

Interactive e-Branding in e-Commerce Interfaces: Survey Results and Implications

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Abstract. This paper explores user views on the way in which interactive e-branding techniques are perceived. A survey consisting of 100 respondents was contacted to address the questions relating to the topic. It was found that current techniques may improve the effectiveness, efficiency and user satisfaction. The paper discusses the findings and concludes with recommendations for further work to improve the overall user experience through interactivity. Virtual shopping assistance was also identified as a factor that can aid users further to resolve problems during their online engagement.

Keywords: Interactivity · e-Branding · e-Commerce interfaces · Effectiveness · Efficiency · User satisfaction · e-Loyalty · Virtual shopping assistants

1 Introduction

According to the Office of the National Statistics, £716.0 million was spent weekly in June 2014. This represents a rise of 11.2 % as compared to June 2013 [1]. Additionally, spending was increased in e-departmental stores by 16.0 % year on year. With the trend of online shopping increasing, organisations are seeking to brand online (e-branding) effectively and interact with online customers strategically.

There has been a significant increase in interactive websites that allows the customers to view their products of interest in a greater depth. For example, 3d illustrations of products and live online chat systems which are integrated into websites so that customers may interact with other users who may have experienced the product.

2 e-Branding, Multimodality and Online User Experience

Online branding or e-branding has become a topic of significant research interest [2]. Traditionally branding is known as the creation of a value through different means, leading to repeat purchase [3–6]. Therefore, it has become essential for organisations to have an online presence and a strong online brand identity. Because a strong brand identity assures consumers of unseen products and assures quality [7–10]. Branding is the process of creating value through the provision of a consistent offer and customer experience that satisfies customers. As customers develop trust in the brand through satisfaction of use and experience, companies have the opportunity to start building

relationships. When a brand satisfies customers, potential competitors cannot easily enter their market due to the brand leadership. Branding therefore enables a company to grow identity and increase the opportunity of repeat business through brand loyalty. According to Simmons [33] “*companies with a history of strong brands are likely to maintain greater control over the balance of power between them and customers, and command higher market share and premium price against generic, unbranded, equivalents*” [34]. A strong and successful brand helps organisations to maintain a leading market position. Branding helps an organisation to achieve economies of scale which helps to introduce new products and/or services [35]. Branding has acquired a lot of research attention but its role and contribution to business performance has remained questionable. The same applies to the area of e-branding.

Regardless of the vast sums of money being invested in online advertising, the return on advertisement on the e-commerce is not well defined. E-commerce companies spend several times of their annual sales revenue in order to have an online presence [36]. Online success can be achieved through online branding [29, 37] and it is vital in the highly competitive online market.

Previous research [9] suggests that e-brands may increase customers’ trust in an environment where physical products or services are unseen. However, the large number of websites has caused confusion and frustration for Internet users [32]. However, customer re-purchasing is likely to be a familiar brand. Ibeh et al. [34] suggests that consumers establish online relationships with brands that are remembered when re-purchasing. These relationships and trust on a brand can be enhanced through interactivity and interactive avatars. Having limited time and cognitive resources and overwhelmed by the information online consumers tend to minimize information overload through mental shortcuts, one of which is e-branding.

A research by Cheskin Research [38] showed that brand is first fundamental aspect of building and maintaining trust on the internet followed by navigability, fulfilment, presentation and technology. Similar results have been found in a research by Rigas and Hussain [11] that one of the major factors to shop online are online brands, convenience and prices.

Several factors of interactions are missing from the e-commerce as compared to face to face interactions [12]. Therefore according to many authors, an effective website design is critical to the success of electronic commerce, and the functionality, usability, ease-of-navigation and interfaces of the websites themselves are vital building blocks for sustainable success [13–16]. Furthermore, researchers [17] demonstrate that website interactivity helps to meet customer expectations by providing a number of fundamental elements. But some authors [18] argue that businesses do not understand the ‘user-website interaction’ aspect.

It has been agreed by Senger et al. and Rigas and Almutairi [19, 20] that interactions need to be managed and aided throughout the buying cycle most importantly in the web-environments. Interaction are of two types, face to face and e-dialogue, both have their own distinctions but e-dialogue involves the transfer of both tactic and explicit knowledge [21].

