CONCEPTUAL MODEL OF NATIONAL CULTURE INFLUENCE ON VIDEO CONFERENCING ACCEPTANCE FOR KNOWLEDGE SHARING: A CASE STUDY IN MANUFACTURING FIRMS IN JORDAN

AYMAN NADER ABDELLATIF ALKHALDI

THESIS SUBMITTED IN FULFILMENT OF THE DEGREE OF
DOCTOR OF PHILOSOPHY

FACULTY OF INFORMATION SCIENCE AND TECHNOLOGY
UNIVERSITI KEBANGSAAN MALAYSIA
BANGI

2013

MODEL KONSEPSI PENGARUH BUDAYA NASIONAL KE ATAS PENERIMAAN SIDANG VIDEO BAGI PERKONGSIAN PENGETAHUAN: KAJIAN KES DALAM KALANGAN FIRMA PENGELUARAN DI JORDAN

AYMAN NADER ABDELLATIF ALKHALDI

TESIS YANG DIKEMUKAKAN UNTUK MEMPEROLEH IJAZAH
DOKTOR FALSAFAH

FAKULTI TEKNOLOGI DAN SAINS MAKLUMAT
UNIVERSITI KEBANGSAAN MALAYSIA
BANGI

2013

DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

22 May 2013

Ayman Nader Abdellatif Alkhaldi
P51447

ACKNOWLEDGMENTS

In the Name of Allah Most Gracious Most Merciful

Alhamdulillah, with His consent, I managed to complete this challenging and taxing task. Foremost praise is to the Almighty Allah for all His blessings for giving me the patience and good health throughout the duration of my PhD research.

I am very fortunate to have Professor Dr. Zawiyah Mohammad Yusof as the main supervisor, and also Associate Prof. Dr. Mohd. Juzaiddin Ab. Aziz as co-supervisor for my PhD. In researching and writing this thesis, I have received invaluable advice and guidance from both of them. Their counsel to provide more extensive narrative and tighter focus made this thesis much better than it would otherwise have been. No words can express my appreciation of their attitude, effort, and energy. Their supervision has enabled this study to be completed in an enjoyable manner.

I would also like to thank all postgraduate students in UKM for their continuous support and understanding that make the author feel being at home. They have given the motivation to complete this challenging endeavour especially Dr. Ali Zahrawi, Dr. Yousef Salameh, Dr. Ibraheem Marashdah, Qusai al-Bsool, Yamen Batch, Hazmy Iman, Abdallah Shatat, Mohammad Zayed, Waleed al-Omoush, Rami al-taʾani, Ahmad al-Saedi, Mohannad Ayash, Omar Akash, Omar al-Qudah, Meshaʾal al-Qudah, Radiyah Aminuaalh, Marlinawati Djasmir, Nurazah, Fadilah Yaseen, and Nor Aziati Hamid for their help, share of knowledge, friendship, and creating a pleasant working environment throughout my years in UKM.

Many thanks to the Ministry of Industry and Trade, and Chamber Industry and Trade in Jordan, and many manufacturing firms for their assistance, patience and endurance throughout collecting data for this research.

Thanks are also due to my special friend, Dr. Islam Taʾamneh for his valuable courage, support, advice and guidance throughout the duration of my study.

Last but not least, i gratefully acknowledge the financial support provided by UKM. I am very grateful and highly appreciated to my beloved parent (Dr. Nader al-Khaldi and Najwa Saʾadeddeen) for their love, endless kindness, support, advice, and trust. I would also like to express my deepest appreciation to my brother (Mohammad al-Khaldi) and his wife, my beloved sisters, and brother in laws (Abdelkareem al-Ashqar, Mohammad al-Hedmy, and Odai Abo-deyeh) for their love, courage, support and trust.

ABSTRACT

Knowledge sharing has been impacted heavily by technology as it is a key enabler to execute the activities though the endeavour is not exempted from cultural factors. However, models portraying on national cultural role on the acceptance of technologies to share knowledge, generally via computer-mediated communication (CMC) and particularly video conferencing are insufficient. It is the aim of the study to develop a new conceptual model to capture the influence of national culture, by means of video conferencing, on knowledge sharing in manufacturing firms in Jordan. The aim is supported by four objectives, namely: to determine whether high/low context style could moderate the effect of social presence on users' perceived usefulness, ease of use, of video-conferencing usage; to determine whether time orientation could moderate the effect of user training and support on users' perceived usefulness, and ease of use, of video-conferencing usage; to examine whether the four Hofsted's cultural orientations could moderate the effect of social influence on video-conferencing usage; and to examine the effect of perceived usefulness and ease of video conferencing use toward determining video conferencing usage in virtual project teams in Jordan. This is a quantitative approach study, adopting survey as its method employing questionnaire to collect data. Self-administered questionnaires were distributed to 1800 senior managers in 47 manufacturing firms in Jordan from April through July, 2011. A total number of 434 questionnaires were returned, but only 357 were valid and then analysed. Analysis used SPSS 17, with Modprobe macro script for moderated multiple regression. Only high/low context style cultural dimension has moderating influence on video conference acceptance. It is evident that cultural values do not impede user training and support, as well as social influence towards the video-conferencing usage. The perceived usefulness and ease of video conferencing use have significantly direct positive effect towards determining video conferencing usage in virtual project teams in Jordan. The study had shed lights on the social factors as an efficient tool to motivate video-conferencing use. High/low context style needs further examination in future studies pertaining to the acceptance of CMC.

ABSTRAK

Perkongsian pengetahuan menerima kesan yang besar daripada teknologi lantaran teknologi menjadi pemboleh utama bagi melaksana aktiviti tersebut meskipun pada hakikatnya, perkongsian pengetahuan tidak terkecuali daripada faktor budaya. Bagaimanapun, model yang menggambar peranan budaya nasional ke atas penerimaan teknologi bagi berkongsi pengetahuan, umumnya melalui komunikasi berperantaraan komputer (CMC) dan khususnya sidang video adalah kurang. Matlamat kajian ini adalah untuk membangun sebuah model konsepsi baharu bagi menyelidiki pengaruh budaya nasional ke atas penerimaan sidang video bagi berkongsi pengetahuan dalam kalangan firma pengeluaran di Jordan. Matlamat kajian disokong oleh empat objektif iaitu, menentukan sama ada gaya konteks tinggi/rendah boleh mengawal kesan kehadiran sosial ke atas tanggapan kebergunaan dan kemudahan mengguna sidang video oleh pengguna; menentukan sama ada orientasi masa dapat mengawal kesan latihan dan sokongan ke atas tanggapan kebergunaan dan kemudahan penggunaan video oleh pengguna sidang video; menyelidiki sama ada empat orientasi budaya Hofsted dapat mengawal kesan pengaruh sosial ke atas penggunaan sidang video; dan menyelidiki kesan tanggapan kebergunaan dan kemudahan mengguna sidang video terhadap penggunaan sidang video dalam pasukan projek maya di Jordan. Kajian ini bersifat kuantitatif dengan tinjauan sebagai kaedah dan mengguna soalselidik sebagai alat pengumpulan data. Soal selidik diedar sendiri kepada 1800 pengurus kanan di 47 firma pengeluaran di Jordan dari April hingga Julai, 2011. Sebanyak 434 soal selidik dikembali tetapi hanya 357 sah dan dianalisis mengguna SPSS 17, dengan skrip makro Modprobe bagi mengawal regresi berbagai. Kajian menunjukkan hanya gaya konteks tinggi/rendah matra budaya mempunyai kesan mengawal ke atas sidang video. Bukti menunjukkan nilai budaya tidak menghalang latihan dan sokongan pengguna, serta pengaruh sosial terhadap penggunaan sidang video. Tanggapan kebergunaan dan kemudahan sidang video mempunyai kesan terus yang positif secara signifikan terhadap penentuan penggunaan sidang video dalam pasukan projek maya di Jordan. Kajian ini menunjukkan faktor sosial sebagai alat yang cekap bagi memotivasipenggunaan sidang video. Gaya konteks tinggi/rendah memerlukan penelitian lanjut dalam kajian akan datang yang berkaitan dengan penerimaan CMC.

