

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/322966992>

Determinants of Pinterest affinity for marketers using antecedents of user-platform fit, design, technology, and media content

Article in *International Journal of Technology Marketing* · January 2017

DOI: 10.1504/IJTMKT.2017.089646

CITATION

1

READS

2,276

4 authors, including:



Sunil Hazari

University of West Georgia

51 PUBLICATIONS 487 CITATIONS

[SEE PROFILE](#)



Beheruz N. Sethna

University of West Georgia

38 PUBLICATIONS 906 CITATIONS

[SEE PROFILE](#)



Cheryl OMeara Brown

University of West Georgia

8 PUBLICATIONS 52 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



'TikTok Made Me Buy It': Investigating brand influencer impact on purchase intention of TikTok users [View project](#)



Determinants of #Pinterest Affinity for Marketers Using Antecedents of User-platform Fit, Design, Technology, and Media Content [View project](#)

Determinants of Pinterest affinity for marketers using antecedents of user-platform fit, design, technology, and media content

Sunil Hazari*, Beheruz N. Sethna and
Cheryl O'Meara Brown

Department of Marketing and Real Estate,
Richards College of Business,
University of West Georgia,
Carrollton, GA, USA

Email: shazari@westga.edu

Email: bnsethna@westga.edu

Email: cbrown@westga.edu

*Corresponding author

Abstract: Social media networks have attracted a large number of users over the year which has increased its potential as a marketing channel. It is important for marketers to investigate characteristics and differentiators in these social media platforms so unique marketing strategies can be used. The Pinterest social media network is a much smaller platform as compared to other larger social media sites such as Facebook, Snapchat, WhatsApp, Instagram, YouTube, and Twitter. Pinterest has a comparatively smaller user base that has been underutilised as a marketing channel. However, Pinterest offers tremendous potential for marketers because of niche appeal in a strong visual medium. Using antecedents of usability, design, user-platform fit, and media content of the Pinterest platform, this study investigated user affinity toward Pinterest. Pinterest affinity, in this study, refers to composite constructs of value, loyalty, and trust experienced by Pinterest users. The results of the study showed that user-platform fit, technical characteristics, design, and purchase intention constructs were important determinants of users' affinity toward Pinterest. Based on these findings, managerial implications and recommendations to marketers on Pinterest are discussed.

Keywords: social media; Pinterest affinity; usability; user-platform fit media content; trust; purchase intention.

Reference to this paper should be made as follows: Hazari, S., Sethna, B.N. and Brown, C.O. (2017) 'Determinants of Pinterest affinity for marketers using antecedents of user-platform fit, design, technology, and media content', *Int. J. Technology Marketing*, Vol. 12, No. 3, pp.230–251.

Biographical notes: Sunil Hazari is a Professor of Marketing in the Richards College of Business, University of West Georgia. He has authored several peer-reviewed journal publications in information technology, business education, digital marketing, and social media. He has presented papers at national conferences and is an editorial board member of several journals.

Beheruz N. Sethna is the President Emeritus and Regents' Professor of Marketing in the Richards College of Business, University of West Georgia. He earned his PhD in Marketing from the Columbia University in 1976. He has

published in diverse fields such as higher education, gifted education, human-computer interaction, the use of engineering models in marketing, health marketing, and online marketing.

Cheryl O'Meara Brown is a Senior Lecturer in the Department of Marketing in the Richards College of Business, University of West Georgia. Her teaching and research interests are in marketing research and digital marketing. She has served as a consultant to several organisations.

1 Introduction

Social media networks have transformed how users communicate, share, create, and consume content from companies as well as from other users. Media rich content has provided an opportunity for ubiquitous media consumption using a variety of internet-connected devices such as smartphones and tablets. Social media has influenced the marketing efforts of companies as they recognise the changing role and scale of consumers and the way in which marketing communication is shared and evaluated (Patino et al., 2012). The Web 2.0 phenomenon that provides platforms for collaboration and communication has been leveraged by social media platforms such as Facebook and YouTube to engage users with content, other users, and businesses. Thackeray et al. (2008) had observed that social media can provide an opportunity to connect with customers using richer media with a greater reach.

Despite concerns about privacy and security, users are eager to reveal and share information on social networks. Marketing communication continues to shift toward a user-centric model and away from the conventional media model that was characterised as being publisher-centric (Daugherty et al., 2008). Companies such as Facebook, Google, LinkedIn and Twitter have built specialised social networking sites that provide unique value propositions based on user needs and expectations. For example, Facebook was initially used for communication between family and friends, but later included features to 'Follow' and 'Like' businesses. LinkedIn is a network for professionals to access knowledge, insights, and job opportunities in business and industry. YouTube is a social network that hosts user-generated content and encourages comments and idea sharing that is related to video content.

Companies have realised the value of building social capital and have engaged customers in marketing activities by using social media platforms (Fogel, 2010; Diffley et al., 2011). There is increased interest in leveraging social media platforms from not only online businesses, but also traditional brick-and-mortar businesses seeking to use the power of social media to acquire new customers as well as retain existing customers. Tsimonis and Dimitriadis (2014) state that organisations using social media can forge relationships with customers, and form communities that interactively collaborate to identify problems and develop solutions. While Facebook has proven to be a powerful advertising platform to generate sales (Tucker, 2014), companies such as Honda, Sony, Whole Foods, Kraft Foods, Lowe's, Nordstrom, Zappos, and The Container Store have also started using smaller social media networks such as Pinterest as a marketing channel. There is a need to investigate Pinterest's potential fit in a business's marketing plan in

order to attract and retain customers based on constructs such as loyalty, value, and purchase intention.

Despite Pinterest's growing number of users and a niche platform that offers marketing opportunities from a visual perspective to an audience of 70 million users, few academic works have investigated the dynamics of Pinterest marketing. Hill and Moran (2011) have called for a better understanding of how consumers use the different social media platforms and recommended investigations into how these platforms affects consumer behaviour in a distinct way. The purpose of this study was to investigate user affinity toward Pinterest using criteria such as usability, user-platform fit, technology and design, purchase intention, and browsing behaviour. These Pinterest-related constructs should be of interest to marketing researchers and practitioners because higher loyalty, perceived value, and trust with a social media platform may lead to increased awareness, or sales, of products displayed on a social media platform. Further, since Pinterest uses a different social networking model that focuses more on content sharing than on user communication, research is needed to investigate users' preferences for (or aversions to), the Pinterest platform. Marketers can then acquire a better understanding of differentiated marketing opportunities in smaller social media platforms such as Pinterest.

2 Review of literature

The popularity of social media networks has convinced many marketing managers to include social networks in their marketing strategies to engage and influence their audiences (Hoffman and Novak, 2012). Research has also shown that marketers should encourage users to interact with brands by creating content that makes consumers feel attracted to the brand and, as a result, increase consumers' interactions with the brand (Rauschnabel et al., 2012). Because most social media marketing efforts are focused on larger platforms such as Facebook, smaller social media networks that may provide niche opportunities have received less attention. The Pinterest social media network was first launched in 2010. In comparison to Pinterest which has 150 million users, Facebook has 1.7 billion users, Instagram has 600 million users, LinkedIn has 467 million users, Twitter has 313 million users, and Google Plus has 300 million users (Comscore, 2015; Statistica, 2016; Chaykowski, 2016). Since Pinterest is a smaller social media network as compared to Facebook, not much attention has been given to Pinterest as a marketing channel. There is more literature on Pinterest in the domains of human computer interface, psychology, and information science (Hall and Zarro, 2012; Hansen et al., 2012; Ottoni et al., 2013; Gilbert et al., 2013; Linder et al., 2014; Mull and Lee, 2014) as compared to business and marketing studies, thus research to date has not adequately examined Pinterest from a marketing perspective. We draw from other domains to shape our study in order to add new knowledge to the marketing discipline.

