

Assessing the Importance of E-SQ Dimensions and Attributes: Perspective of Facebook's Users

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Abstract

The rise of the social networks has radically changed communications. This study seeks to explore the importance of electronic service quality's (E-SQ) dimensions in relation to companies' pages promoted on social networks, specifically Facebook. The common dimensions and attributes of E-SQ were identified by studying the relevant literature. A descriptive approach was used to identify the weights and importance of E-SQ dimensions and attributes in relation to the Facebook pages. 400 questionnaires were administered to the Facebook users, 303 questionnaires were responded to and returned back. Results show that the two most important dimensions of E-SQ as perceived by Facebook users, are privacy/security and information quality. This research provides Facebook fan page owners with useful recommendations on what should be included in their pages in order to attract more fans and increase fans' engagement. It provides a new platform for investigating and improving the concept of E-SQ on the Facebook domain.

Keywords: e-service quality, social networks, Facebook, dimensions, attributes, Jordan

1. Introduction

The Internet has enabled and accelerated new forms of communications. One such means of communication that have emerged and become increasingly popular over the past years is social networks (Neumann et al., 2005). Social networks, such as Facebook, LinkedIn, MySpace, Twitter, YouTube, WhatsApp and Instagram provide improved access to information as they enable a person to communicate with tens, hundreds, or even thousands of other people about the activities, services, products, and the companies that provide them. Moreover, such tools can give potential consumers massive access for reviewers and comments by previous users. This improved access to information results in not only a clearer picture about the activities, services and products of a company but also provides producers with additional valuable information through the social network profile of the visitor. Mangold and Faulds (2009) argue that social media is a hybrid element because it enables companies to not only talk to their customers but it also enables customers to talk directly to each other.

Throughout the world, businesses are increasingly incorporating social media into their marketing programs (Kerin et al., 2013). Social media is a relatively low cost form of marketing and enables businesses to engage in direct and end-user contact (Kaplan & Haenlein, 2010). Moreover, the social engagement by consumers has significant impact on marketing activities as marketers need to be aware of the factors that influence consumer's purchase decision and behaviour (Evans, 2010). Social networking also brings new service quality challenges to businesses. Today, customers want a variety of venues for their customer service, and social media offers a rich channel for this purpose as it enables customers to connect with businesses any time from any location around the globe.

To shed more light on the importance of the social media, a study conducted by comScore shows that around the world, more than 1.2 billion people use social media or social network sites, accounting for 82% of the world's online population (comScore, 2011). In 2011, Harvard Business Review surveyed 2,100 companies and reported that although 79 percent of those companies use or plan to use social media, only 12 percent of those firms felt they were using social media effectively (Harvard Business review, 2011).

Law and Hsu (2005) highlighted the benefits of using web sites in the service industry including; lower

distribution costs which in turn leads to higher profits and also a larger potential market through selling their products and services to global customers without geographical and time constraints. Marketing through social media carries many advantages some similar to those of using websites such as low cost and rapid transmission through a wide community, and some specific to social networks such as user interaction (Vance et al., 2009). For example, Facebook Pages were launched late in 2007. These pages allow businesses to create a profile for a department or instead of being a friend of the page, Facebook members can become a fan, which means they are automatically updated when changes are made to the page. Information, resources such as photos and video and Facebook applications can be added to the page.

Kerin et al. (2013) scanned the international marketing environment and its latest social and technological trends. They identified the social network as a dominant form of communication for consumers and for having feedback and reviews. Hence, it is important for all types and forms of companies to effectively use the social networks to promote their products and services through for example offering targeted products and services via Facebook pages. This will help them to better satisfy their current customers and attract more potential customers. Having done this, more value for practitioners and their establishments will be added through reducing unnecessary costs and exploring their consumers' needs. In addition, more customer satisfaction and loyalty could be achieved through the repetitive interaction and engagement with customers via these pages. According to the February 2013 Social Media Report, the number of Facebook users in Jordan, for example, has reached 2.7 million (Social Breakers, 2013). Furthermore, the total number of Facebook pages worldwide has reached 50 million.

Having explored some of the important and promising specific uses of the Social Media and Facebook pages, more attention should be given to the quality of the pages promoted on social media networks. In this regard, the authors believe that companies who want to make good use of social media such as Facebook to promote their business should put more efforts into improving their Facebook pages. As social networking sites continue to grow, it is important for buyers and sellers to understand, what the electronic service quality (E-SQ) of pages promoted and delivered in the social networks is and what the importance of the dimensions and attributes of E-SQ of pages promoted in the Facebook is. However, it is worth noting, that E-SQ refers to all phases of a customer's interactions with a Web site which facilitate efficient and effective shopping, purchasing, and delivery (Parasuraman et al., 2005).

