The Conceptualisation And Measurement Of Perceived Value In Social Media: The Case Of Facebook Brand Pages

ABSTRACT

The paper focuses on online consumer-brand relationships and explores how perceived value can be conceptualized and measured in social media brand pages, by identifying the benefits and costs consumers-members of Facebook brand pages perceive. Data were collected from consumers who follow popular brands on Facebook, with the use of a questionnaire that was uploaded on the Facebook fan pages of the two leading companies in Greece. Results indicate that perceived value in social media brand pages can be conceptualized as a second-order construct consisting of seven relational benefits i.e. social, special treatment, self-enhancement, enjoyment, functional and advice benefits, and three relational costs i.e. privacy concern, information overload and ad irritation. Further, this value had a significant impact on fan page relationship quality. The study proposes social media practices towards the enhancement of perceived value, through a balanced delivery of relational benefits and costs.

Keywords: Brand Pages, Perceived Value, Relational Benefits, Relational Costs, Relationship Quality.

INTRODUCTION

The rise of Web 2.0 technologies like online blogs, forums and social networking sites, has significantly changed not only the means of communication between Internet users, but also the ways consumers interact with the brands they purchase from (Hudson et al. 2016). Attracted by the interactive nature and popularity of social media, firms are increasingly creating brand fan pages on popular social media platforms, to interact, build and enhance relationships with their customers (Relling etal. 2016; Saboo et al. 2016). In the marketing literature, the most prominent theoretical paradigm that conceptualizes the mechanisms that are responsible for and explains in a significant degree the success or failure of relationships between firms and their customers, is the *relational benefits & costs - perceived value – relationship quality* approach (e.g. Gwinner et al. 1998; Palmatier et al. 2006; Ravald and Grönroos 1996). Recent research shows that the marketing budgets directed towards social media are constantly growing, suggesting that brands are increasingly establishing brand pages on popular social media platforms (Hudson et al. 2016). Through such pages, firms not only connect and build relationships with their customers, but also deliver value to existing and prospective customers, through a blend of brand and non-brand related activities and content they offer. Even though social media have been recognized as a powerful medium for digital marketing and relationship building purposes, no studies have attempted to capture the value consumers perceive through their participation in social media brand pages, and its impact on online consumer-brand relationships.

Considering this gap, the increasing use of social media brand pages as a digital marketing tool, and the recent calls for further research on the topic (e.g. Hudson et al. 2016; Saboo et al. 2016), this study aims to: i) identify the different relational benefits and costs consumers perceive from participating in social media brand pages, ii) examine their relative contribution in forming perceived value, and iii) confirm the impact of this perceived value on online relationship quality.

THEORETICAL BACKGROUND

Social Media Brand Pages

Social media platforms have emerged as a major digital marketing tool, through which marketers can engage in two-way communications with existing and potential customers. Traditionally, companies have tried to connect and build up relationships with consumers through traditional marketing activities such as direct marketing, reward programs and public relations (Jahn and Kunz 2012). Recent research shows that the marketing budgets directed towards social media are constantly growing, suggesting that brands are increasingly interested in having a presence in social media, by establishing brand pages on popular social media platforms (Hudson et al. 2016). Social media brand pages can be found in the literature as "brand fan pages" (Jahn and Kunz 2012) or as "company social networks", which according to Martins and Patricio (2013, p. 568) are "a group of people (followers, fans) connected to a company or brand within the boundaries of a social network site". Through such pages, companies offer activities and content related with the brand or the core product/service, while consumers learn about, interact with, and share information on the brands they love and buy from (Hudson et al. 2016).