Interactive e-commerce websites must have three antecedents according to Yen [22] to have a positive purchase effect on the customer: Information richness, retailer brand

and extended offers. These three dimensions of e-commerce are considered to have the strongest impact on the purchase decision online [23–26].

Loyalty has always been important for organisations whether it be online or offline. But according to Senger et al. [19], the use of IT with the aid of multimedia improves the perception of trust. However when price differences are minimal consumers tend to buy from online stores which they trust [27]. Furthermore when trust develops for a website the customers proactively look for new content on it [28].

There have been no researches carried out about a relation between multimodality and loyalty when shopping online. Although the issue and the benefits of multimodality in e-branding remains unclear there are authors who have concluded that e-branding will come to an end [29, 30] but others [31, 32] argue that an organisation cannot be successful on the internet without e-branding. Therefore, after looking at the current and previous literature in concern with the interactive e-branding it is clear that this area needs research about successful practises, their weaknesses and developments on them. And whether the development of interactive multimodal branding will lead to brand loyalty through satisfaction, trust, and ease of use? The literature also shows a gap in the area of Artificial Intelligence (AI) where online assistants would interact and would have the ability to deal with customer queries.

Existing literature draws out the importance of multimodals to acquire loyalty and create e-branding environment on the internet but the existing literature does not dwell on the use of ‘interactive’ multimodals, which is a significant area and still under-researched.

3 Methodology, Survey and Sample

A survey was conducted using a questionnaire that gathered an overall user viewpoint on topics relating to online shopping, virtual assistants, e-branding and multimodal e-branding. The questionnaire consisted of 45 questions of which 7 questions required a Likert-style answer and 33 questions required a user selection from a menu of different options. All the questions were compulsory with the exception of two questions that were open ended and have not formed a part of this survey. The response rate was 100 %. The questionnaire could be completed by respondents either on paper or on-line. The results were analysed using SPSS. The sample was opportunistic. The population which would be useful for this research would be the consumers who shop online and are critical would help to identify the weaknesses in the current interfaces.

A total of 100 respondents were asked to carry out the questionnaire. Of which 100 (100 %) valid responses were received back. There were two cases which selected not to identify their gender and they have been deemed as invalid responses and that accounted to 2 % of invalid responses. The number of males who participated in the research were 48 (50 %) and the number of females were 48 (50 %).

4 Findings and Analysis

From the questionnaire various factors were selected to compare and contrast their effect on the effectiveness, efficiency and the user-satisfaction of the users. The findings are discussed according to:

1. *Internet Usage*: To find out about the user-satisfaction it was important to find out the amount of time spent on the internet and what devices were used to access it.
2. *Factors to shop and not to shop online*: Various consumers have various needs and therefore it was important to explore the factors to shop online and factors which refrain from shopping online.
3. *Social Media influence*: These days social media influences quite a lot of purchases therefore it was important to find out how and which social media influences the purchase decision.
4. *Knowledge about e-branding and multimodals*: most of the consumers know about e-commerce and e-branding however multimodals are not very known to consumers therefore for consumers to understand multimodal e-branding it is important to know whether there is an understanding of multimodality.
5. *Information seeking and Artificial Intelligence (AI)*: consumers seek information online through FAQ's, forums and etc. However, this information seeking and the whole interactivity can be improved through the integration of Artificial Intelligence in the form of Virtual Shopping Assistants for e-retailers.
6. *Effectiveness, Efficiency and User-Satisfaction*: the current effectiveness, efficiency and the user-satisfaction from the current e-commerce interfaces will be explored to see the areas of and for improvement.

Figure 1 below shows the respondent profile of the sample. 45 % of the respondents had a degree and 18.30 % had a postgraduate degree. In terms of internet proficiency, 62.70 % of the male respondents described themselves as advanced users of internet compared to 37 % of female respondents. 48.10 % of the females described themselves as having an intermediate or Practical Application knowledge of using the internet.

Figure 2 shows the data relating to the internet usage of the sample. 58.30 % of the respondents were internet users for more than 8 years and only 1.3 % of the respondents had internet experience between 1 to 3 years. When respondents were asked about the frequency of accessing the internet, results showed that 65 % of the respondents accessed the internet 6–10 times daily. Approximately, 33.3 % of the respondents spent more than 20 h weekly on the internet. The results also showed that at least 30 % of the respondents spent 6–10 h weekly on the internet. Only 10 % of the respondents spent 0–5 h weekly on the internet. This shows that most of the sample used were familiar with the internet and spent almost one day in the whole week on the internet.

