The Role of Brand Loyalty and Social Media in e-Commerce Interfaces: Survey Results and Implications for User Interfaces

Dimitrios Rigas and Hammad Akhtar Hussain

University of West London, London W5 5RF, UK
{Dimitrios.Rigas,Hammad.Hussain}@uwl.ac.uk

Abstract. This paper explores the role of brand loyalty and social media in e-commerce interfaces. A survey consisting of 118 respondents was contacted to address the questions relating to online shopping and brand loyalty. Link between the frequency of access and time spent on an e-commerce user interface, and brand loyalty, gender and age profile differences, and the role of social media to branding and on-line shopping was analyzed. It was found that online loyalty differs from offline loyalty and loyalty also differed across genders, showing men were more loyal than women when shopping online. Information shared about products on social media by friends and family played an important role in purchase decision making. Website interface and ease of navigation were also key aspects for online shopping. The research concluded with recommendations to create multimodal websites which are more interactive and targeted so customer experience is enhanced and loyalty is achieved through the use of interactivity and social media.

Keywords: on-line Consumer Behavior, Brand Loyalty, e-commence Interfaces, Social Media Interfaces, User Interface Guidelines

1   Introduction

E-commerce interfaces has become common with the advancement of technology and user friendly devices such as smartphones and tablets. According to the Office of the National Statistics, UK [1] £678.8million was spent online in February 2014. Alba et al. [2] suggests that online purchase follows different rules to traditional face-to-face shopping because it is 'virtual'. Therefore it can be asserted that if buying online is different from buying in stores, elements associated with it may also be different.

A brand name is often the first point of contact between the customer and the product [3]. On the other hand Lee and Carter [4] define brand as a differentiator in the mind of the customers which differentiates between the other competitors in the market. Moreover, a brand gives out information about the price, performance, quality and the content of a product or service [4]. Rigas et al, [31,32,33] suggest that the use of multimodal metaphors in e-commerce interfaces is an effective mode of communication to deliver the required information. Extending the idea of Brand, the ideology of

Brand Loyalty comes into context where Dick and Basu [5] define Brand Loyalty as a commitment from the consumer to repurchase or keep on using the same product or services.

However, it is very hard to achieve Loyalty from consumers. Goldscher [6] explains that today's consumers are 'frighteningly disloyal'. This raises the questions, what sort of measures and interactivity could be used so that customers become loyal to a brand when they shop online? With hundreds of choices when shopping online the person shopping on the internet is completely different from the person who shops online and this affects the brand loyalty of a person [7,8]. Loyalty being an issue which is complex, intriguing, multidimensional, and it is also a never ending story [9]. However, Evans et al [10] suggest that 'user satisfaction' leads to brand loyalty.

2 Literature Review

2.1 Technology acceptance model (TAM)

With the rise of technology in all sectors, the need for technology was indeed rising and with increasing failures of system adoption there was no definite model which could explain the acceptance or rejection of a system [11]. The Technology Acceptance Model was proposed by Fred Davis [12] and the model was reliant on the models of TRA created by Fishbein and Ajzen [13]. Over time TAM had become a leading model which predicts whether user will use or reject the system [14]. Fig. 1 shows the latest version of TAM as illustrated by Venkatesh and Davis [26].
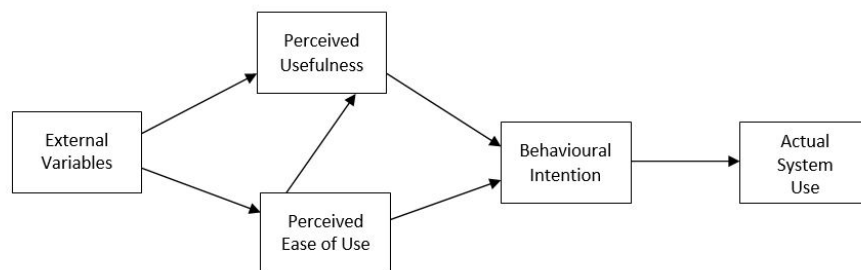

Fig. 1. Technology Acceptance Model (Venkatesh and Davis, 1996, p.453)

2.2 Decision Making Process

Convenience is one of the reasons that users access e-commerce interfaces [7][15,16,17]. The question of convenience comes when a consumer analyzes all the options just before purchase. The decision making model in Fig. 2 shows the stages through which a consumer goes before and after the purchase. Although made for offline consumers but the model is applicable to both online and offline consumers.

