SERVICE INNOVATIONS IN SOCIAL MEDIA & BLOGGING WEBSITES: ENHANCING CUSTOMER’S PSYCHOLOGICAL ENGAGEMENT TOWARDS ONLINE ENVIRONMENT FRIENDLY PRODUCTS

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Abstract
The purpose of this paper is to determine the impact of three dimensions of Blog service innovation (Service Privacy, Webpage Content & Diversification) on customer’s psychological engagement with environment-friendly products available online. They are mediated by two dimensions of online relationship quality (Commitment & Satisfaction). A sample of 251 social media and blogging sites users responded to a structured questionnaire adapted from existing literature. First, confirmatory factor analysis was carried out, and then data were analyzed through structural equation modelling using the bootstrap methodology in AMOS 24. This paper explains the loyalty and psychological engagement pattern of social media users in accordance with the innovations in services provided by organizations in their websites, which provide or discuss information about eco-friendly products. They are explicitly mediated through online relationship quality factor so the customers could be engaged better after determining their psychological intent, which is in this case, is explicitly related to the loyalty of customers. From a managerial perspective, this research not only provides the vital information on customer’s behaviour in relationship with the innovations in services introduced by organizations in their websites but also could help them to minimize their cost and maximize their profits according to the target audience behavioral patterns.

Keywords: Service Innovation, Social Media, Online relationship Quality, Environment-friendly products, e-loyalty.

Introduction:
The business world and its environment are changing these days dramatically. However, it is always vital for companies and organizations to satisfy their customers and enhance their loyalty towards their organization’s products or services. Nowadays, it is an ever-increasing need because the business environment shift’s from production-oriented to customer-oriented (Amin, 2016). Companies always want to find out different ways to increase the loyalty of their customers, which is useful, efficient, and economical.

With time, there are new ways and methods through which organizations not only could find out the factors which are responsible for enhancing the customer’s loyalty with precision, but also be able to implement these techniques with successful output, which resulted in a group of the loyal customer (Thaichon, Lobo, & Mitsis, 2014)

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Blogging is an internet-based activity through which bloggers could share contact information, ideas, videos, text images and links of other websites, information sources and videos very easily. With the help of blogging, anyone could promote his or her ideas, products and services or any other thing quickly and proficiently (Li & Chen, 2009). With the help of blogging anyone could be able to discuss and provide any kind of information on any topic, nowadays it’s an extraordinarily useful and practical source of earning and by providing valuable and in-trend information to your visitors and target customer anyone could make a handsome amount. More visitors on your website mean more earnings, and that’s why bloggers are always worried about their visitors or customers and want to find out the effective ways through which they could enhance their customer’s loyalty towards their website so they could keep coming on their website. Now Facebook is also considered as a blog because it allowed its users to share contact information, text, images, and videos with others very conveniently and appropriately and visitors could get the latest and up-to-date information related to their area of interest(Yang, Weng, & Hsiao, 2014).

That’s why visitors move towards the different kinds of blogging websites to get information regarding the desired products or services to get better insights regarding related services and products. Getting information from various blogging services is helpful in your decision making regarding the use or purchase of any product. (Hansen, Shneiderman, & Smith, 2010).

Innovation in products is an ancient concept to enhance their performance and presentation to attract and retain the new as well as early customers. But innovations in services are a relatively new concept which is proposed by (Barras, 1986) who clarifies this concept as new and improved ways of designing and presenting services to the customers for enhanced performance and presentation of the related services so that the organization could achieve higher customers satisfaction.

The same case applies to blogging services all around the world. With the introduction of new and innovative methods and techniques, it is getting critical for blog service providers to incorporate new kinds of processes and technologies. It could ultimately lead towards the innovation in the services provided by them to better understand the needs and wants of their target customers, hence they could remain loyal to them in a longer run (Papastathopoulou & Hultink, 2012).

For this purpose (Yang et al., 2014) worked rigorously on research related to the development of the exact dimensions on which they could measure the innovation in services provided by different blogging services from the user’s point of view. They named this new scale as “BLOG – S – INNO” or blog service innovations. They used it to measure the innovation in blogging services from the user’s point of view. This scale provides an excellent overview of innovation in services related to blogging sites.

Bloggers are trying their best to keep up with the latest trends regarding their area of expertise. Still, they don’t know the whole picture regarding customer loyalty, this argument is supported by (Yang et al., 2014), and that’s why he developed a measurement instrument for assessing blog service innovation. He also recommends that this instrument must be checked in accordance with the customer loyalty because bloggers don’t have a complete knowledge that which blog service innovation dimensions generate more loyalty in the eyes of their target customers.

