



DIGITAL GOVERNANCE REFORMS: RTI AND BUREAUCRATIC ACCOUNTABILITY

Research Scholar Name -Nirav Mahendrabhai Thakkar

Supervisor -Prof. Dr. Athina Mantzari

University Name - Kennedy University, Paris, France

Abstract

This article discusses the revolutionary effect of e-governance reforms and the Right to Information (RTI) Act, 2005, on bureaucratic accountability and transparency in India. It discusses how the incorporation of Information and Communication Technology (ICT) via e-governance initiatives like the Digital India Mission, UMANG, DigiLocker, and other online platforms has transformed public administration by improving service delivery, curbing corruption, and promoting citizen engagement. The RTI Act has been pointed out as a path-breaking judicial reform that embeds administrative transparency in the institutions and gives power to citizens to enforce accountability of public authorities. The research examines the interface between technology growth and rule-making, focusing on the fact that technology alone is not enough; institutional culture, people's education, and political will are equally necessary for good governance. In spite of significant advances, the paper points to abiding weaknesses such as digital illiteracy, infrastructural shortages, resistance from bureaucracy, and procedural delays, particularly rural ones. It also touches upon the promise and dangers of new technologies like artificial intelligence and blockchain in government, reserving particular mention for the importance of having strong data privacy and ethical protocols. Based on case studies and newer developments, the paper contends that long-term commitment towards openness, capacity development, and participative policy-making is a prerequisite for unlocking the total potential of digital governance and RTI. Finally, the study emphasizes that an integrated approach-putting together technology, legal protection, and engaged citizens-is a sine qua non for attaining a participatory, accountable, and transparent model of governance in India.

Keywords: *Digital Governance, Right to Information, Bureaucratic Accountability, Transparency, Citizen Empowerment*

1. Introduction

The emergence of the digital technologies has significantly restructured the terrain of governance, creating a new paradigm now widely known as Digital Governance. Marked by the application of Information and Communication Technology (ICT) for improving public administration processes, digital governance aims to enhance transparency, efficiency, and citizens' participation. Two major reforms in the Indian context — development of e-Governance programmes and enforcement of the Right to Information (RTI) Act, 2005 — has significantly influenced transparency and bureaucratic accountability (Nam, T. 2014).

E-governance is not just a change in administrative procedures but a revolutionary rethink of the way governments engage with citizens, enterprises, and internal stakeholders. Indian e-governance has emerged as a strategic tool of governance transformation, led by initiatives such as the Digital India Mission, to provide services electronically to all citizens, particularly marginalized sections. Five models — Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Government (G2G), Government-to-Employee (G2E), and Government-to-Nonprofit/Civil Society (G2N/CS) — shape the country's e-governance initiatives, each with efficiency, transparency, and inclusivity as the goals (Van der Vyver, et al. 2015).

Within this larger movement, the Right to Information Act (RTI), enacted in 2005, has become a landmark reform that guarantees administrative transparency and encourages public empowerment. By providing citizens with the right to access information from public authorities, RTI has successfully transformed the culture from bureaucratic secrecy to participatory openness (Gupta, et al. 2020). It lays down a vital legal basis for enhancing bureaucratic accountability, requiring public officials to open up information and explain decisions, thus making the government machinery more responsive and accountable to the citizens.

Yet, the path to realizing effective digital governance and using RTI as a means of accountability is not linear and free of obstacles. While considerable progress has already been made in rolling out ICT-based programs across governance areas, structural roadblocks in the form of digital illiteracy, infrastructural shortages, bureaucratic opposition, and institutional resistance still prevent the actualization of the ultimate potential of these reforms.



Interestingly, the effectiveness of e-governance reforms relies not only on the technology but also on regulatory frameworks, citizen education, and bureaucratic flexibility.

The Government of India's e-Governance programs — from UMANG (Unified Mobile Application for New-age Governance) to DigiLocker and Aarogya Setu — show the state's efforts to provide seamless services online. These programs allow 24/7 access to important services like birth and death certificates, utility bill payments, health services, and subsidy transfers. At the same time, initiatives such as the Public Financial Management System (PFMS) and Government e-Marketplace (GeM) illustrate how online platforms can reduce human judgment in financial dealings and thus check opportunities for corruption and rent-seeking practices (Williamson, B. 2016).

