Journal of Positive School Psychology http://journalppw.com
2022, Vol. 6, No. 6, 10297 – 10310

Modelling Consumer Perception Of Internet Retail Service Quality(IRSQ) Using Structural Equation Analysis: An Empirical Study On Africa's E-Marketplace

[1]Chimpele Kelvin Tsamwa, [*2]Abdul Rahman, [3]Rasheedul Haque, [4]Akintunde Adetayo, [5]Gan Connie, [6]Abdul Rahim Sadiq Batcha

[1]Faculty of Business and Accounting, Linton University College, Malaysia
[2]INTI International University, Persiaran Perdana BBN Putra Nilai, 71800 Nilai, Negeri Sembilan, Malaysia, Senior Lecturer, Faculty of Business and Communications, arahman.senathirajah@newinti.edu.my
[3]Faculty of Business, Finance & Information Technology (FOBFIT), MAHSA UNIVERSITY, Bandar Saujana Putra, 42610 Jenjarom, Selangor, Malaysia , rasheedul@mahsa.edu.my
[4]Faculty of Business and Accounting, Linton University College, Malaysia
[5]Xiamen University Malaysia, Jalan Sunsuria, Bandar Sunsuria, 43900 Sepang, Selangor, Malaysia, Senior Administrative Executive, Department of Advertising, Journalism and Chinese Studies, connie.gan@xmu.edu.my
[6]Faculty of Engineering, MAHSA UNIVERSITY, Bandar Saujana Putra, 42610 Jenjarom, Selangor, Malaysia

Abstract

The purpose of this paper is to explore consumers' perceptions of Internet retail service quality. This is conducted by firstly conducting qualitative interviews to identify five dimensions important to consumers in their assessment of the quality of online retailers. These are identified as information (up to date, comprehensive and reliability of information provided by retailers), ease of navigation (how easy and quick it is for consumers to browse through the online shop), responsiveness (the quality and speed at which consumers receive support when they have questions or have problems), customization (the ability of retailers to remember individual consumers and their browsing history thereby providing personalized information and product recommendations) and security (consumers trust in Internet retailer's integrity regarding non-financial and financial information). Secondly, a quantitative study confirmed the five dimensions mentioned above using multi-item scales, to asses the reliability and validity (convergent, nomological, and discriminant validity) of these dimensions. Theoretical and managerial implications and considerations for future research are discussed.

Keywords: Electronic Commerce, Service Quality, Consumer Satisfaction, Internet, E- Commerce, SERVQUAL

Introduction

Internet based studies show that there has been a remarkable increase in the number of Internet users over the last few years, with about 210 million Africans currently using the Internet (Internetlivestats, 2017). Similar trends are present worldwide. According to a report released by InternetStats.com (2013), online sales in Africa recorded $1.4 billion revenue in 2012, and a 40% percent yearly growth was forecasted for the next ten years. However, studies have indicated that the Internet is mainly used as an information searching tool rather than as a means to buy products. Actually, the average conversion rate for e-commerce sites is between 2% and 3% (Internetretailer, 2011). Similarly, studies show that a lot of people prefer to search for product information online, but proceed to buy products

at traditional brick-and mortar stores (Andrews and Imran, 2000). Such tendencies show that although there is an increase in the number of users, it does not commensurate with a corresponding growth in consumers making their purchases online.

Studies have already indicated that consumers who are not satisfied with a service will inform their experiences to more than three friends. Therefore, the potential consumer will be reduced by the poor service (Horovitz, 1990). As the service becomes more and the competition becomes more, therefore e- retail managers should pay close attention to the quality of service (Tai, 1994).

Understanding the elements of shopping experience that are most important to current and prospective consumers is needed if Internet retailers to increase their sales and maximize profits. This is true for both retailers that operate purely online and those that combine traditional brick-and-mortar with online shops. Exploring consumers' perceptions of internet retail service quality (IRSQ) will assist retailers get closer to their goals. Such a study is needed because poor service quality was found to make up to

80 percent of consumer complaints about e-retailers (Dobie et al., 2001). Research has also shown that companies with superior service quality usually make more profits because of stronger consumer loyalty (Bell and Zemke, 1992; Zeithaml et al., 1996).