Although Pinterest is ranked the third most popular social media site for generating traffic, it has not been able to acquire a large user base. The primary purpose of Pinterest is to help users curate information in order to discover new products and ideas, which can then be saved for later use. By using *pins*, users collect, organise, and share content with other users. Objects such as images, blogs, videos, and other websites can be *pinned*; Pinterest allows users to organise these pins into categories called *boards*. The boards allow users to easily retrieve and share categories of pins. Examples of boards include categories of products, services, brands, quotes, ideas, or tips. Users can create

customised board labels, or use the standard category which is more useful if the user is interested in being re-pinned. When businesses use Pinterest to showcase products, the discernable objective is to influence a sale, but it can also serve as a preview to a new product launch or advertising campaign, as well as direct traffic to a company's website. Instead of relying on direct user-to-user communication, by using the process of social curation, Pinterest users interact with content by sharing pins, re-pinning, and using Like/Comment features that bring together users who have common interests. In a focus group interview of Pinterest users, Linder et al. (2014) found that social curation results in ideation, which is fulfilled by pinning objects to help serve as creative resources that shape users' lives.

To differentiate Pinterest from other social networks, it is important to note that, unlike other social networks such as Facebook or Twitter, 98% of pins on Pinterest have no user comments. Hall and Zarro (2012) reported that Pinterest users were primarily females with the most frequently observed categories being Food and Drink, Home and Garden Décor and Design and Apparel and Accessories. They further found that user comments on pins related to sharing opinion and judgment, engaging in dialog, sharing a personal history with the image, or providing additional narrative details. Interaction and comments about content is the primary purpose of communication among Pinterest users, which provides social capital to other users' content by way of pins and re-pins. The demographic make-up of Pinterest users can shed light on segmentation strategies to be used for marketing purposes (Lipsman, 2015). For example, marketers targeting a female demographic audience in the age range of 18–49 may find Pinterest most relevant among all social media platforms given that 70% of Pinterest users are females. Han et al. (2015) noted that the top ten most popular categories in Pinterest are: DIY and crafts, food and drink, education, animals, health and fitness, design, architecture, products, art and home decor. The nature of content (e.g., static, interactive, video, audio, images, etc.) and affinity of Pinterest users to such content needs further investigation. Only recently has Pinterest started using its platform as an e-commerce website. Recently, in an effort to increase direct sales from its site, Pinterest announced in-platform purchase integration by introducing buyable pins. These special pins are linked to regular e-commerce sites of the company from which the product can be purchased; the transfer from browsing behaviour on Pinterest to purchase completion on the company's website is seamless to the user. Pieters et al. (2010) recommend further study of how design features relate to satisfaction with content and advertisements on social media platforms due to the fact that websites provide contexts that make design features very critical.

3 Theoretical framework

The framework used in this study is adapted from the media richness theory (MRT) which was initially proposed by Daft and Lengel (1986), and extended by Dennis and Kinney (1998) in the context of 'new' media that included audio and video communications. The MRT framework identifies media richness and investigates the degree of effectiveness (trust and loyalty) of a platform due to richness of communication allowed within that platform. According to Rauniar et al. (2014), diverse, rich media and availability of a user interface that promotes high levels of interactivity in social media sites (such as Pinterest) would provide support to the MRT of Daft and Lengel (1986). In

media-rich platforms (such as Pinterest), users communicate using images or videos. Researchers have studied the use of multimedia platforms and its predictors using variables such as age, gender, and personality traits (Dunaetz et al., 2015). Using the four measures of media richness (delay, cues, personalisation and choice), Pinterest provides a high degree of richness because of immediate access to related pins, comments from other users, and the ability to create personalised boards using different categories of interest. While the MRT identifies face-to-face interaction as having the highest social cue, the Pinterest platform may provide a bridge between face-to-face interaction and computer-mediated communication. Webster and Trevino (1995) observed that internet-based platforms have the potential to build relationships as effectively as face-to-face communication. There is therefore a need to investigate constructs that help build affinity toward a social media platform such as Pinterest.

Since MRT does not completely explain the affinity and loyalty concepts used in our study, other theories that support social media and communication protocols were also considered when developing the conceptual framework for this study. Another theory found relevant to our study involves *social presence*, which takes into account the type of media used for interaction between two or more communication partners (in our case, other Pinterest users). The social presence theory, which was proposed by Short et al. (1976) considers social processes of self-presentation and self-disclosure. Kaplan and Haenlein (2010) noted that for elements of self-presentation and self-disclosure, users on social media sites such as Pinterest share personal information related to categories of interest involving arts, crafts, apparel, or home decor. By posting images, ideas, or creative thoughts, users establish high social presence by influencing other users who are curating information in similar categories. Based on rich media, social presence, and self-presentation, we propose and investigate a construct called *Pinterest affinity*, which includes items related to value, loyalty, and trust among users of social media networks such as Pinterest. Antecedents of the Pinterest affinity may include constructs such as usability, user-platform fit, and relevant media content. Each construct is explained below to develop a conceptual framework for the study.

4 Technical and design characteristics of websites

Businesses are using social media sites to promote and market products, engage customers, and create brand loyalty (Neti, 2011). Social media design (organisation, layout) and technology (tools, modules and applications) are important because advertising revenue and sales are tied to audience engagement in the social media site. Pfeiffer and Zinnbauer (2010) noted that the design of a website and interaction opportunities with other users can be significant in driving traffic to the website. New social media networks threaten existing networks by offering differentiated features. For example, by offering unique elements such as encryption, social media platforms WeChat, Weibo, and WhatsApp, which are popular in China, are attracting younger demographics in the West. Singh et al. (2013) suggest using a quantitative framework to help with prediction of a brand's user interactions. Because of competition from other social network platforms, design and technology embedded within social media networks are key ingredients in providing a competitive advantage, or in some cases, survival of the platform. By implementing effective design principles on social network sites, businesses have the opportunity to encourage relationships with consumers from dialog

to dialogue, in which consumers engage in meaningful relationships with content, other users, or firms (Mangold and Faulds, 2009; Lipsman et al., 2012).

Since the earliest days of the Web, researchers have observed that websites that respond to user needs are critical in determining the success of the website (Price, 1997). Businesses depend on websites for brand recognition and lead generation, and to promote services, provide information, invite user-generated content, encourage social sharing, and (in some cases) to nurture sales by using e-commerce. Nielsen (2000) identified important website design principles to include effective navigation, response time, credibility, content, ease of use, frequent updating, relevance to users, quick download times, and high quality content. Palmer (2002) added additional elements to effective web design criteria by suggesting interactivity, responsiveness and media richness. The elements, collectively, would result in high user trust, increased likelihood to return, and higher frequency of use. Data for constructs related to design and technology were collected for the purpose of this Pinterest study.

From a social media network design perspective, user aspects such as type of equipment, quality of internet, compatibility of applications, and display size must be considered when creating and developing social media network platforms to facilitate user interactions. Some social media networks (such as Pinterest) are more effective when content is viewed on larger displays because of intricate details within the rich media content, as well as ease of transferring the rich media content between applications. Vaughan-Nichols (2010) observed that massively multiuser systems like a social network tend to grow quickly, so the technology behind such systems should be able to scale from thousands of users and dozens of servers to millions of users and thousands of servers. Another factor that necessitates a robust technology infrastructure is the requirement that the network should support millions of simultaneous users running different operating systems and form factors (e.g., desktop computers, smartphones, smart watches). User trust can be achieved if technical and design characteristics of the social media network facilitates ease of use and enjoyment while using the system, which may in turn cause higher affinity in terms of value, trust, and purchase intention. In this study, technical characteristics referred to security, privacy, and risk elements. Design characteristics referred to navigation, information retrieval, and features of the website. As a result of the above literature review, we propose the following hypotheses:

- H1a Design characteristics of the Pinterest platform will be positively associated with users' affinity toward Pinterest.
- H1b Technical characteristics of the Pinterest platform will be positively associated with users' affinity toward Pinterest.

