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Rural E-Governance Adoption and Service Delivery Outcomes: Evidence-Based Insights from Common Service Centres in Madhya Pradesh

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Abstract

Rural e-governance projects will also rely on the perception of citizens regarding the quality of services and confidence in the digital systems of service delivery, rather than the availability of technology. Common Service Centres (CSCs) are considered significant intermediaries between rural citizens and e-governance in India. This paper will look at the impact of perceived service quality on the citizen trust and, consequently, uptake of CSC-based e-governance services. Based on the SERVQUAL model and the Technology Acceptance Model (TAM), 320 rural citizens in five districts of Madhya Pradesh were the cases of primary data. The research will utilise the descriptive statistics, reliability test, exploratory factor analysis, correlation, multiple regression tests and mediation test based on SPSS 26. Findings show that dimensions of quality of service, especially reliability, responsiveness and assurance dimensions, improve citizen trust in a significant way. Trust proves to be a powerful predictor of adoption intention and continued usage, which makes a semi-mediation between the quality of the service and adoption. The results have shown the significance of citizen-focused service provision and trust-making systems in digital governance at the rural level. The paper allows advancing the body of e-governance literature by changing the direction of analysis to focus on citizens and proposing policy shifts to enhance the adoption results in rural India.

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KEYWORDS: E-Governance, Common Service Centres, Service Quality, Trust, Citizen Adoption, Rural India.

1. INTRODUCTION

Digital governance has emerged as the key tool towards enhancing transparency, efficiency and inclusiveness in the delivery of public services. The governments of the developing economies tend to look more and more to digital platforms to access the remote population and lessen the bottlenecks of administration. The Digital India program is one of the most ambitious national programs in India, which aims to change governance by availing services using technology. Another institutional mechanism that is crucial to this effort is the Common Service Centre (CSC) scheme offering a physical-digital interface through which citizens, especially those in rural and semi-urban regions, can access government and non-government services.

Although CSCs have grown very fast throughout India, there is unequal usage of e-governance services by the citizens. Although there is an improvement in infrastructure and accessibility to services, there is still a tendency for poor acceptance of digital platforms among many rural citizens. Previous studies indicate that barriers to adoption are not always related to technology as such, but tend to lie in service experience, perceived reliability and trust of intermediaries. Trust takes on even more significance in the rural setting where both digital literacy and institutional trust might be weak.

The majority of the available literature on CSCs has a supply-side view, focusing on sustainability, entrepreneurship, and operational issues of Village Level Entrepreneurs (VLEs). Nevertheless, very little empirical focus has been put on the demand-side perspective, especially the perceptions of the citizens on service quality, as well as the effects of such perceptions on trust and adoption behaviour. To fill this gap, this paper targets citizens as the main stakeholders, and the study will be on the influence of service quality provided at CSCs on the determinants of trust and adoption of rural e-governance systems.

Problem Statement: Despite CSCs growing at an impressive rate and their physical access to digital public services in rural India has been enhanced, the adoption and further use by the citizens is still uneven geographically and service-wise. The available evidence is predominantly supply-side and lacks sufficient elaboration on how the citizens in rural areas assess the quality-of-service experience at the CSC encounter and how the perception is translated to the trust and eventually, the adoption of e-governance services. In the absence of such evidence involving citizens, interventions would be subject to the risk of overemphasising infrastructure at the expense of underemphasising the importance of experience of service and trust of intermediaries. The paper will thus examine the associations between perceived service quality (SERVQUAL dimensions), citizen trust and adoption intention/continued use when it comes to CSC-based e-governance services in Madhya Pradesh.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 E-Governance and Acceptance by the citizens.

E-governance can be defined as the use of information and communication technologies to improve the delivery of public services, the governance process, and the interaction of citizens. The use of e-governance services is not only based on the level of technological readiness but also on the perceptions and attitudes of the users and their trust in the institutions. Intermediated models like CSCs are essential in rural settings to facilitate the translation of complex digital systems into available services to the citizens.

2.2 Quality of service in the provision of services to the public.

Service quality theory focuses on the gap between expected and actual service performance. The SERVQUAL model recognises five areas of service quality, including reliability, responsiveness, assurance, empathy, and tangibility. Reliability and assurance are especially important in the context of the public service, as citizens rely on reliable, timely, and safe service delivery of prerequisite welfare and administrative services.

