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Beyond technology acceptance: Brand relationships and online brand experience ☆

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ABSTRACT

This paper combines insights from marketing and information systems research to arrive at an integrative model of online brand experience. In this model emotional aspects of brand relationship supplement the dimension of technology acceptance to arrive at a more complete understanding of consumer experience with an online brand. The empirical tests involve structural equation modeling and primary data from a survey of 456 users of online search engines. The results demonstrate that trust and perceived usefulness positively affect online brand experience. Positive experiences result in satisfaction and behavioral intentions that in turn lead to the formation of online brand relationship. Interestingly, brand reputation emerges as an important antecedent of trust and perceived ease of use of an online brand.

1. Introduction

Internet and related technologies have dramatically changed the landscape of global branding. In the last 15 years, online brands have grown from obscurity to become household names with market values that place them in the top 100 world's most valuable brands. In fact, one such name (Google) now tops global ratings with an estimated worth of $100,039 million (Financial Times, 2009). Traffic, that is the repeated interactions between an online brand and its users, is the key asset underlying this success (Song, Zhang, Xu, & Huang, 2010). Maintaining an active engagement with the user through repeated interactions remains a critical issue for the online brand (Bart, Shankar, Sultan, & Urban, 2005; Bridges & Florsheim, 2008; Christodoulides, 2009; Helm, 2007; Kollmann & Suckow, 2008).

Understanding and creating conditions that result in a positive online brand experience remains high-priority within two different fields of academic enquiry. The information systems (IS) tradition, in particular studies based on technology acceptance model (Davis, 1989), conceptualizes online brands as pieces of technology. Taking the system usability view, this research tends to focus on task-related features of the brand and considers user experiences in terms of functional outcomes, such as usefulness or functionality (Kim, 2005; Koufaris, 2002; Pavlou, Huigang, & Yajiong, 2007). By contrast the marketing literature tends to view online brands as augmented products or services that meet certain customer needs through interaction in computer-mediated environments (Hoffman & Novak, 1996, 2009). Marketing scholars emphasize the emotive aspects of brand experience and subjective evaluations of the brand, stressing the importance of brand personality (Okazaki, 2006), image (Da Silva & Syed Alwi, 2008a, 2008b; Kwon & Lennon, 2009) or brand equity (Christodoulides, de Chernatony, Furrer, Shiu, & Abimbola, 2006; Christodoulides & de Chernatony, 2004).

The online brand experience encompasses both the cognitive and the affective states (Bhat & Reddy, 1998; Mollen & Wilson, 2010) and a few authors acknowledge the importance of both perspectives (Bridges & Florsheim, 2008; Caruana & Ewing, 2010; Hausman & Siekpe, 2009). For example, some IS scholars focus on hedonic brand experiences and constructs such as fun (Lin, Gregor, & Ewing, 2008). Despite these efforts, in a recent review Taylor and Strutton (2010) conclude that adherence to disciplinary boundaries leads to an incomplete understanding of the antecedents and outcomes of e-marketing and that a unifying framework encompassing interdisciplinary concepts is urgently needed. Responding to the call for a more integrated approach, this study aims to combine theoretical insights from marketing and IS research to arrive at a model of the online brand experience. The model extends the notion of experiencing the brand beyond usability (Flavian, Guinaliu, & Gurrea, 2006), loyalty (Caruana & Ewing, 2010) or satisfaction (Koufaris, 2002), to include the emotive responses and connections with the brand, namely brand relationships. While practitioners recognize these aspect of online brand experience as being critical to the success (Rappaport, 2007), academic research largely overlooks them (Mollen and Wilson, 2010). The investigation focuses on search engines. Compared with online retail

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brands and online purchasing (Caruana & Ewing, 2010; Eastlick, Lotz, & Warrington, 2006; Ha & Stoel, 2009; Kim & Jihyun, 2009), the internet search engines represent an under-researched phenomenon. Yet, the search engines provide a particularly poignant context for analyzing brand relationships. The absence of direct sales means that online brand experiences are both narrower and more immediate (Petre, Minocha, & Roberts, 2006) increasing the emphasis on the quality of the experience and the importance of building long-term relationships with the users (Helm, 2007).

