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An Empirical Analysis of Beneficiary Satisfaction with the Digital India Programme in Andhra Pradesh

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Abstract

The Digital India Programme, introduced by the Government of India in 2015, is a comprehensive initiative designed to bring about a transformation in the country towards a digitally empowered society through enhancing digital infrastructure, electronic governance and citizen-centric service delivery. Although there has been significant progress in the area of digital service expansion, they have not yet been implemented effectively, especially in rural areas, due to some accessibility, inclusiveness, digital literacy, and infrastructure constraints. The present study empirically assesses the beneficiary satisfaction and awareness, accessibility, usage pattern and challenges of Digital India Programme in Andhra Pradesh. Primary data were gathered from 400 respondents using a purposive sampling technique and a structured questionnaire. Descriptive statistics, Chi-square tests, ANOVA, and independent sample t-tests were employed for data analysis. It has been found that 73.5% of the respondents were aware of the programme or partially aware of the programme, Aadhaar (41.8%) and the UMANG App (30.3%) were the most popular digital services used. The dominant mode of access to digital services identified was smartphone (44%). Almost 73.5% agreed that Digital India has enhanced access to government services, 89.8% felt that it saved time and cost, and 86% felt empowered by digital services. Other major implementation challenges identified in the study were poor internet connectivity (31.5%) and lack of digital literacy (41.8%). The results of statistical analysis showed that there was a significant association between the variables of satisfaction and age ($p = 0.006$), education ($p < 0.001$), occupation ($p < 0.001$), income ($p < 0.001$), and location ($p < 0.001$), while gender did not show any significant association ($p = 0.228$). The study findings are that while Digital India Programme has made a positive contribution in improving the digital governance and empowering citizens, there is a need for targeted interventions with a focus on digital literacy, rural connectivity and inclusive digital access to ensure equitable socio-economic development.

Keywords: Digital India Programme, Beneficiary Satisfaction, Digital Governance, Digital Literacy, E-Governance, Digital Inclusion, Rural Connectivity.

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Introduction

Launched by the Government of India in July 2015, the Digital India programme is a bold and transformative program to change the face of the country's digital infrastructure and empower its citizens through technology. The Digital India initiative is envisioned as a flagship programme under the Ministry of Electronics and Information Technology with an aim to build a knowledge economy and digitally empowered society with a vision of ensuring various government services to all citizens electronically, particularly in rural and remote areas (Sinha, 2021; Santhosh Kumar & Aithal, 2024). The programme aims to narrow the digital divide, improve governance transparency and inclusive growth on three pillars: digital infrastructure as a service of all citizens, governance and services on demand, and digital empowerment of citizens (Sharma et al., 2025; Singh & Bhardwaj, 2025).

The article discusses in detail the goals, components, implementation processes and results of the Digital India initiative. It discusses its major initiatives under it, including BharatNet, DigiLocker, e-Hospital, UMANG and digital literacy campaigns like PMGDISHA (Mukherjee et al., 2019; Getaneh et al., 2023). The article also considers problems of implementation, including digital illiteracy, rural connectivity problems, cybersecurity threats, and infrastructural problems (Awasthi et al., 2024; Alrefaee et al., 2025). Furthermore, it assesses the socio-economic effects on the programme in the following sectors: education, health, commerce and public administration (Easwaran, 2022).

This article seeks to present an overview of the progress made and the policy challenges and concerns that remain in the implementation of Digital India and what it means for the future of governance, service delivery and citizen engagement in India. In the continuing pursuit of a digital nation, such analysis is essential to making sure that technology is a force for empowerment for everyone in society (Gelb et al., 2018).

There are nine pillars of the digital India campaign and they are: Broadband highways (Establishing robust digital infrastructure), Universal access to mobile connectivity, Public Internet Access Programme (Providing internet access in public spaces), E-governance (Utilizing technology for efficient and transparent governance), E-Kranti (Delivering government services electronically), Information for all (Ensuring easy access to information for citizens), Electronic manufacturing (Target net zero imports: Promoting domestic electronics manufacturing to reduce reliance on imports). IT for Jobs (Creating employment opportunities in the IT sector), Early harvest program (Implementing quick-win projects to demonstrate the benefits of Digital India).

