

Intention to Use Instagram by Generation Cohorts: The Perspective of Developing Markets

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Abstract

Purpose: The study aims to investigate the effect of behavioural and normative beliefs on attitude and subjective norm towards the use of Instagram respectively, and subsequently their effect on intention to use Instagram by generation cohort. The theory of reasoned action is adopted as underlying basis to explain the relationships under investigation.

Design/methodology/approach: The study was conducted in Sarawak, an emerging market in Malaysia and Southeast Asia. 405 respondents were sampled using purposive sampling technique. They were grouped based on Sarawakian cohorts, rather than the cohorts from the U.S. sources. Data was collected through self-administered questionnaire and analyzed using multiple regressions and ANOVA.

Findings: The findings show that behavioural and normative beliefs partially affect attitude and subjective norm towards the use of Instagram respectively. However, both attitude and subjective norm are significant predictors of intention to use. Additionally, the older cohort is found to rely more on opinions of significant others than the younger cohorts when considering the use of Instagram.

Originality/value: - Although Instagram is gaining great popularity in contemporary society, little has been done to investigate user behaviour towards the application by generation cohorts in the context of developing markets. The study articulates the implication of generational impact on Instagram usage, thus articulating the antecedents of usage across generation cohorts.

Keywords: Instagram, Social Networking, Theory of Reasoned Action, Generational Cohort, Attitude, Subjective Norm

Introduction

Social networking has become an important activity for many businesses and individuals. It is known to assist people in making new friends and connecting with others, as well as searching for and disseminating information. Social media giants, such as Facebook and Twitter, have

revolutionized the manner people communicate by allowing users to upload pictures, and to share their opinions about products, services and experiences with their networked peers conveniently (Edwards, 2011; Rasid et al., 2013). Due to technological evolution, mobile phone users today can easily and frequently connect to social networking sites using smart phones (Bergstrom and Backman, 2013; Raacke and Bonds-Raacke, 2008). As a result, social networking becomes an important component of living and even a habitual activity, especially among younger generations.

Founded by Kevin Systrom and Mike Krieger in 2010, Instagram is a relatively new social networking site, and serves mainly as a platform to share photos among users. It is basically an application that facilitates photos taking, storing and sharing on the phones. It can be easily downloaded for free from the App Store online via smart phones and tablets. Due to its simplicity and popularity, Instagram reached millions of user accounts in a short span of time, and was soon awarded App of the Year by Apple Inc in 2011. It also prompted the interest of Mark Zuckerberg of Facebook to buy Instagram and its company in the following year (Goor, 2012).

Although Instagram is a major social phenomenon in contemporary society, little has been done to investigate user behaviour towards the application in developing markets (Ting et al., 2015). Past literature mostly discusses social networking sites like Facebook and Twitter in the Western context (Akar and Topcu, 2011). Given the fact that Asia is the most populated continent and the adoption of communication technology is different between developed and developing countries (Kartiwi and MacGregor, 2007; Kwon and Chidambaram, 2014), the lack of understanding about the subject matter is a major gap in literature. Moreover, there is also an extreme lack of study which delves into the use of Instagram from generational perspectives. Since generation cohorts are known to have distinctive values and lifestyles due to their respective experiences during formative years (Meredith and Schewe, 1994; Noble and Schewe, 2003), it is believed that different cohorts would have different behavioural responses towards Instagram. Such understanding is essential as it complements market segmentation and targeting strategies (Kotler and Armstrong, 2010). Hence, the present study is aimed to investigate the use of Instagram by comparing the usage behaviours of different generation cohorts in a developing market.

Literature Review

Social Media

Social media perform a role in delivering, receiving, and exchanging information without boundary restrictions (Kim et al., 2013). They are also channels to share opinions and information, and to build social connections with others (Akar and Topcu, 2011). Moreover, they facilitate the maintaining of relationships with friends and families, as well as the making of new friends and forming of communities based on their interests and purposes (Bergstrom and Backman, 2013). Due to their usefulness, it has been reported that 684,478 pieces of content are posted on Facebook, 100,000 posts are tweeted on Twitter, 2 million of questions are searched on Google, 48 hours' length of videos are uploaded on YouTube, up to 3,600 photos are shared on Instagram, and 571 websites are produced on a daily basis (James, 2012). It is also reported that people generally would spend more than 50% of their time on social media sites using their mobile phones (Bergstrom and Backman, 2013).

