

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

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**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. The issues investigated included the 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. It was found that online loyalty differs from offline loyalty and loyalty also differed across genders, showing that males may develop loyalty easier than females 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 some pointers towards multimodal interfaces that aid loyalty with the use of interactive multimodal social media.

**Keywords:** On-line consumer behavior · Brand loyalty · E-commerce 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 UK Office of the National Statistics [1], £678.8million was spent online in February 2014. Alba et al. [2] suggest that online purchase follows different rules to traditional face-to-face shopping because it is ‘virtual’. Therefore it can be asserted that the dynamics of online purchase may be different from the face-to-face shopping experience.

A brand name is often the first point of contact between the customer and the product [3]. Lee and Carter [4] define brand as a differentiator amongst 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., [31–33] 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 question of the interactivity needed so that online customers become loyal. The online e-commerce user may be affected by several factors during the development of brand loyalty [7, 8]. Loyalty is complex, intriguing, multidimensional, and needs to be maintained [9]. Evans et al. [10] suggest that ‘user satisfaction’ leads to brand loyalty.

## 2 Literature Review

### 2.1 Technology Acceptance Model (TAM)

There is no definitive model that can fully explain the acceptance or rejection of a system [11]. The Technology Acceptance Model (TAM) was proposed by Fred Davis [12] and was based on previous models created by Fishbein and Ajzen [13]. TAM has become a leading model to predict whether user will use or reject the system [14]. Figure 1 shows the latest version of TAM as illustrated by Venkatesh and Davis [26].

### 2.2 Decision Making Process

Convenience is one of the reasons that users access e-commerce interfaces [7, 15–17]. The question of convenience comes when a consumer analyses all the options prior to a purchase. The decision making model in Fig. 2 shows the stages that consumers take during purchase. Although made for offline consumers but the model is applicable to both online and offline consumers.

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.

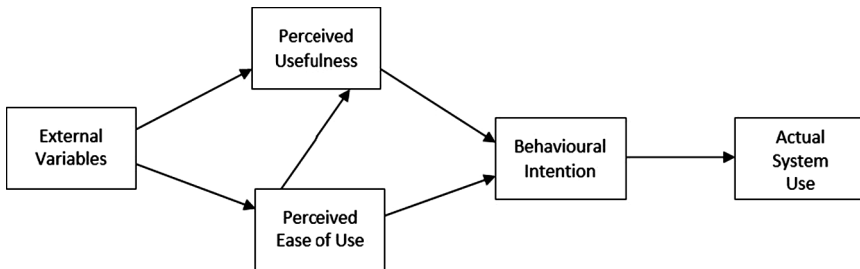


Fig. 1. Technology acceptance model (Venkatesh and Davis, 1996, [26])

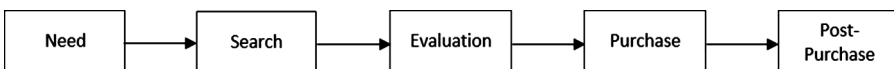


Fig. 2. Decision making model (Engel, Kollat, Blackwell, 1968)

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, with intermediate or advanced knowledge of the Internet, prefer to be kept updated on the marketplace and they often are involved in a 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 1 to 4 (see Fig. 2) may not even be carried out [27]. In this case, the transaction would be carried out instantly (*re-purchase*, 5th step) given the previous experience and preference for the brand. The e-commerce interfaces play an important role in the re-purchase. An excellent user experience with good ease-of-use of the interface is likely to gravitate the user to the ecommerce interface for all user purchases.

### 2.3 Theory of Reasoned Action and Planned Behaviour

The Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB) take user attitudes and social influences into account [13]. TRA in Fig. 3. shows 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 behaviour is not completely under the control of the actor.

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 ‘influence’ of other people (e.g. parents, partner, friends or other users) to a user’s e-commerce decision-making.

These models were challenged [22, 23] as they assume that an e-commerce user goes through this ‘*comprehensive cognitive processing*’ prior to completing a purchase.