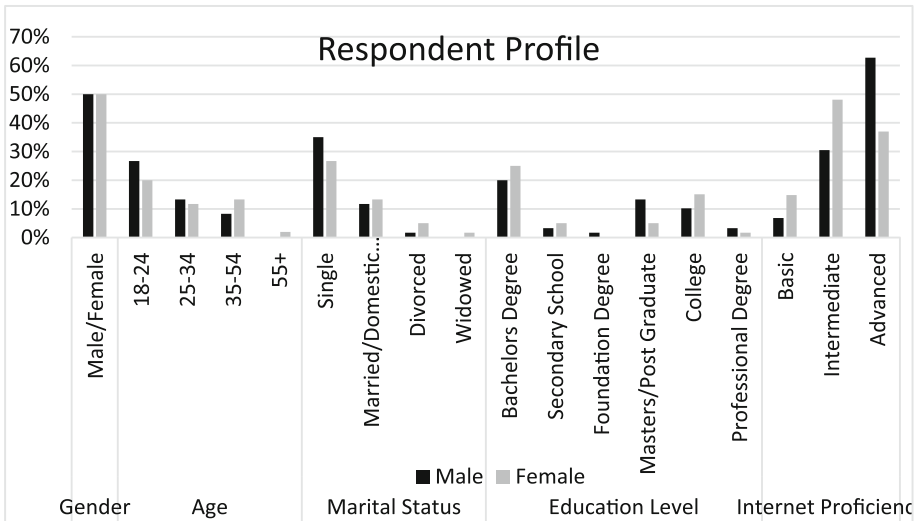


Fig. 1. Respondent profile

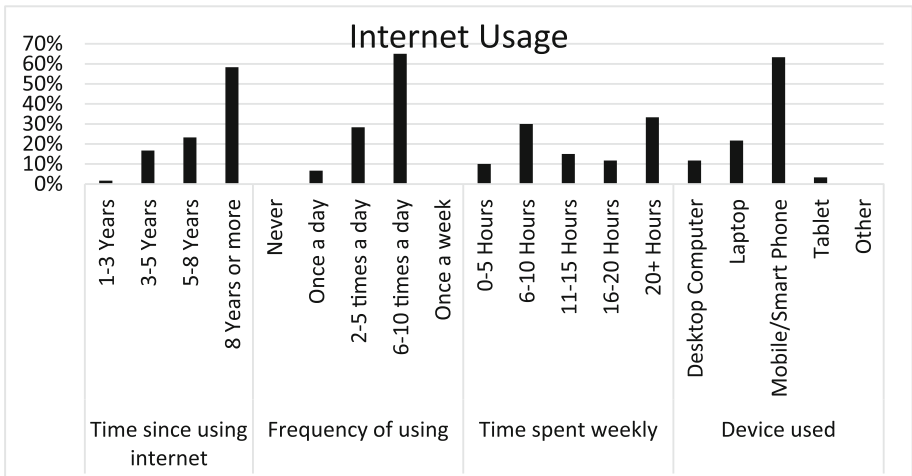


Fig. 2. Internet usage statistics

Customers were asked about buying online behaviours to know the viewpoint and the influence which social media has on the buying behaviour. Figure 3 shows that 91.70 % of the sample were online purchasers and 55 % of the respondents were influenced by social media.

Approximately 75 % of the respondents had shopped from e-retailers (e.g. Amazon or eBay). 55 % of the respondents agreed that current e-commerce websites were usable.

Moreover, 48.30 % of the respondents thought that they will benefit by a “virtual shopping assistant”, this highlights the willingness to accept new interface technologies.

