Online Social Network Citizen Engagement on Instagram Crowdsourcing: A Conceptual Framework

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Abstract: The emergence and popularity of online social network platform has greatly transformed the way businesses work in terms of collaborations, communications and crowdsourcing with the boom of Web 3.0 technology. Crowdsourcing is regarded as voluntary participative group behaviour engaging in company activities within online social networks. Previous studies have identified some basic characteristics of crowdsourcing initiatives from business to business perspectives which defined crowd, clear goal, benefits received by the crowd, online task assigned process and more. However, from the consumer's perspective; motivation for such participative behaviour is still not well researched. Finding the right type of motivation in order to establish this behaviour is essential for the success of crowdsourcing. Two primary motivation categories described in the literature are extrinsic (which is referred as technology-push forces) and intrinsic (which is referred as need-pull forces) motivation. To understand this requires an exploratory study that discloses the psycho-social motivations of crowdsourcing, since currently there is no established unitary and shared knowledge on consumer engagement on crowdsourcing. For this research, crowdsourcing is examined through the Instagram platform. Instagram is an online mobile photo-sharing, video-sharing and social network service that enables online social network citizens (OSNC) to take pictures and videos, and share them on Instagram as well as on other social networking platforms. Instagram's simple design allows images and short videos to fill the screen with nothing to clutter the experience of viewing. Similarly, images and short videos of brand posted on Instagram gives equally compelling visual experience that inspire followers to share, post comments and encourage conversations. Instagram taps into the collective intelligence of their followers, the followers receives benefits from crowdsourcing in terms of personal and social recognition. In this regard, this research will explore on motivating factors underlying OSNC behaviour on crowdsourcing. This research will help with understanding relationship building between the consumer and the brand through crowdsourcing, and in return adds value to the brand in long run.

Keywords: crowdsourcing, Instagram, online social network, motivations, engagement

1. Introduction

Traditional marketing strategy is now becoming a thing of the past. Strategies concentrated on content-generation give more ROI than traditional marketing methods. One overwhelming content-generated marketing component that recently creates impact on brand image and value is crowdsourcing. Crowdsourced content encourages participation from the general market; including the brand loyalist and non-loyalist to deliver inclusive, strong, interesting and genuine content. Due in large part to the proliferation of the internet, mobile technologies, and the recent explosion of social media (Kietzmann, et al., 2011), organisations today are in a much better position to engage distributed crowds (Lakhani & Panetta, 2007) of individuals for their innovation and problem-solving needs (Afuah & Tucci, 2012) (Boudreau & Lakhani, 2013). Examples of companies that have been successful in crowdsourcing are Coca Cola and Lego Inc. (Antorini & Muniz 2013). Coca Cola in 2011 announced a shift in their marketing strategy from usual above and below the line to content concentrated marketing, where Coca-Cola relied on its consumer-generated content to drive part of its marketing activities. In their case, they outline a strategy where consumers are encouraged to develop a brand story through the experiences of others that they know. This, in return increased 45% of their global sales.

Brabham (2008) suggests that approaching crowds and asking for contributions can help organisations develop solutions to a variety of business challenges. In this context, the crowd is often treated as a single construct, that refers to a general collection of people that can be targeted by firms (Prpic, et al., 2015). Another instance is Lego Inc. in 2005 started to crowdsource its construction of Legos launched under the name 'Lego Factory'. This allows consumers to design their own Lego models using a computer program which can then be uploaded to the Lego website. Their designs can be made to order and are available for actual delivery. The brand also covers a small selection of Lego products designed by Lego fans and were also made available for online purchase.

These examples show the engagement between online social network citizen (whom also consume the product directly or indirectly, or at least know or heard about the product) and the brand. Content-generated marketing cannot be a success without engagement by these crowds i.e. the OSNC. Engagement reflects consumers' level of

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interest on brand relevancy on them which gained significant attention of theirs (Coulter et al. 2003). However, despite important insights gleaned, emphasis on engagement studies pertaining to crowdsourcing is so far concept-based which explain and predict the dynamics characteristic of consumer and brand relationships (Bolton & Saxenalyer 2009; Malthouse & Hofacker 2010). Within this concept, engagement which explicitly accounts for consumers interactive brand-related dynamics is gaining traction in the literature thus it needs to fit within the broader theoretical perspectives of consumerism (Brodie et al. 2011). Hence, the purpose of this research is to propose a preliminary conceptual framework disclosing the technology-push and need-pull of crowdsourcing drawing upon Instagram unique characteristics and extant literature in the area of consumer motivation. In this study, OSNC is referred as the active users of online social network. OSNC relatively spend significant amount of time on online social network activities, contributing on the online social network content and participate actively in major online social network sites. This group of people is called citizen because they are abiding under the custom or law that bestow upon them as a registered member of online social network. Having said this, the specific research question devise for this study is:

RQ1: What are the motivations behind the participative behaviour perform by the OSNC on Instagram?

