

## **DIGITAL ENTREPRENEURSHIP AND ITS EFFECT ON EMPLOYMENT OPPORTUNITIES AND LABOUR MARKET IN INDIA: A REVIEW**

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### **Abstract**

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**Keywords:**

*Development;*

*Digitization;*

*Employment;*

*Entrepreneurship;*

*Jobs*

For economic prosperity of the nation, Entrepreneurship act as a catalyst and with the pace of technological change, Digital revolution is transforming the way Entrepreneurs get work done which can give significant cost and quality benefits. It enables creation of new jobs, increases possibility of self-employment, higher productivity across the economy, leads to lower prices, higher income to higher standards of living. It also facilitates creation of new and better products and reduces physically demanding efforts. The purpose of the paper is to observe how Digital Entrepreneurship has more significant employment effects in emerging markets like India. The study attempts to find how Digital Entrepreneurship is creating revolution and how it will help in better way in creating Job opportunities in Indian Context. The paper also endeavors to highlight the barriers & challenges of Digital Entrepreneurship and the step taken by Indian Government to promote Digital Entrepreneurship and Job creations to break those barriers. The findings suggest that infrastructure and delivery platforms must be developed by huge investment in IT sector and Digital Literacy. The findings recommend that in order to acquire the benefits of Digital

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Entrepreneurship and to create new employment opportunities, it is mandatory to Stimulate Innovation, Encourage investment globally and to share expertise through digital literacy. The paper proposes that new policies need to be developed to address the adjustment costs that Digital Entrepreneurship will bring in the Indian Labor market. The study also opines that rapid technology driven transformation brings both challenges as well as opportunities and nations need to be modernized to respond to such challenges.

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## 1. Introduction

Digital technology has opened a plethora of avenues for entrepreneurs to reach out to its customers to innovate and to grow with the digital evolution, entrepreneurs should be aware of nuances of new technology and its emerging channels which offers manifold advantages. Entrepreneurs face lot of challenges like restricted budget, limited resources etc., hence, they need to get started as a Digital Bandwagon to reap its benefits. One of the most effective ways to diversify the economy is to strengthen the India's position in the fast growing market for Digital Technologies and services which can be done with the development of a Vibrant Digital Ecosystem and to build the digital ecosystem Information & Technology sector plays a vital role. In 2017, the Indian domestic Information Technology (IT) spending is estimated to grow at 12.9% and reach a size of 2, 14,012 crores and Digitization can be leveraged to build value by upgrading infrastructure and applications. Business transformation form legacy services to cloud based IT services will benefit the enterprises directly through improved performance and production over the long term. Entrepreneurs, startups, Small & Medium Enterprises (SMEs) etc. can get increasingly techsavvy through Internet and smartphones. This will bring Indian infrastructure comes to par with the global standards and global tech companies too will take more keen interest in quickly expanding Indian market as they have been reaping handsome dividends from their past investment. Digital outsourcing is seeing a growing demand; hence, Entrepreneurs can build and outsource digital marketing teams to cope with the fast paced demands of Digital world. Digital entrepreneurship can be encouraged in every sector whether it is manufacturing, retailing, services, health, education etc. The new technology trends can be adopted to grab the opportunities which were earlier seemed to be a threat by investing in Digital Transformation acceleration. Digital Evolution Index, developed by Fletcher school, Tufts University and MasterCard, is a comprehensive index, based on 170 different indicators, that ranks and tracks 60 countries globally which has developed their Digital economies. As per Digital Evolution Index, 2017, India is ranked at 53<sup>rd</sup> position, with Norway, Sweden and Switzerland to be the top 3 countries. An another Index, Global Entrepreneurship Index, compiled by US based The global Enterprise and development institute, was developed to measure the global entrepreneurship ecosystem of 138 countries across the countries, this index is based on 14 pillars including Digitization. In 2017, India's rank stood 69<sup>th</sup> position out of 138 countries. All such Indexes reveals that India still lag behind globally in context of

Entrepreneurship and digital adoption, hence, Indian IT infrastructure needs to be improved to strengthen India's position globally.