To achieve the required objectives of the Digital India campaign, the Government has marked three vision areas, and they are Every citizen should utilize the digital infrastructure, Proper utilization of public services, and Every resident should be digitally empowered (Bakshi & Watts, 2019).

The present study adds to the body of literature about the Digital India Programme by offering an empirical assessment of the satisfaction levels of beneficiaries from different socio-economic groups in the state of Andhra Pradesh. This study is different from the previous studies, which were mostly concerned with infrastructure development, policy implementation, or technological innovations. Instead of this study, the programme has been analysed from the beneficiaries' point of view by considering all the factors such as awareness, accessibility, service usage, satisfaction level, empowerment and implementation challenges all together. Additionally, the study includes statistical analysis such as Chi-square tests, ANOVA, and t-tests to analyze the influence of various demographic and socio-economic factors on the satisfaction with digital services. The research also explores the major challenges in digital literacy, rural connectivity, and the inclusivity and how these issues can be tackled to maximize the effect and reach of digital India programs.

Objectives of the Study

1. To study and understand the Digital India Programme: objectives and nine pillars of Digital India Programme.
2. To identify the problems that occurred in the implementation of the Digital India Programme across the country.
3. To evaluate the effectiveness of Digital India initiatives with respect to digital infrastructure, public service delivery, and citizen engagement.
4. To measure the beneficiary satisfaction levels with respect to the Digital India Programme.
5. To provide policy suggestions for enhancing the effectiveness and inclusivity of Digital India initiatives in the future.

Research Questions for the Study

1. What is the status of implementation of the Digital India Programme?
2. What are the problems that occurred in the implementation of the Digital India Programme?
3. How satisfied are the beneficiaries of the Digital India Programme in Andhra Pradesh?

Hypotheses

- Ho1: Implementation of the Digital India Programme is not effective
- Ha1: The Digital India Programme implementation is effective.
- Ho2: There is no significant difference in the perceived effectiveness of Digital India services between rural and urban populations in Andhra Pradesh.
- Ha2: There is a significant difference in the perceived effectiveness of Digital India services between rural and urban populations in Andhra Pradesh.
- Ho3: The Digital India programme has not led to a statistically significant improvement in public service delivery in Andhra Pradesh
- Ha3: The Digital India programme has led to a statistically significant improvement in public service delivery in Andhra Pradesh.

This paper is divided into six main sections. Section II, digital governance, digital inclusion, and e-governance in the literature, summarizes the relevant literature on digital governance, digital inclusion, and e-governance initiatives. Section III describes the research methodology, such as sampling design, data collection methods, and the statistical tools employed in the analysis of the data. Data analysis and interpretation of findings by descriptive and inferential statistics are discussed in Section IV. Finally, Section V contains the conclusions, policy implications, and future research directions.

Literature Review

With its focus on governance, service delivery and socio-economic development, the digital transformation initiatives like Digital India Programme have been extensively researched in recent years. The earlier study outlines the vision of Digital India, stressing the development of Digital Infrastructure and enhancing the efficiency of e-governance in India (Sinha, 2021). It also highlighted the enhancement of public service delivery systems in India through digital transformation while highlighting the implementation challenges, especially in rural areas (Awasthi et al., 2024). Another study suggests that digital transformation is a key driver of sustainable development in terms of accessibility, transparency, and citizens' participation in governance systems (Saini & Kharb, 2025).

Digital inclusion and citizens' experience have been the subject of several studies. This paper also emphasizes the importance of the experience of the beneficiaries in assessing digital governance reforms, especially in the rural areas of India (Gelb et al., 2018). This work builds on this discussion and demonstrates that the use of digital government among rural women is affected by usability, trust, and assistance systems (Soni & Mitchell, 2022). This study proposed a digital service usage satisfaction model and concluded that digital platforms' satisfaction greatly depends on user experience and perceived service quality (Kar, 2021).

