Service excellence in e-governance issues: An Indian case study

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Abstract

Service excellence has been a long held goal for the private sector and increasingly, in the government sector for many countries. With the introduction of online services in recent years by governments around the world, the provision of excellence in e-governance services is becoming an equally sought after goal. The measurement of e-governance quality is addressed here with particular reference to India, a country with a population of approximately one billion people, where a high standard of e-governance provision can be expected to have a positive impact on a very large number of people. The paper provides an exploratory study of assessing service orientation and thereby providing a conceptual model of indicating the extent of how the services within the public sector can be categorized.

Key words: service excellence, e-governance, India

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Introduction

In 1863, Abraham Lincoln gave his legendary Gettysburg address using the now famous phrase 'A government of the people, by the people and for the people' (Gettysburg speech). In other words a government that is constructed of people, and elected by the people, should represent the people. People or citizens then become the government's priority. The early 1990s witnessed the movement 'new public management' (NPM) in the western world (Hughes, 2003; Saxena, 1996). NPM encompasses management practices that include service quality, performance management and risk management.

The terms government and governance have been widely disputed. Saxena (2005) draws a key distinction between 'government' and 'governance'. He identifies the government as an institution, whereas governance may be seen as a wider concept illustrating forms of governance that can be undertaken not only by government authority but by private firms, non governmental organisation or associations of firms (Keohane & Nye, 2000). Governments are specific institutions that donate to governance (Riley, 2003). In other words, it is suggested that governance focuses on the approach in which decisions are made, while government focuses on the approach in which these decisions are carried out. This paper is thus intended to posit issues on e-governance and their contribution to excellence in services. The key issue within the context of services is service delivery, which is the process of making available the use of services for consumers, in an efficient and convenient manner. The government can provide value by providing service delivery which consists of the location timing and manner by which it is distributed (Bruhn & Georgi, 2006). At the service level, e-governance features include being open for business 24 hours a day, greater accessibility, lower costs and not having to visit government offices; it also aims to provide government information (Teicher et al., 2002).

Despite the tremendous efforts in e-governance, provision by the various governments of both the developing and developed countries have envisaged problems of technological and

of organisational nature (Heeks, 2003; Holliday, 2002; Pacific Council on International Policy, 2002; Strejeek & Theil, 2002; Wescott, 2001). The present study attempts to contribute to the emerging e-governance issues in the following ways: It undertakes an exploratory pilot study to provide a framework based on service orientation in order to highlight the e-governance problems faced in the Indian subcontinent. A matrix is proposed showing the different categories of service perception by the consumer. For example, the e-service provided by the government is rated as excellent, good, satisfactory or poor. This provides a valuable insight to the need for improvement of e-services. It also attempts to investigate and access e-governance service delivery, examine the level of services as perceived by citizens and to provide initial recommendations on the extent of delivery performed. To enable us to do this we have to first identify what is the gap between service delivery and reality.

Indian perspective:

It is suggested that while India does have an inspiring vision of where e-governance is going, there is a gap between service delivery and reality in that country. The challenge of e-governance in India lies in providing the service to about a billion people. At the moment, India is ranked 87th in the global e-government readiness ranking of 2005 (CIOL, 2006), which indicates significant room for improvement.

Research has indicated that the three Indian states leading in e-governance provision are Andhra Pradesh, Karnataka and Tamil Nadu, while the states of Kerala, Gujarat, Maharashtra, Madhya Pradesh, West Bengal and Rajasthan are not far behind (NASSCOM, 2003). These ten Indian states out of a total of 28, comprise over half the total Indian population. There has been a tremendous increase in the automated work flow within the notoriously bureaucratic Indian government departments, and e-governance seems to be a promising development. For instance, a recent auto bid evaluation for tenders has helped reduce both subjectivity in decision-making and corruption. Corrupt practices have been reduced and on the whole there has been an attendant reduction in costs and inefficiencies (NASSCOM, 2003).

While almost half of the country is catching up, rapid progress is being delayed due to operational, economic, personnel, planning and implementation issues. The main underlying reason for these problems has been identified as an over-emphasis on investing in hardware and too little emphasis on developing software and services (NASSCOM, 2003).