Fig. 2. Decision Making Model (Engel, Kollat, Blackwell, 1968)

A problem occurs when there is a significant difference between what a consumer has and what they desire [27] which results in a gap between the actual state and the desired state [28]. The desired stage on the context of buying online can be a recommendation from a friend, family or even a picture on a social networking website. But on the other hand another reason for the trigger of this need can be a change in the circumstance of the consumer which has led to the creation of this need [27].

Consumers which are intermediate or advanced users of the internet like to keep themselves up-to-date on what's happening in the marketplace and are involved in so called *ongoing search* [29]. According to Solomon [27] consumers seek information for a product in a specific category through social networking so that they can eliminate the items/brands with lower ratings. However, if a consumer is brand loyal and makes habitual decisions, then the processes one-four may not even be carried out [27] and the transaction would be carried out instantly (*re-purchase*, fifth step) because of a previous experience with the brand. The e-commerce interfaces play an important role in the re-purchase step because a pleasant experience will mean the customer will come back again and remember the ease-of-use of the interface.

2.3 Theory of Reasoned Action and Planned Behavior

The Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) take user attitudes and social influences into account [13]. TRA in Fig 3. shows and explains that actions are the direct results of a person's 'intentions' and these actions are taken under 'volitional' control [18]. However, Warshaw [19] suggests that behavior is not in completely under the control of the actor.
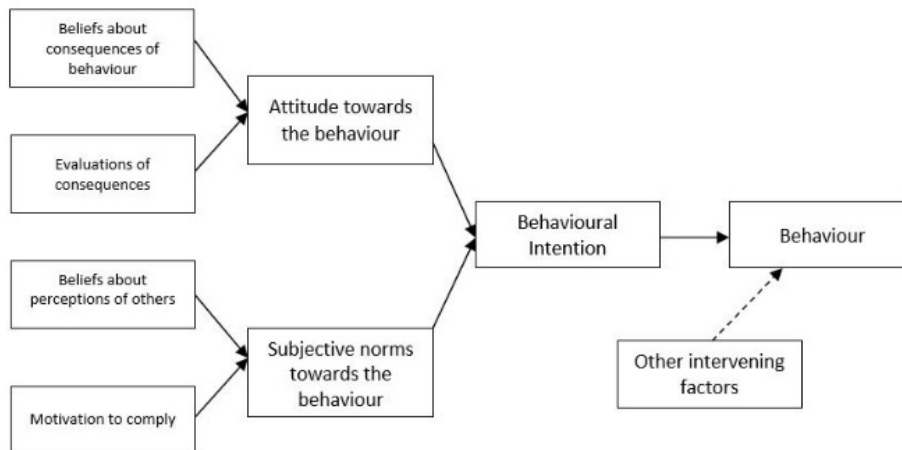

Fig. 3. Theory of Reasoned Action (Fishbein and Ajzen, 1975; Loudon and Bitta, 1993)

As a result the TPB was formed, which is the extended version of the TRA [20,21]. According to Evans et. al [10] the TPB model as shown in Fig 4 takes into account the 'influences' of the people around a person. For example the influence of ones parents and partner will play a significant role in their decision-making.
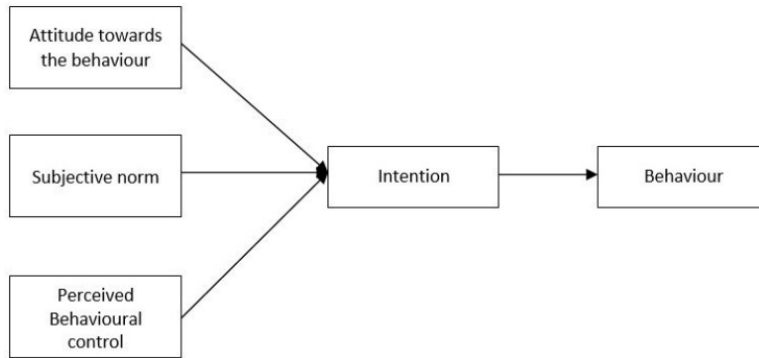