RQ2: What are the pull and push forces of Instagram that motivate crowdsourcing engagement?

Based on the idea of technology-push and need-pull, grounded by uses and gratifications theory proposed by Katz, Blumler, and Gurevitch (1974), these research questions will at this preliminary stage, contextually draw a model that predicts motivation of OSNC engagement in Instagram crowdsourcing and determine the push and pull forces of Instagram crowdsourcing. This research is hoped to contribute to the literature on OSNC-brand engagement by focusing on crowdsourcing. It will uncover central themes that help to characterise OSNC motivation on crowdsourcing and develop typology of OSNC-brand engagement by identifying push and pull forces that is uniquely important in the context of Instagram crowdsourcing in the future. Since this proposed research is at a conceptual stage, this paper is organised by firstly highlighting on the idea of Web 3.0 and crowdsourcing that initiates the inauguration of Instagram, it will then further explain on OSNC engagement in the context of Instagram. Finally, the push and pull forces of Instagram is illustrated and summarised in a table form to give the general picture on how the model proposed can be tested.

2. Literature review

2.1 Web 3.0 and the idea of crowdsourcing

New advances in Internet technology has transformed Web 1.0 into Web 2.0, which then later preceded these integration into Web 3.0 (Berners-Lee et al. 2001). Web 3.0 is viewed as semantic Web technologies integrated into and powered with large-scale applications that developed networked digital technologies that support by human cooperation (or intelligent agents) which automatically manipulate Web services, integrate data and applications from different resources and are able to infer relationships between data in different applications or in different parts of the same applications (Fuchs et al. 2010). From business perspective, Web 3.0 technology is used to adapt and personalise products, brands and services by and for different users or companies according to their own needs whereas, from consumer perspective, it allows users to do what they want with the brand and behave as how they want the brand to behave, whenever they want, allowing instant cross-marketing (Garrigos et al. 2011). The concept of Web 3.0 brought forward radical transformation of technology which revolutionizing brand and consumer engagement, based on the creation and management of networks and participation of people who live, interact, learn, create and contribute content via the web (Garrigos-Simon et al. 2012). In this sense, engagement is the principal feature.

Together with this advancement, consumer is transformed from the passive user of a brand/product into highly active one who wants or at some extent willingly to participate in all production process, forcing company to create an interactive link with the consumer, to be open and cooperative with consumers in the whole communication process, from the definition of the product through to the development, production positioning, communication, brand management or even sales service (Schiffman 2008). In a way, it is a creative segue for consumers to actively consume not only the physical aspect of the product, but also the idea or essence of it through supported or expressed notions online that inculcates virtual participation. Participation is essential, as it increases the engagement, improves reputation and enhances diverse innovations. In the realm of Web 3.0, crowdsourcing is regarded as a type of participative online activity in which a large group of people collaborate on solving a wide variety of problems (Doan

et al. 2011). Some of the earlier studies have identified basic characteristics of crowdsourcing initiative that include clearly defined crowd, task with a clear goal, benefits received by the crowd, online task assigned process and Internet-based collaborative activity (Estelles-Arolas & Gonzalez-Ladron-de-Guevara 2012).

The term crowdsourcing was first used by Howe (2006) that described users' activities on content co-creation. Content co-creation or user-generated content in some cases is termed as customer made content. Customer made content is referred as corporations of creating goods, services and experiences in close cooperation with experienced and creative consumers, tapping into intellectual capital, and in exchange giving them a direct say in and rewarding them for what actually gets produced, manufactured, developed, designed, serviced or processed, while user generated content on the other hand is referred as a regular people who voluntarily contribute data, information, or media that then appears before others in a useful or entering ways (Gatautis & Vitkauskaite 2014).

