

The Influence Of Convenience Of Access On The Perceived Effectiveness Of E-Service Delivery Strategy By The National Transport And Safety Authority In Kenya

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Abstract: In order to satisfy customers and maintain efficiency at organizational level, companies employ various strategies. At the government level, meeting citizen demands in terms of service delivery is paramount. This study sought to find out whether strategies employed by the National Transport and Safety Authority to deliver services were perceived to be effective by the target customer. The study focused on a new strategy that involved online driving license processing. Electronic service delivery, has gained acceptance among business community as well as the government through e-government platform. These strategies would be futile if customers do not perceive them to be effective in addressing their needs. In this regard, the current study sought to establish the effect of convenience of access on the perceived effectiveness of e-Service delivery strategy by the National Transport and Safety Authority online driving license processing in Kenya. The study was guided by the following research questions; to what extent does the ease of service access from diverse locations influence the perceived effectiveness of the e-service strategy? to what extent does flexibility in terms of timing of service access influence the perceived effectiveness of the e-service strategy? to what extent does flexibility in terms of access of service from cyber cafés influence perceived effectiveness of e-service strategy? Data for the study was collected from 284 respondents from the public transport cohort in Nairobi city plying different routes. Data analysis was done using regression analysis and descriptive statistics using SPSS version 23. Findings show that convenience of accessing services played a role in determining whether the service was considered effective or not. The regression coefficient of .994 show that convenience contributes significantly to the perceived effectiveness of e-service delivery strategy in Kenya. The study recommends that it is important to consider the extent to which customers are able to access services from diverse locations and using various modes of delivery point such as public internet facilities popularly known as cyber cafés in Kenya.

I. INTRODUCTION

Internet came into being in the early 70s, yet for the majority of the population it was virtually inaccessible until the early 90's. Electronic commerce, or e-commerce, as we know it today, was made possible through the advent of the world wide web, and the browser(s).

Researchers have distinguished the-service quality into four types namely expected service; desired service; adequate service; and predicted service. Expected services referred to the services customers intend to obtain from the-service provider (Zeithmal et al, 2006). When offering E-Services it is imperative to focus on fulfilling customer expectations

because this in turn leads to customer satisfaction. The perception of customers is what guides them into judging the quality of services that they access and also the effectiveness of the service delivery strategy. In the world we are living in today, customers are looking for convenient way of accessing goods and services and service providers have no option but to search for strategies that make customer experience appealing. Today citizens are appraising their governments on the effectiveness of service delivery. E-government concept has been born out of this need.

The emergence of Information and Communication Technology has provided means for faster and better communication, efficient storage, retrieval and processing of

data and exchange and utilization of information to its users, be they individuals, groups, businesses, organizations or governments. ICTs have to be used in order to create and deliver a service, which is useful and has an effective impact for the businesses and for the citizens. Information and communications technology (ICT) is an integral component of government operations and service delivery. ICT is increasingly used as a strategic tool to more efficiently support any Government's priorities and program delivery.

In order to have a successful e-Government, the Information and Communication Technology (ICT) solutions, which are at the very core of the e-Government infrastructure, have to be reachable by all citizens (Reffat, 2006). Studies that have been done revealed that ICT service delivery qualities influence consumer evaluation and drive purchase intention. Factors include customization, interactivity, care, cultivation, community, choice, convenience, and character (Srinivasan et al., 2002); content, context and infrastructure quality (Lu & Lin, 2002).

In Kenya, the need for use online services has been prompted by the improved ICT infrastructure in the last decade, especially with the installation of the fibre optic cable which greatly enhanced connectivity and speed of internet in the country. This plan for enhancing connectivity in Kenya is contained in the Connected Kenya Master Plan (2012-2017). The plan envisions Kenya as a globally competitive and respected knowledge-based economy and it begun to strengthen ICT business development and was expected to be a major driver in industry (GOK, 2013). The reality of this strategic plan has been witnessed to date.

II. PROBLEM STATEMENT

The National Transport and Safety Authority adopted technology driven e-services in renewal, application and processing of driving license, this service has been manual and involved customers queuing in banking halls and spending several hours. The introduction of e-services was meant to increase the effectiveness of this process. The change from manual to fully electronic system (e-Service) is believed to have brought significant benefits to customers seeking renewal, application and processing of driving license.