2. Conceptual development

2.1. Online brand experience

Online brands emerge as a result of advancements in information and communication technologies. In one sense, an online brand is just a brand in that it incorporates a name or a symbol and a set of product and service features that are associated with that particular name (Christodoulides & de Chernatony, 2004). Like its offline counterpart, an online brand represents an identifiable product augmented in such a way that customers or users perceive it as valuable and different from competitive products. The subjective perceptions of an integrated bundle of information and experiences evoke in the mind of a consumer, a certain personality presence (Okazaki, 2006) and performance (Parasuraman, Zeithaml, & Malhotra, 2005).

The context in which the consumer experiences the brand is a key distinguishing feature of an online brand (Christodoulides, 2009; Hoffman & Novak, 1996). The online contexts tend to be information rich, dynamic, crowded market spaces characterized by excessive information flow and an emphasis on technological innovation (Helm, 2007; Simmons, 2008; Wu, Gautam, Geng, & Whinston, 2004). The virtual nature of the computer-mediated environment and the associated lack of physical clues heighten the challenges of intangibility and uncertainty (Kollmann & Suckow, 2008). At the same time, these environments open up the possibility for interactivity and a real-time brand experience where customers are empowered to engage with the brand and with other customers (Moynagh & Worsley, 2002). In fact, the continuous two-way interaction with a brand, or its traffic, represents the key asset and indicator of success (Song et al., 2010). Online brands rely on the repeated interaction with users to generate income through advertising, licensing or subscriptions in addition to, and instead of, direct revenues from sales (Helm, 2007; Rowley, 2004). A continuous active relationship with the user remains a critical issue for the brands' survival (Christodoulides, 2009; Kollmann & Suckow, 2008; Song et al., 2010).

Online brand experience (OBE) captures the individual's internal subjective response to the contact with an online brand. OBE derives from the concept of customer experience (Arnold, Reynolds, Ponder, & Lueg, 2005) and involves cognitive and affective states that are multidimensional and individual to each consumer (Gentile, Spiller, & Noci, 2007). OBE captures the rational, cognitive, and goal-oriented responses to a brand as well as the emotional, affective processing of brand experiences (Rose et al., 2011). For example, experiential outcomes include task-related phenomena such as usability and functionality of an online brand (Flavian et al., 2006; Petre et al., 2006) and hedonic experiences such as fun or enjoyment (Bridges & Florsheim, 2008; Lin et al., 2008). OBE represent a key consideration for practitioners and the question of effective design of the user experience is at the forefront of managerial agenda (Hausman & Siekpe, 2009, Rappaport, 2007).

Individuals interact with the online brands across a diverse range of activities leading to different behaviors and experiences (Meyer & Schwager, 2007). The diversity of conceptualizations of OBE reflects the variety in online brands. Internet experience (Nysveen & Pedersen, 2004), customer experience in online environments (Novak, Hoffman, & Yiu-Fai, 2000), total consumer experience (Petre et al., 2006), website brand experience (Ha & Perks, 2005) and online experience (Bridges & Florsheim, 2008; Janda & Ybarra, 2006) are but a few examples of different terms that capture OBE. The current paper views experience as an experiential response to the operator environment (Mollen and Wilson, 2010) and defines online brand experience as a holistic response to the stimuli within website environment.

2.2. Technology acceptance model

The problem of user involvement with an online brand attracts considerable attention among information systems (IS) researchers. Understanding conditions under which a technology product or service will be embraced by users remains a key issue in this research. IS studies address the antecedents and outcomes of OBE typically within the theoretical framework of the technology acceptance model (TAM) (Davis, 1989; Venkatesh, Morris, Davis, & Davis, 2003). TAM postulates that the attitudes one holds about the technology do influence the adoption and use of that technology. In particular, the TAM assumes that a person's beliefs about their ability to use a piece of technology and their subjective evaluation of the usefulness of that technology are the key determinants of behavioral intentions. Empirical studies provide a validation for these assertions in online contexts (Bruner & Kumar, 2005; Ha & Stoel, 2009; Hernandez, Jimenez, & Martin, 2009; Palvia, 2009; Pavlou et al., 2007).