A more profound thought of crowdsourcing was noted by Estelles-Arolas & Gonzalez-Ladron-de-Guevara (2012) that explained it as a type of participative online activities in which individual, institution, non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity in nature via a flexible open call to voluntarily undertaking a task. The undertaking of the task of variable complexity and modularity in which the crowd participate in bringing together knowledge and experience entails mutual benefit. The crowd will receive the satisfaction from the given task, be it in a form of reward/incentives, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage that what the crowd has brought to the venture depending on the type of activity with predetermined goal is undertaken. However, one would argue if it were really seen as a task to actually contribute in the sphere of social media, especially when generated content by OSNC are thought to be indeed; expressions and voluntary. The potential transformative nature of crowdsourcing communities as a channel of organisational innovation for companies has urged both researchers as well as practitioners to understand how crowdsourcing communities can be nurtured to generate novel ideas and solutions (Afuah & Tucci, 2012). This is why most businesses see it as valuable and has high retainable value to them.

Although companies have long recognised the importance of retaining, sustaining, and nurturing customers, interactions and engagement, they are now becoming more complex. They now represent a multi-party conversation rather than a brand-dictated monologue. Within these interactions, crowdsourcing has become an integral element for brands to develop and foster more intimate online consumer relationships. Ford, et al. (2015) further elaborates that crowdsourcing enables organisations to enhance research and development budgets, invent innovative solutions for existing problems, relieve overwhelmed in-house employees, or complement limited employee talent and expertise to successfully find technologically complex solutions. The internet online communities and mass-collaboration technologies have all enabled a diverse and dispersed crowd of strangers to work together toward a common goal. By crowdsourcing a need, firms can outsource it for resolution to anyone in the world with a computer and internet access.

Crowdsourcing deployment in branding activities allows crowd to publish and disseminate personal evaluations of products and services. Having said this, crowdsourcing deployment in this context of research will look at only Instagram, due to the fact that Instagram is a fast growing social network platform that is projected to take over Facebook as a more exclusive platform for content-generated marketing activities. Instagram is now being used by top brands to create compelling visual experiences for their followers for instance; Coach has successfully used crowdsourcing to help sell their products through shared photographs of women in different cities all over the world wearing Coach footwear under the hashtag of #coachfromabove.

2.2 Instagram and OSNC participative behaviour

Instagram; a mobile photo sharing application is one of many crowdsourcing marketplaces aimed at popularizing image-intensive social software. Sun, et al., (2015) mentioned that crowdsourcing marketplaces as platform; should enable ONSC corroborate with each other on various tasks as well as provide a positive climate for creative behaviour (Martinez, 2015). The adoption of Instagram among OSNC is significant in that it signals visually predominant, ostensibly organic mode of sharing image which differs from professional photography (McNely 2012). Instagram uses image to communicate, which gives the ability for OSNC to post pictures and 15-second videos, and share it with the world. Instagram's growing popularity has made it an ideal platform of choice for communicators because it provides a versatile stage that can host a number of strategic initiatives to market a business, brand or product.

Since its inception, Instagram has become one of today's top social network sites among OSNC despite its limitation on only being able to upload photo and video content via mobile device. Created by Kevin Systrom and Mike Krieger in October 2010, it managed to garner over one million users within two months' time after launching. As of December 2014, Instagram has over 300 million active users assessing the site per month which hosts over 20 billion photo uploaded from all over the world, largely by the urban youth with a skew towards women. Instagram exhibits high levels of engagement where 57% of its user checks the site at least once a day with 35% visiting multiple times a day. Out of this, 70 million photos and videos are shared everyday with 25 billion likes that boils down to 8500 likes per second and 1000 comments posted per second. Instagram user engagement is noted to be 15 times higher than Facebook engagement. There are about 88% of brands on Instagram shared at least one video, which accounts for 6% of all posts. The top 50 brands on Instagram have an average of 722,000 followers, with an average of 1.5 million Instagram posts mentioning these brand names (Duggan et al. 2015). Table 1 shows the growing Instagram in percentage as compared to other top mobile apps in the year 2013.

