NOVA
IMS

Information
Management
School

MGI

Mestrado em Gestão de Informação
Master Program in Information Management

USE OF SOCIAL MEDIA: EMPIRICAL COMPARISON BETWEEN EUROPE AND THE MIDDLE EAST

Maria Teresa de Lancastre e Tavora Ceyrat

Dissertation presented as partial requirement for obtaining the Master's degree in Information Management

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

NOVA Information Management School

Instituto Superior de Estatística e Gestão de Informação

Universidade Nova de Lisboa

USE OF SOCIAL MEDIA: EMPIRICAL COMPARISON BETWEEN EUROPE AND THE MIDDLE EAST

by

Maria Teresa de Lancastre e Tavora Ceyrat

Dissertation presented as partial requirement for obtaining the Master's degree in Information Management, with a specialization in Marketing Intelligence

Advisor: Professor Tiago Oliveira, Ph.D.

February2017

ACKNOWLEDGEMENT

My deepest gratitude, in the first place goes to my family, namely my parents, for their endless support through all these years, and for being present during my academic path. I am especially grateful to those who supported me on my last year in the Middle East, providing me an amazing and unforgettable experience.

To my Professor Tiago Oliveira, Ph.D., who was the only advisor of my dissertation, I am grateful for his constant support on an international subject, and for guiding the study at distance. I am very grateful to him for all the shared knowledge, for his essential and valuable contribution.

To all the Professors for the knowledge gained on my post-graduation.

To God for making all of this possible.

RESUMO

As redes sociais têm uma importância cada vez mais relevante no nosso quotidiano, intervindo como um meio de comunicação em constante mudança. O propósito deste estudo prende-se com a compreensão das razões que desencadeiam o uso das redes sociais tanto no mundo Europeu como no Árabe. Parcialmente instigadas pelo seu efeito, as sociedades actuais vivem o impacto destas, através de uma constante variação no que respeita à criação, modificação, partilha e discussão de múltiplas temáticas. Não obstante, culturas diferentes podem apresentar diversos comportamentos perante este veículo de comunicação por inúmeras razões, entre elas, o acesso à tecnologia e a determinados conteúdos ou até mesmo por motivos culturais. Na corrente literatura são singulares os estudos que se debruçam numa comparação sobre o uso de redes sociais em diferentes culturas, permitindo assim um terreno fértil para explorar. Durante o estudo, desenvolvemos conteúdos de conhecimento, ao propor uma inovadora comparação entre a Europa e o Médio Oriente que integra os valores da extensão da teoria de aceitação e uso de Venkatesh. Foi realizado um questionário online a fim de recolher dados de utilizadores de redes sociais em ambas as regiões e utilizado o modelo de equações estruturais com o intuito de analisar os resultados. Consequentemente, estes revelaram uma significativa disparidade geográfica nos factores que impulsionam o uso de redes sociais. No lado Europeu, enquanto que a expectativa em relação ao desempenho proveniente do uso é o antecedente mais expressivo, no Médio Oriente, a expectativa do esforço necessário para o uso é o factor mais preponderante e influente. Os resultados destacam a importância das redes sociais na actualidade e enriquecem o conhecimento sobre a temática em culturas dispares. O presente estudo contribui com uma percepção contemporânea sobre factores comportamentais que possam ser preponderantes na aceitação, uso e continuidade deste veículo de comunicação. Contribui assim para o seguimento do estudo da discussão sobre as razões que nos levam a aderir às redes sociais, independentemente da nação e cultura a que pertencemos.

PALAVRAS-CHAVE

Social Media; Europe; Middle East; UTAUT2

ABSTRACT

Social media as an amazing active and fast-moving domain, is playing an important role in shaping our lives. The purpose of this research is to understand the drivers of social media use in the Western and Arab world. Societies are incessantly changing through social media, which is helping to spread the creation, modification and discussion of multiple contents. Yet, different cultures might present dissimilar behaviours towards this vehicle of communication for diverse reasons such as, among others, their access to technology and contents, or cultural influence. Studies about social media use combining two cultures are scarce leading us to an undiscovered research field to explore. We developed the contents of knowledge on social media use by proposing an innovative comparison between Europe and the Middle East, which integrates Venkatesh´s extended unified theory of acceptance and use of technology (UTAUT2). An online survey was created to collect data from users within both cultures. Structural equation modelling (SEM) was used to analyse the outcome. The results revealed a significant disparity on what triggers social media behaviour in those two different regions. At the time that performance expectancy influences on the European side, the effort expectancy was found to be the most predominant trigger into use of social media in the Middle East, by affecting behaviour intention. The results underline the importance of social media nowadays and enriches the knowledge of the subject in two different cultures. The present study contributes with new insights into factors that might be determinant regarding acceptance and use behaviour and continues the discussion on why and how people engage in social media, independently of nation or culture.

KEYWORDS

Social Media; Europe; Middle East; UTAUT2

INDEX

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

UTAUT   Unified theory of acceptance and use of technology

SEM   Structural equation modelling

IS   Information systems

TRA   Theory of reasoned action

TAM   Technology acceptance model

MM   Motivational model

TPB   Theory of planned behavior

TAM-TBP   Integrated model of technology acceptance and usage behavior

MPCU   Model of PC utilization

IDT   Innovation diffusion theory

SCT   Social cognitive theory

PE   Performance expectancy

EE   Effort expectancy

SI   Social influence

FC   Facilitating conditions

HM   Hedonic motivation

HB   Habit

BI   Behavior intention

UB   Use behavior

CI   Continuance intention

CR   Composite reliability

CA   Cronbach's alpha

AVE   Average variance extracted

1. INTRODUCTION

Social media use has been increasing in the world and developing new means of communication within countries (Pinsonneault, 2005). From this perspective, social media is a key subject to be studied in information systems (IS). Conquering new users to social media platforms has become an important issue to enterprises, since it allows them to expand their brand awareness within a new kind of market and users, being anywhere at any time, without spatial and time constrains achievable due to all recent advances in information system technologies, in smart phones, global positioning satellite, tracking, and augmented reality social network applications (Workman, 2014). At the same time a presence in social media platforms allows enterprises to save costs, as such traditional marketing ones, once platforms are mainly seen as free of charge by users, as they do not associate this use with other costs (Baptista & Oliveira, 2015), such as mobile internet cost or the cost of the device itself, contributing positively for social media acceptance. Social media provides a more convenient tool to share information to users and also a faster vehicle to fulfill their information needs and simultaneously interact with other users (Curtis et al., 2010) in order to achieve efficiency, coordination and communication between individuals (Porter and Millar, 1985). As behavioral patterns on social media applications change across cultures, culture itself became a predominant and influential factor in terms of information technology (IT) adoption, with a growing importance to determine behavior towards it (Srite & Karahanna, 2006a).

Despite all efforts to address the complex phenomenon of how to predict users' acceptance and behavior toward technology, there is paucity in IS literature focusing on why different cultures engage in social media. There is a considerable number of important studies conducted in America (Curtis et al., 2010) and in the Arab world (Al Omoush, Yaseen, & Atwah Alma'Aitah, 2012a) on the impact of cultural factors on motivation and attitudes toward social media sites. The technology acceptance and use has been as well extensively researched: (i) adoption level and its effects in outcomes as group performance (Nan, 2011), and (ii) on antecedents of adoption and use of new technology, which triggers influence future adoption and use (Venkatesh & Speier, 2002). Therefore, given the mentioned gap we present a comparative study on factors influencing motivation and usage between Europe and the Middle East.