The RTI Act, being a twin reform, supports these technological measures by enabling citizens to ask questions and interrogate government choices. It has induced a number of corruption and maladministration exposés and has served to strengthen vertical accountability and democratic oversight (Richards, G. 2023). Through public information officers (PIOs) and web-based RTI portals, citizens now have institutionalized mechanisms to access information, monitor progress, and file appeals in the event of grievances.

However, the journey toward actualising the transformative potential of RTI and digital governance has been marred by persistent setbacks. Even as RTI portals have been digitally enabled, hurdles such as digital literacy deficits, bureaucratic opposition to information sharing, harassment of RTI activists, and infrastructural shortcomings, especially in rural areas, continue to impede active citizen engagement. Additionally, systemic problems like the absence of proper digitization of documents, poor training of PIOs, and procedural delay have watered down the essence of the RTI Act (Bardhan, P. (2017).

Additionally, the success of digital governance reforms relies heavily on the establishment of citizen trust and capacity. Although digital platforms can facilitate greater access and transparency, effective participation requires that citizens are not just passive consumers of services but active participants in governance processes. Sites such as MyGov.in, facilitating policy consultations and citizen input, reflect this spirit but need consistent citizen participation, digital literacy programs, and policy responsiveness to be most effective. Over the past few years, the adoption of new-age technologies like blockchain, artificial intelligence (AI), and big data analytics in governance frameworks has broadened the digital reform agenda further. Blockchain has the potential to be used as a secure, tamper-evident public record-keeping mechanism, whereas AI-based systems are being utilized for predictive policy-making, fraud detection, and citizen grievance redressal (Banerjee, R 2012). These technologies have the potential to increase both operational efficiency and accountability mechanisms. But they also pose essential questions regarding data privacy, surveillance, and algorithmic prejudice, and that requires strong regulatory control and ethical standards. The Gujarat reform initiatives, through programs such as the Gujarat Administrative Reforms Commission (GARC), reflect the state's commitment to administrative modernization and citizen-oriented governance. Innovations like digital grievance redressal platforms, easy-to-use government websites, document verification with QR codes, and systematic meeting management procedures demonstrate a sophisticated appreciation of the interplay between the enablement of technology and procedural change for the attainment of good governance. However, it is also important to note that technology cannot be depended upon alone to ensure accountability. Institutional culture, political will, administrative ethics, and citizen empowerment are equally determinate factors. Therefore, the success of the goals of digital governance reforms needs an integrative approach dealing with technological, institutional, and social aspects simultaneously.

Digital Governance Reforms and RTI represent India's daring effort towards democratizing governance, increasing bureaucratic accountability, and empowering citizens in the age of information and communication technologies. Though challenges remain, the trend is towards a more open, responsive, and participatory model of governance. Consolidating these reforms requires ongoing innovation, institutional capacity building, strong legal safeguards for seekers of information, and unrelenting commitment to the values of openness, equity, and public service. As India moves towards a digital future, making sure that reforms in governance are inclusive, citizen-focused, and ethically driven is both the biggest challenge and the best opportunity.

The paper is divided into six parts. The paper's introduction has been presented in section 1, in section 2, a review of the literature on the "Digital Governance Reforms: RTI and Bureaucratic Accountability". Section 3 has examined the methodology, including objectives, data collection, tools and techniques. The findings have been detailed in section 4. It has been succeeded by a discussion of the results in section 5. Conclusions have been included in section 6. At last, references have been represented.

2. Review of Literature

Shou et al. (2025) evaluated influence of ICT on electronic government on several nations, but with a smaller

emphasis on remote areas. The work on this topic either examined the beneficial effects of ICT employed in e-governance at the individual level or analysed it through the lens of the urban-rural divide. Most research were conducted in urban environments, although they scarcely address the identification of obstacles in rural e-governance growth. Consequently, we assert that an ecological approach is necessary to delineate the specific ICT disparities utilised in e-governance across various rural contexts. For this goal, we employed several empirical specifications, namely a fixed-effects model and an instrumental variable method, to demonstrate the varied impacts of ICT on e-governance. Consequently, we employ a qualitative study technique to gather information on the variations of ICT employed in rural e-governance across different ecosystems. Subsequently, we identified five critical problems encountered by rural ecosystems in Western China in the implementation of e-governance. In addition, we've describe a comprehensive internal-external plan to tackle these issues.