This research is an attempt to find out the most important E-SQ dimensions in social media. The authors believe that the quality of pages promoted in the social media can be evaluated using the common dimensions of E-SQ adopted for the normal sites and which are referred to as electronic service quality (E-SQ). To do so, this study uses the existing and common E-SQ dimensions confirmed in the literature.

In order to achieve the aim of this paper, the following objectives will be addressed:

- To review the relevant generic literature in the E-SQ dimensions and its contribution to consumers' behaviour and intention.
- To identify the relative importance of dimensions of the E-SQ of pages and sites promoted in Facebook as perceived by users in Jordan.
- To find out the most important attributes associated with every single dimension of E-SQ as perceived by Facebook users in Jordan.
- To provide some recommendations for practitioners promoting their business using the social networks in order to meet the needs of users of such social networks.

Thus, this paper aims to understand and measure the dimensions and attributes of E-SQ of company's pages and sites used and delivered in the common social network such as Facebook by the perspective of users and fans in order to understand what might influence their behavioural intentions.

Having introduced the research background in this section, the rest of the paper is organised as follows. The next section provides some theoretical background about the E-SQ in terms of their structuring and dimensionality as well as the influence of E-SQ on consumers' behaviour and intentions. The section after that presents the methodology adopted in this research, followed by a section on findings. Then discussions and implications presented before conclusions of the paper. The last section views limitations of this study and offers recommendations for practitioners and future researchers.

2. Literature Review

A review of the relevant literature shows that there is a general agreement amongst researchers that electronic service quality (E-SQ) has a valuable impact on the customers' decisions as well as business successfulness.

Akinci et al (2010) stated that the delivery of high electronic service quality to consumers is the key variable for improving performance and beating competitors. In view of the fundamental importance of E-SQ, it is considered by many as one of the most important tools for achieving long-term success (Zeithaml et al., 2002; Parasuraman et al., 2005; Udo et al., 2010; Akinci et al., 2010). Accordingly, both practitioners and business managers are trying to enhance their competitive advantages by improving and focusing on their virtual business environment as a strategic tool.

It is worth noting that since the early work undertaken by Zeithaml et al. (2000) as claimed by Akinci et al. (2010), research on electronic service quality has grown considerably over the past decade. Zeithaml et al. (2000) were amongst the first to provide a definition of web site service quality. Parasuraman et al. (2005; P: 5) define E-SQ as a “*the extent to which a web site facilitates efficient and effective shopping, purchasing, and delivery*”. Zeithaml et al. (2000), also, mentioned the multidimensional nature of the E-SQ construct which opened the door for other academics to define and investigate the E-SQ construct.

Since then, the literature has focused on conceptualizing, measuring and managing electronic service quality and on its contribution to the electronic environment (Carlson & O’Cass, 2011). Several researchers have developed different perspectives on how to conceptualize and measure service quality. For example, Loiacono et al. (2000) perceived and measured the quality of websites using 12 dimensions including: informational fit to task, interaction, trust, response time, design, intuitiveness, visual appeal, innovativeness, flow-emotional appeal, integrated communication, business processes and substitutability. Barnes and Vidgen (2002) conceptualized and measured web site quality using 5 dimensions; usability, design, information, trust and empathy. Yoo and Donthu (2001), on the other hand, suggested 4 dimensions for conceptualizing and measuring E-SQ: ease of use, aesthetic design, processing speed and security. Wolfenbarger and Gilly (2003) used 4 dimensions and aspects of electronic quality of retailing website (eTailQ) including; website design, reliability/fulfilment, privacy/security and customer service. Zeitham et al. (2002) introduced 5 dimensions to measure E-SQ by using customers’ perception: information availability and content, ease of use/usability, privacy/security, graphic style and finally reliability/fulfilment. Parasuraman et al. (2005) investigated a wide range of dimensions and conclude with 4 dimensions for conceptualizing and measuring E-SQ and which include: efficiency, fulfilment, systems availability and privacy. Li et al. (2002) claimed that the web site quality can be measured by 6 dimensions, namely; responsiveness, competence, quality of information, empathy, web assistance and call-back systems.

Janita and Miranda (2013) tried to explore dimensions of quality in the B2B e-marketplace in the construction sector. Their study identified and validated only four key B2B service quality dimension as perceived by users of online sellers including: reliability and privacy, utility of the information, value-added services, and efficiency. Moreover, Janita and Miranda proved positive impact of the four dimensions on clients’ future loyalty.

As shown above, the literature on e-service quality has provided varying dimensional structures for the e-service quality concept. Accordingly, it is not clear which set of dimensions developed or introduced in the literature truly capture and address the concept and dimensionality of the E-SQ concept.

