

The corporate communications executives' interactive engagement through digital media

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Abstract

Businesses are increasingly using corporate communication technologies to interact with prospective customers. Therefore, this study explores the corporate executives' readiness to use interactive media for engagement with online users. The methodology relied on valid and reliable measures to explore the participants' pace of technological innovation, perceived usefulness, ease of use and social influences, as these factors can have an effect on their engagement with interactive technologies. The findings supported the scales' content validity as the structural equations modeling approach has reported a satisfactory fit for this study's research model. The results indicated that the pace of technological innovation, perceived usefulness, ease of use of online technologies as well as social influences were significant antecedents for the marketing executives' engagement with online users through digital media. This contribution implies that corporate communications executives ought to continuously monitor conversations in social media and review sites, and to respond to their online followers in a timely manner. In conclusion, it identifies its limitations and suggests possible research avenues to academia.

Keywords: Technology Acceptance; Digital Media; Social Influences; Pace of Technological Innovation; Behavioral Intention; Interactive Engagement; Structural Equation Modelling.

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1. Introduction

Several businesses are increasingly promoting their products and services through different channels. Their marketing managers and executives are utilizing different digital media (including social networks, blogs, wikis, electronic fora, webinars, podcasts, videos, et cetera) to reach wider audiences (Camilleri, 2019a). Very often, they are publishing relevant, high quality content online, at the right place and at the right times. Such content may be targeted at particular segments, niches or individual prospects. At times, they are also benefiting of digital content that is co-created by other online users (Harrigan & Miles, 2014), as the Internet's lack of gatekeeping has led to an increased engagement from many users (Camilleri, 2018a). The interactive media have enabled the emergence of a new participatory public sphere where everybody can dialogically interact and collaborate in the co-creation of content (Lamberton & Stephen, 2016; Kaplan & Haenlein, 2010).

The communications through digital media can be dynamic and in real time. Therefore, online users can increase direct interactions with organizations and other audiences (Camilleri, 2018b; Schultz, Utz & Göritz, 2011). Such interactive communications are often referred to as “viral” because ideas and opinions can spread through the web via word-of-mouth (Hajarian, Camilleri, Diaz & Aedo, 2020). There are several online channels that incorporate highly scalable, product recommender systems that feature independent reviews and rankings. These channels are often perceived as highly trustworthy sources by prospective customers (Filiari, 2016). The emergence of user-generated content in fora, newsgroups, social media and crowdsourcing have led to positive or negative word of mouth publicity on brands, products and services (Rios Marques, Casais & Camilleri, 2020).

Such communicative features have become widely pervasive online. (Tiago & Veríssimo 2014; Kaplan & Haenlein, 2010). For this reason, businesses need to acquaint themselves with

the use of digital media in order to increase the impact of their communications. There is an opportunity for them to use interactive technologies to increase the frequency and reach of their messages (Camilleri, 2019a; Kaplan & Haenlein, 2010). Hence, their marketing executives ought to embrace the digital media to amplify the impact of their message. However, they need to create the right message to reach out to their chosen prospects. Notwithstanding, the businesses' online engagement is neither automatic nor easy (Tiago & Veríssimo, 2014; Besiou, Hunter & Van Wassenhove, 2013). The dialogic features that are enabled by web pages, blogs, and other social media may prove difficult to apply (Camilleri, 2020a; Capriotti, Zeler & Camilleri, 2020).

To date, little empirical research has measured the corporate communications executives' acceptance to use the digital media to promote products and/or to engage with online users. Previous studies reported that there are still many businesses that are not benefiting enough of social media, as they did not untap its full potential (Taiminen & Karjaluoto, 2015). Perhaps, they did not consider them as effective communications channels to promote products and services (Rather & Camilleri, 2019; Sin Tan, Choy Chong, Lin & Uchenna, 2010), or they depended on traditional advertising and promotions. Alternatively, businesses may lack the digital competences and skills to engage with online prospects; or may not possess sufficient resources to engage with them through the digital media (Camilleri, 2019b; Brouthers, Nakos & Dimitratos, 2015).

This contribution addresses a knowledge gap in academic literature as it examines the corporate communications executives' technology acceptance and their behavioral intentions to engage in interactive technologies. It adapted valid and reliable measures that explored the respondents' pace of technological innovation, social influences, as well as their perceptions on the usefulness and the ease of use of digital media. Moreover, this study examined the

participants' intentions to engage with interactive technologies. It investigated whether the chosen constructs of our research model, were affected by the demographic variables, including age, gender and experiences. It shed light on the causal path that explains the rationale behind the utilization of digital media for interactive engagement with online users.

2. The Conceptual Development and the Formulation of Hypotheses

A thorough literature review suggests that there are a number of theoretical frameworks, including; the theory of reasoned action (Fishbein & Ajzen, 1975), the technology acceptance model (Davis 1989; Davis, Bagozzi & Warshaw, 1989); the theory of planned behavior (Ajzen 1991); the unified theory of acceptance and use of technology (Venkatesh, Morris, Davis & Davis, 2003; Venkatesh, Thong & Xu, 2012) among others, that were used to explore the individuals' engagement with different technologies, in different contexts.

For instance, the theory of reasoned action sought to explain the relationship between the individuals' attitudes and their behaviors. Fishbein and Ajzen's (1975) suggested that the individuals' decision to engage in a particular behavior is based on the outcomes that they expect. Therefore, this model implies that the individuals' intention and motivation to perform certain actions will precede their actual behaviors. The persons' intentions are determined by their behavioral attitudes and subjective norms (Fishbein & Ajzen, 1975). Hence, this theory included four general concepts: behavioral attitudes, normative pressures (or the subjective norm), behavioral intention, and actual behavior.