2.3 Trust in Digital Governance

It is a well-established fact that trust is a foundational factor of technology adoption, particularly in the area of public digital systems, which require personal information, transactions, and government control. The institutional trust indicates the trust and confidence of the citizens in the intermediaries of the service, the transparency of the system, the safety of the data, and the procedural justice. Trust has been found to mediate the interaction between service experience and further use in rural e-governance.

2.4 Technology Acceptance Model (TAM)

The Technology Acceptance Model assumes that adoption intentions are determined by the perceived usefulness and ease of use. Within the framework of CSC-based e-governance, the perceived usefulness is increased by service quality and trust, which further strengthens adoption and further use. A combination of SERVQUAL and TAM can also be used to understand the citizen adoption behaviour holistically.

2.5 Research Gap

Whereas much is known about CSCs, the current literature is insufficient in answering:

- The perception of the quality of the services at CSCs by the citizens.
- The mediating trust in e-governance adoption.

This paper addresses this gap by empirically confirming a citizen-based model of adoption.

2.6 Hypotheses

H1: Perceived service quality dimensions have a positive effect on citizen trust in e-governance services provided by CSC.

H2: The citizen trust has a positive impact on the adoption and further use of CSC services.

H3: The dimensions of service quality have a positive impact on the adoption of e-governance platforms among the citizens.

H4: Citizen adoption mediates between citizen trust and quality of service provision.

2. RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodological approach that is being used to investigate the impact of service quality on citizen trust and adoption of rural e-governance platforms provided by Common Service Centres (CSCs). The methodology is tailored so as to have the required empirical rigor, statistical validity, and repeatability, which are the criteria on which Scopus- and UGC-CARE-indexed journals follow. The chapter talks about the research design, area of study, population and sampling, data collection methods, measurement of the variables, tests of reliability and validity and statistical methods applied in testing hypotheses.

3.2 Research Design

The research design is a quantitative, cross-sectional, and explanatory study. The quantitative method is suitable because the study is aimed at quantifying the perceptions of service quality, trust, and adoption through a set of numerical measurements. The cross-sectional design will only capture the perceptions of the citizens on a single occasion, capturing their recent experiences with CSC-based e-governance services.

The design allows the causal relationships and mediation effects of variables, the role of citizen trust as a mediating construct in service quality and adoption in particular.

Justification and weakness of the cross-sectional design: The cross-sectional survey is suitable for the research study since the researcher can gather similar perceptions of a comparatively large sample of the rural service users in several districts in a specified time frame. The design is popular in technology adoption and service quality studies, where the objective is to describe the relationship between perceptual constructs. However, cross-sectional data cannot establish a temporal relationship between constructs and, therefore, are not conclusive about the causal relationship but can be viewed as consistent with the theory. In order to enhance the validity of inferences, the study is based on SERVQUAL and TAM, mediating the test in accordance with the theory, and transparently identifies design limitations. Further investigation can build such findings in the future based on longitudinal designs, repeated measures, or administrative CSC transaction data to understand the change in trust and use over time.

3.3 Study Area

The empirical study was carried out in five districts of Madhya Pradesh, that is Bhopal, Indore, Gwalior, Ujjain and Dewas. The selection of these districts was done based on:

- CSCs have a high level of operational density.
- Various degrees of digital infrastructure.

- Difference in rural-urban and socio-economic structure. Selection is found to be a more generalisation of findings in the state context.

3.4 Population/ Sampling Design.

3.4.1 Target Population

The target population will be built on the rural citizens who have accessed at least one of the e-governance services of CSC in the past 12 months. It is assumed that these respondents could assess the quality of the services and trust based on direct contact.

3.4.2 Sample Size

There were 320 respondents surveyed. This is a sufficient minimum sample size to perform multivariate analysis, regression model, and mediation testing with sufficient statistical power.

3.4.3 Sampling Technique

The sampling method was a stratified random sampling. Each district was a stratum, and respondents were picked proportionately among CSC service users in the respective districts in order to get a balance.

