

# External And Internal Factors Influencing E-Service Quality: Examining The Factors Affecting E-Service Quality Of Indian Government's Online Initiatives

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## Abstract

An electronic service, also known as e-service, is a process for delivering services electronically. E-services offer businesses the opportunity to create innovative service design strategies and new services through the use of e-services. Online service quality (eSQ) is increasingly recognized as a determinant of long-term retention and a key competitive advantage. Literature concerning factors influencing the adoption of e-government services in a country like India is lacking. There are few studies investigating the stand-alone external and internal factors that influence the quality of e-Services offered by Indian government agencies. The study results will provide insight to government officials who are responsible for e-government implementation in similar circumstances and, as a result, contribute to the success of e-government implementation.

**Keywords:** e-SQ, e-commerce, e-services, Indian government, external factors, internal factors

## Introduction

Since the beginning of 2000, e-service has become an increasingly popular concept among researchers and practitioners. E-service is the process of providing services electronically. The use of e-services offers businesses a unique opportunity to develop innovative service design strategies and new services. A first point to note is that all service providers, regardless of whether they are brick-and-mortar businesses or Internet-only providers, now have a greater variety of delivery channels available for competition (Ray et.al, 2019). Furthermore, many new services can be offered more economically with a greater geographical reach and a more diverse product mix. Several researchers contend that there have been conflicting results when it comes to e-services. Many industries, including airlines, stock trading, and office supply retailers, have

benefited from the Internet and its services, while many others have spent millions of dollars without improving the service quality (Singh, 2019). A revolution in technology has completely transformed the way businesses operate, serve and retain their customers. The new phenomenon of information technology has set in motion a new paradigm for providing better services in the services sector. Since services are intangible, it has always been challenging to satisfy customers, and therefore to measure and rate the quality of service. Since information technology has become so prevalent in our daily lives, the methods by which services are delivered have changed from traditional to electronic, making it harder to measure a service's quality and maintain it; service quality has now been transformed into e-service quality (Ghosh, 2018). e-Service quality (eSQ) is increasingly recognized as a

key to determining the competitive advantage and a determinant of long-term retention for companies operating online - both private and government. Unlike the traditional retail environment, the online environment is unique. Hence, Ladhari (2010) classified it into four factors: convenience and efficiency, safety and confidentiality, the absence of face-to-face contact, and the production of quality service. According to Wu (2011), eSQ did not directly influence customer satisfaction but instead had an indirect effect, i.e., customer satisfaction provided a mediating role in the relationship among e-service qualities. According to the researcher, eSQ should be measured at the time of purchase in order to better understand online purchases. The point-of-purchase refers to the moment when a customer purchases a product, whereas the post-purchase refers to the moment when they receive the product.

A number of previous studies have combined elements at both pre-and post-purchase, for example, customer service and service delivery (Madon, 2009). Nevertheless, the researcher examined service delivery and customer service at the point of purchase and pointed out that they have been distinguished from service delivery and customer service at the post-purchase stage (Barua, 2012). In other words, these elements play a different role at each stage. As technology increasingly infiltrates all aspects of human life, it has affected the way people live, how they work, how companies do business, and how governments serve their citizens. By making governance and public administration more efficient and effective through e-Governance, new dimensions have been added to the system of governing nations and citizen services have been enhanced. E-Government reveals how public administrations and governments can undergo a massive reorganization and modernization. The e-government industry has played a vital role in improving governmental processes (e-administration), connecting citizens with government services (e-citizens), and establishing external interactions (e-society). E-commerce has altered traditional methods of conducting business, resulting in the creation of many new businesses. In recent years, a number of studies have been conducted to understand how consumers interact with e-services (Misha & Sharma, 2013). As a rapidly developing country with a mixed economic

system after independence, India remains heavily involved in several key industries (Barthwal, 2003; Singh & Sahu, 2018). Research on e-Government encompasses many other fields, such as information systems (IS), public administration, management and political science. Throughout the world, countries have adopted electronic governance. In a rapidly growing economy like India, e-governance has become indispensable. In response to the rapid growth of digitalization, many governments have introduced and integrated technology into their governmental processes. In e-governance, the government utilizes Information and Communication Technology (ICT) to deliver and facilitate government services, exchange of information, communication transactions and integration of various standalone systems and services (Banday & Mattoo, 2013; Sivanthu, 2018). Basically, it is the use of technology to perform government functions and achieve government objectives. e-Government enables citizens and businesses to access government services in a convenient, efficient, and transparent manner. Some examples of e-governance include the Digital India initiative, the National Portal of India, the Prime Minister's website, Aadhaar, filing and paying taxes online, digital land management systems, Common Entrance Test, etc. Taking this into consideration, the current study aims to study the external and internal factors influencing e-service quality of the Indian government's online initiatives.