However, the extent to which the e-services have made access to NTSA services easier to its target group has not been empirically ascertained based on various aspects. The perceived benefits can only be outlined by the users of the e-services. To understand customer perception on the effectiveness of the e-service delivery strategy, there is need to survey these customers/ users.

RESEARCH QUESTIONS AND FOCUS OF THE STUDY

This study was guided by the following questions;

- ✓ To what extent does the ease of service access from diverse locations influence the perceived effectiveness of the e-service strategy?
- ✓ To what extent does flexibility in terms of timing of service access influence the perceived effectiveness of the e-service strategy?

- ✓ To what extent does flexibility in terms of access of service from cyber cafés influence perceived effectiveness of e-service strategy?

These questions formed the basis of enquiry for this study and the focus was limited to the specified areas.

III. LITERATURE REVIEW AND THEORETICAL FOUNDATIONS

Customer expects timely, convenient, ease of use and less costly ways of renewal, application and processing of driving license. This is what will lead to perceived satisfaction or dissatisfaction. According to Alanezi, Kamil, & Bashir (2010), reliability is the degree to which a service that is promised is provided by an e-government web site. The-service should be provided on time, perform the promised service accurately and dependably. Soterous & Zenious (1997), reliability is the ability to perform the promised services accurately and dependably. Safwan (2010), reliability shows the ability of the-service provider to perform services in a dependable and accurate manner. Reliable services are likely to be regarded as effective also since they allow the user the chance of accessing the service to the level of their defined satisfaction.

From the undergoing we can argue that if the service is conveniently available to the customer at the appropriate time and place, it meets the effectiveness test for that criteria. This study therefore uses convenience as a measure of the effectiveness of e-service strategy of the National Transport and Safety Authority for driving licenses processing. Convenience can be assessed from location of access, time of access and mode of access such as through cyber cafés among other interfaces.

Convenience is a general construct that fits a number of business contexts, and so is important when it is found in either the traditional or e-service environment. The notion of convenience is also an emphasis for both IS and marketing studies. Convenience is founded on the work of Berry et al. (2002) and uses access convenience and transaction convenience to measure perceived usefulness. This construct can be measured through six items related to working more quickly, job performance, increasing productivity, effectiveness, making a job or task easier, and usefulness. This study used the concept of convenience to ascertain how convenience contributes to perceived effectiveness.

The study is founded on the disconfirmation theory which is anchored on the notion that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations. Mattila, A. & O'Neill, J.W. (2003) points out that, amongst the most popular satisfaction theories is the disconfirmation theory. From this view, users of online service platform will judge the effectiveness of the service offerer, on the basis of what extent their expectations will be meant and how far the experience has met their perception level.

IV. METHODOLOGY

The study is based on findings from 284 respondents who were active public transport drivers plying four key routes in the Nairobi central business district. The data was gathered using structured questionnaire and used a 5- point Likert scale to measure the various constructs of convenience. The study had a reliability coefficient of .825 and a response rate of 83.6%. Data was analyzed using descriptive statistics and a regression model. SPSS version 23 provided the analysis output and presentations were made in charts and tables.

V. FINDINGS AND DISCUSSIONS

When customers are accessing services, they are concerned about how convenient it is for them at the desired time. Service providers also concern themselves with the issue of convenience to their customers. So, for every strategy designed, service providers must be careful when designing strategies for their target users. This study measured convenience from different dimensions as follows; flexibility in terms of persons to access service in cyber cafés, time in accessing the service, and ease of access from diverse locations.

Findings show that majority (71.5%), concurred that flexibility to access services at different times contributed to the perceived effectiveness of the e-service delivery strategy by NTSA. Figure 1 gives these findings.