Regarding this matter, our study enriches IS literature as it was conducted personally in the two mentioned areas, discussing the triggers which influence adoption and use of social media and its effectiveness, between individuals geographically spread and culturally different. Firstly, we

investigated the direct effects on social media acceptance and use through an integrated model, following Venkatesh's unified theory of acceptance and use of technology (UTAUT2) (Venkatesh, Thong, & Xu, 2012). Therefore we applied a detailed survey, to extract the data on an individual-level in different countries.

The study is organized as per the following subjects. In the next and first part an overview over social media concept and origins is presented, followed by an explanation of the acceptance models used in information systems (Venkatesh & Speier, 2002). The study continues with a research model and a demonstration of the generated hypothesis, preceded by data collection through a query about the use and acceptance of social media launched in Europe and the Middle East, methodology description, results, limitations and possible future streams.

2. THEORETICAL BACKGROUND

2.1. SOCIAL MEDIA CONCEPT

A challenge to any study of social media is the incredible ephemerality of the subject itself. Social media usability is defined as the degree to which a social media platform can be used by specified users to achieve certain goals, with effectiveness and involves a continuously changing scenario. Over the last decade social media had become widely used and even considered by Kaplan and Haenleein as an Internet-based application (Kaplan & Haenlein, 2010). This trend led to a change in our daily lives, becoming part of many business strategies and structures, which are somehow shaped by a continuous development of technology. Due to multiple advances in this field, there is no end to the learning and study of social media, once people are shaped by the technologies that they have contact with and on the other hand, technologies are shaped in order to adopt to people's lives (Civin, Michael, 1999).

The branch of diverse social media networking websites are now divided by its scope and functionality (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). Mayfield defined social media into seven different types, which include social network, blogs, wikis, podcast, forum, content communities, and micro blogging (Mayfield, 2008).

However, social media is not the content or information itself, but rather the platforms, used to interact. It consists in any online platform or channel with generated content by users, being today's most engaging and interactive form of communication. According to Hampton (Hampton & Goulet, 2011) social media mobile application are amongst the most accepted worldwide mobile applications. Social networking platforms, such as Linkedin, Twitter or Facebook have integrated mobile channels to their communications channel strategies, being now largely routinely used by individuals around the world (Hampton & Goulet, 2011). For instance, as of the first quarter of 2016, as per Google Trends, Facebook had 1.65 billion monthly active users.

Earlier literature sought to explain how social media was created. The concept of social networking was born in 1971 with the Bulletin Board System, an online place which core business allowed for the first time users to communicate between themselves on the internet (Kaplan & Haenlein, 2010).

However, the era of social networking as we know today, started around the 90's, AOL Instant Message and SixDegrees (Kietzmann et al., 2011). The member searchable profiles were created in order to allow users to write their biographies and share details about themselves, to be identified and also able to identify other users. Adding other sites which elevated social networking to a different level, in between many, hi5, Classmate (Kaplan & Haenlein, 2010).

Using a similar concept as the six degree of separation, My Space gave users more freedom of customization. Its popularity was surpassed when Facebook was launched and became a social business platform, where companies are able to promote their products or services and interact in real time with potential customers. According to Foster Research Ad spending on social media continues to grow widely, and brand communication with or without the companies acknowledgment (Kietzmann et al., 2011).

Yet, social media is any platform that enables interaction by engaging users to participate in it, comment on and create their own content (Mayfield, 2008). It combines real time information shared through various user driven channels. Social Media provides one to one, one to many, or many to many interactions and everyone can have their own engagement level on social media (Kaplan & Haenlein, 2010).

2.2. UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT)

The unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al., 2003) was developed through a review and consolidation from constructs of the eight prominent theories. These are the theory of reasoned action (TRA) (Sheppard, Hartwick, Warshaw, Journal, & Dec, 1988), technology acceptance model (TAM), the motivational model (MM) (Davis, Fred D, Bagozzi, Richard & Warshaw, 1989), the theory of planned behaviour (TPB) (Ajzen, 1991), the integrated model of technology acceptance and usage behaviour (TAM-TBP) (Taylor, Shirley, Todd A., 1995), the model of PC utilization (MPCU) (Thompson, Ronald; Higginsm, Christofer A.; Howell, 1991), the innovation diffusion theory (IDT) (Rogers, 2002), and the social cognitive theory (SCT) (Compeau Christopher A.Huff, Sid, 1999). UTAUT model holds three constructs of direct determinants of usage intention and behaviour: i) performance expectancy, ii) effort expectancy, iii) social influence and iv) facilitating conditions of use. The moderating variables that will influence the four constructs are: gender, age, experience, and willingness. Since its release the UTAUT model has been used, applied and explored in the IS literature. The model has been growing in the terms of use and acceptance studies, being applied in a large range of

technologies to explore social media adoption (Curtis et al., 2010) and incrementally tested in an individual and organizational level, approaching single and multiple countries and cultures (Im, Hong, & Kang, 2011). Some models were developed in order to extend the initial model by, for instance, creating a forty-one independent variables to predict intension and eight dependent variables to analyse behaviour, to be applied in technology adoption studies (Bagozzi, 2007).

As exposed in Figure 1, an extension of the basic UTAUT model was subsequently developed, the UTAUT2 which adapts and extends the theory to the consumer level. Being directed to the consumer context, it acquires three more constructs: v) hedonic motivation, vi) price value and vii) habit. The hedonic motivation as a key predictor, price hence consumers are aware of the service costs, and habit as a critical influencer in technology context.

This extension of the model drops one of the moderating variables: voluntariness. To gender, age and experience it adds as well a direct connection between the facilitating conditions and the behavioural intention, considering that habit might simultaneously affect behavioural intention and use behaviour, and experience might influence behavioural intention.
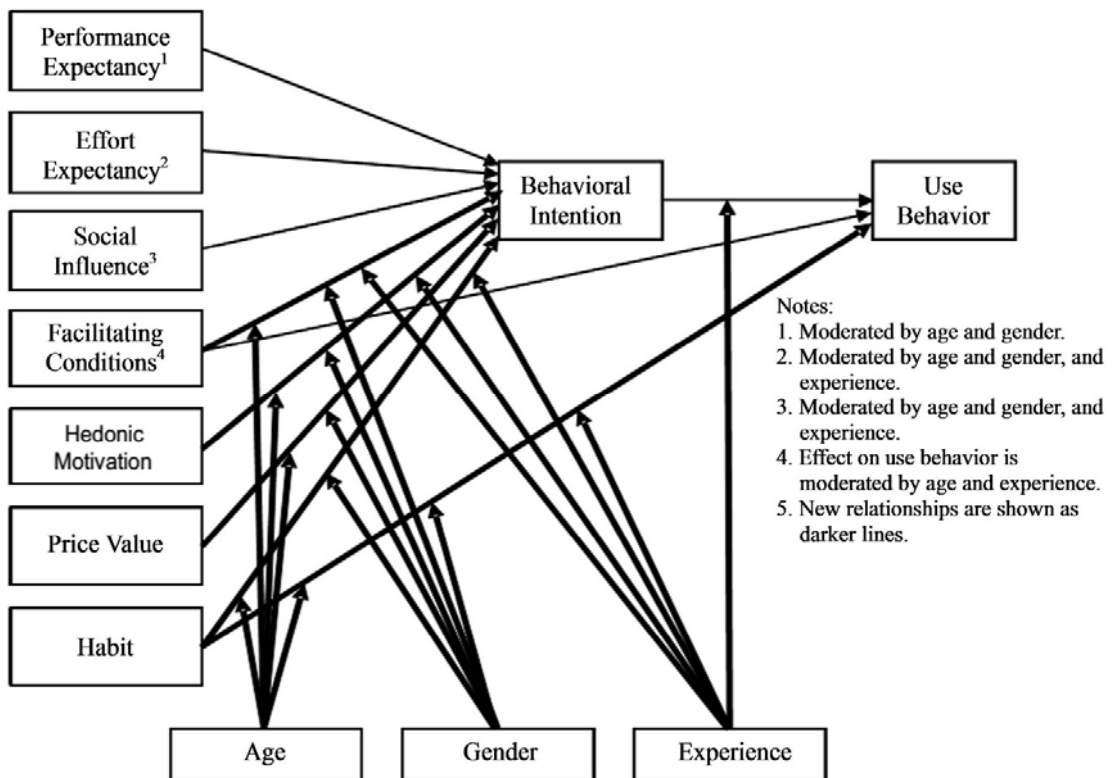