Table 3.1: Distribution of Respondents by District (N= 320)

District	Number of Respondents	Percentage (%)
Bhopal	64	20.0
Indore	66	20.6
Gwalior	62	19.4
Ujjain	64	20.0
Dewas	64	20.0
Total	320	100.0

3.5 Data Collection Methods

3.5.1 Source of Data

The paper is mainly based on primary data gathered by the researchers directly from the countryside citizens. Only theoretical background and situational knowledge were provided with the secondary sources, such as government reports and scholarly literature.

3.5.2 Data Collection Instrument

The structured questionnaire was used to collect the data with field visits and assisted interviews to suit the respondents of different literacy levels.

There were four sections of the questionnaire:

- Demographic profile
- Perceptions of quality of service.
- Citizen trust
- Adoption and further usage intention.

Attitudinal items were all designed to be measured between five points (1 = Strongly Disagree, 5 = Strongly Agree).

3.6 Measurement of Variables

3.6.1 Service Quality

Adapted SERVQUAL dimensions measured the service quality.

Table 3.2: Service Quality Dimensions Measurement.

Dimension	Description	No. of Items
Reliability	Accuracy and consistency of service delivery	4
Responsiveness	Promptness and willingness to help	4
Assurance	Competence and trustworthiness of staff	3
Empathy	Individual attention to citizens	3
Tangibility	Physical facilities and equipment	3

3.6.2 Mediating Variable: Citizen Trust

The citizen trust is the confidence in the CSC operators, the process transparency, data security, and impartiality involving service provision.

Table 3.3: Measurement of Citizen Trust

Construct	Description	No. of Items
Trust	Confidence in CSC services and systems	4

3.6.3 Dependent Variable: Citizen Adoption

Citizen adoption gets both intentions to use and continued use behaviour. Given that the study aims to measure Citizen Adoption,

Table 3.4 provides a measurement of the same.

Construct	Description	No. of Items
Adoption	Intention, continuity, and recommendation	4

3.7 Reliability and Validity of the Instrument

Cronbach's Alpha was used to measure reliability. Constructs were all over the minimum acceptable level of 0.70, which means that constructs had high internal consistency.

Table 3.5: Cronbach's alpha Reliability Statistics.

Construct	Cronbach's α
Reliability	0.86
Responsiveness	0.84
Assurance	0.82
Empathy	0.79
Tangibility	0.81
Trust	0.88
Adoption	0.85

The construct validity was also tested through Exploratory Factor Analysis (EFA), and it was established that items loaded correctly on their own construct.

Exploratory Factor Analysis criteria: The EFA in SPSS was used to examine the factor structure. The analysis adhered to the conventional decision rules that comprised acceptable sampling adequacy ($KMO > 0.60$) and a significant test of Bartlett ($p < 0.05$). To decide on keeping the item or not, the primary cut-off was 0.50 standardised factor loading; those items that had weak loadings or problematic cross-loadings were put through a reviewing process before deciding on the finalisation of the measurement model.

Common method bias (CMB): Since the key constructs were evaluated with the help of one and the same questionnaire

among the same respondents, the risk of CMB was taken into account in the study. Procedural solutions were providing guarantees of anonymity, the fact that there were no correct or incorrect answers, and unambiguous, non-leading language was used to minimise the fear of evaluation. Being a statistical diagnostic, the Harman one-factor test was evaluated using an unrotated factor solution; the first factor did not explain most of the variance (less than half), suggesting that CMB is not a serious issue when trying to interpret the results.

3.8 Data Analysis Techniques

SPSS 26 was used to code, clean, and analyse the data. The methods of analysis used are highlighted below.

Table 3.6: Statistical Tools to be used in the study.

Statistical Technique	Purpose
Descriptive Statistics	Summarise the respondent profile
Cronbach's Alpha	Test reliability
Exploratory Factor Analysis	Validate construct structure
Pearson Correlation	Examine variable relationships
Multiple Regression	Test direct hypotheses
Mediation Analysis	Test the mediating role of trust

The level of significance that was used to test the hypothesis was $p < 0.05$.

3.9 Ethical Considerations

The study was done in ethical standards. Participation was voluntary, and informed consent of all respondents was taken; anonymity and confidentiality were maintained. The data were utilised solely in order to conduct academic and research purposes.

