

“A study on the Paradigm shift due to ICT implementation”

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Abstract—The primary aim of this research article is to analyse the positive and negative side of new technologies like ICT. In addition it discusses about the gender inequality due to the information and communication technology implementation in the developmental process. There is a wide gap presence between the developed nations and developing nations because of the ICT implementation in all the sectors. The new ICT technologies gives many opportunities for economical development but at the same time it widens the gaps between the poor and elite people in the current society. This research clearly shows the positive as well as negative changes of the current scenario. Furthermore it shows the needs of the current workforce. This research suggests the strong needs of ict skills. To face the fast changing information society workforce should be upgraded with the essential skills. his research article supports the positive changes in the industrial society. At the same time this research pinpoints the negative sides of ICT on digital divide, economical, and social dynamics in the current Indian society. Policy makers should concentrate the equality among the social divisions of the current information super highway society

Keywords—*ICT Information super highway Industrial society Gender inequality Social dynamics Policy*

1. Introduction

Information and Communication Technology is the extended technological term derived from IT, Information Technology. It denotes all the unified technology such as telecommunication, wireless technology, computers, audio visual systems, middleware software etc. The above technologies are used to store, transmit, and manipulate information. In short ICT includes the technologies such as telecommunication, digital media, audio-visual transmission, broadcasting technology, network technology, monitoring technology and controlling systems etc. These type of advanced technology revolutionalizes the industrial sectors as well as educational sectors.

IMPORTANT OF THE STUDY

- This digital era requires lot of new information technology tools to transmit, store, and distribute information in a very fast manner.
- Many developing countries tries to develop and implement new information technology tools to cater their own needs.
- The lack of infrastructure and internet facilities creates a wide gap in various sectors like education, industry, marketing, etc.
- The COVID pandemic situation creates lot of opportunities for the new way ICT tools to reach the unreached society.

SCOPE OF THE STUDY

- The general purpose of the study is to study the new ICT tools and its implementation in rural Indian scenario.
- This research focuses the infrastructure, economical feasibilities, and cultural dynamics in Indian condition.
- This review paper focuses on ICT and its impact on society
- It considers the recent developments as well as policies and its impacts.



Figure 1 ICT Tools

Figure one shows the ICT tools and it's developments during the last hundred years. The unified technologies denotes ICT.



Figure 2 ICT technology flow process

Figure two shows the information flow process in a linear way.

2. REVIEW OF LITERATURE

According to Satveer et al., (2017) the online and distance learning (ODL) needs more ICT tools and technology to cater the needs of the unreached society. Their research shows the revolution in educational sector because of the inclusion of new information and communication technology. It shows the fast changing online and distance mode of education in India. Satveer's research focuses the lack of facilities and other infrastructures in the educational sector. In addition, it identifies the requirements of skilled staffs, machines, and maintenance of devices, lack of support, training, and lack of time etc. Satveer has mentioned the economic challenges, cultural challenges and societal challenges present in the current Indian society.

The researcher Abhishek (2022) has discussed the goal of Indian economical development. Rural entrepreneurship is the key to overall development in India. It is possible to attain the overall development through new information and communication technology. This research mentions the focus areas such as processing, new policy and implementation of ICT technologies. In addition, it focuses the economical needs, and regulatory needs of the current society. Through digital tools it is possible to attain the rural entrepreneurship development in India. It is possible

to attain the 5\$ Trillion dollar economy through new ICT technology. ICT tools offers more opportunities for the young rural entrepreneurs.

Barnett’s research discussed the ICT tools’ usage and entrepreneurship in China. It took the mobile phone usage and internet usage time to understand the link between entrepreneurship acitivity and ICT usage. Their research showed the strong and positive impact of ICT tools and entrepreneurship in China. It found out the development of entrepreneurship among the chinese entrepreneurs. The overall growth was 2.1 percent in 2019.

Eryilmaz’s (2018) research discussed the new ICT entrepreneurship opportunities such as infopreneur, digital entrepreneurship and netpreneur. These areas are new to explore more employability in the information super highway. Infopreneur referred to the consultation services in the ICT industry.

3. Research Methodology

This research works uses the available resources regarding the implementation of ICT technologies in India. It considers the application of various ICT tools in education and industrial sectors of rural India. This review paper discusses the impact of ICT tools on three important area namely, education, society, and economies.

Review data

S.No	Sector	Projection of Growth	Current state
1	ICT Market	\$ 350 Billion	\$ 180
2	IT sector	GDP 9 %	GDP 7.7 %
3	Education sector	30 percent of Higher education	15 percent of Hihger education
4	Job sector	50 Lakhs new jobs 15.5 percent growth	44 % Women new employees

Negative impact of Digital divide

S.No	Sector	Infrastructure	ICT
1	Educational	Lack of buildings and machines	Lack of networks and facilities
2	IT sector	Need to improve the basic infrastructure	Need of latest technologies like 5G
3	Economic	Poor policies	Need to digitize departments
4	Job sector	Lack of skilled employees	Digital literacy rate is low

4. Findings

Findings of the Research:

- The above table shows the growth projection in ICT market of India. The current ICT market of India is \$ 180 Billion it will increase to \$ 350 million in 2025.
- Table shows the IT job opportunities during the period 2021 to 2022. It clearly shows the requirements and its growth. Approximately it requires 50 lakhs new employees. Also, it needs 18 lakhs women work force.
- The computer graphics shots are increased.
- The table shows the current growth of educational enrolment ratio (15 %). Also it shows the expected growth (30 %)
- The above table also shows the GDP growth in the Indian sectors.

5. Limitations

This research paper considered the four major areas such as job sector, educational sector, economic growth, and IT market. It did not consider the other major areas such as health, entertainment, defence, transportation, advertising, agriculture, and security.

6. Conclusion

This research shows the recent advancements and its requirements in various sectors such as education, job sector, economic growth, and IT market. There is a positive growth is expected in the above fields. Many reports supports the growth of those sectors. This research concludes that there is a vast gap present in the infrastructure development projects and its reachability in the rural areas of India. The overall development depends upon the proper plan and proper implementation of new technology in rural areas. This research clearly shows the digital divide among the rural people. Furthermore, this research shows the need of new policies to reach the unreached rural sectors of India.

7. REFERENCES

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