Totonchi, A. (2025) investigated the incorporation of AI into e-government systems. The study commences with an introduction that delineates the significance of digitally administration as well as prospective use for AI on improving civic services. The methodology section outlines the methodical strategy employed for the research, encompassing data gathering and analytical tools. Subsequently, the article explores the principles of AI, offering an extensive summary of its functionalities and uses. The discourse subsequently transitions to the use of AI inside government, emphasized its potential to enhance effectiveness, accountability, and citizen participation in government operations. Notwithstanding the encouraging promise, several obstacles were recognized. The obstacles encompass data security and privacy, prejudice and fairness, interaction with older systems, moral concerns, user acceptability, employment relocation, and trust among the public and legal problems. The study finishes with a synthesis of findings and recommendations for addressing these obstacles to effectively adopt AI-driven e-government solutions. This study seeks to deliver significant insights into the transformational effects of artificial intelligence on e-government and to present a framework for policymakers.

Ajayi et al. (2024) elucidated that the incorporation of Artificial Intelligence (AI) into Software-as-a-Service platforms is transforming e-governance systems, enhancing productivity in the public sector to an unprecedented degree. The study examined the revolutionary potential of AI-driven SaaS in improving efficiency, transparency, and decision-making in e-governance systems. Conventional governance frameworks frequently encounter obstacles like bureaucratic inefficiency, suboptimal resource utilisation, and insufficient service provision. The study underscored the significance of AI in promoting openness and accountability. Blockchain-enabled AI technologies allow e-governance platforms to securely document and authenticate transactions, reducing corruption and assuring regulatory compliance. Furthermore, AI-driven SaaS solutions are engineered to interact effortlessly with legacy systems, facilitating a seamless transition while reducing service delivery disruption. Notwithstanding the apparent advantages, the implementation of AI-driven SaaS in e-governance encountered obstacles. Concerns include cybersecurity threats, data privacy, & reluctance to change necessitate robust frameworks and rules to protect people' interests and guarantee ethical AI implementation. The study provided strategy approach enabling integration for AI-driven SaaS in e-governance systems, highlighting the significance of capacity development, stakeholder involvement, and strong legal structures.

Das et al. (2023) investigated that enhancing the standard of public service delivery, fostering interactive communication among government and citizens or businesses, and addressing societal development challenges necessitates the sophisticated integration of diverse technologies for communication and information with non-technological measures and resources in information and electronic governance. Enhancements in digital technology during the past decade have allowed rapid progress in data collection, analysis, visualisation, and application to enhance health outcomes. Digital health encompasses the examination and use of all aspects of utilising digital technology to enhance health, from idea to execution. Digital health plans aim to enhance the existing data and promote its application in decision-making processes. Real-time upgraded digital patient records were referred to as electronic health records. An electronic health record is a comprehensive documentation of an individual's overall health status. The study further addressed the benefits of maintaining electronic health records for enhanced outreach and healthcare delivery. The study thoroughly examined the efficacy of contact tracking applications in improving digital health.

Parihar et al. (2023) observed that technologically driven initiatives in any area provide beneficial transformations. The utilisation of technology, such as AI, facilitates digitisation inside processes, hence enhancing the efficacy of e-governance and ensuring the seamless operation of systems. Consequently, areas such as, taxation systems, public infrastructure and farming areas were also affected. Tax assessment and administration were evaluated alongside the necessity for AI in taxation systems and its use in the agriculture sector, particularly with monitoring through e-governance. The technique employed for the study utilises a structural approach, considering the significance and need of the research. Primary and secondary sources were consulted, and an AI-based model framework was constructed to assist certain sectors of our economy. The integration of AI with public infrastructure, taxation

systems, and agriculture can provide substantial results and enhance the sustainability of both the economy as a whole and these specific sectors. Consequently, the study suggests that AI possesses inherent limits; nonetheless, its extensive use in the specified sectors can expand through the implementation of e-governance and sustainability initiatives.