There is another crucial aspect which is related to this kind of research. Right now, many organizations and companies are providing online selling and customer care services, which in this research is specifically related to environmentally friendly products. They sold their product or services by using online platform and tried their level best to keep their customers loyal to them (Azam, Qiang, & Abdullah, 2012). There are numerous websites in Pakistan, which provide online services related to sales and customer services, they are including but not limited to www.daraz.pk, 500mein.pk, Kaymu.pk, OLX.com.pk, Buyon.pk, Getnow.pk, Bazar.pk.com, Homeshopping.pk, Affordable.pk, Pakstyle.pk, Buyandsell.pk, Payless.pk, Shopizy.pk, Ajmery.pk, Sheops.com, Dastkari.pk, Goto.com.pk, and many other websites. Further, numerous businesses have their Facebook pages and they are doing their business through their Facebook, Instagram, or Twitter accounts. Lastly, there are unlimited websites that provide original content and useful information on several topics. Viewers visit these websites for
different information and knowledge. These websites have contracted with several online advertising platforms which include but not limited to Google Adsense, Media.net, PropellerAds, Amazon Native Shopping Ads, Adversal, Sovrn //Commerce (Formerly VigLink), Skimlinks, Monumetric, InfoLinks, and many more. These networks showed advertisements on those blogging websites according to the profile of the visitor and the content of the website. When a visitor clicks on the advertisement or purchases any advertised product, then these advertising networks paid these blogging websites a suitable amount according to numerous parameters, which include demographics and geographic locality of the visitor.

Thousands of websites provide content on almost every topic of life, and they have tried their level best to retain existing visitors as well as new visitors. The higher number of visitors ensured higher profits. With the passage of time and the inclusion of new technologies, websites need to incorporate new types of innovations, which ultimately impacts the website viewer’s loyalty.

The interest related to eco-friendly products is also increasing in all over the world, including Pakistan (Kautish & Soni, 2012; Sadiq, Abdullah, Aslam, & Zulfiqar, 2020). There are number of websites and online social media platforms which provide awareness and wakefulness related to eco-friendly products. Information about some of them is given below. These websites are included but not limited to Green Global Travel, Urban Gardens, The Green Divas, Planet Save, Reclaimed Home and much more.

**Defining Service innovation:** In this concept, innovation is considered to be a good, idea, or service, which is relatively new and customer or consumer perceives it as a unique offering (Kotler, 2009). Those firms which are always focusing on producing better services with the help of innovation in their work and procedures are always a one step ahead of their competitors (Fuglsang, Sundbo, & Sørensen, 2011). Still, this success could only be achieved when the newly produced and innovative services are in alignment with customer expectations and needs (Aaker, 2008). It is also suggested that for the creation of better services or for the generation of appropriate innovation in services it is recommended to inculcate the target customers with the service providers so they could be able to develop those innovations in services which are in relation with the customer’s needs and wants (Möller, Rajala, & Westerlund, 2008; Ramirez, 1999). The above-mentioned all discussions pretty clear the concept of service innovation, now we move towards the idea of blogging to clarify further our central vision which is related to the Blog service innovation.

**Service privacy-related innovation:**

The rapid growth of technology-enabled the users of blogging services to create and generate a vast amount of data and information on blogging sites. It is also obvious that this information is most of the time is personal, which is used by different entities for different purposes (Nakra, 2001). As we know, the internet is used by millions of users worldwide and international laws for the safety of this personal content are different in different countries (Ma, Meng, & Wang, 2012). That’s why it is getting difficult day by day for blogging websites to control the privacy of the content on their websites. Most of the time public is unaware of how different entities used their information for other purposes and how their privacy is violated (Castañeda, Montoso, & Luque, 2007).

Further keeping in mind the latest trends of blogging websites, it is also clear that privacy in service provided by different blogging websites is a vital part of their business operations for successful growth and enhanced customer satisfaction (Kruck, Gottovi, Moghadami, Broom, & Forcht, 2002). Different organization and companies which are using the traditional methodology for the sales of their products and services are moving towards the internet and blogging websites for more comprehensive customer approach and enhanced applicability of their services (Bernstein, Bhimani, Schultz, & Siegel, 1996; Ladson & Fraunholz, 2005), but considering the latest trends it is also vital to secure the private data and content of their target customers so it cannot be used by any other entity for immoral purposes (Ackerman, Cranor, & Reagle, 1999; Caudill & Murphy, 2000). The above-mentioned discussions and references are also strengthened by the (Andreassen, Lervik-Olsen, & Calabretta, 2015) which is, that it is very important for the commercial success of different organizations and companies to incorporate a different kind of innovation in their
services to attract their target customers and clients based upon their current needs and wants which could be identified by different social science methodologies (Bettencourt & Ulwick, 2008), and these needs and wants include the privacy of their content online (H. Akhter, 2014; Puzis, Yagil, Elovici, & Braha, 2009).

(Kelley, Donnelly, & Skinner, 1990) said that it is crucial to understand the needs and wants of your targeted online customers, especially regarding the privacy of their content online. Still, it is strongly recommended that the service innovation is a co-creation process which involves both the employers who provide that services and the customer who receives those services so that the innovation could be directed in a right way for effective performance and enhanced profitability without any impairment. There are further three parts in which we could further subdivide this innovation for better understanding and clarity.