Figure 1. Unified theory of acceptance and use of technology (UTAUT2) model.

2.3. PRIOR RESEARCH ON SOCIAL MEDIA ADOPTION

Several researches have been focusing into social media adoption, such as, for instance, into specific cases as Twitter or Facebook acceptance and enrolment toward different cultures (Al Omoush et al., 2012a). Many researches deepened into more specific contexts as social media as a mechanism to achieve emotional gratification, revenue and productivity (Karaiskos et al 2011). Social media and smart devices' applications, considered as the new media, have been also a target of studies combining factors grounded by the UTAUT model in order to predict user patterns (Workman, 2014). Following the thematic of patterns in social media, there have also been studies showing that age and gender might differ in the use of technologies, registering that females tend to use technology for social affiliation on a greater scale, compared with males. Studies also focused on demographical affiliation registering a greater proportion of users on a younger age scale (Thelwall, Wilkinson, & Uppal, 2010). Prior research has drawn on the aims of consumer's technology acceptance and use (Venkatesh et al., 2012), or conducted to understand the role of national cultural values into technology acceptance (Srite & Karahanna, 2006). Others have been focused on the impact new media might have had into information technology use (Workman, 2014). Later on UTAUT was considered as the most comprehensive set of factors in order to predict technology use and acceptance. Although primarily oriented toward work related technology adoption and use, was developed into technology use behaviour. Nevertheless, with the new era of emergent smart technologies, involving social and technological advances, social media has become a moving target. Different types of media are emerging. The market has become more demanding and with a need to focus on customer needs and wants, proving that, not all applications do apply for the whole population, in terms of being suited or adopted and utilized (Workman, 2014). With the growth of digital and mobile media, different approaches in media studies have emerged more recently, presenting literature focused on the impact of migration and globalization, in ever changing societies (Sabry, 2017). The importance of studying social media use is becoming more relevant, since when studying as a whole, the current literature showed that social media tends to be more than connecting with others. A comparative study is needed to elucidate into the outcome of social media use in two different cultures.

3. RESEARCH MODEL AND HYPOTHESES

From Venkatesh's model we assume and we adopt performance expectancy as the degree to which an individual believes that using social media will provide benefits in social activities and job performance (Venkatesh et al., 2003). Performance expectancy is a very strong predictor of intention, which suggests that individuals will be using a certain system if they believe it will bring a positive outcome (Compeau Christopher A.Huff, Sid, 1999). In this case the expected outcome could be such as the perception of speed information access or speed connection with other users. It reflects the perception that using social media will improve daily life tasks, and not only job productivity, as well as social connections and access to information (Curtis et al., 2010). Therefore we hypothesize:

> *H1. The impact of performance expectancy (PE) on behavioural intention (BI) will be positive.*

The effort expectancy is the degree to which an individual perceives an ease associating to technology use, as in the current study as the degree to which an individual would perceive as easy the use of social media. In the social media panorama some users are more used to social media platform tools and others are not so technology literate. If users find social media easy to use, for instance if they found it in their own language, they will consequently become more willing to use it (Al Omoush et al., 2012a). Therefore we hypothesize:

> *H2. The impact of effort expectancy (EE) on behavioural intention (BI) will be positive.*

Social influence is the magnitude to which an individual perceives as the action of using a new technology(Venkatesh et al., 2003). In the case of the current study, it can be understood as the action of using social media, being important to others, specifically family and acquaintances. Social influence is a determinant of behavioural intention and therefore we hypothesize:

> *H3. The impact of social influence (SI) on behavioural intention (BI) will be positive.*

Facilitating conditions is the extent to which individuals believe that the aim of technical infrastructures is to assist the use of a technological system if needed (Venkatesh et al., 2003). Using social media requires some skills, either in downloading the application and using the platform, managing the device itself or even in establishing an internet connection. Someone who has access to learning tutorials will be more willing to use social media, being so important to users to be able to require the necessary assistance in order to perform the task. We can

conclude that facilitating conditions will influence intention and use behaviour. As such we hypothesize:

H4a. The impact of facilitating conditions (FC) on behavioural intention (BI) will be positive.

H4b. The impact of facilitating conditions (FC) on use behaviour (UB) will be positive.

Hedonic motivation refers to the extent of amusement resultant from the usage of a certain technology, in the case of the current study applied to the use of social media applications (Hoehle, Zhang, & Venkatesh, 2015), being a predominant factor on social media acceptance. The higher the entertainment level, the greater the acceptance between users. Therefore we hypothesize:

H5. The impact of hedonic motivation (HM) on behavioural intention (BI) will be positive.

Price value refers to consumers' cognitive balance between the perceived value of using social media and the monetary cost of the same (Hoehle et al., 2015). It includes factors as data cost for use and upload or the contrast between the social media price with other communication vehicles. The price value will be positive when the value of social media usage is perceived as being higher than the generated monetary cost. Therefore we hypothesize:

H6. The impact of price value (PV) on behavioural intention (BI) will be positive.

The habit echoes the multiple past experiences and the frequency of past behaviour (Venkatesh et al., 2012) which is considered to have repercussion on the present behaviour. Regarding social media usage it will measure the extent on which social media is part of individuals' daily lives. Therefore we hypothesize:

H7a. The impact of habit (HB) on behavioural intention (BI) will be positive.

H7b. The impact of habit (HB) on use behaviour (UB) will be positive

Consistent with Venkatesh theory (Venkatesh et al., 2012) behavioural intention influences technology. Consumers' behaviour is predictable and influenced by their own intentions. Therefore we hypothesize:

H8. The impact of behavioural intention (BI) on behaviour (UB) will be positive.

Either behaviour intention or use behaviour, will individually affect the continued intention to use social media. Individuals who have their expectations fulfilled towards the platform, will tend to behave intentionally towards a continuously use of social media vehicles(Hoehle et al.,

2015). Technology continuance intention to use may depend on technology itself (Workman, 2014). Therefore, we hypothesize:

H9a. The impact of behavioural intention (BI) on continuance intention (CI) will be positive.

H9b. The impact of user behaviour (UB) on continuance intention (CI) will be positive.

