access for all provisions of the government to all sections of people. This provision is inline with realising the vision of Ambedkar. What Ambedkar could not achieve in his lifetime, what his successors could not achieve in the more than seven decades of India's independence, is now being accomplished by the digital revolution in just seven years.

This paper collates the ideology of Ambedkar to the provisions of Narendra Modi for human advancement via digitalisation in India and describes how the consequent advancement realises the ideology of Ambedkar. This paper is the first to propose such a collation to bring to light how the engineering marvel of digitisation (making all information accessible over the internet) and digitalisation (making all services accessible over the internet) can create an Ambedkar's India with equality and liberty. For long people have thought Ambedkar's ideologies can be achieved by social means such as policy making, legal formulation and education, but this paper manifests the tremendous power of engineering and technology to realise Ambedkar's ideologies in less than a septennial.

This paper presents a collative outline of the impact of digital revolution in India towards accomplishing Ambedkar's vision. Section II describes Ambedkar's vision for India. The next two Sections (III & IV) present Digital India initiative of the Government of India and its impact in the last septennial. Section V discusses the provision created via the digital India initiative to realise Ambedkar's vision. During these discussions, author's (Dr. Ambedkar Chair Professor, A.U.) adequate knowledge and working experience on Dr. Ambedkar's thoughts and works and proven commitment to the cause of Social Justice are also outlined. The concluding remarks are presented in Section VI.

The famous music composer, Ilaiyaraaja compares PM Modi to Ambedkar in new book, calls them 'striking personalities'. The comparison, which was mentioned in the foreword of a book, drew flak



from the DMK. Ilaiyaraaja called Ambedkar as Reformer and Modi as Performer.

Figure 2: Ambedkar & Modi - Foreword by Ilaiyaraaja, the music composer [27]

II. Dr. B.R. Ambedkar & his vision

The key intention of this article is to match the harmony of the Government of India's digital technological advancement under the vision and provision of Shri Narendra Modi to one man's relentless efforts, a century earlier, to see India as a land of equal opportunities. This article brings to light the positive impact of digital technology on the people of India in the last decade and argues on the premise of the underlying ideology of Ambedkar coming to reality through Narendra Modi's provision for digital advancement. Babasaheb Dr. Bhimrao Ambedkar was born on 14th April, 1891 at Mhow, near Indore to Ramji Maloji Sakpal and Bhimabai. The life of Dr. Bhimrao Ambedkar was marked by struggles [6, 7]. Since his parents were Dalits, he was not given equal opportunities. During his growing years, he encountered many challenges and social discrimination. Teachers and other students treated Bhimrao Ambedkar with inferiority. Nevertheless he proved that every hurdle in life can be surmounted with talent and firm determination. Bhimrao Ambedkar was a multi-

talented person. He was a prolific student, a reputed scholar, economist, lawyer, professor,



politician, social activist, author, and a barrister.

Figure 3: Babasaheb Dr. B.R. Ambedkar

Though he hailed from a socially backward caste, he rose to unparalleled height and framed the constitution of India. He is termed as the father of the Constitution of India. He lent his voice to the suppressed and backward community. He made a determined and relentless fight against the social evil practices like the caste system, and promoted education to all and upliftment to the untouchables. It has been thought that the ideologies and principles of Ambedkar can be advanced by social and economic policies and regulations; but in this septennial Prime Minister Narendra Modi has proved that engineering and digital technology has even more impact in realising Ambedkar's India. In this sequel, we discuss the Digital India Initiative of Narendra Modi, its impact on advancement of Indian citizens and its collation with Ambedkar's ideologies.

III. The Digital India Initiative

India is going through a significant transformation in the last seven years in terms of economic reforms, urbanisation and increase in per capita income. However the one most critical component of development is the digital technological advancement that affects all sections of people. This technological advancement leads to seamless information, cash and service flow through all social and financial layers of the society and this consequently leads to improved quality of life for people at large. Therefore it is needless to say that in this day and age, a country's development, national security and economic and social growth revolves around its digital technological prowess.

Digital India is a campaign launched on 1st August 2015 by the Government of India under the leadership of the Prime Minister Shri. Narendra Modi in order to ensure the Government's services are made available to citizens electronically (shortly termed e-governance) by improved online infrastructure and by increasing internet connectivity and making the country digitally empowered in the field of technology.



Figure 4: Shri Narendra Modi, the Prime Minister of India (left) and the Digital India logo (right).

The program is designed to transform India into a knowledge-based economy and a digitally empowered society by ensuring digital services, digital access, digital inclusion and digital empowerment to all sections of the nation irrespective of their caste, creed, language and gender. Such an objective is sought to be achieved by technology that is affordable, developmental and inclusive. This initiative has seen the proliferation of more than 123 crore aadhar, 120 crore mobile phones and 3.12 lakh common service centres (CSCs), etc. Public sector digital platforms like the aadhar, BHIM-UPI, GSTN and GeM coupled with private sector innovation have accelerated digital adoption in India [8].

