E-Tax Website Quality: An Evaluation Framework

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The study aims to evaluate the e-tax portal of Pakistan on the basis of the opinion of its users. It identifies the critical characteristics of quality that significantly exist in the e-tax portal and the characteristics that need to be given attention by the administrators as they are not up to the mark and do not show their significant presence. The study also highlights the problems faced by the users followed by the suggestions given by them in order to improve the quality of e-tax portal. As far as the practical implication of the study is concerned, it will help the FBR authorities to get an idea about the quality of e-tax website from the point of view of e-tax users which will enable them to take certain measure to improve the quality of e-portal and consequently the service level.

Keywords: E-Government, E-Tax Portal, System Quality, Information Quality.

Introduction

The present century is an age of technology. The advancement and growing use of information and communication technology (ICT) has enabled governments of many countries to adapt themselves to e-governments.

E-government is the online delivery of information and services by the government via internet or other electronic means. The governments all over the world are putting their best efforts to make their services and information available online so people can access them and take as much benefit as they can (Berdykhanova, Dehghantanha and Hariraj, 2010). Among various e-services, according to Chatfield (2009), e-tax is a citizen-centric e-government service which facilitates the individuals and corporations to file the tax returns and make payments electronically. Although the adoption of e-tax requires substantial switching costs (for example, obtaining digital signatures of taxpayers for the purpose of verification, learning new software tools etc.) but the citizens' acceptance and adoption of e-tax can be seen as an evidence that they perceive the e-tax services better than the traditional tax services. Apart from the switching costs mentioned above, e-tax can help the governments of a country to reduce its tax administration and tax law compliance costs by providing faster, convenient and better public services (Chatfield, 2009).

The government of Pakistan, like other developing nations, has invested heavily in e-government initiatives and e-filing of tax returns is one of the most important and widely used e-service introduced by federal board of revenue (FBR) in 2007. It has been nearly seven years since this system is developed but FBR is still unable to ensure its efficiency and high quality. Electronic government of Pakistan is still at its developing stage. Under this system the taxpayers have to get themselves registered with FBR web portal, URL https://e.fbr.gov.pk. E-filing enables the taxpayers to submit the tax returns electronically 24 hours a day and 7 days a week. The FAQ section of e-tax portal provides the relevant and easy to understand information to the users so they can get their queries answered. Recently FBR has introduced a new system for filing tax returns, named as 'Iris', only for the year 2014. Pakistan revenue automation limited (PRAL), a private limited company under FBR, has developed this software and users were required to file their

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returns through this newly introduced system. Despite improving the efficiency of e-filing of returns, the Iris is causing serious problems. Despite government support and heavy investment in e-government initiatives, the system has got several quality issues that need to be improved as early as possible because the success of e-government services does not only depend on government support, but on the citizens' adoption as well (Ahmad, Markkula, & Oivo, 2012). On the other hand there should be comprehensive evaluation of websites in oder to identify the factors that affect the quality of e-governemnt websites (Markaki et.al 2010).

The study aims to evaluate the system and information quality of e-tax website of Pakistan and to point out the critical factors of quality that significantly exist in the e-portal as per users' opinion. It further explores major problems faced by the users while filing tax returns electronically. The study also provides suggestions for government bodies as how to improve the overall quality in order to make the tax website more effective.

Practical Significance

Many studies have been conducted to evaluate the online websites quality but the area of government websites of developing counties is disregarded most of the times. This study has filled this gap by focusing on the assessment of e-tax website of a developing country, i.e. Pakistan. The aim of this research is to evaluate the government e-tax websites from the view point of users who have a direct interaction with it. This study is valuable for FBR authorities as it will help them to get an idea about the quality of e-tax website from the viewpoint of the users. The results will enable them to take certain measure to improve the quality of e-portal and consequently the service level. This study has opened a way towards more research regarding quality assessment of electronic public services in developing countries. Such studies are highly appreciated and needed in public administration in order to improve the public sector's online services in developing countries, as it will grab the attention of people towards e-government by increasing their satisfaction level. Consequently, the trend of using e-government services will increase.