5 Browsing, sharing and purchase intention

According to Woodall et al. (2007), social media's impact on consumer behaviour is a result of elements such as consumers being able to satisfy an impulse quickly, share interests and experiences, and seek advice prior to purchase decisions. Pinterest users pin photos of products, which creates interest and drives traffic to other websites. An additional dimension, forming online communities of pinned categories (common among Pinterest users), may also facilitate information sharing and attitudes toward purchase

intentions. Use of social media marketing involves getting a user to interact with the brand (browsing behaviour) and its message by sharing content related to the brand. As an example, on Pinterest, this content may be in the form of images and videos that are pinned and repinned. As a result of the brand content being shared, it becomes self-propagating which can result in more exposure to the business (Trusov et al., 2009) as well as purchases of the product. Sashittal and Jassawalla (2015) observed that Pinterest use guides consumers' purchase behaviour because the availability of curated lists from other users can help narrow choices for a user when making purchase decisions. Since users on Pinterest have a strong tendency to share content of interest to them, the type of content that is either browsed, shared (pinned/re-pinned), or purchased the most needs further investigation.

Online consumers' attitudes and intentions can be greatly influenced by cognitive, psychological, and demographic characteristics (Fang et al., 2013). Purchase intention can be further influenced by moderating variables such as design, usability, and media type. When using the Pinterest social media platform, Han et al. (2015) posited that investigating 'which' users post/share 'what' content, and 'with whom' that content is shared, can provide valuable information for online retailers to enhance their marketing strategies. For example, Pinterest marketers would be interested to know which types of images would be most pinned and repinned. Ellison et al. (2007) studied the use of social network sites and found a strong association between use of social media and different types of social capital. The idea of people browsing and connecting with others based on common interests has also been studied in sociology literature and has been referenced as interest homophily (McPherson et al., 2001). This type of homophily was found in early days of the internet, where communities (such as Usenet) were centred on common topics which gave way to personal connected social networks (such as Facebook and LinkedIn). Pinterest goes back to the premise of interest homophily as it centres on building communities around shared interests.

Trust and loyalty toward social media sites can provide additional benefits. For example, Lipsman (2015) reported that Pinterest users are actively engaged in shared interactions with other users on the site and pay attention to products that are pinned in large numbers. The online buying power index of Pinterest users is 211, which indicates that users spend more than twice as much money online as the average US internet user. Lipsman further noted that when social mentions of brands occur on large-scale social media platforms, they tend to activate consumers at the top of the purchase funnel by driving awareness and interest for something they were not otherwise actively considering. At the opposite extreme of the funnel, consumers may find themselves actively in the market for a specific purchase, so they consult socially-driven reviews on sites like Amazon that integrate user-generated content (Hazari et al., 2016). In between the two types of networks is Pinterest, which has consumers who are receptive to purchase if it matches an idea or inspiration that has been pinned. Phillips et al. (2014) researched the use of indirect strategies of persuasion as a marketing approach on Pinterest. They rationalise the use of this indirect approach due to high degrees of engagement and intimacy that Pinterest users have, which causes their defenses against persuasive advertising to be more relaxed. Providing information about a product that matches the user's idea can help marketers guide the consumer down the funnel toward conversion. Although users on Pinterest may not directly identify the source, availability, or price of a product or idea, by pinning a visual image, the brand or product gets more

opportunity to be re-pinned, thereby promoting it further and providing more visibility to the brand. In this study, browsing is related to behaviour in which consumers explore, discover, and browse through websites to find items of interest. Sharing is related to behaviour that would encourage forwarding, pinning, or bookmarking items of interest on Pinterest.

As a result of the above literature review, we propose the following hypotheses:

- H2a Browsing behaviour on the Pinterest platform will be positively associated with users' affinity toward Pinterest.
- H2b Sharing behaviour on the Pinterest platform will be positively associated with users' affinity toward Pinterest.
- H2c Purchase intention on the Pinterest platform will be positively associated with users' affinity toward Pinterest.

6 Usability and user-platform fit

The technology acceptance model (TAM) proposed by Davis (1989) has been widely cited as being the primary theory that models and predicts use and interaction (user-platform fit) of technology systems. The reason why social media networks have been successful in widespread adoption can also be attributed to personal intentions and motives which were initially proposed in the psychology domain by Fishbein and Ajzen (1975). Usability is a general area that explores the concept of how humans interact with technology. Software, displays, websites, and social media platforms should be designed with usability principles that use technology and design principles by making it easier for a user to interact with a system. It has been known since the earliest days of usability studies that user interface is an important determinant of user satisfaction (Doll and Torkzadeh, 1988). The usability of a system plays an important part in whether the system will be accepted by the user and its continued use over competing systems that offer similar services. This creates an optimum user-platform fit. Childers et al. (2001) found that the level of interactivity on a website is a strong factor in supporting the user-platform fit. This is because more engaged website users will find enjoyment in an interactive environment. To remain competitive, web designers incorporate technical capabilities, user preferences and options, as well as design considerations in user platforms to facilitate browsing (using visual images in Pinterest), sharing (using pins), or making a purchase (buyable pins). Rauniar et al. (2014, p.8) found that, "users' buy-in of social media technologies internalise usage behaviour that is embedded in individual users' attitudes". By utilising site design and technology that provides and promotes a user-platform fit, social networking sites such as Pinterest should facilitate and encourage users to create and share new content because the success of social media networks depends on user involvement, engagement, participation, and sharing. In this study, user-platform fit related to a match between user interests and the ability of the Pinterest platform to help users be inspired and feel connected with other users' content.

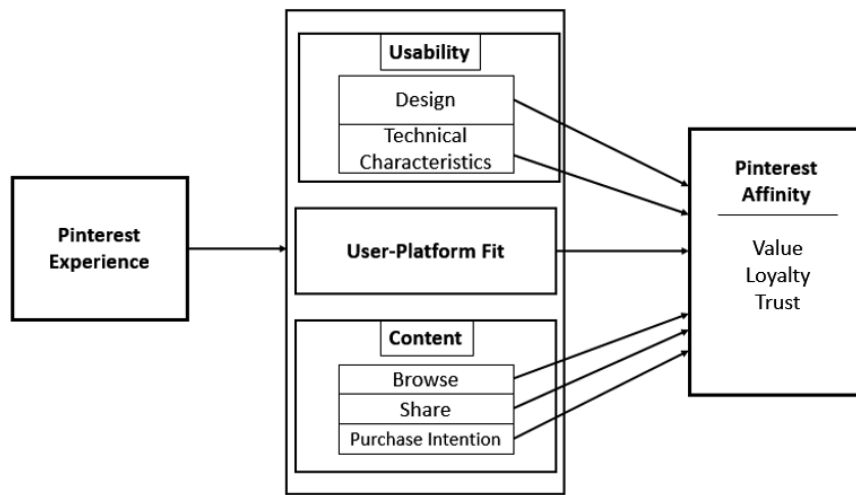
As a result of the above literature review, we propose the following hypotheses:

- H3 Level of user-platform fit for Pinterest users is positively associated with users' affinity toward Pinterest.