Social media have gradually become a vital marketing tool for organizations of any size (Thomas and Akdere, 2013). The different features of social media have altered and enhanced the business operations, and provided new chances for businesses to link with consumers effectively. Consequently, many organizations have begun to utilize social media to interact with their audience. The addition of visual information has ushered in greater influence on

consumer decision-making process (Sema, 2013). Concurrently, social media have gradually turned consumers into advertisers or promoters themselves (Roberts and Kraynak, 2008). Recent studies have found that consumers today tend to rely on peers' opinions more than business communication when they consider purchasing a product (Akar and Topcu, 2011). Therefore, they are also inclined to obtain product information by seeking advice from their friends or other consumers in the same social groups on social networking sites (Clemons, 2009). In particular, they tend to search for people's opinions or reviews about certain products online before they make purchase decision (Sema, 2013).

Instagram

For many years, sites like Facebook, Twitter and LinkedIn are the most preferred social networking platforms. However, Instagram has taken the market by storm in recent years. Notwithstanding a photo-based social networking application and launched only in 2010, more than 100 million users are believed to have been actively using Instagram on a regular basis, making it one of the fastest growing social media in a short period of time (Egan, 2015; Goor, 2012; Thomas and Akdere, 2013). The popularity of Instagram has even exceeded that of Facebook, especially among university or college students (Endres, 2013). It is asserted that students prefer to follow brands on social networking sites in order to view contents posted by the companies concerned. Being a photo-sharing application, Instagram utilizes mobile technology to provide visual connection between brands and consumers (Egan, 2015).

It is reported that Instagram reaches the younger generations, and attracts diverse societies more effectively than other social networking services (Abbott et al., 2013; Salomon, 2013). It is also found that young consumers today spend more time on Instagram than other sites (Salomon, 2013). This is because young mobile users are extremely attracted and driven to taking photos using their smart phones, and sharing them with others instantly (Abbott et al., 2013). Even though the function is simple, the sharing of images rather than words alone has made communication and networking with friends and wider social groups who share similar interests more convenient, animated and entertaining (Bakhshi et al., 2013).

By connecting physical environments with the digital realms, Instagram enhances online presence and identity, and allows more interactive communication and effective dissemination of information (Abbott et al., 2013; Chante et al., 2014). Accordingly, numerous organizations exploit it to create organization-consumer networks so as to make their products more relevant to consumers' values and lifestyles. It is found that organizations with high level of presence on Instagram are likely to have more consumers following them and their products (Lariviere et al., 2013). With the increasing amount of followers, all brand-related photos, events, and updates that the users have posted on their profiles can be easily seen, shared, talked about and disseminated (Goor, 2012).

Generation Cohort

Generation has long been regarded as a segmentation approach due to its predictive capacity of consumer behaviour (Kotler and Armstrong, 2010). Generation cohort defines consumer segment using coming-of-age year as a proxy determinant (Rogler, 2002). The emphasis is not on their age and life-stage, but on their personal attachment to life experiences of major societal events during formative years (Noble and Schewe, 2003). Major development and changes in a country's institutions are believed to have affected individuals profoundly, especially those who are in their formative years (Fong, 2004). Such impact gives rise and forms new generation cohorts. Despite the effect of global events, generational values are predominantly shaped by collective experiences of regional historical events, and reinforced by societal customs and home characteristics (Connerton, 1989; Holbrook and Schindler, 1989). As such, values and

behaviours of one generation cohort are not only expected to be different from those of other cohorts, they are also different from the cohorts who have similar age-range in other countries (Egri and Ralston, 2004).

Studies and findings on generation cohorts in the U.S. are well-documented (Meredith and Schewe, 2002; Strauss and Howe, 1991). Baby boomers, generation X and generation Y are some of the generation labels which are not only well-known, but also widely adopted. However, it is theoretically and practically inappropriate to construe generation labels and characteristics in one population to another population (Munusamy et al., 2010; Ting and de Run, 2012). Due to societal and cultural differences, the formation of generation cohorts in the U.S cannot be the same as that of developing countries (d'Astous and Ahmed, 1999; Ting et al., 2015). In fact, the deficiency of using common age-groups or median years of birth, rather than major external events, are used as proxies for a generation in cross-cultural studies has long been pointed out (Inglehart, 1997).