(a) Design flexibility:

This is defined as the ability of the website to open immediately in any browser and any device regardless of the speed of the internet. Right now, this innovation is considered to be one of the most important aspects of any website. Due to the agile programming and optimal graphics, it could be possible to open a website in any browser and any website regardless of the speed of the internet. Nowadays, social media and blogging websites need to incorporate this kind of ability if they would like their users to remain loyal with them in a longer run.

(b) Professionalization of blogging:

This is defined as the ability of the website to provide all its features up to the highest level of reliability and competence (Petersen, 2014). This type of innovation is not necessarily limited to blogging and social media websites. It could be linked to all kinds of website which provides services of any sort, whether it includes online shopping, customer services, video making or editing, professional consultancy services or any other possible thing. The website must need to provide its features up to the maximum level of professionalism and competency with the intimation of reliability and credibility (Kennedy, 2010).

(c) Completeness of content:

This is defined as if any information was provided by a website then; it must need to deliver information up to maximum level (NADASAN, VANCEA, GEORGESCU, TARCEA, & ABRAM, 2011), without this kind of innovation in the website services, the website viewer can’t find complete information related to any matter. This information could be relevant to the security and login, tagging, login, authentication, e-mail notification, external accounts, personal accounts, terms and conditions, privacy policies, language and region and many other relevant aspects of website information (Thompson & Graydon, 2009).

H1a: Service Privacy related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers.

This relationship is also supported by several theories. The first theory which is in support of this relationship is known as Means end theory (Leão & Mello, 2007). Further, this relationship is also supported by the commitment, trust theory of relationship marketing and expectation confirmation theory.

H1b: Service Privacy related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers under mediation of Trust.

This relationship is supported by the commitment, trust theory of relationship marketing and actor-network theory.

H1c: Service Privacy related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers under mediation of Satisfaction.

This relationship is supported by the commitment, trust theory of relationship marketing and actor-network theory.

Webpage content related innovation:

As we know that websites are noting without their content. This content could be videos, text, sounds, images, animations or the experience of customers or users on blogging websites. These days it is imperative to update the page content of your
websites, so you could be able to attract your target customers or blog readers by providing them with the information which is latest, updated and worthwhile (Dholakia & Rego, 1998). The academic researchers also note that blogging websites also played a crucial role for the advertisements of different products and services; the web page content is the primary source to disseminate or provide the required information to the targeted customer or client for better understanding and enhanced information management with updated discussions and suggestions (Dreze & Zufriden, 1997).

(Dholakia & Rego, 1998) said that in today’s modern world, the web pages and the web page content had proven their importance when we decided to consider them for the advertisement of our different products and services. Now a day’s every organization and company wants to show its presence on the internet with the help of its website, and unique web page content enormously helps in increasing the hit rate or the visitors on the particular website or blogging site. (Resnik & Stern, 1977) also supported this discussion by mentioning that the content plays an essential role in the advertisement. Whatever the medium used in this advertisement, the content always attracts the required target customers to a particular product.

In research conducted by (Bates & Lu, 1997) they said that the webpage design and layout also play an important role in combination with the webpage content. The design or webpage layout helps the bloggers or blog readers to update their content, suggestion, and recommendations in a better way, which ultimately enhances the traffic of visitors on their blogging website.

There are further three parts in which we could further subdivide this innovation for better understanding and clarity.

(a) Advertisement filtering:

This is defined as the ability of the website to block or restrict unwanted content in the form of advertisements (J. C. Mason, J. Grant, A. Behrman, & D. Stillwell, 2002). There are many websites which provide this kind of innovative facility in their services because users don’t like too much and irrelevant advertisement (J. Mason, J. Grant, A. Behrman, & D. Stillwell, 2002). (Robinson, 1999) discussed it as the ability of the website to show contents according to the likes and dislikes of the viewer.

(b) Page layout:

This ability of the website is defined as to show all texts, images, videos or any other information on a webpage more helpfully and comprehensively from the user’s point of view (Luna-Nevarez & Hyman, 2012). Page layout is considered to be one of the most critical innovations in the services of the website. This factor played an important role to display all relevant features of the website with its content in the most optimal manner for enhanced exposure to the website viewer. So when they visit the website, they could be able to navigate easily across the website. Further, it must be easy for them to find out those features and information which the viewer is looking for in a website with minimum spendable time (Marszałkowski & Drozdowski, 2013; Taylor, McWilliam, Forsyth, & Wade, 2002).

(c) Copyright control:

The information which is provided by the website is entirely original and plagiarism free (Ginsburg, 2000). With copyright, you could only copy the work after the explicit permission of the author. While Copyright control means that copyright is held by the writer or original developer and not assigned to a third party (Savola, 2014). H^2a: Webpage Content related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers.