Table 1: Top mobile apps 2013

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Rank	Mobile Apps	Average Unique Users	Year Change
1	Facebook	103,420,000	27%
2	Google Search	75,984,000	37%
3	Google Play	73,677,000	28%
4	YouTube	71,962,000	27%
5	Google Maps	68,580,000	14%
6	Gmail	64,408,000	29%
7	Instagram	31,992,000	66%
8	Maps (Apple)	31,891,000	64%
9	Stocks	30,781,000	32%
10	Twitter	30,760,000	36%

Source: Duggan, Ellison, Lampe, Lenhart, & Madden (2015)

Mancuso and Stuth (2015) proposed that Instagram is offering an exceptionally efficient image-based storytelling application unlike another. Distinct features such as hashtags, '@mentions', geotagging, biography space, follower/following button and photo editing functions were designed to facilitate this ability. Instagram has cleverly understood from its inception that they have to let the OSNC to simultaneously post their photos in other social media platforms. This connectivity to other platforms such as Facebook, Twitter, Tumblr, Posterous and Foursquare facilitate users in disseminating their message to other social circles (Linaschke, 2011). The storytelling process is thus made easier across different platforms, with different audience.

Instagram enables OSNC to participate in building and engaging with the application. According to Hempel (2014), there are various examples of users' participative behaviour in Instagram. Various cases saw amateur photographers quitting their day job to sell prints of their images empowered by popularity gained through the application. Professional photographers are also using Instagram to complement and promote their work. Celebrities use the application as their marketing vehicle and announcement tool. Another prominent example is the trend of "InstaMeet", where Instagram users get together and socialize while capturing pictures and uploading them to the application along with a certain hashtags to commemorate the event. This kind of devotion signifies a certain level of motivation and engagement with the application.

Hempel (2014) mentioned a study that was conducted on academics, photographers and investors in order to uncover the reason Instagram gained so much popularity in a short span of time. It was found that people has shifted to visual communication in order to share their life experience with onlookers. The photo filters could create aesthetically pleasing posts as they have the ability to transform Instagram images into abstraction, as they do so, followers can escape to whatever feelings, memories and experiences the images evoke (Jang et al. 2015; McNely 2012). The image-power nature of Instagram also provides a unique advantage for brand on Instagram to trigger their followers' emotion, which entice desired actions towards the visual posted. This would be particularly helpful to companies marketing their product and brand.

Small businesses are especially thriving through Instagram due to its unrestricted access to fan base. With more than 300 million users, it is indisputably operational in connecting brands with potential customers through visuals (Mancuso & Stuth, 2015). The location search enables OSNC to look for images that has been tagged with a location

pin. This feature is particularly useful for business premises to publicize their location (Linaschke, 2011). The newest addition to Instagram features is the ability to measure clickable advertising messages. The application enables OSNC to test ad visuals, hashtags of product names or subject matter, form factor, colour of product and other visual elements (Mancuso and Stuth, 2015). A particular feature in Instagram, which some OSNC might not favour, is the capability for the images to be reposted via additional mobile application. Nevertheless, this feature is highly approved by corporations, as any kind of free publicity for their goods is highly welcomed.

Nonetheless, the reason underlying engagement of OSNC and Instagram is not limited to its startling features only. Beyond that, there are other contributing factors of Instagram participative behaviour. According to Katz et al. (1974) in media uses and gratification, media users held varying motives for choosing different forms of media which introduce link between how media is used and why it helps media users achieve gratifications. The key concept of media uses and gratifications is that the choice media users made when consuming media motivates their desire to gratify a range of needs, which refers to individual characteristics such as psychological setup, social position, life history and society. This includes a media structure that produces perceived problems and perceived solutions to the user. The problems and expected solutions are modelled into motives for communication, hence lead to media behaviour. Such work places media uses and consequences within the larger context of media user everyday social habits and routines (Zolkepli & Kamarulzaman 2015). Media uses and gratifications suggest ways in which motivations and traits lead to the consumption of the media over other avenues, for the fulfilment of individual needs. Sustainability of virtual communities heavily relies on the persistent effort of participants (Fang & Neufeld, 2008), it is important to understand the motivators and/or inhibitors determining ONSC's participation effort (Sun, et al., 2015). Instagram being one of the communicative media, by understanding on the underlying reason on why OSNC engage in Instagram and perform crowdsourcing can help brand tailor their communication strategy at their core consumer segments.