During the past septennial, the initiative has transformed into a nation wide mass movement. The IT sector does not operate in isolation anymore. It now encompasses every domain of life including financial transactions, infrastructure, education, agriculture, health and so on. What is more worthwhile is that becoming IT dependable has made governance of governments seamless, transparent and far reaching to every nook and corner of the country. The deployment of web based IT technologies for everyday governance has substantiated Shri Narendra Modi's outlook of "minimum government and maximum governance," and "governance to e-governance" as it ensures that government welfare schemes and development measures impact the last person in the country [9].

The adoption of digital technology is not new in India [10, 26]. During 1976 - 1996, the Government of India initiated digitisation of documents via the National Informatics Centre (NIC) to provide efficient and sustainable processing of files (or data) in departments of finance, commercial taxations, excise, public distributions, etc. However this early initiative focussed on digitisation of documents rather than e-governance – digitisation of government services to the people. Although e-governance was initiated in the late 1990s, Presently, the government of India, under the digital India initiative, is focussing on providing government services to all people via the internet under the umbrella of MeITY. The initiative has three key visions, (a) digital infrastructure as a utility to every citizen, (b) governance and services on demand, and (c) digital empowerment of citizens. The mission to achieve the above vision is nine-fold, (a) broadband highways, (b) universal access to mobile connectivity, (c) public internet access programme, (d) e-governance, (e) electronic delivery of services, (f) information for all, (g) electronics manufacturing, (h) IT for jobs, and (i) early harvest programs. The aim of the initiative is to transform India into a knowledge based economy and digitally empowered society.

IV. The impact of the Digital India Initiative over different areas of life in this septennial

This section gives a description of four key areas of influence out of many wherein the ideology of Ambedkar is on course of fulfilment by the Digital India initiative of Narendra Modi.

IV. a) Digital Transactions:

On November 8, 2016, India's prime minister Narendra Modi, announced the demonetisation of 500 and 1000 rupees notes in India. That historic decision had many reasons. One of the reasons was laying the stepping stone towards the dream of digital India. The traditional form of monetary transactions happens with the exchange of physical hard cash between people. Cashless India has now made it nearly redundant. A cashless economy is one in which the liquid transactions through the system happen with the exchange of plastic currency or through digital payments. The prolific advent of ATM, debit and credit cards are plastic currency and online payments come under digital currency. The advent of blockchain technology has also redefined the nuances of a cashless economy. The key benefits of making digital payments include transparency and reduction of unaccounted money.

The COVID-19 has imposed significant limitations on people's mobility. This, across the spectrum, has led to people finding ways to live, work, and transact using means of digital transactions in order to maintain social and physical distance. The Government of India's programs such as Digital India, Jan Dhan Yojna, PM SVANidhi scheme for street vendors, DBT release, FASTag for tolling, etc. brought forth a sweeping reform in how transactions were done by people at the grass roots. UPI payments, RuPay cards, e-com card payments boomed and AePS, Aadhaar enabled cash flows started pring forth [11].

The smartphone is a critical electronic tool used to make digital payments. The government has ensured that smartphone ownership is no longer a bottleneck for the adoption of digital payments. In rural India, the number of smartphone users has risen from 9% in 2015 to 25% in 2018 [12]. Also 97% of all internet users in India access it via their smartphones. Today, India boasts of nearly 118 crore mobile connections, 70 crore internet users and 60 crore smartphones.

According to a survey by People Research on India's Consumer Economy & Citizen Environment with a sample size of 35,000 shown in Tables 1 & 2, the percentage of people in India who use UPI based payments is nearly 79% and the number of people who use smartphones for digital transactions are increasing by the day [13].

% of households who do digital payments in each income group using...	Income groups			Total
	Bottom 40%	Middle 40%	Top 20%	
Paytm, PhonePe type apps	80%	79%	78%	79%
UPI	56%	45%	56%	52%
Online shopping using credit or debit card	27%	42%	44%	38%
Use Bank App	18%	41%	43%	34%

Table 1: Digital payment methods - User share of households

% of household in each income group who have...	Income groups			Total
	Bottom 40%	Middle 40%	Top 20%	
Have smart phone	57%	72%	90%	68%
Do digital payments	24%	34%	49%	32%
Have mobile app for bank	14%	37%	59%	31%
Use phone for banking related matters	5%	17%	30%	14%

Table 2: Status of online banking

There is a very strong consumer momentum in favour of digital payments and online banking driven by a very well-developed ecosystem. According to an ACI Worldwide report for 2020, India was at pole position with 2000 crore real-time online transactions ahead of China at 1500 crore and the US at 120 crore. Addressing the Indian community in Berlin in May 2022, Prime Minister Narendra Modi on Monday said that of the total real-time digital payments that took place throughout the world in 2021, 40 per cent took place in India. India is all poised to become a digital superpower in the near future [14].