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LIST OF ABBREVIATIONS

Analysis of Moment Structure (AMOS)

Analysis of Variance (ANOVA)

Bartlett's Test of Sphericity (BTS)

Computer-Mediated Communication (CMC)

Decision Support Systems (DSS)

Decomposed Theory of Planned Behavior (DTPB)

Executive Information Systems (EIS)

Enterprise Resources Planning (ERP)

Electronic Learning System (ELS)

Group Support System (GSS)

Information and Communication Technology (ICT)

Innovation Diffusion Theory (IDT)

Information System (IS)

Information Technology (IT)

Kaiser-Meyer-Olkin (KMO)

Master Business Administration (MBA)

Multiple Group Analysis (MGA)

Management Information System (MIS)

Motivational Model (MM)

Model of Personal Computer Utilization (MPCU)

Negotiation Support Systems (NSS)

Principal Component Analysis (PCA)

Personal Computer (PC)

Personal Digital Assistant (PDA)

Perceived Ease of Use (PEOU)

Perceived of Usefulness (PU)

Partial Least Square (PLS)

Statistical Analysis System (SAS)

Social Cognitive Theory (SCT)

Structural Equation Modelling (SEM)

Statistical Package for the Social Sciences (SPSS)

Technology Acceptance Model (TAM)

Theory of Planned Behaviour (TPB)

Transaction Processing Systems (TPS)

Theory of Reasoned Action (TRA)

Television (TV)

United Kingdom (UK)

United States (US)

Unified Theory of Acceptance and Use of Technology (UTAUT)

Variance Inflation Factors (VIF's)

CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

Knowledge is a valuable and strategic resource and has achieved an unprecedented focus of research, especially in organization (Babalhavaeji & Kermani 2011). Furthermore, advances in Information and Communication Technology (ICT) have made knowledge a key resource, which could determine the success of an organization and could aid in the creation of a sustainable competitive advantage; especially in a globalized organization (Soley & Pandya 2003; Leidner 2010; and Cogburn et al. 2010). This increased use of knowledge has urged organizations to manage it more effectively and efficiently.

ICT enables companies to find, process, store, and share, information and knowledge (Lopez-Nicolas & Merono-Cerdan 2009). Mian et al. (2008) define knowledge as "the combination of data and information, to which is added expert's opinions, skills, and experiences, resulting in a valuable asset, which can be used to aid decision making." Knowledge management is one of the most recent fields in ICT and management (Al-Alawi et al. 2007). Generally, knowledge management is divided into seven processes: create, identify, collect, adopt, organize, use and share; where knowledge sharing is a key focus field for knowledge management (Hendriks 1999; Er-ming et al. 2007; and Wei 2007). Knowledge sharing was defined by Mian et al. (2008) as "activities of transferring or disseminating knowledge (including implicit and tacit knowledge) from one person, group, or organization, to another." The ability of managing knowledge has emerged as a critical factor in reaching a competitive advantage. However, the key to a competitive advantage is the ability of an organization to organize autonomous communities of practice, and to control the flow of knowledge (Bresnen et al. 2003; Orhun & Hopple 2008).

Managing knowledge in project-based organizations could become a prerequisite to reaching a competitive advantage, by overcoming the limitations on cross-project learning (Bresnen et al. 2003; Mian et al. 2008). Effective knowledge management facilitates the creation and integration of knowledge, minimizes knowledge losses, and fills knowledge gaps throughout the duration of a project. Li and Zhang (2008) point out that many scholars have clarified that team learning has a significant role in an organization's performance, by supporting and complementing knowledge and the attention of team learning innovation. Team learning is defined as "an on-going process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results, and discussing errors or unexpected outcomes of actions." Virtual team members use ICT to facilitate their communications. In other words, they take actions to enable more effective knowledge work (Thomas et al. 2007). Virtual teams are defined as "teams that are composed of geographically and/or organizationally dispersed co-workers, who are assembled together, mainly by Computer-Mediated Communication (CMC), to accomplish one or more organizational tasks (Wei 2007)." According to McQuail (2005), and Yu (2011), CMC is defined as "any communicative transaction that occurs through the use of two or more networked computers." Popular forms of CMC occur via e-mail, v-mail, video-conferencing, and text-based chatting (Thurlow et al. 2004; Bishop 2009). One virtual team technology is video-conferencing, which is defined as "a discussion between two or more groups of people, who are in different places, but can see and hear each other using electronic communications *(CDO* 2010)."The definition of video-conferencing prefered in this study is technology that allows two or more parties to interact synchronously through video and audio, such as using Messenger, Skype, MySpace, Google talk.

National culture is "the collective mind-set that distinguishes members of one nation from another (Hofstede 1991)." It is also defined as "a large number of people conditioned by similar background, education, and life experiences" (Lowry et al. 2007). The significant role of culture in CMC has not been adequately explored (Bagchi & Kirs 2009). Whilst there are a number of obstacles, caused by unacceptable technologies being transferred to developing countries, cultural influence on technology acceptance is still ambiguous (Twati 2008). Al-Sukkar (2005) asserts that

the adoption of internet applications, and the internet itself, is limited in both Middle Eastern organizations and individuals alike. In developing countries, the culture of using technology is different to other cultures. It is evident that culture has influenced the acceptance of CMC in Jordan. Nevertheless, no practical study has been conducted extensively pertaining to Jordan. As such, studies need to be carried out to explore the CMC acceptance in Jordan, particularly regarding the influence of national culture. Furthermore, an investigative study in Jordan suggests that Technology Acceptance Model (TAM) could be valuable only if it is extended towards specific issues (Khasawneh & Ibrahim 2008), thus cultural issues could be included. In this point of view, cultural anthropologists argue that technology has a cultural component that influences the adoption, acceptance, use, and management of the technology itself (Swigger et al. 2004). Guo et al. (2009) investigate the influence of the dialogue technique, using video-conferencing technology, for virtual team members in a Chinese cultural context, whilst stressing the importance of national culture. These cultural differences possibly convey different findings of their scope of study. Therefore, this portrays the need to explore the influence of national culture in Jordan.

1.2 BACKGROUND OF THE STUDY

Knowledge management challenges could not be solved by the use of a technology solution alone (Zhang et al. 2006). According to Orhun and Hopple (2008), the availability of CMC technologies is not enough to assure knowledge sharing. Virtual teams need more facilities than CMC, in order to share their knowledge effectively (Usoro 2005).

The literature is still in its infancy, in terms of the role of national culture differences on the acceptance of Information Technology (IT), while globalization continues (Cardon & Marshall 2008). Guo et al. (2006) claim that the impact on enhancing the team's media perception and use, could be different when the team's members vary by culture. In other words, the diversity of member's cultural values and beliefs are considered as challenges to conform to technology attitudes.

Differences of cultural values, beliefs, and norms, maximize the uncertainty of implementing communication interaction techniques. For instance, social influence

reflects an individual's perception of the social force to act. Social influence is significant in determining the behaviour across cultures differently (Law 2007). Moreover, national culture moderates social influence impact (Guo et al. 2006), in the way that groups would conform more to accept IT, as much as they have collectivistic cultural values. Quoting Swigger et al. (2004), Orvis and Lassiter (2008) indicate that Middle Eastern people have collectivistic tendencies like the Chinese. They may use and perceive communication technologies as being more organized than individualistic cultures, such as the United States (US) or Australia.

Variation of power distribution determines the direction of knowledge flow of the virtual team's members (Wei 2007), whilst structure (hierarchy) affects the flow of sharing their knowledge. However, CMC technologies help to reduce the difficulties in their interactions, enhance the relationships that are probably external to the official hierarchy, and enhance flexibility (Hinds & McGrath 2006). Pai (2009) explains how individuals from different cultures react differently; particularly whilst arguing.