The individuals' behavioral intention to use technology would be determined by their attitude toward usage, which would in turn be conditioned by the usefulness and the ease of use of

information systems (Davis, 1989; Davis et al., 1989). Ajzen and Fishbein (1975) posited that behavioral intention is determined by the individuals' personal attitudes and by normative pressures that they experience. The normative pressure or the 'subjective norm' has a direct effect on the individuals' behavioral intentions (Fishbein & Ajzen, 1975), as they are influenced by others to use certain technologies (Carr & Sequeira, 2007).

Ajzen (1991) has extended Fishbein and Ajzen's (1975) theory of reasoned action by introducing the behavioral intention construct in his theory of planned behavior. He argued that another factor, namely, "perceived control" can have an effect on their intention to use technological innovations. In Ajzen's (1991) own words, the individuals' perceived control represents their "perception of the ease or difficulty of performing the behavior of interest" (p. 183). According to the theory of planned behavior, this construct reflects the individuals' internal and external constraints on their behavior. The behavioral control construct was used in previous studies to measure the extent to which individuals believe that they are capable of using particular technologies. Various individuals may hold different beliefs on the degree of effort and on the persistence of their effort that would be required to use technological innovations.

The technology acceptance model has also been widely used in academic literature to explore the individuals' perceived usefulness, ease of use and attitudes toward different technologies (Camilleri & Camilleri, 2019a, 2019b, 2017; Wu & Chen, 2017; Marangunic & Granic, 2015; Rauniar, Rawski, Yang & Johnson, 2014; Legris, Ingham & Collerette, 2003). However, despite its popularity, many researchers pointed out that there are other factors that could influence the individuals' usage of technology. Venkatesh and Davis (2000) claimed that the technology acceptance model was 'parsimonious'. They recommended that this model should

be supplemented and extended by including the subjective norm construct (from the theory of planned behavior). In a similar vein, Legris et al. (2003) held that the technology acceptance model should include variables that are related to both human and social change processes. Other authors remarked that this model ought to explain the adoption of technology by introducing external variables that may determine the chain of influence from the independent variables to the dependent variables, as it is the case for the theory of planned behavior's behavioral intention (Maruping, Bala, Venkatesh & Brown, 2017; Venkatesh et al. 2003). Although many researchers will probably explore the validity and reliability of the technology acceptance model by using a variety of technologies and environments, a few empirical studies have adopted product factors including technological complexity (Sun & Zhang, 2006; Thong, Hong & Tam, 2002), user factors like computer self-efficacy (Hartshorne & Ajjan, 2009; Hsu & Chiu, 2004; Mun & Hwang, 2003), or environmental factors like technical or organizational support (Gangwar, Date & Ramaswamy, 2015; Martins, Oliveira & Popovič, 2014).

Venkatesh et al. (2003) have integrated elements from different theoretical models and empirically validated them in their unified theory of acceptance and use of technology (UTAUT) model. They explored how individuals accepted and used technology in their workplace environments. Venkatesh et al. (2003) claimed that the UTAUT was definitive as it synthesized previous empirical models. The authors reported that it accounted for 70 percent of the variance (adjusted R²) in usage intention. They suggested that the individuals' performance expectancy, effort expectancy, social influences, as well as the facilitating conditions were four major constructs that could influence their intentions to use technological innovations. Venkatesh et al. (2003) were consistent with the previous theories that explored the acceptance and use of technology. The authors held that the individuals' behavioral intentions had a significant, positive influence on their usage of technologies (Park, Nam &

Cha, 2012). They went on to suggest that this effect decreases as experience increases. This leads to the first hypothesis:

H1: The individuals' intention to use the digital media has a positive and significant effect on their interactive engagement with digital media. This influence is moderated by experience.

2.1.1 The Pace of Technological Innovation

Online technologies are increasingly advancing at an unprecedented pace of innovation. Relevant literature reported that many organizations are utilizing digital media platforms and mobile technologies to engage with online users (Butler, Camilleri, Creed & Zutshi, 2020; Litvin, Goldsmith & Pan, 2018; Kim, Lim & Brymer, 2015). Notwithstanding, there have been significant developments in recommender systems that rely on big data and analytics, among other technologies (Camilleri, 2020b; Xie, So & Wang, 2017; Murphy, Chen & Cossutta, 2016; Xiang, Schwartz, Gerdes & Uysal, 2015). The emergence of these technologies has offered endless opportunities to different businesses to “listen” to their customers (Lee, Jeong & Lee, 2017; Herrero, San Martín & Hernández, 2015). Therefore, there is scope for marketing executives to use the digital media to engage in online conversations with stakeholders (Troise & Camilleri, 2020; Mogaji, Watat, Olaleye & Ukpabi, 2020). Corporate communications practitioners are encouraged to use smart technologies to facilitate the creation of meaningful and personalized services and experiences (Neuhofner, Buhalis & Ladkin, 2015; Greenhow & Robelia, 2009). In this light, this research investigates the marketing executives' attitudes toward the adoption and diffusion of digital media. The researchers presume that it is in their interest to keep themselves up-to-date with the pace of technological innovation. This leads to the second hypothesis:

H2: The individuals' pace of technological innovation has a positive and significant effect on their intention to use the digital media. This influence is moderated by age, gender and experience.

2.2.2 *Perceived Usefulness*

Davis (1989) and Davis et al. (1989) believed that technological innovations can support individuals in their work. Davis (1989) argued that the perceived usefulness of the technology is one of the factors that can influence individuals in their decision about how and when they will use it. He defined the individuals' perceived usefulness of technology as the degree to which a person believes that using a particular system would enhance his or her job performance. Davis, Bagozzi and Warshaw's (1992) related the perceived usefulness (PU) of the technology with the utilitarian value of technology. Hence, PU is tied to utility, and has consistently been shown to be the strongest predictor of behavioral intention (see Venkatesh et al. 2003). Davis (1989) maintained that PU has to do with the degree to which a person believes that the technology will help him or her perform a certain task in an efficient and productive manner. Hence, PU is concerned with the expected overall impact of technology on the individual's job performance (in terms of process and outcome). Turner, Kitchenham, Brereton, Charters and Budgen (2010) elaborated that technology is often used to improve the individuals' working practices by increasing their productivity, quality or timeliness of products and services. Moreover, Venkatesh et al. (2003; 2012) suggested that the demographic variables, including age, gender and experience, can have an effect on their technology adoption. This leads to the third hypothesis:

H3: The individuals' perceived usefulness of digital media has a positive and significant effect on their intention to use the digital media. Age, gender and experience will moderate this effect.