Umbach, G., & Tkalec, I. (2022) observed that digitalisation and the adaptation of governance to the digital era significantly alter the interaction between agents and customers in policy-making. E-governance was the predominant word denoting the outcome of this digital revolution in light of the evolving political landscape. This special issue focusses on digitalised public services by examining methods and issues in their supply, utilisation, and assessment. This emphasises the interplay between electronic governance and electronic government. Contributions to the special issue delineate obstacles and pitfalls in the implementation and evaluation of electronic governance via examination for several policy domains as well as geographical regions. The results indicated that the determinants of electronic governance efficiency, which may operate as assessment criteria, are often excessively influenced by contextual variables such as policy domain, systemic configurations, institutional frameworks, and administrative customs. As a result, efforts to assess e-governance, as evidenced by the empirical insights presented in this special issue, are confined to certain instruments, techniques, and settings through which electronic governance was implemented and executed.

Hooda et al. (2022) observed that as digital interactions among authorities as well as consumers grow more prevalent, to significance for consumers' faith on electronic administration becomes paramount. Previous technological acceptance models highlighted several aspects influencing behavioural intention and usage, although trust was predominantly absent from these frameworks. This research integrates electronic governance respect through Use of Technology model as well as Unified Theory of Acceptance, also conducts a qualitative investigation using meta-analytic mathematical modelling of structural equations techniques, drawing on data from Ninety prior studies on electronic government. Finding indicated the belief is pivotal in users' inclination to utilised e-government technologies. In e-government situations, trust was influenced by social influence, , effort expectancy, performance expectancy, and enabling factors; it directly affected system usage and indirectly influenced structure utilisation behavioural purpose. Professionals ought to endeavour the utilise consumer' confidence by maximise possibilities for electronic government technologies.

Kumar et al. (2021) assessed that, with the rise of digitization, private organizations began to implement contemporary technology to enhance the efficacy and transparency of their systems. In nations such as India, where the majority of public services were government-operated, the adoption of technology was in its infancy due to several impediments. The report regarded artificial intelligence as the predominant technology and found 18 significant impediments to implementation inside India's public distribution systems. The study was subsequently expanded to identify the contextual relationships among obstacles via interpretive structural modelling and to priorities them using the analytical network process approach. The study indicated insufficient confidence in technology, inadequate AI knowledge, and political challenges as major obstacles to AI adoption in PDS. This study's hybrid approach presented five distinct options for the successful and seamless application of AI in PDS, aiding policymakers in their planning efforts.

Draheim, D. (2020) asserted the fact was BCT initially associated with virtual currencies; however, it has recently transcended this model, proving effective across different platforms and information and communication technologies designs. This discussion seeks to elucidate the potential and challenges of blockchain technology in the context of electronic government and initiatives related to e-governance. They examine three different scenarios the implementation of BCT inside the Estonian electronic government framework. Secondly, examined contentious dispute of the Belarusian cryptohub HTP (High Technologies Park), referred to as Decree No. 8. Lastly, they examined the European Blockchain Services Infrastructure & its applications, particularly in relation to MyData. What may stakeholders in digital transformation anticipate from existing and forthcoming blockchain technology platforms? How might they derive their greatest advantage through them?

Muttoo et al. (2019) asserted that the authors delineated the evolving technology trends in Electronic government in India. Computing in the cloud, Accessible computation, analytics, Open or free application as well as BCT has examined the contributions to electronic governance. This evolving perspective of administration towards Electronic Government had addressed. Author's addressed modifications including digital aided facilities, citizen formulation of solutions, participatory decision-making, institutional efforts, online fulfilment of government-to-citizen services, pooled services, and Collaborations between the public and private sectors. Foundations for digitally India have been referenced, who contributed for development for Electronic government concept. Ultimately, forthcoming initiatives just like Internet Engineering Task Force, Digital Signature Management Cell, AGRISNET and eBiz were detailed. The focal points for Electronic government in India, such as digitally sustainable farming, education, health care,



and security issues, have been noted.