In the early years of e-commerce, low prices and online presence were believed to be the most important factors to propel companies' success (Parasuraman, Malhotra, and Zeithml, 2002). Today, low prices and having an online presence alone does not guarantee success anymore, instead service quality issues are now common; such as non- responsiveness to consumer queries, wrong or late deliveries, spam, the speed at which a website loads, non-accessibility to desired information and the threat of identity theft. Under these situations, Internet service quality has entered the scene as a differentiating strategy. To retain consumers and attract new ones, retailers must shift the focus of e-business from e-commerce (the transactions) to e-services (Parasuraman, Malhotra, and Zeithml, 2002). Additionally, as retailers often have limited resources, they must therefore determine priorities among alternative service attributes when making investment decisions related to attainment of superior services (Brandt, 1997). The most apparent reason lies on the premise that human service is now being replaced by technology based services. This distinction raises new questions as to what are the relevant service quality dimensions that can be applied in evaluating e-service quality. (Rahman A., et al., 2017) Therefore, it is important for retailers to uncover what dimensions consumers utilize in their assessment of overall satisfaction and service quality and which of those dimensions are more important.

The purpose of this research is to fill this gap in our knowledge, first, exploring dimensions of Internet retail service quality that are important to consumers, second, developing a scale to empirically assess those factors. The relevant literature concerning service quality, with a specific emphasis on the online context is reviewed. Then, two studies (one qualitative and one quantitative) was used to develop a five-factor Internet retail service quality. Finally, theoretical and managerial implications are discussed.

LITERATURE REVIEW

2.1 Service Quality

Service quality is a concept related to the measurement of quality in different enterprises and organizations and serves the development of a truly consumer- focused management and culture (Gazor et al, 2012). However service quality attributes differs across the different industries. Ladhari (2008) stated that "It has been suggested that industry-specific measures of service quality might be more appropriate than a single generic scale". This argument was supported by Dabholkar et al. (1996) who stated that "It appears that a measure of service quality across industries is not feasible; therefore, future research on service quality should involve the development of industry-specific measures of service quality". Ladhari (2008) reported that in recent years, more attention was paid by researchers and scholars to the development of an alternative industry- specific research instruments for measuring service quality.

Subsequently, various industry-specific measures have been developed to measure

service quality (Ladhari, 2008). Among others, service quality was measured in: restaurants (Andaleeb and Conway 2006; Namkung and Jang 2008), insurance (Tsoukatos, Marwa and Rand 2004), travel agencies (Martinez Caro and Martinez Garcia 2008), higher education (Russel 2005; Markovic 2006), public-transport (Sánchez Pérez 2007), health spas (Snoj and Mumel 2002; Markovic, Horvat and Raspor 2004), accounting and audit firms (Ismail 2006), web-sites (Parasuraman, Zethaml and Malhotra 2005; Nusair and Kandampully 2008), and hotels (Markovic 2003, 2004; Juwaheer 2004; Wang, Wang and Zhao 2007; Raspor 2009). For instance, the public land transport companies encourage providing training regularly for their staffs to ensure all the staffs are qualified in order to provide service efficiently which will lead to a better performance. (Rahman A., et al., 2018)

Various conceptual models have been developed by several researchers and academics worldwide to investigate service quality concept. In a literature review study, Seth et al. (2005) presented a list of key service quality models such as Technical-Functional Quality Model (Gronroos, 1984), Gap Model and SERVQUAL Model (Parasuraman et al., 1985, 1988), Service-Profit Chain Model (Heskett et al., 1994), and Satisfaction-Service Quality Model (Spreng and Mackoy, 1996).

These conceptual models along with other models have contributed to the development of various schools of thought on service quality.

2.2 Internet Retail Service Quality

Despite extensive research, studies of online service quality have not resulted in a coherent body of knowledge about online service quality (Tate and Evermann, 2009). There is confusion about the dimensions, indicators, and theory of Internet retail service quality. There is no agreement on the number of Internet retail service quality dimensions. New studies continue to suggest new dimensions, or new combinations of existing dimensions. (Alzola and Robaina, 2005; Tate, Evermann, Hope, and Barnes, 2007). There is semantic ambiguity, where the same term for a construct is used with different meanings and indicators, or different constructs (and terms) are defined using the same indicators (Tate and Evermann, 2009). This practice of adding, subtracting, modifying and recombining indicators makes meta-analysis and meaningful comparisons between studies impossible (Tate and Evermann, 2009). Below we explore on the dimensions of Internet retail service quality that recent studies have begun to explore and the emerging body of knowledge.