Digital literacy has also been noted as an important factor in studies, as has socio-economic status. It has been established that digital literacy training has a substantial positive effect on in-service participation and perceived value of the training for unemployed women in India (Mukherjee et al., 2019). In the previous study, the importance of digital education and digital skill development in the higher education context on the adoption of digital services was highlighted (Kaushik & Kaushik, 2024). Likewise, another study found that use of digital skill training has the potential to create greater empowerment of marginalized groups and improve service uptake (Mukherjee et al., 2024).

Digital transformation is also reinforced by sector-specific studies. It was found that digital services greatly benefit the farmers in India, especially in rural areas, in terms of farm income (Sharma et al., 2025). This paper emphasizes the importance of digital technologies to enhance access to health insurance for poor people (Nayak et al., 2019). In this research, the opportunities and challenges have been identified in the field of digital payment systems, specifically in terms of adoption and trust issues (Sunil & Nalwaya, 2023).

These are corroborated by international and comparative studies. In rural settings, it is reported that the availability of good infrastructure and good accessibility have a significant effect on user satisfaction in the presence of digital service

delivery (Khadiza & Ullah, 2020). In this paper, it is anticipated that, if digital identity systems are not designed properly, they can have undesired exclusionary impacts (Masiero & Arvidsson, 2021).

The studies reviewed generally indicate that digital governance programs contribute to socio-economic impacts, inclusion and service delivery. However, there are problems such as digital illiteracy, infrastructure problems, lack of trust and unequal access to the obstacles to their effectiveness. Existing studies tend to be either infrastructure-related or sector-specific, and do not provide a detailed empirical assessment of beneficiaries' satisfaction among socio-economic groups. This gap necessitates the current study in which the awareness, accessibility, usage, satisfaction and demographic factors of the outcomes of the Digital India Programme has been assessed.

Research Gap

Though there has been considerable research on the Digital India Programme, the majority of the studies, which have focused on specific sectors like education, agriculture or financial inclusion, have been limited to policy design, digital infrastructure development, or the impact of digitalisation on specific sectors. There has been relatively little research on the overall evaluation of the satisfaction of the beneficiaries by various socio-economic segments. Additionally, most previous research does not combine various aspects like awareness, accessibility, usage patterns, perceived benefits, and difficulties in one framework. The other limitation is that there has been no statistical analysis of the impact of demographic variables on satisfaction levels. This study fills these gaps by making an empirical multi-dimensional evaluation of the outcomes of Digital India, based on the survey data and statistical testing.

Research Methodology

Research questions and hypotheses can be developed by clearly stating the purpose and scope of the investigation, through the use of the main goals of the study and the methods used to carry out the investigation. It also provides a guideline for research process. This also outlines the research design, data gathering procedures, sampling techniques and analysis tools utilized to ensure that the evaluation was systematic, fair, and that the results would be repeatable, valid, and reliable. Research methodology of this study is both quantitative and qualitative methods are both used to collect reliable and valid data. Primary data was gathered by giving structured questionnaires to a representative sample of 400 respondents across urban and rural areas, beneficiaries, service users and those involved in Digital India initiatives. Secondary data was collected from the government documents, policies and literature reviews. The study adopted a qualitative approach, using statistical analysis, which included chi-square tests, t-tests, and ANOVA for hypothesis testing and interpretation of the qualitative responses through thematic analysis. This methodological approach ensures a comprehensive assessment of the programme's reach, inclusivity, and effectiveness in fostering digital empowerment and governance in India.

