QUALITY OF STUDENTS' EXPERIENCE WEBSITE: AN EVALUATION USING ISO 9126

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Abstract

People are becoming aware of the time and effort saved and of the up-to-date information gathered when using technology. In this context, a website on students' experiences was created to allow stakeholders to compare the quality of services delivered by some tertiary educationa institutions. The paper's main objective is to evaluate whether the characteristics are significantly related to the quality of the website using the ISO 9126 model. The first and second-order confirmatory analyses proved that the instrument used has good validity and reliability. Each of the four characteristics significantly contributed to measuring the website quality, with portability as the most important, followed by functionality. This is due to the diversity of electronic devices used by stakeholders.–To complete the six characteristics, members of the development team gave high ratings for their reliability and maintainability. Recommendations were made on how to enhance the developed website and to assess the enhanced website further.

Keywords: efficiency, functionality, portability, usefulness

Introduction

With the advent of technology, it became apparent that it has become a way of life for many people in their daily dealings, whether for personal or business use (Grimaldo et al., 2020). Website technologies have constantly evolved and become more indispensable, prompting organizations to use them. Website technologies are usually created to support the interaction and communication of an organization with its users (Devi & Sharma, 2016). Further, they serve as a communication tool among stakeholders (Mentes & Turan, 2012) or simply establish and increase visibility (Chiuchi et al., 2011). Some use technology as a marketing tool to reach their potential stakeholders (Gordon & Berhow, 2009).

Anchored on a framework used by developed countries such as Australia, UK, and USA, a website on students' experiences in the higher education institution (HEI) was developed in the Philippines. The website has searchable data derived from students' real-life experiences in the HEI where they were enrolled. It can compare students' experiences in the institution regarding knowledge and skill development, the quality of teaching staff, learners' engagement, and the support and learning resources available in the institution. Thus, HEIs can be compared according to each of the five attributes. Data were collected through an online survey. Comparison of institutions uses aggregate data, thereby protecting the respondents' anonymity and safeguarding the confidentiality of data.

Previous studies pointed out that website visitors may find it challenging to get the information due to website usability. Website usability, posited to be an essential gauge for measuring quality (Aziz & Kamaludin, 2015), was established to affect the satisfaction of users, which in turn affects their intention to use (Belanche et al., 2012). Tandon and Kiran (2019), posited that the quality of a website and certain online shopping drivers might significantly impact their satisfaction with shopping online. Due to the importance of establishing the quality of a website, several studies were done in other countries on determining the quality of a website using different models, one of which is the ISO 9126 model.

Chua and Dayson (2004), used the ISO 9126 model to evaluate the functionality, usability, reliability, and efficiency of an e-learning management system. Fahmy et al. (2012) used it to formulate a model to assess the quality of e-Books based on the characteristics of functionality, reliability, usability, efficiency, and portability. This paper used the model to evaluate the quality of the developed website. Specifically, it sought to determine which characteristics are significantly related to the website's quality: functionality, usability, portability, and efficiency. The developers evaluated the website's reliability and maintainability to complete the six quality characteristics.

The developed website provides a measure of student experiences. Its significance lies in allowing the website viewers a comparison of study variables across programs in the participating HEI using data analytics, thereby enabling stakeholders a basis for the selection of HEIs to enroll. The results will also be beneficial in providing feedback to the participating schools to improve the school's delivery of educational services. The study results can be a basis for policy formulation or reformulation on curriculum reengineering in a broader perspective.

Theoretical background

The paper was anchored on ISO 9126 Software Quality Standards (2001). The ISO 9126 standard started in 1991 and is used to evaluate software in terms of quality model, external metrics, internal metrics, and quality in use metrics. Part 1 of the standard centers on evaluating software based on its quality. The model included six quality characteristics; functionality, reliability, usability, efficiency, maintainability, and portability. Each characteristic has sub-characteristics that are further subdivided into attributes that can be verifiable in measuring the software.