The orientations of cultural values play an important role in a virtual project team's perception to accept and use technology. For instance, an Italian study argued that the mobile phone was accepted because of individualistic values (Thomas et al. 2005). However, since Middle Eastern people have femininity cultural values, which imply caring about the quality of life; they therefore focus on establishing relationships rather than technology itself (Li et al. 2009).

During the initial stages, a new technology is usually slow and difficult to be accepted. However, in due course, when users get used to that new technology, they feel comfortable, with an ease of use. This process is related to the user's perception of using technology, because their perception may change over time. Some users worry about the difficulties of learning, while others believe that technology is easy to use, once they start learning, this due to cultural values regarding focus on time (Li et al. 2009).

Virtual project teams' interactions are affected, by being unable to express their ideas completely, or they do not get enough information. Therefore, they are shy about asking for something to be repeated (Chow et al. 1999). Furthermore, in video-

conferencing communication technology, knowledge workers from different organizational levels have different priorities and opinions towards making decisions. In other words, knowledge sharing occurs within organizational levels vertically. Therefore, it is hard for knowledge workers at a lower level to use unusual technologies to share their knowledge with other workers at a higher level, due to the different power of positions (Eriksson & Makinen 2004). They prefer to follow the majority of their community (i.e., superiors and/or peers) to use common communication technologies, such as e-mail (Damian & Zowghi 2003; Huang & Trauth 2007; and Wei 2007). Team members possibly pay attention to others opinions regarding video-conferencing acceptance (Law 2007); having the value of conformity with their group to accept video-conferencing, whereas they suppress the perception of emphasizing their own acceptance behaviour and ignore the majority of their group (Li et al. 2009). Although some virtual project teams perceive that video-conferencing is easy and useful to use, they worry about using it, because it is an unusual technology within their community, and using unusual technology reflects that knowledge workers do not comply with community rules and regulations to accept video-conferencing (Adenfelt & Lagerstrom 2006).

Because culture varies between countries (Hofstede 1991), there is an urgent need to measure the possible influence of national culture on video-conferencing acceptance in Jordan. EIUL (2009) reports that misunderstandings in communications arising because of cultural differences, where cited as the biggest challenge in virtual working; even among virtual project teams from the same culture. There are many cultural differences that are difficult to observe, and can therefore provide opportunities for offence to be taken. It is important for organization's leaders and knowledge workers to understand the communication medium preferences of the virtual project teams, under their control and to make accommodation for those differences. This could be achieved through measuring the possible influence of national culture on video-conferencing acceptance for knowledge sharing, in order to discover potential weaknesses and strengths. It is timely to consider how an organization could share knowledge more effectively and efficiently using CMC. However, literature in this area reveals that the role of national cultural differences on CMC acceptance is still in its infancy (Cardon & Marshall 2008).

1.3 PROBLEM STATEMENT

A problem statement is defined as any situation that has a gap between the actual situation and the expected situation (Sekaran 2005; Sekaran & Bougie 2009). It is an issue or concern that needs to be addressed, with the aim of providing better understanding (Creswell 2009), and refers to a brief statement about the issue to be explored and solved. In this study, the current situation needs further investigation, to build up a theory and find answers empirically. The problem statement of this research is as follows:

As observed virtual project teams are using e-mail and text-based chatting for sharing knowledge, whilst video-conferencing is ignored. Video-conferencing allows virtual teams to meet with one another regardless of their locations; saving travel costs, time, and effort; as well as encouraging effective knowledge sharing by better brain-storming (Owen 2010). It also enables users to avoid response waiting time, through an immediate response. Also, viewing team members' faces via video-conferencing offers several benefits, such as the reduction of misunderstandings (by showing body language and voice intonation). Furthermore, viewing team members' faces reminds them of each other's personalities, which results in creating an opportunity to build interdependency and trust relationship (Anawati & Craig 2006). Selecting video-conferencing medium rather than other mediums for sharing knowledge should provide better understanding through showing designs and images. Also, video-conferencing allows the collaboration in drawing figures of strategies and planning of new products or improves current manufacturing projects.

However, video-conferencing usage is influenced by culture. The influence of a society would determine wether a technology is accepted or rejected. This is because culture indicates the feasible perceptions, thoughts and actions of human behaviour (Hofstede 1980). A culture of a nation has known as "the collective mind-set that distinguishes members of one nation from another (Hofstede 1991)." People from different culture have different values. These values can shape the perception to select a specific medium instead of another medium to receive and send knowledge to be shared and understood as feedback with regards of achieving manufacturing projects.

Thus, virtual project teams' members could be affected by each other as a result of values and perceptions. This has also impacted the video-conferencing acceptance and usage to share knowledge (Orvis & Lassiter 2008). However, cultural believes of avoiding use an unusual technology (Adenfelt & Lagerstrom 2006), tendency to follow the majority and/or the superiors (Eriksson & Makinen 2004; Wei 2007), caring about building relationships than technology itself (Li et al. 2009), could affect the amount and flow of knowledge amongst virtual project teams (Wei 2007). Furthermore, virtual project teams' members are worry about the difficulty to start learning to use technology (Li et al. 2009); and being unable to express or get enough knowledge using a technology. All these could restrict sharing knowledge in manufacturing firms in Jordan.

Studies show that in general the use of video-conferencing is almost ignored (Hirsh et al. 2005). Studies by Anjum et al. (2006) and Castle (2009), report that video-conferencing is least used among the communication mediums. For example, Hirsh et al. (2005) find that most participants (68%) do not engage in a video-conferencing, and 3% only of the samples are using it frequently. Among virtual project teams the percentage of using the e-mails (28%), phones (20%), messengers (12%), and video-conferencing (8%), as mentioned by Anjum et al. (2006). Castle (2009) finds that virtual team members prefer the e-collaboration tools to be e-mail (70%), telephone (60%), and video-conferencing (50%). From the above, the video-conferencing system is the most ignored technology to them. This situation is worsened when technology acceptance is impacted by culture (Myers 2002; Taras et al. 2011; and Taras et al. 2012). Thus, cultural issue needs to be addressed urgently. Cultural issue has been seen to be the most significant challenge that hinders the use of CMC (Tanner 2009; Fox et al. 2011). Since early 2011, quoting Wasko and Faraj (2000), Ghosh (2011) asserts that by addressing cultural diversity it provides better understanding of the obstacles that need to be solved. This would lead to solving the problems in enhancing knowledge sharing among virtual teams via video-conferencing. EIUL (2009) reports that it is cruicial to take into account the cultural references in selecting the appropriate tools for CMC in the Middle Eastern countries.

There is also another issue arise, is resolving around cultural influence of video-conferencing usage. There is as yet no model on national culture influence on video-conferencing acceptance for knowledge sharing particularly in Jordan. As such, this study examines cultural orientation of high/low context style, long versus short-term time orientation, power distance, and individualism versus collectivism, uncertainty avoidance, and masculinity versus femininity, which could influence knowledge sharing via video-conferencing. At the end of the study, a new conceptual model has been developed that serves as reference for organizations in adopting video-conferencing for knowledge sharing, which takes into account the influence of national culture on the acceptance of such tool.

1.4 RESEARCH QUESTIONS

Marion (2004) asserts that research questions are brief statements of the objectives of a study, which are to be achieved or proved. Research questions are important to be identified, because all of the components in a study grow on research questions in a reasonable mode. Similarly, according to Creswell (2009), research questions focus on the purpose of a study. In this study, quantitative research questions inquire about the relations between constructs that need to be answered. The main research question of this study is as follows:

What is the moderating role of cultural orientation of high/low context style, long versus short-term time orientation, power distance, individualism versus collectivism, uncertainty avoidance, and masculinity versus femininity, which could influence the perception to accept video-conferencing in virtual project teams in Jordan?