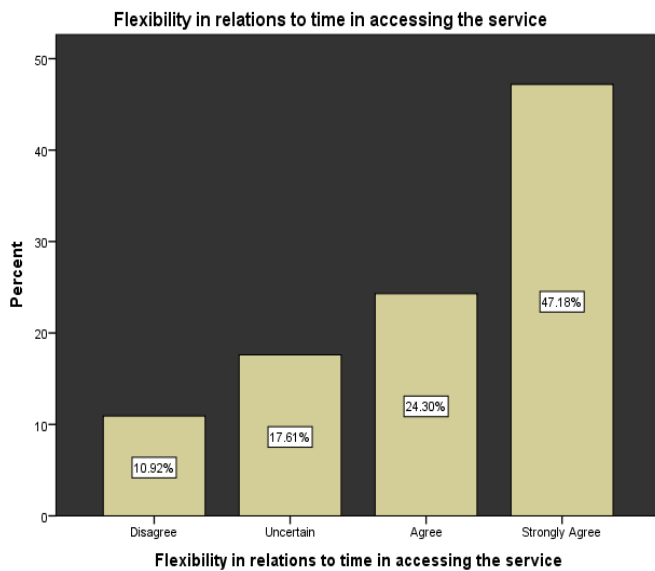


Figure 1

From figure 2 below, it is clear that majority (36% and 13%) of respondents agreed that the ability to access services from diverse locations influenced the perceived effectiveness of the e-service strategy. Surprisingly a reasonable percentage disagreed or was uncertain of whether flexibility to access the service from different locations influenced the perceived effectiveness of the services.

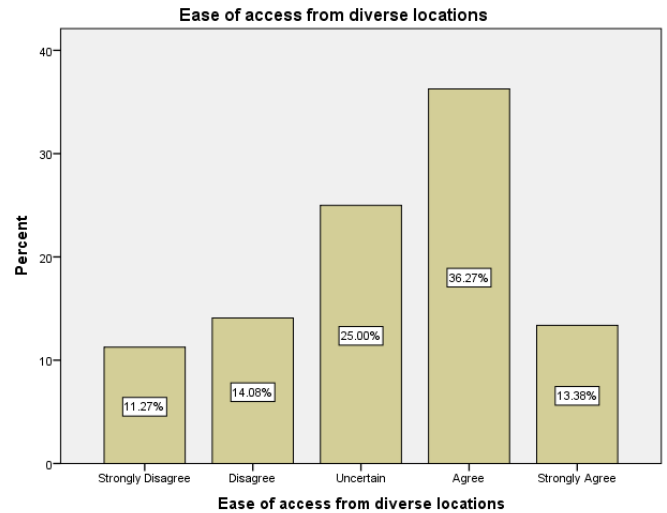


Figure 2

Special emphasis need to be made on the weight placed by respondents on the effect of flexibility of persons to access services from the cyber cafés, as shown in the figure 3 below whereby approximately 79% of the respondents felt that it had great impact in the perceived effectiveness of the e-service delivery strategy by NTSA. This in essence shows that the space and time of accessing services was useful in evaluating the effectiveness of the e- service strategy. Given the fact that cyber cafés are an important service distribution points and contributes a lot to the effectiveness of e-service delivery strategy in Kenya. Again, observing that only a minimal (1%) group disagreed that access of service from the cyber cafés contributed to their assessment of service delivery effectiveness, it's a point to observe when designing e- service delivery strategies.

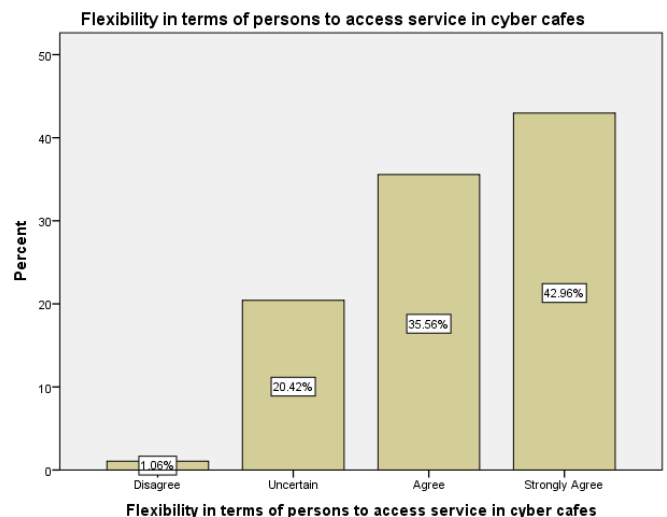


Figure 3

The mean scores for flexibility in relations to time in accessing the e-service (4.07), and ease of access from diverse locations (4.20) were in the interval $3.5 < \mu < 4.5$ which indicated that respondents had a tendency to agree that each metric had an impact on the effectiveness of e-service delivery of NTSA online driving licenses processing. Responses were