Recent applications of TAM include extensions of the original framework. Studies expand the original model to account for other effects of technology usage beyond and in addition to behavioral intentions including, for example, satisfaction (Wixom & Todd, 2005), loyalty (Flavian et al., 2006), unplanned purchases (Koufaris, 2002), and positive word of mouth (Palvia, 2009). Studies incorporate additional antecedents of attitude or behavioral intentions to more accurately depict conditions under which a technology is perceived as useful (Venkatesh et al., 2003). For example, Gefen, Karahanna, and Straub (2003) and Palvia (2009) focus on trust; Pavlou et al. (2007) consider the mitigating role of perceived uncertainty on purchase intentions. Finally, some conceptualizations amend the original model to account not only for the adoption of technology but also for its use. Pavlou and Fygenson (2006) study distinguishes between two related behaviors: obtaining information and purchasing. Hernandez et al. (2009) compare experienced and inexperienced e-customers to show how adoption differs from acceptance of e-commerce. These modifications expand the model but preserve its original message: the model depicts a usability view of technology adoption where the user's attitude and behavior is primarily a function of cognitive and goal-oriented interactions with a brand that rest on its task-related and the technical performance.

2.3. Brand relationships

Marketing theory argues that brands provide emotional benefits to consumers (Pawle & Cooper, 2006). Feelings matter: consumers affectively bond with specific brands to form brand relationships (de Chernatony & Dall'Olmo Riley, 1998; Dall'Olmo Riley & de Chernatony, 2000; Fournier, 1998). Two aspects indicate the existence of a relationship between the consumer and the brand: the emotional connection and communication (Veloutsou, 2007). The emotional dimension of the bond, including the self-connection and the immediacy, is part of the relationship (Fournier, 1998; Pawle & Cooper, 2006). According to social psychology theory, communication forms the other dimension of the relational bond (Falk & Wagner, 1985; Hinde, 1997), a view supported in the literature on brand relationships (Veloutsou, 2007; 2009; Veloutsou & Moutinho, 2009). Consumers who form deep relationships with brands tend to be actively involved in two-way communication process, that is, in providing and receiving information (Veloutsou, 2007). Affections towards a brand translate

into a positive assessment of quality, satisfaction and loyalty (Aaker & Keller, 1990; Brown & Dacin, 1997; Dacin & Smith, 1994).

According to the marketing view of the online brand experience, the online brand is not only a technology but also a product and the technology user is also a consumer (Song et al., 2010). User interaction with an online brand can be viewed as an ongoing relationship where the experiences associated with the brand create emotional ties between the consumer and the branded product. The functional performance of the brand matters but only as a basic prerequisite for success (Kollmann & Suckow, 2008). Emotional connections between the customer/user and the technology supplement the rational evaluation of the functional and technical performance of the brand (Christodoulides et al., 2006).

Successful brand relationships emerge from positive experiences with a brand (O'Laughlin, Szmigin, & Turnbull, 2004). A brand relationship is the long lasting bond between the brand and the consumer that can be clearly distinguished from other concepts, such as brand attitudes, satisfaction and involvement (Thomson, MacInnis, & Park, 2005). The relationships begin when customers and brands interact; as the frequency and duration of the interaction increases, the relationships become stronger and more sustainable. Whereas functional benefits of the online brand, such as technological features and quality, can be easily replicated, relationship benefits provide a more solid basis for a long term success (Bagozzi, Gopinath, & Nyer, 1999; Kollmann & Suckow, 2008).

2.4. Antecedents and outcomes on online brand experience

Fig. 1 presents an integrative model of the online brand experience. In this model the emotional aspect of a brand relationship supplements the dimension of technology acceptance to provide a more complete understanding of consumer experience with an online brand. The model incorporates TAM variables including perceived usefulness, perceived ease of use and behavioral intentions. Trust and brand reputation represent additional antecedents. The model outcomes include online brand experience, satisfaction (Koufaris, 2002) and online brand relationships (Veloutsou, 2007).

When an online brand is not only a technology but also a product and when technology users are also consumers, the brand reputation can be a determinant of technology acceptance (Song et al., 2010). The reputation of a branded offer is the aggregate perception of the salience of this offer (Fombrun & Rindova, 2000). Brand reputation forms over time and results from brand experiences, some of them sought by the customer and some, such as exposure to advertising, are involuntary and uncontrolled (Veloutsou & Moutinho, 2009). The evaluation of the brand plays a key role in the development of brand relationships (Esch, Langner, Schmitt, & Geus, 2006). In the context of technology research, reputation and image exert a strong influence on the perceived value and usefulness of technology (Venkatesh & Davis, 2000). Familiarity with the brand (Ha & Perks, 2005) and positive perceptions of a brand (Eastlick et al., 2006) are important predictors of trust also because they mitigate concerns about privacy or security (Eastlick et al., 2006).