There were studies on the use of the same standard for evaluating websites. At Telkom University, the students assessed the academic website based only on four characteristics: functionality, reliability, usability, and efficiency (Suwawi et al., 2015). Moumane et al. (2016) used the standard to evaluate the usability of the mobile environment. At the same time, Haque and Bansal (2012) got the perspective of three groups of respondents (the developers, the users, and the project manager) to evaluate the reliability characteristic of software. For this paper, the users assessed the quality of the developed website on four: functionality, usability, efficiency, and portability. Additionally, the last two characteristics, which are reliability and maintainability, were evaluated by the website developers.

Functionality of Website

The functionality of a website refers to its ability to deliver to the needs of its user. It should therefore perform the task required by providing accurate and up-to-date information. The website should be easy to download, navigate, and work on different browsers. The website's functionality has a significant positive impact on its usability as perceived by customers toward online shopping in India (Tandon et al., 2015).

The software's ability to deliver functions that will meet the users' needs during usage in an exact condition best describes functionality (Padayachee et al., 2010). Systems functionality is necessary to users; thus, the measurement of its functional requirements is a significant factor in determining the quality of a system (Bhatti, 2005). The sub-characteristics of functionality as provided by ISO 9126 are suitability, accurateness, inter-operability, and security. Functionality is critical in providing quality services to system users (Bertot et al., 2006). It can also create a competitive edge for the organization and was hypothesized to directly link to its usability (Weir et al., 2006). However, providing it is not an assurance that websites are helpful to users (Lu & Yeung, 1998).

Usability of Website

The website usability is dependent on how easily the user understands and uses it for their purpose. Website usability is affected by the appearance of

the website, its font size and color combination, and the way information are organized. Web designers are usually concerned with how technology is used in developing the website rather than how usable their end-product is to the targeted user (Jabar et al., 2013). The website's usability significantly affects the efficiency of the entity's function that uses the website (Darem & Suresha, 2013).

The usability characteristic is a combination of several notions, such as user satisfaction and performance, to name a few. Some standards related to usability componenet are defined using different categories like product effect, attributes, the process used, and the organization's capability (Abran et al., 2003). Usability does not only pertain to the screen layout and interface; it is also about the user's interaction with the system (Ferré et al., 2001). The sub-characteristics are understandability, learnability, operability, and attractiveness. The achievement of quality of use is the primary objective of usability. It should be the main factor in the architecture of interactive products (Bevan, 1995).

Portability of Website

The portability of a website refers to the ease of opening the website using different browsers or different devices, including mobile devices. A web browser allows the user to access information from the web. Since the market that uses websites is varied, portability is the most important in developing a website (Johansson & Svensson, 2009).

The portability characteristic is the software's ability to execute from different platforms, hardware, software, and organization (Fahmy et al., 2012). Dromey's (1995) study defines portability as requiring little or no modification to compile and run in different systems. The operating system, compiler, and machine dependencies are affected by portability. The importance of portability in quality cannot be denied since it is being utilized by four quality models McCall's, Boehm's, Dromey's, and IS0 9126 (Al-Qutaish, 2010). Its sub-characteristics are adaptability, installability, conformance, and replaceability.

Efficiency of Website

The efficiency of a website pertains to its performance, usually related to the loading speed of the website and its response time when being used. These two factors significantly affect the website's usability from the user's point of view. Some website developers put too much attention on the website's aesthetic aspect, forgetting that page loading time is more critical (Manhas & Ramjit, 2013). Thus, the website's file size is small to achieve a shorter loading time for the website to be considered efficient.

The efficiency characteristic is the software's ability to produce the desired execution based on the resources utilized under quantified conditions

(Padayachee et al., 2010). It should also be fault-free and deliver the output that is desired by the organization (Jalote, 2000). Man (2002) identified satisfaction as one of the determinants of software product efficiency. According to Paradi et al. (1997), quality has a massive impact on efficiency that if it is not included, it will create problems in the system. Its sub-characteristics are time behavior and resource utilization.

Reliability of Website

The website's reliability pertains to its performance when it is being used or its ability to function without error within a time frame. If an error does occur, the website should resume operation in a reasonable amount of time. It means that the website's level of performance is preserved when used under certain conditions (Fahmy et al., 2012).