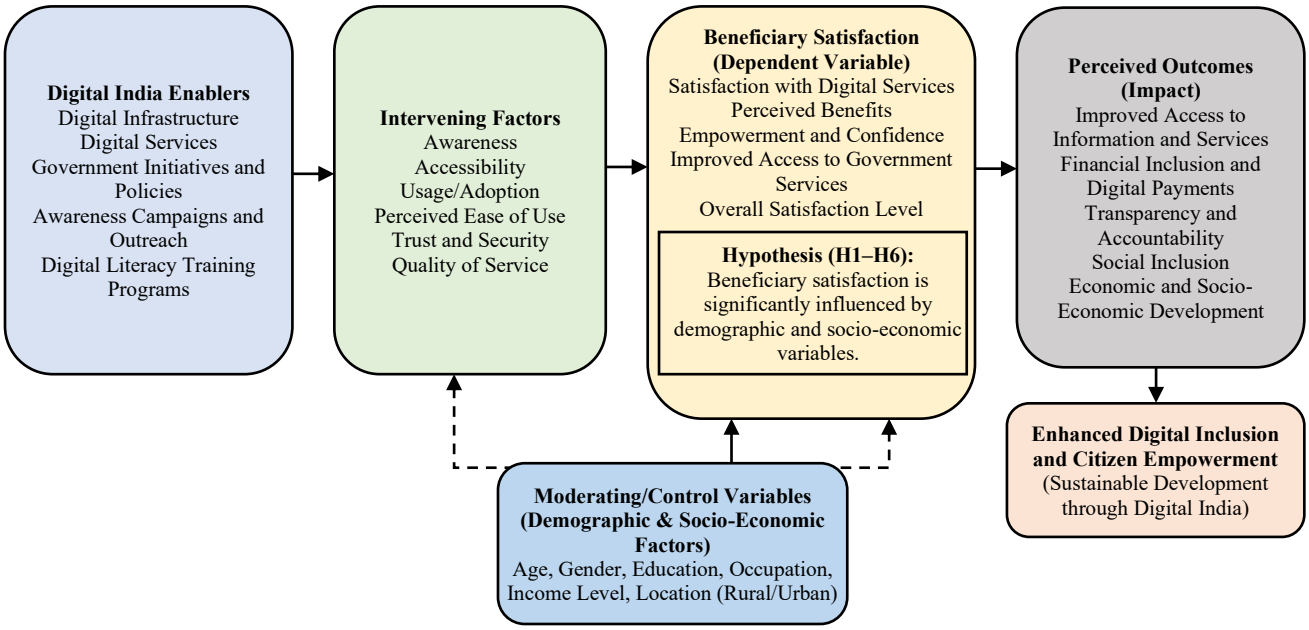


Fig. 1: Conceptual Framework for Evaluating Beneficiary Satisfaction in the Digital India Programme

Research Design: Descriptive research design is employed as it is concerned with determining the frequency with which something occurs or the relationship among variables. A descriptive study is relevant for the present study because the objectives have been set and research questions raised properly and the related hypotheses have been formulated.

The conceptual model depicted in fig. 1 is taken for the understanding of factors that affects beneficiary satisfaction towards Digital India Programme. It highlights some important elements such as enablers (digital), intervening variables (e.g. digital literacy, infrastructure), perceived outcomes (e.g. access to services, empowerment) and moderating variables (e.g. socio-economic status, geographical location). The framework shows how these factors are interrelated and how they are all linked to the overall satisfaction and digital inclusion. The model provides a holistic perspective for analysing the effectivity of the Digital governance initiatives in India.

Data Sources: Primary data and secondary data were taken. Secondary data was gathered from official government publications, policy documents, progress reports on Digital India, academic research papers, credible on-line database and other books, journals, magazines and theses. The primary data were collected by using personal interview and online interview using structured questionnaire. Questionnaires were given to 400 beneficiaries from both urban and rural areas.

Data Collection Method: The present study has been conducted through survey research method to collect the data in a systematic manner from a wide section of the respondents. The survey method is suitable for evaluative studies as it helps in gathering the quantitative data about awareness, accessibility, usage pattern, satisfaction and perception of people towards different Digital India initiatives.