Malhotra, Parasuraman and Zeithmal (2002) point out that some differences exist in the meaning of Web site service quality. Other researchers such as Lociacono, Watson and Goodhue, 2000 focus their operationalization's on the technical quality of the Web site itself rather than the quality of the service quality provided to consumers through the Web site. Some conceptualizations are limited to the interactions with the site itself while others include post Web site services of fulfillment and returns. Malhotra, Parasuraman and Zeithamal (2000) defined web service quality as the extent to which a Web site facilitates efficient and effective shopping, purchasing, and delivery of products and services. In their definition, the meaning of service is comprehensive and includes both pre- and post-Web site service aspects.

Madu and Madu (2002) proposed 15 online service quality dimensions: they are performance, features, structure, aesthetics, reliability, storage, capacity, serviceability, security and system integrity, trust, responsiveness, product/ service differentiation and customization, web store policies, reputation, assurance, and empathy. Zeithmal et al. (2002) identified seven dimensions for e-service quality; which are efficiency, reliability, fulfillment, privacy, responsiveness, compensation, and contact. These seven dimensions were further classified into two categories: a core service scale for measuring perception's of online shops' service quality when consumers experience no problems with the site (efficiency, reliability, fulfillment, and privacy) and a recovery service scale for measuring e-retailers' service recovery when problems occur (responsiveness, compensation, and contact) (Yang and Fang, 2004).

Rowley (2006) performed a meta- analysis by collating several studies in the area of Internet service quality. The study found that the following dimensions are the most prominent in terms of measuring this phenomenon: accessibility, responsiveness,

personalisation, reliability, information and communication, delivery, and web site features.

When evaluating recent research, several common dimensions emerged and seem to be particularly relevant for the online environment. First, studies perceive security to be a very important service quality dimension, which seems to be a dimension unique to the e-business a environment.

People are now more sensitive to the safety of their online transactions. This is possibly due to the ever increasing web site hacks and also probably because of the lack of a human-to-human interaction in online environments. For instance, sensitive financial information is being exchanged via computer networks instead of fellow human beings. Ease of navigation is another dimension that appears in many of the research studies. It is consistent with the functional quality aspects described by Gronroos (1983) and others. A business that has a site that is simple to use and that facilitates the locating of products/ services is a dimension that is different and more specific than service quality dimensions previously identified for traditional business outlets. Another dimension that appears in many research studies is information. The quality, relevance and quantity of information in an online shop is a dimension not directly explored in traditional retailing service quality measures. It gets at the idea that adequate and accurate amounts of information are considered a key part of the service provided by online retailers. Perhaps this is due to the absence of interaction with salespersons hence the 'do-it-yourself' mentality that results from having to rely on one's own abilities to find and buy products.

The current research strives to overcome shortcomings in some prior IRSQ research by:

- Developing dimensions that are grounded in in-depth interviews with consumers who have actively used this medium for making purchases (Fontana and Frey, 1994);
- Creating multi-time scales that are psychometrically sound;
- Utilizing available theoretical perspectives from previous literature; and
- Assessing the nomological validity of the scale.

2.3 Study

Two types of research methods were used in the collection of data in this study: quantitative and qualitative methods (Ghauri et al., 1995). The first stage covered semi-structured interviews and a total of 10 interviews were conducted. In this first study, participants comprised 5 women and 5 men aged between 23 and 40. The participants' level of formal education ranged from Bachelor's to Master's Degree. Interview length averaged thirty minutes. The purpose of the interviews was to explore consumers' feelings and their perceptions of e-quality service. This was done by asking participants' to explain their online experience with web sites from which they had made at least one purchase in the last six months. In the end, five dimensions pertaining to Internet retail service quality were identified as being the most important. These were information, ease of navigation, responsiveness, personalization and security.

The second stage emphasized on quantifying the five dimensions identified in the qualitative study. To collect data, the researcher used a standardized questionnaire that quantified 27 items for the 5 dimensions discussed in the above section.