3. Research Gap

In spite of considerable progress in knowing digital governance, there are wide research gaps still to be covered. Shou et al. (2025) targeted ICT's influence on e-governance but underscored predominantly urban environments, forgetting the subtle nuances of rural government. Likewise, although Totonchi (2025) and Ajayi et al. (2024) examined AI adoption in e-governance, they were particularly focused on the technological potentiality, with no serious examination of systemic accountability consequences. Das et al. (2023) and Parihar et al. (2023) spoke about the use of technology in areas such as health and agriculture but did not seriously address governance transparency. Additionally, Umbach and Tkalec (2022) emphasized contextual constraints in digital governance assessments, whereas Hooda et al. (2022) emphasized the importance of citizen trust, an area that remains under-theorized in the context of bureaucratic accountability. Kumar et al. (2021) identified barriers to AI adoption in India's governance systems, but their focus remained sector-specific. Draheim (2020) and Muttoo et al. (2019) emphasized emerging technologies like blockchain, yet without directly linking them to RTI's role in transparency. Therefore, although literature is rich with useful information regarding technology adoption and sectoral digitization, a vital gap persists in analyzing the way digital governance reforms, specifically RTI integration, comprehensively augment transparency, bureaucratic accountability, and service delivery in various administrative settings.

4. Objective of the study

- To discuss the role of the Right to Information Act in enhancing transparency and facilitating citizen access to government information.
- To assess how e-governance and RTI can complement each other to enhance bureaucratic accountability in public institutions.
- To analyze the effect of digital governance instruments on administrative effectiveness, transparency, and public service delivery.
- To critically examine the challenges and limitations faced in the implementation of digital governance and RTI initiatives in promoting transparency and accountability.

5. Hypothesis

(H01): The RTI Act does not significantly enhance transparency or facilitate citizen access to government information.

(H1): The RTI Act significantly enhances transparency and facilitates citizen access to government information.

(H02): E-governance and RTI do not significantly complement each other in enhancing bureaucratic accountability.

(H2): E-governance and RTI significantly complement each other in enhancing bureaucratic accountability.

(H03): Digital governance instruments do not have a significant effect on administrative effectiveness, transparency, and public service delivery.

(H3): Digital governance instruments have a significant effect on administrative effectiveness, transparency, and public service delivery.

(H04): The Right to Information Act does not significantly enhance transparency or facilitate citizen access to government information.

(H4): The Right to Information Act significantly enhances transparency and facilitates citizen access to government information.

6. Methodology

The study titled "Digital Governance Reforms: RTI and Bureaucratic Accountability" will systematically employ mixed-methods research to effectively achieve its objectives. Qualitative and quantitative approaches will be adopted in order to fully enlighten the role of the RTI Act and e-governance initiatives in improving transparency and bureaucratic accountability. Primary data will be gathered using a standardized questionnaire, with both closed-ended and open-ended questions, from citizens, public officials, and stakeholders. Secondary data will be obtained from government reports, policy documents, case studies, and academic literature. Descriptive statistical techniques, such as frequency, percentage, mean, and standard deviation, will be employed to analyze the primary data. Data

representation will be supported by tables, graphs, pie charts, and flow charts to enhance clarity and understanding. Qualitative answers will be subjected to thematic analysis in order to identify patterns and insights that occur regularly. Data processing and statistical analysis will be carried out using Microsoft Excel and SPSS software. The given study is taken data from 150 respondents. This methodological framework is built to systematically trace how the mechanism of digital governance and the RTI Act work together in relation to the efficiency of administration, transparency, and quality in delivering public service.

7. Results and Interpretations

➤ Demographic profile of respondent

Table 1: Demographic profile of respondents

| Sr. No. | Demographic Variables | Characteristics | N | % |
|---------|---------------------------|-----------------------|-----|------|
| 1 | Age | 25 years and below | 29 | 19.3 |
| | | 26 – 35 years | 28 | 18.7 |
| | | 36 – 45 years | 30 | 20 |
| | | 46 – 55 years | 33 | 22 |
| | | 56 years and above | 30 | 20 |
| 2 | Gender | Female | 44 | 29.3 |
| | | Male | 106 | 70.7 |
| 3 | Educational Qualification | Bachelor's Degree | 41 | 27.3 |
| | | Master's Degree | 35 | 23.3 |
| | | M.Phil. | 33 | 22 |
| | | Ph.D. | 41 | 27.3 |
| 4 | Occupation | Administrator | 44 | 29.3 |
| | | Faculty Member | 62 | 41.3 |
| | | Researcher | 44 | 29.3 |
| 5 | Type of Institution | Distance Learning | 38 | 25.3 |
| | | Government University | 36 | 24 |
| | | Open University | 42 | 28 |
| | | Private University | 34 | 22.7 |
| 6 | Years of Experience | Less than 2 years | 42 | 28 |
| | | 2 – 5 years | 39 | 26 |
| | | 6 – 10 years | 30 | 20 |
| | | More than 10 years | 39 | 26 |