The reliability characteristic is the ability of the software to preserve a specified level of performance when utilized under quantified conditions (Fahmy et al., 2012). A system may be deemed reliable even if bugs appear. However, these bugs should rarely occur during practical applications. A system must be fully tested to intensify its reliability. If bugs appear, they must be corrected immediately (Frolov, 2004). Lousy system design and implementation are the usual culprits of low reliability. Users normally associate software quality with reliability, which is the capability of the software to function correctly between failures (Kitchenham & Pfleeger, 1996). The sub-characteristics are maturity, fault tolerance, recoverability, and compliance.

Maintainability of Website

The maintainability of a website refers to its capability to be modified when needed. A website should have minimum downtime, and when it does, the repair should be done within a reasonable amount of time not to discomfort its user. In constructing a building, maintainability should be incorporated in the design phase, construction, and post-construction (Sulaiman et al., 2013). Thus, the website's design should be easy to maintain at a minimum cost when there are environmental changes or to improve its performance after its development.
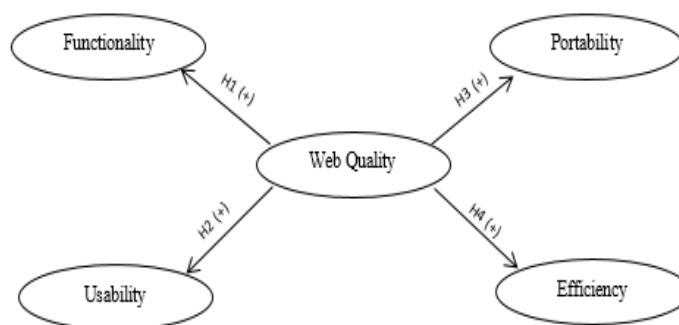
Conceptual framework

Figure 1. *Conceptual model*

The conceptual model shows the relations of the different quality characteristics in ISO 9126 to the quality of the website. These are functionality, usability, portability, and efficiency. In this study, the following hypotheses were tested:

H1: The website's functionality has a significant relationship with its quality.

H2: The website's usability has a significant relationship with its quality.

H3: The portability of the website has a significant relationship with its quality.

H4: The website's efficiency has a significant relationship with its quality.

Methods

Research design

The different quality characteristics in ISO 9126 were used to evaluate the website, albeit by different groups of users. Functionality, usability, efficiency, and portability were evaluated by intended website users using a descriptive-correlational design, while the last two characteristics, by website developers, using a descriptive design. The descriptive design described the different website characteristics, and the correlational design determined the relationship of each to the website quality.

Subjects of the study

The website users were stakeholders such as school administrators, teachers, parents, students, senior high school students who are already preparing to choose a school for their tertiary education, and the general public

interested in comparing schools using the website. The website was presented to the intended users of different tertiary level institutions randomly for evaluation, and 783 responded.

Profile of Respondents

Table 1

Profile of respondents for functionality, usability, portability, and efficiency of the website (n = 783)

	f	%			F	%
Gender			**Highest Educational Attainment**			
Male	243	31.03%	Junior high school completer		126	16.09%
			Graduating/graduated from senior			
Female	540	68.97%	high		462	59.00%
Total	783		Vocational graduate		27	3.45%
Age			College graduate		110	14.05%
15 – 24	631	80.59%	MA/MS graduate		35	4.47%
25 – 34	49	6.26%	PhD graduate		23	2.94%
35 – 44	56	7.15%		Total	783	
45 – 54	29	3.70%	**Stakeholder's Status**			
55 – 64	15	1.92%	Incoming college students		461	58.876%
65 and more	3	0.38%	Students in the tertiary level		140	17.880%
Total	783		Teacher		60	7.663%
			Parent		60	7.663%
			Guardian		24	3.065%
			School Administrator		32	4.087%
			System Developer		6	0.766%
				Total	783	100.00%

Of the 783 respondents, 540 (68.97%) are female. Table 1 shows that the majority of the respondents (631, 80.59%) were aged 15 to 24, graduating or graduated from senior high school (462, 59.00%), and were incoming college students (461, 58.876%). Fifty-six (7.15%) of the respondents were aged 35-44, and 21.46% had at least a college degree. There is an equal number of teacher and parent respondents at 60 each.

Six website developers evaluated reliability and maintainability since it may be difficult for one-time website users to determine its actual performance and the time and effort needed to maintain the website when the environment changes. Of the six, 5 are male. One has a masterate degree, while all others are college graduates. Also, there are two respondents in each age range.