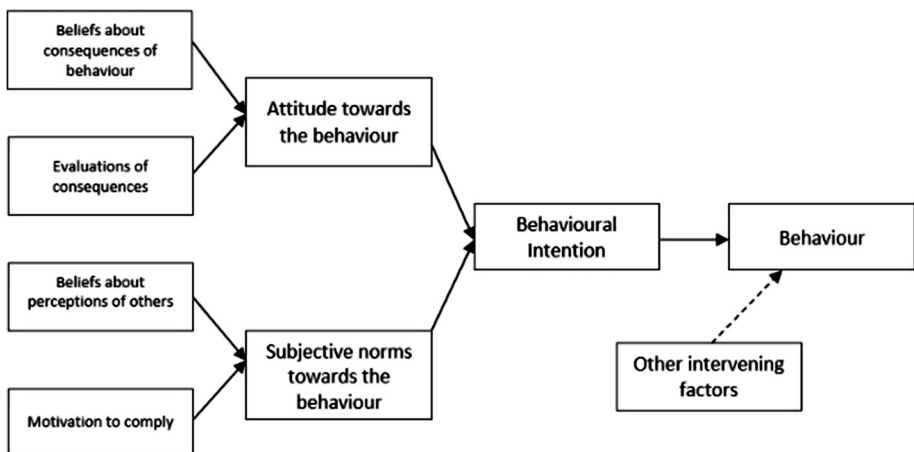
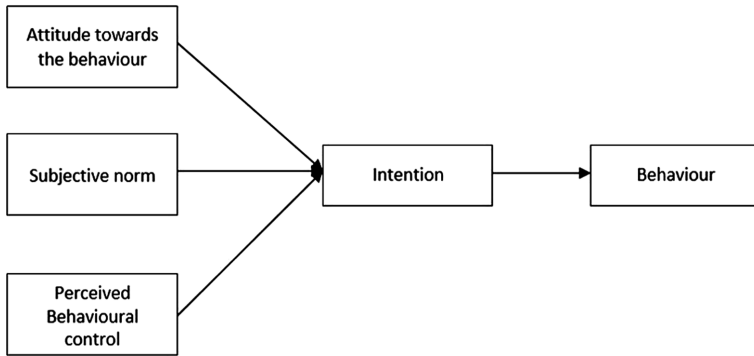


Fig. 3. Theory of reasoned action (Fishbein and Ajzen, 1975; Loudon and Bitta, 1993)



**Fig. 4.** Theory of planned behaviour (Ajzen, 1991)

They also do not take into account possible emotional, habitual, spontaneity and user cravings [24]. Other factors that may affect on-line user behavior include lack of finance, motivation, and change of circumstances Evans et al. [10].

### 3 Methodology

#### 3.1 Survey

The data was collected through a self-completion questionnaire in various shopping locations around London, UK. 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. A large number of people head towards shopping in markets, and they have experience of shopping in store and online. The questionnaire comprised of 31 closed end questions of which 11 were using a Likert-style questionnaire. All questions needed to be answered but respondents could leave questions unanswered. All data was collected anonymously.

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 for the analysis and transfer to SPSS. No alternations to the answers could be done either by the author or the respondent. Paper forms were available for the respondents who were not prepared to use the tablet. However, all respondents were happy to answer the questionnaire using the provided tablet.

#### 3.2 Sample

Non-random sampling was used to administer the survey with 100 respondents. When a random sampling is used it means that each unit of the population is included in the research [25]. For this survey, convenience sampling was a practical way to obtain an overall viewpoint of the general trends in this area. It was practical as 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 but it will be more difficult to generalise the results [25].

### 3.3 Response Rate

A total of 117 respondents were asked to carry out the questionnaire. 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 was 60 (52.2 %) and 55 (47.8 %) for females.

## 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:** The Internet proficiency of the respondents was important in order to better understand their predisposition to online loyalty.
2. **Online vs Offline Brand Loyalty:** The results would demonstrate some difference between online and offline brand loyalty and relate this to gender.
3. **Important Factors to Online Shopping:** This is to obtain an overall viewpoint of the factors that motivate users to shop online.
4. **Time Spend on Websites and Brand Loyalty:** The possible linking time spent on e-commerce websites to brand loyalty.
5. **Frequency of Visit and Brand Loyalty:** In traditional face-to-face shopping, consumers visit their favorite retailers more often than other shops. This question would show whether this is correct in online shopping.
6. **Role of Social Media in Brand Loyalty:** The influence of social media to online users that predisposes to the development of brand loyalty.
7. **Factors Which Keep Consumers Away from Online Shopping:** This was to identify some of the reasons that could prevent users from online shopping.

### 4.1 Online Experience of the Sample

Figure 5 shows that 53.8 % of the people were using Internet for 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.