This relationship is supported by the comparative advantage theory of competition which is presented by (Ricardo, 2009), according to his theory if any organization or company is producing products and services better than its competitors due to innovation in its operations then they may be able to secure more sales and customer loyalty. Further, this relationship is also supported by flow theory, rational choice theory, and social cognitive theory.

H^2b: Webpage Content related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers under mediation of Trust.
This relationship is supported by the commitment, trust theory of relationship marketing and actor-network theory.

H2c: Webpage Content related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers under mediation of Satisfaction.

This relationship is supported by the commitment, trust theory of relationship marketing and actor-network theory.

Diversification related innovation:

The final dimension, which is related to the blog service innovation is diversification related innovation. This concept is debated by(Yang et al., 2014) in which he clarifies that this component is mainly based upon data storage and information sharing. According to the (Ke, Jiangling, & Dan, 2003; White & Noerr, 1976) the data storage is a technology which is based upon the different computer parts and recording components which are used to retain and secure the data in digital format. It is also the core functioning component of blogging and e-commerce websites.

Blogging is all about sharing ideas, suggestions, and recommendations or in-other words information with other blog readers; it is one of the most critical factors which are related to the innovation related to the diversification (Hara & Foon Hew, 2007; Kim, Lee, & Elias, 2015). There are further three parts in which we could further subdivide this innovation for better understanding and clarity.

(a) Data storage:

This is defined as the ability of the website to store all data which is related to its users (Benson, Marcus, Karger, & Madden, 2010). It is considered to be as one of the most critical innovative factors in websites. The website’s adequate storage capacity of data required by its users played a vital role in attracting new users around the world (Papierniak, Thaisz, Diwekar, & Chiang, 2000).

(b) Information sharing:

This is defined as the ability of the website to share information with its users in a useful and suitable manner (Osatuyi, 2013). The social networking websites are all about information sharing, and not only information sharing but information sharing in a smooth manner. The ability of the website to share information with its users in an effective and efficient way ultimately attracts the user’s loyalty (Hur, Kim, Karatepe, & Lee, 2017; Jansen, Sobel, & Cook, 2011).

(c) Diversified functions:

This is defined as the ability of the website to provide different functions and services to better serve the needs of its viewers. These services could be effective customer support, inventory handling, advertising campaigns, legal support and much more (Gao, Qi, & Zhang, 2007)

H3c: Diversification related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers under mediation of Trust.

This above-mentioned relationship is supported by flow theory, rational choice theory, the comparative advantage theory of competition and social cognitive theory.

H4c: Diversification related innovation incorporated by blogging websites has a positive impact on e-loyalty of website viewers under mediation of Satisfaction.

This relationship is supported by the commitment, trust theory of relationship marketing and actor-network theory.

Trust:

The first and the one of the most important component of relationship quality is trust which is studied by different researchers science 1950 (Corritore, Kracher, & Wiedenbeck, 2003). Trust is a topic of interest in various fields, we could find out comprehensive research studies regarding trust in a field of psychology (Rotter, 1967) marketing (Morgan & Hunt, 1994) sociology (Lewis & Weigert, 1985)
management (Ramonjavelo, Préfontaine, Skander, & Ricard, 2006) and economics (Williamson, 1993). In these days when online marketing is all about having a trust between an organization and its target customers, it receives a significant attentiveness from researchers and marketing professionals (Beldad, De Jong, & Steehouder, 2010). Online trust is a growing research interest between different researchers due to increase in an online presence of different organizations for the enhancement of their business and for the promotion of their products and services (Urban, Amyx, & Lorenzon, 2009). Online trust is defined by (McKnight, Choudhury, & Kacmar, 2002) as a “set or we could say a combination of positive thinking or prospect with regard to the capability, honesty and compassion of organizations in an online environment”. Online trust is fundamentally considered as same as a trust considered in a traditional context between the organization and its clients, but it could certainly differentiated on a basis of physical presence of an organization (Urban et al., 2009).

**H^d:** Trust has a positive impact on e-loyalty of website viewers.

**Satisfaction:**

Satisfaction is a widely discussed topic in these days and the interest of academic researcher and marketing professionals are increasing in this concept with the passage of time (K. Nusair & Kandampully, 2008). (Oliver, 1981) presented an expectancy disconfirmation model which is extensively used to understand the level of customer satisfaction in services and retail industries. When we apply this model it tells us that customer compares the performance of the products or services with the expectations he have from that particular product or services which finally lead towards the satisfaction if performance enhances in comparison with the expectations and also lead to dissatisfaction if expectations are greater than the performance of the product or services provided by the organization or blogging websites (Hennig-Thurau, Gwinner, & Gremler, 2002).