In order to answer this main question, this study needs to answer four sub-questions; numbered 1, 2, 3, and 4, as follows:

1. Does high/low context style moderate the effect of social presence on user's perceived usefulness, as well as perceived ease of use, of video-conferencing usage in virtual project teams in Jordan?

The above sub-research question (1) leads to the following sub-sub-research questions:

i. Does high/low context style moderate the effect of social presence on users' perceived usefulness of video-conferencing in virtual project teams in Jordan?
ii. Does high/low context style moderate the effect of social presence on users' perceived ease of use of video-conferencing in virtual project teams in Jordan?

2. Does long versus short-term time orientation moderate the effect of user training and support on users' perceived usefulness, as well as on user's perceived ease of use, of video-conferencing in virtual project teams in Jordan?

The above sub-research question (2) leads to the following sub-sub-research questions:

i. Does long versus short-term time orientation moderate the effect of user training and support on users' perceived usefulness of video-conferencing in virtual project teams in Jordan?

ii. Does long versus short-term time orientation moderate the effect of user training and support on users' perceived of ease of use of video-conferencing in virtual project teams in Jordan?

3. What are the influences of cultural orientations in moderating the effect of social influence on video-conferencing usage in virtual project teams in Jordan?

The above sub-research question (3) leads to the following sub-sub-research questions:

i. What is the influence of power distance in moderating the effect of social influence on video-conferencing usage in virtual project teams in Jordan?

ii. What is the influence of individualism versus collectivism in moderating the effect of social influence on video-conferencing usage in virtual project teams in Jordan?

iii. What is the influence of uncertainty avoidance in moderating the effect of social influence on video-conferencing usage in virtual project teams in Jordan?

iv. What is the influence of masculinity versus femininity in moderating the effect of social influence on video-conferencing usage in virtual project teams in Jordan?

4. Do users' perceptions of usefulness and ease of use of video-conferencing determine the video-conferencing usage in virtual project teams in Jordan?

The above sub-research question (4) leads to the following sub-sub-research questions:

i. Does users' perception of usefulness of video-conferencing determines video-conferencing usage in virtual project teams in Jordan?

ii. Does users' perception of ease of video-conferencing use determines video-conferencing usage in virtual project teams in Jordan?

1.5 OBJECTIVES OF THE STUDY

Objective is the research goal that the researcher seeks to achieve as answers of the proposed research questions (Creswell 2009). Obviously, the objective of this study is the expression of the target to be achieved that could be observed and measured. The objective as a concept is divided into general objectives and specific objectives. In this study, the general objective is to develop an understanding of the right to act upon the restructuring of the research topic sentences used. Whilst, the specific objective is to explain the actions to be executed, step by step (Khalid 2003). Theoretically, the main

objective of this study is to develop a new conceptual model for capturing the national culture influence on video conferencing acceptance for knowledge sharing. This should be achieved in order to enhance the adoption and use of video-conferencing in virtual project teams in Jordan.

In order to achieve this main aim, this study seeks to execute four sub-research objectives, numbered 1, 2, 3, and 4, as follows:

1. To determine whether the high/low context style could moderate the effect of social presence on users' perceived usefulness, as well as perceived ease of use, of video-conferencing in virtual project teams in Jordan.

   The above sub-research objective (1) leads to the following activities:

   i. Measure the possible moderating effect of high/low context style on the effect of social presence on users' perceived usefulness of video-conferencing in virtual project teams in Jordan.

   ii. Measure the possible moderating effect of high/low context style on the effect of social presence on users' perceived ease of use of video-conferencing in virtual project teams in Jordan.

2. To determine whether long versus short-term time orientation could moderate the effect of user training and support on users' perceived usefulness, as well as perceived ease of use, of video-conferencing in virtual project teams in Jordan.

   The above sub-research objective (2) leads to the following activities:

   i. Measure the possible moderating effect of long versus short-term time orientation on the effect of user training and support on users' perceived usefulness of video-conferencing in virtual project teams in Jordan.

ii. Measure the possible moderating effect of long versus short-term time orientation on the effect of user training and support on users' perceived ease of use of video-conferencing in virtual project teams in Jordan.

3. To examine the relations of cultural orientations that could influence the effect of social influence on video-conferencing usage in virtual project teams in Jordan.

   The above sub-research objective (3) leads to the following activities:

   i. Measure the possible moderating effect of power distance on the effect of social influence on video-conferencing usage in virtual project teams in Jordan.

   ii. Measure the possible moderating effect of individualism versus collectivism on the effect of social influence on video-conferencing usage in virtual project teams in Jordan.

   iii. Measure the possible moderating effect of uncertainty avoidance on the effect of social influence on video-conferencing usage in virtual project teams in Jordan.

   iv. Measure the possible moderating effect of masculinity versus femininity on the effect of social influence on video-conferencing usage in virtual project teams in Jordan.

4. To examine the effect of perceived usefulness and ease of video-conferencing use toward determining video-conferencing usage in virtual project teams in Jordan.

   The above sub-research objective (4) leads to the following activities:

   i. Measure the direct effect of perceived usefulness of video-conferencing toward determining video-conferencing usage in virtual project teams in Jordan.

ii. Measure the direct effect of perceived ease of use of video-conferencing toward determining video-conferencing usage in virtual project teams in Jordan.

1.6 CONCEPTUAL MODEL

Conceptual model (or theoretical model) is primary to the overall research study. A conceptual model is a model that allows a researcher to produce a logical theory or opinion of the relationship between several constructs. These constructs are identified as important to the problem under study (Sekaran 2005). Conceptual models with a logical hypothesize, links theories, models, or previous findings, with the problem being studied (Khalid 2003). In this study, a conceptual model is proposed to allow researchers to prove the hypothesized relationships between several constructs identified as significant to the problem being studied, based on the theory chosen (Sekaran 2005).

This study seeks to extend the model developed by Karahanna and Limayem (2000), which was based on the TAM developed by Davis (1989). The new extended model in this study adapts cultural constructs that were adopted from Hofstede's cultural theory and Hall's cultural communication theory, in order to obtain an integrated model (i.e., a new conceptual model of the study). This model was developed with the aim to investigate the moderating influence of national culture on video-conferencing acceptance for knowledge sharing.

However, the new proposed conceptual model in this study is not new in its nature, but, it is an extended model by Karahanna and Limayem (2000) (i.e Part C), which added social construct (social presence, user training and support, and social influence) (i.e Part B), basically based on TAM (i.e Part A). This study only adds a number of cultural constructs (i.e Part D), which have not been considered by the model developed by Karahanna and Limayem (2000). Therefore, from the literature review, it is evidence that the social constructs added by Karahanna and Limayem (2000) could be affected by the cultural constructs either directly and/or indirectly.

The conceptual framework of this study (shown in Figure 1.1) shows the theoretical adaptation to come out with the new proposed conceptual model of this study.