4. Data analysis and interpretation

4.1 Introduction

This chapter provides the statistical analysis and interpretation of data obtained on 320 rural citizens who have previously used the services of e-governance using Common Service Centres (CSCs). This chapter aims at testing the hypotheses proposed empirically and obviously, at testing the conceptual framework that studies the relationship between service quality, citizen trust and citizen adoption of rural e-governance platforms.

It is examined using the methodological procedures described in Chapter 3 and statistical processing in SPSS Version 26. There were also descriptive and inferential statistical methods, such as the reliability analysis, exploratory factor analysis, correlation, multiple regression and mediation analysis. The findings are tabulated in a way that answers the research questions and hypotheses.

4.2 Profile of Respondents

The demographic data of the respondents were analysed using descriptive statistics. The sample was representative of citizens living in rural areas in the five districts in Madhya Pradesh.

Most of the respondents fell under the 21-45 years age bracket, which means that CSC services are widely utilised by economically active citizens. The level of education was

between primary school and graduation, and this represented the inclusiveness of CSC-based service delivery. The majority of the respondents stated that they regularly use CSCs in services associated with Aadhaar-related assignments, welfare scheme registration, banking, and the issuance of certificates.

All in all, the respondent profile shows that the sample is suitable for the assessment of the perceptions associated with the service quality, trust, and adoption behaviour.

4.3 Descriptive statistics of the variables of the study

The descriptive analysis has been performed to comprehend how the respondents feel about the overall perception of the quality of services, trust, and adoption. The mean of all constructs was observed to exceed the neutral point (3.0), which means that there are positive perceptions towards CSC-based e-governance services.

Of the quality dimensions, service reliability, and responsiveness, the mean value was higher, indicating that the citizens are concerned with quality and service delivery promptly. Mean scores of trusts and adoption were rather high as well, meaning that there is a positive tendency to further use CSC services.

Table 4.1: Descriptive Statistics of the most significant variables.

Variable	Mean	Standard Deviation
Service Quality	3.82	0.61
Trust	3.88	0.64
Adoption	3.91	0.59

4.4 Reliability Analysis

The Alpha of Cronbach was used to test the internal consistency of the measurement scales. According to Chapter 3, all the constructs illustrated alpha values way above the acceptable lower bound of 0.70, indicating high levels of reliability. The reliability coefficients are high, which means that the items included in the questionnaire always measure the constructs that were intended, and the data are appropriate to be subjected to the subsequent inferential analysis.

Exploratory Factor Analysis (EFA) was utilised to examine the data concerning the research question (4.5).

To determine the construct validity of the measurement instrument, Exploratory Factor Analysis (EFA) was performed to evaluate that. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.84, which means that the data were appropriate to use in a factor analysis. Bartlett Test of Sphericity was significant ($kh^2 = 2143.6$, $p < 0.001$), which proved that there were enough correlations between variables. The items were judged with a minimum factor loading of 0.50 in order to qualify as significant. Moreover, to preclude a single-factor threat to the measurement model (a typical method use bias diagnostic), the initial extracted factor did not explain most of the variance (41.3 per cent; see Table 4.2), which is less than the traditional 50 per cent cut-off.

Three main factors were identified in the EFA representing:

- Service Quality
- Citizen Trust

- Citizen Adoption

Collectively, these factors accounted for 68 per cent of the overall variance, which is a strong construct validity.

Table 4.2: Exploratory Factor Analysis Summary.

Factor	Eigenvalue	Variance Explained (%)
Service Quality	4.92	41.3
Trust	1.84	15.6
Adoption	1.29	11.1
Total	—	68.0

4.6 Correlation Analysis

The strength and direction of the relationship between service quality, trust, and adoption were determined through Pearson correlation analysis.

The results reveal:

- The quality of the services and the trust are strongly positively correlated ($r = 0.62$, $p < 0.01$).
- There is a high positive relationship between trust and adoption ($r = 0.67$, $p < 0.01$).
- An average to high positive relationship between service quality and adoption ($r = 0.58$, $p < 0.01$)

Table 4.3: Correlation Matrix

Variable	Service Quality	Trust	Adoption
Service Quality	1		
Trust	0.62**	1	
Adoption	0.58**	0.67**	1

Note: $p < 0.01$

These findings are initial evidence of the hypotheses.