Research Questions

The major research questions that this study will try to answer are:

- What elements of system quality and information quality do significantly exist in the e-tax portal of Pakistan?
- What major problems do users of e-tax portal face while filing their returns?
- How can the quality of e-tax portal be enhanced?

Literature Review

Dimensions to Measure E-service Quality

In the field of marketing, an intensive research has been done on the area of service quality. Asubonteng, McCleary and Swan (1996) defined service quality as 'the difference between the expectation of the customer for the service performance before the use of service and their perception after the service is received'. When the performance of the service does not meet the minimum expectation level, quality is considered as poor, and when the performance goes above the expectation level, quality is considered high (Connolly and Bannister, 2008). With the introduction of information and communication technology, the services are provided to the customers widely through internet. Thus e-service has become the vast area of research. Papadomichelaki and Mentzas (2009) stated e-service as a web service that is provided to the people through internet (Zaidi, Marir and Siva 2013). Website developed by service providers is the main source of interaction between customer and those service providers and evaluation of e-service website is the key area which monitors the quality of specific website. Various models have been introduced to assess the e-service quality in the respective areas of e-commerce. The practitioners have been using some very well-known models like SERQUAL, WEBSQUAL, E-S-Qual, SITEQUAL and E-GOVQUAL etc. for assessing the e-service quality. DeLone and McLean (1992) have introduced an information success model which included system quality and information quality as main dimensions to assess the quality of the website (Zaidi, Marir and Siva, 2013). Several other studies included various new dimensions to evaluate the quality of websites. Barnes and Vidgen (2001) have used an instrument WebQual3.0 to assess the quality of three auction websites. This instrument has three main dimensions through which it assess the website quality. These dimensions of quality are web information quality, web interaction quality and site design quality. The dimension of web information quality is measured through various items, i.e. accuracy, timely, information realiability; the items of web interaction quality includes good reputation, safe to transact, personal data security, timely delivery; while site design quality in measured through various items, i.e. easy to navigate, attractive appreance and projects a sense of competency (Barnes and Vidgen, 2001).

The area of e-government is less studied as limited literature is available about e-services provided by the government. The e-services provided by the government to their citizens needs to be properly evaluated as the government bodies, which encourage

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their citizens to use e-government services, need to understand the requirements of citizens regarding website service quality. Thus e-service evaluation will help the government bodies to improve the service quality and increase the satisfaction level of citizens with public administration (Connolly and Bannister, 2008). Zaidi, Marir and Siva (2013) have developed a framework and dimensions to assess e-governement service quality and trust. The focus of proposed framework e-GSQTA was on the main dimensions of system quality, process quality and information quality and it includes measures like system availablity and functionality, efficeiency, responsiveness, reliablity, privacy and security, interactivity and transparency, information apperance, information value, and compensation contact to assess e-service quality.

System Quality and Information Quality

Among various dimensions to assess the website quality, system and information quality are the factors that are widely used by various researchers. DeLone and McLean (2003) defined system quality as;

> *"System quality, in the Internet environment, measures the desired characteristics of an e-commerce system. Usability, availability, reliability, adaptability, and response time (e.g., download time) are examples of qualities that are valued by users of an e-commerce system"*

They further described information quality as follows.

> *"Information quality captures the e-commerce content issue. Web content should be personalized, complete, relevant, easy to understand, and secure if we expect prospective buyers or suppliers to initiate transactions via the Internet and return to our site on a regular basis."*

Hasan and Abuelrub (2010) conducted a study to assess the quality of websites and proposed evaluation criteria for any website irrespective of the kind of service it provides. Their evaluation criteria consisted of following dimensions, namely; content quality, design quality, organization quality, and user-friendly quality. The dimension of content quality, also known as information quality included seven variables, i.e. timely, relevant, Multilanguage/culture, variety of presentation, accuracy, objective and authority.

Rababah and Masoud (2010) in their study determined the key factors to develop a successful e-comerce website through intensive literature review. While discussing the key factors of a website, they mentioned a sub-factor of quality, namely; content adequacy which, according to them, can be measured by taking few items into consideration, i.e. updated content, correctness, intelligibility, user oriented, respectability, concise content, completeness and compatibility with real store. Roca, Chiu and Martinez (2006) conducted a study regarding e-learning service and suggested an extended technology acceptance model. They employed three dimensions to assess the perceived quality of e-learning website including; information quality, service quality and system quality.