- H4 The higher the level of user-platform fit, the stronger will be the positive association between usability and content and users' affinity toward Pinterest.

Given the literature review presented above, which is related to users' Pinterest experience, usability and content, user-platform fit, and proposed users' affinity toward Pinterest, the hypotheses stated above lead to the following conceptual framework which will be investigated in this study.

Figure 1 Conceptual framework



7 Method

Quantitative data were gathered through a questionnaire-based survey of 357 undergraduate business students enrolled at a university in the Southeast United States; 139 (42.6%) of these identified themselves as female and 187 (57.4%) as male. Respondents were provided information on the purpose of the study. The survey was developed by the authors with construct measures using the review of literature, and was delivered electronically using online surveys. Following the introduction section in the survey, which included the informed consent, the survey asked for information related to general social media use and specific Pinterest use, along with other information such as frequency of using social media, devices on which social media is accessed, and different social media platforms used. After the general information items, the participants were asked to enter their familiarity level with the Pinterest social media platform. For non-users of Pinterest, the survey then branched to other sections where a reason for not using Pinterest was asked. All participants were presented randomised Likert scale items related to the constructs in the study. These statements included information related to loyalty, value, trust, purchase intention, user-platform fit, design aspects, technical features and browsing/sharing/purchase intention. The five-point Likert response scale ranged from 'strongly disagree' to 'strongly agree'. An additional column, 'cannot answer,' was also provided to differentiate from responses that respondents may have otherwise selected as 'undecided'. Survey items captured participant preferences related

to the items under investigation in this study. The survey then asked for demographic information such as age, gender, and employment status. Sin and Tse (2002) showed demographic variables such as education, gender, age, and internet use impact online purchase intention, so including demographic information was relevant to study in the context of user-generated content. IRB approval was obtained from the university committee to administer the survey to students.

Prior to administration of the survey, it was pilot tested with a group of respondents that included faculty and students (not counted in the actual sample). Feedback from the group was incorporated in the final version of the survey that was given to respondents included in this study. Content validity of survey items was established by two faculty members in the marketing department in the college of business. The scales used in this study included usability (subscales design and technical characteristics), content (subscales browsing, sharing, and purchase behaviour), and user-platform fit which used indicator items within each subscale to contribute to the independent variables. The dependent variable was the construct of Pinterest affinity that included indicator items measuring subscales of value, loyalty, and trust (see Figure 1). Since these were new constructs specific to the Pinterest platform and developed to test the hypotheses developed for the study, we relied on the review of literature to identify related scales in previous studies that measured similar constructs. Straub (1989) recommended pilot testing previously validated instruments and conducting reliability analysis to ground central constructs. The selected items from the review of literature were modified to conform to the context of the Pinterest study. All items used in the questionnaire were pilot tested and subsequently subjected to reliability analysis.

8 Scale measures

For the usability scale, items were modified from research conducted by Brooke (1996), Bangor et al. (2008), Gerlich et al. (2010) and Shipps (2013). Items included in this scale were related to design, navigation, Pinterest categories, information architecture of the Pinterest platform, features, security, privacy and risk. For the user-platform fit, items were modified from research conducted by Venkatesh and Davis (1996) and Gerlich et al. (2010). Items within the subscale related to the Pinterest platform and user interests, lifestyle, connections, community, and comparative platform preference were included in the scale. For the content scale, which included subscales of browsing, sharing, and purchase intention, items were modified from research conducted by Daft and Lengel (1986), Nielsen (2000), Salisbury et al. (2001), Palmer (2002), Voorhees et al. (2006), Ellison et al. (2007) and Knezek et al. (2012). Items in this scale were related to browsing and accessing rich media (images, video and blogs), pages, boards, and pins, as well as influences on purchase behaviour. For the Pinterest affinity construct that consisted of value, loyalty, and trust subscales, items were modified from Bloemer and De Ruyter (1998), Chaudhuri and Holbrook (2001), Anderson and Srinivasan (2003), Brakus et al. (2009), Mills and Knezek (2012) and Laroche et al. (2013). Items in this scale were related to productivity, quality of information, benefits, differentiation, preference, competition, and user trust with the Pinterest platform.

Reliability analysis of scales and subscales was conducted and it was found that each construct exceeded the recommended Cronbach alpha reliability coefficient (α)

value of 0.7 (Nunnally and Bernstein, 1995). Scale items and α value of constructs are shown in Table 1.

Table 1 Reliability coefficient of scale measures

<i>Measure</i>	<i>Number of items</i>	<i>α</i>
Design	5	.914
Technical	4	.819
User-platform fit	5	.848
Browse	3	.860
Share	3	.899
Purchase intention	3	.762
Value	4	.847
Loyalty	4	.840
Trust	4	.712

9 Data analysis and results

Table 2 shows demographic characteristics of respondents which included profiles related to gender, age, social media expertise, device preferences, and session time. Participants were also asked about their familiarity and experience with Pinterest.

Table 2 Demographic information

<i>Measure</i>	<i>Items</i>	<i>n</i>	<i>%</i>
Gender	Male	139	42.6
	Female	187	57.4
Age	18–25	299	92.3
	26–50	23	7.1
	Over 51	2	0.6
Social media expertise (self-perceived)	Beginner	13	4.0
	Intermediate	148	45.0
	Expert	168	51.1
Devices used for accessing Social media	Smartphone	308	93.6
	Tablet	3	0.9
	Laptop	14	4.3
	Desktop	4	1.2
Average social media Session time	< 30 minutes	215	65.5
	30–60 minutes	91	27.7
	> 60 minutes	22	6.7
Pinterest familiarity	Not familiar at all	86	26.3
	Somewhat familiar	123	37.2
	Very familiar	121	36.6

To test hypotheses H1a and b, and H2a, b, and c, several regressions were performed. The results are shown in Table 3.

Table 3 Test of models for value, loyalty and trust

	<i>Value</i>		<i>Loyalty</i>		<i>Trust</i>	
Adj. R ²	0.745		0.487		0.604	
F	207.907		101.764		161.922	
Sig F	0.000		0.000		0.000	
	<i>β value</i>	<i>Sig.</i>	<i>β value</i>	<i>Sig.</i>	<i>β value</i>	<i>Sig.</i>
Design						
Technical	0.253	.000	0.265	.002	0.545	.000
Browse						
Share						
Purchase intention	0.117	.031			0.293	.000
User-platform fit	0.554	.000	0.470	.000		

Note: Blank cells denote non-significant results.

H1a stated that design characteristics of the Pinterest platform will be positively associated with users' affinity toward Pinterest. Using information shown in Table 3, it was found that H1a is not supported.

H1b stated that technical characteristics of the Pinterest platform will be positively associated with users' affinity toward Pinterest. It was found that H1b is supported. Significant and positive effects were found for technical characteristics in the explanation of value (0.253, $p < .001$), loyalty (0.265, $p < .05$), and trust (0.545, $p < .001$).

H2a stated that browsing behaviour on the Pinterest platform will be positively associated with users' affinity toward Pinterest. H2b stated that sharing behaviour on the Pinterest platform will be positively associated with users' affinity toward Pinterest. Neither H2a nor H2b are supported.

H2c stated that purchase intention on the Pinterest platform will be positively associated with users' affinity toward Pinterest. It was found that H2c is largely supported. Significant and positive effects were found for purchase intention in the explanation of value (0.117, $p < .05$) and trust (0.293, $p < .001$), though not with loyalty.

H3 stated that the level of user-platform fit for Pinterest users is positively associated with users' affinity toward Pinterest. It was found that H3 is supported. In the regression analysis shown in Table 3 largely supports H3. Significant and positive effects were found for purchase intention in the explanation of value (0.554, $p < .001$) and loyalty (0.470, $p < .001$), though not with trust.