IV. b) Digital Education

Digital education is the innovative incorporation of modern technology and digital tools to assist the progress of teaching and learning. The concept is not new and has existed in various forms for many years now, but when the COVID-19 pandemic suspended face-to-face teaching its significance increased manifold. Most educational institutions are adopting digital education as a solution while traditional classroom setup takes a back seat for some time due to the currently prevailing pandemic.

The Government of India is strongly promoting digitalisation of education across all sectors of students [15, 25]. The promulgation of smartphones and free/cheap access to the internet has allowed students to attend college virtually, learn from video lectures and notes from universities across the world. It has given scope to create a online classroom environment, debates, discussions, etc. The Union Budget in 2022 has witnessed the importance given by Narendra Modi on digital education [16, 21]. The budget focused on the skill development and provision of world-class education to students across the country for the education sector. The Government announced the launch of a digital ecosystem termed DESH-Stack e-portal promote online training to people in life skills. The proliferation of digitalisation is so immense that the government of India announced the formation of a digital university to establish a world-class education ecosystem [16]. The digital university will impart teaching in regional languages and ICT formats. Moreover various channels have been defined by the Government of India for a widespread of the sources and means to provide education to different corners of the country. The One Class One TV channel programme will soon be to 200 TV channels under the PM e-vidya scheme to provide supplementary education to the rural students. A comprehensive initiative called PM eVidya was announced in 2020, which aims to unify all efforts related to digital/online/on-air education to enable equitable multi-mode access to education. It is envisaged that it will benefit nearly 25 crore school going children across the country. One of the most important initiatives of MHRD is DIKSHA (Digital Infrastructure for Knowledge Sharing). It will provide courses for teachers, quizzes and others. VidyaDaan was launched in April, 2020. It is a content contribution program at national level, that makes use of the DIKSHA platform and tools, it allows donation or contribution of e-learning resources for school education by experts, private bodies, and educational bodies. The Swayam portal contain video

lectures from reputed professors. e-Pathshala mobile app and web portal can be used to access e-textbooks. 3,500 pieces of audio and video content of NCERT are available. For hearing impaired students, one DTH channel is available with sign languages and study material has been developed in Digitally Accessible Information System (DAISY), for hearing and visually impaired. Online learning platform Coursera reported 49% growth in students in India in 2021 [18]. The number of Indian students following UK HE programmes through distance learning has increased by 56 per cent compared to five years earlier. This shows the country's booming demand for online higher education.

IV. c) Digital Health Services

The Covid-19 outbreak has made every country painfully aware of the limits of its own healthcare systems. The digital revolution and telehealth solutions became imperative during the height of the pandemic. The number of patients taking online consultation increased to about 40 crore in 2021 [19]. The nation's numbers in placing prescription orders on e-commerce portals, for example, is expected to nearly double by 2025. The government of India has given impetus to digital medicare. The Ayushman Bharat Mission aims to provide health coverage for 50 crores Indians and also insurance of five laks per year for medical treatment in both public and private hospitals [20]. The mission has cashless payment and paperless recordkeeping through the hospital or doctor's office. There is no restriction on family size, age or gender. The scheme provides access to free COVID-19 testing. The introduction of National Identification Number (NIN) to health facilities in India was key in achieving inter-operability within all health facilities (both public & private) to facilitate inter-operability among health IT systems deployed. So far approximately 99% of public health facilities have been allocated NIN. Hospital Information System (HIS) is being implemented for computerised registration and capturing medical data of patients in public health facilities upto PHC level. This will also facilitate workflow management leading to better delivery of services to patients and improvement in efficiency of processes in these facilities.

The Prime Minister of India Shri Narendra Modi announced the National Digital Health Mission (NDHM) on 15 August 2020 [22]. NDHM will implement the following schemes listed hereunder.

Health ID	Implementation of a unique health ID just like an aadhar ID to identify and authenticate an individual based on past medical records. To create a wide network of health records.
Digi doctor	A repository of licensed doctors in contact details and specialisation with regular update.
Health Facility Register	A repository of health facilities/hospitals across the country, the facilities available within and the charges.
Personal Health Records	Electronic record of an individual containing medical history and medication used.

Table 3: Implementation aims of the NDHM

The immediate and biggest benefit of digitisation of data and digitalisation of services is evident in India's fight against Covid19 [23]. To date, more than 188.55 crore vaccine doses have been provided to States/UTs so far through the Indian government for free through direct state procurement category. Digital India has led the way in bringing vaccines to India's citizens. It started last April with the Aarogya Setu application, a contact tracing app with over 10 crore users.