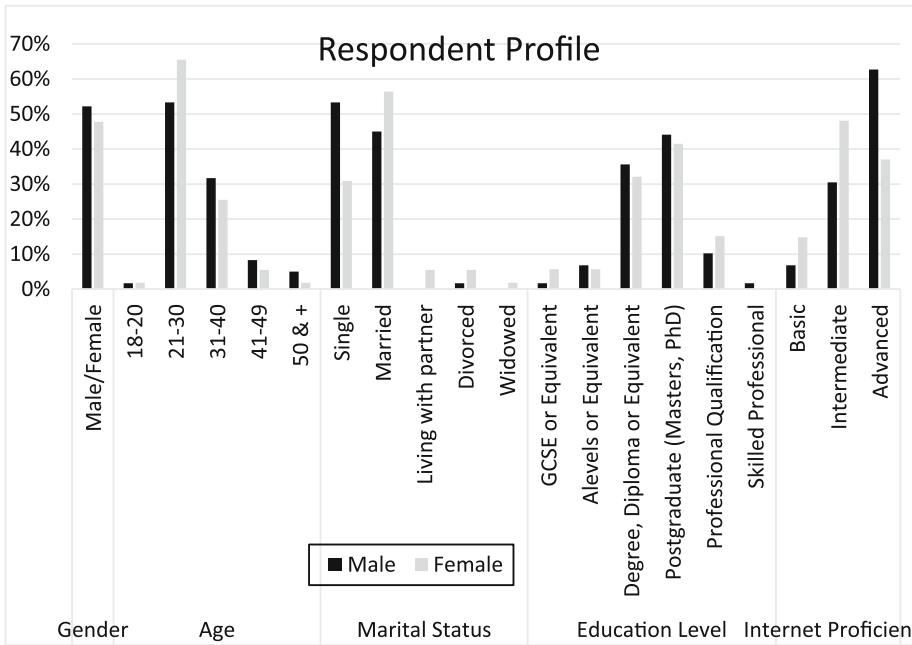


Fig. 5. Profile of the respondents

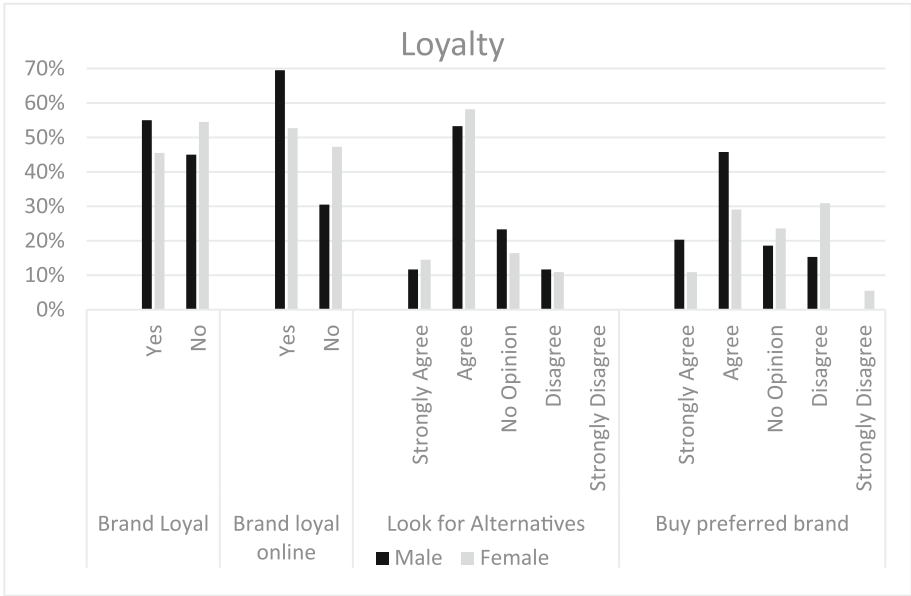
### 4.2 Online Vs Offline Brand Loyalty by Gender

Figure 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. 21.7 % females were brand loyal which is 7 % less than males. 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.

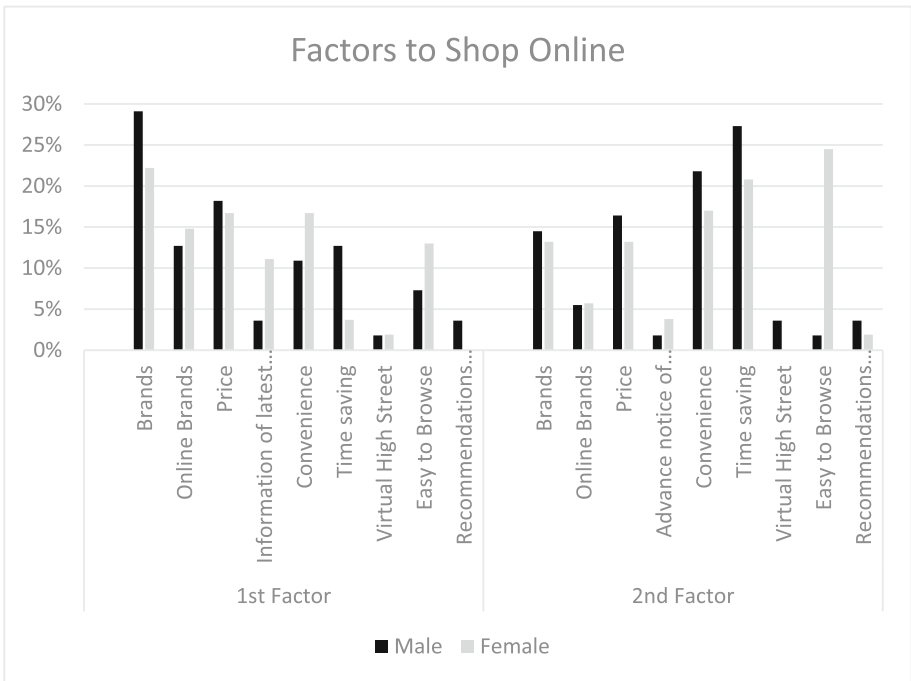
### 4.3 Important Factors to on-Line Shopping