Respondents were asked to answer questions on a five-point Likert scale, which 1= strongly disagree, 2= disagree, 3= neutral, 4= agree, and 5= strongly agree. A sample of 200 African students who had made at least one Internet purchase within the last six months was used. Africa has a total population of 1.1 billion (Population Reference Bureau, 2013) and for the purpose of this study it was divided into five stratas based on geography; Northern Africa (population 208 million), Western Africa (population 331), Eastern Africa (population 362 million), Middle Africa (population 138 million), and Southern Africa (population 61 million). Then, within each stratum, survey respondents were randomly selected. The sample sizes were determined by the size of each region as a percentage of Africa's total population. Thus, 30 participants were selected from Northern Africa, 60 respondents were from Western Africa, 66 Eastern Africans, 25 from Middle Africa and 11 from Southern Africa making a total of 200 respondents.

RESULTS ANALYSIS

3.1 Qualitative Results Analysis

Information. The information dimension used in this research was found to predict consumer's inclination to make future purchases from the same e-retailer. This emphasizes the importance of supplying up to date, comprehensive and reliable product information and clearly stating the payment and delivery terms.

Information essentially relates to the quality of text and revolves around providing consumer-centric, credible content and services in a timely fashion (Lee and Lin, 2005; Jun and Yang, 2008; Janda and Trocchia, 2003). Companies operating within the online environment must be able to give clients concise and easy to understand information, as any poor content could result in a consumer leaving the website and thus representing mixed opportunity. (Shaohan and Minjoon, 2003). Outdated information has proven to be a large detraction for prospective consumers, therefore the need for relevant information is essential to online success. Consumers have also been shown to dislike vast quantities of information within the web context, as it is believed to make the finding of relevant information exceedingly difficult (Jun and Yang, 2008).

In other studies, information was also found to be a relatively effective predictor of attitude toward the site (Chen and Wen, 1999) and e-satisfaction (Szymanski and Hise, 2000).

3.2 Ease of navigation

The ease of navigation dimension of IRSQ uncovered in the qualitative study refers to how easy and quick it is for one to browse through an e-retailers' web site. Good navigation design helps users acquire more of the information they are seeking and makes the information easier to find. Thus, a key challenge in building a usable website is to develop a good navigational structure and appropriate hyperlinks. Ease-of-navigation is analogous in essence to the ease of use in IT research (Davis, Bagozzi, and Warshaw, 1989), but it is specific to website navigation.

Ease of navigation has also been proven to be important for evaluating Internet systems quality (website quality in particular) by many researchers dealing with Internet service quality (Doll and Torkzadeh, 1988; Abels et Al., 1999; Jayawardhena and Foley, 2000; Liu and Arnett, 2000; Santos, 2003).

3.3 Responsiveness

The responsiveness dimension refers to the quality of support clients receive when they have questions or run into problems, and the speed with which this support is provided. This is important because in the qualitative study, this dimension was found to largely determine client evaluations of post transaction services. The consumer support is appreciated during the pre-transaction stage, particularly for online services: the online consumer is relatively powerless in enforcing help, having to rely on the willingness of the firm to provide support. The faster a firm responds to requests, the better the service will be evaluated (Van Riel et al, 2001).

Responsiveness relates to several aspects surrounding the online experience, including the promptness and helpfulness of the service provided by an online operator, as well as the technology on which the interface runs (Lee and Lin, 2005; Jun and Yang, 2008). According to Rahman et al., (2017) emphasized the importance of responsiveness during a technology- mediated interaction due to the lack of human contact or presence to get involved if there are any problems during the transaction phase. Therefore, the availability of immediate assistance is important for customers especially when they are experiencing problems or difficulties during online shopping. There are thus both human and technological factors at play.

3.4 Personalisation (Customization)

This dimension refers to the ability of web sites to recall individual consumers and their browsing history so as to enable it to provide personalized information and product recommendations. Customization is how much and how easily the site can be tailored to the individual consumers' preferences, histories and ways of shopping (Zeithaml, et al, 2000). Venkatesh and Ramesh (2006) argue that the ability to customize websites is an important design feature because it helps consumers save time and gives information that is of greatest interest to them.

In an Internet retail service environment, there is an intrinsic lack of real-time interaction, and this can discourage online buyers. Customization can overcome this barrier through creating a user-specific interactive environment and even sending communication to users at pre-determined, on-supply or on-demand intervals. The use of rule- engines or personalisation software also increases a site's ability to provide consumers with personalised information relating to their preferences and interests, as determined by their search behavior (Jun and Yang, 2008).