But keeping in view the latest technologies and shifting of business from traditional context to online context it is getting difficult for customer to understand that whether the services provided by the organization performs more than or less than in comparison with their desired expectations (Allagui & Temesek, 2004; Zeithaml, 2000). (Rust, Inman, Jia, & Zahorik, 1999) suggest that when the expectations of our target customer is not clear then we must need to calculate the opinion of our customer regarding our product or services which currently at that time is based upon the experience he or she have with those services which is provided by the organization. So rather than judging the customer satisfaction with the evaluation of a difference between the performance and expectation, we need to understand it as a cumulative experience (Krishnan, Ramaswamy, Meyer, & Damien, 1999). That’s why (Garbarino & Johnson, 1999) defined customer satisfaction as “an overall assessment depend on the total purchase and consumption knowledge with a product or service over time which, especially in an online context, which results from clients interactions with an online service provider over time” (Liang, Chen, & Wang, 2008).

**H^e:** Satisfaction has a positive impact on e-loyalty of website viewers.

**E-loyalty of website viewers:**

The last variable which is a dependent variable and is the key to this research study is customer’s or in case of this study is called e-loyalty of website viewers (Oliver, 2014) explains customer loyalty as “a deeply held dedication to re-buy or re-patronize a favored product/service constantly in the future, thereby causing recurring same service or same product set purchasing, despite situational environmental influences and promotional or marketing efforts having the ability to cause switching behavior”. This definition of customer loyalty is used in an online loyalty or e-loyalty context also, (R. E. Anderson & Srinivasan, 2003) identified the concept of e-loyalty as “a client’s positive approach towards an electronic business resulting in reiterate buying or purchase behavior”. The above mentioned definitions clearly elaborates that the customer loyalty is mainly considered to be a same phenomenon, whether we consider it in traditional context or we consider it in an online or e-commerce context. Online loyalty of customer towards the eco-friendly products is a growing issue for the organizations.

**Method and measures:**
Empirical settings and data collection:

For this research study the data were collected using a probability simple random sampling technique with the help of a self-administered, structured questionnaire from a sample of 500 students which could belong from intermediate to PhD level in different educational institutes of Pakistan. Of these 500 questionnaires, 270 responses were received (54 per cent response rate), among which 19 questionnaires were with incomplete information, so the analysis was done with 251 complete responses. Respondents’ demographic profile is presented in Table I.

<table>
<thead>
<tr>
<th>Category</th>
<th>Subdivision</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>155</td>
<td>61.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>96</td>
<td>38.2</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Un-Married</td>
<td>226</td>
<td>90</td>
</tr>
<tr>
<td>Age</td>
<td>Below 25 years</td>
<td>212</td>
<td>84.5</td>
</tr>
<tr>
<td></td>
<td>25 – 30</td>
<td>29</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>31 – 35</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>36 – 40</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>40 and above</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>Intermediate</td>
<td>7</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>Bachelors</td>
<td>128</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>109</td>
<td>43.4</td>
</tr>
<tr>
<td></td>
<td>M.Phil</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>Phd</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Internet Usage</td>
<td>Once in a day</td>
<td>202</td>
<td>80.5</td>
</tr>
<tr>
<td>Frequency</td>
<td>After 3 days</td>
<td>17</td>
<td>6.8</td>
</tr>
<tr>
<td></td>
<td>After one week</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>After two weeks</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>After one month</td>
<td>24</td>
<td>9.6</td>
</tr>
</tbody>
</table>

The respondents were students in a variety of colleges and universities and were selected randomly using simple random sampling technique. Respondents had to have the experience of using social media blogging websites, so they could be able to answer the questionnaire with more information and awareness. They were asked to remember the name of the social media blogging website first in their mind (e.g Facebook, Twitter, Instagram, Snap chat, etc) and then to answer questions using a given scale and keeping their experience with that website in mind. Social media blogging websites (e.g. Facebook, Twitter, Instagram, Snap chat, etc) are the background for the study because of their attractiveness with target respondents (i.e. students of different colleges and universities) and because Social media blogging websites are designed to inspire and indulge their target viewers user experience, in addition to meeting their serviceable needs and to give them more freedom to express themselves by using the innovative technologies provided by these high tech websites. In particular, these social media blogging websites strive to acquire the loyalty of their online viewers using different innovative high tech services to provide them the best and personalized user experience and to retain them by establishing deep relationships like e-loyalty through their innovations which are specifically related to the online services. Students of different colleges and universities were the focus of this study because they are the main users of social media blogging websites in Pakistani market and for the international market because of their size and rising buying power (Ahmad, Asmi, Ali, Rahman, & Abbas, 2017; K. K. Nusair, Bilgihan, & Okumus, 2013). They are more educated and have the ability use the online services of different websites hence they are more open to online advertisements than older generations are (Sönmez, 2010), and their love for purchasing and rising numbers for searching products...
and services online have a significant impact on markets (Lee Taylor & Cosenza, 2002).

Measures:

All of the measures were drawn from existing literature. They were mentioned in a table below. The scales which will be used in this research study are mentioned below.