Fig. 4. Theory of Planned Behaviour (Ajzen, 1991)

These models were challenged by [22,23] as they assume that a consumer or e-commerce user goes through the '*comprehensive cognitive processing*' prior to completing a purchase. They also do not take into account any emotional, habits, spontaneity and result of user cravings [24]. Other factors, such as lack of finance, motivation, and change of circumstances, also affect on-line user behavior Evans et. al, [10].

3   Methodology

3.1   Survey Instrument

The data was collected through a self-completion questionnaire in various shopping locations around London. The reason it was administered in various shopping locations in London was because it would give better opinions from the shoppers who select to shop offline rather than shopping online. This will also generalize the results because a large number of people head towards shopping in markets, and they have experience of shopping in store and online as well. The questionnaire comprised of 31 closed end vertical questions of which 11 were Likert style questionnaire and one question was a multiple-answer question which asked about the factors which refrained a consumer to shop online. All the questions were compulsory to fill however, there were some unfilled answers which is normal for a questionnaire.

Technology was used to acquire the answers from the respondents. A tablet was used to key in the answers to the soft copy of the questionnaire. Once an answer was been punched into the form the answer was automatically recorded in the database which could only be seen by the author to analyze and transfer it to SPSS for further analysis. No alternations to the answers could be done either by the author or the respondent, making the collection method as transparent and original as possible. The

use of modern technology not only made the process easier but also it was easy to administer the respondents. Paper forms were available for respondents who were not friendly with technology however, they were not used as all the respondents were happy to fill in the questionnaire on the tablet device.

3.2   Sample

The population which would be useful for this research would be the consumers who shop online and have been loyal to those retailers. Also consumers who do not shop online were a part of the research to know the reasons for not using the e-commerce interfaces to shop online. No other criterion were set such as the location, industry, or a specific demographs. However, it was in the favor of the research to acquire responses from as diverse people as possible so that the results would show a wider applicability amongst the e-commerce interfaces.

Non-random sampling has been used as a method to select participants in the research. When a random sampling is used it means that each unit of the population is included in the research [25]. It was decided to select 100 respondents to answers the questions posed. In non-random sampling there is no chance that a human biasness will take place. All the eligible respondents will answer the questionnaire. Respondents would not be selected on subjective basis for example their friendliness and approachability [25]. In addition to random sample convenience was also looked at.

Convenience sampling was also used because it was easier to collect data through this method of sampling. Anyone could be approached irrespective of their traits to fill out the questionnaire. If a different type of non-probability sample was used it would be difficult to gather data and the element of biasness would be higher. In convenience sampling the response rate is also high however, a limitation is that it is nearly impossible to generalize the results [25]. As this is an opportunity and the nature of the research is about brand loyalty when shopping online therefore the convenience sampling can be used and this is a good opportunity to try this method.

3.3   Response Rate

A total of 117 respondents were asked to carry out the questionnaire. Of which 115 (98.3%) valid responses were received back. There were two missing cases which accounted to 1.7% of missing or invalid responses. Two respondents did not fill in their gender therefore the number of males who participated in the research were 60 (52.2%) and the number of females were 55 (47.8%).

4   Findings and Analysis

From the questionnaire, eight different factors were selected and divided across genders to compare and contrast their effect on the Purchase Decision. These findings are discussed according to:

1. ***Proficiency on the internet:*** Internet is a totally different medium as compared to the traditional shopping method. Finding out the internet proficiency of the respondents was vital. It would inform about how advanced people have become with technology and how well they perceive it to shop online and show loyalty.
2. ***Online vs Offline brand loyalty:*** As shopping medium are different so the reaction to the medium will also be different. The results would show difference in loyalty over mediums and across genders.
3. ***First most important factor to shop online:*** Through this the motivation to shop online would be known. Different people would have different motivations but eventually the most important factor would be known through the results.
4. ***Second most important factor to shop online:*** knowing the first most important factor isn't enough, the second most factor would give deeper insight into the consumer intentions to shop online.
5. ***Time spend on websites and Brand Loyalty:*** Spending more time on favorite websites could be linked to Brand Loyalty. If this statement is correct, interactivity could be increased on websites so consumers spend more time and show higher loyalty.
6. ***Frequency of visit and Brand Loyalty:*** In traditional shopping, consumers visit their favorite retailers more than other shops. Hence, this question would show whether this is correct in online shopping or not.
7. ***Role of Social Media in Brand Loyalty:*** social media is such a phenomenon these days that it would be injustice if its role is not analyzed in achieving brand loyalty.
8. ***Factors which keep consumers away from online shopping:*** it was equally important to find out what repels customers from online shopping, so recommendations could be made to strengthen these weak points.
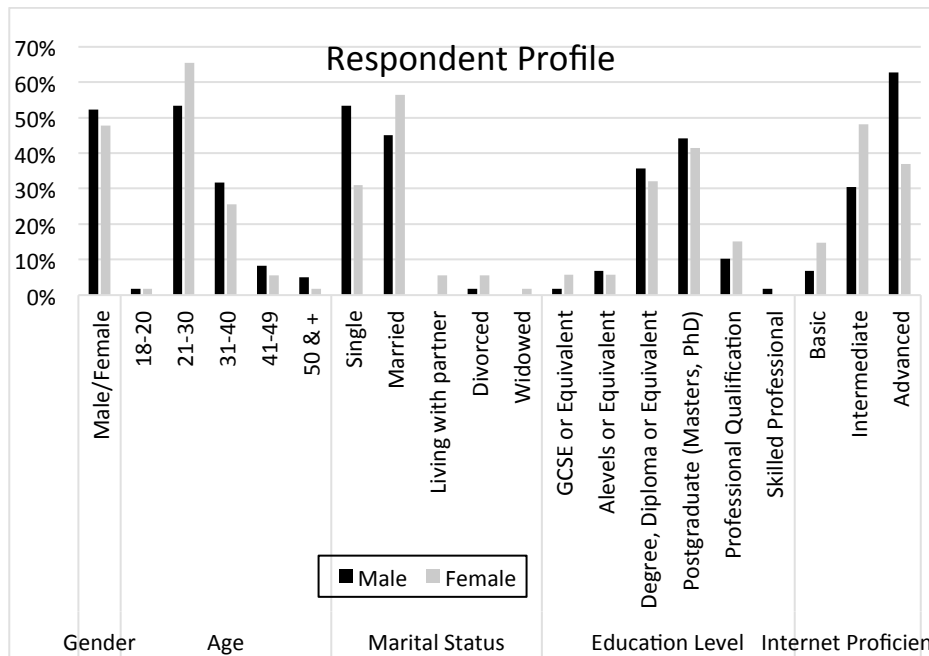
Fig.5. Respondent Profile

4.1 Online Experience of the Sample

According to the data collected and illustrated in Fig 5, 53.8% of the people were using internet since eight years or more and 50.4% people described themselves as advanced users of the internet. By advanced they meant that they were very good, very confident and experienced users of the internet. These results not only show the time since people have been using internet or their proficiency but also it shows that these days people have become technology friendly and use the internet more than ever before. Therefore confirming ease of use of technology of the TAM.

4.2 Online vs Offline Brand Loyalty by Gender

When it came to brand loyalty Fig. 6 shows that 28.7% of the males regarded themselves as brand loyal and 23.5% of the females regarded themselves as not loyal when they shopped in store. In the case of females 21.7% females called them brand loyal which is 7% less than males and 26.1% females agreed that they are not brand loyal when they shop in store.