Research Instrument: The study An Evaluative Study of Digital India Programme adopted the method of structured questionnaire as the main instrument for gathering the pertinent data from the respondents. It was pre-tested with 20 respondents for clarity and reliability before it was finalized. The data collection tool employed to get information from the respondents was the structured questionnaire. There were two parts to the questionnaire. The first part consisted of questions about demographic characteristics including age, gender, education, occupation, income and area of residence. The second part had questions about awareness, accessibility, usage frequency, satisfaction, effectiveness perception, challenges faced, and empowerment from Digital India services. A total of 25 items, multiple choice and opinion, were included in the questionnaire. A 5-point Likert scale from "Strongly Agree" to "Strongly Disagree" was used to assess their perception and satisfaction with digital services. Also, where appropriate, frequency-based and categorical response formats were used. To make sure the questionnaire was clear, consistent and relevant, it was pre-tested with 20 respondents before final administration. Changes were made as a result of feedback from the pilot study. The questionnaire was pre-tested to ensure reliability and validity by clarifying and consistency.

Sampling Plan: The purposive sampling method was used to collect views from different types of respondents representing various geographical and socio-economic groups. The study used a purposive sampling technique to get responses from individuals who knew about or experienced Digital India services. The sampling frame covered beneficiaries and users of Digital India program in both rural and urban areas of AP including students, workers, farmers, small business owners, daily wage workers etc. The respondents were selected on certain parameters such as awareness about the Digital India services, using at least one Digital Government Service, willingness to take part in the survey. In a bid to capture different perspectives of the community regarding accessibility, usage and satisfaction with the Digital India initiatives, an attempt was made to have the respondents from different socio-economic, educational, occupational, income and geographical backgrounds.

Sample Size Determination for a Population of Greater than 10,000

For population >10,000

Sample size formula (equation 1) is,

$$N \frac{Z^2 \cdot P \cdot Q}{d^2} \quad (1)$$

Where N = desired sample size when the population size is greater than 10,000.

Z = standard normal deviate; usually set at 1.96, which is 95% confidence level

P = proportion in the target population estimated to have characteristics. If there is no reasonable estimate, use 50% proportion in the target population not having the characteristics (equation 2).

$$Q = (1 - P) \quad (2)$$

The values of various variables in the formula are:

Z =1.96, P =50%; $Q = (1 - P)$ =50%; d = 0.05

So, $N = (1.96)^2$. (0.5*0.5)/$(0.05)^2$ = 384.16=> 385 or say 400.

Contact method: A combination of personal interviews and online survey methods was employed to collect primary data effectively from a diverse set of respondents.

Data Analysis and Interpretation

The data collected were processed and analyzed systematically and inferentially and to evaluate the effectiveness of the Digital India Programme and the satisfaction of the beneficiaries, descriptive statistical methods were used. The summary of demographic characteristics, level of awareness, usage pattern and challenges faced by the respondents were obtained through descriptive statistics such as frequency and percentage analysis. The Chi-square test, ANOVA, and independent sample t-test were used as inferential statistical tools to explore the association between socio-demographic variables and overall satisfaction with digital services. The major findings that are relevant to the objectives of the study are highlighted in the analysis.

Demographic Profile of Respondents

Based on the demographic data of 400 respondents, most of the respondents were aged below 40 years (75.5%), and the male respondents accounted 62.3% of the respondents. The respondents were relatively highly educated, with 44.3% having undergraduate or higher degrees. The largest occupational groups were students (29%), daily wage workers (25.8%), and small business owners (22.3%). The rural respondents made up 55% of the sample, the urban respondents 45% of the sample. The analysis of income showed that the majority of the respondents were in the lower and middle income groups, with 58% earning less than ₹30,000 per month.

Awareness & Usage of Digital India Services

The results show a high awareness of the Digital India Programme with majority of the respondents being aware at both full and some level. The Internet proved to be the leading source of awareness, ahead of newspapers and friends/relatives, while government campaigns made relatively little impact on public awareness.