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Scale</th>
<th>Source</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blog Service innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Privacy</td>
<td>(Yang et al., 2014)</td>
<td>5-point scale (strongly agree to strongly disagree)</td>
<td></td>
</tr>
<tr>
<td>Webpage Content</td>
<td>(Yang et al., 2014)</td>
<td>5-point scale (strongly agree to strongly disagree)</td>
<td></td>
</tr>
<tr>
<td>Diversification</td>
<td>(Yang et al., 2014)</td>
<td>5-point scale (strongly agree to strongly disagree)</td>
<td></td>
</tr>
<tr>
<td>Online Relationship Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>(Brun, Rajaobelina, &amp; Ricard, 2014)</td>
<td>5-point scale (strongly agree to strongly disagree)</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>(Brun et al., 2014)</td>
<td>5-point scale (strongly agree to strongly disagree)</td>
<td></td>
</tr>
<tr>
<td>E-Loyalty</td>
<td>(Srinivasan, Anderson, &amp; Ponnavolu, 2002)</td>
<td>5-point scale (strongly agree to strongly disagree)</td>
<td></td>
</tr>
</tbody>
</table>

1: First bold box shows the dimensions of “Blog Service Innovation”.
2: Second Bold box shows the dimensions of “Online Relationship Quality”.
3. Dotted lines represent direct effects.

Fig. 1. Theoretical framework:
Data Analysis and results:

Confirmatory factor analysis:

It is necessary to conduct the confirmatory factor analysis for all types of variables for accurate and precise results. For this study, it is decided to conduct a pooled CFA analysis. It runs all the latent variables at the same time in order to achieve the required model fitness. The pooled CFA method is a lot easier and better than the Individual CFA, since it runs all the latent variables simultaneously which is time-saving.

(Afthanorhan, Ahmad, & Mamat, 2014; Chong, Nazim, & Ahmad, 2014).

The model fit indices show that there is an acceptable fit between the data and the proposed measurement model, as the values of the Comparative Fit Index (CFI = 0.938), Root Mean Error of Approximation (RMSEA = 0.049) and Chi-square to Degree of Freedom Ratio (x²/df = 1.590) are all meeting the cutoff criteria, so the values of the fitness indices meet the excellent criteria for model fitness (R. Anderson, Babin, Black, & Hair, 2010; Hoe, 2008; Lomax & Schumacker, 2004).

(Table 3) Pooled CFA Model Fitness Tests

<table>
<thead>
<tr>
<th>Name of Category</th>
<th>Name of index</th>
<th>Index full name</th>
<th>Value in analysis</th>
<th>Acceptable value</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fit</td>
<td>RMSEA</td>
<td>Root Mean Square of Error Approximation</td>
<td>0.049</td>
<td>&lt;0.80</td>
<td>(Browne &amp; Cudeck, 1993)</td>
</tr>
<tr>
<td>Incremental Fit</td>
<td>CFI</td>
<td>Comparative fit index</td>
<td>0.938</td>
<td>&gt;0.90</td>
<td>(Bentler, 1990)</td>
</tr>
<tr>
<td>Parsimonious Fit</td>
<td>Chisq/df</td>
<td>Chi Square / Degrees of freedom</td>
<td>1.590</td>
<td>&gt;5</td>
<td>(Hu &amp; Bentler, 1999)</td>
</tr>
</tbody>
</table>

Typically, the values of the fitness indices range from 0 to 1, but researchers have argued that, for good model fit, the CFI values should be greater than 0.95, and for acceptable fit, these values should be greater than 0.90. While the values here are grater then 0.9, representing excellent model fit.

Confirmatory factor analysis of this study’s data was used to measure reliability, convergent validity, and discriminant validity. The reliability of the measurement scales was measured with the help of composite reliability which is preferred to report reliability of a scale (Netemeyer, Bearden, & Sharma, 2003), a widely used indicator. The results of this test, as shown in Table 4, indicate that the data for all the variables are reliable, as the values are greater than 0.7 for all variables. The results of the confirmatory factor analysis reveal that the data also match to the requirements of convergent and discriminative validity. For convergent validity, the standardized factor loadings of all the items in a measurement scale should be greater than 0.5 (R. Anderson et al., 2010; Fornell & Larcker, 1981). Our research fulfills this requirement, as the values of standardized factor loadings for all the measurement scales are greater than 0.5 (Table 4). Discriminant validity is used to confirm that the measurement scales are distinct from other measures used in study; it was measured through HTMT analysis and discussed in detail in Table 5.