Relational Benefits and Costs in an Online Environment

According to the theory of relationship marketing, in order for a relationship to last and develop, both parties should receive some short of benefits, in addition to those stemming from the core-product/service. Based on this assumption, two widely adopted and used typologies were proposed by Gwinner et al. (1998) (i.e. "confidence benefits", "social benefits", and "special treatment benefits") and by Reynolds and Beatty (1999) (i.e. "social benefits" and "functional benefits"). Several subsequent studies have confirmed the existence and importance of these benefits in various offline traditional contexts. With the emergence of Internet, e-commerce, and virtual communities (i.e. forums), a number of authors has confirmed the existence of the above relational benefits in the online environment, or identified new ones such as "self enhancement benefits" (e.g. Hennig-Thurau et al. 2004), "status benefits" and "perceived enjoyment" (e.g. Li 2011) and "advice benefits" (e.g. Hennig-Thurau et al. 2004).

Apart from benefits, the development and maintenance of a relationship between customers and firms is supposed to generate for or require from the customer some sort of sacrifices and costs (Bendapudi and Berry 1997; Morgan and Hunt 1994). Several studies suggest that the use of online environments such as e-commerce and personal social networking websites is accompanied by a series of consumer concerns, unpleasant experiences and feelings, related with and derived from company marketing and promotional actions, such as "privacy concern" (e.g. Ku et al. 2013), "information overload" (e.g. Chen et al. 2009), and "ad irritation" (e.g. Baek and Morimoto 2012).

Relationship Quality

A fair number of studies in marketing literature, consider relationship quality as a meta-construct composed mainly of three key interrelated components, namely trust, commitment and satisfaction (Palmatier et al. 2006), reflecting the overall nature of relationships between companies and consumers (Hennig-Thurau et al. 2002). These three dimensions are widely studied as consensual indicators of relationship quality, as each one of these three dimensions captures a different facet of the quality of the consumer-company relationships. Although relatively fewer studies were conducted in an online context, the three key dimensions of the construct have been shown to be important in an online (e.g. retail) context by several researchers (e.g. Rafiq et al. 2013).

Perceived Value

Perceived value is broadly defined as the customer's assessment of what is received relative to what is given (Zeithaml 1988). Ravald and Grönroos (1996) have suggested that value assessments should take into account relational benefits for relational exchange. It is generally supported that relational benefits add to the perceived value of a product or service because the relationship is strengthened when customers perceive benefits beyond their satisfaction with the core product or service (Liljander 2000). Towards this direction, literature further supports that perceived value could be enhanced not only by adding benefits to a product or service, but also by reducing the costs associated with the use of the product/service (Ravald and Grönroos 1996). Therefore, customers are more likely to remain in a relationship when the benefits exceed the costs they perceive (Zeithaml 1988), and this will further have a positive impact on relationship quality dimensions, i.e. satisfaction, trust and commitment (Moliner 2009).

Although a number of studies has theoretically proposed or empirically tested the existence of various individual benefits and unpleasant experiences perceived by Internet users in several online contexts (i.e. e-commerce websites, online communities, personal social networking sites), none of them has identified and examined what relational benefits and costs consumers simultaneously perceive through their participation in company created social media brand pages, and their importance in forming value perceptions. Furthermore, to the best of our knowledge, so far, no study has examined how perceived value from social media brand pages impacts online consumer-brand relationships.

Hence, this paper aims to:
i) Identify the benefits and costs consumers perceive through their participation in Facebook brand pages; ii) Explore their relative importance in forming perceived value, and; iii) Confirm the impact of this perceived value on the three dimensions of fan page relationship quality, i.e. fan page trust, fan page commitment, and fan page satisfaction.

METHODOLOGY

Measurement Instrument

The data for this research were collected through a survey instrument, in which relational benefits and costs were initially identified through a series of focus groups with frequent social media users who follow popular brands, while then scales were adopted from the extant literature, and modified to serve the purpose of the study. **Relationship quality**: *satisfaction* and *commitment* (Hennig-Thurau et al. 2002); t*rust* (Chauduri and Holbrook 2001). **Relational benefits**: *social benefits* (Gwinner et al. 1998; Hennig-Thurau et al. 2004); *special treatment benefits* (Gwinner et al. 1998); *self enhancement benefits* and *advice benefits* (Hennig-Thurau et al. 2004); *status benefits* (Li 2011); *enjoyment benefits* (Li 2011; Wang et al. 2013); *functional benefits* (Reynolds and Beatty 1999). **Relational costs**: *privacy concern* (Ku et al. 2013); *information overload* (Chen et al. 2009; Winzar and Savik 2002); *ad irritation* (Baek and Morimoto 2012). The items for all the studied constructs can be found in the appendices (Tables 1 and 3).