2.3 OSNC engagement on Instagram

Considering the numerous definitions of engagement concerning online social network proposed by scholars and practitioners, the concept of engagement is closely tied to the trend toward interactive experience and value cocreation (Hollebeek et al. 2014). Recent trends show that consumers are increasingly seeking more involved roles in the branding process and in contributing to brand identity (Doorn et al. 2010). Engagement is the antecedent to outcomes such as usage, affect and response. The fundamental insight of engagement comes from experiencing Instagram in certain way. To understand engagement is to understand the experiences that consumers have in connecting with the site. Martinez (2015) found that greater psychological involvement and emotional attachments in engagement yields greater attention to detail thus makes for more creative contributions. Martinez (2015) further illustrates that should consider creating compelling virtual experience to inspire OSNC to make contributions. With special emphasis on Instagram and brand identities, given the particular personality traits of knowledge community while avoiding excessive, anxious control and respecting individuals (Martinez, 2015) may allow brands to better engage ONSC with their goals. Hence, online social network engagement on Instagram is believed to fit into the OSNC life. For instance, Instagram content can be engaging because OSNC have a utilitarian experience with it where they believe that the site provides information in helping them make important decisions and accomplish something in their lives. On the other hand, other available content from Instagram can be engaging because it provides OSNC with an intrinsically enjoyable experience, enabling them to unwind and escape from the pressures of daily life. This platform; coupled with its active users in a way promotes creativity and with it quality contributions through participative engagement. Experiences are not necessarily mutually exclusive and some content could engender high levels of multiple experiences. It is necessary to realise that there is more than one path to engagement and that the different paths are realised by offering different experiences.

There are many independent streams of research examining consumers' engagement online and with media in general. According to Parent, Plangger and Bal (2011), engagement specific to social media has more directly been conceptualised as consisting of several elements including creating and posting online content that is relevant and meaningful to consumers, relinquishing some degree of control over this content so that it becomes sharable, and even modifiable, among friends, engendering a sense of online community among existing customers and facilitating conversation and dialogue rather than delivering one-way marketing communications monologues. While Zolkepli and Kamarulzaman (2015) found that needs on using social media is motivated by personal (entertainment and enjoyment), social (social influence and social interaction) and tension release (companionship, belongingness, playfulness and escapism) that each triggers the social media user to connect and adopt social media.

While there can be substantial common ground between the experiences posited by the social network platform, unfortunately they are not entirely consistent. Certain experiences exist in some frameworks but not others, among the experiences that consistently exist in multiple frameworks; there are often subtle differences in the way in which they are conceptualised. In some cases, multiple experiences under one framework are subsumed by a single experience of another. Therefore, in this proposed research, OSNC engagement is compartmentalised into technology-push and need-pull forces to gain more in-depth understanding on the motivation that lead to participative behaviour of Instagram users on crowdsourcing.

3. Conceptual framework: Technology push and need pull forces

Push forces is conceptualised as motivational factors or needs that arise due to a disequilibrium or tension in the motivational system, which include factors that motivate or create a desire on human behaviour. Meanwhile, pull forces in contrast is conceptualised as feature-related factors that create attractions towards certain motivation (Klenosky 2002). Push and pull factors are two separate decisions made at two separate points in time. It has been noted that while the internal forces push people towards certain motivation, the external forces of the motivation itself simultaneously pull them to choose that particular behaviour (Cha et al. 1995).

In the light of push and pull forces, the concepts of technology-push and need-pull were introduced by Schon (1967) as the underlying motivations and driving forces behind the innovation of a new technology (Chidamber & Kon 1994). Technology-push suggests that innovation is driven by science, and thus drives technology and application. The technology push force stems from recognition of a new technological means for enhancing performance. With appropriate structure and strategy, adoption of new technology could create substantial and sustainable competitive advantages (Porter & Miller 1985). On the other hand, need-pull proponents argue that user needs are the key drivers of adoption. Langrish (1972) concluded that both, the technology-push and need-pull forces existed, but that the need-pull forces was generally more prevalent. Some researchers proposed that a successful innovation would occur when a need and the means to resolve it simultaneously emerge (Fischer 1980). Thus, adoption of a new technology may be induced by the recognition of a promising new technology, a performance gap, or the motivating forces of both.

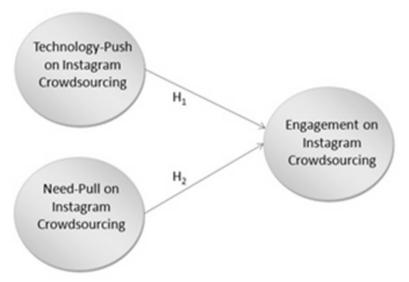


Figure 1: Conceptual framework

Based on this, the preliminary conceptual framework that consists of two main constructs: (i) technology-push on Instagram crowdsourcing and (ii) need-pull for Instagram crowdsourcing is hence proposed. These two main constructs are assumed to influence OSNC engagement on Instagram crowdsourcing. The proposed model is illustrated in Figure 1. Based on the conceptual framework, the proposed hypotheses are as follows:

H1: The higher the technology-push forces perceived towards Instagram, the greater the possibility of participative behaviour of crowdsourcing

H2:The greater the need pull by the Instagram, the higher the participative behaviour on crowdsourcing

From this set of hypotheses, it is deduced that technology-push on participative behaviour of Instagram crowdsourcing can be themed into two types of engagement that is: (i) personal engagement that consists of eight (9)

motives that is enjoyment, entertainment, interactivity, ego enhancement, playfulness, immediacy, stimulation and inspiration, temporal and creativity and (ii) social engagement consists of eight motives also that is trendiness, social interaction/socializing, social influence, materialism, social facilitation, civic-mindedness, utilitarian, and community. On the other hand, need-pull on participative behaviour of Instagram crowdsourcing is proposed to have ten (10) items that is social tagging, geo-tagging, conversation, photo sharing, image power, timely content, promotions/incentives, celebrity factor, exclusivity and privacy and trust. These motives are the driving factors that lead OSNC to perform a participative behaviour on Instagram crowdsourcing. These motives also work as antecedents, where brand on Instagram can tap into. The proposed method for this conceptual model is quantitative research using either survey or online survey instrument due to the fact that the unit of analysis of this study is those that use online applications. Table 2 summarises the proposed constructs and its testable variables.

Table 2: Proposed constructs and variables

Variables		Literature Support	
	Personal Engagement		
1	Enjoyment	Calder, Malthouse, & Schaedel (2009); Mehmetoglu (2011); Zolkepli & Kamarulzaman (2015)	
2	Entertainment	Rohm, Kaltcheva, & Milne (2013); Zolkepli & Kamarulzaman (2015)	
3	Interactivity	Zolkepli & Kamarulzaman (2015)	
4	Ego-Enhancement	Mehmetoglu (2011)	
5	Playfulness	Zolkepli & Kamarulzaman (2015)	
6	Immediacy	Omar (2014)	
7	Stimulation & Inspiration	Calder, Malthouse & Schaedel, 2009	
8	Temporal	Calder, Malthouse & Schaedel, 2009	
9	Creativity	Martinez (2015)	
	Social Engagement		
1	Trendiness	Zolkepli & Kamarulzaman (2015)	
2	Social Interaction/Socializing	Calder, Malthouse, & Schaedel (2009); Mehmetoglu (2011); Zolkepli & Kamarulzaman (2015)	
3	Social Influence	Zolkepli & Kamarulzaman (2015)	
4	Materialism	O'Cass, 2004	
5	Social Facilitation	Calder et al. (2009)	
6	Civic Mindedness	Calder et al. (2009)	
7	Utilitarian	Calder et al. (2009)	
8	Community	Calder et al. (2009)	
	Instagram Usage Experience		
1	Social Tagging	Jang, Han, Shih, & Lee (2015)	
2	Geo Tagging	Jang, Han, Shih, & Lee (2015)	
3	Conversation	Jang, Han, Shih, & Lee (2015)	
4	Photo-Sharing	Jang, Han, Shih, & Lee (2015)	
5	Image Power	Jang, Han, Shih, & Lee (2015)	
6	Timely Content	Rohm et al. (2013)	
7	Promotions/Incentives	Rohm et al. (2013)	
8	Celebrity Factor	Caroll (2008)	
9	Exclusivity	Rohm et al. (2013)	
10	Privacy & Trust	Shen, Lee, & Cheung (2014)	

4. Conclusions and implications

A major challenge facing the study on engagement lies not only in understanding of the engagement itself, but also on the understanding of engagement role together with other variables in guiding the participative behaviour of crowdsourcing. This study has outlined important constructs and variables that should be taken into consideration as antecedents of participative behaviour of crowdsourcing, which can be used by a company as a blueprint to maximize efforts in strengthening brand value through Instagram. The proposed framework also appears to be a valuable aid in guiding companies to understand the factor that entice Instagram followers to highly participate on brand crowdsourcing activities. Such approach can enhance the effectiveness of brand strategy as well as brand-consumer

relationship at both theoretical and practical level. Given the ongoing struggles to keep up with the fast moving technology and innovation, a model that explains OSNC engagement on crowdsourcing is a crucial tool for emerging and growing technological era of consumerism.

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