Aadhaar and the UMANG App were the most commonly used digital services, reflecting a high order of adoption of identity-based and e-governance services. The smartphones were found to be the key access device, followed by Common Service Centers (CSCs), which indicates the role of mobile technology and public infrastructure for services.

Table 1: Awareness and Usage of Digital India Services

Variable	Major Findings	Percentage
Awareness Level	Fully aware / Somewhat aware	73.5%
Main Source of Awareness	Internet	27.8%
Most Used Service	Aadhaar	41.8%
Second Most Used Service	UMANG App	30.3%
Major Access Device	Smartphone	44.0%
Use of Public CSCs	Respondents using CSCs	30.8%

The findings (Table 1) indicate that penetration of digital services has reached considerable levels in the Digital India Programme, especially those based on mobile services. However, less dependence on government campaigns suggests increased institutional outreach and awareness programmes.

Perceived Benefits and Challenges of the Digital India Programme

The majority of the respondents had a positive perception of the effectiveness of Digital India services. The vast majority of the respondents expressed their satisfaction with the accessibility to the government's services, cost savings, and citizen empowerment that were enhanced by the use of digital services. Access to documents and digital banking/UPI service saw significant improvement. But there was comparatively less improvement in online education and e-healthcare services.

With all these positive results, a number of obstacles remain in the way of the use of digital services. Lack of digital literacy and poor internet connectivity emerged as the major barriers, followed by language barriers, technical issues, and lack of trust in online services.

Table 2: Perceived Benefits and Challenges of the Digital India Programme

Variable	Major Findings	Percentage
Improved Accessibility to Government Services	Agree / Strongly Agree	73.0%
Saving of Time and Money	Agree / Strongly Agree	89.8%
Feeling of Empowerment	Agree / Strongly Agree	86.0%
Major Improvement Area	Access to documents	48.0%
Second Improvement Area	Digital banking/UPI	43.8%
Major Challenge	Lack of digital literacy	41.8%
Second Major Challenge	Poor internet connectivity	31.5%
Need for More Digital Literacy Training	Increase considerably/moderately	71.5%

The results certainly highlight that, the Digital India Programme has brought convenience and digital empowerment but the lack of infrastructure and digital literacy is still a major challenge in the path of inclusive digital transformation are shown in table 2.

Chi-Square Analysis of Overall Satisfaction Levels

The association of the socio-demographic variables and overall satisfaction with Digital India services was analyzed using Chi-square analysis. Age, education, occupation, income, and location were factors found to be significantly associated with satisfaction. Gender was not significantly associated with satisfaction levels, however.

Table 3: Summary of Chi-Square Test Results

Variable	Chi-Square Value	p-value	Result
Gender vs Satisfaction	—	0.228	Not Significant
Age vs Satisfaction	18.274	0.006	Significant
Education vs Satisfaction	42.600	<0.001	Significant
Occupation vs Satisfaction	49.232	<0.001	Significant
Location vs Satisfaction	21.241	<0.001	Significant
Income vs Satisfaction	29.614	<0.001	Significant

The findings reveal that Socio-economic and demographic factors significantly affect the satisfaction of the beneficiaries with the Digital India service, as shown in table 3. Education, employment, and income proved to be significant factors in determining digital service satisfaction, as well as the place of residence.

Analysis of Satisfaction Levels Using ANOVA and t-test

One-way ANOVA (Table 4) was used to determine if there were differences in the mean satisfaction scores between the different demographic groups. The results demonstrated statistically significant differences between education and occupation groups, but not between the age or income groups at the 5% significance level. No significant difference of gender with respect to satisfaction was observed using an independent sample t-test, but an urban-rural difference was observed.

Table 4: Summary of ANOVA and t-test Results

Variable	Statistical Test	p-value	Result
Age Groups	ANOVA	0.052	Not Significant
Education Groups	ANOVA	0.001	Significant
Occupation Groups	ANOVA	<0.001	Significant
Income Groups	ANOVA	0.052	Not Significant
Gender Difference	Independent t-test	0.108	Not Significant
Urban vs Rural Difference	Independent t-test	0.001	Significant

The findings indicate that satisfaction among the respondents with Digital India services is influenced to a large extent by their education, occupation, and geographical location. The large urban-rural disparities also suggest that there are differences in the level of digital accessibility, awareness, and service utilization patterns between urban and rural areas.