It is clear from the preceding discussions that there is no consensus on how to construct the dimensions of E-SQ due to the diverse and contradictory results developed in the literature. To solve this problem, Ladhari (2010) reviewed the huge body of research and concluded that the E-SQ concept has got different structuring of E-SQ. Moreover, Ladhari (2010) provided different criticisms for the existing literature on E-SQ such as that most previous studies use US users and respondents which diminish the validity of the previous studies and respondents in the previous studies have adopted the internet as an information source not for commercial purposes i.e. collecting some information from the web rather than buying products or services.

In order to resolve such inconsistency in the conceptualisation of E-SQ, Ladhari (2010) reviews and summarised comprehensively the literature concerning the e-service quality concept undertaken in different industries published in the academic journals. The motivation for Ladhari’s research was that the dimensions of the e-SQ concept are contingent on the service industry. As a result, Ladhari identified six important dimensions and constructs of e-service quality that capture the meaning of E-SQ including; reliability/ fulfilment, responsiveness, web design, ease of use/ usability, privacy/security, information quality/ benefit. Table 1 explains meaning of the 6 dimensions highlighted by Ladhari (2010).

Table 1. Definitions of the six E-SQ dimensions by Ladhari (2010)

Dimension	Definition
Reliability/ Fulfilment	Refers to the performance of a promised product and service in an accurate and timely manner and to the delivery of intact and correct products or services at times convenient to customers.
Responsiveness	Refers to a willingness to help users, prompt responses to customers' enquiries and problems and the availability of alternative communication channels.
Web design	Refers to aesthetics features and content as well as structure of online catalogues.
Easy of use/ usability	Refers to user friendliness, especially with regard to searching for information.
Privacy/security	Refers to the protection of personal and financial information and the degree to which the site is perceived by consumers as being safe from intrusion
Information quality/ benefit	Refers to the adequacy and accuracy of the information users get when visiting a web site

Source: Ladhari, 2010 (Page: 473).

The main advantage and outcome of Ladhari's review, that his research provides more robust and rigorous methods for measuring E-SQ since he reviewed numerous studies on E-SQ from well known databases and processed them into thorough content analysis technique. As a result, since Ladhari's study was the base for the current study, it is would be more interesting for the academic community to complement the global and generic dimensions and measurements of E-SQ in a particular culture as suggested by Ladhari (2010).

In terms of the consequences of E-SQ, it was confirmed in the literature that e-service quality has a positive impact on customers' behavioural intentions. Udo et al. (2010), for instance, investigated the impact of e-service quality perception and expectations on customer satisfaction and behavioural intentions by surveying US students at a large public university. Udo et al. (2010) found that the mediation factor of customer satisfaction on web service quality and behavioural intentions is stronger than the direct influence of web service quality on behavioural intentions. However, it is worth saying that, although Udo et al. (2010) included one moderating variable (i.e., individual PC skills), this variable did not influence customer satisfaction and behavioural intentions to use the e-service.

Bai et al. (2008) also probed the impact of website quality on customer satisfaction and purchase intentions by investigating the Chinese online visitors' perspective. The study highlighted and reinforced the importance of customer satisfaction as a mediating variable for this relationship in the online markets. On the other hand, Sheng and Liu (2010) measured the impact of 4 dimensions of E-SQ on customer satisfaction and customer loyalty. Sheng and Liu measured the impact of E-SQ on two different variables since customer satisfaction is different from customer loyalty. They found that only 2 dimensions of E-SQ (efficiency and fulfilment) influence customer satisfaction while there are other 2 dimensions of E-SQ (privacy and fulfilment) influence customer loyalty. Although their research model is simple, it helps managers know which dimensions of E-SQ will attract loyalty of customers rather than their current feelings and satisfaction. Thus, e-service quality may assure future business for organizations. Carlson and O'Cass (2011) used the model developed by Dabholkar (1996) to understand antecedents, consequences and mediators of e-service quality in the retailing sector. Findings of their study support the mediating role of customer satisfaction as a mediating variable for achieving better explanation for customers' behavioural intentions.

Using another perspective, Lai (2006) assessed employees' perception of e-service quality in the electronic business (EB) and user satisfactions with enterprise applications by collecting 161 questionnaires from seven international electronic businesses in Taiwan. Results obtained from the study partially support the idea that higher level of EB, which refers to an enterprise with the capability of exchanging values (goods, services, money, and knowledge) digitally via a computer network, leads to higher level of user satisfaction. Moreover, Lai's study confirmed 4 dimensions of EB-SERVQUAL (i.e. reliability, responsiveness, assurance and empathy).

In addition, some researchers believe that augmenting online marketplaces with social networking, can improve trust between transaction partners and increase user satisfaction. In 2008, Swamynathan et al tried to investigate the impact of social networking on online marketplaces. In their study, the researchers performed a detailed study of an auction site that integrates social links into user profiles. Results show that users who transact with friends of friends generally obtain significant benefits in the form of higher user satisfaction. The authors also reported that with sufficient adoption, social networking can have a dramatic positive impact on online marketplaces and positive perceptions of electronic service quality offered by companies.