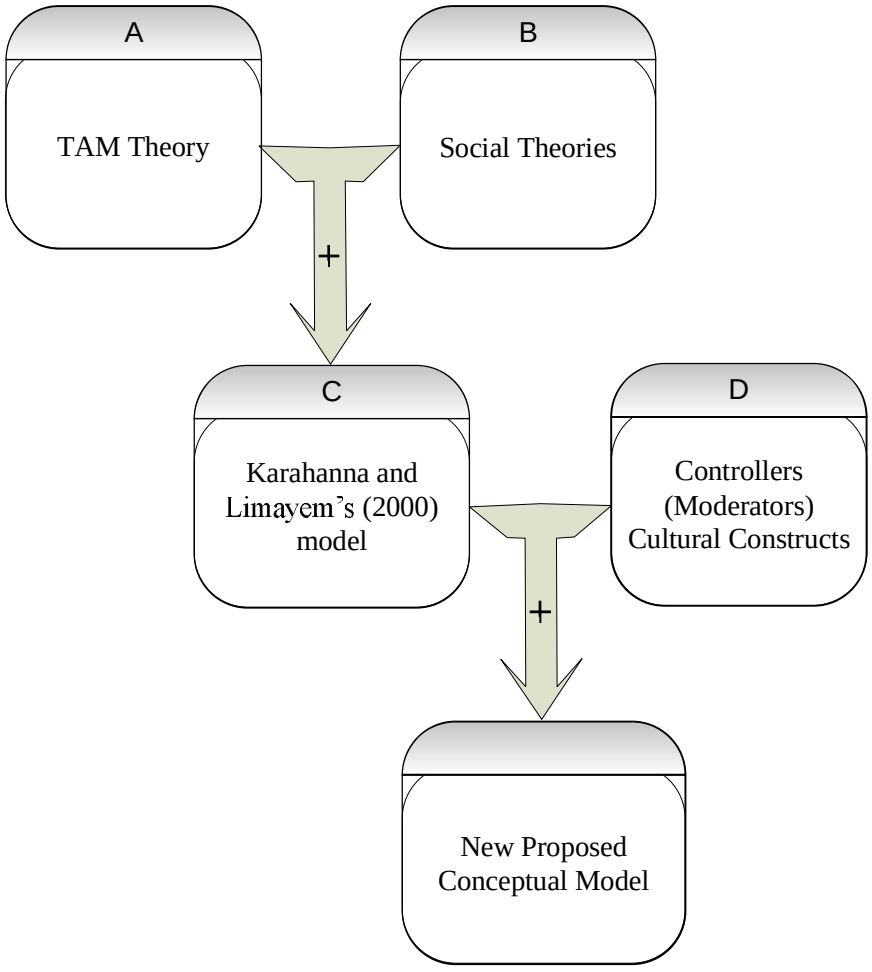

Figure 1.1 Conceptual framework of the study

The proposed conceptual model of this study (shown in Figure 1.2) includes the exogenous constructs (or predictor constructs). These are: social presence, user training and support, which directly affect the perceived usefulness, as well as perceived ease of use; social influence exogenous construct directly affects video-conferencing use (Karahanna & Limayem 2000). Meanwhile, exogenous controller cultural constructs (or moderator constructs) were added by this study. These are: high/low context style, which controls (moderates) the effect of social presence on perceived usefulness, as well as perceived ease of use; long versus short-term time

orientation controls the effect of user training and support on perceived usefulness, as well as perceived ease of use; power distance, individualism versus collectivism, uncertainty avoidance, and masculinity versus femininity, control the effect of social influence on video-conferencing use. Meanwhile, endogenous constructs (or the processes constructs) are in the middle of the conceptual model, between the exogenous constructs and dependent construct. These are: perceived usefulness and perceived ease of use, which directly affects video-conferencing use. Video-conferencing use is the dependent construct of the perceived ease of use and usefulness, as well as the social influence to use video-conferencing; which is known as a result construct (Davis 1989). To avoid any misunderstandings, the independent constructs are labelled as exogenous constructs, whilst the mediator constructs (i.e., independent and dependent constructs at the same time) are labelled as endogenous constructs. The dependent construct is labelled as the dependent construct.

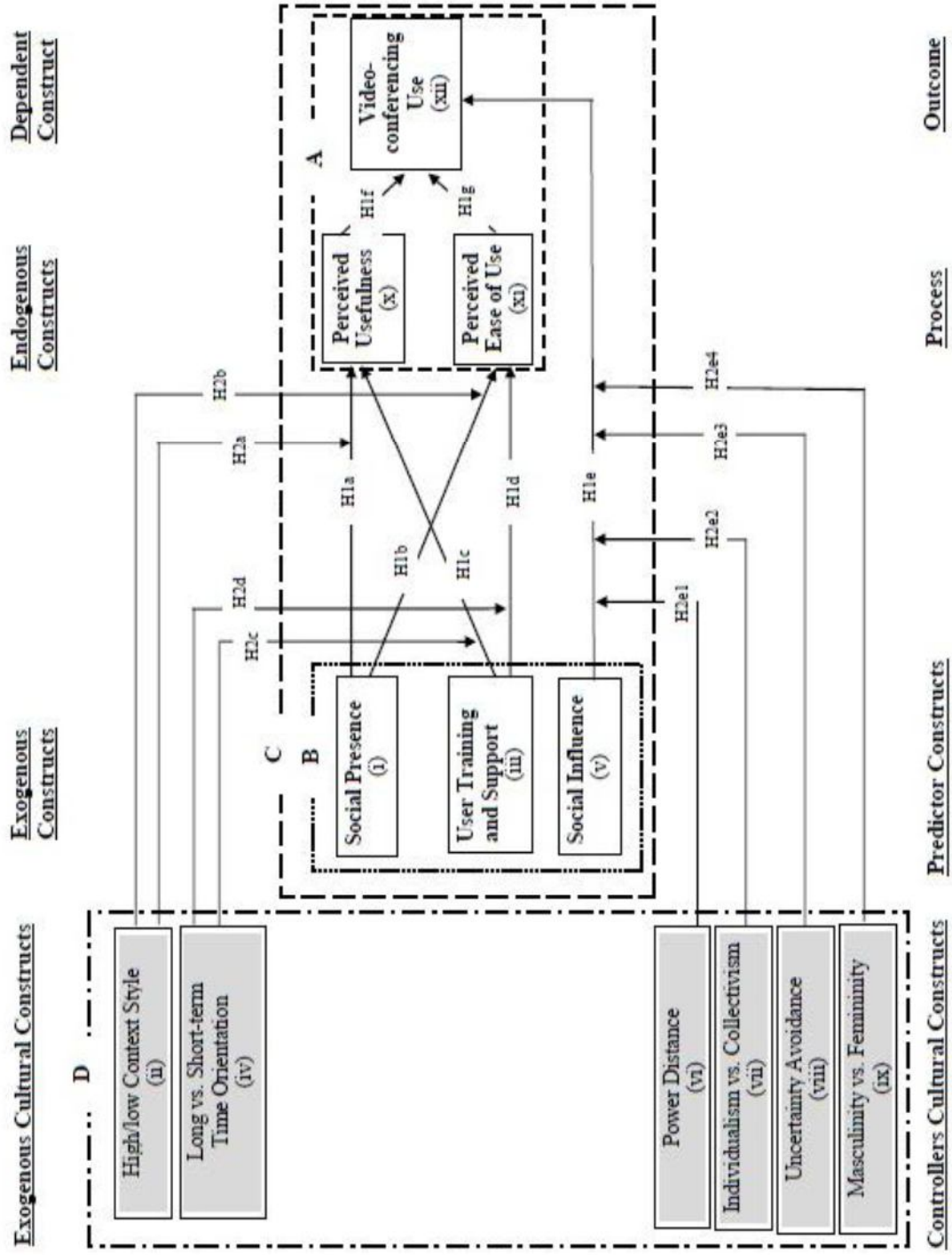

Figure: 1.2 New proposed conceptual model

1.7 THEORIES USED FOR THE STUDY

1.7.1 Cultural Theories

There are two cultural theories were selected to discover the national culture influence in this study; these theories could be employed in various fields of research. A review on the cultural theories was conducted (see section 2.2); in order to choose the most appropriate cultural theories to carry out this study. This study uses the five Hofstede's cultural theory dimensions and high/low context style from Hall's inter-cultural communication theory, as the basis to measure the influence of national culture the proposed conceptual model of this study.

a. Hofstede's Cultural Theory

Hofstede's cultural theory has five dimensions, power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity, and long versus short-term time orientation. These dimensions are defined from the perspective of this study in section 1.12.

b. Hall's Inter-cultural Communication Theory

Hall's effort on cultural communication is divided into three cultural dimensions, which are context (high versus low context style); time (polychronism versus monochronism); and space (high versus low territoriality). This study managed to measure high/low context style cultural dimension over other cultural dimensions. This dimension is defined in section 1.12.