(Table 4) Pooled Confirmatory Factor Analysis (Independent, Mediating & Dependent Variable)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loadings</td>
<td>Scale Reliability</td>
</tr>
<tr>
<td>How much important it is from your point of view that Social media websites and other blogging websites needs to provide “INNOVATION” in the below mentioned “SERVICES” which are provided by them to their online users.</td>
<td></td>
</tr>
</tbody>
</table>
### Measure validation:

Discriminant validity is used to confirm that the measurement scales are distinct from other measures used in study. Discriminant validity was measured by using the HTMT analysis in which the cut off criteria for strict discriminant validity is 0.850 and for liberal discriminant validity is 0.900 (Henseler, Ringle, & Sarstedt, 2015). Therefore, it is established that all the measurement scales used in the study differ from each other, so the data used in our study fulfills the requirements of convergent and discriminant validity and is suitable for further analysis (Table-5).
Structural equation modeling:

In Structural model a structural equation modeling (SEM) was used to test the hypotheses, using AMOS 24. As the proposed model contains mediation, the SEM technique was used to analyze all of the paths simultaneously (Alavifar, Karimimalayer, & Anuar, 2012; Hoe, 2008; Iacobucci, Saldanha, & Deng, 2007). The model fit indices for the structural model are meeting the acceptable criteria.

**Table-5** HTMT Analysis

<table>
<thead>
<tr>
<th></th>
<th>Diversification</th>
<th>Webpage</th>
<th>Privacy</th>
<th>Satisfaction</th>
<th>Trust</th>
<th>Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Webpage</td>
<td>0.075</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td>0.172</td>
<td>0.067</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.117</td>
<td>0.090</td>
<td>0.048</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>0.220</td>
<td>0.030</td>
<td>0.035</td>
<td>0.568</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.078</td>
<td>0.018</td>
<td>0.221</td>
<td>0.033</td>
<td>0.098</td>
<td></td>
</tr>
</tbody>
</table>

**Table-6** SEM, Model Fitness Tests

<table>
<thead>
<tr>
<th>Name of Category</th>
<th>Name of Index</th>
<th>Index Full Name</th>
<th>Value in Analysis</th>
<th>Acceptable Value</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fit</td>
<td>RMSEA</td>
<td>Root Mean Square of Error Approximation</td>
<td>0.057</td>
<td>&lt;0.80</td>
<td>(Browne &amp; Cudeck, 1993)</td>
</tr>
<tr>
<td>Incremental Fit</td>
<td>CFI</td>
<td>Comparative Fit Index</td>
<td>0.914</td>
<td>&gt;0.90</td>
<td>(Bentler, 1990)</td>
</tr>
<tr>
<td>Parsimonious Fit</td>
<td>Chisq/df</td>
<td>Chi Square / Degrees of Freedom</td>
<td>1.814</td>
<td>&gt;5</td>
<td>(Hu &amp; Bentler, 1999)</td>
</tr>
</tbody>
</table>

Hypothesis Testing: The results of structural model are shown in Table 7 and table 8 with Figure 2.

**Table-7** Results of structural model: direct effects

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Causal Path</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>P-Value</th>
<th>Standardized Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H^a$</td>
<td>Service Privacy related innovation$\rightarrow$ Viewers e-Loyalty</td>
<td>-0.162</td>
<td>0.093</td>
<td>0.690</td>
<td>-0.032</td>
</tr>
<tr>
<td>$H^b$</td>
<td>Webpage Content related innovation$\rightarrow$ Viewers e-Loyalty</td>
<td>-0.183</td>
<td>0.026</td>
<td>0.206</td>
<td>-0.080</td>
</tr>
</tbody>
</table>
The SEM statistics show that $H^1_a$ (Service Privacy related innovation $\rightarrow$ Viewers e-Loyalty, $\beta = -0.032$, $P = 0.690$), $H^1_b$ (Webpage Content related innovation $\rightarrow$ Viewers e-Loyalty, $\beta = -0.080$, $P = 0.206$) and $H^1_c$ (Diversification related innovation $\rightarrow$ Viewers e-Loyalty, $\beta = 0.048$, $P = 0.440$) are rejected on the grounds of significance level, as the SEM results show that the beta values of these hypotheses are not significant. As the research is focusing on the effects of these innovations on the viewer’s e-loyalty, the results clearly showed that every innovation must be connected with some factors of relationship quality such as satisfaction and trust. Without the relationship building factors innovations in any sector which is solely related to the customers or in this research case is related to the online viewer’s loyalty towards the blogging and social media websites is completely waste of resources. As we can see in our $H^1_d$ (Trust $\rightarrow$ Viewers e-Loyalty, $\beta = 0.235$, $P = 0.008$) and $H^1_e$ (Satisfaction $\rightarrow$ Viewers e-Loyalty, $\beta = 0.330$, $P = 0.001$) hypothesis the beta values of these hypothesis are positively significant, which showed that creating trust and satisfaction ultimately leads towards the customer loyalty. But how you could create the trust and satisfaction? And for that purpose the organizations needs to invest in innovation specifically related to services for blogging and social media websites.