Instrumentation

The five-part survey instrument for stakeholders was adapted from Suwawi et al. (2015) and Chua and Dayson (2004). The first four parts measured the website's functionality, usability, efficiency, and portability. Each part used a 6-point scale ranging from "strongly agree" to "strongly disagree" to the

statements given. The last part was the *robotfoto* that provided the demographic profile of the respondents.

The questionnaire for the website developers had two additional parts, measuring the reliability and maintainability of the website. Each is a combination of structured questions using a 6-point scale and open-ended follow-up questions.

The two sets of questionnaires were validated by content experts in information technology and marketing practitioner, while the internal consistency was established by pilot testing that yielded the following Cronbach alpha: functionality, 0.90; usability, 0.94; portability, 0.88; and efficiency, 0.94, all of which are greater than the accepted value of 0.70.

Data Collection Procedure

The survey questionnaire for stakeholders was made available online through a Google document where the respondent may opt-out. Letters were sent to tertiary-level schools nationwide, inviting stakeholders in their respective schools to view the website and answer the questionnaire. Invitations were also sent to senior high school administrators to ask their students to participate. System developers who are either parents or guardians were likewise invited to participate.

The website developers were requested individually to answer the questionnaire on reliability and maintainability. The survey results were downloaded and sanitized for processing.

Data Analysis

Descriptive statistics was used to determine mean and standard deviation, while confirmatory factor analysis (CFA) using structural equation modeling was used to detetmine if functionality, usability, efficiency and portability are valid dimensions of quality of the website. Factor loadings were used to assess the relationship of the different characteristics to the quality of the website. The AMOS software version 27 was used for processing data.

Ethical consideration

The name of the researchers and the purpose of the website were made clear in the introductory part of the survey. Consent of the respondents was sought by clicking the NEXT button in the Google form. Respondents click the SUBMIT button when ready, or they may opt out in the middle of the survey. Names and email addresses were not required to ensure anonymity and confidentiality of information.

RESULTS

Descriptive statistics of website quality characteristics
Table 2

Descriptive statistics, factor loadings, and Cronbachs' alpha reliability coefficients of the different of website quality using 1st order CFA

		Factor Loading	Mean	SD	Reliability Coefficient
	Functionality of the website		**4.747**	**1.179**	**.900**
F1	The website is performing the tasks required.	.786	4.58	1.100	
F3	The website has a feature to address your questions or concerns.	.610	4.28	1.382	
F4	The website has a feature (Contact us) that allows you to get in touch with the website administrators.	.658	5.06	1.093	
F5	The website has a feature (About us) that allows you to know the persons behind the project.	.646	5.05	1.080	
F6	The website's content is accurate.	.775	4.68	1.057	
F7	The website's content is up to date.	.756	4.62	1.138	
F8	The website is free from spelling errors.	.692	5.06	.998	
F9	The website's text is well-written and grammatically correct.	.717	5.02	.984	
F10	The website's menu items are working.	.747	4.99	1.080	
F11	The website displays its content even in other browsers.	.785	4.85	1.134	
	Usability of the website		**4.458**	**1.274**	**.942**
U1	The website usage is easy to understand.	.871	4.58	1.258	
U2	Everything in this website is easy to understand.	.876	4.44	1.261	
U3	The website usage is easy to learn.	.895	4.67	1.189	
U4	The website is user-friendly.	.870	4.63	1.202	
U5	The website's navigation can be used easily.	.845	4.57	1.166	
U6	The website's look is attractive.	.627	3.83	1.472	
U7	The website looks organized.	.703	4.48	1.248	
U8	The website uses fonts properly.	.666	4.52	1.302	
U9	The website uses color properly.	.595	4.40	1.341	
	Efficiency of the website		**4.521**	**1.286**	**.943**
E1	The website loads fast.	.850	4.55	1.297	
E2	The website's response time is fast.	.923	4.52	1.284	
E3	The website's contents are displayed properly without delay	.930	4.50	1.277	
E4	The website does not slow down when used continuously for some time.	.868	4.51	1.286	
	Portability (compatibility) of the website		**4.763**	**1.141**	**.883**
P1	The website can run even in other browsers.	.823	4.86	1.083	
P2	The website can run even in mobile devices.	.722	4.78	1.144	
P3	The website appears clearly even if mobile gadgets are used.	.777	4.65	1.195	
	Scale of 1 to 6 used.				