The first set of most important factors, as shown in Fig. 7, for shopping online are *brands* (26.1 %), *price* (16.2 %) and *convenience* (14.4 %). The reason for price being a factor is that there are so many people who have no specific loyalty. Their main aim is to acquire cheaper products. This can be easily achieved online, as there are low costs for the online businesses. It is not surprising that convenience is a factor as people to shop online.

In the second set of most important factors was *time-saving* (24.1 %), which was almost a quarter of respondents. It was followed by convenience (19.4 %) and price (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. 6.** Brand loyalty online and offline



**Fig. 7.** First and Second most important Factor to Shop Online

#### **4.4 Time Spent on Websites and Brand Loyalty**

Although consumers who spend longer time on their favorite brands website can be regarded as loyal to the brand, there are no findings to 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 accounted for 72.5 % of the respondents. However, 9 % of males and 6 % of females spend three hours on their favorite brands website with 1 % of females spend eight or more hours on their favorite brands website. This time is regarded to be more than one hour daily.

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 were self-identified as brand loyal always visited the website of their favorite brand compared with 10 % of females. Therefore females who visit their favorite website brands often are more brand loyal as compared to men. Both males and females (13 % each) who were brand loyal and shopped online visited their favorite brands website often.

This number significantly drops for females to 4 %. However, the opposite happened with male respondents. The percentage increased to 17 % when it came to visit their favorite brands website. A total of 26.1 % respondents always visited their favorite brands website whereas this number jumps to 37.5 % who say that their visit their favorite brands website sometimes. With regard to the frequency of respondents visiting their preferred brand website sometimes, a high percentage of 30.4 % was found. Surprisingly there were 5.8 % respondents who never visited their preferred brand website.

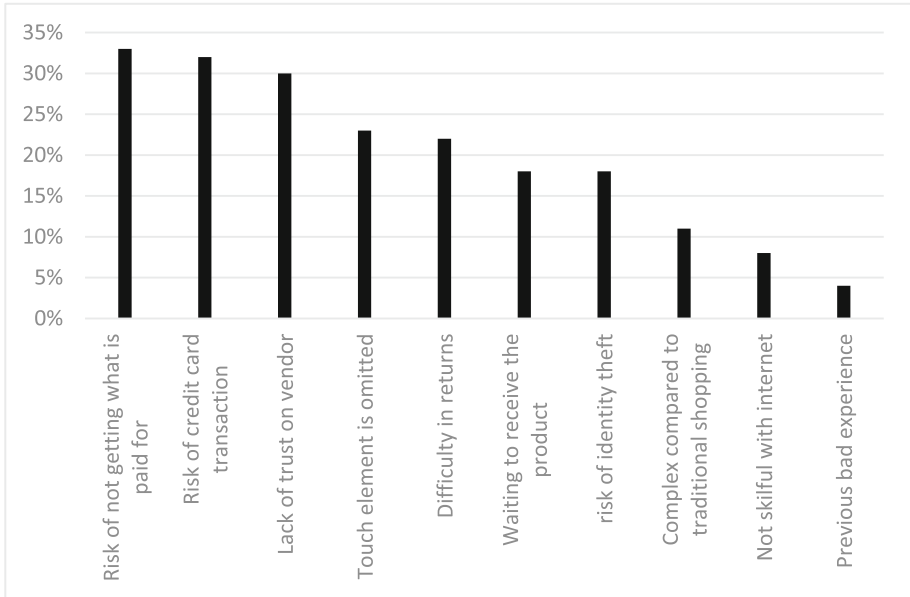
#### **4.6 Role of Social Media in Brand Loyalty**

38.5 % respondents agreed that they followed social networking recommendations and also a 45.7 % of respondents agreed that they tried to purchase an item following a social influence. Respondents strongly agreed (7.8 %) to search online to purchase similar items that have been previously bought by their friends. 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 that online shoppers were concerned about the value of the product for the price paid. 17 % of the respondents raised alarms of not receiving the item whereas 37 respondents (16 %) were worried about credit card frauds.





**Fig. 8.** Factors which keep away from shopping online

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 difference between online and offline shopping as there is no physical interaction between the customer and the vendors. This is a trust related issue. The results are shown in Fig. 8.

## 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.

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