2.2.3 Perceived Ease of Use

Davis (1989) explored the extent to which a person thinks that the technology is user-friendly and free of effort. He argued that the individuals' perceived ease of use (PEoU) of technology is a precursor of their technology acceptance. Davis' (1989) defined the PEoU construct as the degree of user friendliness of technologies. Venkatesh et al. (2003) maintained that effort-oriented constructs were evidenced during the early stages of technology adoption, when the users may encounter process issues when they are still learning on how to use the technology. In a similar vein, Thong et al. (2002) contended that if individuals find that the technology is difficult to understand and use, they will not perceive its usefulness. As a result, they won't be productive and efficient when they use it. Venkatesh et al. (2003) also reported that the complexity of the technology can have an effect on the individuals' intention to use it.

Taylor and Todd (1995) maintained that inexperienced individuals may initially focus on learning the technology, until they become experienced users. Hence, they will presumably overcome their concerns about the ease of use of technological innovations. The authors held that eventually individuals will focus their attention on the usefulness of the technology. This argumentation suggests that the path from ease of use to attitude will be stronger for inexperienced users, whereas the path from perceived usefulness to attitude will be stronger for experienced users. In simple words, if the technology is easy to use the individuals would perceive the benefits in using it. On the other hand, individuals may feel uneasy, apprehensive, or fearful of using technologies, including computers (Meuter, Bitner, Ostrom & Brown, 2005; Igbaria & Parasuraman, 1989). Previously, Venkatesh et al. (2003) suggested that technology anxiety is evoked by emotional reactions when it comes to performing certain behaviors. Therefore, the individuals' perceived ease of use (or technological anxiety) can have an impact on their intention to use technologies. Venkatesh and Morris (2000) posited that age, gender

and experience may influence the relationship between the individuals' effort expectancy or perceived ease of use and their behavioral intentions to use certain technologies. This leads to the fourth hypothesis:

H4: The individuals' perceived ease of use has a positive and significant effect on their intention to use the digital media. Age, gender and experience will moderate this effect.

2.2.4 Social Influences

Very often, individuals are influenced by others, including their family and friends, to use technologies. Venkatesh et al. (2003) indicated that their social influences (SI) construct represented the degree to which an individual perceives that important others believe he or she should use the new system. This construct is similar to Fishbein and Ajzen's (1975) subjective norm construct that was used in their theory of reasoned action, as well as in Ajzen's (1991) theory of planned behavior. These theories suggest that the individuals' social influences are a direct determinant of their behavioral intention. While normative pressures have been given different labels, each of these constructs presume that the individuals' behaviors are influenced by how they believe others will view them. Venkatesh et al. (2003) maintained that social influences appear to be important in the early stages of the individuals' experiences with the technology. They contended that, over time this construct becomes nonsignificant with sustained usage. Therefore, the social influences can have an impact on the individuals' behaviors through; compliance, internalization, and identification (Venkatesh & Davis, 2000; Allen, Sven, Marwan & Arslan, 2020). Such normative pressures may attenuate over time through the increased use of technology. Moreover, the demographic variables, including gender may have an influence on the relationship between the individuals' social influences and their intention to use certain technologies (Venkatesh & Morris, 2000). The male and

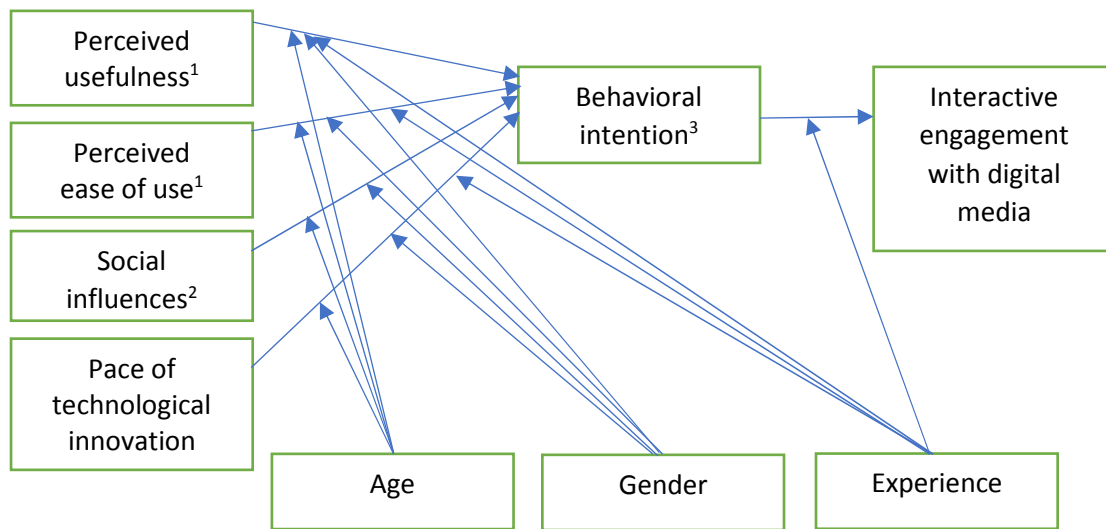
female genders may respond in a different manner to societal pressures. They may be driven by psycho-social phenomena to behave the way they do. The individuals' age and experience may also affect whether they are affected by social influences (Morris & Venkatesh 2000). This leads to the fifth hypothesis.

H5: The individuals' social influences can have a positive and significant effect on their intention to use the digital media. Age and gender will moderate this effect.