This was followed by another app, “Co-WIN” which was developed for booking vaccination appointments. India’s vociferous vaccination drive is made seamless by digital technology and has at large saved many lives. The India’s vaccination drive is indicative of the speed and equality ensured via e-governance in delivery and monitoring of government services to all the people.

IV. d) Digital Governance

India has seen a paradigm shift in governance in the last 7 years since the initiation of the Digital India programme. Digitilising all government information and digitalising all services has paved way for people to benefit directly from all schemes irrespective of their caste, creer, religion, gender and language. Moreover the disbursement of funds directly to people has increased transparency in governmance and reduction in unaccounted money. This digital reform has led to empowerment of all Indians, welfare of the poor and marginalised and reduced corruption under the visionary leadership of Prime Minister, Shri Narendra Modi.

The current digital infrastructure of the country that identifies and connects people while simplifying their day-to-day life through digital means includes Aadhaar Unique Identity (UID), JAM trinity (Jan Dhan-Aadhaar-Mobile) and Unified Payments Interface (UPI) [11]. To add, the Pradhan Mantri Jan Dhan Yojana is the world’s largest financial inclusion program offering banking services, insurance and pension to more than 45 crore people in India. 45% of these benefeciaris are from rural India, and 55% are women. RuPay debit cards were promulgated to encourage cashless transactions and nearly 33 crore cards have been issued to date. Pension beneficiaries under Atal Pension Yojana (elderly pension), PM Suraksha Bima Yojana (health care), PM Fasal Bima Yojana (agriculture) etc. have their money credited into their accounts regularly without them having to visit the pension centres or banks. The Direct Benefit Transfer Scheme accurate targetting and timely delivery of benefits to people, ensures finacial inclusion and it is estimated that nearly 16 lakh crore rupees have been deposited directly into the accounts of people since 2014 when Shri Narendra Modi took the prime ministership of India. The Government e-marketplace assures transparent business entity transactions. It currently has nearly 7 lakh MSMEs and over one lakh women entrepreneurs.

V. Collation of Ambedkar’s Ideology & Digital India Initiative — Interdisciplinary Thoughts & Discussions

The provisions made available by Narendra Modi under the aegis of the Digital India initiative are helping to accomplish Ambedkar’s vision of the nation. This section presents how Ambedkar’s India is being realised by Narendra Modi’s Digital India Initiative.

V. a) Ambedkar’s Ideologies and Vision

“I like the religion that teaches liberty, equality and fraternity.”

Babasaheb Ambedkar

- *Discrimination of all forms should be eradicated:*

"What are we having this liberty for? We are having this liberty in order to reform our social system, which is fuel of inequality, discrimination and other things, which conflict with our fundamental Rights"

Babasaheb Ambedkar

Discrimination based on caste, gender, language and other factors posed a great challenge to the development of India. Ambedkar had not only written on the issues of caste inequality but also fought against it in India, especially for the human rights of ex-untouchables/social outcasts known as Dalits. According to him, the ideal society should be based on liberty, equality and fraternity. Ambedkar had been closely involved in the struggle to give Indian outcasts, the dalits, the scheduled caste and scheduled tribe people solid statutory safeguard. He was a delegate at the roundtable conference in London, where he argued for a separate electorate for the dalits. It is not a surprise that subsequently the scheduled caste and scheduled tribes were guaranteed in the 1949 constitution of India in the form of reservation in various fields such as legislative, employment and education. Babasaheb Ambedkar was a great champion for overcoming social inequalities in India. He succeeded in turning the depressed class movement into a revolutionary movement throughout India.

"Democracy is not merely a form of Government. It is primarily a mode of associated living, of conjoint communicated experience. It is essentially an attitude of respect and reverence towards our fellow men."

Babasaheb Ambedkar

- ***A Healthy Economy with Equal Opportunity:***

Ambedkar was one of the pioneers who examined the relationship between socio-economic and political variables co-jointly and the role of development projects in transforming India. His ideology was that industrialisation and agricultural growth could enhance the economy. He was the first Indian economist who comprehensively studied the public finances, and taxation and also the monetary standards of British India, and explained the adverse effects of both the internal and external taxes on local business in British India. He studied extensively on rural poverty, marginalised economic surge, lagging industrial growth and proposed solutions and tax policies under the democratic framework to uplift the marginalised and downtrodden. He opposed income tax for low-income groups. He contributed to Land Revenue Tax and excise duty policies to stabilise the economy. He played an important role in land reform and the state economic development. Babasaheb Ambedkar campaigned for government interference within the decision making framework of economic reforms saying that non-interference of government would mean private autocracy. He worked relentlessly for financial equality to all people within well defined boundaries that advance the nation's economic growth.

"I measure the progress of a community by the degree of progress which women have achieved."