This study mainly focuses on how Digital Entrepreneurship significantly contributes to the employment opportunities in emerging markets like India where, large proportion of population is engaged in informal sectors.

### **Objectives of the study**

The study attempts to achieve the following Objectives:

1. To examine the Digital Entrepreneurship and Factors influencing it in the Indian context.
2. To find how Digital Entrepreneurship is helping in better way for Employment Opportunities in India.
3. To highlight the steps taken by Indian Government to promote Digital Entrepreneurship and Job Creations.
4. To highlight the Suggestions and Policy Implications of the study.

In order to achieve the objectives of the study, the paper is divided into following sections, **Section 1**.i.e the present section gives the insight of Digitization and Entrepreneurship, **Section 2** gives the Review of Existing Literature followed by **Section 3** entails the Digital Entrepreneurship Development in India and provides an Overview of how Digital Entrepreneurship impacts Job Creations or Employability in Indian context and highlights the various steps taken by Indian government for promoting Digital Entrepreneurship and Job Creations followed by Conclusions, Recommendations and Policy Implications which will be part of **Section 4** . References used in the study are mentioned in last Section.

### **2. Review of Literature**

Erik Brynjolfsson & Andrew McAfee [1] insisted that this new era of technology will alter the income and jobs of millions of workers and will enhance the skills and growth of the economy. It is an era of restructuring where we need to understand the phenomena and discuss its implications and strategies. The authors also suggested that technological revolution will bring a

radical change in the economy by creating new jobs but it may also create unemployment in less or medium skilled job sector which can be replaced by robots.

Hair.et.al. [6] recognized that there are three determinants of market orientation in Digital Entrepreneurship, i.e. Technological skills, tools to manage IT business environment and Knowledge and awareness of diverse market accessible to Digital enterprises.

El-Darwich & Singh [3] [4] observed that in US in 2011, digitization contributed to US\$193 billion boost to world economic production and created around 6 million new jobs. The researchers also highlighted that in same year nearly 38000 new jobs were generated in Middle East and North Africa due to digitization.

Roubini [10] has stated that breakthrough in robotics and automation will boost the productivity and efficiency which will impact the manufacturers in a positive manner. This wave of development will also be beneficial for software developers, researchers, skill developers and educators.

Chaudhuri .P & K.Abhishek [2] investigated the impact of digitization on economic growth and its potential for creating job opportunities. The researchers opined that digitization being a key economic driver, it's important to integrate economy by creating digital markets. The authors highlighted that developing economies has more possibilities than developed economy as they have more scope of increasing productivity and reducing inefficiency. Their study discussed the digital contribution and employment generation in different countries with the E-Commerce growth. The study concluded that developing countries like India have led to an attractive online customer base and unprecedented growth of E-commerce due to increasing internet penetration, rapid adoption of technology and increasing technical gadgets etc.

Gupta N. & Arora.k [5] studied the positive impact of digitization on Indian Economy in terms of growth and development of rural Indian sector. The study also pinpointed how 'Digital India' initiative of Indian government will lead to empowerment of rural enterprises in the country. The researcher concluded that digital initiatives will provide more employment prospects for Indian youth which will boost the nation's economy.

Aftab. M [8] highlighted that concept of digitization and its social, economic and ecological benefits. The study suggested that digitization will boost access of knowledge, improve the quality of life and reduces unemployment. The research concluded that emerging digital initiatives will impact the economy, society and academics in a positive way.

Nepelski. et.al. [9] assessed the European Union's Digital innovation and Entrepreneurship performance and suggested how policy makers can make digital innovation and entrepreneurship work better together in European Union. The study concluded that digital technology facilitates the modernization of firms and economies but it requires skills and capabilities from technical, managerial, financial, large funding and innovation friendly environment. The authors also concluded that Research and Development is prerequisite in this regard and also prioritize the deployment of digital infrastructure.