However, personalisation has its criticism. The fact that people are cautious of giving personal information to Internet retailers has limited the extent to which customization is possible (Lee and Lin, 2005). In spite of all this, increasingly complex advances in data mining technologies, such as collaborative filtering, have now made websites to be able to analyze real time buying behavior, which allows the site to personally recommend and offer services and products suited to specific users. This technology even permits online retailers to provide applicable content to infrequent users based on similar user behavior (Shaohan and Minjoon, 2003). Ultimately, it is critical for businesses to engage consumers in personalized dialogues and to learn more about their needs to better anticipate their future preferences (Jun and Yang, 2008).

3.5 Security

The qualitative interviews revealed that people value and are concerned about the safety of their financial and non- financial information. The participants also stressed how much they dislike spam and thus made it clear that they will boycott web sites that do not assure them that they will not be placed on mailing lists without their consent.

Security refers to the protection of personal and financial information (Yoo and Donthu, 2001) and the degree that a site is considered by consumers as being safe from intrusion (Parasuraman et al., 2005). Security has been identified as a vital factor to determine e-service quality for consumers of online banking services (White and Nteli, 2004). Security is the most important factor on intention store visit and to make purchases (Ranganathan and Ganapathy, 2002; Yoo and Donthu, 2001).

Other e-retailing studies (eLiljander et al., 2002; Szymanski and Hise, 2000; Yoo and Donthu, 2001; Zeithaml et al., 2000) found that the perception of protection involving one's financial and non-financial information plays a major role in determining consumers' attitudes and behaviors following an online experience.

QUANTITATIVE DATA ANALYSIS AND RESULTS

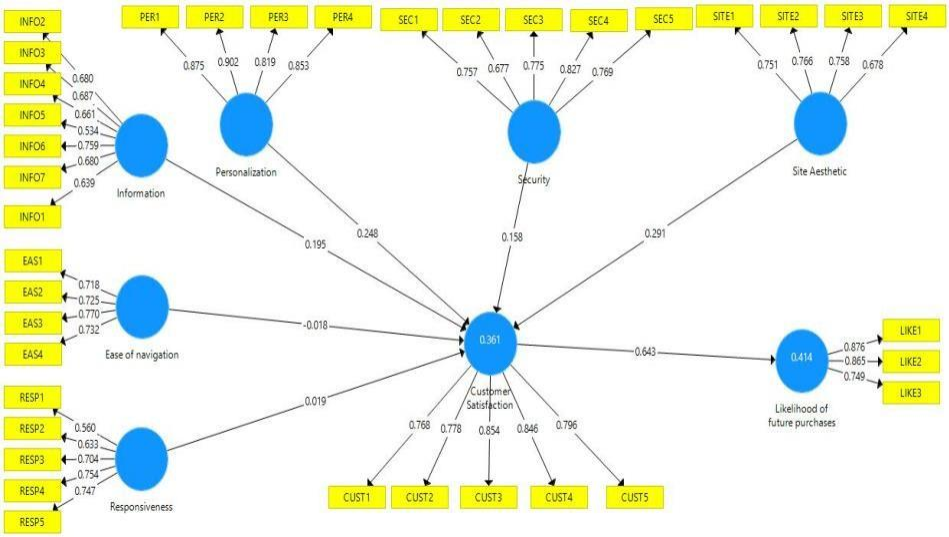

Figure 1: Measurement Model

4.1 Measurement Model

Figure 1 shows the overall results for the hypothesized model. The good fit of the model is presented with the acceptable R2 and good constructs reliability (Gefen et al., 2000). The ability of the model to predict revealed by the R2 value, is another important factor in the model (Chin, 1998; Komiak and Benbasat, 2004). For the reliability, composite reliability and average variance extracted (AVE) assessment, shown in Table 1 are the two main measurements applied in this research. Composite reliability does not presume that all indicators are equally weighted (Chin, 1998) which implies that composite reliability may be more appropriate to evaluate reliability. Composite reliability is suggested to be higher than 0.7 (Barclay et al., 1995; Fornell and Larcker, 1981). The other measurement, AVE, point out the variance amount that a construct confines from its indicators relative to the amount due to measurement error (Chin, 1998). For the first-order factor, the proposed minimal critical value for AVE is 0.5 (Hu et al., 2004). The composite reliability and AVE values shown in Table 1 are looked to achieve these requirements.