Sample and Data Collection Procedures

The survey instrument was pre-tested with a group of consumers who are fans of popular brands on Facebook. The questionnaire was then uploaded on the Facebook fan pages of (and in cooperation with) the two leading technology/computers retailers in Greece. A seven-point Likert scale ranging from "strongly disagree" to "strongly agree" was used. This process resulted in 476 fully completed & usable questionnaires. The sample was mainly male (61.6%), between 18-34-year old (70.6%), and University/College educated (72.2%).

DATA ANALYSIS AND RESULTS

Data were analysed in three steps. Firstly, a first-order confirmatory factor analysis (CFA) was performed (AMOS 20.0) on ten latent constructs to assess the reliability and validity of the relational benefits and costs identified in the focus groups and in the literature, as a first-order construct (Table 1). Fit indices for the measurement model ($\chi 2$ = 2590.15, df = 1266, CFI = .948, TLI = .943, NFI = .903 and RMSEA = .047) were acceptable (Schumacker and Lomax 2014). Cronbach's alpha values of all the constructs were greater than 0.8 (Hair et al. 2009), while the composite reliability values are generally greater than 0.9 (Bagozzi and Yi 1988). As can be seen in Table 1, all indicators have significant loadings (at $p < .001$) onto the respective latent constructs with values between 0.647 and 0.965, while the the average variance extracted (AVE) for each construct is greater than 0.57, indicating convergent validity of the constructs (Fornell and Larcker 1981).

As an intermediate step, CFA was also performed on relationship quality dimensions, with results indicating good model fit and convergent validity for the constructs (Table 3).

Next, a second-order CFA (Table 2) was conducted (AMOS 20.0) to test perceived value as a second-order model of ten first-order factors (relational benefits and costs). Fit indices ($\chi 2$ = 2733.936, d.f. = 1296, CFI = .943, TLI = .940, NFI =. 898 and RMSEA = .048, PRATIO = .940, PNFI = .844, PCFI = .887) are acceptable, which shows that the second-order operationalisation of perceived value fits the data well. Since higher-order factor models are more parsimonious, they should perform better on parsimony indices like PRATIO, PNFI and PCFI, as compared to the first-order factor models (Hair et al. 2009). Comparing the fit indices of the first-order and second-order models, we note that the second-order perceived value model performs better than the first-order model on PRATIO, PNFI and PCFI indices, while each of the first-order factors have significant loadings onto the second-order perceived value, allowing us to conclude that the overall fit of the second-order perceived value model is acceptable.

During the last step, a structural equation model (see Figure 1 in Appendices) of the relationships among perceived value and relationship quality dimensions was fitted to the data (AMOS 20.0). Results suggest that the tested model fits relatively well the data ($\chi 2$ = 4069.687, df =1919, CFI = .935, TLI = .932, NFI =. 884, RMSEA = .049). Path coefficients shown in figure 1, indicate that perceived value impacts relationship quality dimensions i.e. *fan page trust* (i.e. $\beta = 0.741$, $p < .001$), *fan page commitment* (i.e. $\beta = 0.746$, $p < .001$) and *fan page satisfaction* (i.e. $\beta = 0.717$, $p < .001$) positively. This is in line with previous studies (e.g. Moliner 2009), providing further evidence that the examined second-order construct of perceived value that consists of the ten identified relational benefits and costs is acceptable.

DISCUSSION, IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH

Building on the digital and relationship marketing literatures, and to the best of our knowledge, this study is the first attempt to examine how perceived value can be conceptualised and measured in the environment of social media brand pages, providing a holistic approach of the "benefits/costs-perceived value-relationship quality" paradigm. Findings indicate that perceived value in Facebook brand pages can be conceptualised as a second-order construct that consists of seven relational benefits and three relational costs, having a positive and negative contribution respectively. The positive impact of perceived value on the online relationship quality highlights the importance of this perceived value (conceptualised as relational benefits/costs) in building online consumer-brand relationships.