### **3. Results and Analysis**

#### **3.1 Digital Entrepreneurship in India**

Today, India has reached the stage of demographic transit where more than 60% of population is economically active (age group 15-59 years) known as Demographic Dividend. But, to tap the Demographic dividend, it is necessary to generate enough job opportunities to productively absorb this population. But, India faces lot of challenges in reaping this demographic dividend due to many economic and social reasons. The target of creating 500 million workforces by 2022 is one of the challenges which India need to achieve but 90% of Indian workforce is engaged in informal jobs. Hence, the policy focus should be to create decent jobs which can provide a reasonable standard of living to workforce. it has also been felt essential to promote self-employment or Entrepreneurship.

Entrepreneurship is not new to India, in fact, Swadeshi Movement in 1905, led to development of many industries. To promote Entrepreneurship, MSME (Micro, small and medium enterprises) Act, 2006, was enacted to facilitate the promotion and development of MSME enterprises. In light of Entrepreneurship, Small Help Groups (SHGs) can't be underestimated, these are homogenous voluntary formed groups of micro enterprises which save and contribute

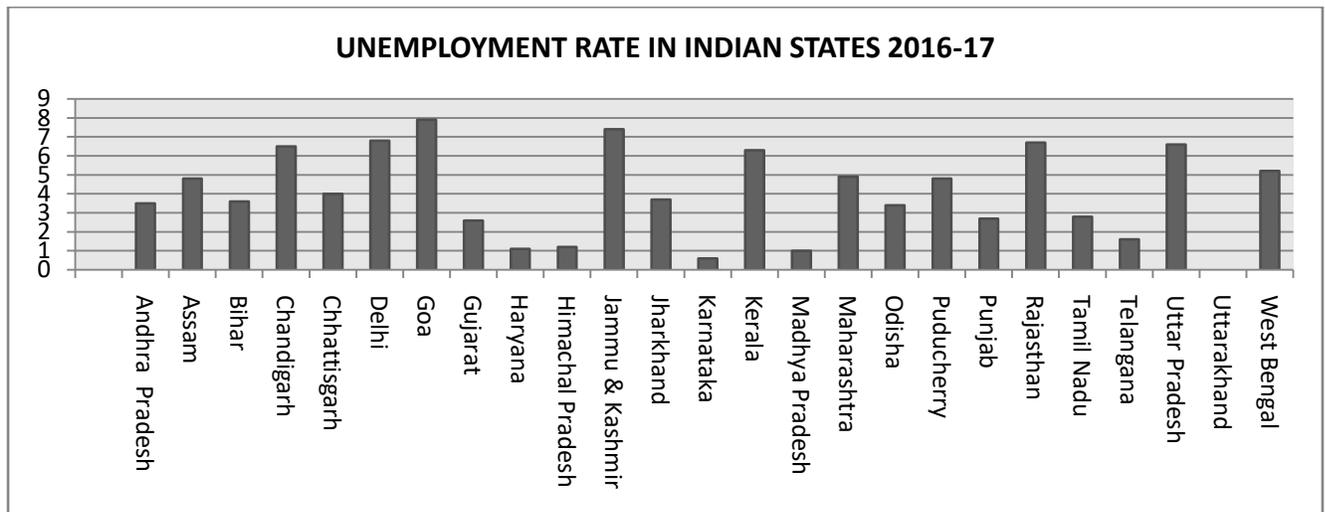
to a common fund and out of that fund, and the members are given the small loans of requisite amount to meet their credit needs on the basis of agreed rate of interest and terms and conditions. Indian government has also launched many policies and programs to promote Entrepreneurship like Atal Innovation Mission (AIM), Udhog Aadhaar (for ease of doing business) etc. Indian Government has also simplified the regulatory framework to provide platform and to promote Entrepreneurship. Digital technology has opened new avenues for enterprises which can provide lot of opportunities to the enterprises and generate employment opportunities for job seekers.