According to a study by NASSCOM, India's National Association of Software and Services Companies, although there is rapid progress in e-governance implementation, there have been far too many problems in the operational, economic, personnel, planning and implementation stages. That study indicates that the Indian government should clearly define an e-governance strategy and formulate plans with measurable timelines, which currently do not exist (NASSCOM, 2004).

Nevertheless, the foremost concerns of the government lie in addressing the appropriate connectivity between nations, stable power supply, and constant assistance to help the illiterate and lower strata of society (Menon, 2003). There has also been too much emphasis on starting new projects without the subsequent follow through in implementing and running the projects. Anecdotal evidence by Ahmed (2004) indicates that there will be a continuation of funds into buying and installing IT hardware with no changes expected in the long term. He identifies another significant problem; the severe lack of in-house IT expertise to solve even minor problems. There is an acute shortage of staff across even the leading Indian states in the provision of e-governance. Problems also lie in the planning processes, and the type of technology platforms that are required to be utilised. Standardising programs across the board is another prominent issue that crops up as different departments use different programs. Thus, more time and resources are expended on the unnecessary duplication of databases in government departments (Ahmad, 2004).

There is no paucity of suggestions in the literature as to why India needs an e-government or e-governance. There is a significant investment of resources being spent on e-governance projects. Often the rating of some of the e-governance projects is based on subjective assessments and value judgments of only a few sources and institutions (Rao,

Rao, & Bhatnagar, 2004). Based on the problems that India faces for the moment and the amount of investment that is being directed to this area, it would be worthwhile to distinguish e-governance assessment with its service delivery. To do this, the next section will draw on an understanding of the importance of services and how technology plays a role in the public sector. It will then discuss the much talked about service dimensions and why it was necessary to use different measures to access service orientation.   The research question that needs to be addressed is as follows:

What is the gap between service delivery and reality? And

- to what extent can e-governance be rated as an efficient service;
- to what extent does e-governance provide user convenience; and
- to what extent is e-governance meeting citizen centricity attributes.

Literature review

While there are many definitions of what a 'service' entails, we use the contemporary definition offered by Kotler and Armstrong (1991):

A service is an activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything.   Its production may or may not be tied to a physical product.

Services have characteristics that distinguish them from products including intangibility, inseparability, variability, perishability and inability to own a service. These characteristics are described in order to understand the nature of a service offered. ISO 9004 has highlighted the fact that a good quality service can lead to improvements in market share, cost reduction, improved productivity and efficiency and customer satisfaction (McColl, Callaghan & Palmer, 1998). Findings from an e-service research indicate that internal customer satisfaction is vital to the success of e-procurement operation and is a significant determinant of the cost and benefits to be gained from its adoption (Croom & Johnston, 2003).

Emerging e-service research within the development of service between an organisation and its external customers is not new. Sousa (2002) not only considered the quality of the customer's experience but also the requirements for key service design. Other researchers evaluated what e-services required in terms of value-added features in order to obtain market share and profits (Verma et al., 2002). While there has also been models developed linking consumer-perceived quality with e-service to the SERVQUAL (Zhu et al., 2002), investigation in prime areas such as the rationale behind why consumers accept or reject technology have also been researched (Walker et al., 2002).   This broad area of e-service research indicates the importance that e-service is gaining momentum in its application.

Figure 1. The service triangle technology (Parasuraman 1996).
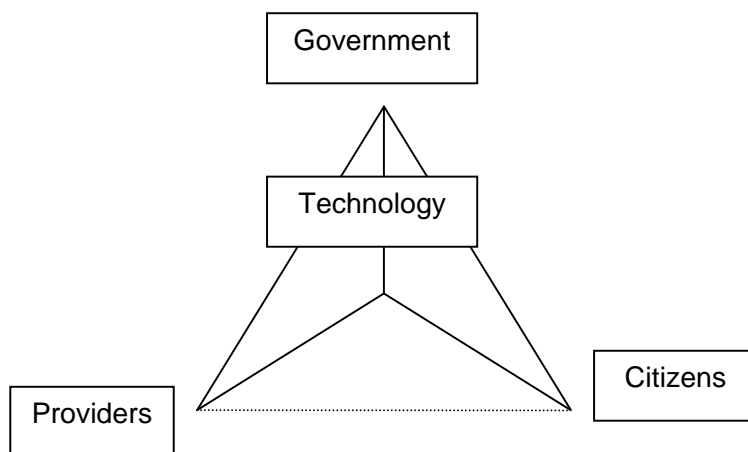
With respect to technology, researchers have expanded the services triangle to a pyramid. The pyramid indicates that the interactive marketing can be the outcome of citizens, service providers and technology, interacting at a given point in time to participate in the delivery of a service (see Figure 1).   It is the government's responsibility to provide the technology and of the service provider to ensure service quality to their citizens (Parasuraman, 1996).