Following study's findings, brand managers could adjust their social media strategies to enhance and moderate users' perceived relational benefits and costs, accordingly. For example, social benefits could be developed by adding social features that could enhance consumer-to-consumer/brand interactions (e.g. interactive knowledge games). For enhancing special treatment benefits, firms could be interacting personally with each one of their fans, e.g. by mentioning the name of the user while answering questions in comments. Regarding the enhancement of the status and self enhancement benefits, marketers could strengthen the information sharing capability of their fan pages, giving fan page users the opportunity to tell others about their experiences with the company's products, and feel that they are a valued member of the fan page. Online events and contests could put consumers in good mood and increase perceptions of enjoyment benefits. Furthermore, by providing useful and informational content to their fans, companies can make them feel that they gain value and enhance perceptions of functional and advice benefits. Similarly, limiting the frequency of Facebook page updates and avoiding over-pushing could limit information overload perceptions. When posting updates, companies have to make sure that they are providing useful content, not overly promotional advertising for their products and services. Additionally, firms should define a clear policy about users' personal data on Facebook, and inform their fans about the handling of their profile information.

As there are various social media, with different characteristics and audiences, and every social network transmits messages to users differently, the results of the study cannot be generalized to all available social media platforms. Users of other social media platforms such as Twitter, Snapchat and Instagram, should be reached to provide a better-grounded view of consumers' perceptions of relational benefits and costs. Also, a longitudinal examination of social media participation would allow observing how perceptions of benefits and costs are affected by changes and new added features of social media.

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Table 1: Relational Benefits & Relational Costs – First-Order CFA

Model fit: χ2 = 2590.15 (p<0.001), df=1266, CFI= .948, TLI= .943, NFI=. 903, RMSEA= .047, PRATIO = .919, PNFI = .830, PCFI = .871				
Constructs	**Items**	**SL**	**CR**	**AVE**
Social Benefits (a= .926)	1. I am recognised by certain users of the fan page	.767	.926	.584
	2. I am familiar with the fan page administrator	.712		
	3. I have developed friendships with other users	.818		
	4. Users know my name	.753		
	5. I enjoy certain social aspects of the relationship with the company	.764		
	6. I enjoy certain social aspects of the relationship with other users	.869		
	7. I believe a chat among like-minded people is a nice thing	.647		
	8. It's fun to communicate this way with other people in the fan page	.761		
	9. I meet nice people this way	.765		
Functional Benefits (a= .929)	1. I value the convenience benefits the fan page provides me very highly	.837	.921	.744
	2. I value the time saving benefits the fan page provides me very highly	.846		
	3. I benefit from the advices the fan page gives me	.915		
	4. I make better purchase decisions	.850		
Self Enhancement Benefits (a= .951)	1. I can express my joy about a good buy of a product that company sells	.892	.951	.830
	2. I feel good when I can tell other fan page users about my buying success	.913		
	3. I can tell other fan page users about a great experience with the company	.935		
	4. My contribution to the fan page shows others that I am a clever customer	.903		
Enjoyment Benefits (a= .929)	1. I have fun using the fan page	.896	.933	.739
	2. Using the fan page provides me with a lot of enjoyment	.935		
	3. I enjoy using this fan page	.950		
	4. It's boring for me to use the fan page	.680		
	5. Participating in the fan page entertains me	.808		
Special Treatment Benefits (a= .930)	1. I get discounts, coupons & special deals that non-fan page users don't get	.648	.915	.646
	2. I get better prices than non-fan page users	.762		
	3. The company does services for me that they don't do for non-fan page users	.752		
	4. I am given priority over customers who are non-fan page users	.946		
	5. I get faster service than non-fan page users	.834		
	6. I get better service than non-fan page users	.849		
Status Benefits (a= .967)	1. My image among the users is improved	.923	.967	.881
	2. My status among the users is increased	.965		
	3. I am becoming a more valued member of the page	.919		
	4. My popularity among the other users is increased	.947		