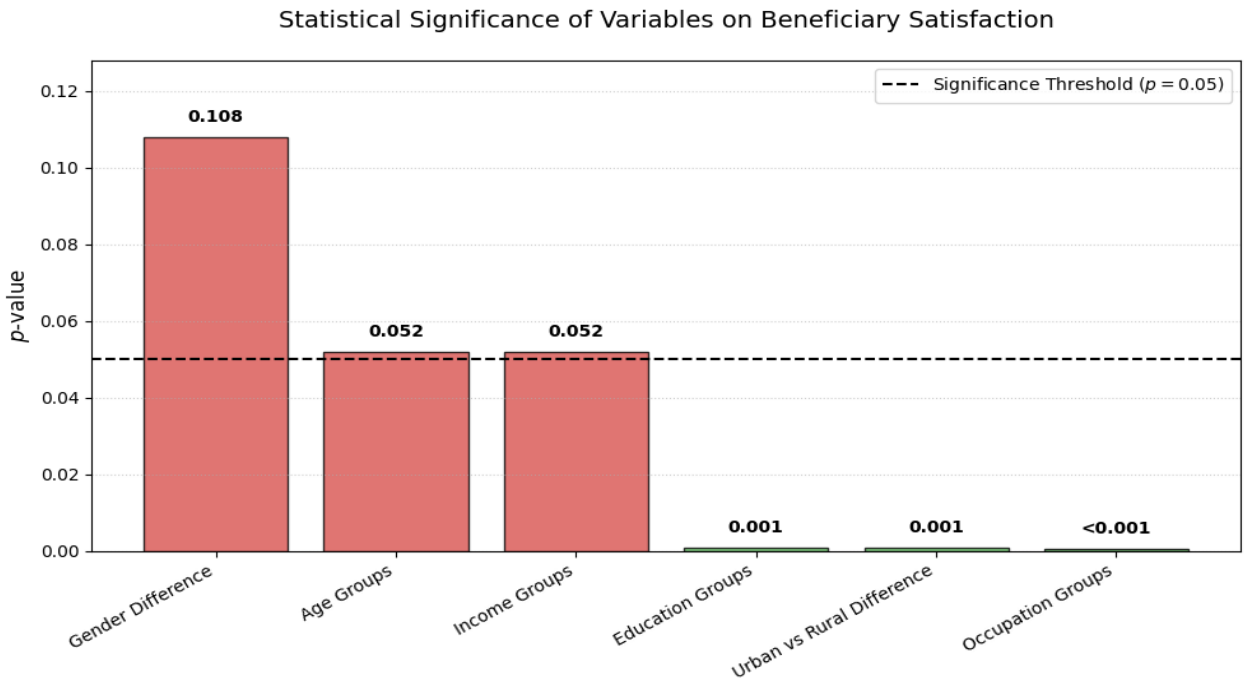


Fig. 2: Statistical Significance of Demographic Variables on Beneficiary Satisfaction

Fig. 2 presents the p-values of the various demographic variables (gender, age, income, education, occupation, and location) and their statistical significance with respect to the satisfaction level of beneficiaries towards the Digital India Programme. Significant association with the significance threshold is set at $\boldsymbol{p} = 0.05$; variables like age, income, education, location, and occupation have a significant association ($\boldsymbol{p} < 0.05$) while gender does not ($\boldsymbol{p} = 0.108$). The graph offers insights into which Socio-economic factors most strongly influence the satisfaction level.

Summary of the Findings

The study examined the feedback received from 400 beneficiaries to understand their awareness, accessibility, use, and satisfaction with the Digital India Programme. The results showed that most of the respondents were below 40 years of age, and the rural respondents were more than the urban respondents. Many respondents held a degree or higher, and the majority were from lower and middle-income groups.