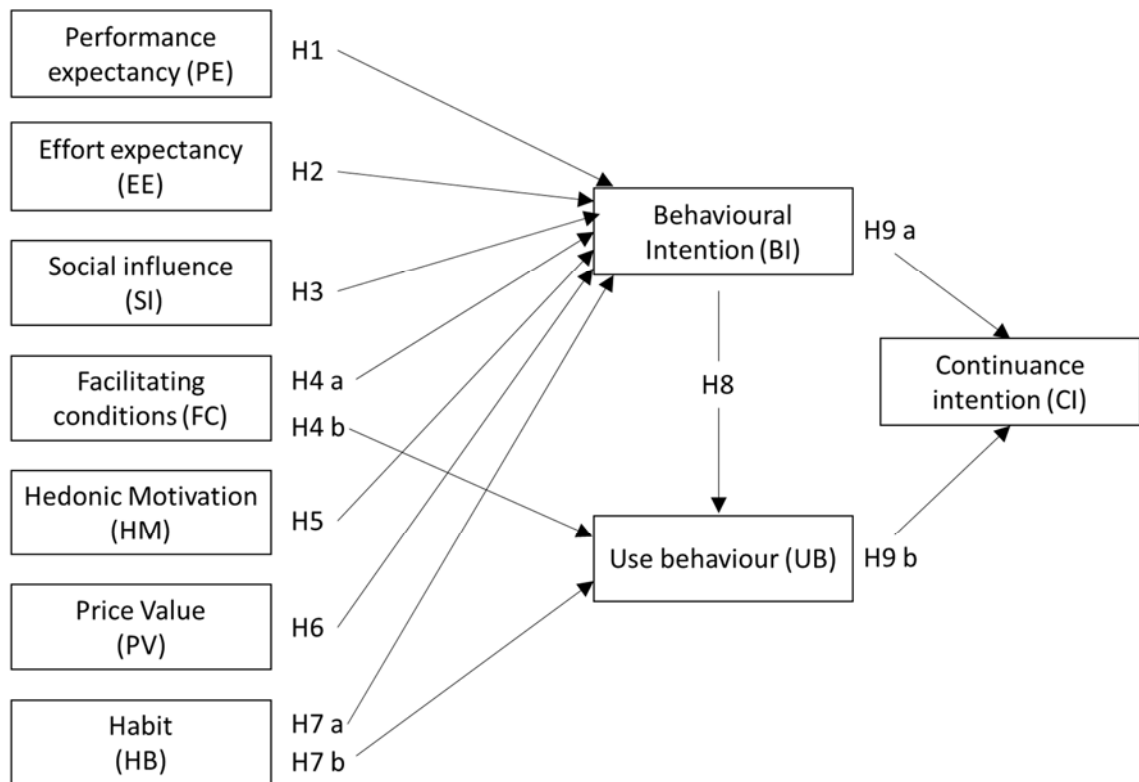Consequently on the Figure 2 we present the research model.

Figure 2. Research model.

4. DATA COLLECTION RESEARCH METHODOLOGY

The data collection was conducted in two different regions of the globe, namely Europe and the Middle East. A survey was created to collect the data. The survey was taken online using hyperlinks that could be only used once, and personally. The frame comprised 287 entries in Europe and 113 in the Middle East. All respondents were provided with instructions and the survey was available in English for both regions. The survey contained three distinct divisions: (i) UTAUT2 data constructs, (ii) cultural parameters, (iii) general information and demographic characteristics. We adapted the data construct items from Venkatesh et al.(2012), and the use behaviour from Martins et al.(2014). All items for each question were measured with a seven-point range scale, evaluating from "strongly disagree" (1) to "strongly agree" (7). On the other hand the use behaviour constructs were evaluated from 1 (never) to (several times) according to social media use (Appendix A).

In order to create an analysis based in a comparative scheme, we conducted the same questionnaire representing the European and Arabic culture. In pursuit of the above to our survey we targeted the adult population who: i) have one or more social media accounts, ii) owns one or more devices which enables the use of social media platforms. In consumer context the social media use is mainly a voluntary decision. However, as mentioned in current literature, the use of social media and social networking technologies can increase in a work environment, employees' metaknowledge (ability to know "who knows what" and "who knows who") might be beneficial to enterprise structure, co-worker relationships, and subsequently generate more revenue (Leonardi, 2015). This argument might question as well the use of social media for working purposes, instead of on a voluntary basis. We adapted existing scales to operationalize the constructs used in our study. In order to measure continued intention to use social media, we adapted Venkatesh's validated existing scale (Venkatesh et al., 2003). Social media usability and all its constructs were measured using reflective items.

We registered that in the European sample 54.5% of the participants were male gender, while 45.5% female. In the Middle East sample 63.3% were male and 36.6% were female participants. Regarding the educational level, we listed a percentage of 52.2% with a Bachelor for the European sample and 35.8% with a Master. On the Middle East side we registered 67.3% with a Bachelor and 5.45% with a Master. The descriptive statistics of the participants are detailed on Table 1.

Measure	Value	Frequency EU	Frequency ME	% EU	%ME
Gender	Male	146	70	54.5%	63.6%
	Female	122	40	45.5%	36.4%
Educational level	Lower than Bachelor	26	30	9.70%	27.3%
	Bachelor	140	74	52.2%	67.3%
	Master or higher	102	6	35.8%	5.45%
Age	Below 35	228	94	-	-
	Between 36 and 55	31	15	-	-
	Over 56	9	0	-	-

Table 1. Descriptive statistics of respondents' characteristics

5. DATA ANALYSIS AND RESULTS

The theoretical model was tested using variance-based techniques, as partial least square (PLS), with Smart PLS software (Ringle, C. M., Wende, S., & Will, A. (2005). SmartPLS 2.0. Retrieved from http://www.smartpls.de). We used the partial least square as the statistical method, as it is considered a powerful statistical technique mostly used in social sciences, marketing and strategic management, being also suitable for complex models with multiple constructs. We started with the reliability and validity assessment of the measurement model, followed by a structural model assessment and hypotheses testing.

5.1 MEASUREMENT MODEL

The measurement model results are presented in Table 2 and 3 and was assessed for (i) construct reliability, (ii) indicator reliability, (iii) convergence validity, and (iv) discriminant validity. To access the psychometric properties of the scales, we examined the construct's composite reliability (CR) and Cronbach's alpha (CA) scores of these scales (Mackenzie, Podsakoff, & Podsakoff, 2011). The CR and the CA were evaluated based on the criteria that the results should be higher than 0.7. The results obtained from the PLS measurement model indicated that all the mentioned constructs are greater than 0.7 on the CR and CA results (please see, Table 2), subsequently construct reliability is satisfied. The Indicator reliability was evaluated based on the criteria that the loadings should be greater than 0.7, not considering the ones less valuable than it. On that sequence, as shown on Table 2, UB1 was not considered due to low loading.

To evaluate the convergent validity was used the average variance extracted (AVE). The AVE is the average amount of variance in indicator variables that a construct is able to explain. The AVE should be higher than 0.5, due to the fact that the latent variable should explain more than half of the variance of its indicators. As shown in Table 3 all the mentioned constructs registered an AVE higher than 0.5, subsequently meeting this criterion, we can confirm that the convergent validity of a model is satisfied.

To determine the discriminant validity of the constructs, we analysed using two criteria: Fornell-Larcker and cross-loadings. The Fornell-Larcker criterion defends that the square root of AVE should be greater than the correlations between the constructs, as seen on table 3. Regarding the cross loading criterion it requires that the loading of each indicator should be greater than

all cross-loadings. As shown in Table 2 each construct presents a greater loading on its corresponding factor than the cross-loading on the other factors. We conclude that the measures are satisfied.

The assessments of construct reliability, indicator reliability, convergent validity, and discriminant validity of the constructs were satisfactory. The measurement model results ensure that the constructs are statistically different and can be used to test the structural model.