However, when it came to online shopping 36% of males considered themselves as brand loyal as compared to only 25.4% of female agreeing that they are brand loyal when shopping online.
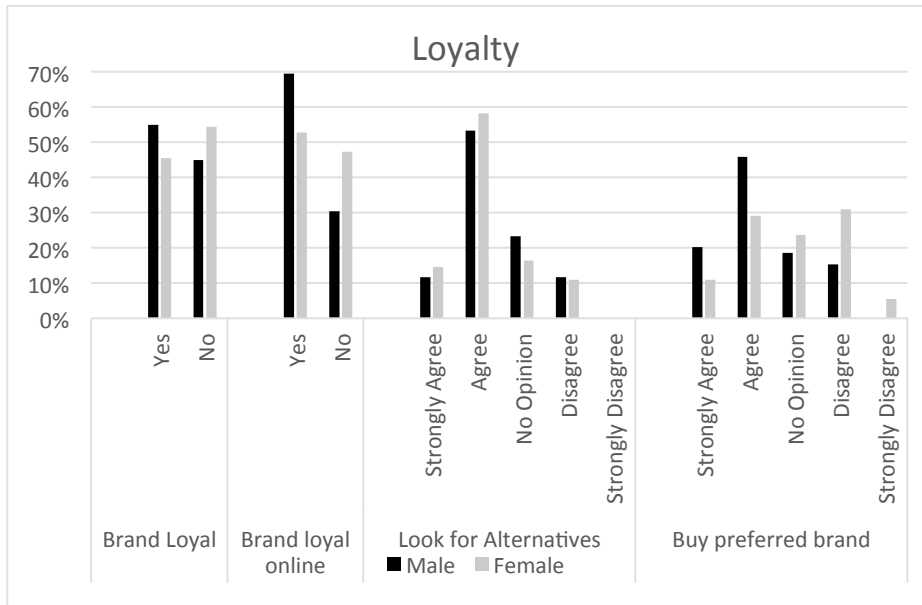
Fig. 6. Brand loyalty online and offline

4.3 *Important Factors to On-line Shopping*

The first most important factor as shown in Fig. 7 for shopping online are brands (26.1%) and for the same question the second highest factor is price (16.2%) and then convenience (14.4%). These days due to increase in technology and more brands opening their outlets online there is a high demand for shopping branded items on the internet and as customers have trust with the brand and the purchase process the first factor to shop online is brands.

However, the reason most of the people have selected price as the first factor is that there are so many people who fall under the no loyalty area in the loyalty model are after the low price for products because their main aim is to acquire cheaper products. This can only be done online as there are low costs for the businesses which operate online. Moreover, the third option was convenience, increasingly people are getting busier and they shop online because the parcels are delivered directly to their home. The table below shows the statistics.

According to the data collected and as shown in Fig. 7 the second most important factor when shopping online was time saving (24.1%) which is almost a quarter of respondents. In this question the respondents changed their answer and opted for convenience at number two with 19.4% respondents selecting the option. And thirdly price was selected by the respondents which equaled to 15.7%. Brand came at number four with only 14.8% people selecting it as an option. This may be because they have selected this option in the previous question.
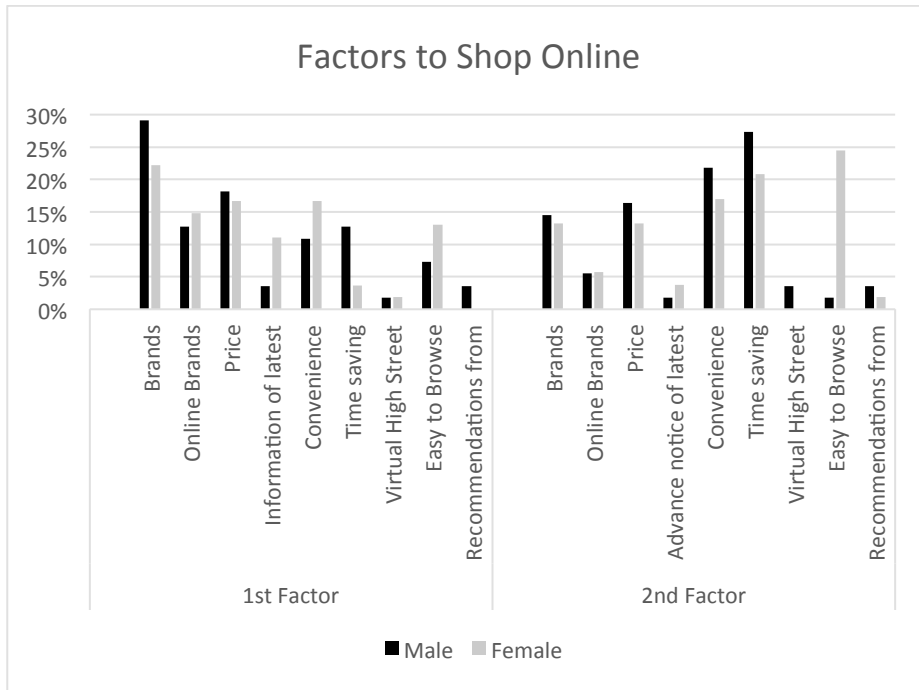
Fig. 7. First and Second most important Factor to Shop Online