Saha, Nath, and Salehi-Sangari (2012) evaluated the governement e-tax website in the context of Sweden, focusing only on the two factors of quality, i.e. system quality and information quality. Based on the previous literature, they have constructed an instrument having seven items to measure the system quality and information quality each. The measures of system quality include provision of necessary information and forms, provision of instructions, fast access to information, quick loads, easy to move between pages, easy to locate information and easy to navigate within site. On the other hand the items to measure informational quality covered accuracy, precision, up-to-date, timely, relevence, sufficiency and completeness. DeLone and McLean (2003) presented an information success model named as D&M IS success model which mainly focused on two constructs of quality, i.e. system quality and information quality. The items that were selected to measure system quality were ease-of-use, functionality, reliability, flexibility, data quality, portability, integration, and importance. On the other hand information quality was measured in terms of accuracy, timeliness, completeness, relevance, and consistency. Wangpipatwong et.al (2005) in his study explored those factors which can influence citizens' decision to adopt e-government website. He focused on two dimensions, i.e. system quality and information quality. The variables of system quality included functionality, reliability, usability and efficiency while the information quality was measured through accuracy, timeliness, relevancy, precision and completeness (Wangpipatwong, Chutimaskul, and Papasratorn, 2005).

Users' Perception about Quality of E-Tax Websites

E-tax filing and payment system is one of the most significant and frequently used G2C e-government services (Hung, Chang and Yu, 2006). Several studies have been conducted to assess the service quality of government e-tax websites and to determine those factors that are valued by people. E-tax is an e-government facility provided to the citizens which allow them to file their taxes online. A study conducted in Hong Kong focused on e-tax services in order to examine the effects of service and technology features on 'service quality' and on the 'intention of

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people to continue the use of e tax services'. The services characteristics (security and convenience) and technology characteristic (perceived usefulness) are the major determinants of service quality. Here the security factor of service characteristic is the most powerful predictor of 'service quality'. On the other hand 'service quality' is the stronger predictor than the 'perceived usefulness' for the continuance intention to e-tax service. The service quality characteristics are 'assurance' and 'reliability' of e-tax services which influence the citizens to continue the use of e-tax services (Hu, Brown, Thong, Chan and Tam, 2009). The users of e-government appreciate user friendliness, personalization, and ability to communicate. However the overall interest of people in e-government is generally low but the people using e-government services frequently show more positive attitude towards it than those who don't use it (Kolsaker and Lee-Kelley, 2008). Hung, Chang and Yu (2006) in their study identified the determinants of users' acceptance of online tax filing and payment system. They also explored the relative importance of each determinant for both, users and non-users. The results of an empirical study indicate that the important factors that determine the users' acceptance of online tax filing and payment system are perceived usefulness, perceived ease of use, perceived risk, trust, compatibility, external influences, interpersonal influence, self-efficacy and facilitating conditions. They further explored that among these nine antecedents, four factors (i.e. perceived ease of use, perceived risk, external influences and facilitating conditions) are considered significant by the adopters of e-tax system for filing and payment. A Sweden based study conducted a survey of 97 municipalities from all 21 regions of Sweden, focused on Swedish online tax system, and examined system and information quality criteria in order to evaluate government e-tax websites. As per users' perspective 'accessibility' and 'navigation facility' are key features of system quality while the key measures of information quality are 'sufficiency', 'timeliness', and 'information preciseness', as the provision of timely and specific information that is sufficient for citizens' needs is important (Saha, Nath, and Salehi-Sangari, 2012).

The present study aims to evaluate the overall quality of e-tax portal and to point out the critical factors that are valued by the users. It further investigates the major problems faced by the users while filing tax returns electronically. The study also provides suggestions for government bodies how to improve the quality of the tax website in order to make it more effective.

On the basis of the reviewed literature, an e-portal evaluation model is developed which basically is consisted of two parts. The first part focuses on the implementation of e-government initiatives. The institutional theory proposed by Meyer and Rowan (1977) and institutional isomorphism by DiMaggio and Powell (1983) will be used to describe the process of execution of e-government initiatives in the context of Pakistan. The latter part intends to evaluate the e-tax portal of Pakistan by using the perceptions of the users. The two important dimensions of quality, i.e. system and information quality will be used for this purpose. The model furthur assumes that the overall quality of the website can be determined through these two dimensions.