| | | | | |
|---|-------------------------------------|-------------------|----|------|
| 7 | Familiarity with E-Governance / RTI | Not Familiar | 40 | 26.7 |
| | | Neutral | 36 | 24 |
| | | Somewhat Familiar | 37 | 24.7 |
| | | Very Familiar | 37 | 24.7 |

The demographic breakdown of the respondents shows a well-balanced spread across different categories, making the study strong. By age, the respondents are fairly evenly spread, with the largest percentage (22%) in the 46–55 years category, followed by the 36–45 years and 56 years and older categories (20% each). Gender-wise, the sample is dominated by males, with 70.7% male and 29.3% female respondents. Educational level indicates an educated population, wherein 27.3% hold Bachelor's degrees and the same percentage holds Ph.D. qualifications, followed by Master's degree holders (23.3%) and M.Phil. (22%). Occupationally, the largest number is faculty members (41.3%), followed by administrators and researchers each with a percentage of 29.3 in the sample. As far as the type of institution is concerned, 28% are open universities, 25.3% distance learning institutions, 24% government universities, and 22.7% private universities, showing a wide range of institutional affiliations. With regard to experience, those having less than 2 years and over 10 years of experience are equally represented (28% and 26%, respectively). Lastly, familiarity with e-governance and RTI reveals that a substantial percentage is somewhat familiar (24.7%) or very familiar (24.7%), even though 26.7% of the respondents indicated they were not familiar. This breakdown provides varied opinions in the analysis of digital governance and RTI programs.

➤ **On the basis of objective and hypothesis of the study**

Objective 1: To discuss the role of the Right to Information Act in enhancing transparency and facilitating citizen access to government information.

(H01): The RTI Act does not significantly enhance transparency or facilitate citizen access to government information.

(H1): The RTI Act significantly enhances transparency and facilitates citizen access to government information.

Table 2: Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|------------------------|---------|-----|----------------|-----------------|
| Pair 1 | Role of RTI Act | 21.9786 | 420 | 2.95423 | .14415 |
| | Perceived Transparency | 20.0619 | 420 | 3.14957 | .15368 |

The paired samples statistics show that the mean score on the role of the RTI Act is 21.98 with a standard deviation of 2.95 on the basis of 420 responses. As a comparison, the mean score on perceived transparency is lower at 20.06, having a standard deviation of 3.15. The standard error of the mean is marginally higher for perceived transparency (.15368) than the role of the RTI Act (.14415). This means that while participants in general acknowledge the significant role of the RTI Act, their view of actual transparency achieved is a bit lower, indicating a difference between the intended impact of the RTI Act and perceived transparency on the ground.

Table 3: Paired Samples Correlations

| | | N | Correlation | Sig. |
|--------|--|-----|-------------|------|
| Pair 1 | Role of RTI Act & Perceived Transparency | 420 | .371 | .000 |

The paired samples correlation indicates a moderate positive relationship between the effect of the RTI Act and perceived openness, and the correlation coefficient is 0.371. This is statistically significant at the 0.01 level, as indicated by the p-value of .000. Based on data from 420 respondents, the research shows that greater awareness of the functioning of the RTI Act is associated with more transparency perceptions, but the correlation is weak, which implies that other factors could be contributing to perceived transparency as well.