Researchers such as Parasuraman, Zeithaml and Berry (1998) have indicated that service

quality is measurable and their GAP model covers two basic dimensions of service provision: outcome and processes. This model has been criticised by many authors. Initial criticisms have been made by Cronin and Taylor (1992) and echoed by many others. Some of the main criticisms are summarised by McColl, Callaghan and Palmer (1998, p. 156):

- The GAP model is suitable for long term customer satisfaction;
- The customer satisfaction perceptions are a weak measure of loyalty;
- The expectations measurements are complicated to make;
- The measurement instrument is unsophisticated and is limited in its form; and
- Specific characteristics are required to be defined differently for organisations.

Although the criticisms outlined do highlight major issues, it is noteworthy to mention that the work of Parasuraman et al. (1988) has concentrated on measuring consumer expectations as well as perception of performance. The research by Gronroos (1984) indicated that 'technical' and 'functional' qualities are the two main elements of quality. While technical quality indicates the relatively quantifiable features of a service, other features such as waiting time and reliability of services could be listed as technical as they can be easily measured by the customer and the service provider. Functional quality, on the other hand, consists of how the technical quality is delivered to consumers and how this process can be influenced by environmental factors. The nature of service quality is a highly conceptual construct and defining this construct commences by addressing the abstract expectation that consumers have with regards to quality (McColl, Callaghan & Palmer, 1998).

In other words, it states that after service delivery, consumers subsequently judge quality based on how the perceived delivery match up to their expectations. Zeithaml et al. (1993) have differentiated three levels of quality assessment: the desired level of service (giving the customer what they want); the adequate service level (an acceptable standard of service) and predicted level (most likely to occur). Service quality is a subjective matter. For example, a consumer may not be able to determine what good quality is, if they are using the service for the first time. Although quality standards will provide the basis of how

well a service is regarded, consumers progressively learn the use of the service. First time users and other factors are key areas that need to be considered before measuring up quality standards.

If we were to access e-governance provision, we would find that the expectations of citizens about government are formed on the experiences they have had mostly with private institutions and the services provided by them. It would be rare to find characteristics such as 'reliable', 'convenient', 'efficient' and 'effective' related with the delivery of public services in India.

As suggested in the literature above, one of the criticisms of the SERVQUAL scale is that the measurement instrument is unsophisticated and limited in its form.   Specific characteristics are required to be defined differently for organisations and should also be country specific.   To provide an understanding of service orientation, we have used a component of the framework for assessing e-governance projects developed by Rao, Rao, and Bhatnagar (2004).

Methodology

Scale development:

SERVQUAL is a scale that is generally used to access service quality but as suggested in the literature above there have been various drawbacks. To understand e-governance and its functioning, we have used the service orientation scales developed by Rao, Rao, and Bhatnagar (2004) as shown below. They have grouped service orientation under three sub groups namely – efficiency, user convenience and citizencentricity.