Recent studies have found that Sarawak, one of the largest states in Malaysia, is made up by five generation cohorts in the past 80 years (De Run and Ting, 2013, Ting et al., 2012). The first cohort is labelled as Neoteric-inheritors. They are still in their formative years and are thus fickle and susceptible to change. The second cohort is labelled as Prospective-pursuers who are in their mid 20s and 30s. Despite growing up knowing technological development, political unrest and natural disasters, they believe that they can make the difference in their own lives. The third cohort is known as Social-strivers, the youngest being in their late 30s and the oldest early 50s. Due to societal and economic change in 1970s and early 1980s, they become more concerned with social well-being and economic stability. The fourth and fifth cohorts, who are over 50 years old, are labelled as Idealistic-strugglers and Battling-lifers due to their attachment to communism, colony of British and Japanese occupation during their formative years respectively. Although the last two cohorts constitute substantial segment in Sarawak, they did not have noticeable experience of communication technology during formative years. Hence, the present study will only adopt the first three cohorts as they are more likely Instagram users.

Framework and Hypotheses

The theory of reasoned action (TRA), introduced by Fishbein and Ajzen (1975), is utilized as the underpinning basis to look into intention to use Instagram by generation cohorts. The theory, as shown in Figure 1, stipulates that an individual's behaviour is determined by his intention to perform it. Intention, in turn, is predicted by attitude and subjective norm. Finally attitude and subjective norms are predicted by behavioural and normative beliefs respectively (Korgaonkar et al., 2001). Even though TRA was developed some decades ago, it has been widely used in recent studies, including those related to technologies in both western and eastern contexts due to its capacity to explain consumer behaviour (Ramayah *et al.*, 2009; Shih and Fang, 2004). The theory of planned behaviour (TPB), which is the extension of TRA, is not adopted in the study because perceived behavioural control is not a concern in using Instagram among younger generations.

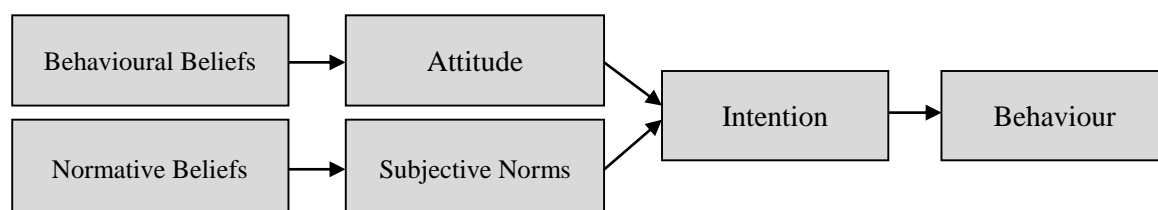


Figure 1: Theoretical Framework based on TRA

Intention

Intention is described as an individual's subjective probability aspect that joins him to a certain behaviour (Fishbein and Ajzen, 1975). It is also explained as a determination that an individual intends to follow in a certain way (Downey, 2010). This explains why intention is often used to better understand how attitude and opinions about significant others can affect actual actions (Huang et al., 2004). It provides better predictions than a simple extrapolation from past trends (Armstrong et al., 2010). Since intention has direct influence on subsequent behaviour, intention to use Instagram is adopted as the outcome construct in the framework of the present study.

Attitude and Subjective Norm

Attitude is defined as a tendency of an individual to act in a certain way based on his predisposition and experience (Fishbein, 1967). It indicates a mental state of willingness which has directive influence on individual's reaction on relevant objects and situations. Attitude affects intention and is closely related to behaviour because it is a composition of personalities and motivations (Borkowski, 2005). On another note, subjective norm is defined as the perceived social pressure to perform or not to perform the behaviour (Ajzen, 1991). It refers to an individual's opinions about what significant others believe the individual should do (Finlay et al., 1999). Given the magnitude of attitude and subjective norm in explaining intention, and their relevance to the use of Instagram, both are adopted as the determinants of intention in the study. Hence, the hypotheses are formulated as follows:

- H₁: Attitude towards the use of Instagram has positive effect on intention to use Instagram.*
- H₂: Subjective norm towards the use of Instagram has positive effect on intention to use Instagram.*

Behavioural and Normative Beliefs

A belief is generally described as specific statement about the attributes of certain objects (Pollay and Mittal, 1993). It is an estimate or probability of the truth of a phenomenon (Cooper and Schindler, 2008). Therefore, they are the antecedents and orientations of attitude and subjective norm, and they provide more comprehensive understanding of consumer behaviour and eventual outcome. Past studies have shown the importance of behavioural and normative beliefs to gain insights into the formation of attitude and subjective norm (Ramayah et al., 2009; Thompson and Thompson, 1996). Hence, the findings of a qualitative study by Ting *et al.* (2015) pertaining to behavioural and normative beliefs about the use of Instagram are adopted in the present study. As such, the hypotheses are formulated as follows:

- H₃: Behavioural beliefs about the use of Instagram have positive effect on attitude towards the use of Instagram.*
- H₄: Normative beliefs about the use of Instagram have positive effect on subjective norm towards the use of Instagram.*

In light of the aforementioned, the conceptual framework of the study is developed as shown in Figure 2. Using the early qualitative study as the basis (Ting et al., 2015), five belief factors are used to decompose behavioural and normative beliefs respectively.