4.4 *Time spent on websites and Brand Loyalty*

It has been presumed that consumers who spend longer time on their favorite brands website are brand loyal however, there are no findings which suggest that people who do not spend time on their favorite brands website are not loyal.

The results show that 28% of males and 22% of females spend two to three hours on their favorite brands website weekly and they are also brand loyal, this accounts for 72.5% of the respondents. However, 9% of males and 6% of females spend three to give hours on their favorite brands website, only 1% of female spends eight or more hours on her favorite brands website and she considers herself as brand loyal when she spends online. This time is equal to or more than one hour daily in a week of seven days. On the other band people who answered that they are not brand loyal when they shop online spend considerably less time on their favorite brands website.

4.5 *Frequency of visits and Brand Loyalty*

8% of males who call them brand loyal always visit the website of their favorite brand compared with 10% of females which is 2% higher. Therefore females who visit their favorite website brands more are more brand loyal as compared to men. The number of respondents had an equal number when they selected that they visit their

favorite brands website often. Both males and females (13% each) who were brand loyal and shopped online visit their favorite brands website often.

This number significantly drops in female gender to 4% when the frequency of visit drops to sometimes. However, opposite happened with male respondents, their number increased to 17% when it came to visit their favorite brands website sometimes. A total of 26.1% respondents always visit their favorite brands website whereas this number jumps to 37.5% who say that their visit their favorite brands website sometimes. When it was analyzed about how many loyal respondents visit their brands website sometimes, a high percentage of 30.4% was found. Surprisingly there were 5.8% respondents who never visited their favorite brands website.

4.6   *Role of Social Media in Brand Loyalty*

With the increased use of technology and social media use. These days consumers closely follow their friends and their recommendation and thus become brand loyal. 38.5% respondents agreed that they followed social networking recommendation and also a 45.7% of respondents agreed that they tried to find an item after seeing a friend wearing it. Respondents strongly agreed (7.8%) to looking for similar items when they saw their friends wearing something on the social media. However, 13.7% strongly agreed to follow social media recommendation from their friends and family.

4.7   *Factors Preventing Consumers from On-line Shopping*

Consumers were enquired about factors which keep them away from online shopping. Results showed, most of the consumers do not shop online because they are scared that the product will not be what they paid for. 17% of the respondents raised alarms of not receiving the item whereas 37 respondents or 16% of the people who participated were worried about credit card frauds. The risk of credit card fraud is on the rise and the issue needs to be addressed by the authorities.