Constructs		PE	EE	SI	FC	HM	PV	HB	BI	UB	CI
Performance Expectancy (PE) (CR=0.94; CA=0.91)	PE1	**0.92**	0.52	0.34	0.42	0.71	0.38	0.31	0.72	0.66	0.68
	PE2	**0.93**	0.42	0.42	0.35	0.63	0.43	0.17	0.67	0.59	0.61
	PE3	**0.87**	0.58	0.30	0.44	0.66	0.35	0.28	0.66	0.64	0.62
	PE4	**0.84**	0.30	0.44	0.26	0.57	0.41	0.02	0.54	0.48	0.51
Effort Expectancy (EE) (CR=0.98; CA=0.97)	EE1	0.49	**0.96**	0.11	0.72	0.42	0.34	0.23	0.54	0.53	0.50
	EE2	0.53	**0.95**	0.13	0.68	0.45	0.35	0.21	0.57	0.53	0.52
	EE3	0.48	**0.97**	0.13	0.71	0.45	0.33	0.25	0.57	0.54	0.53
	EE4	0.49	**0.94**	0.19	0.69	0.44	0.36	0.18	0.52	0.53	0.50
Social Influence (SI) (CR= 0.91; CA=0.86)	SI1	0.27	0.03	**0.87**	0.09	0.18	0.22	0.25	0.16	0.25	0.15
	SI2	0.31	0.08	**0.90**	0.11	0.23	0.25	0.27	0.22	0.29	0.21
	SI3	0.45	0.21	**0.85**	0.22	0.39	0.40	0.15	0.32	0.36	0.34
Facilitating Conditions (FC) (CR=0.92; CA=0.89)	FC1	0.32	0.62	0.14	**0.86**	0.33	0.46	0.21	0.39	0.37	0.35
	FC2	0.35	0.72	0.13	**0.91**	0.38	0.42	0.23	0.45	0.43	0.43
	FC3	0.39	0.65	0.16	**0.92**	0.37	0.52	0.22	0.45	0.43	0.44
	FC4	0.39	0.55	0.20	**0.78**	0.35	0.49	0.11	0.45	0.36	0.41
Hedonic Motivation (HM) (CR=0.97; CA=0.96)	HM1	0.72	0.46	0.36	0.42	**0.97**	0.41	0.21	0.68	0.58	0.64
	HM2	0.69	0.44	0.33	0.39	**0.97**	0.41	0.16	0.66	0.53	0.61
	HM3	0.67	0.44	0.26	0.38	**0.94**	0.37	0.24	0.61	0.57	0.59
Price Value (PV) (CR=0.95; CA=0.93)	PV1	0.37	0.33	0.32	0.48	**0.37**	0.87	0.06	0.33	0.30	0.38
	PV2	0.35	0.33	0.30	0.52	0.33	**0.91**	0.07	0.36	0.27	0.37
	PV3	0.43	0.33	0.36	0.48	0.40	**0.93**	0.10	0.40	0.31	0.41
	PV4	0.44	0.34	0.33	0.50	0.40	**0.93**	0.11	0.43	0.33	0.43
Habit (HB) (CR=0.92; CA=0.89)	Hab1	0.08	0.16	0.12	0.13	0.11	-0,03	**0.88**	0.24	0.32	0.24
	Hab2	0.07	0.07	0.25	0.09	0.07	0.01	**0.85**	0.18	0.33	0.18
	Hab3	0.15	0.07	0.32	0.09	0.10	0.02	**0.87**	0.26	0.37	0.26
	Hab4	0.36	0.36	0.17	0.35	0.34	0.22	**0.86**	0.50	0.50	0.51
Behavioural Intention (BI) (CR=0.97; CA=0.95)	BI1	0.65	0.60	0.19	0.51	0.62	0.34	0.40	**0.95**	0.65	0.73
	BI2	0.72	0.50	0.34	0.44	0.65	0.43	0.31	**0.94**	0.66	0.72
	BI3	0.72	0.55	0.29	0.48	0.66	0.44	0.37	**0.98**	0.69	0.76
User Behaviour (UB) (CR=0.95; CA=0.90)	UBa2	0.61	0.51	0.29	0.41	0.53	0.27	0.48	0.66	**0.95**	0.69
	UBa3	0.66	0.55	0.39	0.47	0.58	0.37	0.41	0.68	**0.95**	0.69
Continuance intention (CI) (CR=0.99; CA=0.98)	CI1	0.67	0.51	0.29	0.45	0.62	0.46	0.31	0.72	0.68	**0.95**
	CI2	0.68	0.52	0.29	0.46	0.63	0.43	0.40	0.76	0.72	**0.99**
	CI3	0.67	0.53	0.29	0.47	0.63	0.43	0.40	0.77	0.71	**0.99**
	CI4	0.66	0.54	0.27	0.46	0.61	0.40	0.39	0.75	0.72	**0.98**

Table 2. Quality criteria and factor loadings.

Constructs	Mean	SD	PE	EE	SI	FC	HM	PV	HB	BI	UB	CI
Performance Expectancy (PE)	5.25	1.47	**0.89**									
Effort Expectancy (EE)	5.97	1.22	0.52	**0.96**								
Social Influence (SI)	4.43	1.79	0.42	0.15	**0.87**							
Facilitating Conditions (FC)	6.32	0.91	0.42	0.73	0.18	**0.87**						
Hedonic Motivation (HM)	5.77	1.35	0.72	0.46	0.33	0.41	**0.96**					
Price Value (PV)	5.90	1.26	0.44	0.36	0.36	0.54	0.41	**0.91**				
Habit (HB)	4.07	1.69	0.23	0.23	0.24	0.22	0.21	0.09	**0.86**			
Behavioural Intention (BI)	5.48	1.50	0.73	0.58	0.29	0.50	0.67	0.42	0.38	**0.95**		
User Behaviour (UB)	5.26	1.51	0.67	0.56	0.36	0.46	0.58	0.33	0.47	0.70	**0.95**	
Continuance intention (CI)	5.47	1.40	0.69	0.54	0.29	0.47	0.64	0.44	0.38	0.77	0.73	**0.98**

Table 3: Square root of AVE (in bold) and factor correlation coefficients.

5.2 STRUCTURAL MODEL AND HYPOTHESES TESTING

The structural model was assessed using R^2 measures and the level of significance of the path coefficients, assessed by bootstrapping procedure.

Through the results shared on Table 4 and by an analysing the data from both samples, we were able to collect the following summarized results.

Our research model explains a 66.0% of variation in behavioural intention, 55.1% of use behaviour and a 66.3% of variation in continuance intention. In order to explain behaviour intention we have the following statistically significant constructs: performance expectancy, effort expectancy, hedonic motivation, social influence and habit. Showing a less strong impact in behaviour intention, facilitating conditions and price value.

It was notable that some constructs, such as facilitating conditions and habit, were influencing simultaneously behaviour intention and use behaviour, although presenting a different strength and impact on both relationship sides.

To explain use behaviour we have statistically significant relationships with behaviour intention, facilitating conditions, and habit.

In terms of explaining continuance intention we registered a strong influent impact of behaviour intention and use behaviour.

Therefore we can assume that from the previously presented and mentioned hypotheses the following ones are positive and so supported: H1, H2, H4b, H5, H7a & H7b, H8 and, H9a &H9b. The hypothesis H3, H4a and H6 were not supported. The hypotheses H3, regarding social influence is the only one presenting a negative impact towards behaviour intention.