Thus, social networks like Facebook represent excellent communication opportunities and require new and

unconventional thinking (Kaplan & Haenlein, 2010; Kweskin, 2007) to ensure that consumers have good experiences and transactions (Xiaofen & Yiling, 2009). This new era of social engagement and digital communication is vital to successful business strategies. As organisations become more globally competitive, it is more important for marketing strategy and developers to create and implement more innovative and compelling avenues and tools to attract larger pools of customers (Rockendorf, 2011).

To conclude, perceptions and evaluations of E-SQ form an antecedent of electronic customer satisfaction as supposed and supported in the traditional marketing literature and the virtual online context (Al-Hawari & Ward, 2006; Bai et al., 2008; Sheng & Liu, 2010; Carelson & O’Cass, 2011). In other words, electronic service quality and electronic customer satisfaction (E-CS) will determine the future behaviours of consumers’ i.e. behavioural intentions as supposed before in the generic marketing literature as well as the electronic setting (Anderson & Fornell, 1994; Oliver, 1999; Pont & McQuilken, 2005; Anderson & Srinivasan, 2003; Bai et al., 2008). Hence, having more and high levels of E-SQ and E-CS will lead to better behavioural intentions and actions such as positive word-of-mouth, higher purchase intentions, less price sensitivity and less complaint behaviour (Zeithaml et al., 1996) which means E-service quality has a positive, indirect link to behavioural intentions (Cronin & Taylor, 1992; Dabholkar & Thorpe, 1994; Oliver & Swan, 1989).

3. Research Question

In spite of the ongoing debate in the literature, this study attempts to identify which of the 6 generic E-SQ dimensions highlighted by Ladhari (2010) has the most relative importance to Facebook users in the Jordanian setting. These dimensions will help fans, users and practitioners in assessing the customers’ and users’ perception of e-service quality of pages promoted in the social media specifically in Facebook. One dimension, reliability/fulfilment, has been excluded from this study as it is not applicable to Facebook pages and the setting of this research.

Former studies indicate that this area of research is very promising and can yield useful findings. In addition, conducting such type of research in the Jordanian setting can give more benefits for the theoretical bases as suggested by Ladhari (2010). And with social media such as Facebook in which fans can also contribute content, change opinions and create communities for different needs, more challenges for measuring and evaluating service quality of pages and sites promoted in such arena like the Facebook are brought up.

In this regard, understanding Facebook fan’s perceptions and behaviour forms an important issue in contemporary marketing strategy. Accordingly, recent literature witnessed several numbers of studies that tried to investigate this phenomenon. For instance, Lapointe (2012) highlight the value of fans metric which refers to number of Likes for Facebook pages. Lapointe also acknowledged that not all fans are equal. Moreover, Lipsman et al. (2012) addressed the profile of fans at Facebook in order to offer advice about increasing the number of “Likes” on Facebook. Wallace et al. (2014) provide insight into the link between fans of Facebook pages and their attitudes toward brands promoted in Facebook. In other words, Wallace et al try to explore relationship between fans and brands through grouping fans into four segments of fans, namely; the fan-atics, the self-expressive, the utilitarians and the authentic. Chianasta and Wijaya (2014) tried, also, to identify and find out how the social media impacts promotion of IT products in Indonesia, unfortunately, they found limited influence of social networks on products’ recognition and popularity. Ruiz-Mafe et al. (2014) identified the main drivers of Facebook fan page loyalty in order to promote and create long-term relationships with users and fans. Findings of their study revealed that attitude emerged as a key variable in increasing loyalty to fan pages. Moreover, results imply a significant positive influence of perceived usefulness, trust and dependency on loyalty in fan pages.

Thus, this paper addresses the E-SQ in the Facebook setting and explores what are the fan’s perceptions of E-SQ in Facebook through attempting to provide answers for the following questions:

“What is the relevant importance of dimensions of electronic service quality associated with pages and sites promoted and delivered in Facebook by using the fan’s perspectives? What is the perceived relative importance of attributes associated with E-SQ dimensions of pages and sites promoted in the Facebook? What are the key factors should be considered and emphasized for measuring E-SQ of pages and sites in the social networks arena such as Facebook?”

4. Methodology

4.1 Research Sampling and Data Collection

Since the main aim of this study was to investigate the importance of different dimensions and perceptual attributes of E-SQ in Facebook pages. The unit of analysis in this study was individual active Facebook users

who have frequently liked different Facebook pages.