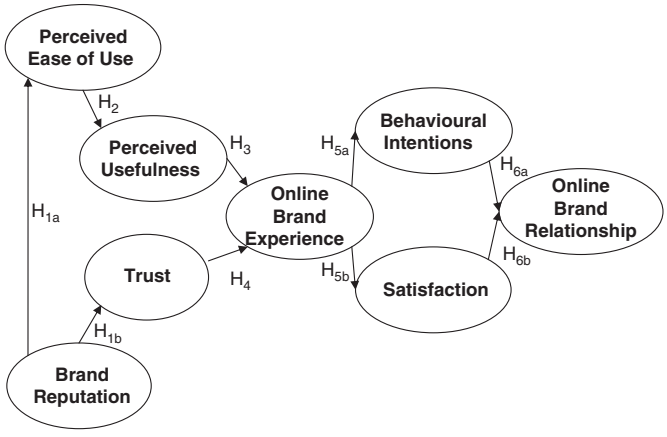

Fig. 1. Conceptual model.

H1a. Brand reputation will have a direct positive effect on the perceived ease of use.

H1b. Brand reputation will have a direct positive effect on trust.

According to TAM, two factors determine an individual's intention to use technology: perceived usefulness (PU) and perceived ease of use (PEU) (Davis, 1989). PEU captures a person's belief that using the system will be free of effort. Research shows that some consumers are more familiar with using technology-based products and might have more confidence in their ability to engage with an online brand (Koufaris, 2002). Self-efficacy is a major factor that underlies motivation (Venkatesh et al., 2003), exerting a significant effect on other perceptions such as usefulness and thereby indirectly determining the final behavior (Hernandez et al., 2009, Palvia, 2009). PU denotes the extent to which a person believes that using the system will enhance their performance. Research findings support the notion that the user's perception of the usefulness of the interactions with an online brand has implications for their attitude and behavior (Flavian et al., 2006; Hernandez et al., 2009). For example, Caruana and Ewing (2010) find that perceived usability positively influences online loyalty. An additional relationship assumes that PEU will influence PU (Palvia, 2009).

H2. The perceived ease of use will have a direct, positive effect on perceived usefulness.

H3. The perceived usefulness will have a direct, positive effect on the online brand experience.

Trust represents a multidimensional construct that is intrinsically linked with the concepts of uncertainty and risk (McCole, Ramsey, & Williams, 2010). Given the relative newness of the internet coupled with the remote nature of the customer-organization relationship online, the concerns about risk seem accentuated. Moreover, the online context requires high-levels of trust compared with face-to-face contact (Corbitt, Thanasankit, & Yi, 2003). Trust influences customers' intentions to engage in online experiences and lack of trust is a primary reason why customers abstain from interactions with online brands (Eastlick et al., 2006; Gefen et al., 2003; Pavlou & Fygenson, 2006). Trust positively influences attitudes towards online purchasing (McCole et al., 2010) and has a mitigating effect on other sources of uncertainty such as privacy concerns, fears of opportunism, or insecurity (Eastlick et al., 2006; Pavlou et al., 2007).

H4. Trust will have a direct positive effect on the online brand experience.

The brand offer differs from the customer's experience of that offer. Online brand experience captures the internal and subjective response to the contact with an online brand (Meyer & Schwager, 2007). Positive online brand experience occurs when the net value of good interactions with the brand exceeds the value of negative ones (Christodoulides et al., 2006). Satisfaction is but one consequence of positive emotional and cognitive states of OBE (Janda & Ybarra, 2006; Kim, 2005). Other consequences might include a person's intention to revisit a website (Koufaris, 2002), re-purchase intentions (Kim, 2005) or loyalty (Flavian et al., 2006).

H5. The online brand experience has a direct positive effect on behavioral intentions (H_{5a}) and satisfaction (H_{5b}).