The third most important factor identified by the respondents was the lack of trustworthiness of vendors which accounted for 15% of the respondents. This is a different between online and offline shopping because there is no physical interaction between the customer and the shop which also reduces the trust leading to problems. The results are shown in Fig. 8.
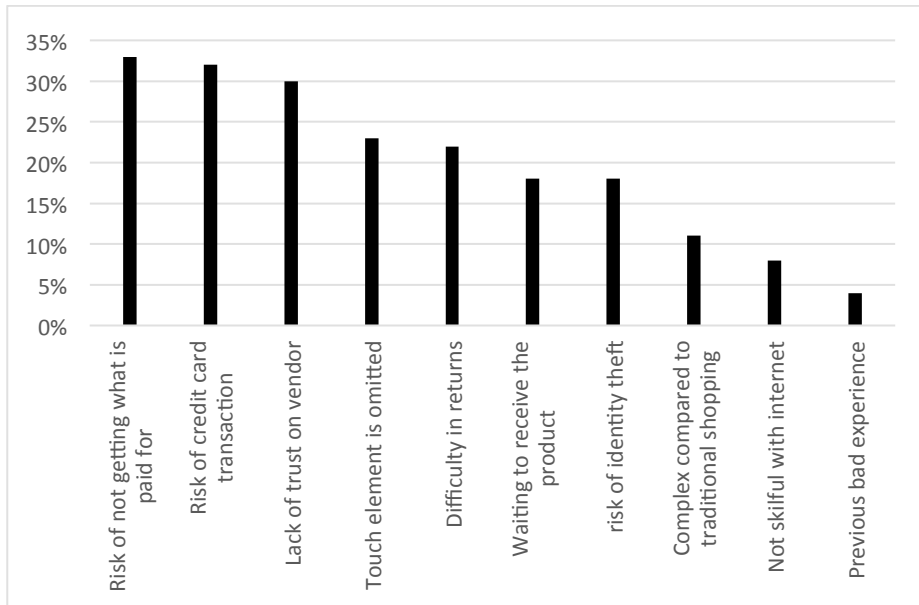
Fig. 8. Factors which keep away from shopping online

5 Conclusion: Implications for E-Commerce Interfaces

The results from the survey carried out showed directions and areas of improvements in the e-commerce interfaces. The top five reasons why people do not shop online are the areas for further development in the e-commerce sector. The top three issues that prevent consumers from shopping online can be eliminated through appropriate interaction between the consumer and the vendor. Interactive multimodal websites and applications shall be created to provide better overall experience and satisfaction to consumers which also leads to loyalty online. Interactive multimodals not only convey messages but also build 'trust' on the vendors which is a major weaknesses in current e-commerce interfaces framework.

Social media also plays an important role not only for businesses to market their products and services but also to collect valuable feedback from consumers to improve the products. The research findings inform the online user interface industry about the importance of presence within the social media and user engagement which is more likely to lead to purchase and online brand loyalty. This is derived from how consumers follow their friends lead on social media and look for similar items to buy online. Additionally, consumers want to have more engagement in the e-commerce framework with their favorite brands rather than any other brand. The survey results also open new dimensions for research in exploring the role of interactive Multimodals in achieving Brand Loyalty online. Furthermore, the survey results also trigger the importance to research why female gender is less brand loyal when they shop online and offline.

6   References

1. Office of The National Statistics (ONS). (February, 2014). Retail Sales, 2014. Available: http://www.ons.gov.uk/ons/dcp171778_358049.pdf. Last accessed 05th Nov 2014.
2. Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., et al. (1997). Interactive home shopping: Consumer, retailer, and manufacturer incentives to participate in electronic market places. Journal of Marketing, 61(3), 38-53
3. Hillenbrand, P., Alcauter, S., Cervantes, J.&Barrios, F. (2013). "Better branding: brand names can influence consumer choice", Journal of Product &Brand Management, vol. 22, pp. 300-308
4. Lee, K. & Carter, S. 2012, Global marketing management: changes, new challenges, and strategies, Oxford University Press, Oxford.
5. Dick, A. and Basu, K., 1994. Customer loyalty: towards an integrated framework. Journal of the Academy of Marketing Science 22 (2), 99-113.
6. Goldscher, S. 1998, Count the ways to loyalty, part 1, BNP Media, Northbrook.
7. Degeratu, A.M., Rangaswamy, A. and Wu, J.N. (2000), "Consumer choice behavior in online and traditional supermarkets: the effects of brand name, price, and other search attributes", International Journal of Research in Marketing, Vol. 17, pp. 55-78.
8. Emmanouilides, C. & Hammond, K. 2000, "Internet usage: Predictors of active users and frequency of use", Journal of Interactive Marketing, vol. 14, no. 2, pp. 17-32.
9. Kalauz, Maja. Vranesevic, Tihomir. Trantnik, Miroslav. 2011, "The clothing brand loyalty of teenagers: Differences between Loyalty and Desire to be Loyal", International Journal of Management Cases, Vol. 13, issue 4, pp 156-164
10. Evans, M., Foxall, G.R. & Jamal, A. 2009, Consumer behaviour, Wiley, Chichester.
11. Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quartely, 13 (3), 319-40
12. Davis, F. (1985). A Technology Acceptance Model for empirically testing new end-user information systems: theory and results. Unpublished Doctoral Dissertation, MIT Sloan School of Management, Cambridge, MA.
13. Fishbein M and Ajzen I (1975) Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research, Addison -Wesley, Reading, MA
14. Lee, Y.,Kozar, K.A. & Larsen, K.R.T (2003). The Technology acceptance model: past, present, and future. Communications of the AIS, 12 (50), 752-80
15. Beauchamp, M.B. and Ponder, N. (2010), "Perceptions of retail convenience for in-store and online shoppers", The Marketing Management Journal, Vol. 20 No. 1, pp. 49-65.
16. Colwell, S.R., Aung, M., Kanetkar, V. and Holden, A.L. (2008), "Toward a measure of service convenience: multiple-item scale development and empirical test", Journal of Services Marketing, Vol. 22 No. 2, pp. 160-169.
17. Reimers, V. and Clulow, V. (2009), "Retail centres: it's time to make them convenient", International Journal of Retail & Distribution Management, Vol. 37 No. 7, pp. 541-562.
18. Fishbein, M. and Stasson, M. (1990) The role of desires, self-predictions, and perceived control in the prediction of training session attendance, Journal of Applied Social Psychology, 20:173-98
19. WARSHAW, P. R., 1980. Predicting Purchase and other behaviors from generally and contextually specific intentions. Journal of Marketing, 17, 26-33.
20. Ajzen, I. (1988). Attitudes, personality, and behavior. Chicago: Dorsey Press.
21. Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. Journal of Experimental Social Psychology, 22, 45374.