2.2.5 The Research Model

This study adapted the constructs from the technology acceptance model and from the theory of planned behavior. In sum, it hypothesizes that the individuals' pace of technological innovation, perceived usefulness, ease of use and social influences are the antecedents of their behavioral intention to use the digital media for interactive engagement with online users. Moreover, it presumes that the demographic variables, including age, gender and experience mediate these relationships, as illustrated in Figure 1.

Figure 1: A research model that examines the online users’ interactive engagement with digital media



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|--|
| <ol style="list-style-type: none"> 1. Moderated by age and gender and experience. 2. Moderating by age and gender. 3. Moderated by experience |
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3. The Research Method

Survey questionnaires were distributed by email among marketing managers and executives who were members in trade associations in Edinburgh, Scotland. The emails generated 1,783 hits on the questionnaire’s website. Of these, 248 respondents have submitted useable data sets. The respondents did not participate more than once in the survey as they could not use the same IP address.

3.1.1 The Measures

The research participants were expected to indicate the extent of their agreement with the survey items in a seven-point Likert scale. The responses ranged from 1= “strongly disagree” to 7= “strongly agree”, where 4 signaled an indecision. This study adapted valid and reliable measures that included; Grewal et al.’s (2004) ‘pace of technological innovation’; Davis’

(1989) and Davis et al.'s (1989) 'perceived ease of use' and 'perceived use'; Fishbein and Ajzen's (1975) and Ajzen's (1991) 'social influences' and behavioral intention, as well as McMillan and Hwang's (2002) 'engaging' construct.

The participants were expected to disclose their age by choosing one of seven age groups. They indicated their gender that was coded by using the 1 or 0 dummy variable, where 0 represented women. The respondents revealed their experience that was categorized in seven options. The questionnaire was pilot tested among a small group of post graduate students (who were not included in the survey results) to ensure that its scales were reliable and valid.

3.2 Data analysis

The surveyed respondents indicated their socio-demographic details about their 'gender', 'age' and 'experience' in the latter part of the survey questionnaire. Table 1 presents the profile of respondents that participated in this study:

Table 1: The demographic profile of respondents

Gender		Age		Experience	
Female	185	16-25 years	7	0-12 months	5
Male	63	26-35 years	53	13-24 months	2
		36-45 years	99	25-36 months	10
N=248		46-55 years	48	37-48 months	8
		56-65 years	32	49-60 months	26
		66-75 years	6	61-72 months	49
		More than 76 years	1	More than 73 months	148
		mean	44 years		
		N=246		N=248	

There were one hundred and eighty-five females (n=185) and sixty-three males who participated in this study. The respondents' 'age' varied, and this was evident in the standard deviation (σ) of 0.71. The majority of the respondents were aged between 36 and 45 years of age (n=99), followed by those aged between 26 and 35 years (n=53). The majority of respondents (n=148) indicated that they had acquired more than six years of experience on digital media. Whereas, there were twenty-five (n=25) respondents started using digital media in the past four years.

Generally, the participants agreed with the survey items in the model, as the mean scores were well above the mid-point of 4.0. The standard deviations revealed that there was a narrow spread around the mean as the participants' responses ranged from 0.3 to 1.4. The skewness and the kurtosis indices also met Kline's (2005) recommendations for the purposes of SEM.

3.2.1 Evaluation of the measurement model

The measurement model involved a confirmatory factor analysis (CFA). This was conducted through Structural Equation Modelling that was carried out through Amos. The researchers assessed the uni-dimensionality, validity and reliability of the constructs. The uni-dimensionality was achieved as all factor loadings were positive and higher than 0.6. There was evidence of convergent validity as all items in the measurement model were statistically significant. The values of the average variance extracted (AVE) were higher than 0.5. Moreover, there was construct validity as the fitness indices of the latent constructs achieved the required level.

The CFA results reported the fitness indices and factor loadings for every item together with their R². The correlations between constructs were computed simultaneously. There were

certain fitness indices that did not achieve the required level. The factor loading for item PU4 and ENG4 were below 0.6. Therefore, these two items were dropped. There was discriminant validity as the model had low modification indices ($MI < 14$) and the correlation between the exogenous constructs did not exceed 0.85. The items that had a factor loading less than 0.6 and an R^2 less than 0.4 were deleted as they affected the fitness index of the model. The fitness indices have improved after the necessary modifications. Yet, AGFI was still below the required level. Thus, the researcher examined the modification indices and found that there was a correlated error. The MI value of 23.19 was considered high as it was greater than 15.0. The redundant items were identified as two items have caused the measurement error and a poor AGFI fit. Thus, the researchers set the two correlated measurement errors of redundant items as a “free parameters” and run a new measurement model. The latest results reported a satisfactory model fit: [$\chi^2 = 441.240$; $\chi^2 / df = 2.97$; TLI= .962; CFI= .951; RMSEA= .046; SRMR= .027].

3.2.2 The validity and reliability of the research model

The convergent validity for the measurement model was achieved as all AVE values exceeded 0.50. A value greater than 0.5 indicated an acceptable convergent validity (Hair et al., 2010). The discriminant validity was assessed by using Fornell and Larcker (1981) criterion. The construct validity for the measurement model was achieved as all fitness indices met the required level. The discriminant validity was satisfactory when the redundant items were deleted. Moreover, the composite reliability was acceptable as all CR values exceeded 0.60. Table 2 reports the findings from CFA for every construct, including the factor loadings, CR, AVE and alpha values. The constructs in the model were discriminant of each other as shown in the Discriminant Validity Index Summary in Table 3. The bold diagonal values are the square roots of AVE of the construct, and the other (unbold) values are the correlations

among the constructs. The discriminant validity was achieved as the bold diagonal values were higher than the values in their rows and columns.