Positive brand experiences generate repeated interactions and as the frequency and duration of the customer–brand interaction increases, online brand relationships form. Online brand relationships capture the emotional ties that link the consumer to the technology. The relationships with online brands depend on emotional experiences that are created through satisfaction and loyalty (Kollmann & Suckow, 2008). In particular, consumers form stronger relationships with brands that they trust and feel satisfied with (Veloutsou, 2007). These relationships further strengthen the brand making it more difficult for competitors to imitate (Simmons, 2007).

H6. Behavioral intentions (H_{6a}) and satisfaction (H_{6b}) have a direct positive effect on online brand relationships.

3. Research methodology

3.1. Data collection

The results are based on the analysis of primary data collected through a survey of UK users of search engines. Questionnaire development follows a multi-stage process as recommended by Churchill (1979) and updated by Anderson and Gerbing (1988). Insights from a literature review and pre-study work involving detailed interviews with 8 internet users generated an initial pool of questions. The items were evaluated using three methods: expert panel pre-test; and pre-test with a convenience sample. In the first instance, the draft survey was submitted to university doctoral researchers (3) and academic staff (2) for evaluation. Revisions regarding content, wording, structure and presentation were introduced. In the second phase, 6 online users were asked to answer the questions. They were advised that they were taking part in a pre-study and were encouraged to critically evaluate the questionnaire. The answers were timed and evaluated for the ease of response.

Primary data was collected using a fully structured, person-administrated survey using the street-intercept method. Data collection took place in Scotland, United Kingdom, over the period of two months. The research sample comprises 456 respondents. The sample includes 213 male and 242 female respondents and encompasses online search engine users of different ages (sample mean equals 27.4 years), location, income and educational levels. The respondents were asked to name their preferred search engine i.e. the search engine that they used most often in the last 3 months. The most popular engines were Google (80%), Yahoo (8.8%) and MSN (6.8). The answers to questions that followed concerned the preferred search engine (specific search engine).

Although method effects are less pronounced in the context of technology research than in other fields of behavioral study (Malhotra, Kim, & Patil, 2006), the study employs several ex ante and ex post strategies to alleviate the risk of common methods variance (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003). The questionnaire includes different scale-formats, different response anchors, positive and negative statements and assurances about anonymity and confidentiality. In the ex post analysis, the Harman tests fails to identify a single factor that would account for most of the variance.

3.2. Measure development

The existing operationalizations of constructs served as a starting point for the measure development. The development of scales involved an adjustment of wording to fit the current setting and a measure purification procedure with CFA, to test for scale validity and reliability (see Appendix A for details). In all, 31 items capture the nine study constructs. Two 3-item scales based on Davis (1989) measure the perceived usefulness (PU) and the perceived ease of use (PEU). Brand reputation is captured using three items based on Veloutsou and Moutinho (2009). The online brand experience (OBE) scale involves 5 items based on previous conceptualizations, in particular Christodoulides et al. (2006) and Parasuraman et al. (2005). Bart et al. (2005) scales capture trust and behavioral intentions. The scale for satisfaction is based on Bart et al. (2005) and Koufaris (2002). A modified version of Veloutsou's (2007) scales captures two dimensions of brand relationships (OBR): two-way communications and emotional exchange.

The study follows a measure validation procedure with confirmatory factor analysis (CFA) as suggested by Anderson and Gerbing (1988). Appendix A presents the details of the measurement model including the scales, their reliability and validity. All standardized loadings are high and t-values are significant ($p<0.01$). The results of CFA (reflective causal model) are satisfactory $Chi^2 = 750.746$, $df = 379$; root mean square error of approximation (RMSEA) = .046 with the upper confidence interval at 0.051; CFI at 0.933; GFI at 0.904; CMIN below the recommended level of 2 at 1.981 (Hair, Black, Babin, & Anderson, 2006). All standardized loadings are above 0.5 and constructs display good composite reliability of 0.7 and above. It is possible to further improve the measurement model by removing the weaker indicators but this approach is not desirable since the reduction in the number of indicators is likely to diminish the theoretical constructs (Hair et al., 2006). The assessment of discriminant validity involves a comparison between squared interconstruct correlations (SIC) and AVE. The results show that the values of AVE are higher than SIC suggesting acceptable discriminant validity. Table 1 presents interconstruct correlations.