E-Portal Evaluation Model

The variables measuring system quality and information quality in the model (Figure 1) have been used by various researchers to assess the quality of websites, Table 1.

Methodology

The research aims to explore the important dimensions of FBR website as per users' perspective and also investigate their views about its quality. Thus it is said to be an explanatory and descriptive research. A triangulation research strategy was selected to carry out this research. Rationale of using triangulation strategy was to avoid any sort of biasness as well as to get the deep insight of the issues. The nature of this research is cross-sectional as it is conducted at a specific point of time and the data is collected from a one sample group. For the purpose of collecting quantitative data, a structured questionnaire framed by Saha et.al, (2012) was adapted. Some amendments were made by adding few variables from literature in order to get some more information. The final questionnaire was comprised of total 17 statements, related to the website quality.

Population and Sample

The target population of this research is registered tax payers who are recognized by FBR web portal. In Pakistan taxes are being paid by large companies, private limited companies, association of persons (AOP), and individuals. As per an estimate, total number of registered tax payers in Pakistan is about 43 hundred thousand where FBR web portal recognizes almost 16 hundred thousand of them. The sample of this research is the registered taxpayers in Lahore region who are filing their taxes electronically. FBR only provides information about total number of taxpayers in Pakistan but information about number of taxpayers in specific region is said to be confidential, thus kept off the record.

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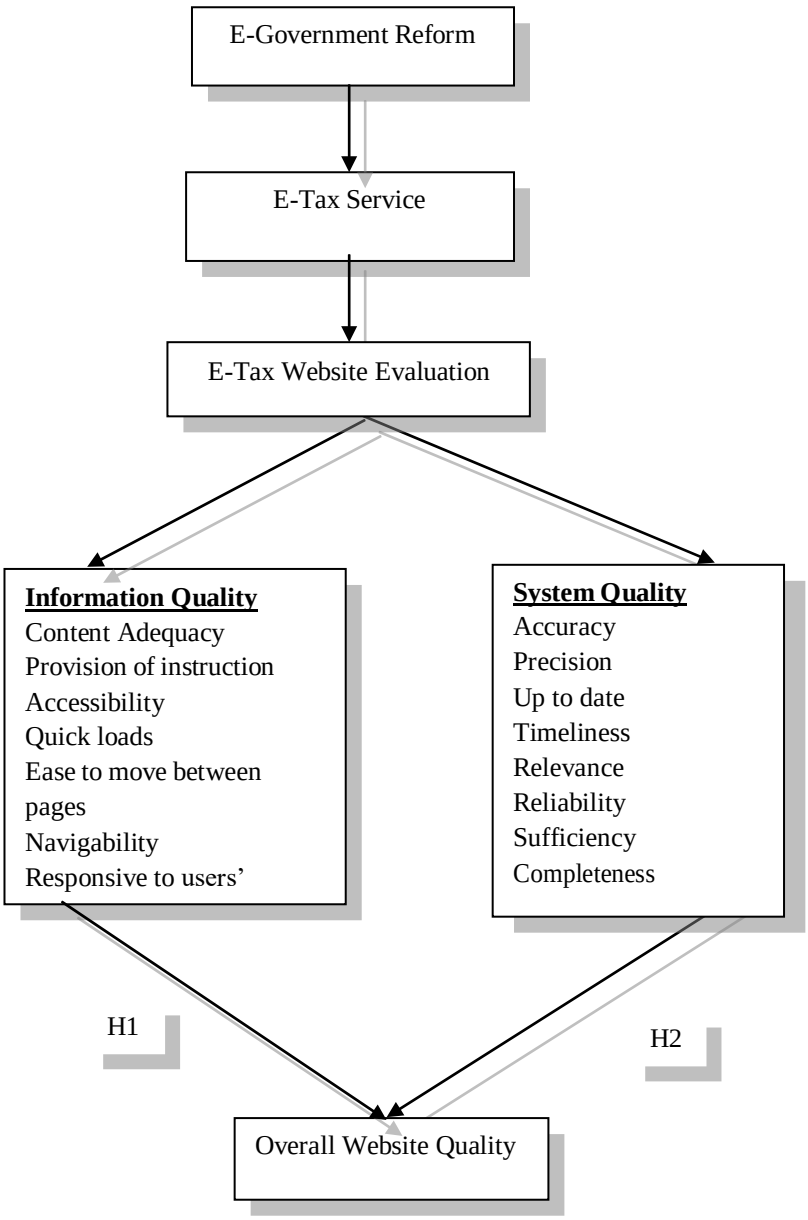
Figure 1: E-Portal Evaluation Model