Digital technology have been the source of new form of Entrepreneurship known as Digital Entrepreneurship in which a firm is essentially founded on E-commerce and is based on exploiting network using Internet Technologies. The term “Digital Entrepreneurship” refers to the process of creating a new internet enabled or delivered business, product or service. It may include start-ups bringing new digital products or services or digital transformation of existing business activity. It is the practice of new venture opportunities through media and internet technologies. Hull. et.al. (2007) has categorized 3 types of Digital Entrepreneurships .i.e. Mild Digital Entrepreneurship, which complements to traditional settings; Moderate Digital Entrepreneurship, which significantly focuses on Digital products , digital delivery and other digital components of business, and Extreme Digital Entrepreneurship, which entirely ventures Digitally from production to distribution process. These entrepreneurs have different business models than traditional entrepreneurs. But these enterprises face certain barriers like Infrastructure i.e. access to affordable, reliable and high speed broadband infrastructure, a dynamic and competitive digital business environment like entry and exit barriers, access to finance, data and privacy and security regulations etc. Business entrepreneur need to possess technological awareness which will allow and help them to identify new technology that will transform their business model. Hence, it becomes crucial to encourage uptake and integration of ICT in business.

### **3.2 Digital Entrepreneurship and Job Creation in Indian context**

#### **3.2.1 Employment and Unemployment statistics in Indian Context**

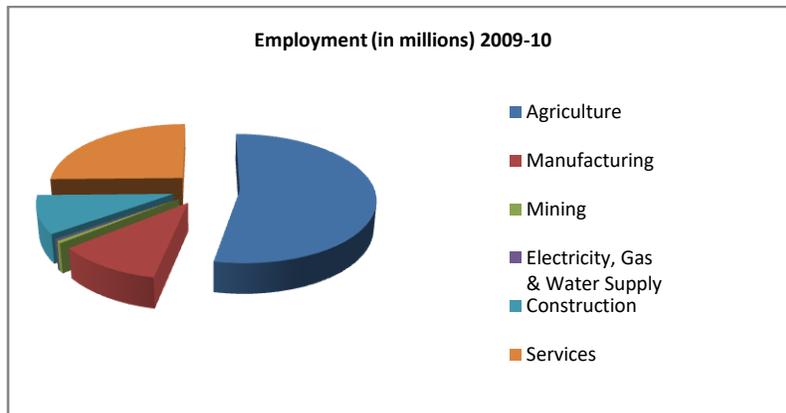
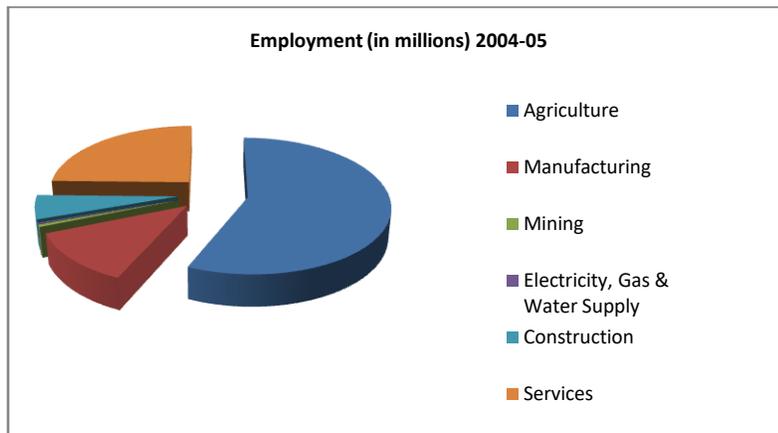
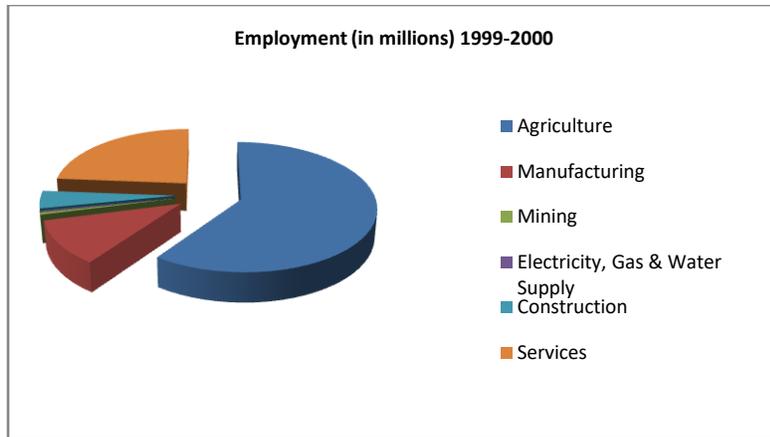
The present section gives an insight of Employment and unemployment Statistics of India State wise and year wise.(See Table 3.1, 3.2 and 3.3 )