22. Bagozzi, R. P. (1981). Atttudes, intentions, and behavior: A test of some key hypotheses. Journal of Personality and Social Psychology, 41, 607ó627.

23. Gürhan-Canli, Zeynep and Rohini Ahluwalia (2002), "Understanding Processes Underlying Consumer Inferences," in Advances in Consumer Research, Vol. 29, eds. Susan Broniarczyk and Kent Nakamoto, Provo, UT: Association for Consumer Research, 489

24. Hale, J.L.; Householder, B.J. & Greene, K.L. (2002). The theory of reasoned action. In J.P. Dillard & M. Pfau (Eds.), The persuasion handbook: Developments in theory and practice (pp. 259–286). Thousand Oaks, CA: Sage.

25. Bryman, A. & Bell, E. 2011, Business research methods, Oxford University Press, Oxford.

26. Venkatesh, V. & Davis, F,D. (1996). A model of the antecedents of perceived ease of use: development and test. Decision Sciences, 27 (3), 451-481

27. SOLOMON, M., et al., 2006. Consumer Behaviour: A European Perspective. 3rd ed. Harlow: Prentice Hall.

28. Bruner II, Gordon C. and Pomazal, Richard J. (1988), "Problem Recognition: The Crucial First Stage of the Consumer Decision Process, Journal of Consumer Marketing, 5 (1), Winter, 53-63.

29. Bloch, P.H., Sherrell, D.L. *and* Ridgeway, N.M. (1986) Consumer search: an extended framework. *Journal of Consumer Research*, **13**, 119-126.

30. Engel, J.F., Kollat, D.T. & Blackwell, R.D. Consumer behavior. New York: Holt, Rinehart & Winston, 1968.

31. Rigas, D.I. and J.L. Alty, Using sound to communicate program execution. Proceedings of the 24th EUROMICRO Conference, 1998. 2: p. 625–632.

32. Rigas, D. and D. Hopwood, The Role of Multimedia in Interfaces for On-Line Learning. 9th Panhellenic Conference on Informatics (PCI'2003). , Thessaloniki, Greece, 2003.

33. Rigas, D.I., Guidelines for Auditory Interface Design: An Empirical Investigation. 1996: PhD thesis, Loughborough University of Technology.

34. Rigas, D., & Almutairi, B. (2013). An Empirical Investigation into the Role of Avatars in Multimodal E-government Interfaces. International Journal of Sociotechnology and Knowledge Development (IJSKD), 5(1), pg. 14-22