H4 stated that the higher the level of user-platform fit, the stronger will be the positive association between usability and content and users' affinity toward Pinterest. To test H4, user-platform fit was split into two levels: low (< 3.0) and high (> 3.0), and coded as a dichotomous – low (1) / high (2) – variable. Regressions were run with each of the three dependent sub-constructs of Pinterest affinity (value, loyalty, and trust) as the dependent variable, with the independent variables being the dichotomous user-platform fit variable, the usability constructs (design and technical characteristics), and the content constructs (browsing, sharing, and purchase intention). The results are shown in Table 4.

While Table 4 looks similar to Table 3, it is to be noted that that Table 4 uses a dichotomous user-platform fit variable, specifically created to test H4.

Table 4 Test of models for value, loyalty, and trust, with user-platform fit coded as a dichotomous (low/high) variable

<i>Dependent variable:</i>	<i>Value</i>		<i>Loyalty</i>		<i>Trust</i>	
Adj. R ²	0.719		0.530		0.626	
F	115.630		67.814		148.932	
Sig F	0.000		0.000		0.000	
	<i>β value</i>	<i>Sig.</i>	<i>β value</i>	<i>Sig.</i>	<i>β value</i>	<i>Sig.</i>
Design						
Technical	0.367	.000	0.312	.000	0.542	.000
Browse	0.248	.000	0.263	.003		
Share						
Purchase intention	0.165	.012	0.231	.005	0.311	.000
User-platform fit	0.186	.001				

As shown in Table 4, user-platform fit shows a significant and positive effect on value, but not for either of the other two dependent variables, loyalty and trust. H4 was therefore only partially supported.

9.1 Composite model of Pinterest affinity

The preceding analysis had been done separately for the three constructs that define Pinterest affinity: value, loyalty, and trust. Further analysis was done with the objective of treating Pinterest affinity as one comprehensive construct that includes the sub-constructs of value, loyalty, and trust. As a first step in this process, when creating a scale from the three sub-constructs of value, loyalty, and trust, reliability analysis showed a good value for Cronbach's alpha (0.829). Given that each of the three sub-constructs (value, loyalty, and trust) themselves consist of four indicator items from the questionnaire, a separate reliability analysis was done with all 12 items taken together. That analysis yielded an acceptable Cronbach's alpha of 0.895. The values of Cronbach's alpha allowed us to create the construct of Pinterest affinity which consists of all 12 original items.

The result of a test of this model is shown in Table 5, using the composite measure of Pinterest affinity as the dependent variable, and the usability constructs (design and technical characteristics) and the content constructs (browsing, sharing, and purchase intention) as the independent variables.

We note that the adjusted R² for this model (0.810) is higher than those for tests done separately for the sub-constructs of value (0.745), loyalty (0.487) and trust (0.604), which were shown in Table 4. Looking back at the set of hypotheses, using the composite measure of Pinterest affinity, rather than the sub-constructs of value, loyalty, and trust individually, we get an additional perspective on the results of the hypotheses tests.

Table 5 Test of composite model of Pinterest affinity

<i>Pinterest affinity</i>		
Adj. R ²	0.810	
F	300.146	
Sig F	0.000	
	<i>β value</i>	<i>Sig.</i>
Design		
Technical	0.356	.000
Browse		
Share		
Purchase intention	0.186	.000
User-platform fit	0.434	.000

- H1a stated that design characteristics of the Pinterest platform will be positively associated with users' affinity toward Pinterest. H1a is not supported.
- H1b states that technical characteristics of the Pinterest platform will be positively associated with users' affinity toward Pinterest. H1b is supported by virtue of the positive and significant coefficient in Table 5 ($\beta = 0.356$, $p < .001$).
- H2a stated that browsing behaviour on the Pinterest platform will be positively associated with users' affinity toward Pinterest. H2b stated that sharing behaviour on the Pinterest platform will be positively associated with users' affinity toward Pinterest. H2c stated that purchase intention on the Pinterest platform will be positively associated with users' affinity toward Pinterest. H2a and H2b are not supported, but H2c is supported by virtue of the significant coefficient in Table 5 ($\beta = 0.186$, $p < .001$).
- H3 stated that the level of user-platform fit for Pinterest users is positively associated with users' affinity toward Pinterest. H3 is supported. User-platform fit showed a significant and positive effect on the composite measure of Pinterest affinity ($\beta = 0.434$, $p < .001$).

To test H4, user-platform fit was split into two levels: low (< 3.0) and high (> 3.0), and coded as a dichotomous – Low (1) / High (2) – variable. Regressions were run with the composite measure of Pinterest affinity as the dependent variable, and the independent variables were the usability constructs (design and technical), the content constructs (browsing, sharing, and purchase intention), and the dichotomous user-platform fit variable. The results are shown in Table 6. While Table 6 looks similar to Table 5, it is to be noted that that Table 6 uses a dichotomous user-platform fit variable, specifically created to test H4. H4 stated that the higher the level of user-platform fit, the stronger will be the positive association between usability and content and users' affinity toward Pinterest. Table 6 shows that the user-platform fit variable has a significant positive effect on Pinterest affinity. H4 is therefore supported.

Table 6 Test of composite model of Pinterest affinity, with user-platform fit coded as a dichotomous (low/high) variable

<i>Dependent variable:</i>	<i>Pinterest affinity</i>	
Adj. R ²	0.813	
F	191.171	
Sig F	0.000	
	<i>β value</i>	<i>Sig.</i>
Design	0.210	.001
Technical	0.406	.000
Browse		
Share		
Purchase intention	0.294	.000
User-platform fit	0.100	.035

10 Discussion and implications

There are several social media platforms used by consumers, with each social network providing unique features and catering to a different audience based on the needs of users. The MRT provides support for Pinterest because users are motivated to use the platform (technical and design characteristics), and Pinterest also provides social presence (user-platform fit) which is another factor that influences cognitive choice of a platform by users. Marketing on social media networks requires a better understanding of demographics and the target audience. This is consistent with research by Ottoni et al. (2013) who stated that it is important to understand differences in online social networks, so one can design services and applications that leverage human social interactions and provide more targeted and relevant user experiences. In addition to the hypotheses stated earlier, we wanted to determine for our sample the popularity of different social media platforms. The highest numbers of users were for Snapchat followed by Instagram, Facebook, YouTube and Twitter. Pinterest, which was the main focus of this study, ranked seventh in the list of social media platforms identified by respondents. This shows that although the Pinterest platform has potential to inspire and influence purchase intentions, marketers need to leverage features such as design and user-platform fit (Rauniar et al., 2014) that we identified in the conceptual framework of this study. Since Pinterest was the focus of this study, and was not found to be one of the leading uses of social media, we explored the reasons why respondents did not use Pinterest. The results showed that respondents felt other social media sites were a better fit (user-platform fit construct of this study), and most of the people on users' social networks were using other platforms. Another reason given by respondents was that Pinterest is perceived to be a platform for a female audience. Additionally, many respondents mentioned that the reason they do not use Pinterest is that the purpose of Pinterest is not clear. This finding again identifies user-platform fit as an important construct for affinity toward a social media platform.

As social media networks have become ubiquitous, marketers are challenged to come up with new strategies to differentiate their brands in this increasingly competitive space.