**Table 3.1: Unemployment rate in India State wise (2016-17)****Table 3.2: Rural and Urban Unemployment rate in India**

MONTH	UNEMPLOYMENT RATE (%)		
	TOTAL	URBAN	RURAL
17-Aug	4.02	4.92	3.57
Jul-17	3.27	4.01	2.9
Jun-17	3.8	4.47	3.47
May-17	3.98	4.77	3.59
Apr-17	3.89	4.25	3.71
Mar-17	4.71	5.86	4.11
Feb-17	5.06	6.47	4.32
Jan-17	5.97	7.73	5.08
Dec-16	6.43	7.74	5.75
Nov-16	6.55	7.75	5.92
Oct-16	6.75	7.62	6.3
Sep-16	8.46	9.73	7.83

Source: <https://unemploymentinindia.cmie.com/>

**Table 3.3: Sector wise employment in India**



### 3.2 Digital entrepreneurship and Job Opportunities

Today, we are at the budding stage of fourth Industrial revolution which is complemented by Genetics, Digitization, Nanotechnology, Artificial intelligence etc. Hence, there has been tremendous change in the employment patterns across most sectors. Over the coming years, due to disruptive changes in business models, there will be profound impact on the employment landscape. Its future impact will be on the employment level, skill sets and recruitment patterns

in almost every sector. Digital transformation will enable business to connect and collaborate with freelancers and independent professionals through digital platforms which will promote and encourage “Digital Entrepreneurship”. Digitization will promote entrepreneurship by connecting talent with the opportunities.

Some researchers argue that technology and machines could kill millions of jobs and some proposed that it will just lead to job transformation rather than job loss. Critically, it is necessary to anticipate upcoming technological changes and tackle the skill mismatch in the labor market which will increase the ability to innovate and will bring Inclusive growth and will accelerate the economic growth.

### **3.3: Steps taken by Indian Government for promoting Digital Entrepreneurship and Digital Job Creations**

#### **3.3.1 Self-Employment and Talent Utilization (SETU)**

In 2015-16 general budget, Government of India announced the launch of SETU initiative which is a Techno-financial, Incubation and facilitation program. This program was started to support all start up business and other self-employment activities, mainly in tech-driven areas. Initially, Rs 1000 crores were allotted to this program in Niti Aayog.

#### **3.3.2 ATAL Innovation Mission (AIM)**

This program was initiated by the Government of India as an endeavor to promote innovation and Entrepreneurship to provide a platform for promotion of world class innovation hubs. Under this program, Atal Tinkering Laboratories have been established in schools across India to foster creativity and inculcate skills in Young minds. Under this scheme, young minds will learn the concept of SETU (Science, Technology, English and Math).another scheme of Atal Incubation centers (AIC) also comes under AIM umbrella. AIC scheme intends to support start up business by creating suitable physical infrastructure in terms of capital equipment and operating facilities.