Table 1: Constructs Validity and Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance xtracted (AVE)
Consumer Satisfaction	0.868	0.87	0.904	0.655
Ease of navigation	0.723	0.725	0.826	0.542
Information	0.789	0.803	0.847	0.443
Likelihood of future purchases	0.777	0.797	0.87	0.692
Personalization	0.887	0.914	0.921	0.745
Responsiveness	0.713	0.719	0.813	0.467
Security	0.82	0.831	0.874	0.581
Site Aesthetic	0.722	0.721	0.828	0.546

Convergent validity is items in a scale capability to come or load simultaneously as a sole construct. It is estimated by probing each loading for each block of indicators. The standardized loadings should be higher than 0.7, meaning that the indicators share more variance with their respective latent variable than with error variance. A lower bound of 0.50 may be adequate (Chin, 1998). The entire path coefficients in this study are statistically significant. Discriminant validity signifies how well individual item factor connects to its hypothesized construct comparatively to others (Kerlinger, 1973; Swafford et al., 2006). Discriminant validity is approximated via cross-loadings and the relationship between correlations among first-order constructs and the square roots of AVE (Chin, 1998; Fornell and Larcker, 1981) Table 2.

Table 2: Correlation Matrix Against AVR Square Root

	Customer Satisfaction	Ease of navigation	Information	Likelihood of future purchases	Personalization	Responsiveness	Security	Site Aesthetic
Customer Satisfaction	**0.809**							
Ease of navigation	0.221	**0.736**						
Information	0.385	0.404	**0.666**					
Likelihood of future purchases	0.643	0.113	0.2	**0.832**				
Personalization	0.346	0.073	0.101	0.278	**0.863**			
Responsiveness	0.309	0.381	0.48	0.268	0.149	**0.684**		
Security	0.433	0.256	0.468	0.367	0.262	0.436	**0.762**	
Site Aesthetic	0.445	0.321	0.306	0.417	0.123	0.333	0.395	**0.739**

The cross-loadings depicted in Table 3 show sufficient discriminant validity levels for each construct. Each item factor in the bold value of Table 3 displays strong loading values to the corresponding latent construct and low loading values to other constructs. The linkage between AVE square roots values and the correlations among first- order latent constructs hold the similar conclusion. In Table 2, it is clearly indicated that the square roots of AVE (bold numbers in diagonal) are higher than the correlations among the constructs (off-diagonal values).