Similarly it is also inaccessible information that how many of them are filing their returns electronically, as individual who fall in tax slab (i.e. 4 hundred thousand per annum) but having taxable income less than 5 hundred thousand have a choice to file their returns either manually or electronically. On the other hand many companies, AOPs, and individuals are not filing their returns by themselves but taking the services of tax consultants, and the information about the number of these consultants is also not available.

Sample Size

Keeping in mind all the limitations regarding sample, the researcher has decided to get maximum possible responses from tax consultants and common people who were using FRB web portal for the electronic filing of tax returns. During this time period, 300 valid responses were collected by survey. While for gathering qualitative data, interviews were taken from a sample of 10 respondents only. This sample size was decided on the basis of theoretical saturation as further interviews were not resulting in generation of new theoretical insights.

Sampling Technique

The researcher has used non probability sampling techniques and the sample was selected on the basis of purposive and snow ball sampling.

Results of Quantitative Data Analysis

Reliability Analysis

The first step of the analysis is to check the reliability of the survey instrument. The reliability coefficient Cronbach's alpha was calculated for this purpose which showed an excellent reliability of the instrument (Cronbach's Alpha=0.947).

Demographics of the Respondents

The data is gathered from tax consultants (advocates and chartered accountants) who are providing their services to the taxpayers and other people who are not using the FBR website professionally but only for filing their own returns. Among 300 respondents, 154 (51.3%) were tax consultants and 146 (48.7%) lie on other category of 'others'. The majority of the respondents were males i.e. 252 (84%) while only 48 (16%) females were included in the survey. The average age of respondents is 39.85, implying that majority of the respondents belong to the age of 40 years.

Independent Sample T-Test

The independent sample t-test was conducted to check any difference in the opinion of professional users and non-professional users about the system quality and information quality of the website. Taking the system

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quality into consideration, the result of independent sample t-test assumes equal variances, thus the t-score (-9.112) and significance value (0.000< 0.005) indicates a variance in the opinion of professional and non-professional users. For the factor of information quality, again the results of t-test assumed equal variances, the t-score (-8.953) and significant value (0.000< 0.005) implies that there is a difference between the opinion of professional and non-professional users about the information quality of the website.

Table 1: Variables of System Quality and Information Quality and their Evidence from Literature