Advice Benefits (a= .948)	1. I receive tips from other fan page users about the products that company sells	.938	.948	.902
	2. I receive advice from other fan page users that helps me solve problems with the products that company sells	.961		
Ad Irritation (a= .963)	1. When the fan page posts advertising messages, I think it is Negative	.804	.961	.756
	2. When the fan page posts advertising messages, I think it is Irritating	.836		
	3. When the fan page posts advertising messages, I think it is Pointless	.836		
	4. When the fan page posts advertising messages, I think it is Unappealing	.944		
	5. When the fan page posts advertising messages, I think it is Regressive	.929		
	6. When the fan page posts advertising messages, I think it is Unattractive	.846		
	7. When the fan page posts advertising messages, I think it is Vulgar	.859		
	8. When the fan page posts advertising messages, I think it is Awful	.892		
Information Overload (a= .890)	1. There is too much information on this fan page that I am unable to handle it	.683	.885	.570
	2. I can effectively handle all the information on this fan page (*reversed item)*	.486		
	3. Because of the plenty information on this fan page, I feel difficult in acquiring all this information	.777		
	4. The fan page posts messages too often	.846		
	5. I have no idea about where to find the information I need on this fan page	.798		
	6. I feel overloaded by the amount of information on this fan page	.872		
Privacy Concern (a= .919)	1. It bothers me when this fan page asks me for this much personal information	.771	.919	.696
	2. I am concerned that this fan page is collecting too much personal information about me	.908		
	3. I am concerned that unauthorized people may access my personal information	.849		
	4. I am concerned that this fan page may keep inaccurate personal information about me	.821		
	5. I am concerned about submitting information to this fan page	.815		

Table 2: Perceived Value - Second-Order Confirmatory Factor Analysis

Second-order factor	First-Order Constructs				
		Social Benefits	*Functional Benefits*	*Self Enhancement Benefits*	*Enjoyment Benefits*	*Special Treatment Benefits*
Perceived Value	**SL**	.809	.821	.791	.766	.667
	p-value	***	***	***	***	***
		Status Benefits	*Advice Benefits*	*Ad Irritation*	*Information Overload*	*Privacy Concern*
	SL	.745	.633	-.149	-.026	-.190
	p-value	***	***	***	***	***

Model fit: χ2 = 2733.936 (p<0.001), df=1296,
CFI= .943, TLI= .940, NFI=. 898, RMSEA= .048, PRATIO = .940, PNFI = .844, PCFI = .887

Table 3: Fan Page Relationship Quality Confirmatory Factor Analysis

Constructs	Items	SL	CR	AVE
Fan Page Satisfaction (a= .959)	1. My choice to use this fan page was a wise one	.886	.961	.859
	2. I am always delighted with using this fan page	.903		
	3. Overall, I am satisfied with this fan page	.945		
	4. I think I did the right thing when I decided to use this fan page	.971		
Fan Page Trust (a= .948)	1. I trust this fan page	.954	.948	.859
	2. I believe it is a reliable fan page	.937		
	3. This is an honest fan page	.889		
Fan Page Commitment (a= .969)	1. My relationship to this specific fan page is very important to me	.915	.970	.891
	2. My relationship to this specific fan page deserves my maximum effort to maintain	.943		
	3. My relationship to this specific fan page is something I really care about	.975		
	4. My relationship to this specific fan page is something I am very committed to	.941		

Model fit: χ2 = 110.631 (p<0.001), df=36,
CFI= .988, TLI= .983, NFI=. 984, RMSEA= .066

Figure 1: Research Model

Note: ***Path coefficients significant at *p* < .001
Model fit: χ2=4069.687 (p<0.001), df=1919, CFI=.935, TLI= .932, NFI=.884, RMSEA=.049