1.7.2 Social Theories

a. Social Presence Theory

Social presence theory is to elucidate the impact of telecommunications media in communication. Social presence is defined as "the extent of salience (i.e., situation or quality of being there) between two or more communicators via a communication medium" (Short et al. 1976). They also define it as the extent to which users feel close

to other communicator(s), which is almost similar with definitions provided by (Tu & Mclsaac 2002; Biocca et al. 2003). However, Lee (2004) defines social presence as a psychological state in which virtual social actors are experienced as actual social actors in either sensory or non-sensory ways. The richer the ICT, the more social presence provide. However, Lowenthal (2010) claims that most of social presence definitions keep on in the middle of the continuum, where focus on whether there is emotional connection or interpersonal connection among communicators.

With regard of cultural influence on social presence, Lee et al. (2003) assert that culture can moderates the effect of technology acceptance, especially through adapting TAM, and essential to be examined. In the same way, Cui et al. (2012) state the importance to investigate the cultural role on user's social presence of CMC.

b. Social Influence Theory

Fulk et al. (1990) has developed social influence model of technology use. They suggest the properties of any technology are different from one user to another, and social context to another. Furthermore, user's use of a technology rather than another for a particular transaction is subject to not only the impact of that user's own opinion, but also the influence of group norms. Social influence (also known as subjective norm) concept has been defined as "person's perception that most people who are important to him think he should or should not perform the behavior in question" (Fishbein & Ajzen 1975). Social influence theory assumes that user's technology use is socially influenced. The impact of feelings, beliefs, or behaviors of individuals would result in social influence. Social influence in the media choice is the user feeling of should or should not use the system, for being under pressure of superiors and peers (Karahanna & Limayem 2000). According to Kelman (1958) social influence is composed of compliance, identification, and internalization forms. These social influence forms are defined as follows: (i) the compliance represents when people consent with each other, however they keep their negative opinions privately but comply for an expected reward or punishment; (ii) the identification occurs when people are changing their attitude or behavior just to follow their favorite individual(s) or desired relationship with others, such as a famous celebrity; and finally (iii) the internalization is the procedure to accept a set of rules, which were created by groups

which are have power on the individuals. The individual follows the rules because the content of the rules followed is essentially rewarding. Wilson et al. (2010) emphasize that conformity is a form of social influence also, assert that social influence occurs when an individual change his/her behavior in order to comply with a group.

With regards to cultural influence on social influence, Venkatesh et al. (2000); Venkatesh et al. (2003); Srite et al. (2006); Gou et al. (2006); and Li et al. (2009) emphasize that social influence is a vital determinant of intention to use a technology. In the same way, social influence has been represented and measured in TAM in recent cultural research; reflects the importance of its influence (Srite et al. 2006; Li et al. 2009). Furthermore, as asserted by Ajzen et al. (1980), user characteristics and differences might affect their social influence directly and/or might moderate the effect of social influences on intention to use. In the cultural differences studies, for instance, Karahanna et al. (2005) claim that culture can affect either directly and/or moderately the social influence on user's intention to use. Moreover, as asserted by Wang et al. (2006) there is weakness of previous research on social influence, that lack of prominent role of culture's that could affect social influence.

1.7.3 Technology Acceptance Model (TAM)

TAM is "an information systems theory that models how users come to accept and use a technology". TAM is to study an individual's acceptance and adoption technology and Information System (IS), and to elucidate computer usage behavior (Davis 1989). TAM mainly includes the elements of Perceived of Usefulness (PU); and Perceived Ease of Use (PEOU). An individual's IS acceptance and use is determined by these two major factors in TAM. TAM describes determinants of technology acceptance, based on the influence of external factors towards beliefs, attitudes and intentions of users (Alrafi 2005).

1.8 HYPOTHESES OF THE STUDY

The aim of formulating hypotheses is to explain the phenomenon of temporary recommendations that are reviewed for a solution, which allows researchers to link theory with observations (Majid 2005). Chua (2009) states that a research hypothesis

is a statement made by the researchers forecast the relationship between the constructs. Hypothesis could be defined as the logical expected relationship between two or more constructs, specified in the form of an expression that would be explored (Sekaran 2005). In summary, the hypothesis is the logic of the researchers forecast to a relationship between constructs, based on a particular theory and previous studies. The hypotheses of this study are as follows:

H1a: Social presence has a direct positive effect on users' perceived usefulness of video-conferencing usage in Jordan.

H2a: High/low context style positively moderates the effect of social presence on user's perceived usefulness of video-conferencing in Jordan.

H1b: Social presence has a direct positive effect on user's perceived ease of use of video-conferencing usage in Jordan.

H2b: High/low context style positively moderates the effect of social presence on user's perceived ease of use of video-conferencing in Jordan.

H1c: User training and support has a direct positive effect on user's perceived usefulness of video-conferencing usage in Jordan.

H2c: Long versus short-term time orientation negatively moderates the effect of user training and support on user's perceived usefulness of video-conferencing in Jordan.

H1d: User training and support has a direct positive effect on user's perceived ease of use of video-conferencing usage in Jordan.

H2d: Long versus short-term time orientation negatively moderates the effect of user training and support on user's perceived ease of use of video-conferencing in Jordan.

H1e: Social influence has a direct positive effect on video-conferencing usage in Jordan.

H2e1: Power distance positively negatively moderates the effect of social influence on video-conferencing usage in Jordan.

H2e2: Individualism versus collectivism positively moderates the effect of social influence on video-conferencing usage in Jordan.

H2e3: Uncertainty avoidance positively moderates the effect of social influence on video-conferencing usage in Jordan.

H2e4: Masculinity versus femininity negatively moderates the effect of social influence on video-conferencing usage in Jordan.

H1f: User's perceived usefulness of video-conferencing does determine video-conferencing usage in Jordan.

H1g: User's perceived ease of video-conferencing use does determine video-conferencing usage in Jordan.

Further details on how these hypotheses are drawn, are explained in Chapter III. These hypotheses are formulated by reviewing previous related work on the influence of national culture on technology acceptance. The integrated model (conceptual model) in this study was developed by investigating previous models.

1.9 SIGNIFICANCE OF THE STUDY

The main focus of this study is to investigate the influence of national culture on knowledge sharing in manufacturing firms in Jordan, using video conferencing. In reviewing the practice of knowledge sharing, it is desirable to identify cultural constructs that possibly influence knowledge workers share their knowledge. In addition, the extent to which perceived ease of use and usefulness to use video-conferencing, which determines the real use of video-conferencing to share knowledge, it is important to develop strategies that improve organizational learning, to attain a competitive advantage. Knowledge is useless if it is not shared; but individual knowledge sharing is difficult as it is not a natural behaviour (Al-Hawamdeh 2003). Knowledge is not only seen as an asset, but as a competitive advantage to organizations. According to Jones and Alony (2007), and Cho and Lee (2008), when people interact via CMC, cultural values have to be taken into consideration. As asserted by Murthy (2011), sharing knowledge is embedded into culture. Therefore, to improve knowledge sharing via video-conferencing, particular emphasis on national cultural values must be given due attention.

Existing models that capture national cultural impact are lacking, because they only explore CMC acceptance in general, without focusing on any particular medium; other than measuring national culture at national level. Therefore, this study has specifically measure national cultural value of video-conferencing at an individual level, as the results are more accurate than other levels, such as organizational or national. The conceptual model is able to address articulated views of the impact of national culture via video conferencing, on the endeavour of knowledge sharing.

This study provides empirical implications on the influence of national culture on video conferencing in manufacturing firms in Jordan; through identify significant constructs that influence video conferencing acceptance for knowledge sharing among knowledge workers. In other words, new policies and strategies should be formulated based on the empirical findings of this study, in a way to avoid weaknesses and exploit the strengths of national culture impact. These empirical findings could be used as guidelines to improve organizational learning, in order to maintain competitive advantages.