**Figure-2. Structural Model:**

Note: Dotted line represents the direct relationship while straight lines represent the indirect relationship.
The results of the indirect effects showed us the complete picture. The relationship of the innovations in services which are specifically related to the blogging and social media website must create trust and satisfaction in their viewer which are the strong building blocks of online relationship quality. But from organizational point of view every innovation needs time and resources, and companies cannot put their all efforts in creating these innovations for their target viewers without knowing that what kind of relationship they are going to build with their target viewer. As discussed previously that satisfaction and trust usually considered being a same concept, but it’s not a true notion. According to (Brun et al., 2014) the trust and satisfaction are the parts of online relationship quality and must be considered as different from each other.

So the decision totally depends upon the organizational needs and what kind of relationship they want to build with their target customers. According to the SEM results for indirect affects the hypothesis H²a (Service Privacy related innovation→Satisfaction→Viewers e-Loyalty, β=0.089, P=0.001) is positively significant and suggest that innovations in services which are related to the Service Privacy of the blogging websites create the satisfaction in the minds of their target viewers and ultimately leads towards their loyalty, this finding is also in line with the results of (Liang et al., 2008) and (Allagui & Temessek, 2004). This suggests that innovation in services creates satisfaction which ultimately leads towards customer loyalty in a longer run.

H³a (Service Privacy related innovation→Trust→Viewers e-Loyalty, β=0.060, P=0.006) is also positively significant. This result suggests that service innovation related to service privacy also impacts the viewer’s loyalty through trust, or we could say that this kind of innovation enhances the trust which ultimately increases the viewer’s loyalty. The above findings also match with the commitment trust theory of relationship marketing, which clearly states(Morgan & Hunt, 1994) that without building the relationship with your target customers organizations cannot be able to capture the loyalty of their target customers despite having innovations and technologies in services or products.
This type of finding is also in line with the results discussed by (White & Noerr, 1976) in which they said that effective data storage ability is crucial for the survivability of the organization in a longer run.

Conclusion, implication and recommendation for further studies:

This study concludes that service privacy related innovation and diversification related innovation in social media and blogging websites creates loyalty in their target viewers through trust and satisfaction, while webpage content related innovation have insignificant impact on viewer’s online loyalty. Further there is no significant direct relationship between any kind of service innovation and viewer’s e-loyalty or online loyalty, while satisfaction and trust both have direct significantly positive impact on viewer’s e-loyalty. These results clearly shows that if any organization wants to generates a loyalty in their target viewers mind then first they must need to create a sense of satisfaction or trust in their viewers mind, and organization cannot just achieve level of satisfaction or trust in their viewers mind. They must need to invest resources in different kind of innovation and when it comes to social media and blogging websites then innovation related to these services considered to be more important than ever. By applying those innovations organization could be able to create satisfaction and trust which ultimately leads towards the generation of loyalty in their target viewers mind.

Theoretical implications:

The research presents theoretical foundation for additional investigation of innovation in services especially in an online perspective. (Yang et al., 2014) find the possible dimensions for innovation in blogging and social media websites, but they provide the future recommendation that those types of innovations must be checked on website viewer’s e-loyalty in accordance with the online relationship quality factor. Because without its implication on viewer’s loyalty factor mediated by online relationship factor, organizations cannot be able to identify that which kind of innovation is more suitable for their situation.

Furthermore (Beldad et al., 2010; Keh & Xie, 2009; Urban et al., 2009) also suggest that for gaining...
customer’s loyalty, organization must need to generate a sense of trust and satisfaction in their mind, and without any kind of innovation in those services which is provided by any social media and blogging website, this task is impossible to achieve, and the findings or this study also supports the previous researchers argument.

Managerial implications:

With the induction of social media and blogging, internet has gone through major changes that make it predominantly imperative for different organizations to comprehend users’ experience in accordance with the innovations provided to them online and there online relationship quality factor in accordance with their loyalty to that particular website. According to the results of this study if organizations which would like to sale or talk about the environment friendly products, and they are interested in the development of loyalty factor in their target audience through satisfaction as well as trust relationship factor then they must need to apply service privacy related innovations in their websites. Although the results are rigorously checked and rechecked but there is a huge possibility that with the change in geographical scenario, and demographics the innovations have different impact, which provides an outstanding tool in the hands of managers who could use this model and could be able to find and identify those innovations which are in line with their market, user and organizational demands. With the changes in business dynamics it is becoming vital for managers to not only shift their business online and start a direct conversation with their clients but also develop, improve and implement innovations in their online services for better and enhanced decision making and finally superior profitability.

Limitations and future recommendations:

As the research is carried out only related to the online products which are environmentally friendly, it is needed to focus upon other areas as well, which could include but not limited to electronics, textiles, home accessories and many more. Moreover, the time restriction is also another limitation in this research because more time could bring more reliable and accurate results. There could be another opportunity for future research that sample is collected through the one time sample collection method, if researchers apply longitudinal method then the results could be more clear and accurate.

Acknowledgment

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