ABSTRACT

The empowerment of the role of women plays a crucial role in the overall development of any society and has a positive effect on the daily life of women. The winds of radical change in employment and information technology have opened up a multitude of opportunities for women in India and around the world. The primary aim of this study is to determine the use of digitization in rural and urban regions by women. Digitization, which is the focus of digital literacy, is the most important skill required to empower women. The advancement of mobile technology has brought the world to the fingertips and enabled women to catch up on everyday national and global news. Education not only enables rural women to digitize, but also helps them to strengthen themselves economically. To this end, it would be advantageous for women to use smartphones to learn how to use the Internet, conduct financial transactions online and become aware of global trends.

Keywords: empowerment, digitization, advancement

Introduction

Women have achieved a certain level of independence, with their dependence on others decreasing over the years. After the onset of globalization in 1990, technology was initially a male-dominated field, but as the participation of women has increased over the years, the use of technology among them has increased. Despite the promises of the digital revolution, rural women still do not have the same access to information and technology as urban women in India. Empowering rural women to provide them with access to environmental, social and medical needs, as well as education, would enable them to take full advantage of the Digital India program, which supports women in their economic development. Digitization aims to create a new way of empowering women to improve entrepreneurship.

Information Communication Technology

In a rapidly changing, technology-driven world, people's lives are enhanced by the internet and the gadgets they use to access it. Technological innovations have changed human life, led to far-reaching changes, influenced society and brought economic growth. The country's economy is making tremendous profits from its contributions to the digital revolution. Although the nation's digital literacy has increased, women still face a variety of difficulties in accessing technology and using the internet. The social status and literacy rate of women are key factors in determining how technological advances can help women rise. However, it cannot be denied that rural women are lagging behind in using technology and the internet.

One of the major problems with using technology is literacy, which is an obstacle to its efficient use. There are many loopholes in the projects organized for women, but there are some remarkable achievements among the few women who have reached great heights with the help of technology. As indicated by a Notermans (2019), "Pooja", a country lady, needed to exhibit her planning capacities, and she was assisted with doing as such by utilizing the web. Ladies with such good thoughts should be offered freedoms to dominate, which would make them models for other rustic ladies to improve their own computerized education levels. ICT essentially centers around engaging ladies using fundamental methods and conveys a lot of data, yet this data is regularly not viably utilized. This investigation mirrors the extensive hole in the advanced impetuses accessible for metropolitan and rustic ladies that outcomes in financial inconsistencies.

Women in the Digital Era

Phones could help them overcome the barriers they have faced over the decades. It is necessary to find the reasons for the inequality between rural and urban women in order to identify the institutions that need to be strengthened. In terms of internet usage, only 29% of women use the internet (Women, 2019). As long as this percentage does not increase,
India's goal of a digital economy or improved digital literacy cannot be achieved in the expected timeframe due to the lack of a significant strategy. In the current scenario, all women have either laptop or smart phones and 73% of women have internet banking in which 45.9% are private employees, 21.6% are home makers and rest are govt. or semi govt. employees. Each uses different mode for payment of their goods as shown in pie chart i.e. 37.8% uses cash, 35.1% uses digital payment method and rest are uses card.

They have different mode for digital payment like 18.8% have PhonePe, 25% have Google Pay, 15.6% have Paytm and Bhim app.

This all scenario shows the digital expansion all over the country. The expansion of the digital economy has opened up a multitude of new opportunities in the IT sector. In recent years, women's engagement in various institutions has increased tremendously, and the outsourcing of business activities has created new jobs in the IT industry, many of which have been secured by women. However, the study shows that women are deprived of various leadership and professional skills, leading to them being dominated by men and being forced into routine work. Nonetheless, new platforms are creating new job opportunities for Indian women and the shared economy enables them to bypass physical mobility barriers and reconcile work and domestic commitments. This economy creates employment opportunities without social discrimination. It can be used both to raise women and to balance the country's economy as a whole.

Research Methodology

Research Objectives
To see how provincial ladies use computerized and correspondence advancements in the Indian setting.

- To distinguish whether the utilization of computerized advancements among provincial ladies is identified with instruction, age, conjugal status and business status.

Research Hypothesis
This investigation was trial with the accompanying speculation

- H0: Women in India are curious about innovation and digitization in India.
- H1: Women in India know about innovation and digitization in India.
Sampling Methodology

Random data was collected based on usage of the technology in both rural and urban areas. Based on the criteria for the aspect of the analysis of the use of technology, five attributes such as online transactions (purchase bill, electricity bill), entertainment (cinema tickets), online communication, social networking and online service are considered. The questionnaire was collected and the data analyzed confirmed the facts given in various survey reports on the use of technology by rural women in India. Data was collected from a sample size of 200.

Sampling Details

The main focus is on women in India of all ages. The sample data was analyzed with the help of the R software using K-Means clustering to find out exactly in which areas the rural women are absent, and the result is presented in a graph. After performing the K-Means algorithm, the various attributes required by rural women were identified. K-means clustering can be divided into two groups, namely rural and urban. Each group is assigned the mean of the points in the group, known as the cluster centroid. The result is based on a clustering vector, a sum of squares and an available component are calculated in the cluster using the K-mean algorithm. The graph given below shows the different payment mode use by women having different professions i.e. BW(Business Women), GE(Government Employees), HM(Home Maker), PE(Private Employee), Stu(Students) during shopping and this graph shows a positive effect on digital transformation of Women during this COVID-19 pandemic.

![Different payment mode use by Women during Shopping](image)

Conclusion

In India, technology-oriented programs are carried out for the benefit of women, but the projects are unsuccessful due to a lack of equipment for the women. However, ICT policy is aimed at bringing greater benefits to women. More online and offline jobs must be made available to women in order to become economically stronger. It must be understood that exposure to technology in itself empowers women. This ensured that more technology related programs are needed and should be organized. Familiarity with computers and other technical devices not only makes women technologically literate, but also enables them to become economically stable. Digitization makes them economically stronger and more stable; it helps them become tech savvy individuals. It can also be strengthened by promoting the digitization of women. The advent of digital payment methods enables women to make efficient payments without being scammed by fraud. With the help of various analysis algorithms, a comparative study could be carried out in order to measure the success of such digitization initiatives on the basis of their performance. Digital literacy helps rural women to become digitally competent and also helps them to become economically independent.
References