Finally, this study helps to expand the knowledge of Jordanian researchers, on the significance of carrying out further research in this field in other sectors, and measuring technologies other than video-conferencing. Hopefully, the findings and implications of this study can act as a stimulus to users in other sectors, so that they can accept video-conferencing, to share their knowledge more effectively and efficiently.

1.10 SCOPE OF THE STUDY

Quoting Ibrahim (2008), Booth et al. (2012) assert that defining the scope of a research study is prior step to start surveying the literature review. However, it is essential to understand a broad field of research study to be able to define the scope of the study. Furthermore, defining the scope of the research study includes deciding on the ‘how would the research study influence on the who?’; the ‘who the research questions about?’; and the ‘what outcomes were to be found to answer the research questions?’. Therefore, it is significant to define the scope of research study, because it allows researcher(s) to focus on the research questions. As such, this study examines

the influence of national culture on video-conferencing acceptance for knowledge sharing [HOW], in the virtual project teams of manufacturing firms in Jordan [WHO], to develop a conceptual model [WHAT].

The scope of the study is also limited by the constructs or variables used in the development of the proposed model. These are: social presence, high/low context style, user training and support, long versus short-term time orientation, social influence, power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity, perceived usefulness, perceived ease of use, and video-conferencing use.

1.11 THE FOCUS OF THE STUDY

Although the importance of the cultural role is apparent and increasing, to date, the majority of researches in the field of CMC have been rooted in Western cultures (Fussell & Zhang 2007). In the same way, quoting Fandy (2000), Zakaria et al. (2003) who indicate that some researchers that have explored technology in Arabic countries, have focused on the technology, but may not have completely considered the importance of a specific societal implication of Arabic culture. For instance, the very limited researches that have investigated the cultural role in technology transfer in Arabic countries (e.g. Straub et al. 2001) have pointed out that "Arab cultural beliefs were a very strong predictor of resistance to IT (Straub et al. 2001)." In general, limited studies have examined the cultural influence on CMC acceptance; specifically in Jordan. However, with respect to the Middle East, a small number of researchers have explored the influence of cultural values generally, in the scope of Jordan for example, where Akour et al. (2006) examined the four Hofstede's dimensions that effect Jordanian managers' intention to use the internet in general. Whilst, Ta'amneh (2012) examines the effect of Hofstede's dimensions on the Website user interface design in Jordan; he asserts the importance of linking cultural issues/ values with the Websites and other technologies. Quoting Cyr (2004), Ta'amneh (2012), cultural issues/values are reflecting the human behaviour, perceiption, and beliefs to accept and use any technology. In his study, discovering the cultural issues that would shape the perceiption to accept video-conferencing is essential.

Al-Sukkar (2005) asserts that the acceptance of internet applications, and the internet itself, is limited in both Middle Eastern organizations and individuals alike. In developing countries, differences exist in the form of culture when it comes to adopting and using technology. Al-Sukkar also provides an evident that culture has influenced the acceptance of ICT in Jordan. Nevertheless, no practical study has been conducted in the scope of Jordan, and as such, it is essential to explore the CMC acceptance in Jordan.

Only manufacturing firms were selected for this study, in order to control variances in responses that could be due to structural differences of manufacturers and non-manufacturers. Rotch (1990) states, that compared to manufacturing firms, non-manufacturing firms are different from each other in terms of their characteristics. Furthermore, outputs of non-manufacturers are often hard to determine. Furthermore, cross-cultural differences in organizational contexts have the most effective impact on knowledge sharing; especially in manufacturing context (Hutchings & Michailova 2006; Law 2007). Also, the video-conferencing system is an effective and reliable medium to share knowledge in achieveing manufacturing processes (Denstadli et al. 2012). Knowledge sharing practices is able to gain competitive advantage in manufacturing firms in Jordan (al-Mahamid et al. 2010). Furthermore, this study focuses on studying the acceptance of video-conferencing, by means of knowledge sharing in manufacturing firms in Jordan, since the researcher has observed the ignorance of sharing knowledge via video-conferencing. Based on the analysis of previous studies, this study seeks to explore national culture influence on the user's perceptions to accept and use video-conferencing technology, in the scope of Jordanian manufacturing firms.

1.12 DEFINITIONS OF OPERATIONAL CONSTRUCTS

The concept of operational constructs should be defined in order to be measured (Sekaran 2005). Construct definition does not depend on a dictionary definition, but is based on the internal logic of the measurement item in the study. In other words, a construct's definition has to be from the perspective of the study, not a general concept (Oppenheim 2000). Theoretically, variables or constructs could operate in

different levels of abstract (Hair et al. 2010). This study involves 12 constructs. The operational definitions of each construct are as follows:

The construct used in this study to develop the proposed conceptual model are derived from the selected theory as mentioned in section 1.7. These constructs are such as:

a. Social Presence

Short et al. (1978) define social presence as the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships. Accordingly, Law (2007) defines social presence as the degree to which individuals feel close. The richer the CMC, the more social presence is provided. Social presence is also defined as the capacity to transmit information about facial expression, direction of looking, posture, dress, and non-verbal cues.

b. High/low Context Style

Hall (1976) developed the concept of high/low context style as the degree to which users are aware of and pay attention to situational and contextual cues when interpreting messages. To provide a better understanding of the role of high/low context styles in communication, it is necessary to define what context means in communication studies (Law 2007). Hall and Hall (1990) define context as "the information that surrounds an event, which is inextricably bound-up with the meaning of that event."

Communicators in different cultures shape their messages in distinct ways to ensure that their messages have been understood (Hall 1976 in Wang 2010), Fussell & Setlock 2009). Hall (1976) argues that low context is common in Western cultures, especially in the US, because Westerners tend to prefer more direct communication and thus rely primarily on words to express meaning. Conversely, high context is common in Asian cultures, especially in Chinese, Japanese and Arab cultures (Zakaria et al. 2003). These cultures tend to prefer more indirect forms of communication. Communicators therefore rely on the situational context to make meaning apparent

(Setlock & Fussell 2010; Wang et al. 2010).

c. User Training and Support

Training and support could be offered for end-users from a set of three sources; namely information centre, local Management Information System (MIS) staff, and other informal sources. The information centre is the focus source of training and support in this study, which basically aims to lead users to assist themselves through offering services of support, such as hardware support, software support, and training sessions (Govindarajulua & Reithelb 1998).

d. Long vs. Short-term Time Orientation

Long versus short-term time orientation is the variety of focusing on time for being long-term or short-term oriented. Long-term time orientation, means focusing on the future. It implies a cultural trend towards delaying immediate gratification, by practicing persistence and thriftiness. In contrast, short-term time orientation, means focusing on the past and present, by respecting tradition and a need to follow trends (Wei et al. 2008). Users with short-term orientation worry about the difficulty of starting to learn to use technology, whilst users with long-term orientation look after the learning process and practice how it would be easy to use the technology (Li et al. 2009).

e. Social Influence

Social influence refers to the impact of the feelings, beliefs, or behaviours of individuals, would result in social influence. Social influence in media choice is the user's feeling of 'should' or 'should not' use the system, when under pressure of significant superiors and peers (Karahanna & Limayem 2000).

f. Power Distance

Power distance is the extent to which less powerful members of organizations accept that power is distributed unequally. It suggests that a society's level of inequality is endorsed by the followers, as much as by the leaders (Wei et al. 2008). In technology

usage, high power distance users pay more attention to their community's reaction to the technology, and then alter their reaction relying on their place within the hierarchical structure. However, low power distance users are more self-governing in their technology use (Li et al. 2009).