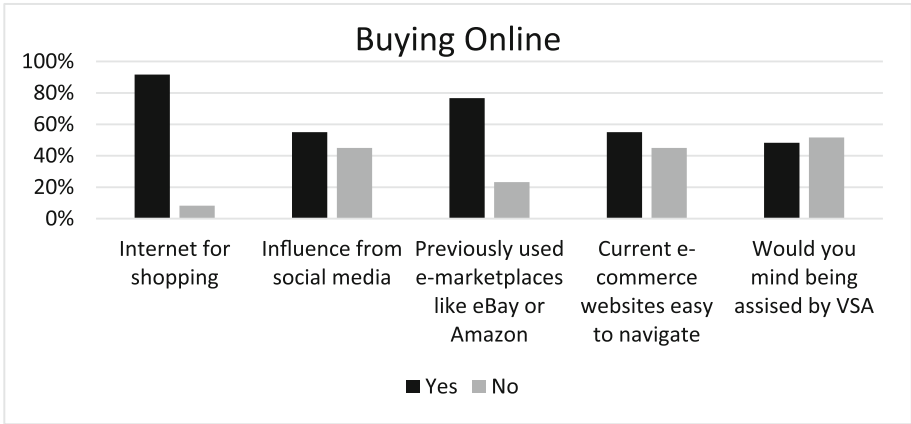


Fig. 3. Buying online

It also points towards an area that is underdeveloped. Figure 4 shows the frequency of use of social media platforms. 20.40 % of the respondents thought that they fully influenced from Facebook and 46.20 % thought that were never influenced by Twitter. The second most influential platform was YouTube with 18.20 %. This was attributed to the ability of users to watch reviews of products prior to purchasing. This highlights that e-commerce platforms are likely to benefit by providing relevant links of videos relating to the products on social platforms. 25.90 % and 24.50 % of the respondents thought that they usually influenced by Facebook and Instagram respectively. This may be due to the integration between the apps that allows users to share their posts simultaneously with one being a platform for sharing images only.

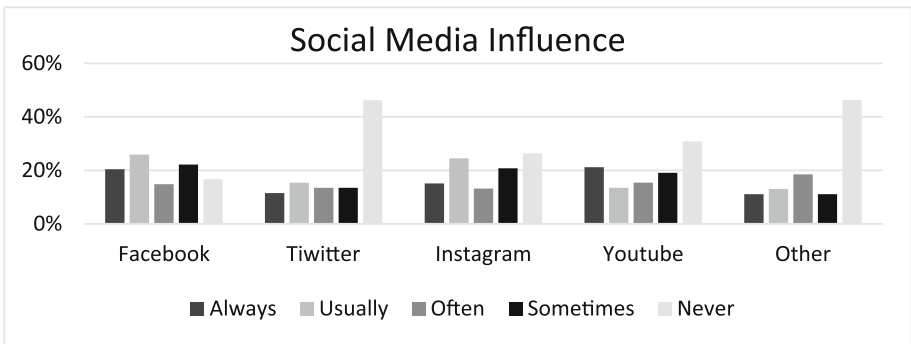


Fig. 4. Influence from social media

4.1 Influencing Factors to Purchase Activity

This part of the survey investigated the factors that motivates or demotivates people to online purchasing. The results are depicted in Figs. 5 and 6. The results showed that *time saving* (55.20 %), *convenience* (53.40 %) and *price* (50.90 %) were the top three reasons that motivated people to shop online. These results are in agreement with previous findings by Rigas and Hussain (2015). In addition, it appears from the findings in this survey that brands/e-brands (and associated attributes) were not thought by respondents to be the most important factors. 29.10 % of the respondents followed a recommendation by a peer.



Fig. 5. Factors to shop online

Figure 6 shows the factors which refrain the shoppers from online activity. These were delivery times (76.70 %), risk of credit card frauds (48.30 %), ordering the wrong item (46.70 %) and subsequently returning those items (43.40 %).

The survey also obtained an overall viewpoint of the respondents regarding their knowledge about multimodal and e-branding. The results in Fig. 7 show that 61.70 % of the respondents are aware of e-branding, and 73.40 % were not familiar of multimodality. Interestingly, 65 % of the respondents thought that they had never experienced multimodal e-branding. When respondents were asked about the possibility of associating an e-brand with an interactive character, 81.70 % of the respondents thought that such an association will aid them to remember an e-brand. 61.70 % of the respondents had never came across an interactive character on an e-commerce interface or platform. 70 % thought that an interactive characters will motivate users to repeat purchase.