Table 2 shows the different indicators to measure the characteristics of website quality. Among the four, portability has the highest mean (4.763), followed by functionality (4.747), while usability is the lowest at 4.458. The standard deviation of the characteristics, which ranged from 1.141 to 1.286, showed that the group of respondents is highly heterogeneous.

The table shows that the reliability coefficients of the different characteristics ranged from 0.883 to 0.943, higher than the minimum acceptable value of 0.70. Thus, the indicators had good internal consistency (Gliem, J. & Gliem, R, 2003).

First Order Confirmatory Factor Analysis

From Table 2, factor loadings of the 9 item indicators used to measure usability ranged from 0.595 to 0.895, the 4 items used to measure efficiency ranged from 0.850 to 0.930, and the 3 items for portability ranged from 0.722 to 0.823, all contributed significantly in measuring each characteristic of the website quality. However, indicator 2 (F2) of the dimension functionality was removed as it did not contribute significantly to measuring the dimension, while the remaining indicators had a loading that ranged from 0.610 to 0.786.
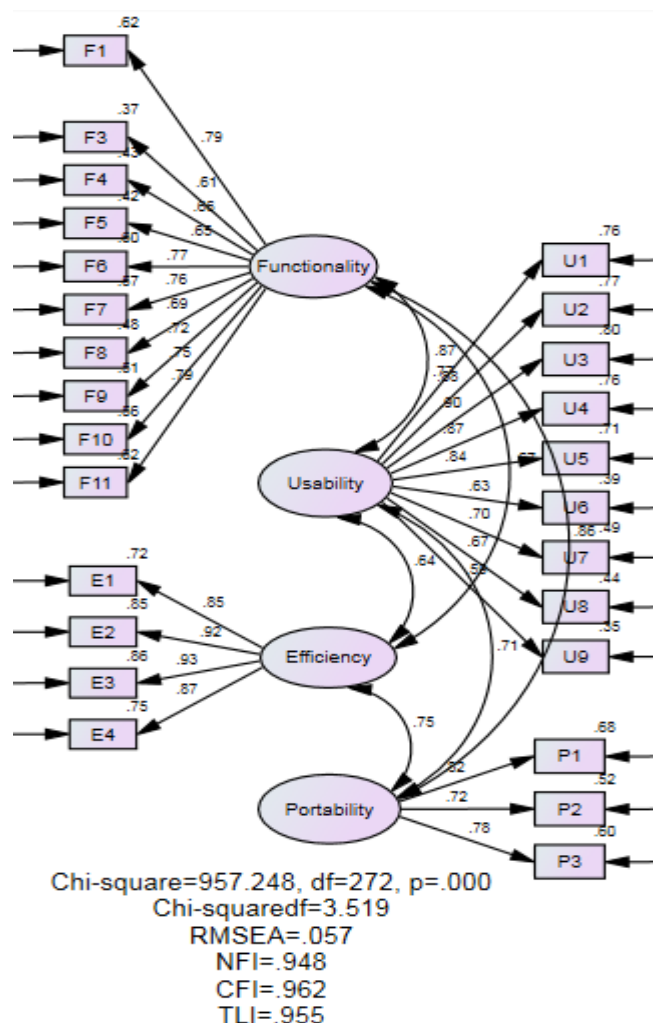
First Order Factor Analysis Model

Figure 2. *The First Order Factor Analysis Model*

Different model fit indices were used to assess the first-order CFA. These were chi-square over degrees of freedom (3.519), the Root Mean Square Error of Approximation (RMSEA=.057), the Standardized Root Mean Square Residual (SRMR=.047), the Normal Fix Index (NFI=.948), the Comparative Fit Index (CFI=.962), and the Tucker Lewis Index (TLI=.955). As shown in Figure 2, the computed values indicated that the CFA model is acceptable.