One way in which this can be done is to use smaller social media networks, such as Pinterest, that provide a unique set of opportunities to promote a brand. It would be helpful for marketers to understand the nature of Pinterest and how it is different from other, larger social media platforms that have more users. Pinterest relies on visual images to content (e.g., food and gardening), and visuals and graphics will receive much more attention than other content. Since Pinterest is a new medium for e-commerce, a company considering Pinterest should be aware of what its competitors are doing in this platform so that Pinterest-specific features (such as promoted Pins) are being used for differentiation purposes. Meyer (2016) emphasises that, although the perception of a brand cannot be strictly controlled, it can certainly be influenced as a result of visual design, content design, and interaction design. The underlying message of Pinterest is about self-improvement (Sevitt and Samuel, 2013) so any content that relates to emotional aspects within a user should provide more value, loyalty, and satisfaction which were studied in this research.

The conceptual framework presented in Figure 1 postulates that usability (which consists of design and technical characteristics) and content (which consists of browsing, sharing, and purchase intention) are determinants of Pinterest affinity. From Table 3, we note that technical characteristics, purchase intention, and user-platform fit have a positive, significant, and consistent impact on at least one of the sub-constructs of Pinterest affinity (value, loyalty, or trust). So, the implications are that these characteristics determine Pinterest affinity, and consequently, marketers on Pinterest would be well advised to focus on enhancing the technical characteristics of the site by encouraging pinning, re-pinning, and sharing on their site that potentially leads to purchases. Han et al. (2015) similarly observed, from the perspective of a consumer, that content posting and sharing behaviours could be interpreted as behaviours that reflect latent factors. Examples of such latent factors are needs, interests, and desires. Marketers who are able to tap into these latent factors can shed light on users' interests beyond their words, which in turn can be used to better satisfy them using the brand's message.

It may be appropriate at this stage to examine the items that went into the creation of these constructs, so as to offer specific guidance to marketers on Pinterest. Technical characteristics include the following items: Pinterest keeps my information secure, Pinterest cares about my privacy, If I find an item on the Pinterest website I would consider making a purchase knowing my information would be stored securely, and using Pinterest is no more risky than using other social media sites. One enhancement that Pinterest could make would be to send users communication on social media reminding them about new items related to pins that have been marked as favourite by other Pinterest users. The goal of communicating brand messages is to create purchase intention which we investigated using the following items: Browsing through items on Pinterest can influence my purchase decision, After I use Pinterest I feel like making a purchase, and I feel good about buying an item I saw on Pinterest. Marketers on Pinterest could use an approach similar to strategies used by e-commerce sites such as <http://www.amazon.com> and <http://www.walmart.com> by displaying for users other items they might be interested in when they are in the process of potentially making a purchase via a Pinterest pin. These pins could be shown in the same brand theme or style as regular pins, thus giving users ideas which may spark interest and ideation (Linder et al., 2014).

Brand building by forging relationships directly with customers and has become the new digital norm for social media marketing. Various social media platforms are being

used to launch marketing content that appeals to users as they follow celebrities and influencers on different social media sites. Companies are increasingly using social media platforms to share stories and inviting connections from users by making the social media platform a hub for a community of consumers (Holt, 2016). The use of social media platforms to consume content is creating an affinity toward these platforms by generating a viral effect in which other related content is shown and consumed based on user profiles. In this study, when Pinterest affinity was considered as one composite construct (as shown in Table 5), rather than the sub-constructs of value, loyalty, and trust, similar conclusions were found. Therefore, marketers on Pinterest should continue an emphasis on user interface web design, ensuring that navigation is intuitive for the user. Strategies related to design and interactivity (Childers et al., 2001), including ideas such as user submission of favourite pins, voting in online contests, and generating new hashtags, can encourage user-generated content that creates brand awareness. The findings of this study are similar to previous research that showed user-generated social media communication has a positive influence on both brand equity and brand attitude (Schivinski and Dabrowski, 2016).

Social media provides an effective platform for developing relationships between consumers and brands (Gao and Feng, 2016). In this study, user-platform fit emerged as being a significant determinant in all of our analyses. User-platform fit consisted of the following items: Pinterest is a good fit for my interests, Pinterest gives me good ideas to enhance my lifestyle, Pinterest allows me to stay connected with people with similar interests, other Pinterest users and their pins help me get a sense of community, and Compared to other social media sites, I would rank Pinterest to be one of the best platforms for the value it offers. These results are also consistent with findings of Clark et al. (2017) who found that a personally relevant platform would make consumers more active in a brand community. In the same study it was also found that engaging in a brand community leads to satisfaction with a social media brand.

There is a link between social media marketing efforts, brand equity, and its consequences, including preference, loyalty, and price premium (Manthiou et al., 2016). Based on our research, we find that marketers should be clear about what their brand stands for and what value is being created for the user by using the platform (user-platform fit subscale in this study), and use Pinterest as a channel to promote that value proposition. In terms of ensuring that features are easy to find, marketers on Pinterest could add to their list of general categories a *pin board* category, inspired from other users, that takes users to a list of particular things that they can do and browse within the site. This might also help those who feel that the purpose of Pinterest is not clear to gain an understanding of all that can be achieved.

Our research can be useful to marketers who are planning to use social media sites, especially Pinterest, to grow their business and attract customers to the brand. A better understanding of social media platform characteristics and user base demographics can help a company align its marketing efforts with users who matter the most in terms of brand affinity and brand loyalty. Gelley and John (2015) differentiated other platforms such as Facebook and Twitter in comparison with Pinterest; they found that following other users is a 'second-class mechanism' for content discovery on Pinterest. They also stated that Pinterest is not time-bound and content is relevant long after it has been posted. Since the Pinterest platform is more focused around content than users, marketers should not seek to increase the number of followers to their brand but instead focus on

getting their products pinned and repinned over a period of time so it can propagate across many boards. Singh et al. (2013) also proposed that marketers on Pinterest should identify users who like a brand and have boards which are aligned semantically with the brand's pin. These users can be considered high-quality brand prospects and a marketing strategy can include the social media managers of the business proactively pinning and repinning the users' pins. This will draw more attention to the brand.

11 Limitations

This study explored constructs and antecedents related to Pinterest affinity that included value, loyalty, and trust. The sample participants were college students who shared their experience with different social media sites. It would be interesting to research whether users outside the age group of the majority of our sample participants (millennials) would yield the same results. Although the selection of items used in our subscales were identified using a review of literature and modified for the context of the study, as well as subjected to reliability analysis (which shows all subscales were reliable), the scales asked about purchase intention. It is possible that purchase intention may affect purchase behaviour in the future based on other criteria not included in the study. To improve the construct validity of items, there is a need in future research to further refine and research the Pinterest affinity scale using this study as a foundation. The participants self-reported on items such as hours spent on each social media platform, years of experience, and familiarity with Pinterest. We assume that participants reported these items accurately. Our research focused on antecedents related to usability, user-platform fit, and user interaction within the content of the Pinterest website. Future studies could explore whether other antecedents also influence affinity toward Pinterest use. In conclusion, Dennis and Kinney (1998) caution that it is difficult to isolate factors that can reliably predict performance when using different media in different situations. Using the conceptual framework developed for this study, future research can replicate the research design used in this study and investigate affinity constructs of other social media networks.

References

- Anderson, R.E. and Srinivasan, S.S. (2003) 'E-satisfaction and e-loyalty: a contingency framework', *Psychology & Marketing*, Vol. 20, No. 2, pp.123–138.
- Bangor, A., Kortum, P.T. and Miller, J.T. (2008) 'An empirical evaluation of the system usability scale', *International Journal of Human-Computer Interaction*, Vol. 24, No. 6, pp.574–594.
- Bloemer, J. and De Ruyter, K. (1998) 'On the relationship between store image, store satisfaction and store loyalty', *European Journal of Marketing*, Vol. 32, Nos. 5/6, pp.499–513.
- Brakus, J.J., Schmitt, B.H. and Zarantonello, L. (2009) 'Brand experience: what is it? How is it measured? Does it affect loyalty?', *Journal of Mmarketing*, Vol. 73, No. 3, pp.52–68.
- Brooke, J. (1996) 'SUS-A quick and dirty usability scale', *Usability Evaluation in Industry*, Vol. 189, No. 194, pp.4–7.
- Chaudhuri, A. and Holbrook, M.B. (2001) 'The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty', *Journal of Marketing*, April, Vol. 65, No. 2, pp.81–93.