Babasaheb Ambedkar

- ***Women Safety and Gender Equality:***

Ambedkar reformed the Hindu code bill including making the laws applicable to even non-Hindus. According to this bill, portions of inheritance to daughters, while giving widows complete property rights which had previously been restricted, was passed. The bill hence put forth gender equality in laws of inheritance and marriage. Babasaheb Ambedkar worked to ensure that women were also protected under labour laws. He was instrumental in reducing the number of working hours and improving the working conditions. In 1928, as a member of the Legislative Council of Bombay, he supported a Bill granting paid maternity leave for women working in factories. For the Indian women's movement Ambedkar provided a powerful source of inspiration to formulate a feminist political agenda which simultaneously addresses the issues of class, caste and gender in the contemporary sociopolitical set up. As law minister he made constitutional reforms and provisions for gender equality. He collated the common Civil Code for Hindus and other sections of the Indian social order. He indicated that women should be given all round development more notably social education, their well-being and socio-cultural rights. He highlighted that Indian women of every section of the society should be given their due share and it is a duty to preserve and protect self-respect and reticence of women. He provided strong constitutional safeguards to women. Ambedkar tried an ample inclusion of women's rights in the political lexis and Constitution of India.

"Babasaheb wanted the highest quality of education for every child."

Manish Sisodia

- **Education and Health Services:**

As rightly quoted by the Delhi Minister Manish Sisodia, "Babasaheb wanted the highest quality of education for every child." Ambedkar is a greatest exemplar of the belief that education enables a man to overcome all obstacles in life, be they social, cultural or economic in nature. He holds the distinction of being the first Indian to pursue a doctoral degree in economics abroad. He was the first PhD in economics and the first double doctorate holder in economics in South Asia. He was also among the most highly educated Indians of his generation. However, Ambedkar experienced untouchability and discrimination since he was a child and He worked relentlessly to provide educational and health reservations to the marginalised classes of people.

"Men are mortal. So are ideas. An idea needs propagation as much as a plant needs watering. Otherwise both will wither and die."

Babasaheb Ambedkar

V. b) Narendra Modi's Provision to Ambedkar's Vision through Digital India

Ambedkar promoted advancement of thought. He was the only philosopher with a design to rebuild India into a modern urbanised, industrialised civilisation with surpluses [28]. Since independence, it has been thought that social and economic policy framework is the biggest propellor to foster Ambedkar's vision of India. With India advancing towards becoming digitally empowered, what could not be achieved in more than seven decades is now becoming possible due to the Digital India campaign of Narendra Modi. In 1950, the newly independent India officially abolished its caste system and outlawed discrimination against the Dalits who had been attached as the lowest sect of social hierarchy. But India's caste system buttressed by 3000 years of history has proved highly resilient to this change. Ambedkar sloganeered for abolishing the caste system. Even after seven decades of government interference, caste system continues to pervade every aspect of Indian life

with Dalits facing deep rooted socio-economic discrimination that impedes their advancement in better living standards.

Although it is arguable that the disparity in access to credit is tied to differences in income, assets or education, the evidence suggests otherwise. Dalits are even now subjected to humiliation and bullied in rural areas. Banks have discriminated systematically against lower castes. Loan applications from Dalits are discouraged, additional sureties are demanded and small loans are issued and high collaterals are required. Dalits have long been subjected to long waiting periods in queues in banks, pension offices, shops, railway stations, etc. The advent of cashless transactions, online bookings, pay n go contactless methods, online delivery of good, etc. the need to physically go and purchase has been nullified. Discrimination has always been at its peak in the delivery of government schemes. The political, religious, caste and economic disparities led to unequal disbursement of government money to people thus causing the poor-rich divide. People were discriminated and ripped off their benefits so inhumanely that it caused the poor to die of starvation and hunger. The biggest gain from the digital India movement is that the government monetary benefits are being directly credited into the accounts of the citizens. This has removed any scope for discrimination. Moreover the scope for corruption has been eliminated as now there is no scope to show partiality or undue favouritism at the panchayat level during disbursement of funds. Most corruption within cash flows happen during the sale and purchase of properties; this leads to a lot of unaccounted wealth generation; going digital has caused all services to be rendered in a free and fair manner with equal opportunity and accountability to all people to make their cashflows without any human intervention. Going cashless gives great accountability to every penny spent by every individual. This has drastically reduced the scope for the proliferation of unaccounted (black) money. Ambedkar advocated the need for stringent taxation measures. The digitalisation of all transactions, including salaries and purchases, allows the government to monitor the cash flows both at the national level and at the individual level and account each individual/company for the taxes they are due. For instance, India's gross revenue collection soared to a record high of Rs 27.07 lakh crore rupees in FY22, while the tax-to-GDP ratio jumped to an over two-decade high of 11.7 per cent.