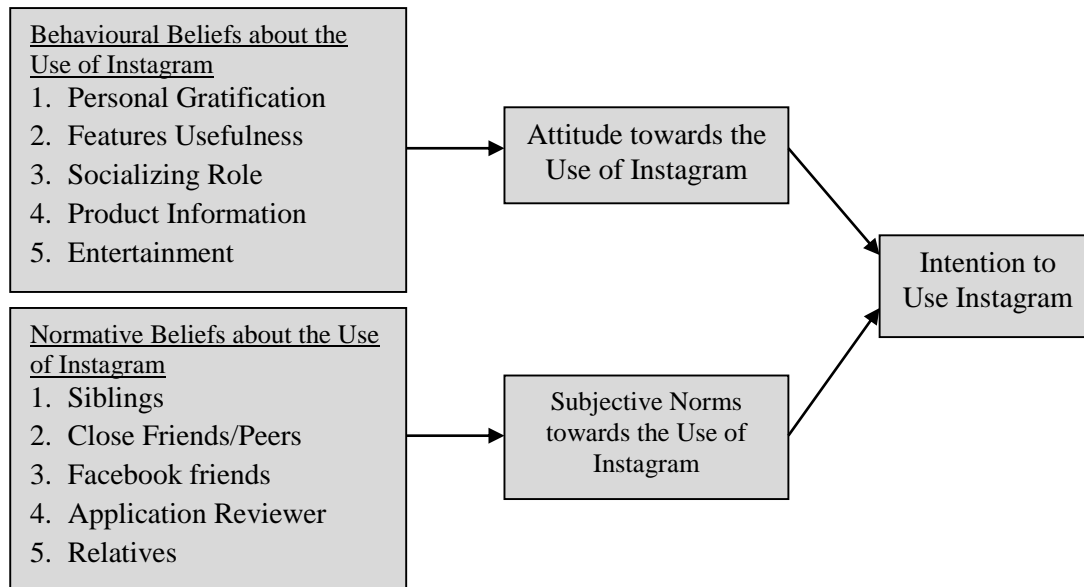


Figure 2: Conceptual Framework based on Ting et al. (2015)

3.4 Differences by Generation Cohorts

Since Neoteric-inheritors, Prospective-pursuers and Social-strivers are shaped and formed due to their respective attachment to major events and societal change during formative years, they possess distinctive characteristics (Ting et al., 2012; De Run and Ting, 2013). Hence, it is postulated that they would have different behavioural responses towards the use of Instagram. The final hypothesis of the study is thus formulated as follows:

H5: Behavioural and normative beliefs, attitude, subjective norm and intention towards the use of Instagram are different across generation cohorts.

Methodology

The study was conducted in Sarawak, one of the largest states in Malaysia located in Borneo Island. Sarawak is emerging as one of the lucrative investment hubs with promising economic prospects in Southeast Asia (Lim, 2014). Hence, Instagram becomes an important platform for local and foreign organizations to connect with their consumers in the state. Given the objectives of the study, a quantitative design, which is both explanative and comparative, was adopted. While explanative approach emphasizes on explaining relationships of phenomenon under investigation (Diers, 2006), comparative approach compares groups to determine the differences in relationships by cohorts (Mills et al., 2006).

Since there is no available list of Instagram users, purposive sampling technique was used to sample the relevant respondents in the state (Trochim, 2006). A survey using self-administered questionnaire was designed. All statements related to the hypothesized relationships are adapted from past studies (Ramayah et al., 2009; Ting et al., 2015), and positive-worded statements using 7-point Likert scale were used. Apart from profiling questions, qualifying questions were included to ensure that only relevant respondents, who were Instagram users and belonged to one of the target cohorts of the study based on their age, were retained in the dataset. Seven hundred copies of questionnaire were distributed throughout the state in mid-2015. After screening and cleaning the data to remove outliers and observations with serious missing values, multiple regressions and ANOVA were then used to perform tests of relationship and difference on the hypotheses.