DV: Behavioural intention (BI)	Full	European	Middle East
R^2	66.0%	72.50%	59.4%
Performance expectancy (PE)	0.41***	0.44***	0.15
Effort Expectancy (EE)	0.15***	0.06	0.53***
Social influence (SI)	-0.06*	-0.04	-0.02
Facilitating conditions (FC)	0.04	0.02	0.08
Hedonic motivation (HM)	0.23***	0.25***	0.20*
Price value (PV)	0.06	0.06	-0.02
Habit (HB)	0.19***	0.24***	-0.08
DV: Use behaviour (UB)	Full	European	Middle East
R^2	55.1%	61.0%	59.0%
Facilitating conditions (FC)	0.13***	0.11***	0.24**
Habit (HB)	0.22***	0.38***	0.13
Behavioural intention (BI)	0.54***	0.45***	0.58***
DV: Continuance intention (CI)	Full	European	Middle East
R^2	66.3%	71.3%	65.0%
Behavioural intention (BI)	0.51***	0.59***	0.10
Use behaviour (UB)	0.36***	0.30***	0.69***

Table 4. Structural model results.
Notes: ***$p < 0.01$; **$p < 0.05$; *$p < 0.10$

6. DISCUSSION

Our presented theoretical model establish a unique application of Venkatesh's theory(2012) in Europe and the Middle East. Applied on two different cultures and living habits, it explains significantly a variance on what triggers behaviour intention and use behaviour of social media, in these two dissimilar regions.

6.1 MAIN FINDINGS

The research model explains the aspects that influence behavior intention and use behavior towards social media, within both regions. From a full sample analysis, with different strengths, in order to explain behavior intention we have positively affecting: performance expectancy, effort expectancy, hedonic motivation and habit. Negatively affecting behavior intention, we have social influence. Simultaneously explaining positively behavior intention and use behavior, although with different strengths, we have: facilitating conditions, habit, and behavior intention. Behavior intention and use behavior were found to have statistically significant influence on continuance intention.

Our study demonstrated that the main difference lay behind what triggers the action, on each sample results, as for instance, the performance expectancy for the European users, and the effort expectancy for the Middle East ones. Those are the factors affecting the behaviour intention towards social media, and ultimately its usability and individuals' continuance intention to use.The mentioned findings and more detailed ones are described and explained as per below.

6.1.1. Supported findings

By agglomerating all respondents' results shared on Table 4, full, European and Middle East sample and analysing them according to each constructs relationships behind behaviour intention, we may consider the following supported findings.

Hedonic motivation was found to be the only construct relationship behind behaviour intention, which is statistically similarly relevant across the three samples, the full (0.23), the European (0.25) and the Middle East one (0.20). The hedonic motivation relationship finding is consistent on being considered by previous literature (Venkatesh et al., 2012), and was found once more influential into behaviour intention. It is important to social media applications to create a

feeling of entertainment and a positive emotion or sense of satisfaction through the use (Liao, Palvia, & Lin, 2006).

Performance expectancy and habit were found to have a similar strong statistically impact behind behaviour intention only across the full and European sample. The research model validates the construct of performance expectancy behind behaviour intention. Our respondents from the full (0.41) and European (0.44) sample considered it as being the strongest antecedent of behaviour intention. This relationship finding is consistent with recent literature (Baptista & Oliveira, 2015). Social media usage is highly perceived as beneficial in social and working environments, even potentially contributing to a stronger engagement between users and their organizations, by promoting dialogue between members (Hanna, Kee, & Robertson, 2017), providing a faster access to information or to connect with others, thus contributing subsequently to a more positive intention to adopt social media (Compeau Christopher A.Huff, Sid, 1999).We can assume that from the European side respondents', this relationship is the most predominant one, meaning they give a strong importance into performance expectancy with regards to social media. On the opposite side, in the Middle East sample performance expectancy was found to be positive, however not so expressed (0.15) going against previous literature (Venkatesh et al., 2012) and symbolizing one of the most important discrepancies of the research.

We validate habit on the full (0.19) and European (0.24) sample into behaviour intention, in line with earlier researches (Liao, Palvia, & Lin, 2006), according to previous studies it appeared to be seen by users as one of the most important factors modelling use on a daily basis (Zhou et al., 2010).

Effort expectancy was found to have a solid statistical impact only across the Middle East (0.53) sample, and a presence, however less relevant in the full sample (0.15). This finding is consistent with earlier research (Venkatesh et al., 2012), a result probably derived from the heavy number of users, mainly younger ones, as the majority of users are in the range below 35 years old (Al Omoush et al., 2012a), who might perceive as easy the use of social media on the associated device. Regarding the results generated from the Middle East side respondents' opinions, the model reflects the importance of effort expectancy towards behaviour intention, as being the most influent relationship. This finding is consistent with previous literature in the Arab world (Al Omoush, Yaseen, & Atwah Alma'Aitah, 2012b). This constructed is related to the learning level of a social media platforms, proving that the easier the level of interaction, either through the platform design or the language provided, the stronger will be the users' presence. Also due

to the availability of different devices in some Arab markets, which are slightly less expensive in Europe, made technology more available to many and as a result a need to be easier to adapt.

The research model validates across the full, European and Middle East samples, its three relationship constructs behind use behaviour: facilitating conditions, habit and behaviour intention. Regarding facilitating conditions we found its results (full: 0.13; European: 0.11; Middle East: 0.24) in line with earlier researches and previously supported by Venkatesh et al. (2012). We can assume that consumers with different devices might experience different levels of interaction when using social media (Venkatesh et al., 2012). However, with today's technology, the access has become simplified and that reason might justify the relationship. The past usage experiences will influence future use behaviour. The presence of habit (full 0.22; European: 0.38; Middle East: 0.13) has been consistent with previous literature (Venkatesh et al., 2012). Once activated, attitudes and intentions will automatically guide and influence future use behaviour. For instance, after a long period of repeatedly being active and checking on social media, users might develop a positive view towards the use of the platform. The behaviour leading into this use will be unconsciously present in users' minds. The relationship between behaviour intention and use behaviour is validated (full: 0.54; European: 0.45; Middle East: 0.58) and goes in line with previous researches (Venkatesh et al., 2012). It is important to note that behaviour intention is seen by respondents as the most important trigger into use behaviour.

The research model validates behaviour intention (full: 051; European: 0.59; Middle East: 0.10) and use behaviour (full: 0.36; European: 0.30; Middle East 0.59) into continuance intention. These finding are supported by previous literature (Venkatesh et al., 2012). We registered a difference on the main trigger into continuance intention, when comparing the European and the Middle East side. Behaviour intention is the most predominant factor on the first mentioned sample, while on the last one, use behaviour will be the most influent one. This finding goes in line with previous literature that defends that the use of social media depends on the sense of novelty of it, however having the constant risk of declining as the novelty wears of (Al Omoush et al., 2012a).

6.1.2. Additional findings

By agglomerating all respondents' results shared on Table 4, full, European and Middle East sample and analysing them according to constructs relationships behind behaviour intention, we may consider the following unconfirmed findings. Our results did not confirm across the full,

European or Middle East sample, a significant relationship with three constructs 'behind behavioural intention namely: social influence, facilitating conditions, and price value.