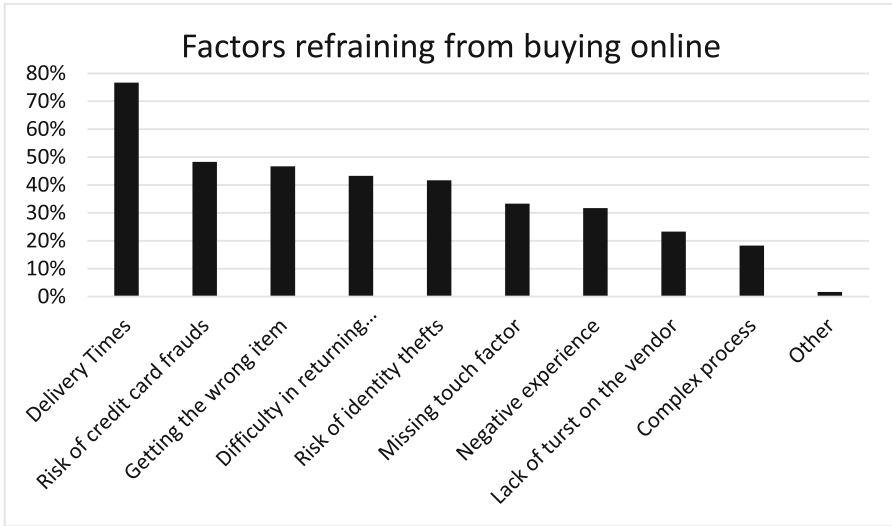


Fig. 6. Factors refraining from buying online

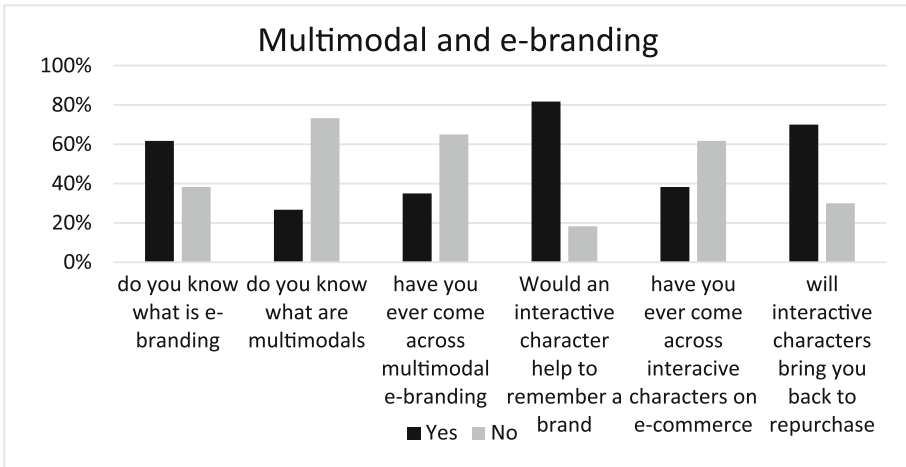


Fig. 7. Multimodals and e-branding

Respondents were also asked whether current interfaces could be improved through virtual shopping assistants. 58.30 % agreed that such facility would be desirable. 66.70 % of the respondents had never experienced a virtual assistant. This indicates some scope for further development in this direction (see Fig. 8). 60 % of the respondents reference the *frequently asked questions* section. A virtual assistant could be utilised in that section of the interface and may lead to a better efficiency and user-satisfaction.

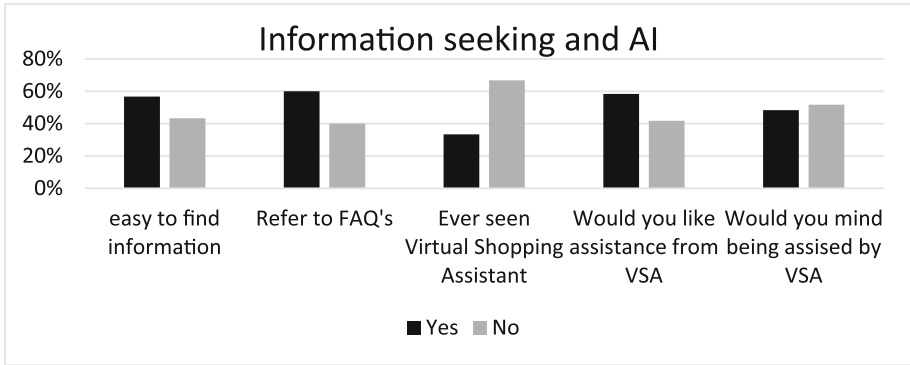


Fig. 8. Information seeking and AI

To know more about the effectiveness, efficiency and user-satisfaction of the current e-commerce interfaces respondents were asked about presentation, checkout times and the user-satisfaction during their online transactions. Figure 9 shows that 54 % of the respondents felt that the current presentation created an urge to purchase. 60 % of the respondents indicated that their transactions were cancelled before completion due to an error. 61.70 % respondents said that the current checkout times were fast. 44.15 % of the respondents were generally not satisfied with their overall online experience.