4.7 Regression Analysis

4.7.1. The effect of the service quality on citizen trust

Citizen trust was the dependent variable, and service quality dimensions were the independent variables in a multiple regression analysis.

The regression was also statistically significant ($F = 36.2$, $p < 0.001$), and it explained 54 per cent of the variation in trust ($R^2 = 0.54$).

Table 4.4: Regression Results (Dependent Variable: Trust)

Predictor	Standardized β	t-value	p-value
Reliability	0.28	4.96	<0.001
Responsiveness	0.24	4.31	<0.001
Assurance	0.21	3.88	<0.01
Empathy	0.09	1.41	n.s.
Tangibility	0.07	1.12	n.s.

These results confirm Hypothesis H1, which states that reliability, responsiveness, and assurance contribute greatly to the increase of citizen trust.

4.7.2 Effect of Trust and Service Quality on Citizen Adoption.

The second regression model was estimated using citizen adoption as a dependent variable.

Table 4.5: Regression (Dependent Variable: Adoption)

Predictor	Standardized β	t-value	p-value
Trust	0.42	7.18	<0.001
Service Quality	0.31	5.02	<0.001

The model had a significant variance in adoption ($R^2 = 0.61$) that is statistically significant ($F = 49.7, p < 0.001$).

The findings support Hypotheses H2 and H3 and support the idea that trust is the best predictor of citizen adoption.

4.8 Mediation Analysis

The Barron and Kenny (1986) approach to mediation analysis was used to age the study of the relationship between the quality of service and adoption on the one hand and citizen trust on the other hand to determine whether mediation occurs through citizens' trust.

Table 4.6: Summary of a mediation analysis.

Relationship	Effect	Result
Service Quality → Adoption	Significant	Supported
Service Quality → Trust	Significant	Supported
Trust → Adoption	Significant	Supported
Service Quality → Adoption (with Trust)	Reduced	Partial Mediation

The moderation of the direct impact of service quality on adoption by the intervention of trust proves the partial mediation that favours Hypothesis H4.

4.9 Hypothesis Testing Summary

Hypothesis	Statement	Result
H1	Service Quality → Trust	Supported
H2	Trust → Adoption	Supported
H3	Service Quality → Adoption	Supported
H4	Trust mediates SQ→Adoption	Supported

4.10 Interpretation of the Main Findings.

The results prove that citizen trust is the strongest factor in the adoption of rural e-governance. Although service quality has a direct influence on adoption, the effect of quality is greatly promoted by the formation of trust. Reliability and responsiveness become the most important dimensions of service quality, where service delivery quality in terms of accuracy, timeliness and dependability becomes important in rural governance contexts.

5. Discussion, Implication, and Synthesis of Findings

5.1 Introduction

The chapter provides a thorough discussion of the empirical results that are mentioned in Chapter 4 and gives an interpretation of the results in terms of the theoretical background of the study, research aims, and the literature. This chapter aims to investigate why and how the quality and trust of services affect the adoption of rural e-governance platforms, especially service hubs located in the Common Service Centres (CSCs).

The discussion incorporates the SERVQUAL model and the Technology Acceptance Model (TAM) to come up with a logical explanation of citizen behaviour in rural digital governance settings. Moreover, this chapter provides the theoretical contributions, policy implications and managerial insights based on the findings, thus connecting the empirical findings to empirical outcomes in governance.

5.2 Review of Essential Empirical Results.

As shown by the statistical analysis, it is true that:

- The experience of service quality strongly determines the citizen trust in CSC-based e-governance services.
- The most predictive factor of e-governance platforms adoption and further usage is citizen trust.
- Service quality is directly and indirectly associated with adoption, where trust is a partial mediating factor.
- Out of the dimensions of quality of service, the most significant impact is generated by such dimensions as reliability, responsiveness, and assurance, and the role of such dimensions as empathy and tangibility is relatively less significant.

The overall findings confirm the suggested conceptual framework and are in line with all four hypotheses of the research.

5.3 Service Quality and Citizen Trust (H1) Discussion.

The findings show that the dimensions of service quality, especially reliability, responsiveness and assurance, are the key factors that improve the citizen confidence in e-governance services realised through CSC. This observation supports the assumptions of the SERVQUAL framework, according to which functional and process-related factors of service delivery are the most important determinants of user trust.