g. Individualism vs. Collectivism

Individualism vs. collectivism refers to the degree to which individuals are supposed to look after themselves or remain integrated within groups (Wei et al. 2008). In high collectivism cultures, people have a tendency to focus more on the community that they belong to, and are more impacted by their peers and superiors, by satisfying their opinions. In technology adoption and use, high collectivism users care more about how their community is perhaps affected, by their technology use behaviours (Li et al. 2009).

h. Uncertainty Avoidance

Uncertainty avoidance refers to the extent to which users could avoid ambiguous situations; where users feel either uncomfortable or comfortable in ambiguous or unstructured situations. Unstructured situations are novel, unknown, surprising, or different from usual (Wei et al. 2008). In general, high uncertainty avoidance users are more expected to comply with their community's beliefs in using a technology (Li et al. 2009).

i. Masculinity vs. Femininity

Masculinity versus femininity is the degree to which tough values, like assertiveness, performance, success, and competition (societies associate this with the role of men), prevail over tender values, like quality of life, maintaining warm personal relationships, service, care for the weak, and solidarity (societies associate this with women's roles) (Wei et al. 2008). In using a technology, femininity users usually care more about building relationships with other users than with the technology itself. Users with feminine values are more expected to conform to social pressures than those with high masculine values (Li et al. 2009).

j. Perceived Usefulness

Perceived usefulness is one of the two major factors that determine the system's real use in TAM, developed by Davis (1989). Davis (1989) defines perceived usefulness as the "degree to which individual believe using the information system would enhance their performance." In this study, perceived usefulness is determined through video-conferencing usage.

k. Perceived Ease of Use

Perceived ease of use is one of the two major factors that determine the system's real use in TAM, developed by Davis (1989). Davis (1989) defines perceived ease of use as when the "individual believes that the given information system would reduce the intensity of their work." In this study, perceived ease of use is determined through video-conferencing usage.

l. Video-conferencing Use

Video-conferencing usage is the resulting factor determined by the system's real use in TAM, developed by Davis (1989). Video-conferencing usage is the degree to which users use video-conferencing technology.

1.13 ORGANIZATION OF THE THESIS

The organization of this study follows a standard thesis format, where content is organized into five chapters, as follows:

Chapter I provides the introduction, background, problem statement, research questions, objectives, conceptual model and framework, theories used for the study, hypotheses, significance, scope and focus of the study, operational definitions, research contribution, and organization of the thesis.

Chapter II reviews literature related to the study, including concepts, definitions; and technology acceptance, and cultural theories. Also, review on base

models for the conceptual model; previous studies of national culture on technology acceptance; and the summary.

Chapter III aims to formulate a theory (or propose a conceptual model) to capture national culture influence on video conferencing acceptance in manufacturing firms in Jordan. The theory formulation discusses TAM; Karahanna and Limayem's (2000) model; the importance of Hostede and Hall's cultural theories; and conceptual model and generalizing the hypotheses.

Chapter V describes the phases of research method employed in the study, including Research design. Data collection and strategy of data analysis are also discussed in this chapter.

Chapter IV presents the data analysis and interpretation of the study's results. This chapter starts by testing the fundamental issue of ensuring that data fits with the proposed conceptual model, as well as the initial steps to ensure purity of data and testing of the proposed hypotheses using an appropriate statistical test. This includes validity and reliability tests, as well as regression analysis; used to test the hypotheses. Also, Modeprob macro script utilized for interpreting moderators' significance. Finally, the result of hypotheses testing is summarized and the conceptual model is provided.

Finally, Chapter VI discusses the research findings, theoretical and practical contributions, implications, limitations of the study, and recommendations for future work.

1.14 CONCLUSION

Chapter I provides a brief overview of the key aspects in the study. Advances in ICT have made knowledge a key strategic resource, which could determine the success of an organization and could aid in the creation of sustainable competitive advantage; especially in a globalized organization. An increased use of knowledge has influenced organizations to manage knowledge more effectively and efficiently. Managing knowledge could take place particularly through the sharing of knowledge. In

addition, a limited study of cultural factors affecting the acceptance of video-conferencing technology for sharing knowledge in manufacturing firms in Jordan is the main motivation for this study. This study aims to investigate cultural factors, such as the cultural orientation of power distance, individualism versus collectivism, uncertainty avoidance, and masculinity versus femininity. High/low context style and long versus short-term time orientation could influence the sharing of knowledge via video-conferencing. Finally, the study has developd a new conceptual model to guide organizational leaders to adopt knowledge sharing technologies, for enhancing the virtual project teams' organizational learning in Jordan. To achieve these objectives, detailed research questions and hypotheses were formulated. The relationships between the constructs are shown in the conceptual model and each construct is defined as operating to provide a better understanding. The scope of the review is limited to manufacturing firms in Jordan, due to the structural differences of manufacturers and non-manufacturers, and limited studies in Jordan. This study is significant because it fills the gaps of previous related studies, by providing an empirical study on the influence of national culture on video-conferencing acceptance in manufacturing firms in Jordan, with the support of empirical data. The conceptual model contributes by helping organizations to plan their learning strategies, in order to enhance their knowledge sharing in virtual project teams in manufacturing firms in Jordan.

CHAPTER II

LITERATURE REVIEW

2.1 INTRODUCTION

Literature review provides a framework for defining the concepts and creating the importance of a study, shares the findings of other previous related studies and on-going arguments (Creswell 2009). As defined by Fink (2005), literature review is an explicit, systematic, and reproducible process for identifying, evaluating, and synthesizing the existing related work conducted by researchers, scholars, and practitioners. Currie (2005) argues that a literature review is aimed at achieving the following: to provide a contextual framework for the study; to clarify the concepts and aspects of the study; to justify the study; to reveal how the study fits in with the existing body of knowledge; to assist the researcher to rely on related theories and models; to emphasize gaps in previous related studies; and to refine, argue, refocus or even change the issue of the study.

The literature review was carried out by searching related sources of publications, such as journals, books, conference papers, and reports. These references were accessed either electronically or physically (from the library). The references involved are ranged from 1975 to 2013.

This chapter is divided into several sections for ease of discussion. These are: definition of concepts; review on cultural theories and models; review ontechnology acceptance theories; theoretical background of the conceptual model; review on previous studies of social constructs on technology acceptance; and analysis on previous studies of national culture on technology acceptance.

2.2 DEFINITION OF CONCEPTS

As this study seeks to capture the influence of national culture on video-conferencing acceptance for knowledge sharing, it is significant to define and discuss different key concepts within the field of the study. Defining concepts could help in three functions, which are: providing a better understanding of the issues of the study to researchers in the field; clarifying the terms subtracted out in the objectives of the study; and revealing the consistency among the key concepts (Zawiyah 1999).

This section reviews the key concepts in order to provide an understanding of the concepts used in the study, and how these concepts are integrated from the perspective of this study. These key concepts are national culture, knowledge, knowledge management, knowledge sharing, knowledge sharing and organizational learning in organizations, knowledge sharing via CMC, video-conferencing technology, and virtual project teams. These key concepts are reviewed as follows:

2.2.1 National Culture

Hofstede's definitions of culture are effective and meaningful in the literature of communications in organizations and business (Vatrapu & Suthers 2007). Culture typically indicates the feasible perceptions, thoughts and actions of human behaviour. Culture is defined as "a collective programming of the mind which distinguishes one group from another" (Hofstede 1980). It is also defined as "a collective programming of the mind; it manifests itself not only in values, but in more superficial ways" (Hofstede 2001). Another definition of culture provided by Hofstede (2000) is "the collective programming of the mind which distinguishes the members of one group or category of people from another." More specifically, national culture is "the collective mind-set that distinguishes members of one nation from another" (Hofstede 1991). For this study, the most appropriate definition of national culture is the latest mentioned by Hofstede (1991), because this study intends to examine the influence of the Jordanian national culture. However, in understanding the cultural differences among nations, intercultural researchers attempted to provide frameworks that identify, and effectively organize specific dimensions of cultural differences.