## Literature Review

Srivastava (2011) defines e-government as the use of ICTs for improving access to government services and delivering value-added target processes to the benefit of stakeholders. According to some researchers, the quality of e-government services, or e-service quality, is determined by the users' overall assessment of the service in the virtual context and serves as one of the key factors in determining the success or failure of the program. In addition to affecting government, it has an impact on citizens as well. Shareef et.al (2011) asserted that although e-government has been widely adopted and developed, it is not clear whether citizens in developing countries are prepared to embrace these services. E-government projects often fail due to a lack of public acceptance of technology, particularly in

developing countries. The diffusion, acceptance, and success of e-government initiatives depend on the willingness of citizens to adopt them (Kumar et al., 2018). E-government systems have significant impacts on public administration, organizations, individuals, and society; however, only a few thorough and systematic studies have been conducted on the subject to comprehensively integrate overall factors related to their successful implementation (Gupta, Singh & Bhaskar, 2018). The theory and concept of eGovernment is still in its infancy. Alzahrani, Al-Karaghoul, and Weerakkody (2017) argue that the e-government discipline offers researchers and practitioners a lot of opportunities. There is, however, a gap in the literature concerning the factors influencing the adoption of e-government services in a country like India. According to several researchers, after reviewing the literature on e-government adoption, the proposed e-government models are too narrow in scope. Technology has played a significant role in Indian public administration since the 1960s and has continued well into the early 1990s. The initial purpose of this project was to develop in-house government applications related to defense, economic monitoring, planning, and managing data intensive functions related to elections, census, and tax administration. The advent of the internet era in the late 1990s initiated a second phase of computerization that resulted in pioneering work in e-government, pointed out Gupta (2010). In his study of e-government systems, Heeks (2003) observes that 35 percent of e-government projects in developing countries are total failures and 50 percent are partial failures. Despite significant investments, extensive planning, and a growing implementation of e-government projects in India, public agencies have not been able to encourage citizens to use these services. In the past, the complexity of government work procedures has always been a barrier to citizens and other stakeholders being able to access government services. Government portals, however, cover the scope and complexity of government department dependencies, presenting government-on-line in a variety of ways (Kompella, 2020). All types of self-services are available on these systems, from searching for information to services involving complex transactions such as e-filing income taxes. Alternatively, the portal can also serve as

a convenient platform for getting new business permits, uploading or downloading tenders, bidding in government auctions, or promoting business-to-government transactions (B2G). Furthermore, government portals provide an opportunity to reorient services around the needs of citizens while consolidating back-office responsibilities (Gupta et al., 2004).

Research based on actual experiences of citizens with government online services is crucial for suggesting management implications models. The importance of ensuring a return on investments is another important aspect of service quality research (Wang et al., 2005). Bhattacharya, Gulla, and Gupta (2012) contend that government portals in India are designed entirely by IT professionals and are implemented exclusively by the IT department. As a result, the portals lack a clear focus on service objectives, resource commitment, and citizen-centric design. Many of these portals face problems related to multilingualism, presentation of features, plurality of services, interoperability, and communication. The inefficiency of portal management often prevents citizens from using online services. In addition, e-services are distant and impersonal in comparison with traditional methods of government interaction. This results in a feeling of mistrust, a lack of trustworthiness, and a sense of dissatisfaction among citizens. As a result, researchers and practitioners have worked towards a generic and fundamental mission of citizen centricity. The quality of e-government services may also be affected by the administrative level of a country (Goyal, Pillai & Chauhan, 2021). Several studies have focused on the dynamic progression of services from the national level to the state level and from the state level to the local level. Generally, these studies conclude that the federal government is more advanced than state governments in terms of quality features and accessibility. The ultimate objective of online government, regardless of the implementation phase or administrative level, is to provide transparent and effective services to citizens (Monga, 2008). In their study of the positive impact that e-government services have on citizens, Verdegem and Hauttekeete (2007) find that the online presence of government organizations itself serves as a source of moral support. Other factors that contribute to user satisfaction include

reliability, security, usability, content readability, ease of use, content quality, cost effectiveness, privacy or personal information protection, transparency, courtesy, responsiveness, accessibility and flexibility. While citizens' behavioural intentions are very complex, their willingness to adopt a new technology-driven system is equally complex (Shareef et al., 2011). A person's willingness to adopt innovations is based on the relative advantage of new practices, which are compatible with existing values, beliefs, and experiences (Bhuvana & Vasantha, 2020).

### Research Gap

Despite its significant contributions, this study does have certain limitations. To enhance the current findings, larger and more representative samples within India may be included in future studies. Further extension and verification of the findings may be possible to other developing countries that are at a similar stage of maturity in terms of e-government services. The number of studies exploring the stand-alone external and internal factors influencing the quality of e-Services of the Indian government's online initiatives is limited to none. Internal factors are those that are within the control of an organization, while external factors are those that impact the success of an organization, and these impacts may be positive or negative. An organization cannot control external factors - all it can do is react to them and make decisions to help it remain successful.