Content Adequacy	Cao et al., 2005; Wangpipatwong et al., 2005; Roca et al., 2006; Saha et al., 2012
Provision of instruction	Cao et al., 2005; Saha et al., 2012; Hasan and Abuelrub, 2011; Aladwani and Palvia, 2002
Accessibility	Mohammed, Rababah, & Masoud, 2010; Basu, 2004; Delone and Mclean, 2003; Fogg et al., 2003; Bailey and Pearson, 1983; Saha et al., 2012; Hasan and Abuelrub, 2011; Li, 1997; Aladwani and Palvia, 2002
Quick loads	Fogg et al., 2003; Delone and Mclean, 2003; Cao et al., 2005; Saha et al., 2012; Aladwani and Palvia, 2002
Ease to move between pages	Cao et al., 2005; Saha et al., 2012; Hasan and Abuelrub, 2011; Aladwani and Palvia, 2002
Ease to locate information	Basu, 2004; Fogg et al., 2003; Lin et al., 2004; Cao et al., 2005; Saha et al., 2012; Economides and Terzis, 2007; Aladwani and Palvia, 2002
Navigability	Cao et al., 2005; Saha et al., 2012; Economides and Terzis, 2007; Hasan and Abuelrub, 2011; Aladwani and Palvia, 2002
Responsive to users' inquiries	Delone and Mclean, 2003; Bailey and Pearson, 1983; Cao et al., 2005; Economides and Terzis, 2007; Hasan and Abuelrub, 2011
Accuracy	Fogg et al., 2003; Bailey and Pearson, 1983; Cao et al., 2005 ; Wangpipatwong et al., 2005; Saha et al., 2012; Hasan and Abuelrub, 2011; Li, 1997; Aladwani and Palvia, 2002
Precision	Bailey and Pearson, 1983; Wangpipatwong et al., 2005; Saha et al., 2012; Li, 1997
Up to date	Fogg et al., 2003; Cao et al., 2005 ; Roca et al., 2006; Saha et al., 2012; Aladwani and Palvia, 2002
Timeliness	Bailey and Pearson, 1983; Cao et al., 2005 ; Wangpipatwong et al., 2005; Roca et al., 2006; Saha et al., 2012; Hasan and Abuelrub, 2011; Li, 1997
Relevance	Delone and Mclean, 2003; Basu, 2004; Bailey and Pearson, 1983; Cao et al., 2005 ; Wangpipatwong et al., 2005; Roca et al., 2006; Saha et al., 2012; Hasan and Abuelrub, 2011
Reliability	Delone and Mclean, 2003; Wangpipatwong et al., 2005; Bailey and Pearson, 1983; Roca et al., 2006; Hu et al., 2009; Economides and Terzis, 2007; Hasan and Abuelrub, 2011; Li, 1997; Aladwani and Palvia, 2002
Sufficiency	McKinney et al., 2002; Cao et al., 2005 ; Roca et al., 2006; Saha et al., 2012; Griffin et al., 2004; Lee et al., 2008
Completeness	Delone and Mclean, 2003; Wangpipatwong et al., 2005; Bailey and Pearson, 1983; Roca et al., 2006; Saha et al., 2012; Li, 1997; Aladwani and Palvia, 2002;

Exploratory Factor Analysis

An exploratory factor analysis (EFA) was carried out to check the importance of variables of website quality and in order to demarcate them in further dimensions. The results of the EFA are shown below.

Data was collected from a sample of 300, the results of 'Kaiser-Meyer-Olkin Measure of Sampling Adequacy (0.945) clearly shows that the selected sample was sufficient for running the factor analysis. The Bartlett's test of Sphericity, on the other hand, measures the significance of the study that gathered responses are valid and suitable to the problem for which the study is conducted. The results of Bartlett's test of Sphericity (sig. = 0.000) clearly indicates the significance of the study.

The purpose of conducting the EFA is to examine the factor structure. The next part of EFA deals with

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factors extraction and its segregation, based on significant factor loading provided below in Table 2.

The table 2 is representing the results of exploratory factor analysis. A cutoff point of '0.6' was decided as a significant factor loading, thus EFA extracted five variables named ease to locate information, precision, relevance, sufficiency, and completeness. Furthermore the results of EFA are showing a clear demarcation of website quality factors into two components as shown in the table.

Table 2: Exploratory factor analysis

Items	Component 1	Component 2
Provision of necessary information & forms	Quick access (0.651)	Provision of necessary information & forms (0.883)
Provision of instruction	Quick loads (0.780)	Provision of instruction (0.804)
Quick access	Ease to move between pages (0.678)	
Quick loads	Ease to navigate within site (0.603)	
Ease to move between pages	Responsive to users' inquiries (0.677)	
Ease to locate information	Accuracy (0.676)	
Ease to navigate within site	Up-to-date (0.746)	
Responsive to users' inquiries	Timeliness (0.618)	
Accuracy	Reliability (0.708)	
Precision		
Up-to-date		
Timeliness		
Relevance		
Reliability		
Sufficiency		
Completeness		

Spearman's Rho Correlation

The spearman's rho correlation was conducted to check the dependence of system quality and information quality on overall website quality.

H1: there is a relationship between information quality and overall website quality.

The result of spearman correlation shows the significant value of correlation coefficient (0.638) at significance level of 0.01, which shows a strong positive relationship between information quality and overall website quality. The p-value (0.00<0.01) indicates that the hypothesis is accepted.