3.3. Hypotheses testing

SEM approach and AMOS software were used to test the research hypotheses. Three models are estimated: a complete model including all constructs (Model 1) and two part-models where either BI (Model 2) or Satisfaction (Model 3) are removed from the analysis. According to the correlation table, Satisfaction or BI is highly correlated and the interaction between the two construct has an effect on other relationships within the model. The fit indexes for all structural models show an acceptable fit with Chi^2 ranging from 671 ($df = 326$) in Model 2 to 750 ($df = 327$) in Model 1; CFI from 0.919 to 0.933 (Model 1); GFI from 0.898 (Model 3) to 0.905 (Model 2); RMSEA ranging from 0.046 (Model 1) to 0.051 (Model 3); CMIN from 1.981 to 2.190.

Table 2 below provides a summary of casual paths in the structural model and the results illustrating the confirmed relationships and their direction. The data does support H_{1a} and H_{1b}: BR has a significant positive effect on PEU and trust, thus indirectly influencing OBE. The analysis confirms strong positive relationships between PEU and PU (H_2). The results provide support for H_3 and H_4 concerning the positive effect of PEU and trust on OBE. As expected, there is a strong positive relationship between OBE and satisfaction (H_{5b}) and OBE and behavioral intentions (H_{5a}). The data supports the assertion that behavioral intentions and satisfaction positively influence online brand relationships (H_6).

Table 1
Correlation matrix.

	BR	PEU	PU	Trust	OBE	BI	S	OBR
BR	1							
PEU	0.48	1						
PU	0.46	0.55	1					
Trust	0.48	0.48	0.31	1				
OBE	0.40	0.45	0.43	0.45	1			
BI	0.31	0.40	0.33	0.32	0.57	1		
S	0.29	0.45	0.34	0.47	0.69	0.60	1	
OBR	0.00	0.14	0.13	0.22	0.24	0.29	0.42	1

Table 2
Summary of SEM results.

				Path estimate	Standardized path estimate	Sig.
H_{1a}:	BR	→	PEU	0.83	0.73	0.00
H_{1b}:	BR	→	Trust	0.77	0.66	0.00
H_2:	PEU	→	PU	0.84	0.89	0.00
H_3:	PU	→	OBE	0.34	0.40	0.00
H_4:	Trust	→	OBE	0.33	0.43	0.00
H_{5a}:	OBE	→	BI	0.73	0.80	0.00
H_{5b}:	OBE	→	Satisfaction	0.96	0.97	0.00
H_{6a}:	BI	→	OBR	0.45	0.31	0.00
H_{6b}:	Satisfaction	→	OBR	0.42	0.34	0.00

4. Discussion

4.1. Theoretical implications

Despite the significant progress in the understanding of online brands (Caruana & Ewing, 2010; Da Silva & Syed Alwi, 2008a; Lin et al., 2008) and online brand experience (Petre et al., 2006; Rose et al., 2011; Mollen & Wilson, 2010), the problem of capturing multiple antecedents, facets, and outcomes of experience in different online contexts remains a key research challenge (Taylor & Strutton, 2010). The present study contributes to existing literature in four important ways. Firstly, the research model extends the notion of experiencing the brand to include the emotive responses and connections with the brand that build over time, namely brand relationships. Secondly, the model identifies brand reputation to be an important moderator of perceived ease of use and trust in non-retailing context. Thirdly, the model combines insights from marketing and IS literature. Finally, the focus on an online context that is different from retailing addresses an important bias in current research.

A key contribution concerns the extension of the model. Rather than focus on satisfaction (Ha and Perks, 2005) or loyalty (Caruana & Ewing, 2010), the outcomes of OBE capture the long-term emotive connection with an online brand–brand relationship (Veloutsou, 2007). The results show that brand relationships represent an important outcome of the online brand experience. In time, positive interactions with an online brand lead to more than immediate satisfaction: consumers form relationships with the brands they interact with. Marketing literature maintains that enduring customer–brand relationships are essential to the success of offline brands (Fournier, 1998; Veloutsou, 2007). The evidence presented here shows that they are also important in online environments and in relation to search engines. In fact, these online brands show significant similarities with offline counterparts: in order to build a strong brand, trust and product quality must be enriched with brand related feelings that emotionally connect the customer and the brand (Kollmann & Suckow, 2008). Creating bonds and connecting to brands' emotional values might prove to be a valuable anchor of stability amid the change, uncertainty and confusion that is so pervasive in electronic markets (Simmons, 2007).