All these digital initiatives have increased the buying capacity of people thus contributing to the overall economic development of India. The Make-In-India campaign with a digital face (online applications, approvals, transactions, taxations, etc.) has become a great success in that the poor and the downtrodden, especially those classes of people that have been subjected to immense discrimination, have gone to become job providers.

Digital India has reversed India's situation in the last septennial. The move is from discrimination to digitalisation. Seamless and cashless flow of money, firm and well monitored taxation system, transactions with less or no scope for corruption and discrimination — this is certainly what Ambedkar envisioned for India. Increasing the physical divide and reducing the digital divide is

"So long as you do not achieve social liberty, whatever freedom is provided by the law is of no avail to you."

Babasaheb Ambedkar

leading to reduction the socio-economic divide.

Ambedkar's social liberty and advancement is now being realised through digital education initiatives in India. The Narendra Modi's provision for creating a thriving digital education system in India, described in Section IV. B, fully complements Ambedkar's vision of the Indian educational system. The advancement of online learning, availability of text books and study resources has allowed people of all sects, boys and girls, including Dalits to access the highest quality education.

Dalit children were subjected to extreme discrimination in schools. Girls were not even sent to school. Poor students were not allowed high quality education due to the high fees involved. Today the Digital India Initiative helped these Dalits and girls and all citizens of India get access to all text books and study material and listen to high quality lectures from reputed professors who belong to the said upper classes. Digital education has interestingly caused the converse – that children from the so called upper classes now listen to lectures of professors belonging to the said lower classes. Digital education initiatives have eliminated the caste divide that was once the most prevalent form of social evil in India. The boundaries of time, location, caste, gender and income are abolished. This septennial has seen the rise of equal opportunities and liberty to all student community to learn and fulfil their goals. Hostel life marks a wonderful time for every student and leaves him with memories and friendships that stay for a lifetime. The Indian caste system is so rooted in so much that almost all universities including the Indian Institutes of Technology provide separate hostels for Dalits. This only imposes and fuels social divide among students. The digital revolution brought forth by Narendra Modi, especially the digital university, would totally eliminate such a divide. Being a great educationalist himself, Narendra Modi's digitalisation of education provides great scope to accomplish Ambedkar's vision for a quality educational system with equal opportunities to all students and liberty to students to direct their careers according to their choice.

People have been subjected to discrimination in medical deployment since ages in India. This discrimination is based on caste, gender and economic status. Dalits were not allowed into hospitals. Women were not treated. Remote villages did not have the availability of an on call doctor. Now almost every rural person in India has a smartphone and internet (there are about 1,04,259 gram panchayats that have WiFi Hotspots installed under BharatNet Project till January 2022 [24]) they can take online consultation. People can order medicines online which can be delivered to their houses in no time. This is the scenario that Ambedkar envisioned for India — a free and fair community with equal opportunities for health, education and economic empowerment — am Modi's Digital India campaign is fully complementing the vision. While there is more that needs to be done, especially in connecting villages to the internet and increasing digitalisation of services and improving security measures, the efforts of the government of India are laudable in realising Ambedkar's India.

VI. Author's Knowledge & Working Experience on Dr. Ambedkar's thoughts and works

This section presents Author's (Dr. Ambedkar Chair Professor, A.U.) adequate knowledge and working experience on Dr. Ambedkar's thoughts and works and his proven commitment to the cause of Social Justice. Being a technocrat, most of his contributions in the technology eventually serve the Social Cause at large.

• Digital Banking & Cashless Transactions:

When the Prime Minister of India, Shri. Narendra Modi announced the demonetisation of 500 and 1000 rupees notes in India, there was a lot of panic situation among the common men, specifically among formers, who runs their business transactions only through currency notes. Once the demonetisation was announced, people suddenly stopped the usage of currency notes and started using their credit / debit cards and other UPI services. The formers of the state were in confusing state and thought of losing their market due to the digital transactions, which they are not used to. The author of this article (Dr. Ambedkar Chair Professor, A.U.), being a strong advocate to the ideologies of Ambedkar, was strongly convinced on the collation of Narendra Modi's Digital India campaign with the formers. Being the principal of an engineering educational institute with over 2000 students, he and his students contributed by conducting awareness camps to rural people on the importance of digital transaction.



Figure 5: The author, giving awareness to farmers at a local farmer market in Visakhapatnam, along with 500 students who advocated the importance of digital transactions.

These types of awareness programs on digital transactions not only educated farmers on digital transactions but also erased unnecessary fears from the minds of farmers. Through the explanation of how simple it is to use Card swiping Machines and other UPIs towards digital money transactions, all the farmers were so much relieved. Now it can be witnessed everywhere how farmers and other common people are adapted to these digital transactions, even the street vendor carrying the QR Code of Google-Pay / Phone-Pay.

There are many advantages to digital transactions instead of cash transactions for farmers and vendors. It saves a lot of time in counting the currency notes. It also protects farmers from fraudulent currency notes. It is difficult for farmers to store those currency notes during the busy selling time and there is every possibility of theft and deception. Whereas with digital transactions, farmers will get the money credited directly to their bank account.