H2: there is a relationship between system quality and overall website quality.

The spearman correlation coefficient (0.670) at the 0.01 significance level indicates a strong positive relationship between system quality and overall website quality. The p-value (0.00<0.01) indicates that the hypothesis is accepted.

Qualitative Data Analysis

For the purpose of gathering qualitative data, 10 interviews were conducted from the professionals who were having sufficient experience to use FBR website. The first question asked from the interviewees was;

Q1: What major problem/s do you face (frequently) while using FBR e-portal?

The answers gathered from the respondents were transcribed first, and the following themes were extracted from the transcriptions.

Table 3: Problems identified by users

Major Problems	Frequency of Responses
Loading issues	5
Errors	4
Unfriendly to use	5
Accessibility issues	5
Not up-to-date	1
Communication problem	4

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Q 2: What measures would you suggest to improve the system efficiency?

The respondents were asked to suggest something for the improvement of system efficiency. Most of them stated that the problems they have identified should be resolved as it will ultimately bring improvement to this system. Some respondents gave other suggestions in this regard from which following themes were extracted.

Table 4: Suggestions given by the users

Suggested Themes	Frequency of Responses
Network load balancing	2
Provision of instructions	3
Awareness workshops	1
Staff training programs	2

Discussion and Conclusion

After presenting the results of quantitative and qualitative data analysis, this current section will be discussing the results in light of literature and theoretical framework.

This data was collected from two types of respondents, using the e-FBR portal i.e. 'professionals' and 'others'. The purpose of gathering data from two different types of respondents was an attempt to assess whether there is any difference of opinion exists regarding their experience with respect to system quality and information quality of FBR e-portal. Independent sample t-test was used for this purpose. In order to run the EFA, initially 16 elements were used to assess website quality. The purpose of running EFA was to meet the main objectives of study, i.e. to identify most significantly existing elements of quality in e-tax portal from the users' point of view. These results of EFA imply that among 16 items that were used to assess the quality of the website, users pointed out that 11 elements have their strong and significant occurrence in the e-tax portal thus they can be considered as strong predictors of e-portal quality while other non-converged items were although present in the website but with relatively less significance. Those non-converged items were needed to be given more attention by the administrators so that they can play their significant role to enhance the overall quality of e-tax portal.

The survey instrument for this study was adapted from the previous literature, with two clear and distinct dimensions of system quality and information quality having sixteen variables collectively. Based on the opinion of users of FBR e-portal, EFA came up with two components where the variables of system quality and information quality were intermingled. The component one included 9 items including; quick access, quick loads, ease to move between pages, ease to navigate within site, responsive to users' inquiries, accuracy, up-to-date, timeliness and reliability. The second component included only 2 items, i.e. provision of necessary information & forms and provision of instructions. This inclusion of information quality variables into system quality can be taken as if users might have misinterpreted the items. Although literature supports the fact that system quality and information quality are two mutually exclusive dimensions of quality but when tested in the context of Pakistan, the results signified that users of e-tax portal perceived these dimensions quite similar and interchangeable.

The two dimensions, system quality and information quality, were tested for their dependence on the overall website quality. Two hypotheses were developed in this regard; i.e.

H1: there is a relationship between information quality and overall website quality.

H2: there is a relationship between system quality and overall website quality.

For the dimension of information quality, result of spearman's rho correlation showed a significant value of correlation coefficient (0.638) at significance level of 0.01, representing a strong positive relationship between information quality and overall website quality. The p-value (0.00<0.01) indicated the acceptance of hypothesis (H1).

The spearman's rho correlation was again run to check the relationship between system quality and the overall website quality. The correlation coefficient (0.670) at significance level 0.01 indicated a strong positive relationship between system quality and overall website quality. The p-value (0.00<0.01) indicated that hypothesis H2 is accepted.

In this study, the focus was on above mentioned dimensions of quality in order to evaluate the overall quality of e-portal of FBR. The results of spearman's rho correlation showed that overall quality of the website was well assessed by taking these two dimensions into consideration as website's overall quality has a strong dependence on its system quality and information quality.