Table 2: The measuring items and the confirmatory factor analysis

Construct and Items			FL	CR
Pace of Technological Innovation (AVE=0.79)	PTI1	Digital media is changing at a fast pace.	0.79	0.81
	PTI2	Compared to other technologies, digital media are changing fast	0.74	
	PTI3	I have consistently seen new technology in digital media for some time.	0.75	
	PTI4	Innovations in digital media are frequent	0.74	
	PTI5	The pace of technological innovation in hospitality is high	0.69	
	PTI6	Technological innovation and hospitality do not go hand in hand (R)	0.65	
Perceived Usefulness (AVE=0.82)	PU1	I find digital media useful in my daily life	0.8	0.82
	PU2	Digital media increase my chances of achieving things that are important to me.	0.78	
	PU3	Digital media help me accomplish things more quickly	0.65	
	PU4	Digital media increase my productivity	0.49	
Perceived Ease of Use (AVE=0.74)	PEU1	Learning how to use digital media is easy for me	0.91	0.89
	PEU2	My interaction with digital media is clear and understandable	0.88	
	PEU3	I find digital media easy to use	0.86	
	PEU4	It is easy for me to become skillful at using digital media	0.82	
Social Influences (AVE=0.72)	SI1	People who are important to me think that I should use digital media	0.79	0.85
	SI2	People who influence my behavior think that I should use digital media	0.92	
	SI3	People who are important to me would prefer that I use digital media	0.87	
Behavioral Intention (AVE=0.91)	BI1	It is highly likely that I shall continue using digital media in the future	0.81	0.91
	BI2	Probably, I will use digital media in my daily life.	0.82	
	BI3	I will use digital media as frequently as possible.	0.79	
Interactive Engagement (AVE=0.88)	ENG1	Digital media offer a variety of content	0.88	0.89
	ENG2	It is easy to find my way through the digital media	0.85	
	ENG3	Digital media keep my attention	0.74	
	ENG5	Digital media do not keep my attention*	0.68	
	ENG6	Digital media are passive*	0.65	
	ENG7	Digital media provide immediate answers to questions	0.80	
	ENG8	Digital media lack content*	0.69	
	ENG4	Digital media are unmanageable*	0.56	

Table 3: The discriminant validity index

	Construct	Items		1	2	3	4	5	7	8	9	10
1	Pace of Technological Innovation	PTI	6	0.889								
2	Perceived Usefulness	PU	3	0.512*	0.906							
3	Perceived Ease of Use	PEoU	4	-0.725	0.675	0.86						
4	Social Influences	SI	3	0.531	0.392*	0.712	0.849					
5	Behavioral Intention	BI	3	0.767*	-0.232	0.722	0.761	0.954				
6	Interactive Engagement	IE	7	0.743	0.193*	0.723	-0.743	0.634**	0.938			
7	Age	GDR	1	0.021	-0.032	-0.011	0.017*	0.003*	-0.125	N/A		
8	Gender	AGE	1	0.111	-0.015	-0.011	-0.003	0.002**	0.005	0.012*	N/A	
9	Experience	EXP	1	0.03	0.022*	-0.017	0.011**	0.021	0.104	0.101*	0.092*	N/A

Note:

- 1) The discriminant validity was assessed by using Fornel and Larcker (1981) by comparing the square root of each AVE in the diagonal with the correlation coefficients (off-diagonal) for each construct in the relevant rows and columns.

3.2.3 Assessment of the structured model

This study followed Venkatesh et al.'s (2012) procedure to illustrate the structural model results. Two models tested the direct and moderated effects of the adapted UTAUT model. Appendix A sheds light on the path coefficients. It illustrates the significant moderating effects of age, gender and experience on the link between the exogenous and the endogenous constructs.

4. Discussion

This study has supported and validated Davis' (1989) technology acceptance model and has adapted other constructs including Ajzen's (1991) 'social influences' and 'behavioral intention', McMillan and Hwang's (2002) 'engaging' construct as well as Grewal et al.'s (2004) 'pace of technological innovation'. The results suggest that most of the hypothesized relationships were positive and significant. The findings from the structural equations modeling approach reported a satisfactory fit for this study's research model. Overall, the direct effects represented 39 percent of the variance that predicted intention, whilst the interaction terms explained 65 percent of the variance. In a similar vein, there was 41 percent of the variance that can be attributed to the direct effects, and 54 percent of the variance comprised the mediating effects.

The results suggest that there were highly significant, direct effects that predicted the corporate communications managers' behavioral intentions to engage with online users via digital media. The individuals' utilitarian motives to use the digital media were clearly evidenced in the perceived usefulness measuring items (Davis et al., 1992; Davis et al., 1989). The respondents perceived the usefulness of the digital media as there were very significant direct effects

($p < 0.001$) as well as significant indirect effects ($p < 0.05$) on their intentions to use the digital media. The findings indicated that they were influenced by their colleagues or competitors as there were significant direct and indirect effects on their behavioral intention to utilize the digital media. Moreover, there were significant moderating influences from the demographic variables, including age, gender and experiences on other exogenous variables that effected the respondents' perceptions on technological innovations.

The users' behavioral intention predicted their usage of technology (H1). The results indicated that the individuals' intentions had a highly significant, direct influence (0.31) on their interactive engagement through digital media, where $p < 0.001$. Moreover, there was a significant ($p < 0.05$), indirect influence (0.13) between their intention and engagement. H2: The findings reported that the pace of technological innovation was also a very significant antecedent that predicted the users' intention to use digital media (0.14), where $p < 0.01$. Yet, this research found that there was no relationship between the pace of technological innovation and intention when the interaction terms were inserted in the structured equation. In a similar vein, there were no interaction terms that were influencing the relationship between the individuals' perceived ease of use and their intention to use the digital media.

These findings suggest that age, gender and experience did not mediate the relationship between the pace of technological innovation or perceived ease of use of digital media and intention. Evidently, the participants did not consider the digital media technologies to be difficult to use. H3: The perceived usefulness had a direct effect (0.31) on intention, and this influence was highly significant at $p < 0.001$. There was also an indirect effect (0.13) from the mediating variables in the perceived usefulness-behavioral intention relationship. H4: There were significant, direct relationships between perceived ease of use (0.27) and (H5) social

influences (0.18) with the individuals' intention to use the digital media, where $p < 0.05$ for these hypotheses.