• Digital Education:

Quality Education is one of the UN's Sustainable Development Goals and also it is the dream of Babasaheb Ambedkar to provide quality education to all categories of students including the marginalised. This is possible only through Digital Education, which is the innovative use of digital tools and technologies during teaching and learning and is often referred to as Technology Enhanced Learning (TEL) or e-Learning. Exploring the use of digital technologies gives educators the opportunity to design engaging learning opportunities in the courses they teach, and these can take the form of blended or fully online courses and programmes.

Rich people can afford to go to quality educational institutions where quality teaching and human resources are available but not the same case with the poor and deprived people. Now with the available Digital platforms, any student (Rich or Poor) can access the online resources that are made freely available to use. For example, MOOCS (Massive Online Open Courses), where many video lectures are freely made available to access over the platforms like SWAYAM, NPTEL, etc.,

Dr. Ambedkar Chair Professor, A.U. is very well versed in these online courses and he holds the experience of being the Course Coordinator for about nine MOOCs courses. WISTM College is one of the first higher education institutions that shifted to digital learning mode when COVID Pandemic hit the nation badly. Dr. M James Stephen was appreciated for being one of the first in the State to have started the online mode of teaching in Engineering Colleges during the first

lockdown. His efforts in educating the staff and training them on how to conduct the online classes along with implementing Student-Centred Learning are applauded.

Most of the students who join his college are from humble and rural backgrounds. When Parents are concerned about their child's studies, this innovative method has truly brought confidence that the pandemic won't hinder the future of the students. This initiative has truly shaped the progress of this institute.

Tools Used towards online teaching:

Google Meet/Zoom to teach the class

Google Classroom for submissions, evaluation, course material, video lectures & Attendance

YouTube to upload videos and give live streaming while taking classes.

Google forms for overall feedback and consolidated report generation.

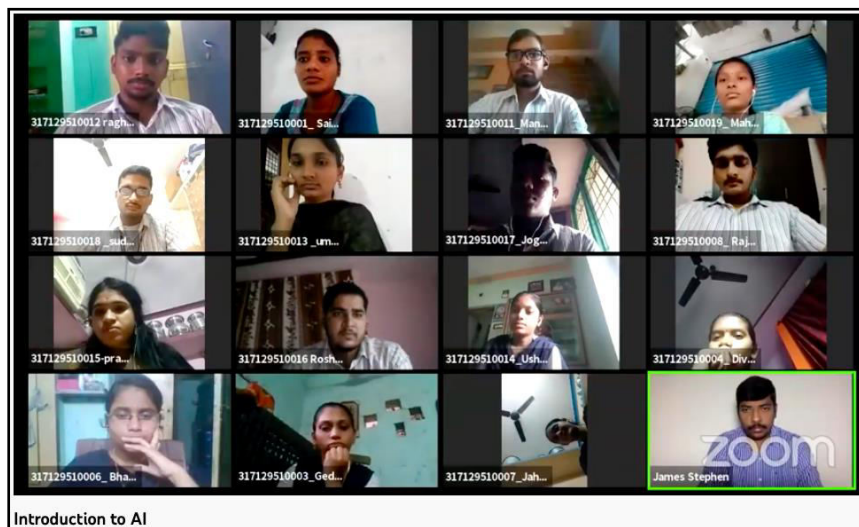


Figure 6: Author taking an online class to his students over Zoom with YouTube live streaming

Online learning offers many benefits for students, including the chance to study flexibly and from a location that suits. Ambedkar suffered discrimination at schools and colleges where he studied but there is no point of discrimination when it comes to Digital Education.

• Digital Health Services:

“Health is wealth”. Good health and well-being are also one of the UN’s Sustainable Development Goals, which aims to ensure healthy lives and promote well-being for all at all ages. Hospitals with good medical facilities and medical consultancies are available mostly in Urban areas, hence people who live at rural areas suffer quality health consultations. Villagers would not prefer travelling to cities for medical consultation when they are prone to some sicknesses, which might lead to chronic diseases. This is made possible with Digital Health Services. Many health applications are available on smartphones. Most of the villagers are also well-versed in the usage of smartphones, technocrats are coming up with more user-friendly applications.

Babasaheb Ambedkar envisioned the well-being of all sectors of people with good health. The author of this article (Dr. Ambedkar Chair Professor, A.U.) has adequate knowledge and working experience in realising Dr. Ambedkar’s thoughts and ideology through I.T. Solutions. His proven commitment towards reaching the unreached is appreciated with the Pride of India Award by the International Council of Social Reforms & Research on the occasion of the Birth Anniversary of Dr. Babasaheb Ambedkar on 14-04-2022. He owns 10 patents and 3 copyrights, and many of his works are in medical and health domains. To pick up one among many, during the recent pandemic time, he worked so relentlessly along with his research scholars to bring out a Novel Health Care Risk

Profiling Complications Learning Model for COVID-19. He and his scholar developed an application on “Risk Profiling under COVID-19”, which is very useful for any layman to have a self-examination on the possible risk of getting affected by COVID-19. This application is made openly available to all. Many are being benefited through this application, especially farmers and



people who live in rural areas.