Correlations among the different characteristics of website quality

Table 3

Correlation among the different characteristics with composite reliability, average variance extracted, and square root of AVE

	Composite Reliability (CR)	Average Variance Extracted (AVE)	Functionality	Usability	Efficiency	Portability
Functionality	0.914	0.518	**0.720**			
Usability	0.932	0.609	0.772***	**0.781**		
Efficiency	0.940	0.798	0.672***	0.638***	**0.893**	
Portability	0.818	0.601	0.858***	0.714***	0.751***	**0.775**

Table 3 shows that the four characteristics' composite or construct reliability coefficients ranged from 0.818 to 0.940, which are considered a very good level measure (Hulin et al., 2001) of the internal consistency of the items used. Additionally, the average variance extracted from 0.518 to 0.798 indicates that the indicators used in each dimension can better reflect the characteristics of the dimension in the model.

From the same table, the square root of the AVE of each dimension is greater than its correlation with the other variables, except for functionality and portability. The square root of AVE of portability (.775) is smaller than functionality (.858).

Thus, in general, the factor loadings, Cronbach's alpha, composite reliability coefficients, Average Variance Extracted, and the square root of AVE indicated good reliability and validity of the instrument used.

Second Order Confirmatory Factor Analysis

Table 4

Factor loadings of the different indicators of website quality using 2nd order CFA

Web Quality	Factor loading
Functionality	.922*
Usability	.817*
Efficiency	.764*
Portability	.926*
Functionality	
F1	.785
F3	.608
F4	.662
F5	.649
F6	.772
F7	.753
F8	.694
F9	.718
F10	.750
F11	.782
Usability	

U1	.872
U2	.878
U3	.896
U4	.869
U5	.842
U6	.625
U7	.701
U8	.665
U9	.595
Efficiency	
E1	.850
E2	.923
E3	.929
E4	.868
Portability (compatibility)	
P1	.825
P2	.727
P3	.775

*significant at .01 level

Table 4 shows the factor loading using two-level factor analysis. For the 1st level, the factor loadings of the functionality indicators ranged from 0.608 to 0.785; usability, 0.595 to 0.896; efficiency, 0.850 to 0.929; and portability, 0.727 to 0.825. These factor loadings are almost the same as those for the 1st level presented in Table 3.

Additionally, the factor loadings for the 2nd level ranged from 0.764 to 0.926, indicating that the four characteristics contributed significantly to measuring the website quality.
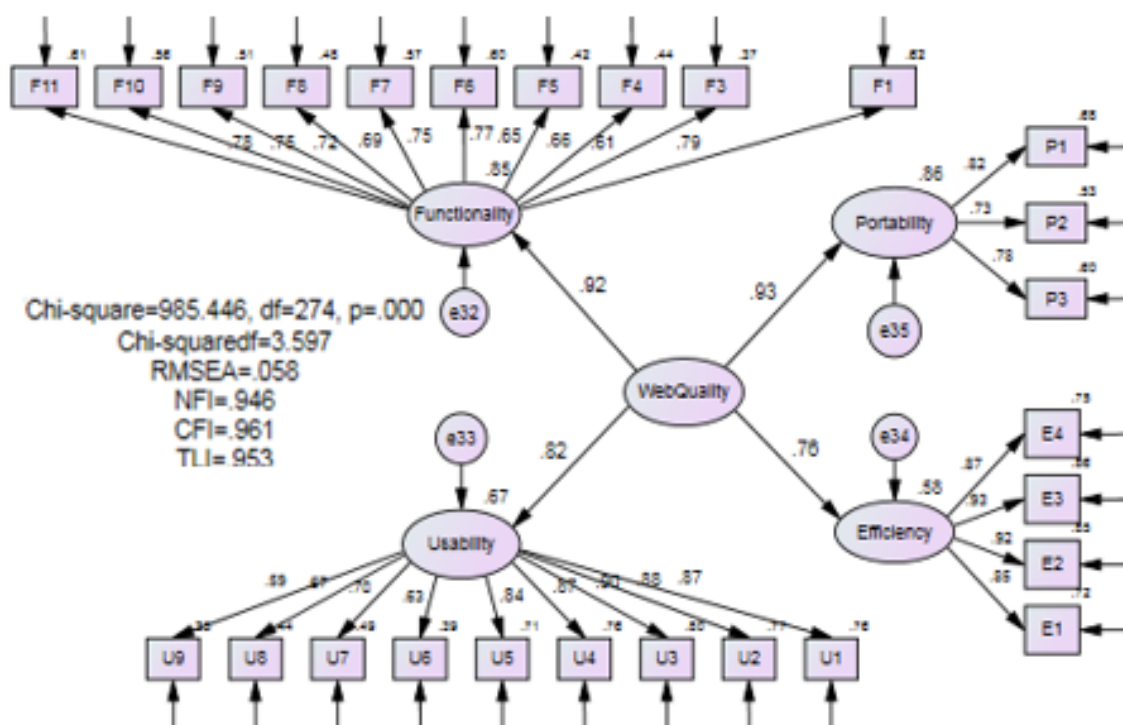
Second Order Factor Analysis Model