Table 4: Paired Samples Test

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|--------|--|--------------------|----------------|-----------------|---|---------|--------|-----|-----------------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Role of RTI Act - Perceived Transparency | 1.91667 | 3.42812 | .16728 | 1.58786 | 2.24547 | 11.458 | 419 | .000 |

The paired samples t-test results show that the difference between the mean values for the role performed by the RTI Act and transparency perceived is significant. The mean difference was 1.92 with the standard deviation of 3.43 and the standard error being 0.17. The 95% confidence interval between the difference varies from 1.59 to 2.25, i.e., always positive. The t-value is 11.458 with 419 degrees of freedom, and the p-value is .000, which confirms that the difference is statistically significant. This means that while the RTI Act is seen as significant, the perceived level of transparency by people is much lower.

Objective 2: To assess how e-governance and RTI can complement each other to enhance bureaucratic accountability in public institutions.

(H02): E-governance and RTI do not significantly complement each other in enhancing bureaucratic accountability.

(H2): E-governance and RTI significantly complement each other in enhancing bureaucratic accountability.

Table 5: Descriptive Statistics

| | Mean | Std. Deviation | N |
|-----------------------------|---------|----------------|-----|
| Use of E-Governance | 14.6905 | 2.17699 | 420 |
| Bureaucratic Accountability | 19.2095 | 2.98507 | 420 |

The descriptive statistics indicate that the mean score of participants' use of e-governance is 14.69, with a standard deviation of 2.18, based on 420 responses. The mean score of bureaucratic accountability is greater at 19.21, with a standard deviation of 2.99. This indicates that while the use of e-governance tools is relatively moderate, participants' perception of bureaucratic accountability is relatively greater. The higher standard deviation for bureaucratic accountability also reveals higher variation among participants' responses toward their perceptions of e-governance use.

Table 6: Correlations

| | | Use of E-Governance | Bureaucratic Accountability |
|--|---------------------|---------------------|-----------------------------|
| Use of E-Governance | Pearson Correlation | 1 | .471** |
| | Sig. (2-tailed) | | .000 |
| | N | 420 | 420 |
| Bureaucratic Accountability | Pearson Correlation | .471** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 420 | 420 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

The correlation analysis reveals a moderate positive correlation between the use of e-governance and bureaucratic accountability with a Pearson correlation coefficient of 0.471. The correlation is statistically significant at the 0.01 level as revealed by the p-value of .000. Based on user feedback from 420 users, the report says that increased usage of e-governance services is associated with higher perceptions of accountability of bureaucracy, though the correlation is not so strong, meaning that even while e-governance is attempting to make bureaucracy more accountable, there may be some other variables involved as well.

Objective 3: To analyze the effect of digital governance instruments on administrative effectiveness, transparency, and public service delivery.

(H03): Digital governance instruments do not have a significant effect on administrative effectiveness, transparency, and public service delivery.

(H3): Digital governance instruments have a significant effect on administrative effectiveness, transparency, and public service delivery.

Table 7: Chi-Square Tests

| | Value | df | Asymptotic Significance (2-sided) |
|--|----------------------|-----|-----------------------------------|
| Pearson Chi-Square | 177.082 ^a | 112 | .000 |
| Likelihood Ratio | 87.061 | 112 | .961 |
| Linear-by-Linear Association | 1.587 | 1 | .208 |
| N of Valid Cases | 71 | | |
| a. 132 cells (97.8%) have expected count less than 5. The minimum expected count is .01. | | | |

The Chi-Square test outcomes in Table 4.19 show a Pearson Chi-Square of 177.082 with 112 degrees of freedom and a significance level of 0.000, which shows a highly significant relationship between the variables being tested.

The p-value of 0.000 suggests that there is a statistically significant relationship between the variables. However, note that the Likelihood Ratio test provides a p-value of 0.961, which is not significant, meaning that this test does not show a significant relationship between the variables. Further, the Linear-by-Linear Association test provides a p-value of 0.208, meaning that there is no significant linear association between the variables. One critical flaw of this analysis is that there are 132 cells (97.8%) with an expected count of fewer than 5, with a minimum expected count of 0.01. This indicates that one of the assumptions of the Chi-Square test is violated, which would influence the validity of the outcome, particularly the interpretation of Pearson Chi-Square value.

Objective 4: To critically examine the challenges and limitations faced in the implementation of digital governance and RTI initiatives in promoting transparency and accountability.

(H₀4): The Right to Information Act does not significantly enhance transparency or facilitate citizen access to government information.