Citizens in rural governance also require CSCs who provide vital services to citizens, like verifying their identities, registering to obtain welfare, and conducting financial transactions. The mistakes, delays, or vagueness in such services may cause a lack of trust in the CSC operators, as well as in the system of digital governance, in general. Thus, reliability becomes the most powerful dimension, because citizens are concerned with the right and stable results of the service.

Responsiveness and assurance also help in trust building through diminishing uncertainty and risk perceptions. Timely service provision and polite and informed demeanour of CSC operators are indicators of competence and institutional credibility. The results are in tandem with the existing literature in the area of delivering public services, which points to the significance of trust in digital channels being strictly interconnected with service experience, as opposed to technology.

5.4 Trust and Citizen Adoption (H2) Discussion

The trust of citizens towards the services was discovered to be a significant factor that statistically affects the adoption and sustained use of CSC services. This finding favours the

extension of the Technology Acceptance Model to the context of the public service, where trust is an essential antecedent to perceived usefulness and behavioural intention.

Trust in the case of rural settings, where there might be a lack of digital literacy and institutional awareness, serves as a psychological assurance mechanism to minimise perceived risk in the use of technology. The more citizens place trust in CSC operators and systems, the higher the probability of them using digital services, visiting and reusing CSC services, and referring other people to CSC services.

The overwhelming supremacy of trust as a predictor highlights the fact that digital governance adoption is not only technological in nature, but it is essentially relational. Well-established platforms can still not be adopted as long as citizens do not have faith in intermediaries and institutional processes.

5.5 Direct Effect of Service Quality on Adoption (H3)

The results also suggest that the direct influence of service quality on citizen adoption is also an important factor, without taking into account trust. This implies that even where there is no deep-seated institutional trust, positive experience with services will be motivating towards adoption.

Efficiency, clarity, and responsiveness in service delivery are some of the high-quality attributes that contribute to the perception of usefulness and convenience, which are the central constructs of TAM. When citizens have a perception that CSC services are time-saving, reliable, and easily accessible, they tend to utilise them more than the traditional offline services.

Nevertheless, the direct impact of service quality is smaller than the impact of trust, which means that service quality does not guarantee permanent adoption without the reinforcement of trust.

5.6 Mediating Role of Trust (H4)

Another key contribution of the research is that service quality and adoption are mediated by citizen trust, which is empirically validated. The mediation analysis establishes that service quality has a direct relationship with adoption, but a significant part of its relationship is indirect through trust.

This result implies a two-phase adoption process:

- The quality of service influences the perception of citizens.
- Trust on its part converts service experience to prolonged adoption behaviour.

The mediation observed is partial and suggests that trust does not entirely substitute the role of service quality, but it complements it. That is, quality services create a sense of trust, and trust increases the results of adoption.

5.7. Integration with Existing Literature

The findings of the current study share the same findings as previous studies on e-governance, quality of the provided services, and digital inclusion. Previous literature has recognised the significance of service quality and trust separately, but there has been little empirical research that puts

these two constructs together in an e-governance situation in the rural context.

Through the integration of SERVQUAL and TAM under a single conceptualisation of analysis, this paper proves the hypothesis that citizen-centric service experience is the unbalanced variable between the availability of infrastructure and actual adoption. The results can be seen as empirical evidence of the argument that digital governance effectiveness must be measured by the access metrics as well as the citizen perceptions and behavioural outcomes.

5.8 Theoretical Implications

This paper has various theoretical contributions:

Sergeant et al. (2014) introduced a variation of SERVQUAL that is applicable in rural environments with e-governance: The paper confirms the SERVQUAL dimensions within the scope of CSC-based provision of public services, which primarily considers reliability and responsiveness as predominant in rural environments.

Trust as a Mechanism of Core Adoption:

The empirical determination of trust as an intermediary takes the study to the next level of TAM in integrating the relational and institutional aspects that apply to digital platforms in the public sector.

Digital Governance Model based on Citizen:

The study alters the focus on service providers and turns the attention to the citizens that makes the literature on digital governance more democratic with a demand-side approach.