### Aim and Objectives

**Aim:** The aim of the current paper is to study the external and internal factors influencing e-service quality of Indian government's online initiatives. The objectives are as follows:

- To study the e-service quality of Indian government's online initiatives
- To study the external and internal factors affecting the e-service quality of Indian government's online initiatives
- To understand the challenges with Indian government's online initiatives
- To suggest measures to improve the e-service quality of Indian government's online initiatives by identifying the influential factors

### Hypotheses

#### Hypothesis 1

H0: External and internal factors do not affect the e-service quality of Indian government's online initiatives

H1: External and internal factors affect the e-service quality of Indian government's online initiatives

#### Hypothesis 2

H0: Customer satisfaction is a contributing factor for government e-service services

H2: Customer satisfaction is not a contributing factor for government e-service services

#### Hypothesis 3

H0: Identifying the influential factors do not contribute to improving the e-service quality of Indian government's online initiatives

H3: Identifying the influential factors contributes to improving the e-service quality of Indian government's online initiatives

### Findings and Suggestions

According to findings from the literature, citizens will be more willing to adopt e-government services if they find them to be more useful, user-friendly, effective and efficient. The government should provide e-government services with relevant information, as well as a well-organized design and content to ensure the adoption of e-government services by citizens. Considering that e-government services in India are at an early stage, the government should focus on expanding e-government services for its citizens (Khanra & Joseph, 2019). In order for service providers to boost the efficiency and quality of their services in order to reach a larger audience, one of the primary challenges involved is to develop these services with high quality to meet users' expectations. In order to maintain trust between service providers and users, quality plays a crucial role. Additional concerns for citizens include privacy and security. From the Indian perspective, it can be argued that citizens are not aware of the full extent of e-government services. Government must therefore take a more active role in this area. Citizens are concerned with facilitating conditions such as the availability of adequate infrastructure and service support. As a result, the government

should focus on improving the IT infrastructure and supporting facilities, such as online payment capabilities, to promote e-government. In order to determine the quality of government e-services, we must consider eight factors: system quality, reliability, security, accessibility, intelligibility, service capability, interactivity, and responsiveness. It has been found that perceived service value is one of the most powerful mediators between service quality and citizens' intentions to continue using the service. There is a direct correlation between the intention to use a service and the quality, value, and satisfaction with the service. It is imperative that the government implement strong policies and formulate their strategy in a way that will enhance citizens' trust in e-government services so that citizens may utilize e-government services without fear. E-government policies should emphasize the usefulness of e-government services, infrastructure issues, awareness, adequate help and guidance, and convenient access to e-government services. The Indian government has aggressive plans to implement e-government solutions across the country in the coming years. As part of the reform, large investments have already been made in the ICT infrastructure and a concerted effort is being made at a strategic level to reform the service delivery model. As a result of these reforms and restructurings, the results have not been too encouraging since a gap exists between the design and the actual results. Understanding the needs and expectations of citizens can help to reduce this gap and act as a positive trigger for the adoption of e-government. The use of public campaigns can increase awareness of e-government services and encourage citizens to utilize them. To maximize utilization, the government must strive for operational excellence and improve quality of services. Ultimately, the goal should be to ensure that these services fail as little as possible.

### **Conclusion**

Based on the literature review, the primary factors influencing citizens to adopt e-government services in India are functional benefits, awareness, ease-of-use, availability of resources, computer self-efficacy, multilingual option, compatibility, identity, security, service availability, reliability, information quality,

risk, responsiveness, trustworthiness, social influence, and civic mindedness. Additionally, corruption prevention, transparency and fairness in processes, customer support, connectedness, and forced adoption are also important determinants. In conclusion, it can be stated that the government must be able to understand the citizens' needs and take appropriate action in order to diffuse e-government services successfully.

### **Future scope**

It is imperative that we understand the adoption behaviour of citizens in order to get the maximum benefit from electronic public services. In this sense, these findings may provide valuable insights to government officials tasked with providing e-governance services and is therefore likely to have an impact on the success of e-governance implementations in similar settings. It is hoped that the study findings will provide insight to government officials responsible for providing e-government services and, thereby, contribute to the success of e-government implementation in similar situations. The majority of the studies in India are conceptual and do not suggest any concrete methods for measuring the quality of e-services in India. In addition, the study contributes to the progress of further theoretical advancements on e-service quality of transaction portals used by government organizations. There is the possibility of including larger and more representative samples within India in later studies in order to strengthen the results of the present study. There is an opportunity to further extend and verify the findings in other developing countries that are at a similar stage of maturity with respect to their e-governments services. There is also a future scope for studies to explore how the e-service quality of Indian government's online initiatives in specific categories, such as, the underdeveloped areas, or another demographic such as the older citizens, women in underdeveloped societies etc.

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