The perceived usefulness appears to be a determinant for the corporate communications executives' behavioral intention to engage with digital media, in most situations: The strength of this relationship varies with gender and age such that it is more significant among the younger individuals. Interestingly, the effect of the individuals' perceived ease of use on their engagement is moderated by age as well as by gender, such that it is more significant among females. The results indicated that those effects decreased with experience. There were indirect relationships and significant mediating effects from the demographic variables.

This study suggested that individuals, including the older ones tend to gain experience as they engage in the habitual use of technology. Previous research posited that gender differences will moderate the effect of experience on the individuals' behavioral intention and use of technology, as females tend to pay more attention to detail than their male counterparts (e.g., Venkatesh et al., 2012). There were other significant path coefficients within the interaction terms, including; EXP, PU x AGE, PTI x AGE, PEoU x EXP, PEoU x GDR x AGE, PTI x GDR x AGE and PEoU x GDR x AGE x EXP that predicted the individuals' intention to interact with online users via digital media.

5. Conclusions and Implications

This study reported that the marketing communication executives were considering the digital media to be useful tools for their interactive engagement with online users. These respondents were using social media networks, blogs and online review sites to improve their reach, frequency and impact of their message among prospects. In conclusion, this research suggests

that there is potential for different businesses to engage with online users (prospective customers) in real-time through digital media technologies.

Technologies are increasingly playing an important role for today's marketers. Various businesses are using the digital media to promote their offerings and services among online users. Notwithstanding, the findings of this research indicate that there are highly significant direct effects that predict the corporate communications executives' behavioral intentions to use the digital media to interact with online users. This contribution suggests that businesses ought to consider the factors that are affecting their marketers' intention to use interactive technologies, such as their perceived usefulness, ease of use, pace of technological innovation, as well as social influences. This way, they will be in a position to facilitate and enhance their interactive engagement through the digital media, and will improve their digital presence, build relationships with online users and increase their brand equity.

Businesses need to enhance the pace of technological innovation by implementing organizational changes, where necessary. They should encourage their marketers to use the digital media to engage with online users. There is scope for them to attract knowledgeable, talented employees who are proficient in building relationships with different social media users. This study reported that social influences were also found to be an important determinant that led to interactive engagement. Therefore, corporate communications executives ought to continuously monitor online conversations in social media and review sites. They are expected to respond to their followers' comments, concerns and/or queries as quickly as possible to avoid negative word-of-mouth publicity. If they do so, they can improve their corporate reputation and standing.

6. Limitations and Future Research

To date, there have been a few studies, albeit a few exceptions, that have explored the corporate communications executives' acceptance and usage of interactive media. Some studies have used different sampling frames, research designs, and methodologies to explore this topic. In this case, the research model has integrated previously tried and tested measures relating to the technology acceptance model and from the theory of planned behavior. The researchers examined the direct and indirect effects of the individuals' social influences, their attitudes towards technological innovation, their perceived usefulness and ease of use of digital media technologies, as well as their intention to use them for interactive engagement with stakeholders, including customers and prospects.

The number of respondents who participated in this study was more than sufficient to draw significant conclusions and implications from the results. Future contributions can replicate this study in different contexts. Perhaps, other research may include small and large firms, across various industry sectors, and compare the differences between these two categories. Alternatively, they can build on this study by including utilitarian and / or hedonic constructs to explore the effect of other exogenous constructs on the individuals' behavioral intention to use the digital media for interactive engagement with online users. Future studies can explore this topic in more depth through qualitative methodologies, to better understand the reasons behind the participants' perceptions and attitudes. Further research is necessary to identify the organizational aspects that facilitate or hinder the businesses' online communications.

Appendix A: The structural model results

DV: Behavioral Intention to Use Digital Media	Direct Effects	Direct Effects and Interaction Terms
Adj. R2	0.39	0.65
Perceived Usefulness (PU)	0.31***	0.13*
Perceived Ease of Use (PEoU)	0.27*	0.23
Social Influences (SI)	0.18*	0.11*
Pace of Technological Innovation (PTI)	0.13**	0.15
Gender (GDR)		0.02
Age (AGE)		0.01
Experience (EXP)		0.14*
GDR x AGE		0.01
AGE x EXP		0.15*
GDR x EXP		-0.12
GDR x AGE x EXP		0.03
PU x GDR		0.01
PEoU x GDR		-0.06
SI x GDR		0.01
PE x GDR		-0.03
PU x AGE		-0.19*
PEoU x AGE		0.01
SI x AGE		0.01
PTI x AGE		-0.21*
PEoU x EXP		0.12*
PU x GDR x AGE		-0.03
PEoU x GDR x AGE		-0.11*
SI x GDR x AGE		0.07
PTI x GDR x AGE		-0.09*
PEoU x GDR x EXP		0.01
PEoU x AGE x EXP		0.09
PEoU x GDR x AGE x EXP		-0.19*

Note: DV = Dependent Variable. * $p < 0.05$; ** $p < 0.01$, *** $p < 0.001$.