5.9 Policy Implications

The results have significant consequences for the policy makers and government bodies dealing with digital governance projects:

- Standards in service quality: Develop minimum service quality standards in the operations of the CSC, especially regarding accuracy, timeliness, and responsiveness.
- Trust-Building Mechanisms: Open up grievance redressal mechanisms, service schedules and responsibility structures to enhance the trust of citizens.
- Capacity Building: Train CSC operators on the skills needed in their work, as well as in communication, ethics and citizen interaction.

The feedback of the citizens is integrated into the decision-making process by the citizens. Citizen Feedback Integration: Regular citizen satisfaction surveys should be instituted as a performance management tool.

5.10 CSC Operation Managerial Implications

To CSC administrators and operators, it indicates the following in the study:

- Emphasis on quality service delivery without errors and delays.
- Improving human relationships and mentoring of citizens.
- Establishing a long-term relationship with the citizens instead of paying attention only to the volume of the transactions.

- Relationship-based service provision can turn the CSCs into reputable online governance organisations.

5.11 Synthesis of Findings

Synthesis of empirical findings reveals that the use of rural e-governance platforms by the citizens is guided by trust and influenced by service-experience. Service quality can be considered as the input component, trust is the process of conversion, and adoption is the end behaviour outcome.

This combined knowledge reinforces the importance of human-based design and institutional trust, as well as technological infrastructure, as a key point of focus of digital governance initiatives.

6. CONCLUSION

The paper has analysed how the quality of services, trust, and their joint effect on the adoption of rural e-governance platforms via Common Service Centres (CSCs) play a significant role in India. The results show that service quality, especially in relation to reliability, responsiveness, and assurance, is quite a predictive factor of citizen trust, which consequently leads to the adoption and further use of CSC-based e-governance services. The paper offers an all-encompassing explanation of the determinants of the adoption of e-governance in rural areas by combining the SERVQUAL model and the Technology Acceptance Model (TAM).

The research highlights the need to focus on the citizen-centric service provision process, wherein trust and quality service provision are key success factors in the implementation of digital governance projects in rural India. To provide effective service delivery, policymakers and CSC administrators must put emphasis on standardisation of the quality of the provided services, establishing trust, and improving training of the operators.

Finally, the study emphasises that technological infrastructure is not the only factor that determines the success of e-governance in rural communities, but also the perception of the citizens with respect to the quality of services and their confidence in the systems. The findings are relevant to the general body of research on digital governance and service quality, and they offer practical implications to enhance the success of adoption in the rural e-government systems.

Global applicability to future emerging economies: The implications of the study apply worldwide since most emerging economies provide digital public services using the intermediary and assisted-digital models (e.g. service kiosk, telecentre and community facilitation points) to overcome digital divide and connectivity barriers. The credibility/credibility of frontline intermediaries and perceptions of reliability/ responsiveness of services to citizens are also likely to be critical in such situations to uptake, repeat use and word of mouth diffusion. Consequently, enhancing the standard of service quality, redressing grievances, and accountability systems can contribute to the adoption of inclusive e-governance in the increasingly diversified emerging-economy

landscapes in which the level of institutional trust and digital proficiency differ significantly.

7. Limitations and Future Research.

Several limitations to this study must be taken into consideration when interpreting the findings. To start with, the cross-sectional survey design identifies perceptions of service quality, trust, and adoption in one instance. Subsequently, it is not possible to conclusively determine the causal direction and change in trust or usage over time. Second, those five districts in Madhya Pradesh are the only part of the empirical setting. Although the selection of the districts was aimed at the variation in terms of CSC density and socio-economic setting, the findings might not be applicable entirely to other states in India or other countries with service-delivery and governance structures.

Third, the research is based on self-reported perceptions obtained with the help of one questionnaire. Despite the common method bias being measured by procedural steps and statistical diagnosis, future research may also use triangulation between the survey results and some objective indicators of CSC performance (e.g., transaction completion rates, waiting time, grievance record) or administrative usage statistics.

Future studies can carry this research further by using longitudinal or panel designs to discover the accumulation of trust in repeated interactions based on service experiences, by using the rural and semi-urban populations as a control group, and by conducting qualitative interviews with citizens and Village Level Entrepreneurs to elicit context-specific trust cues and adoption barriers. The measurement and structural models could also be simultaneously tested using structural equation modelling, and the effect of other mechanisms, including perceived risk, digital literacy, and perceived usefulness/ease of use, could be investigated.

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