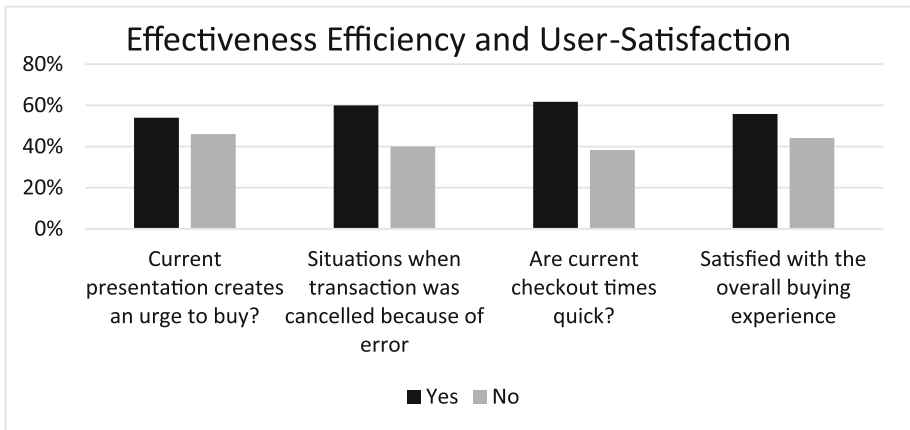


Fig. 9. Effectiveness, efficiency and user-satisfaction

5 Conclusion: Implications for Interactive e-Branding

It is difficult to generalise with convenience sample. However, this survey shows that there is at least a prima facie case that multimodality in the form of a virtual assistant will benefit not only the consumers but also the e-retailers. Furthermore, online product reviews in popular social media platforms also play a role in consumer purchase

decision. The users of e-commerce platforms can benefit by using these interfaces in a more effective, efficient and satisfied manner. The e-retailers can benefit by increasing multimodal interactivity and thus leading to repeat purchases. There is a need to investigate these prima facie cases of user preference in e-commerce user interfaces in order to establish a better understanding of the ways that multimodal features can be used in this context and the way in which users can accept these techniques.

References

1. Office for National Statistics: Consumer Trends of United Kingdom for 2014 (2014). <http://www.ons.gov.uk/ons/rel/consumer-trends/consumer-trends/q2-2014/index.html>. Accessed 30 Jan 2015
2. Rowley, J.: Online branding. *Online Inf. Rev.* **28**(2), 131–138 (2009)
3. Aaker, D.: *Managing Brand Equity: Capitalising on the Value of a Brand Name*. Free Press, New York (1991)
4. de Chernatony, L., McDonald, M.: *Creating Powerful Brands: The Strategic Route to Success in Consumer, Industrial, and Service Markets*. Butterworth-Heinemann, Oxford (1992)
5. Kapferer, J.: *Strategic Brand Management*. Free Press, New York (1992)
6. Hankinson, G., Cowking, P.: *Branding in Action: Cases and Strategies for Profitable Brand Management*. McGraw-Hill, New York (1993)
7. Ries, A., Ries, L.: *11 Immutable Laws of Internet Branding*. Harper Collins, London (2000)
8. Bergstrom, A.: Cyber branding: leveraging your brand on the internet. *Strateg. Leadersh.* **28**(4), 10–15 (2000)
9. Berry, L.: Cultivating service brand equity. *J. Acad. Mark. Sci.* **28**(1), 128–137 (2000)
10. Mitchell, L.: Branding equals smart e-business. *Infoworld* **22**, 47–48 (2000)
11. Rigas, D., Hussain, H.A.: The role of brand loyalty and social media in e-commerce interfaces: survey results and implications for user interfaces. In: Fui-Hoon Nah, F., Tan, C.-H. (eds.) *HCIB 2015. LNCS*, vol. 9191, pp. 347–357. Springer, Heidelberg (2015)
12. Chadwick, S.A.: Communicating trust in e-commerce interactions. *Manage. Commun. Q.* **14**(4), 653–658 (2001)
13. Constantinides, E.: Influencing the online consumer's behaviour: the web experience. *Internet Res.* **14**(2), 111–126 (2004)
14. Yen, B., Hu, P.J.-H., Wang, M.: Toward an analytical approach to effective web site design: a framework for modelling, evaluation and enhancement. *Electron. Commer. Res. Appl.* **6**, 159–170 (2007)
15. Lim, H., Widdows, R., Hooker, N.H.: Web content analysis of e-grocery retailers: a longitudinal study. *Int. J. Retail Distrib. Manage.* **37**(10), 839–851 (2009)
16. Colla, E., Lapoule, P.: Les facteurs clés du succès des cybermarchés: les enseignements du cas Tesco. *Décis. Mark.* **61**, 35–45 (2011)
17. Dholakia, R.R., Zhao, M.: Retail web site interactivity. *Int. J. Retail Distrib. Manage.* **37**(10), 821–838 (2009)
18. Hasley, J., Gregg, D.G.: The outcomes of user interactions with retail websites: semantics and nomenclature. *J. Technol. Res.* **5**, 1–53 (2014)
19. Senger, E., Gronover, S., Riempp, G.: Customer web interaction: fundamentals and decision tree. In: *AMCIS 2002 Proceedings*, Paper 270 (2002)
20. Rigas, D., Almutairi, B.: An empirical investigation into the role of avatars in multimodal e-government interfaces. *Int. J. Sociotechnol. Knowl. Dev. (IJSKD)* **5**(1), 14–22 (2013)