Table 3: Cross-Loading

	Customer Satisfaction	Ease of navigation	Information	Likelihood of future purchases	Personalization	Responsiveness	Security	Site Aesthetic
CUST1	**0.768**	0.117	0.294	0.483	0.262	0.198	0.344	0.368
CUST2	**0.778**	0.239	0.332	0.489	0.214	0.271	0.333	0.332
CUST3	**0.854**	0.133	0.299	0.527	0.354	0.28	0.305	0.4
CUST4	**0.846**	0.206	0.342	0.532	0.26	0.273	0.391	0.416
CUST5	**0.796**	0.199	0.292	0.567	0.304	0.225	0.381	0.281
EAS1	0.186	**0.718**	0.267	0.114	0.095	0.283	0.187	0.226
EAS2	0.156	**0.725**	0.372	0.001	-0.045	0.303	0.187	0.256
EAS3	0.175	**0.77**	0.336	0.12	0.069	0.244	0.233	0.284
EAS4	0.114	**0.732**	0.189	0.088	0.097	0.301	0.126	0.154
INFO1	0.266	0.175	**0.639**	0.202	0.037	0.247	0.271	0.155
INFO2	0.264	0.266	**0.68**	0.108	0.024	0.274	0.293	0.191
INFO3	0.232	0.367	**0.687**	0.094	0.032	0.335	0.287	0.252
INFO4	0.233	0.205	**0.661**	0.104	0.07	0.262	0.256	0.095
INFO5	0.189	0.289	**0.534**	0.119	0.066	0.334	0.224	0.188
INFO6	0.336	0.311	**0.759**	0.19	0.149	0.428	0.48	0.276
INFO7	0.242	0.288	**0.68**	0.093	0.068	0.348	0.307	0.255
LIKE1	0.571	0.022	0.137	**0.876**	0.269	0.238	0.289	0.331
LIKE2	0.582	0.128	0.192	**0.865**	0.228	0.178	0.322	0.4
LIKE3	0.438	0.144	0.177	**0.749**	0.191	0.268	0.311	0.303
PER1	0.363	-0.01	0.043	0.259	**0.875**	0.121	0.184	0.068
PER2	0.309	0.129	0.035	0.274	**0.902**	0.135	0.252	0.135
PER3	0.278	0.069	0.176	0.224	**0.819**	0.144	0.241	0.116
PER4	0.201	0.085	0.124	0.177	**0.853**	0.114	0.244	0.119
RESP1	0.207	0.206	0.261	0.195	0.163	**0.56**	0.225	0.215
RESP2	0.141	0.176	0.319	0.214	0.08	**0.633**	0.284	0.224
RESP3	0.231	0.286	0.353	0.221	0.067	**0.704**	0.389	0.272
RESP4	0.238	0.238	0.317	0.203	0.09	**0.754**	0.271	0.179
RESP5	0.214	0.37	0.388	0.091	0.109	**0.747**	0.316	0.251
SEC1	0.411	0.128	0.354	0.321	0.204	0.363	**0.757**	0.306
SEC2	0.265	0.158	0.49	0.216	0.204	0.308	**0.677**	0.228
SEC3	0.338	0.197	0.291	0.273	0.29	0.335	**0.775**	0.307
SEC4	0.298	0.288	0.377	0.268	0.208	0.325	**0.827**	0.28
SEC5	0.303	0.227	0.297	0.298	0.081	0.318	**0.769**	0.375
SITE1	0.344	0.208	0.185	0.26	0.15	0.234	0.269	**0.751**
SITE2	0.301	0.332	0.317	0.216	0.047	0.273	0.261	**0.766**
SITE3	0.333	0.339	0.224	0.379	0.039	0.275	0.311	**0.758**
SITE4	0.33	0.077	0.186	0.368	0.121	0.202	0.323	**0.678**

4.2 Hypotheses Testing and Results

The hypotheses adequacy evaluation as represented in the model was carried out via R2, regression weights, bootstrap critical ratios (t-values) and path variance (Table 4). Out of seven direct relationship hypotheses tested five direct relationship are found to be significant and supported. In H1, consumer satisfaction is predicted to have positively and significantly affected by the information dimension. Results in Table 4 supported this hypothesis with path coefficient of 0.915 and t-value of 2.579. Meanwhile, in H4 hypothesized that consumer satisfaction is positive and significantly influence by personalization/ customization. The result shows the path coefficient of 0.248 and t-value of 3.4 and the hypotheses is supported. In H5, it is hypothesized that consumer satisfaction is positively and significantly influenced by security and this hypotheses is supported where the path coefficient is 0.158 and the T-value is 1.688. In H6, website design is predicted to have has a positive and significant impact on consumer satisfaction. Results in Table 4 supported this hypothesis with path coefficient of 0.291 and t-value of 4.129. Two direct relationship hypotheses, H2 and H3 are found to be not supported from the hypotheses testing. For H2, -0.018 and the t-value of 0.288 whereas for H3, the path coefficient of 0.019 and the t-value of 0.227.

Table 4: Hypotheses Result

	Path Coefficient	T-value	Conclusion
Customer Satisfaction -> Likelihood of future purchases	0.643	13.686	Supported
Ease of navigation -> Customer Satisfaction	-0.018	0.288	Not Supported
Information -> Customer Satisfaction	0.195	2.579	Supported
Personalization -> Customer Satisfaction	0.248	3.4	Supported
Responsiveness -> Customer Satisfaction	0.019	0.227	Not Supported
Security -> Customer Satisfaction	0.158	1.688	Supported
Site Aesthetic -> Customer Satisfaction	0.291	4.129	Supported

DISCUSSION

Theoretical Implications

The contribution has been made to support and enrich the theories about the perceived Internet retail service quality that already exists. Furthermore, based on the existing theories, this study has tested how the five dimensions (i.e. Information, ease of navigation, responsiveness, personalization, and security) affect the perceived Internet retail service quality. Finally, we have discovered new dimensions from the qualitative interviews. These entirely new factors or dimensions will affect the perceived Internet retail service quality.