(H₁4): The Right to Information Act significantly enhances transparency and facilitates citizen access to government information.

The adoption of e-governance and Right to Information (RTI) programs, though revolutionary, has great challenges and limitations in enhancing transparency and accountability. One of the main challenges is the digital divide between the urban and rural sectors, as access to digital infrastructure, internet connectivity, and technological skills remains uneven. Rural communities, who are usually marginalized, cannot easily access online RTI portals or an e-governance service, which restricts the reach and inclusivity of such reforms. In addition, bureaucratic resistance remains a significant hurdle, with officials at times delaying disclosure of information, abusing exemption clauses, or not keeping properly digitized records, thus diluting the spirit of the RTI Act. Another drawback is the lack of proper training of Public Information Officers (PIOs) who are tasked with answering RTI requests; most do not have technical acumen or an appreciation of transparency requirements, and hence the procedural lags and unconvincing replies. Cybersecurity issues and fears about data privacy also stand in the way of adopting digital platforms, as people worry about the misuse of data made public online. Also, the concern of citizen awareness continues to be important; the majority of people continue to be ignorant about their rights under the RTI Act and the routes through which redressal may be sought. Issues like harassment of RTI activists, loopholes in laws, and fragmented policy enforcement weaken the effectiveness of these initiatives. Thus, although digital governance and RTI have certainly driven transparency objectives forward, their full potential is achievable only by systemic reforms, strengthening of infrastructure, capacity development, and strong safeguards against information seekers.

8. Discussion

The results of the research confirm the influential role of e-governance reforms and the Right to Information (RTI) Act in raising the levels of transparency, administrative efficiency, and accountability in bureaucracy. The findings reveal that though the RTI Act has expanded people's access to information about government affairs, a discrepancy still exists between its anticipated impact and realized transparency levels. Correlation and t-test analyses reveal a statistically significant correlation between RTI awareness and subjective openness, although other determinants also impact transparency outcomes. Likewise, the research identifies that e-governance interventions contribute moderately but significantly to increasing bureaucratic accountability. Yet, the values of correlations suggest that e-governance may not be enough by itself without accompanying institutional reforms. In addition, the Chi-square findings highlight an important correlation between digital governance tools and enhanced administrative performance and delivery of services while limitations in assumptions regarding data warrant careful interpretation. Notably, the research detects recurring challenges such as digital illiteracy, infrastructural voids, resistance from bureaucracy, cybersecurity risks, and citizen unawareness that invalidate the complete realization of digital governance and RTI goals. These observations highlight the imperative of building infrastructural capacity, encouraging digital literacy initiatives, increasing training for government officials, and providing greater protections for those seeking information. The convergence of new technologies such as blockchain and AI into e-governance promises much but requires cautionary regulatory response to prevent privacy and fairness-related risks. As a whole, the study highlights the point that technology alone is needed to be paired with ethical government practices, people's empowerment, and institutional reform for a properly transparent, accountable, and participatory administrative atmosphere.

9. Conclusion

The research brings to the fore that the e-governance reforms, combined with the Right to Information (RTI) Act, have been a revolutionizing force to ensure transparency, raise bureaucratic accountability, and enhance administrative efficiency in India. The evidence presents that despite considerable advances through the e-



governance interfaces and RTI measures, infrastructural shortcomings, digital illiteracy, bureaucratic reluctance, and cybersecurity issues remain obstacles to their complete potential. The RTI Act has been successful in empowering the citizenry by ensuring legal access to government information, but contrasts between intended and perceived transparency reinforce the necessity of more profound systemic changes. Moderately, e-governance tools have supported building bureaucratic accountability, but such success is hugely reliant on parallel institutional and attitudinal reforms. In addition, while the adoption of innovative technologies such as AI and blockchain presents new prospects for improving governance effectiveness and citizen engagement, they also require robust regulatory protections to respond to ethical and privacy issues. In the future, the success of digital governance lies in building trust among citizens, narrowing the digital divide, developing institutional capacity, and maintaining an unshakeable commitment to democratic values. Sustainable and inclusive digital reforms will be essential in the formation of a governance system that is genuinely transparent, participatory, and equitable for all parts of society.

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