- Chaykowski, K. (2016) *Pinterest Reaches 150 Million Monthly Users, Boosts Engagement Among Men* [online] <http://www.forbes.com/sites/kathleenchaykowski/2016/10/13/pinterest-reaches-150-million-monthly-users/#31e92e1a1018> (accessed 12 April 2017).
- Childers, T., Carr, C., Peck, J. and Carson, S. (2001) 'Hedonic and utilitarian motivations for online retail shopping behavior', *Journal of Retailing*, Vol. 77, No. 4, pp.511–535.
- Clark, M., Black, H. and Judson, K. (2017) 'Brand community integration and satisfaction with social media sites: a comparative study', *Journal of Research in Interactive Marketing*, Vol. 11, No. 1, pp.218–229.
- ComScore (2015) *Social Media Insights and Metrics* [online] <http://www.comscore.com/Insights/Presentations-and-Whitepapers/2015/Social-Media-Insights-and-Metrics> (accessed 27 May 2017).
- Daft, R.L. and Lengel, R.H. (1986) 'Organizational information requirements, media richness, and structural design', *Management Science*, Vol. 32, No. 5, pp.554–571.
- Daugherty, T., Eastin, M.S. and Bright, L. (2008) 'Exploring consumer motivations for creating user-generated content', *Journal of Interactive Advertising*, Vol. 8, No. 2, pp.16–25.
- Davis, F.D. (1989) 'Perceived usefulness, perceived ease of use, and user acceptance of information technology', *MIS Quarterly*, Vol. 13, No. 3, pp.319–340.
- Dennis, A.R. and Kinney, S.T. (1998) 'Testing media richness theory in the new media: the effects of cues, feedback, and task equivocality', *Information Systems Research*, Vol. 9, No. 3, pp.256–274.
- Diffley, S., Kearns, J., Bennett, W. and Kawalek, P. (2011) 'Consumer behavior in social networking sites: implications for marketers', *Irish Journal of Management*, Vol. 30, No. 2, pp.47–65.
- Doll, W.J. and Torkzadeh, G. (1988) 'The measurement of end-user computing satisfaction', *MIS Quarterly*, Vol. 12, No. 2, pp.258–274.
- Dunaetz, D.R., Lisk, T.C. and Shin, M.M. (2015) 'Personality, gender, and age as predictors of media richness preference', *Advances in Multimedia*, Vol. 7, doi:10.1155/2015/243980.
- Ellison, N.B., Steinfield, C. and Lampe, C. (2007) 'The benefits of Facebook 'friends': social capital and college students use of online social network sites', *Journal of Computer-Mediated Communication*, Vol. 12, No. 4, pp.1143–1168.
- Fang, H., Zhang, J., Bao, Y. and Zhu, Q. (2013) 'Towards effective online review systems in the Chinese context: a cross-cultural empirical study', *Electronic Commerce Research and Applications* [online] <http://www.dx.doi.org/10.1016/j.elerap.2013.03.001> (accessed 21 February 2017)
- Fishbein, M. and Ajzen, I. (1975) *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Fogel, S. (2010) 'Issues in measurement of word of mouth in social media marketing', *International Journal of Integrated Marketing Communications*, Vol. 2, No. 2, pp.54–60.
- Gao, Q. and Feng, C. (2016) 'Branding with social media: user gratifications, usage patterns, and brand message content strategies', *Computers in Human Behavior*, Vol. 63, No. 3, pp.868–890.
- Gelley, B. and John, A. (2015) 'Do I need to follow you?: Examining the utility of the Pinterest follow mechanism', in *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*, February, pp.1751–1762.
- Gerlich, R.N., Browning, L. and Westermann, L. (2010) 'The social media affinity scale: implications for education', *Contemporary Issues in Education Research*, Vol. 3, No. 11, pp.35–42.
- Gilbert, E., Bakhshi, S., Chang, S. and Terveen, L. (2013) 'I need to try this?: A statistical overview of Pinterest', in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, April, ACM, pp.2427–2436.
- Hall, C. and Zarro, M. (2012) 'Social curation on the website Pinterest.com', *Proceedings of the American Society for Information Science and Technology*, Vol. 49, No. 1, pp.1–9.

- Han, J., Choi, D., Choi, A., Choi, J., Chung, T., Kwon, T.T. and Chuah, C.N. (2015) 'Sharing topics in Pinterest: understanding content creation and diffusion behaviors', in *Proceedings of the 2015 ACM on Conference on Online Social Networks*, November, ACM, pp.245–255.
- Hansen, K., Nowlan, G. and Winter, C. (2012) 'Pinterest as a tool: applications in academic libraries and higher education', *Partnership: The Canadian Journal of Library and Information Practice and Research*, Vol. 7, No. 2 [online] <http://dx.doi.org/10.21083/partnership.v7i2.2011> (accessed 7 February 2017).
- Hazari, S., Bergiel, B.J. and Sethna, B.N. (2016) 'Hedonic and utilitarian use of user-generated content on online shopping websites', *Journal of Marketing Communications*, [online] <http://www.dx.doi.org/10.1080/13527266.2016.1143383> (accessed 23 March 2017).
- Hill, R.P. and Moran, N. (2011) 'Social marketing meets interactive media: lessons for the advertising community', *International Journal of Advertising*, Vol. 30, No. 5, pp.815–838.
- Hoffman, D.L. and Novak, T.P. (2012) 'Toward a deeper understanding of social media', *Journal of Interactive Marketing*, Vol. 26, No. 2, pp.69–114.
- Holt, D. (2016) 'Branding in the age of social media', *Harvard Business Review*, Vol. 94, No. 3, pp.41–50.
- Kaplan, A.M. and Haenlein, M. (2010) 'Users of the world, unite! The challenges and opportunities of social media', *Business Horizons*, Vol. 53, No. 1, pp.59–68.
- Knezek, G., Mills, L. and Wakefield, J.S. (2012) 'Measuring student attitudes toward learning with social media: validation of the social media learning scale', *Proceedings of the Annual Meeting for the Association of Educational Communications and Technology*, November, Louisville, KY.
- Laroche, M., Habibi, M.R. and Richard, M.O. (2013) 'To be or not to be in social media: how brand loyalty is affected by social media?', *International Journal of Information Management*, Vol. 33, No. 1, pp.76–82.
- Linder, R., Snodgrass, C. and Kerne, A. (2014) 'Everyday ideation: all of my ideas are on Pinterest', in *Proceedings of ACM Conference on Human Computer Interaction*.
- Lipsman, A. (2015) *What Potential Does Pinterest Have as an Advertising Platform?*, February 3 [online] <http://www.comscore.com/Insights/Blog/What-Potential-Does-Pinterest-Have-as-an-Advertising-Platform> (accessed 28 April 2017).
- Lipsman, A., Mudd, G., Rich, M. and Bruich, S. (2012) 'The power of 'like', how brands reach (and influence) fans through social-media marketing', *Journal of Advertising Research*, Vol. 52, No. 1, pp.40–52.
- Mangold, W.G. and Faulds, D.J. (2009) 'Social media: the new hybrid element of the promotion mix', *Business Horizons*, Vol. 52, No. 4, pp.357–366.
- Manthiou, A., Rokka, J., Godey, B. and Tang, L.R. (2016) 'How social media marketing efforts influence brand equity creation and its consequences: the case of luxury brands', in *Let's Get Engaged! Crossing the Threshold of Marketing's Engagement Era*, pp.561–561, Springer International Publishing, NY.
- McPherson, M., Smith-Lovin, L. and Cook, J.M. (2001) 'Birds of a feather: homophily in social networks', *Annual Review of Sociology*, Vol. 27, No. 1, pp.415–444.
- Meyer, K. (2016) *The Impact of Interaction Design on Brand Perception*, July 17 [online] <http://www.nngroup.com/articles/interaction-branding/> (accessed 17 February 2017).
- Mills, L. and Knezek, G. (2012) 'Measuring learning preferences within the integrated communications learning landscape', in Resta, P. (Ed.): *Proceedings of Society for Information Technology & Teacher Education International Conference 2012*, Chesapeake, VA: AACE, pp.1994–1999.
- Mull, I.R. and Lee, S.E. (2014) 'PIN' pointing the motivational dimensions behind Pinterest', *Computers in Human Behavior*, Vol. 33, pp.192–200, Doi: 10.1016/j.chb.2014.01.011 (accessed 15 March 2017).