Figure 3. *The Second Order Factor Analysis Model*

Figure 3 shows that for the 2nd order CFA, the different model fit indices used to have the following computed values: chi-square over degrees of freedom (3.597), the Root Mean Square Error of Approximation (RMSEA=.058), the Standardized Root Mean Square Residual (SRMR=.048), the Normal Fix Index (NFI=.946), the Comparative Fit Index (CFI=.961), and the Tucker Lewis Index (TLI=.953). These values indicated an acceptable second-order CFA.

Further, it was shown in Figure 3 that among the four characteristics of website quality, portability (β=.93, p<.01) and functionality (β=.92, p<.01) have the highest regression estimates. Thus, the website quality is significantly related to the dimension portability, explaining 86% of the variability of its portability. Similarly, it is significantly related to the dimension functionality explaining 85% of its variability.

In the same manner, website quality is significantly related to the dimension usability (β=.82, p<.01) and to the dimension efficiency (β=.76, p<.01), explaining 67% and 58% of the variability of the two characteristics, respectively.

Website reliability and maintainability

Table 5

Descriptive statistics of website reliability and maintainability

			Mean	S.D.
Reliability of the website				
R1	Maturity	The website does not display errors.	5.17	.69
R2	Fault tolerance	The website is capable of handling errors.	5.50	.50
R3	Recoverability	The website can resume its operation after an error or a failure.	5.17	.69
R4	Reliability compliance	The website performs its function without failure for a reasonable amount of time.	5.33	.47
		Total	5.29	.53
Maintainability of the website				
M1	Corrective maintenance	Errors in the website can be repaired in a reasonable amount of time.	5.33	.47
M2	Adaptive maintenance	The website is easy to maintain and remains effective even if there are changes in the environment.	5.33	.47
M3	Perfective maintenance	The website can easily be enhanced to improve its overall performance.	5.17	.37
M4	Enhancement	The enhancement of the website can easily be done without incurring so much cost.	5.00	.58
		Total	5.21	.46

*Scale of 1 to 6 used.

From table 5, the dimension reliability has four indicators: maturity, fault tolerance, recoverability, and reliability compliance. Fault tolerance had the highest mean (5.50), followed by reliability compliance (5.33). The other two indicators had the same mean of 5.17.

The developers claimed that the website developed can handle errors through the "conditional statements used" and "try-catch exception handling." On the maturity of the website, in 16 months, the developers alleged to have done ten versions. Most of the modifications were requested by the website user and were not developers' errors. Thus, the maturity of the website developed was established.

The developers alleged that after an error or a failure, the website could resume its operation in less than a minute, where the system makes the `recovery of data. This proves the recoverability of the website. Subsequently, the website was given an average rating of 5.33 for reliability compliance.

The same table also shows the four indicators used to measure the dimension maintainability; corrective, adaptive, perfective maintenance, and enhancement. Corrective and adaptive maintenance has the highest mean of 5.33, while enhancement has the lowest at 5.00. On the one hand, according to the developers, errors in the website can easily be repaired by the team in an average of 2-3 hour time, and the same amount of time is needed to do modifications to the website should there be changes in the environment. Thus, they rated corrective and adaptive maintenance highly. On the other hand, to

improve the overall performance and enhance the website, a team of six may require approximately 5-6 hour time. Finally, according to the dimension of maintainability, the website's compliance was rated 8.5 on a scale of 10. This indicates the concurrence with the statement that the website can easily be enhanced without additional cost on the user's part.