#### **3.3.3 MUDRA bank**

Micro Units Development and refinancing Agency Bank (MUDRA Bank) is a public sector financial institution which provides low rates loan to micro finance institutions and Non-banking

Financial institutions and MSMEs. MUDRA Bank was set up under Pradhan Mantri Mudra Yojna Scheme.

### **3.3.4 Entrepreneurship development scheme**

It is a proposed scheme developed by Ministry of Skill development and Entrepreneurship to educate and equip potential enterprises across India. It will also support enterprises through E-hubs (Entrepreneurship hubs). This scheme will foster social entrepreneurship and will also promote women entrepreneurship and entrepreneurship among under presented groups.

### **3.3.5 National Skill Development Corporation (NSDC)**

It was set up under Public Private Partnership model based on various pillars to upgrade skills to international standards. This scheme operates through partnership with many stakeholders like private sector, Central government, State government, Universities, NGOs etc.

### **3.3.6 National Skill Development Agency (NSDA)**

NSDA is an autonomous body which is part of Ministry of skill development and Entrepreneurship. This body is engaged with Indian state governments to plan skill development action. It has set up suitable administrative mechanism through technical assistance program with Asian Development Bank (ADB), European Bank (EU) etc. This body also invites innovative ideas on skill development and tries to implement such ideas.

### **3.3.7 Ministry of Skill Development and Entrepreneurship (MSDE)**

MSDE was set up by Government of India in 2014 to coordinate the skill development across India. Its aim is to build new skill and innovative thinking for exiting jobs and also to create new jobs in the Indian market.

### **3.3.8 Make in India**

'Make in India' initiative was launched by India Prime Minister Narendra Modi on 25<sup>th</sup> Sep, 2014 to make India a global manufacturing hub to encourage companies to manufacture this product within the country. It targets 25 sectors including IT sector. This initiative seeks job creation, enhancement of skill development, protecting Intellectual property and to foster innovation.

#### **4. Conclusion**

Besides creation of employment opportunities in big industries, Digital Entrepreneurship will provide new opportunities to trade artisans, sellers, merchants, craftsmen by providing them online trading platform. It will give a noteworthy positive socio-economic impact. Digital entrepreneurship will help people build careers from a range of varied skills like Software developers, content writers, designers etc. and will provide an exciting and aggressive career path and diverse opportunities to job seekers which will give a paradigm shift in the aspirations of Indian Youth. The digital revolution will lead to rural upliftment and women empowerment by making them independent entrepreneurs which will empower them to perform both roles of homemaker and career women. The Digital initiatives will provide effective economical inclusion by generating jobs for 'Vulnerable groups' which includes people who are either unemployed or partially employed, it also includes people with disabilities. Thus, it will create an environment of inclusive and balanced growth. Digital technological enhancement will provide opportunities to businesses to tap new markets both in domestic as well as international markets, which were not yet fully explored because of complex trade structures and middlemen.

#### **Recommendations & Suggestions**

1. Generation and nurture of world class digital players which will create well-paid jobs and attract highly skilled IT professionals.
2. Development of Digital Workforce through Digital Skill development and by encouraging research and development capabilities.
3. Expansion in business education in technical universities to enable engineers to gain managerial skills which can be done through collaboration between Academia and Industry.
4. Providing a transparent regulatory framework for all players including a robust financial system for easy access to finance.
5. Digital Entrepreneurship is still in its emergent phase, further research is needed on the subject that how the digital technology can benefit the Indian Entrepreneurs in terms of Overall economic growth.

## Policy Implications

The study will be beneficial and useful for Entrepreneurs, researchers, practitioners and IT workforce to develop their working strategies and will also create awareness among them about digital culture which will create lot of Job opportunities for Youth in developing countries like India. It will encourage the existing workforce to enhance their skills, gain knowledge and will provide an exciting and aggressive Career path to them in the present era of Digitization.

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