The participants that were used for the current study were students. In this regard, Swaid and Wigand (2009) provide justifications for approaching students only including: (1) students at universities form one of the most active social website users and conduct more online businesses purchases than the overall web users, (2) using students at universities is better than other populations since they are younger and better educated, (3) using a homogenous population like students at universities can reduce the effect of variance when not considering all possible factors and elements that influence perceptions of respondents.

In terms of the sampling design and technique, most similar studies have used convenience sampling for data collection (Gummerus et al., 2004; Kim et al., 2009; Carlson & O’Cass, 2011). Sekaran (2003; 2010) suggests using convenience sampling when the collection of information is from members of the population who are conveniently and easily available to provide the needed information.

In this study, the respondents who took part were students from one Higher Education University in Jordan that specializes in Information technology. Students from the computer engineering, computer science and management information system departments were approached and contacted since researchers believed such respondents have good technology skills which enable them to provide valuable contributions to the relevant issues at hand.

Accordingly, the present study has used two forms of sampling: convenience sampling by approaching students available at classes and lectures and purposive or judgmental sampling by approaching a specific group of students. The total number of students at those three departments was (719) which forms a 24% of the total number of students at the whole university which give good representation of sampling. To follow Sekaran (2003) suggestions for determining the sample size, (248) respondents should be obtained (i.e. sample size) when the population for students registered at the three departments approached (Sekaran, 2003; P. 294).

At the onset of the study, the researchers obtained the timetable of the classes given to the students in these three departments. Then, over the period of four weeks, some of faculty members who teach these classes were approached informing them of the research and research objectives and requesting their assistance in facilitating the administration process of the questionnaires to their students attending their classes. 400 questionnaires were distributed for the classes since the suggested sample size should be (248) when the population for students at three departments was (719) as suggested by Sekaran (2003). (352) questionnaires were returned back over a period of 4 weeks time. However, only (303) usable questionnaires were returned yielding a response rate of (76%) of questionnaires distributed after excluding (49) questionnaires. In the classes, and after getting the permission from lecturers of classes to distribute the questionnaire, the researchers briefly explained the purpose of the study. Students were asked to complete the questionnaire during the class. The total number of questionnaires retained were (303) which forming (42%) of total number of students at the three departments surveyed which was (719) students. Thus, the current study got more than (248) questionnaires as suggested and requested by Sekaran (2010) to have an acceptable representation for the research population.

4.2 Measurements and Scales

In order to measure the construct under investigation, this study used scales and measures similar to those adopted in the previous studies. To be more precise, the e-service quality of Facebook pages was measured using five dimensions and several items as suggested by Ladhari (2010). However, it is worth saying that all items were modified and reworded to be suitable with the current study setting and culture (i.e., Facebook pages promoted in Jordan). Thus, the current study measures E-SQ at the dimensional level (i.e., 5 dimensions) by using (5) items and by using (25) statements to measure attributes of E-SQ dimensions as shown on Table 2.

Table 2. Construct sources and number of items

Construct	No. items	Sources
Responsiveness	6	Ho and Lee (2007); Parasuraman et al., (2005);
Page design	5	Lee and Lin (2005); Swaid and Wigand (2009);
Easy to use/ Usability	5	Jeong et al., (2003);
Security/privacy	3 + 1 by the Authors	Parasuraman et al., (2005);
Information quality/ Benefit	5	Jeong et al., (2003)

As shown in Table 2, the E-SQ attributes were measured using 25 items (statements) with multiple items for each dimension. In other words, multi-item approach was adopted from the E-SQ literature in order to explore the degree of importance for the 5 dimensions and all attributes related.

When indicating the importance of the overall performance/quality of the included dimensions and attributes, respondents were requested to provide their perception using a seven-point Likert scale ranging from very un-important (1) to very important (7) on the 5 dimensions and the 25 attributes. Preston and Colman (2000) argue that in order to ensure stable participant responses, a seven-point scale should be used because it allows respondents to make more detailed differentiation of the importance level of the attributes and dimensions. Moreover, having done this made such scale consistent with that used in the majority of previous studies.

The questionnaire used has 3 parts, part one collects some demographic information about respondents, part two collects information concerning the respondents' usage of Facebook and fan pages, while the third part measures the E-SQ dimensions and attributes. The questionnaire was administered in English. In April 2013, the questionnaire was pilot-tested by 8 professional staff members and 8 Facebook users, who were asked to check the appropriateness and comprehensiveness of all statements. Other than a few suggestions on rewording, no major problem was found.

5. Findings

5.1 Demographic Profile of Respondents

The questionnaire contained questions on the gender of the respondents, their age group, the frequency of checking their Facebook accounts; the average time spent surfing Facebook pages in each visit, and the approximate number of pages liked over the last three months. Table 3 through to Table 8 summarises the demographics of respondents that took part in this study.