Findings

Profile of Respondents

It is imperative that the respondents are Instagram users belonging to one of the target cohorts in the study. After removing outliers and cases with serious missing values, 405 observations are retained in the dataset. The profile of respondents is presented in Table 1.

Table 1: Respondent Profile

Variables	Frequency	Percent
Gender		
Male	192	47.5
Female	212	52.5
Cohort (as of 2015)		
Neoteric-inheritors (23 years old and below)	181	44.8
Prospective-pursuers (24 to 37 years old)	179	44.3
Social-strivers (38 to 53 years old)	44	10.9
Instagram Usage		
Once a few hours	57	14.1
Daily	121	30.0
Few times a week	67	16.6
Occasionally	43	10.6
Infrequently	116	28.7

Inferential Findings and Hypothesis Decisions

Table 2 presents the findings pertaining to the effect of attitude and subjective norm on intention to use Instagram using TRA as the underpinning basis. It is found that both attitude and subjective norm have positive relationship with intention to use. R^2 value suggests substantial variance explained in the model. Hence, the first and second hypotheses are supported.

Table 2: Effect of Attitude and Subjective Norm on Intention

Variables	Beta	Sig.
Intention		
Attitude	0.774**	0.000
Subjective Norms	0.162**	0.000
R^2	0.717	
Adjusted R square	0.716	
F value	498.688	

* $p < 0.05$, ** $p < 0.01$ (one-tailed)

Table 3, in turn, shows the findings pertaining to the effect of behavioural and normative beliefs on attitude and subjective norm respectively. It is evident that all behavioural beliefs, except for product information, are positively related to attitude towards the use of Instagram.

Table 3: Effect of Beliefs on Attitude and Subjective Norm

Variables	Beta	Sig.	Variables	Beta	Sig.
Attitude			Subjective Norm		
Personal Gratification	0.136*	0.007	Siblings	-0.017	0.388
Feature Usefulness	0.232**	0.000	Relatives	0.246**	0.000
Socializing Roles	0.128**	0.002	Peers	0.457**	0.000
Product Information	-0.062	0.090	Facebook Friends	-0.030	0.319
Entertainment	0.483**	0.000	Application Reviewers	0.132*	0.017
R^2	0.717		R^2	0.508	
Adjusted R^2	0.713		Adjusted R^2	0.501	
F value	198.68		F value	80.468	

* $p < 0.05$, ** $p < 0.01$ (one-tailed)

Moreover, only relatives, peers and application reviewers are found to have significant relationship with subjective norm. Both R^2 results suggest strong explanatory capacity in the models. As such, the third and fourth hypotheses are partly supported.

The findings generated by ANOVA and post hoc test, as shown in Table 4, indicate that Neoteric-inheritors, Prospective-pursuers and Social-strivers hold similar behavioural beliefs about the use of Instagram. However, the normative beliefs of Social-strivers are significantly different from that of the younger cohorts. Consequently, all three cohorts share similar attitude towards the use of Instagram, but not subjective norm. Despite the difference in subjective norm, all three cohorts also share similar intention towards the use of Instagram. As such, it is concluded the last hypothesis pertaining to the postulated difference in behavioural responses is partly supported.

Table 4: Difference by Generation Cohorts

Variables	Neoteric-inheritors	Prospective-pursuers	Social-strivers
Behavioural Beliefs			
Personal Gratification	4.7729 ^a	4.9301 ^a	4.9034 ^a
Feature Usefulness	4.8996 ^a	5.0484 ^a	5.0032 ^a
Socializing Roles	4.8819 ^a	4.8173 ^a	4.9470 ^a
Product Information	4.9017 ^a	4.8819 ^a	5.0091 ^a
Entertainment	5.0876 ^a	5.0301 ^a	4.9537 ^a
Normative Beliefs			
Siblings	3.4171 ^a	3.7514 ^a	4.4773 ^b
Relatives	3.6800 ^a	3.7740 ^a	4.8409 ^b
Peers	4.3000 ^a	4.4040 ^a	5.0114 ^b
Facebook Friends	3.7714 ^a	4.0000 ^a	4.6136 ^b
Application Reviewers	3.6000 ^a	3.8701 ^a	4.8409 ^b
Attitude	5.0857 ^a	4.8776 ^a	5.0455 ^a
Subjective Norms	4.5429 ^a	4.5556 ^a	5.0682 ^b
Intention	5.1600 ^a	5.1111 ^a	5.0833 ^a

Means with the same superscripts are not significantly different; means with different superscripts are significantly different at $p < 0.05$ (two-tailed)

Discussions

The study has shown the relevance of TRA in investigating Instagram usage from the perspective of a developing market. Attitude and subjective norm are both found to be significant predictors of Sarawakians' intention to use Instagram. This underscores the relevance of consumers' predisposition and opinions of significant others to intention to use the application. The findings also infer that the relationship between attitude and intention to use is greater than the relationship between subjective norm and intention to use (Oliver and Bearden, 1985).