A key finding concerns the role of brand reputation in explaining the online brand experience. The results show that brand reputation is an important precondition of online brand experience having an effect on perceived ease of use and trust thus indirectly affecting satisfaction and behavioral intentions (Flavian et al., 2006). The empirical model suggests that brand reputation is a key antecedent of trust; that is, brand reputation mitigates the uncertainty and the brand seems a reference point that reduces perceived risk and creates trust (Kollmann & Suckow, 2008). An important relationship links brand reputation and the perceived ease of use: it seems that brand reputation brings down the psychological barriers to adoption of technology and has an effect on the perceptions of self-efficacy. Previous studies examine the positive interactions between reputation, trust and perceive ease of use in the context of online purchasing and with reference to online retail brands (Eastlick et al., 2006; Ha and Perks, 2005). Notably, these relationships remain relevant and significant in the search engine context where consumer experiences are narrower, more immediate and where the costs of interaction with the brand are much lower (Wu et al., 2004). The relationship between brand reputation and ease of use has important implications for TAM further illuminating what "easy" or "useful" might mean to the user (Venkatesh, Davis, & Morris, 2007) and how brands can influence that meaning. Taken together, the results strongly undermine the view that brand building is redundant in online environments. Quite the reverse: strong brands seem to represent a key asset in the crowded, uncertain and ever changing online environment (Christodoulides, 2009). Having a reputable brand seems an important precondition for success (Da Silva & Syed Alwi, 2008b; Kwon & Lennon, 2009).

Understanding conditions that lead to a positive online brand experience represents a complex problem that spans across disciplinary boundaries (Rose et al., 2011; Taylor & Strutton, 2010). The results of this study provide a strong support for an integrated view of the online brand experience that incorporates both marketing and information systems constructs. Online brand experiences emerge as an outcome of emotive considerations such as perceived brand reputation (Kwon & Lennon, 2009) and rational beliefs about self-efficacy or the usefulness of the online brand (Davis, 1989). Behavioral intentions only partially capture outcomes of the experiences (Koufaris, 2002). Positive user interaction leads to satisfaction (Kim, 2005) and over time, emotional connections emerge between users and brands to form brand relationships (Veloutsou, 2007). The study contributes to IS theory in that it explicitly recognizes the role of affections as antecedents and outcomes of brand experiences providing new insights into the antecedents of technology use. Subjective perceptions of brands are seemingly important artifacts of ease of use (Da Silva & Syed Alwi, 2008a). Satisfaction is a key outcome alongside behavioral intentions (Palvia, 2009). Brand relationships, the emotive ties that link the consumer with the brand, represent the cumulative result of the positive interactions with a brand (Fournier, 1998). The explicit recognition of the online brand as a technology product with functional requirements that may present a barrier to its adoption represents an important addition to the marketing literature. The application of an IS model to consumer interaction with a search engine provides an interesting extension of buyer behavior into a context where no purchasing takes place (Helm, 2007).

4.2. Managerial implications

This study draws managerial attention to the subjective aspects of brand experience and the emotive outcomes of these experiences. Online brands are intrinsically linked with technological developments: at the core of many of the most famous names are the technologists (who founded the business) and superior technological solutions that provided a competitive edge (Helm, 2007). In the past, technological opportunities rather than market demands drove the growth of that sector (Helm, 2007). Branding efforts revolved around product features and performance, because innovation and product advancement were seen as drivers for competitive advantage. The reported findings draw attention to the non-functional aspects and long-term outcomes of brand experience (Mollen & Wilson, 2010). The managers should recognize the growing strategic significance of emotions when brand building (Bagozzi et al., 1999) and the emotional value added for a differentiated positioning (Rappaport, 2007). The emotions are relevant not only in the online purchasing context but also with reference to seemingly functional online brands — search engines. The overarching managerial implication from this study is the need to build and maintain strong brands based on emotional connections with the users that go beyond the functional benefits of quality, product features, or technical performance.

5. Conclusion and directions for future research

The current research responds to calls for a more integrative view of user interaction with an online brand. The results show than online brand experiences depend on the perceptions of the usefulness of the brand, trust and indirectly, on its reputation. Positive experiences lead to satisfaction, behavioral intentions and in turn, to emotional ties with the brand.