The standard deviation of the different indicators of maintainability shows the homogeneity of responses to this dimension compared to the reliability dimension.

Discussion

The 1st order confirmatory factor analysis indicated that the study's instrument has good reliability and validity. Correspondingly, the relationship between the quality of the website and the different characteristics was established and proven to be significant.

The 2nd order confirmatory factor analysis established that each of the four characteristics significantly contributed to measuring the website's quality. Of the four characteristics, in consonance with Johansson and Svensson (2009), portability which had the highest regression estimate, is considered very important in website development. The finding implies that the stakeholders confirmed that the developed website could run in any browser and mobile device. Further, stakeholders will not have difficulty accessing the website regardless of whether they are using a laptop, desktop, cellphone, or any electronic gadget, for as long as the device will allow access to the internet. This affirms Fahmy et al. (2012), findings that a system is portable if it can be executed from different platforms.

Next to portability, the quality of the website is significantly related to its functionality. The stakeholders found that the website's text is well-written and free from spelling and grammatical errors. Functionality has essential features that direct users to the persons behind the website. Further, the content of the website is accurate and up to date. Hence, it can be said that the website is performing the tasks required, thus, affirming the findings of Bhatti (2005) and Bertot et al. (2006) that functionality is an important factor in determining the quality of a system to its intended user, and that of Tandon et al. (2015), that functionality of a system affects its usability.

Also related to the quality of the website is its usability. Affirming the findings of Ferre et al. (2001), the stakeholders found that usability is not limited to screen layout and interface but its interaction with the system. They found that the website usage is easy to learn and understand if it is user-friendly, and its navigation can be used easily. Although the website does not look attractive, however, the fonts and colors are used correctly. This is also consistent with

Jabar et al. (2013), findings that the usability of a website is not limited to the technology used to develop it but how useful it is to the end-user.

Lastly, the quality of the website is significantly related to its efficiency. The website's efficiency was established since there was no problem loading the website, and it does not slow down even when used continuously.

Of the last two characteristics, the website developers rated the characteristic reliability of the website slightly higher than its maintainability. They claimed that the website could handle errors and perform its function without failure for a reasonable amount of time. Errors in the website can easily be repaired, and the website can easily be maintained should there be changes in the environment.

Conclusion

A website is usually developed to do a specific task. It may be to communicate with stakeholders, to serve as a marketing tool, or to make its presence felt. For online marketers, it may be used to introduce a product and a tool for buying and selling. For this paper, the website was developed to allow users to view students' experiences in the school they are currently studying to compare different institutions in different parts of the country for study options.

Five attributes were included on the website; the students' perception of the knowledge and skill developed in the institution, the quality of teaching received, their engagement, the support they received, and the learning resources provided by the institution. The ISO 9126 model was used where the website was evaluated based on its functionality, usability, portability, and efficiency to determine users' perception of its quality. The characteristics of reliability and maintainability were likewise given high ratings by the website developers, though there were not proven to affect the quality of the website statistically.

The study confirmed that all characteristics are significant in measuring the quality of the website. Portability or the quality of being accessed anywhere using any mobile device was found most notable. The following important dimension is the website's functionality or the website quality to do the assigned task. Related to functionality is its usability or usefulness, followed by the website's efficiency. Addendum to these, a website should be reliable and maintainable. The website should be able to do the specified function without failure, and it should be easy to maintain should there be a need to update the website to accommodate change.

The result that portability was assessed to be the most significant of the four characteristics may be because more than 50% of the respondents are

incoming college students and belong to generation Z, who are "digital natives." The parent/guardian comprised only 10.73% of the respondents. The result may not be the same if the respondents are more diverse. Thus, it is recommended that a follow-up study be done using more balanced samples.

Since a website is being evaluated, some technical terms in the questionnaire may not be totally eliminated. Consequently, the result of the study is based on the perception and understanding of the respondents which can be considered a limitation of the study. In consideration, it is recommended that a qualitative study be done to have a more comprehensive view of the intended user of the website.

The confirmatory factor analysis proved that the instrument used is valid and reliable. Thus, it is recommended that future researchers adopt the instrument in evaluating their websites.

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