In order to provide more comprehensive understanding about intention to use Instagram, behavioural and normative beliefs, which were elicited in past qualitative study (Ting et al., 2015), are adopted as antecedent variables in the present study. In terms of the behavioural beliefs, personal gratification, feature usefulness, socializing roles and entertainment are found to be positively related to attitude to use Instagram among Sarawakians. This explains why photo shooting, editing, filtering and sharing, which Instagram mainly does, become so appealing today. It also implies why many consumers, especially the younger generations, indulge themselves in *selfie* and *wefie* behaviours (Kaye, 2010). Additionally, consumers can easily use the application on their mobile phones to interact with others. Since the interaction is visual and instantaneous, it makes Instagram entertaining and thus a superior alternative to socializing with others. Nevertheless, obtaining information about products is not what motivates Sarawakians to use Instagram. Understandably, social media like TV and networking

sites like Facebook can afford to provide more product information than Instagram. Since the consumers can always find time searching for specific information when needed, this actually highlights the magnitude of instantaneous interaction using mobile phones in Sarawak and developing markets to connect the consumers to the products and the organizations in a more effective and efficient manner.

As for subjective norm, opinions and recommendations from relatives, peers and application reviewers can significantly affect Sarawakians' intention to use Instagram. Relatives and peers are not immediate family members, but they are more likely the sources of reference in purchase decision, rather than business communication (Akar and Topcu, 2011). Since Instagram is relatively new, consumers tend to rely on the opinions of the close ones, especially those who use the application. Consequently, they are also inclined to read the ratings and comments given by application reviewers. It is interesting to note that although Instagram is now part of Facebook, many consumers are found to refuse to link Facebook to Instagram for privacy purposes (Patterson, 2015). They find Facebook more complicated and exposing, while Instagram more purposeful. This might explain why Facebook friends do not exert any impact on Sarawakians's intention to use Instagram.

When looking into the subject matter across generation cohorts, the subjective norm of Social-strivers is found to be different from that of Neoteric-inheritors and Prospective-pursuers. The findings infer that Social-strivers, whose age ranges from late 30s to early 50s, rely on opinions of significant others more than the two younger cohorts. The main reason for this is that Social-strivers are not as technology-savvy as the younger generations. Most of them grew up into young adulthood with limited knowledge about computer and the Internet. Moreover, they are more comfortable with communication in natural setting rather than virtual interaction. Conversely, Prospective-pursuers experience rapid development of communication technology like mobile phones during their formative years. In like manner, Neoteric-inheritors, who are still coming of age, know Facebook and other social networking sites in their tender years. They are more adaptive to change, and hence they do not depend on opinions of others as much as Social-strivers do.

Implications and Conclusion

The understanding of intention to use Instagram, and the implication of generational difference are of utmost importance for business organizations when tapping into developing markets, such as Sarawak. Since consumers in Sarawak are generally in favour of Instagram, managers and marketers can exploit the features of Instagram so as to connect the organizations and products to their target consumers. Nevertheless, not all consumers are alike. Even though the Internet, mobile phones and social networking sites are widely used in Sarawak regardless of their age, generational difference provides insights into why older cohorts rely on opinions of significant others more than the younger ones when considering the use of Instagram. This implies older cohorts, albeit using all the latest technologies, are more comfortable with natural communication, and require additional advice or guidance to using new communicational device.

By utilizing TRA and the concept of generations, the present study has extended the knowledge about consumer behaviour by looking into intention to use Instagram by generation cohorts in the context of developing markets. Even though it articulates the rationale of using the application by cohorts in Sarawak, it does not delve into the impact of such usage on business organizations and consumers. Hence, it would be interesting to look into how the use of Instagram relates to brand personality and loyalty, electronic word-of-mouth, selfie behaviours and purchase decision process by generation cohorts. Such understanding would help business

organizations to utilize Instagram purposefully and specifically so as to interact with their consumers in developing markets, and turn them into channels to more potential markets.

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