DV: Interactive Engagement with Digital Media	Direct Effects	Direct Effects and Interaction Terms
Adj. R2	0.41	0.54
Behavioral Intention (BI)	0.31***	0.13*
Experience (EXP)		0.31

Note: DV = Dependent Variable. * $p < 0.05$; ** $p < 0.01$, *** $p < 0.001$.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Allen, K.A. Sven, G.T., Marwan, S. & Arslan, G. (2020). Trust and belonging in individual and organizational relationships. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Besiou, M., Hunter, M. L. & Van Wassenhove, L. N. (2013). A web of watchdogs: Stakeholder media networks and agenda-setting in response to corporate initiatives. *Journal of Business Ethics*, 118(4), 709-729.
- Brouthers, K. D., Nakos, G. & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Entrepreneurship Theory and Practice*, 39(5), 1161-1187.
- Brown, S. A. & Venkatesh, V. (2005). Model of adoption of technology in households: A baseline model test and extension incorporating household life cycle. *MIS Quarterly*, 399-426.
- Butler, A. Camilleri, M.A., Creed, A. & Zutshi, A. (2020). The use of mobile learning technologies for corporate training and development: A contextual framework. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Camilleri, M. A., & Camilleri, A.C. (2017). Measuring the educators' behavioural intention, perceived use and ease of use of mobile technologies. In *31st Annual Conference of the British Academy of Management, Conference Proceedings*, Bristol, UK.
- Camilleri, M. A. (2018a). The SMEs' technology acceptance of digital media for stakeholder engagement. *Journal of Small Business and Enterprise Development*, 26(4), 504-521.
- Camilleri, M. A. (2018b). The promotion of responsible tourism management through digital media. *Tourism Planning & Development*, 15(6), 653-671.
- Camilleri, M. A. (2019a). Measuring the hoteliers' interactive engagement through social media. In *14th European Conference on Innovation and Entrepreneurship (ECIE2019)*, University of Peloponnese, Kalamata, Greece.
- Camilleri, M. A. (2019b). The online users' perceptions toward electronic government services. *Journal of Information, Communication and Ethics in Society*, 18(2), 221-235.
- Camilleri, A.C. & Camilleri, M. A. (2019a). The students' perceived use, ease of use and enjoyment of educational Games at Home and at School. *International Academy of Technology, Education and Development (IATED, 2019)*, Valencia, Spain.
- Camilleri, M. A. & Camilleri, A. C. (2019b). The students' readiness to engage with mobile learning apps. *Interactive Technology and Smart Education*, 17(1), 28-38.

- Camilleri, M.A. (2020a). Strategic dialogic communication through digital media during COVID-19. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Camilleri, M.A. (2020b). The use of data-driven technologies for customer-centric marketing. *International Journal of Big Data Management*, 1(1), 50-63.
- Capriotti, P., Zeler, I. & Camilleri, M.A. (2020). Corporate communication through social networks: The identification of key dimensions for dialogic communication. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Carr, J. C. & Sequeira, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A theory of planned behavior approach. *Journal of Business Research*, 60(10), 1090-1098.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace 1. *Journal of Applied Social Psychology*, 22(14), 1111-1132.
- Dumpit, D. Z. & Fernandez, C. J. (2017). Analysis of the use of social media in Higher Education Institutions (HEIs) using the Technology Acceptance Model. *International Journal of Educational Technology in Higher Education*, 14(1), 5-21.
- Filieri, R. (2016). What makes an online consumer review trustworthy?. *Annals of Tourism Research*, 58, 46-64.
- Fishbein, M. and Ajzen, I. (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Reading, MA, USA: Addison-Wesley.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 48, 39-50.
- Ha, I., Yoon, Y. & Choi, M. (2007). Determinants of adoption of mobile games under mobile broadband wireless access environment. *Information and Management*, 44(3), 276-286.
- Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). New Jersey: Prentice-Hall International.
- Hajarian, M., Camilleri, M.A., Diaz, P & Aedo, I. (2020). A taxonomy of online marketing methods for corporate communication. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Harrigan, P. & Miles, M. (2014). From e-CRM to s-CRM. Critical factors underpinning the social CRM activities of SMEs. *Small Enterprise Research*, 21(1), 99-116.

- Hartshorne, R. & Ajjan, H. (2009). Examining student decisions to adopt Web 2.0 technologies: theory and empirical tests. *Journal of Computing in Higher Education*, 21(3), 183-198.
- Herrero, Á., San Martín, H. & Hernández, J. M. (2015). How online search behavior is influenced by user-generated content on review websites and hotel interactive websites. *International Journal of Contemporary Hospitality Management*, 27(7), 1573-1597.
- Hsu, M. H. & Chiu, C. M. (2004). Internet self-efficacy and electronic service acceptance. *Decision Support Systems*, 38(3), 369-381.
- Igbaria, M. & Parasuraman, S. (1989). A path analytic study of individual characteristics, computer anxiety and attitudes toward microcomputers. *Journal of Management*, 15(3), 373-388.
- Kaplan, A. M. & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59-68.
- Kim, W. G., Lim, H. & Brymer, R. A. (2015). The effectiveness of managing social media on hotel performance. *International Journal of Hospitality Management*, 44, 165-171.
- Kim, S. S. & Malhotra, N. K. (2005). A longitudinal model of continued IS use: An integrative view of four mechanisms underlying postadoption phenomena. *Management Science*, 51(5), 741-755.
- Kim, S. S., Malhotra, N. K. & Narasimhan, S. (2005). Research note—two competing perspectives on automatic use: A theoretical and empirical comparison. *Information Systems Research*, 16(4), 418-432.
- Kline, R. B. (2005). Principles and practice of structural equation modeling (2nd ed.). New York: Guilford Press.
- Lamberton, C. & Stephen, A. T. (2016). A thematic exploration of digital, social media, and mobile marketing: Research evolution from 2000 to 2015 and an agenda for future inquiry. *Journal of Marketing*, 80(6), 146-172.
- Lee, M., Jeong, M. & Lee, J. (2017). Roles of negative emotions in customers' perceived helpfulness of hotel reviews on a user-generated review website: a text mining approach. *International Journal of Contemporary Hospitality Management*, 29(2), 762-783.
- Legrís, P., Ingham, J. & Collerette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information and Management*, 40(3), 191-204.
- Litvin, S. W., Goldsmith, R. E. & Pan, B. (2018). A retrospective view of electronic word-of-mouth in hospitality and tourism management. *International Journal of Contemporary Hospitality Management*, 30(1), 313-325.
- Marangunić, N. & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. *Universal Access in the Information Society*, 14(1), 81-95.