widely distributed around the mean for flexibility in terms of persons to access service in cyber cafes (std. dev.=1.19), and time in accessing the-service (std. dev.=1.04).

The analysis of the mode gives us another dimension that is important in assessing the effectiveness of e-service delivery strategy by NTSA when processing driving licenses. The mode shows that most people agreed or strongly agreed that all the metrics contributed to their perceived effectiveness of NTSA by using e-service strategy. The table 1 below gives the details for these findings. The implication also is that as organizations design strategies, it is important to consider the convenience from the perspective of the users.

Metrics	Ease of access from diverse locations	Flexibility in relation to time of accessing the service	Flexibility in terms of persons to access service in cyber cafés
N	284	284	284
Mean	3.2641	4.0775	4.2042
Mode	4.00	5.00	5.00
Std. Deviation	1.19361	1.04034	.79787

Table 1: Descriptive Statistics of Perceived Convenience of e-Service Strategy

Further analysis using regression model shows that convenience was a major contributor to perceived effectiveness of the e-service strategy by NTSA. The model shows that convenience accounted for 68.5% of the change in the dependent variable with a strong positive correlation of .823. Table 2 shows these findings.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.828 ^a	.685	.684	.32539

a. Predictors: (Constant), CONVENIENCE

Table 2: Model Summary

The regression model also shows that convenience contributed unstandardized coefficient of .994 to the model. This means that it was considered to be quite crucial when accessing services.

A unit increase in the convenience of e-service access would lead to a 0.994 increase in the perceived effectiveness of the e-service delivery strategy with the other variables kept constant. This shows that customers really consider the factor of convenience crucial in judging the effectiveness of the e-service delivery strategy. This is understandably so, given the fact that matatu drivers have really limited time to wait for services because of the nature of their work. The ability to access the service from diverse locations is crucial at different times is hence crucial.

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	.389	.132		2.944	.004
Convenience of E-Service	.994	.066	1.089	15.030	.000

a. Dependent Variable: Perceived Effectiveness of E-Service Delivery Strategy

Table 3: Regression Coefficients

VI. SUMMARY CONCLUSION AND RECOMMENDATIONS

This study concludes that convenience is important in as far as accessibility of service is concerned. In summary we can therefore say that convenience contributes significantly to the perceived effectiveness of e-service strategy. The impact of convenience aspects in service access on the effectiveness of e-service delivery of NTSA online driving licenses processing were examined using various metrics. These included the flexibility in terms of persons to access service in cyber cafes, time in accessing the service, day of the week to access the service, and ease of access from diverse locations. The mean scores for flexibility in relations to time in accessing the-service (4.07), flexibility in relations to day of the week to access the-service (3.75), and ease of access from diverse locations (4.20) were in the interval $3.5 < \mu < 4.5$ which indicated that respondents agreed that each metric had an impact on the effectiveness of e-service delivery of NTSA online driving licenses processing. From the regression analysis, convenience contributed .994 to the perceived effectiveness of the e-service delivery strategy. This is also the highest as compared to the other factors. This factor had also a mode value of 4 and 5 in all aspects, meaning most respondents agreed and strongly agreed on the fact that all the aspects leading to convenience of e-service delivery strategy.

The study recommends that there is need to promote more service delivery points so as to enhance accessibility and convenience. The timing of service delivery should be 24 hour based and the responsiveness by the service offerer should be evident such that challenges can be addressed promptly. This means the technology experts at the designing end must be engaging and on course always.

Future research can look into the challenges of convenience to different user segments. This will provide insight into how service designers can address the issue of convenience to different categories of users.

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