Table 3. Gender of respondents

Variable	Number	Percentage (%)
Male	190	63
Female	113	37
Total	303	100%

As shown in Table 3, the study included a total of 303 respondents, of which, 190 (63%) were males and 113 (37%) were females. Such result is compatible with the facts gained from the registration office at the university implying that males in this university are dominating the population of students.

Table 4. Age of respondents

Variable	Number	Percentage (%)
Less than 20 years	89	29
20-24	212	70.0
25-29	2	1
Total	303	100%

Since the typical age for undergraduate students in Jordan is between 18 and 23 years, 89 (29%) of the respondents are less than 20 years old, 212 (70%) are in the 20–24 age group, and only 2 (1%) are in the 25–29 age group as shown in Table 4.

Table 5. Frequency of checking personal Facebook accounts

Variable	Number	Percentage (%)
Once a month	8	3%
Once a week	11	4%
At least once a day	92	30%
3-4 times a day	71	23%
5 times and more a day	121	40%
Total	303	100%

Respondents were asked to indicate the frequency of checking their Facebook accounts. As shown in Table 5, the majority of respondents, 121 (40%), reported that they check their Facebook accounts 5 times and more daily. Moreover, less portion of respondents, 71 (23%), check they account less often between 3-4 times a day. Of these, 92 (30%) reported that they check their accounts at least once a day, very small number of respondents, 11 (4%), check they accounts once a week and even less number of respondents, 8 (3%) check their accounts once a month. This finding is consistent with the fact that social networks dominate the behaviour and communications among people.

Table 6. Average time spent per Facebook visit

Variable	Number	Percentage (%)
Less than 5 minutes	12	4.0
5 minutes	45	15
10 minutes	48	16
15 minutes	47	15
20 minutes	49	16
30 minutes	46	15
60 minutes	33	11
120 minutes	6	2.0
More than 120 minutes	17	6
Total	303	100 %

Table 6 shows the average time spend per Facebook visit. On average, 46% of respondents indicated were spending between 15-30 minutes each time they use Facebook, 35% were spending up to 10 minutes per visit, 11 % spend around 60 minutes, and only 8% spend a minimum of 120 minutes per visit.

Table 7. Number of pages liked

Variable	Number	Percentage (%)
Less than 5	39	13
Between 6 and 10	70	23
Between 11 and 20	53	17.5
Between 21 and 50	79	26
More than 50	62	20.5
Total	303	100%

When asked how many fan pages they have liked on Facebook during the past 3 months as shown in Table.7, the largest number 79 (26%) indicated they have liked between 21 and 50 pages. On the other hand, the smallest number 39 (13%) indicated that they have liked less than 5 pages. Interestingly, 62 (20.5%) of participants indicated that they have liked more than 50 pages in the past three month. This means that most Facebook users are liking pages on Facebook.

Table 8. Willingness to accept marketing messages

Variable	Number	Percentage (%)
Yes	131	43.2
No	171	56.4
Total	302	99.7 %

When asked about their willingness to accept marketing messages as reported on Table 8, responses were divided as shown in Table 8. 131(43%) said yes expressing their willingness to accept marketing messages while 171 (57%) responded by no (i.e., they are unwilling to accept marketing messages).

5.2 Descriptive Analysis

This part seeks to measure the respondents' perceptions regarding the relative importance of the different dimensions and attributes of e-service quality in relation to Facebook fan pages. To do so, the mean scores and standard deviation values for all dimensions of E-SQ were calculated in order to be able to rank each of these dimensions and the attributes. In Table 9, the importance of each of the five dimensions was assessed directly against each other. After that, Table 10 up to Table 14, show an assessment of the attributes related to each of the dimensions individually.

Since all dimensions and attributes were measured using a 7-point scale, a mean of less than 3.5 mean score -implies that respondents perceive such dimension or attribute as being of low importance,. If the mean scores fall between 3.6 and 5.0, this means that the items are of a moderate importance to respondents. Finally, the important dimensions and attributes are those whose mean scores were greater than 5.1.

Table 9. Importance of E-SQ dimensions

Variable	Importance	Mean	SD
Privacy / Security	1	5.58	1.779
Information Quality	2	5.29	1.665
Ease of use	3	4.96	1.616
Page Design	4	4.94	1.649
Responsiveness	5	4.67	1.781

As indicated in Table 9, respondents generally perceived Privacy/ Security and Information Quality included dimensions as somewhat important (with means from 5.58 and 5.29). In other words, respondents rated the privacy/security and information quality as the most and second most important dimensions of E-SQ in Facebook fan pages with mean scores of 5.58 and 5.29 respectively. Ease of use (mean score 4.96) was rated as the third most important dimension, whereas page design (mean score 4.94) and responsiveness (mean score 4.67) were perceived as the second least and least important dimensions.