There was a fair level of awareness about the Digital India Programme with majority of respondents being aware of it all the time or to some extent. The key to awareness was the Internet, and the reach of government campaigns was relatively small. The most common digital services used were Aadhaar and UMANG App, while the most popular access method was smartphone.

There were positive perceptions of the programme's impact found in the study. It has helped people access government services, improve time & money efficiency, and make them feel empowered via digital services, around 73%, 89.8% & 86% of the respondents, respectively, felt Digital India did so. Major improvements were observed in access to documents and digital banking services.

But the most salient issues regarding the effective use of digital services continued to be a lack of digital literacy and poor Internet connectivity. Findings of statistical analysis showed that age, education, occupation, income, and location were statistically significant factors affecting levels of satisfaction, while gender was not.

Suggestions

The results of the study suggest the need to enhance the digital literacy programs for effective use of the Digital India services, especially for the rural, women, and age-minority groups and the economically weaker sections. The training programmes should be organized in structured way through school, community centre, Common Service Centre (CSC) or local institutions, with simplified and vernacular-language learning modules. The government should also further strengthen the digital infrastructure by improving the internet connectivity in rural and semi-urban areas with

accelerated BharatNet and 5G implementation. Authentic and easy-to-use digital platforms are crucial in minimizing technical mistakes and enhancing service efficiency.

However, more needs to be done to raise awareness about digital services using more creative methods, including TV, radio, social media, and grassroots-level institutions. For inclusive socio-economic development, the scope of Digital India initiatives needs to be widened to other fields like online education, telemedicine, agriculture, and support for small businesses. Furthermore, mechanisms for security, privacy protection, and grievance redressal must be strengthened to boost the trust of the public in online services. Private sector involvement in digital infrastructure development and literacy programmes should be promoted and digital policies emphasized that they are inclusive and accommodate the needs of daily workers, small farmers and low-income households.

Conclusion

This study analyzed the effectiveness, accessibility and satisfaction of beneficiaries with the Digital India Programme in the State of Andhra Pradesh. The outcomes show that the programme has made a meaningful contribution to the development of digital governance, increased access to public services and increased citizen empowerment. The study showed that the awareness on the programme is relatively high with 73.5% of the respondents being fully or somewhat aware of the Digital India programme. The most popular services were Aadhaar (41.8%) and UMANG App (30.3%), and the most preferred medium for accessing digital platforms was smartphones (44%). The analysis also showed positive perceptions by the public about the effects of digital services. 73% of the respondents agreed that Digital India has helped in enhancing the access to government services and 89.8% agreed that the digital services have saved time and money. Further, 86% of the respondents stated that their use of digital services gave them a feeling of empowerment. Enhancements were primarily seen in the access to documents, and digital banking/UPI services, showing an increasing acceptance of digital governance and financial inclusion initiatives. However, the study found that there are significant barriers to inclusive digital participation, including low digital literacy (41.8%) and weak Internet connectivity (31.5%). The statistical analysis gave valuable contribution to understanding the factors that determined the satisfaction of beneficiaries. The age ($p = 0.006$), education ($p < 0.001$), occupation ($p < 0.001$), income ($p < 0.001$) and location ($p < 0.001$) were found to be statistically significant and highly associated with the satisfaction level in the study, while gender was statistically insignificant ($p = 0.228$). The ANOVA results also showed that levels of satisfaction were significantly affected by education, occupation and geographical location, and this was again confirmed by the t-test results. This study shows that the Digital India Programme has seen remarkable progress in the area of digital inclusion and efficiency in governance, but needs to focus more on developing digital literacy, Internet infrastructure in the rural areas and inclusive service delivery mechanisms. Longitudinal assessment of the adoption of digital services, inter-state comparisons, sector specific digital governance outcomes, and how new technologies like artificial intelligence and 5G-enabled public services affect citizen satisfaction and digital inclusion could be priorities for future research.

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