The results draw attention to the importance of emotive brand experiences in the context of search engines. Online environments are, by their nature, information-based service environments that are fundamentally linked with technology and technological innovation. In this crowded and ever changing market-space, branding emerges as a key weapon in fight for consumer attention.

This study is not without limitations. The cross-sectional design captures data at a point in time and does not fully address the causal relationships among the study constructs. The approach only partially explores of the dynamics of the interrelationships and the richness and multidimensionality of the constructs. Future research should employ longitudinal designs to address the dynamics, complexity and causality effects. The use of a non-randomized sampling design represents another limitation. The large sample size and the demographic representativeness of the sample provide some assurance of validity but the responses are limited to a narrow geographical area. Future studies could use the internet to collect data from larger populations. Although such a design does not provide a probability sample, the large sample size would further increase confidence in the generalizability of findings. The measurement model represents a key area of concern. Although all measures are based on existing studies, the reduction of the scale response format to 5 points adversely affected variability and validity of the scales (Churchill & Peter, 1984). Future research should revalidate the measurement scales developed and used in this study. Finally, although the results support the importance of branding in online environments, the study incorporates only a small subset of branding constructs. For example, the study did not explore the role of brand personality in shaping consumer experiences. Future studies should consider other aspects of branding, specifically brand personality, alongside the study constructs.

Appendix A. Measurement model

Constructs	Mean	Std. dev.	Stand. reg. weights	CR	Cronbach alpha
Perceived ease of use					
It is easy for me to use search engines	4.5	0.76	0.82	0.75	0.73
I find it easy to get a search engine to do what I want	4.0	0.86	0.80		
I feel confident about using a search engine	4.3	0.87	0.56		
*It is difficult to find the information I want (reversed)**					
Perceived usefulness					
Online searches improve my ability to find what I want	4.4	0.76	0.76	0.71	0.71
*Search engines are effective in finding most relevant information**			0.54		
It is very convenient to search for information online	4.3	0.98	0.70		
*Online searching provides speedy answers to my questions**					
Overall, I find search engines useful	4.3	1.07			
Brand reputation					
This search engine is well known	4.6	0.8	0.72	0.73	0.74
It is one of the leading search engines on the web	4.6	0.67	0.73		
This search engine is reputable*					
It is easily recognizable	4.6	0.68	0.63		
Trust					
I have trust in this search engine	4.4	0.76	0.85	0.77	0.74
I feel safe when I use it	4.2	0.86	0.79		
Its developers are genuinely committed to my satisfaction	3.6	0.89	0.52		
It appears to be more trustworthy than other search engines					
*It is not very secure (reversed)**					
Online brand experience					
The web page layout is appealing	4.1	0.79	0.70	0.78	0.76
It is easy to navigate	4.2	0.83	0.69		
Results are always returned promptly	4.2	0.81	0.61		
*The site set up can be personalized to my needs**					
The results are always up to date	3.8	0.94	0.70		
Accurate search results are always returned	3.9	0.81	0.63		
Satisfaction					
This search engine entirely fulfills my needs	3.9	0.89	0.69	0.70	0.70
*This search engine has not been as good as I thought it would be (reversed)**					
The search engine provides the results I want	4.2	0.74	0.63		
This search engine usually meets my expectations	4.2	0.73	0.67		
Behavioral intentions					
I intend to use this search engine again	4.6	0.65	0.73	0.71	0.68
I would bookmark this site	3.9	1.1	0.67		
I would strongly recommend this search engine to others	4.2	0.79	0.61		
*It is unlikely I will use it in the future (reversed)**					
Online brand relationship					
I want to be informed about this search engine	2.9	1.07	0.67	0.79	0.84
*If e-mails about this search engine are sent to me, I get annoyed**					
I am more willing to learn news about this search engine than others	3.2	1.03	0.59		
I am interested in information about this search engine	3.0	1.08	0.79		
I am willing to give feedback to its developers	3.1	1.11	0.71		
I care about the developments relevant to this search engine	3.2	1.1	0.70		
It means more to me than other brands	3.3	1.02	0.68		
I believe using it is in my best interest	3.5	0.92	0.80		
Over time this search engine becomes more important to me	3.1	1.12	0.58		

* *Items removed in measure purification procedures*

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