- Neti, S. (2011) 'Social media and its role in marketing', *International Journal of Enterprise Computing and Business Systems*, Vol. 1, No. 2 [online] <http://www.ijecbs.com/July2011/13.pdf> (accessed 22 April 2017).
- Nielsen, J. (2000) *Design Web Usability*, New Riders, CA.
- Nunnally, J.C. and Bernstein, I.H. (1995) *Psychometric Theory*, McGraw-Hill, New York, NY.
- Otoni, R., Pesce, J., Las Casas, D., Franciscani Jr, G., Meira Jr, W., Kumaraguru, P. and Almeida, V. (2013) 'Ladies first: analyzing gender roles and behaviors in Pinterest', in *Proceedings of International Conference of Web and Social Media*.
- Palmer, J.W. (2002) 'Web site usability, design, and performance metrics', *Information Systems Research*, Vol. 13, No. 2, pp.151–167.
- Patino, A., Pitta, D.A. and Quinones, R. (2012) 'Social media's emerging importance in market research', *Journal of Consumer Marketing*, Vol. 29, No. 3, pp.233–237.
- Pfeiffer, M. and Zinnbauer, M. (2010) 'Can old media enhance new media? How traditional advertising pays off for an online social network', *Journal of Advertising Research*, Vol. 50, No. 1, pp.42–49.
- Phillips, B.J., Miller, J. and McQuarrie, E.F. (2014) 'Dreaming out loud on Pinterest: new forms of indirect persuasion', *International Journal of Advertising*, Vol. 33, No. 4, pp.633–655.
- Pieters, R., Wedel, M. and Batra, R. (2010) 'The stopping power of advertising: measures and effects of visual complexity', *Journal of Marketing*, Vol. 74, No. 5, pp.48–60.
- Price, M. (1997) 'What makes users revisit a web site?', *Marketing News*, March 17, p.12.
- Rauniar, R., Rawski, G., Yang, J. and Johnson, B. (2014) 'Technology acceptance model (TAM) and social media usage: an empirical study on Facebook', *Journal of Enterprise Information Management*, Vol. 27, No. 1, pp.6–30.
- Rauschnabel, P.A., Praxmarer, S. and Ivens, B.S. (2012) 'Social media marketing: how design features influence interactions with brand postings on Facebook', in *Advances in Advertising Research*, Gabler Verlag, Vol. III, pp.153–161.
- Salisbury, W.D., Pearson, R.A., Pearson, A.W. and Miller, D.W. (2001) 'Perceived security and world wide web purchase intention', *Industrial Management & Data Systems*, Vol. 101, No. 4, pp.165–177.
- Sashittal, H.C. and Jassawalla, A.R. (2015) 'Why do college students use Pinterest? A model and implications for scholars and marketers', *Journal of Interactive Advertising*, Vol. 15, No. 1, pp.54–66.
- Schivinski, B. and Dabrowski, D. (2016) 'The effect of social media communication on consumer perceptions of brands', *Journal of Marketing Communications*, Vol. 22, No. 2, pp.189–214.
- Sevitt, D. and Samuel, A. (2013) 'How Pinterest puts people in stores', *Harvard Business Review*, Vol. 91, No. 7, pp.26–27.
- Shipp, B. (2013) 'Social networks, interactivity and satisfaction: assessing socio-technical behavioral factors as an extension to technology acceptance', *Journal of Theoretical and Applied Electronic Commerce Research*, Vol. 8, No. 1, pp.35–52.
- Short, J., Williams, E. and Christie, B. (1976) *The Social Psychology of Telecommunications*, John Wiley & Sons, Hoboken, NJ.
- Sin, L. and Tse, A. (2002) 'Profiling internet shoppers in Hong Kong: demographic, psychographic, attitudinal and experiential factors', *Journal of International Consumer Marketing*, Vol. 15, No. 1, pp.7–29.
- Singh, S., Wang, Y. and Ding, L. (2013) 'Who is repinning?: Predicting a brand's user interactions using social media retrieval', in *Proceedings of the Thirteenth International Workshop on Multimedia Data Mining*, August, ACM, p.1.
- Statistica (2016) *Numbers of LinkedIn Members from 1st Quarter 2009 to 3rd Quarter 2016 (in millions)* [online] <http://www.statistica.com/statistics/274050/quarterly-numbers-of-linkedin-members/> (accessed 14 April 2017).

- Straub, D. (1989) 'Validating instruments in MIS research', *MIS Quarterly*, Vol. 13, No. 2, pp.147–169.
- Thackeray, R., Neiger, B.I., Hanson, C.L. and McKenzie, J.F. (2008) 'Enhancing promotional strategies within social marketing programs: use of Web 2.0 social media', *Health Promotion Practice*, Vol. 9, No. 4, pp.338–343.
- Trusov, M., Bucklin, R.E. and Pauwels, K. (2009) 'Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site', *Journal of Marketing*, Vol. 73, No. 5, pp.90–102.
- Tsimonis, G. and Dimitriadis, S. (2014) 'Brand strategies in social media', *Marketing Intelligence & Planning*, Vol. 32, No. 3, pp.328–344.
- Tucker, C.E. (2014) 'Social networks, personalized advertising, and privacy controls', *Journal of Marketing Research*, Vol. 51, No. 5, pp.546–562.
- Vaughan-Nichols, S.J. (2010) *How Social Networking Works* [online] <http://www.itworld.com/article/2759107/enterprise-software/how-social-networking-works.html> (accessed 16 April 2017).
- Venkatesh, V. and Davis, F.D. (1996) 'A model of the antecedents of perceived ease of use: development and test', *Decision Sciences*, Vol. 27, No. 3, pp.451–481.
- Voorhees, C.M., Brady, M.K. and Horowitz, D.M. (2006) 'A voice from the silent masses: an exploratory and comparative analysis of noncomplainers', *Journal of the Academy of Marketing Science*, Vol. 34, No. 4, pp.514–527.
- Webster, J. and Trevino, L.K. (1995) 'Rational and social theories as complementary explanations of communication media choices: two policy-capturing studies', *Academy of Management Journal*, Vol. 38, No. 6, pp.1544–1572.
- Woodall, R.D., Colby, C.L. and Parasuraman, A. (2007) '“E-volution” to revolution' *Marketing Management*, Vol. 16, No. 2, pp.29–34.