Social influence was surprisingly the weakest bond influencing behaviour intention registering a negative impact on the full sample (-0.06), on Europe (-0.04) and Middle East (-0.02). This finding was not consistent with previous literature(Kaplan & Haenlein, 2010; Venkatesh et al., 2012), were the concept of social interaction was mostly based on users intention and desire to control others' impressions about themselves. This finding also contradicts earlier studies, which defend a strong impact of social interaction in users behaviour intention, due to the Era we are living in, where social interaction grants an opportunity to relatedness and connectedness (Al Omoush et al., 2012a). As per previous literature, social media became a way of self-presentation and promotion management (Ellison, 2007), where users might engage in networking platforms to fulfil their psychological needs of life satisfaction and integration through self-presentation. Hence social network sites emphasize the social dimension online by promoting interaction between users, it would be understandable to see them being influenced by their peers regarding behaviour intention and use. However, this attitude was not registered. Nevertheless, we agree that this finding is loyal to current societies and the result is supported by recent studies (Baptista & Oliveira, 2015).We can assume that in general survey users believe that they are not socially influenced by others, mainly family and friends, with regards to their behaviour towards social media platforms.

Regarding facilitating conditions (full: 0.04; European: 0.02; Middle East: 0.08), our model registered a weak relationship between behavioural intention, that goes against previous literature (Venkatesh et al., 2012). According to previous studies, users with a lower level of facilitating conditions will subsequently have a lower intention to use social media. However, we believe that the connection between those constructs is not a relevant one, due to the fact that mainly all users have access to a device support and online help. The user friendly applications and/or devices available on today's market, tend to anticipate and satisfy costumers' needs, giving simultaneously more confidence in the use, and less importance to the existing of facilitating conditions.

The price value(full: 0.06; European: 0.06; Middle East: -0.02) construct was not found strongly significant over behaviour intention as probably due to the fact that social media might generate indirect costs to users, such as internet, which will not be associated it with their use. This

assumption contradicts previous studies (Venkatesh et al., 2012), but is in line with recent researches, such as in mobile banking field (Baptista & Oliveira, 2015).

Only on the European sample, the research model did not confirm significantly effort expectancy (0.06) with behaviour intention, going against previous research (Venkatesh et al., 2012). Probably as a result of the long period of time that those are being continuously used, and the level of social media usage in European countries, made it be perceived as easy to use.

Only on the Middle East sample, the research model did find significant the relationship between habit (-0.08) and behaviour intention, contrary to previous studies (Venkatesh et al., 2012).This finding is consistent with recent Arab literature (Al Omoush et al., 2012b), and can be justified in the Arab societies, due to some social, cultural, religious, moral and political restrictions, that have been inconstant through the time and moderating the impact on self-expression or self-disclosure either between their country nationals or expatriated individuals. However slowly tending to lead into a change, those results might also be influenced and neutralized by the high level of different nationalities and cultures living now in this region. This finding can be sustained with previous researches, where those restrictions are believed to break down under the fertile field of social media ground, especially after the so-called Arab Spring.

6.2 PRACTICAL IMPLICATIONS

Different countries and nationalities behave differently toward social media, presenting dissimilar behavior intentions, use behavior and subsequently diverse attitudes toward these vehicles of communication. The results of our study have relevant implications for social media platform developers. Mainly in terms of design and product structure, this study presents key information to implement new applications on the market, in order to anticipate all users' needs and fulfil their differences. International companies should continue the development of different interfaces in order to correspond to cultural preferences through different countries. Given our findings it seems appropriate to customize platform interfaces in order to focus on cultural users' expectancy across globe areas. On this subject, applications designers might develop alternative social media interfaces relevant to all users. These ones could be simultaneously emphasized on socializing (individuals high on performance expectancy) and as well on the structure of the application (individuals high on effort expectancy). This study also has implications for social media developers aiming to create new applications in the market, and to provide a better mechanism for customers. By sharing some light on users' expectations,

companies might as well develop more assertive marketing strategies, product positioning and, a more customized product service.

Our findings contribute to consumer acceptance, by understanding the main factors and constraints behind users intentional behaviour (namely in this case performance expectancy and effort expectancy). As we found on both areas the quality of the application will influence the continued intention to use it. Social media platforms should enhance the user experience for high demanding users on performance and effort expectancy.

6.3 THEORETICAL IMPLICATIONS

Social media platforms have been expanding as virtual social meeting places, playing stronger roles in society, as they facilitate and enhance different forms of self-presentation, social relationships and interactions. They became a platform of freedom and expression, subsequently changing the face of societies in the European and Arab world. Yet, there was not a comparison on both of motivations and usage patterns, or continuity of use. This study has many important theoretical contributions, primarily as being a pioneer research testing and analysing Venkatesh model in order to understand what triggers social media use in European and Arab culture simultaneously. We came to a conclusion that the effects were heterogeneous across different constructs and cultures.

Our findings suggested that culture plays a significant role when studying technology acceptance and use at an individual level. Among the evaluated constructs, performance expectancy and effort expectancy are the ones that influence the most the decision making process. Therefore, these constructs are relevant and important in the context of social media applications use, given that users are likely to evaluate the applications whether they can deliver value on the performance or effort experience. This suggests that performance oriented individuals seek and expect productivity as outcome over the use of technology in their daily lives (Compeau Christopher A.Huff, Sid, 1999). In contrast individuals who are effort orientated seem to pay attention to the structure of the application interface and its functional characteristics (Al Omoush et al., 2012a). In this case it is not the outcome but the experience of the use that will determine the subsequently future behaviour towards it. We found support for the interaction between social media applications and behaviour intention / use behaviour on the continued intention to the referred applications.

Our work demonstrates the value of combining two different cultures in advancing IS research. Rather than measuring cultural values, we did as Venkatesh and Zang (2010), who tested the

unified theory of acceptance and use of technology (UTAUT), into different samples collected in the U.S. and China. On following the Venkatesh model our study became less likely to miss any factor that might trigger users' behaviour toward social media. Our research design can serve as an example for future studies aiming to work on cultural values in the same context or settings.

6.4 LIMITATIONS AND FUTURE RESEARCH

There are some limitations to this study, which requires further additional research. Firstly, even though Venkateh's model is considered as being one of the most comprehensive frameworks to study technology acceptance and use, it does not analyse cultural dimensions. To address this limitation, and since cultural values can vary according to different dimensions or even within the same culture, further research might be developed using Hofstede's model as a comprehensive framework of national cultural values, which can be studied in combination with the UTAUT model. Following the cultural limitation of the study, and by being a comparison between two different cultures, it would be interesting to give continuance on a cultural level, to conceptualize any espoused cultural values. Such research could be developed by using alternative cultural taxonomies as Trompenaars (2013), whose framework emphasizes seven cultural dimensions, namely universalism vs. particularism, neutral vs. emotional, specific vs. diffuse, individualism vs. collectivism, achievement vs. ascription, sequential vs. synchronic and internal vs. external control.

Secondly, in our study we present a geographic limitation, by being carried on a regional level. Additional studies might be interestingly done in order to clarify the different factors underlying social media application usability, not only on a regional level, but also on a specific country level.

Thirdly, as social media is constantly growing there is some limitation on studying the impact of all kinds of social media applications as a whole. A potential area of research could be found by analysing and comparing the impact of a certain application, on both mentioned regions, once published in the market, in order to study the acceptance level.