21. Gurgul, G., Rumyantseva, M., Enkel, E.: Customer integration—establish a constant bilateral knowledge flow. Diskussionspapier des Research Centers Knowledge Source der Universität St. Gallen (2002)
22. Yen, Y.-S.: The interaction effect on customer purchase intention in e-commerce: a comparison between substitute and complement. *Asia Pac. J. Mark. Logist.* **26**(3), 472–493 (2014)
23. Burt, S., Davies, K.: From the retail brand to the retailer as a brand: themes and issues in retail branding research. *Int. J. Retail Distrib. Manage.* **38**(11/12), 865–878 (2010)
24. Kim, E.Y., Kim, Y.-K.: Predicting online purchase intentions for clothing products. *Eur. J. Mark.* **38**(7), 883–897 (2004)
25. Chu, W., Choi, B., Song, M.R.: The role of on-line brand awareness and infomediary reputation in increasing consumer purchase intention. *Int. J. Electron. Commer.* **9**(3), 115–127 (2005)
26. Hume, M.: Understanding core and peripheral service quality in customer repurchase of the performing arts. *Manag. Serv. Qual.* **18**(4), 349–369 (2008)
27. Strader, T.J., Shaw, M.J.: Consumer difference for traditional and Internet markets. *Internet Res. Electron. Netw. Appl. Policy* **9**(2), 82–92 (1999)
28. Rhea, D.: Trust me. *Critique* **14**, 74–149 (2000)
29. Sinha, I.: Cost transparency: the net’s real threat to prices and brands. *Harv. Bus. Rev.* **78**, 43–51 (2000)
30. Chevron, J.: Is the internet really killing brands? (2000). www.jrcanda.com/art-netkillsbrands.html. Accessed 2001
31. McGovern, G.: The Caring Economy (2000). www.thecaringeconomy.com. Accessed July 2001
32. Carpenter, P.: e-Brands-Building on Internet Business at Breakneck Speed. Harvard Business School Press, Boston (2000)
33. Simmons, G.J.: “i-Branding”: developing the internet as a branding tool. *Mark. Intell. Plan.* **25**(6), 544–562 (2007)
34. Ibeh, K.I.N., Luo, Y., Dinnie, K.: e-Branding strategies of internet companies: some preliminary insights from the UK. *J. Brand Manage.* **12**(5), 355 (2005)
35. Steven, C.: Issues in Branding. Reuters Report, Datamonitor Plc., London (1999)
36. Epstein, M.J.: Implementing successful e-commerce initiatives. *Strateg. Finance* **86**(9), 22–29 (2005)
37. Chevron, J.: Is the internet really killing brands? (2000)
38. Cheskin Research: Ecommerce trust study (1999). www.cheskin.com. Accessed January 2016