Results of this study give empirical evidence that the five Internet retail service quality dimensions mentioned above are distinct constructs. While the reliability of some of the dimensions can be improved, the operationalization of these five constructs allows for a good initial test of the efficacy of these dimensions for predicting consumer reactions crucial to Internet retailers.

Additionally, the research's findings show support for the strong predictive power of the overall scale for estimating satisfaction with the online shopping experience, likelihood of future purchases and overall evaluation of services provided by the online shop. Specifically, it appears that online consumers may be most concerned with such factors as the retailer' ability to assure them of financial and personal security and privacy, provide a highly informative consumer interface (information), and, to a slightly lesser extent, offer customized information.

Managerial Implications

With the rapid global growth of e- commerce, more and more e-retailers are starting to realize that providing high quality e-services to consumers is a key determinant of their business' success (Zeithaml, 2002; Wang, 2003; Yang, 2001). The objective of this paper was to have a better understanding of the dimensions that affect the consumers' perceived Internet retail service quality. Therefore, if managers want to achieve a high level of Internet retail service quality, they must pay attention to all the five dimensions (i.e. Information, ease of navigation, responsiveness, personalization, and security), which are identified and tested in this study. The following are the managerial implications:

Firstly, e-retailers must pay attention to consumers' ease of website navigation. Consumers should know exactly where they are and where they are navigating in the online website. Managers must ensure that the online shop has functions that help users find what they need without difficulty, has a good performing search engine, and lets consumers to efficiently navigate through the web pages.

Secondly, the information dimension implies that it is very important for managers to provide easily retrievable, accurate and reliable information on the website. The relevancy and usefulness of applicable information cannot be overemphasized in today's highly competitive global market. This is critical in allowing the consumers to assess options and eventually make a purchase decision. Outdated

information has shown to be a big detraction for prospective consumers and so the need for relevant information is paramount to online success. Consumers have also been shown to dislike huge quantities of information within the online retailer, as it is believed to make the finding of relevant information extremely difficult (Jun and Yang, 2008).

Thirdly, security dimension is regarded as the most important among the five dimensions. Wee and Ramachandra (2000) stated consumers are more likely to buy products from Internet retailers if they find the personal and financial information they provide is secure. It implies that managers should keep consumers' information secure. Internet retailers are more likely to strength consumers' confidence and buying power if their online retailers can satisfy consumers sense of security and safety (Loiacono et al., 2000). Other studies have shown that a majority of online consumers are very concerned about threats towards their personal privacy (Graeff and Harmon, 2002).

Fourthly, e-retailers should pay attention to responsiveness, to assist them in giving appropriate service information to clients whenever a problem occurs and responding to consumer requests. Online shops still operate in much the same way as traditional brick and mortar stores. Technical failures have been so prevalent that consumers often need to receive assistance from e-retailers. Therefore, fast response to consumer inquiries and concerns, and interactive communication are crucial to enable consumers reap the convenience of Internet shopping. More specifically, the study indicates that prompt response to consumers' inquiries and concerns is an important way of increasing consumer satisfaction and loyalty.

Lastly, the study on the personalization dimension suggests that e-retailers should satisfy the individual consumer's unique needs. As Internet technologies continue to be sophisticated and web sites can offer more targeted content, demand for personalization continues to rise (Gurau et al., 2003). It is also very important for managers to understand the consumers by giving individual attention, personal acknowledgements which the consumers note from online shops, and provide message segments to enable people to give feedback.

LIMITATIONS AND FUTURE RESEARCH DIRECTION

This study has two main limitations. Firstly, only one segment of Internet users (i.e. Students) participated, and may not be representative of the general population of online consumers. Future studies should cover all different age groups. To add to the depth of the current study, age, gender and income should be tested as moderator variables.

Secondly, since the sample was collected in Africa, generalizability to other continents/ countries might be limited due to cultural differences in purchase behaviours.

This study only focused on Internet retail service quality from the consumers' perspective. Future research may be conducted to also study the Internet retail service quality from the businesses' perspective. Further studies can investigate more samples from different continents/ countries or places instead of samples from Africa only. Evidence exists that the Internet retail service quality may differ across cultures (Gefen, 2000; Tsikriktsis, 2002). Therefore, the research can be replicated in different cultures to provide cross- cultural comparisons.

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