Figure 7: ‘My Doctor App’ developed by the author for the benefit of rural communities

- **Digital Governance:**

A major component of the Digital India campaign is to deliver government services and other essential services digitally. It is easier to change the way of delivering services from physical to digital. Many services of the Government of India were digitised under the Digital India Campaign. All ministries would be linked under this scheme, and all departments will be able to reach out to the people with fundamental services like health care, banking, education, scholarships, gas cylinders, water and electricity bills, and judicial services.

Dr. Babasaheb Ambedkar dreamt of equal opportunities and services to all sects of people in society. But this dream had not been realised till the initiative of the Digital India Movement. Formers and Villagers struggled to roam around the government offices to get their simple work done. There was a lot of discrimination at government offices based on caste and other parameters like haves and have-nots. When many services of government were digitised, there is no point of such discrimination any more. For example, earlier formers used go around Mandal Revenue Office for their lands mutation and other transactions. Now Mee-Seva centers are widely available at every corner of the city and every part of the rural villages, where formers can go and get their work done in quick time without going around govt. offices. In rural areas villagers face many problems and it is very difficult them to reach the officers to express their grievance. Now online grievance services are made available. For example AP Government have come up with a wonderful online grievance platform called SPANDANA.

The major challenge is educating people in the rural area to utilise these digital services. The Author (Dr. Ambedkar Chair Professor, A.U.) has the working experience in educating rural population towards utilising government services on digital platforms. He serves as the coordinator of the “Unnat Bharat Abhiyan”, a flagship programme of the government of India and inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India. The Mission of Unnat Bharat Abhiyan is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. It also aims to create a virtuous cycle between society and an inclusive academic system by

providing knowledge and practices for emerging professions and to upgrade the capabilities of both the public and the private sectors in responding to the development needs of rural India. Five rural villages in Pendurthi Mandal (Pinagadi, Gorapalli, Kotlavani palem, Rampuram, Karakavani palem) had been adopted by WISTM College under the leadership of the author (Presently serving as Dr. Ambedkar Chair Professor, A.U.) to work towards transformative results in the lives of marginalised people [29]. Awareness programs on government services on digital platforms are conducted so frequently in these villages.



Figure 8: Dr. Ambedkar Chair, A.U. educating rural women about SPANDANA Grievance Redressal Platform

- Social Empowerment through I.T. Solutions:

Extraordinary opportunities emerge when people and technology connect. Connectivity and innovation in technology are transforming how organisations and governments operate and how services are delivered to people. The promulgation of smartphones has proved how information technology (IT) and electronics empower remote access to all services. This IT revolution along with the Internet of Things (IoT) technology has permeated into all applications of life. We are innovating in ways never before imagined possible. The advent of all these information technology services is a boon for mankind to be able to upgrade so as to reach 100% efficiency in all the tasks undertaken. The author (Dr. Ambedkar Chair Professor, A.U.) presented many innovative ideas and their practical implementation to key challenges in the fields on real estate, agriculture, farming, irrigation, healthcare, etc., which can be utilised on a large scale to make lives easy for a lot of people belonging to different cadres in the society. These ideas have received national recognition in prestigious Government organised competitions and some of them are already in use. The progress of technology is the progress of mankind and this article presented tangibly how technologies promote social advancement.

VII. Conclusion

This paper presented a collative perspective of how Narendra Modi's Digital India is realising the vision of Ambedkar for India. Ambedkar advocated against discrimination of all forms and called for a firm financial system with government monitoring and accountability. India's Digital India Initiative under the leadership of Prime Minister Narendra Modi is providing nearly all services electronically and seamlessly to all sections of people in India. Digital technologies which includes the concept of mobile applications and cashless transactions have emerged as the catalysts for economic growth and citizen empowerment in the last septennial. Under-currently, this initiative is slowly and steadily realising the Ambedkar vision. How this is being realised is presented in this paper with focus on cashless transactions, education, health and governance aspects and their impact in the last septennial. Author's adequate knowledge and practical working experience on Dr.

Ambedkar's ideology and his proven commitment to the cause of Social Justice are presented at the end.

Hence it may be concluded that Dr. Babasaheb Ambedkar's Ideology of Eradication of discrimination of all forms, Healthy economy with Equal opportunities, Women Safety and Gender equality, Quality education and Health services is realised through Digital India initiative and other advancements in Information Technology.

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