7. CONCLUSIONS

The potential of social media in Europe and Middle East has seen a rapidly explosion in the last years. Based on prior research and investigation our work contributes in an innovative way to the continuing discussion on why and how people engage on social media, independently of culture, country, gender or age. It consists on an analysis that integrates two different cultures on an individual level, in order to understand the role of social media applications in our lives as measuring the use of social media. The UTAUT2 model was tested and focused on both regions, being so a unique geographic analysis. The results provided support for our subsequent work in order to understand the behavioural triggers of social media acceptance and use. Our results indicated divergence with earlier findings, confirming the unique characteristics of such a comparison. We found that there are behavioural differences between the two spheres of the globe towards the intention of use of social media. While in Europe performance expectancy explains the behaviour into social media applications, in the Middle East the effort expectancy explains the behaviour toward individuals' intentions. Furthermore, social influence was surprisingly not relevant in both regions, reflecting a change in society's attitudes. We contributed to IS literature by providing findings explaining the drivers of continued intention to use social media applications. For researches this study provides a basis for future enrolment. For technology it reveals crucial information to design and implement new successful applications. Therefore the results of this study contribute to fostering a better understanding of online and offline cultural diversities.

REFERENCES

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. http://doi.org/10.1016/0749-5978(91)90020-T

Al Omoush, K. S., Yaseen, S. G., & Atwah Alma'Aitah, M. (2012a). The impact of Arab cultural values on online social networking: The case of Facebook. *Computers in Human Behavior*, *28*(6), 2387–2399. http://doi.org/10.1016/j.chb.2012.07.010

Al Omoush, K. S., Yaseen, S. G., & Atwah Alma'Aitah, M. (2012b). The impact of Arab cultural values on online social networking: The case of Facebook. *Computers in Human Behavior*, *28*(6). http://doi.org/10.1016/j.chb.2012.07.010

Bagozzi, R. P. (2007). The Legacy of the Technology Acceptance Model and a Proposal for a Paradigm Shift . *Journal of the Association for Information Systems*, *8*(4), 244–254. http://doi.org/Article

Baptista, G., & Oliveira, T. (2015). Computers in Human Behavior Understanding mobile banking : The unified theory of acceptance and use of technology combined with cultural moderators, *50*, 418–430. http://doi.org/10.1016/j.chb.2015.04.024

Civin, Michael, 1999. (1999). from the SAGE Social Science Collections . All Rights Reserved .

Compeau Christopher A.Huff, Sid, D. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *MIS Quarterly*, *23*(2), 145–158. http://doi.org/10.2307/249749

Curtis, L., Edwards, C., Fraser, K. L., Gudelsky, S., Holmquist, J., Thornton, K., & Sweetser, K. D. (2010). Adoption of social media for public relations by nonprofit organizations. *Public Relations Review*, *36*(1), 90–92. http://doi.org/10.1016/j.pubrev.2009.10.003

Davis, Fred D, Bagozzi, Richard & Warshaw, R. P. (1989). DavisBagozzi.pdf.

Diversity, U. C. (2013). Understanding Cultural Diversity in Business.

Ellison, N. B. (2007). The Benefits of Facebook "' Friends :'" Social Capital and College Students ' Use of Online Social Network Sites, *12*, 1143–1168. http://doi.org/10.1111/j.1083-6101.2007.00367.x

Hampton, K. N., & Goulet, L. S. (2011). Social networking sites and our lives.

Hanna, B., Kee, K. F., & Robertson, B. W. (2017). Positive Impacts of Social Media at Work : Job Satisfaction , Job Calling , and Facebook Use among Co-Workers, *00012*.

Hoehle, H., Zhang, X., & Venkatesh, V. (2015). An espoused cultural perspective to understand continued intention to use mobile applications: a four-country study of mobile social media application usability. *European Journal of Information Systems*, *24*(3), 337–359. http://doi.org/10.1057/ejis.2014.43

Im, I., Hong, S., & Kang, M. S. (2011). An international comparison of technology adoption: Testing the UTAUT model. *Information and Management*, *48*(1), 1–8. http://doi.org/10.1016/j.im.2010.09.001

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*(1), 59–68. http://doi.org/10.1016/j.bushor.2009.09.003

Karaiskos et al 2011. (n.d.).

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, *54*(3), 241–251. http://doi.org/10.1016/j.bushor.2011.01.005

Leonardi, P. M. (2015). R ESEARCH A RTICLE A MBIENT A WARENESS AND K NOWLEDGE A CQUISITION : U SING S OCIAL M EDIA TO L EARN " W HO K NOWS W HAT " AND " W HO K NOWS W HOM ," *39*(4), 747–762.

Mackenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). C ONSTRUCT M EASUREMENT AND V ALIDATION P ROCEDURES IN MIS AND B EHAVIORAL R ESEARCH : I NTEGRATING N EW AND E XISTING T ECHNIQUES Summary of Steps for Scale Purification and Refinement, *35*(2), 1–5.

Mayfield, A. (2008). What is social media. *Networks*, *1.4*, 36. http://doi.org/10.2217/rme.11.82

Nan, N. (2011). T HEORY AND R EVIEW C APTURING B OTTOM -U P I NFORMATION T ECHNOLOGY U SE P ROCESSES : A C OMPLEX A DAPTIVE S YSTEMS M ODEL 1, *35*(2), 505–532.

Pinsonneault, A. (2005). U NDERSTANDING U SER R ESPONSES TO I NFORMATION T ECHNOLOGY : A C OPING, *29*(3), 493–524.

Porter and Millar. (1985). How Information Gives You Competitive Advantage.pd

Rogers, E. M. (2002). Diffusion of preventive innovations. *Addictive Behaviors*, *27*(6),

989–993. http://doi.org/10.1016/S0306-4603(02)00300-3

Sabry, T. (2017). Reframing Media and Cultural Studies in the Age of Global Crisis, *12*, 1–4.

Sheppard, B. H., Hartwick, J., Warshaw, P. R., Journal, T., & Dec, N. (1988). The Theory of Reasoned Action : A Meta-Analysis of Past Research with Recommendations for Modifications and Future Research, *15*(3), 325–343.

Simulation, C., Simulation, C., & Link, A. (2010). TeesRep - Teesside ' s Research Repository Crowd modeling and simulation technologies.

Srite, M., & Karahanna, E. (2006a). T HE R OLE OF E SPOUSED N ATIONAL C ULTURAL, *30*(3), 679–704.

Srite, M., & Karahanna, E. (2006b). The Role of Espoused National Cultural Values in Technology Acceptance. *MIS Quarterly*, *30*(September), 679–704. http://doi.org/10.1093/ajae/aau104

Taylor, Shirley, Todd A., P. (1995). TaylorTodd.pdf.

Thelwall, M., Wilkinson, D., & Uppal, S. (2010). Data Mining Emotion in Social Network Communication : Gender differences in MySpace 1, *61*, 190–199.

Thompson, Ronald; Higginsm, Christofer A.; Howell, J. M. (1991). thompson.pdf.

Venkatesh, V., Morris, M. G., Hall, M., Davis, G. B., Davis, F. D., & Walton, S. M. (2003). U SER A CCEPTANCE OF I NFORMATION T ECHNOLOGY : T OWARD A U NIFIED V IEW 1, *27*(3), 425–478.

Venkatesh, V., & Speier, C. (2002). User Acceptance Enablers in Individual Decision Making About Technology : Toward an Integrated Model, *33*(2).

Venkatesh, V., Thong, J., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the UnifiedTheory of Acceptance and Use of Technology. *Mis*, *36*(X), 1–22.

Workman, M. (2014). New media and the changing face of information technology use: The importance of task pursuit, social influence, and experience. *Computers in Human Behavior*, *31*(1), 111–117. http://doi.org/10.1016/j.chb.2013.10.008