- Martins, C., Oliveira, T. & Popovič, A. (2014). Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management*, 34(1), 1-13.
- Maruping, L. M., Bala, H., Venkatesh, V. & Brown, S. A. (2017). Going beyond intention: Integrating behavioral expectation into the unified theory of acceptance and use of technology. *Journal of the Association for Information Science and Technology*, 68(3), 623-637.
- McMillan, S. J. & Hwang, J. S. (2002). Measures of perceived interactivity: An exploration of the role of direction of communication, user control, and time in shaping perceptions of interactivity. *Journal of Advertising*, 31(3), 29-42.
- Mekler, E. D., Brühlmann, F., Tuch, A. N. & Opwis, K. (2017). Towards understanding the effects of individual gamification elements on intrinsic motivation and performance. *Computers in Human Behavior*, 71, 525-534
- Mogaji, E., Watat, J.K., Olaleye, S.A. & Ukpabi, D. (2020). Recruit, retain and report: UK universities' strategic communication with stakeholders on Twitter. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Morris, M. G. & Venkatesh, V. (2000). Age differences in technology adoption decisions: Implications for a changing work force. *Personnel Psychology*, 53(2), 375-403.
- Mun, Y. Y. & Hwang, Y. (2003). Predicting the use of web-based information systems: self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. *International Journal of Human-Computer Studies*, 59(4), 431-449.
- Murphy, H. C., Chen, M. M. & Cossutta, M. (2016). An investigation of multiple devices and information sources used in the hotel booking process. *Tourism Management*, 52, 44-51.
- Murray, K. B. & Häubl, G. (2007). Explaining cognitive lock-in: The role of skill-based habits of use in consumer choice. *Journal of Consumer Research*, 34(1), 77-88.
- Neuhofer, B., Buhalis, D. & Ladkin, A. (2015). Smart technologies for personalized experiences: a case study in the hospitality domain. *Electronic Markets*, 25(3), 243-254.
- Nysveen, H., Pedersen, P. E. & Thorbjørnsen, H. (2005). Explaining intention to use mobile chat services: moderating effects of gender. *Journal of Consumer Marketing*, 22(5), 247-256.
- Rather, R. A., & Camilleri, M. A. (2019). The effects of service quality and consumer-brand value congruity on hospitality brand loyalty. *Anatolia*, 30(4), 547-559.
- Rauniar, R., Rawski, G., Yang, J. & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6-30.

- Rios Marques, I., Casais, B. & Camilleri, M.A. (2020). The effect of macro celebrity and micro influencer endorsements on consumer-brand engagement on Instagram. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Ryan, R. M. & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Schultz, F., Utz, S. & Göritz, A. (2011). Is the medium the message? Perceptions of and reactions to crisis communication via twitter, blogs and traditional media. *Public Relations Review*, 37(1), 20-27.
- Sharma, R., Yetton, P. & Crawford, J. (2009). Estimating the effect of common method variance: The method—method pair technique with an illustration from TAM Research. *MIS Quarterly*, 473-490.
- Sin Tan, K., Choy Chong, S., Lin, B. & Cyril Eze, U. (2010). Internet-based ICT adoption among SMEs: Demographic versus benefits, barriers, and adoption intention. *Journal of Enterprise Information Management*, 23(1), 27-55.
- Sun, H. & Zhang, P. (2006). The role of moderating factors in user technology acceptance. *International Journal of Human-Computer Studies*, 64(2), 53-78.
- Taiminen, H. M. & Karjaluoto, H. (2015). The usage of digital marketing channels in SMEs. *Journal of Small Business and Enterprise Development*, 22(4), 633-651.
- Taylor, S. & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research*, 6(2), 144-176.
- Teo, T. (2009). Modelling technology acceptance in education: A study of pre-service teachers. *Computers and Education*, 52(2), 302-312.
- Thong, J. Y., Hong, W. & Tam, K. Y. (2002). Understanding user acceptance of digital libraries: what are the roles of interface characteristics, organizational context, and individual differences? *International Journal of Human-Computer Studies*, 57(3), 215-242.
- Thong, J. Y., Hong, S. J. & Tam, K. Y. (2006). The effects of post-adoption beliefs on the expectation-confirmation model for information technology continuance. *International Journal of Human-Computer Studies*, 64(9), 799-810.
- Tiago, M. T. P. M. B. & Veríssimo, J. M. C. (2014). Digital marketing and social media: Why bother?. *Business Horizons*, 57(6), 703-708.
- Troise, C. & Camilleri, M.A. (2020). The use of the digital media for marketing, CSR communication and stakeholder engagement. In Camilleri, M.A. (Ed.), *Strategic Corporate Communication in the Digital Age*, Emerald, UK.
- Turner, M., Kitchenham, B., Brereton, P., Charters, S. & Budgen, D. (2010). Does the technology acceptance model predict actual use? A systematic literature review. *Information and Software Technology*, 52(5), 463-479.

- Venkatesh, V. & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.
- Venkatesh, V. & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, 115-139.
- Venkatesh, V., Speier, C. & Morris, M. G. (2002). User acceptance enablers in individual decision making about technology: Toward an integrated model. *Decision Sciences*, 33(2), 297-316.
- Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425-478.
- Venkatesh, V., Thong, J. Y. & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 157-178.
- Verplanken, B. & Wood, W. (2006). Interventions to break and create consumer habits. *Journal of Public Policy and Marketing*, 25(1), 90-103.
- Xiang, Z., Schwartz, Z., Gerdes Jr, J. H. & Uysal, M. (2015). What can big data and text analytics tell us about hotel guest experience and satisfaction?. *International Journal of Hospitality Management*, 44, 120-130.
- Xie, K. L., So, K. K. F. & Wang, W. (2017). Joint effects of management responses and online reviews on hotel financial performance: A data-analytics approach. *International Journal of Hospitality Management*, 62, 101-110.
- Wu, B. & Chen, X. (2017). Continuance intention to use MOOCs: Integrating the technology acceptance model (TAM) and task technology fit (TTF) model. *Computers in Human Behavior*, 67, 221-232.