Table 10. Importance of attributes associated with privacy / security

Attribute	Importance	Mean	SD
Protecting my personal information (e.g. photos, age gender, location)	1	5.82	1.674
Protecting the information/comments I post on Facebook fan page	2	4.84	1.818
Protecting information about types of products and services I am interested in	3	4.79	1.838

Privacy/Security is not only one of the most important E-SQ dimensions according to this study, but also lack of security has been identified as one of the major obstacles to the adoption of new information technology (Chen & Barnes, 2007). Table 10 revealed the perceptions of respondents on different attributes related to the privacy/security dimension of Facebook fan pages. In the privacy/security dimension, all attributes were considered from somewhat moderate to important (with means from 4.79 to 5.82). In particular, protecting personal information (e.g., gender, age, location) had the highest mean of 5.82. This matched the statement of concern made by a prior study that focused on the importance of protecting social network users' personal information and that highlighted the need to develop a new privacy system supported by mobile Internet devices (Aldhafferi, et al., 2013). Next up the list is "protecting the information/ comments" posted on Facebook pages (mean 4.84) followed by "protecting information about types of products and services" (mean 4.79). Since the respondents were regular Facebook users, they are aware that when they post a comment on Facebook page, the comment is visible to anyone who visited/liked the page. The same applies to protecting the information about the products or services they are interested in. Once, a Facebook user likes a certain brand or product, this

information is made publically available.

Table 11. Importance of attributes associated with information quality

Attribute	Importance	Mean	SD
Providing all needed information to enable consumers to purchase from the company promoted on the Facebook fan page	1	5.46	1.625
Providing information that can be understood easily on Facebook Fan page	2	5.35	1.625
Providing up to date information (current and timely) on Facebook Fan page	3	5.24	1.604
Providing clear information on Facebook Fan page for users	4	5.18	1.627
Providing accurate and relevant information on the Facebook Fan page	5	5.12	1.702

Regarding the “information quality” dimension, which was perceived as second important, respondents felt that all the five attributes were important (with means from 5.12 to 5.46) as indicated on Table 11. Earlier research has shown that information quality plays a key role in consumers’ assessment of a company’s website (Ou & Sia, 2010; Zhang & von Dran, 2000). In this study, a company’s fan page on Facebook is considered one of the company’s websites that is maintained and operated by one or a group of representatives from the company. This is natural because providing information is the basic goal of a Facebook fan page, hence it is crucial for customers seeking information about a company to be able to find all the needed information. This information should be easy, relevant, accurate, and up to date.

Table 12. Associated with importance of attributes ease of use

Attribute	Importance	Mean	SD
Assuring that the Facebook fan page and its linked page work well	1	5.28	1.617
Having a Facebook page that I can move around easily to locate the information I want	2	5.22	1.573
Having a Facebook page with well organized information	3	5.17	1.732
Having Facebook fan page that is easy to browse and navigate	4	5.11	1.698
Offering simple and clear directions use and browse the Facebook fan page	5	5.05	1.588

In the dimension of ease of use, Table 12 implies that respondents felt that all the related attributes are also quite important because the easier a Facebook fan page is to use the more likely you are to use it as tool for communication between sellers and buyers and other users. The most important attribute, as identified by the respondents is assuring that the Facebook fan page and its linked page work well since a Facebook fan page with broken link can be frustrating to visitors.

Table 13. Importance of attributes associated with page design

Attribute	Importance	Mean	SD
Using proper type of media in the page (charts, photos & images)	1	5.34	1.546
Providing well-organized Facebook Fan page	2	5.09	1.593
Providing visually attractive Facebook fan page	3	4.77	1.702
Using proper type of fonts in the page	4	4.68	1.738
Using proper colors in the page	5	4.57	1.685

In regard the dimension of Page Design, Table 13 shows that respondents felt that two of the related attributes are also quite important. Respondents viewed using proper types of media in Facebook fan pages as the most important attribute in the page design dimension. This is consistent with what successful Facebook fan pages do in order to attract more fans. Most successful Facebook fan pages offer their fans a variety of media, including

videos, images, and standard text updates. Respondents also agreed on the importance of providing well organised, visually attractive Facebook Fan pages that use proper types of fonts and suitable colours. One thing worth noting here is that Facebook pages look and behave much like a user's personal profile.