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The qualitative results of study are validating the results of quantitative analysis. The interviews were taken from experienced users of e-tax portal and they were asked to mention the problems they face, if any, while filing their returns online. While answering to this question, a major problem faced by the users of e-tax portal was the issue of poor loading speed as system takes too much time to load pages and usually fails to proceed the given command, especially on the peak days of filing returns. Another important problem that almost all respondents identified was the unfriendliness of tax portal. The majority of people are reluctant to file their returns by themselves just because this e-portal is not that user friendly. Thus they bear heavy costs in order to take help from consultants. Despite the loading issues, another significant problem identified by users is the issue of accessibility. The users frequently come across this issue on the peak days of filing returns when system becomes unable to manage heavy load of traffic. Users of e-tax portal also identified the issues of poor communication, as they claim that their online queries are not responded timely. Even the helpline of FBR remains busy most of the time and staff sitting there is not capable enough to answer all the queries of users. Some respondents mentioned that FBR website is not free from error. The most recurring error mentioned by users was the 'login error' that system usually doesn't recognize user ID or the password. Another problem faced by the users of e-portal is that system is not timely up-dated and users are not timely informed about any tax related update through this website.

The respondents were also asked to give their suggestions to improve the overall quality of the website. Majority of the respondents said that FBR authorities should take serious action against the problems they have identified; it will definitely bring improvement in the overall system efficiency. Certain other suggestions given by respondents are included in 'recommendations' section at the end of the study.

After discussing the quantitative and qualitative results it is also important to understand the contextual relevance of e-government initiatives. These initiatives, throughout the world, started taking place in the year 1994. Developed countries were the first to transform their system of government from manual to technological, based on ICT. Many developing countries followed the footsteps of those developed countries and Pakistan was one of them. E-government in Pakistan was established in late 2002. Government of Pakistan has brought e-government reform for getting legitimacy from the modern world. Although many factors like literacy rate, access to technology etc. were not in the favor of e-government initiatives at that time but the government did not step back and took certain initiatives to make the use of technology prevalent.

After the establishment of e-government, many important institutions were given a government mandate to convert their operations from manual to electronic. Thus Federal board of revenue (FBR), in the result of coercive isomorphism, started converting its functions gradually and in year 2007 it properly established its e-portal in order to improve system efficiency and also to facilitate taxpayers. The filing of taxes through e-portal is helping the FBR and citizens to save their resources.

The results of this study revealed the fact that this transformation from manual to electronic system of filing tax returns is not properly indigenized and contextualize as people still feel this system quite complicated and a common taxpayer prefer to take the help of consultant rather than using it by him/herself. Although government is taking various steps to improve system efficiency but the focus should be on its simplification in order to make it more useful. Furthermore, government should also take steps to increase the awareness of people about e-services.

Recommendations

This section of the study will bring upon some recommendations that will help in improving the effectiveness of the system of e-filing.

- The number of servers that e-FBR has should be increased as it will enhance the availability of website, specifically on the peak days of filing returns. Increasing the number of servers will automatically redistribute traffic to the operational host when other hosts will be getting overloaded.
- The size of portal should also be increased to avoid the problem of poor loading.
- The website should provide a proper and detailed set of instructions about how to use website and how to file tax returns.
- FBR should focus on conducting the awareness workshops and seminars for the facilitation of taxpayers in order to increase their awareness about e-filing of tax returns.
- The system developers of e-portal should focus on making it user-friendly. An easy to use system will reduce the fear of people to file their returns by themselves without taking the help of consultants.
- Online queries of the respondents should be answered as soon as possible. Moreover the helpline service should be available 24/7.

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Future Research Directions

The data for this study was conducted only from Lahore region, thus the selected sample cannot be considered as a representative of the whole population of taxpayers in Pakistan. The generalize ability of findings can be enhanced by collecting data from other regions of the country as well. The major aim of this research is to evaluate e-FBR portal on the basis of users' opinion. This study is only focusing on two dimensions of website quality, i.e. system quality and information quality. Future research can take up some other dimensions as well to have more detailed evaluation. Similarly the variables of system quality and information quality can also be increased to execute an in-depth assessment. E-government is a vast area for research. Keeping the same dimensions and variables, future research can focus on the evaluation of any other portal in public sector.

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