Efficiency attributes

Where 1 = excellent, 2=good, 3=satisfactory, 4= poor

1. Speed of delivery of service
2. Compliance to committed service time frame
3. Quality of service

4. Simplicity of user action required for obtaining the service

5. Reliability of the service

User convenience attributes

1. Ease of access to the service

2. User dependence of time (24 x 7) availability

3. Single window access to several services

4. Integrated services enabling access to several agencies through one request

5. Mechanisms for problem resolution

6. How smoothly exceptions are handled

7. Whether alternative processes exist in case of serious problems

8. Suitability of service locations to socially and economically backward areas

Citizen- centricity attributes

1. To what extent user requirements are covered in service design

2. To what extent is the use of local language in user interfaces

3. To what extent attributes of citizen centricity are these new services being offered other than conventional services offered earlier

4. How much have you reduced your visits to higher level offices to complete the transaction

5. To what extent is the staff of the service provider at service delivery station familiar with the services packaged for different user groups

Sample selection and data analysis:

A random telephone interview was conducted by a market research company in India on a sample of 30 consumers in the state of Hyderabad taken from the residential listings in the telephone directory. All consumers that were identified as using any form of electronic service provided by the government were included in the study. The research instrument contained a total of 18 questions based on service orientation and the remaining on demographic profiles.

As the research method being used is quantitative in nature, SPSS was used to help analyse results gathered from the survey responses. Descriptive analysis is used to measure the mean, mode, standard deviation and range of the responses. The idea of this type of analysis is to describe the variables in a data matrix (Burns & Bush, 2000).

The demographic profiles of the selected sample were: age range from 18-29 years represented 16%; 30-50 years represented 48%; and 51-70 years represented 36%. There were 60% males and 40% females in the selected sample. There was only a minority (3%) that didn't have formal education. Those that had completed higher secondary i.e. year 11 and 12 represented around 37% of the sample and those with a university degree was around 30% and 30% had post graduate degrees.

Figure 2. Conceptual Model – Service orientation of e-governance in India

I	II
Excellent Access to several services 40%	Good New services 40% Local language 70% Availability of services 43.3% Simplicity of user action 30.0% Quality of service 50%
III Satisfactory Knowledge of service provider 66.7 Reduced visits 53.3% Ease of access 30.0%	IV Poor Speed of delivery 43.3% User requirement design 63.3% Backward areas availability 80% Reliability of service 53.3% Compliance to service 63%

Discussion and findings:

To develop this model we considered what factor was ranked the highest within each scores. For instance with regard to availability of services, 16% considered it to be

'excellent', 43% 'good' which was the highest, 36% percent considered it as 'satisfactory' and 3% rated it 'poor'.   The highest score within the availability of services was 43% good and hence it was entered in quadrant II (good).

In the above table it can be identified that within the top ranking scores in quadrant IV – 'Poor' service - above 60% of the respondents were in user requirement design category, 80% in backward areas availability and 63% in compliance to service.   These are indications of significant deficiencies and of a need for more resource in these areas. While local language was rated good it is important that this standard is maintained. Knowledge of the service provider was rated as only satisfactory.   In fact, knowledge of the service provider should as far as possible fall in the 'excellent' quadrant. Dissemination of knowledge by service providers is considered essential as this factor may be the one to educated citizens.

About 30% of the sample found ease of access satisfactory.   Around 50% of the consumers considered service quality as good. This calls for even more emphasis on trying to narrow the service gap.   Although most of the users were highly literate, their expectations may be of a higher standard. As 53% rated reliability of the service as poor, this should be of concern to service providers and suggests they need to significantly improve the reliability of their services. At the moment in Hyderabad, there are not many competitors. An effective way to improve services would be to increase competition with the introduction of additional service providers. To improve their competitive position, service providers would then improve their performance in all areas of service provision. More competition would also have beneficial cost advantages.

Limitations and Conclusions

The paper provides an exploratory study of assessing service orientation and thereby providing a conceptual model of indicating the extent of how the services within the public sector can be categorized. It provides useful insights to those managing e-governance and service providers providing the service. This paper has a number of limitations which are worth noting. Firstly, this is a pilot study and the sample is too small to make major

generalisations. Secondly, the study being of an exploratory nature, more qualitative and quantitative focus is required. Thus the paper lacks a strong theoretical framework that is provided in the services area. Future researchers can use the other gaps identified in the SERVQUAL model to provide further legitimacy to the model in terms of broadening its application in the context of similar service areas. The assessment evaluation only took into consideration one construct of the service orientation. Further research can be applied to all the constructs. The challenge of e-governance to serve a billion people should not fail to be a significant focus of the government and every possible step should be undertaken to harness its delivery be it in the service or technological area.

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