Table 14. Importance of attributes associated with responsiveness

Attribute	Importance	Mean	SD
Providing telephone number and contact information to reach the company promoted on the Facebook fan page.	1	5.43	1.692
Making customer service representatives available online on the Facebook fan page (live chatting)	2	5.16	1.677
Providing a message option for users' comments, feedback, and queries	3	4.98	1.574
Providing frequently asked questions (FAQ) section for everything related to products and services promoted on the Facebook fan page	4	4.87	1.491
Clarifying and publishing policies and terms for buying products and services promoted in the Facebook fan page	5	4.83	1.565
Responding to users' (likers') inquiries quickly	6	4.82	1.690

As we can see from the above Table 14, two attributes related to the responsiveness dimension were perceived fairly important. The most important of which is providing telephone numbers and contact information to provide fans to reach the company promoted in the Facebook fan pages. Providing customer service representatives available on the Facebook fan pages to respond to visitor enquiries via live chatting (mean 5.16) was perceived more important than the provision of a message option for users' comments and queries (mean 4.87) which in turn was perceived more important than the provision of a frequently asked questions section for everything related to promoted products and services (mean 4.87). Unfortunately, live chat applications are not free but apparently essential to provide real time customer support to fans or potential customers. The second least important attribute was publishing policies and terms for buying products and services promoted in the Facebook fan page (mean 4.83). The least important attribute was responding to users' enquiries quickly (mean 4.82).

6. Discussions and Implications

In this study, the researchers intentionally did not study the contents of a specific Facebook fan page that are continuously changeable and updated. On the other hand, the researches explored the perceptions of users on general Facebook fan pages dimensions and attributes that are relatively steady over time. This research can benefit Facebook fan page owners in having a better understanding of the preferences of potential visitors on what should be included in their pages such as privacy/security and information quality. The page owners can then focus their efforts on the development of their Facebook pages by including/ paying more attention to the most important attributes which would eventually attract more fans and increase fan engagement.

As for the specific attributes, based on the findings, visitors are generally looking for the basics. First and foremost, Facebook fan pages should protect its visitor's personal information (e.g., photos, age gender, and location). With Facebook fan pages one cannot access the fan's personal information unless this information is publically made available. However, if the Facebook fan page collects content and information directly from users, it should be made clear why this information is collected and should provide notice about and obtain user consent for the use of any collected information from fans. A Facebook fan page owner is responsible for obtaining all the necessary permission to re-use the collected information. Current and potential Facebook page fans should be able to like/visit the pages with piece of mind that their personal information is safe.

In regards the quality of information, it is recommended that Facebook page owners provide all needed information to enable consumers to purchase they need. This information should be easy to understand, up-to-date, accurate, and clear.

Fans should also be able to move around smoothly by successfully visiting links to other content, by easily locating the required information in a well organized page that is easy to browse and navigate. In terms of the design, Facebook fan pages should take advantage of diverse types of media available and use the proper type of media. Visitors like to see well organized Facebook fan pages that are visually appealing.

Basic contact and access information, such as telephone number, physical address, web address and e-mail, should be made available on the Facebook page. It is also recommended to provide fans with a live chat facility. Facebook page owners should regularly check their pages so that the content is complete and regularly updated and the overall look of the page is visually appealing.

7. Conclusion

This study addressed the issue of E-SQ dimensions and attributes for companies' pages promoted on Facebook. Although the E-SQ of websites has been widely addressed, research into the E-SQ of social networks such as Facebook is lagging behind due to the somehow recent widespread usage of social networks. Findings of this study highlight the importance of the privacy/security and information quality of pages promoted using Facebook as critical dimensions of E-SQ of pages on Facebook. Having said this, managers and administrators of pages promoted in Facebook should enhance such dimensions and attributes associated with those two dimensions. Moreover, identifying the importance of attributes of E-SQ dimensions of pages using the Facebook provides managers with a valid tool in order to identify the requirements of having well perceived Facebook pages.

This may enhance consumers' positive behavioural intentions to buy, use and recommend goods and services promoted on social networking sites such as Facebook. There is no doubt that the consumer-generated content available on social networks is going to dominate the consumer behaviour and decision (Solomon, 2013). Hence, Facebook marketing and sales benefits should be larger and larger according to the latest trends emerged in the B2C and B2B transactions.

8. Limitations and Directions for Future Research

The first limitation of this study is that it's addressed a one group of respondents (i.e. students) in only one higher educational institution in Jordan. So, results could be limited in terms of giving big pictures about E-SQ dimensions of Facebook pages. The second limitations that this study was based only on users' perspectives rather than perspective of administrators and owners of such pages in the Facebook. The third limitation that this study did not measure the impact of E-SQ of Facebook pages on fan's attitude and future behaviour. Thus, future research should re-apply this dominion of research by measuring the impact of E-SQ of Facebook pages on customer satisfaction, loyalty and behavioural intentions and business profitability. Moreover, new research should use different approaches of sampling other than non probability sampling. In addition, future research should address managers and practitioners in investigating the importance of dimensions of E-SQ pages in the Facebook domain. Moreover, future research should address other social networks such as twitter, Instagram, LinkedIn, YouTube, etc. Finally, more qualitative techniques (e.g., interviews, focus groups, etc) can be used to analyze the contents of Facebook pages and its dimensions.

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