DETERMINANTS TO KNOWLEDGE TRANSFER AND SHARING IN MULTIMEDIA SUPER CORRIDOR IN MALAYSIA: THE MEDIATING ROLE OF TRUST

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ABSTRACT

The increased quest for vision 2020 has certainly meant that the role of MSC status organizations in Malaysia in contributing success becomes the subject of considerable debate. In this context, not much research has been conducted on knowledge transfer and sharing in MSC status organizations as well as the mediating role of trust in enhancing knowledge transfer and sharing in the Malaysian organizations. Based on knowledge creation theory, this study examines the determinants of knowledge transfer and sharing in MSC status organizations in Malaysia. Primarily, this study explored the relationship between organizational capacity, organizational motivation, organizational environment, trust and knowledge transfer and sharing in MSC status organizations. Partial Least Squares Method (PLS) algorithm and bootstrap techniques were used to test the hypotheses. The results indicated that eight out of twenty-five hypotheses were found to be positive and significant. Specifically, the hypothesized direct relationships between organizational capacity (top management support), organizational motivation (culture), organizational environment (information technology), trust and knowledge transfer and sharing were supported. The results also revealed that the direct relationships between organizational capacity (human resource practices), and organizational environment (information technology, networks) were significantly related to trust. Furthermore, in terms of trust as mediating variable between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing, one out of eight hypotheses indicated full mediation including the relationship between networks and knowledge transfer and sharing. These results offer theoretical, methodological, and practical implications and will help academics and practitioners in the knowledge management field. Nonetheless, further studies are necessary both to confirm the findings and to incorporate additional variables that may influence results. The results of the study were crucial to be looked into so that MSC status organizations could have a clearer understanding and guidelines if they were to enhance their mission to accomplish phase three 2011-2020 of vision 2020 in transforming Malaysia into a knowledge-based society.

Keywords: Organizational capacity, Motivation, Organizational environment, Knowledge transfer and sharing, Trust, MSC, Malaysia.

ABSTRAK

Usaha yang berterusan untuk mencapai wawasan 2020 menimbulkan persoalan tentang peranan organisasi berstatus MSC di Malaysia dalam menjayakan aspirasi ini. Dalam konteks ini, tidak banyak kajian pernah dijalankan berhubung perkongsian dan pemindahan ilmu yang berlaku dalam organisasi berstatus MSC. Peranan kepercayaan sebagai perantara untuk meningkatkan pemindahan dan perkongsian pengetahuan di organisasi di Malaysia juga kurang diselidiki. Kajian ini yang menggunakan teori penciptaan pengetahuan telah meneliti penentu kepada pemindahan dan perkongsian pengetahuan yang berlaku di organisasi berstatus MSC di negara ini. Kajian ini meneroka hubungan antara kapasiti organisasi, motivasi organisasi, persekitaran organisasi, kepercayaan dengan pemindahan dan perkongsian pengetahuan di organisasi berstatus MSC. Algoritma kaedah kuasa dua terkecil separa dan teknik bootstrap diupayakan untuk menguji hipotesis. Dapatan memperlihatkan bahawa lapan daripada dua puluh lima hipotesis didapati positif dan signifikan. Secara khususnya, hubungan terus yang dihipotesis antara kapasiti organisasi (sokongan pihak pengurusan atasan), motivasi organisasi (budaya), persekitaran organisasi (teknologi maklumat), kepercayaan dengan pemindahan dan perkongsian pengetahuan juga disokong. Dapatan juga memaparkan bahawa hubungan terus antara kapasiti organisasi (amalan sumber manusia) dengan persekitaran organisasi (teknologi maklumat, jaringan) berkait secara signifikan dengan kepercayaan. Selain itu, dari segi kepercayaan sebagai pemboleh ubah perantaraan antara kapasiti organisasi, motivasi organisasi, persekitaran organisasi dengan pemindahan dan perkongsian pengetahuan, satu daripada lapan hipotesis menunjukkan perantaraan penuh, termasuklah hubungan antara jaringan dengan pemindahan dan perkongsian pengetahuan. Hasil kajian ini memberikan implikasi teori, kaedah serta amalan dan membantu golongan akademik serta pengamal dalam bidang pengurusan pengetahuan. Namun begitu, kajian lanjut perlu dilakukan untuk mengesahkan dapatan serta menambah pemboleh ubah yang mungkin boleh mempengaruhi dapatan. Dapatan kajian ini penting dan perlu diambil kira untuk memberikan pemahaman dan panduan kepada organisasi berstatus MSC untuk membolehkan organisasi ini menjayakan fasa ketiga wawasan 2020, iaitu fasa 2011-2020 demi mengubah Malaysia kepada masyarakat yang berteraskan pengetahuan.

Kata kunci: Kapasiti organisasi, Motivasi, Persekitaran organisasi, Pemindahan dan perkongsian pengetahuan, Kepercayaan, MSC, Malaysia.

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LIST OF ABBREVIATIONS

AMOS	Analysis of Moment Structures
AVE	Average Variance Extracted
CMC	Creative Multimedia Cluster
CR	Composite Reliability
CULT	Culture
D	Omission Distance
DV	Dependent Variable
ICT	Information and Communications Technology
IT	Information Technology
IHLs	Institutions of Higher Learning and Incubators
IVs	Independent Variables
HRP	Human Resource Practices
KM	Knowledge Management
KTS	Knowledge Transfer and Sharing
LS	Learning Strategy
LVs	Latent Variables
MDC	Multimedia Development Corporation
MSC	Multimedia Super Corridor
NET	Networks
OS	Organizational Structure
PCB	Public Complaints Bureau
PhD	Doctor of Philosophy
PLS	Partial Least Squares
Q^2	Cross Validated Redundancy
R^2	R-squared values
REW	Rewards
SSO	Shared Services & Outsourcing Cluster
SECI	Socialization, Externalization, Combination, Internalization
SEM	Structural Equation Modelling
PLS-SEM	Partial Least Squares Structural Equation Modelling
SMEs	Small & Medium-Sized Enterprises
SPSS	Statistical Package for the Social Sciences
SWT	*Subhanahu Wa Ta'ala*
TMS	Top Management Support
T	Trust
VAF	Variance Accounted For
UUM	Universiti Utara Malaysia

CHAPTER ONE

INTRODUCTION

1.1 Background of study

It has been widely known that the competitive advantage of organizations in today‟s economy occurs from knowledge assets (Wei, Siong & Kuan, 2009), which are determined as a process of creating and sharing knowledge effectively to increase organizational effectiveness. This is based on the fact that knowledge assets have been linked to organizational achievement as it is the source of competitive advantage (Wei et al., 2009). Therefore, organization‟s effectiveness can be improved through transferring and sharing useful knowledge. This is because knowledge plays an important role in creating competitive advantage in the organizations (Daud & Yusuf, 2008; Zack, McKeen & Singh, 2009).

However, it is also crucial to note that a sustainable economic development in a highly competitive world market requires a direct involvement in the generation of knowledge (Wei et al., 2009). In this respect, Malaysia has experienced a continuous transformation in the economy (Daud & Yusoff, 2011). For instance; On 1960, Malaysian depended on agricultural economy; in 1970s, manufacturing industry, and two decades later, in 1991, the Prime Minister of Malaysia, Dr. Mahathir bin Mohamad, emphasized that it is necessary to transform and develop the Malaysia economy towards a knowledge based economy in order to achieve vision of 2020 (Tasmin, Rusuli, & Hashim, 2010; Daud & Yusoff, 2011). Moreover, the establishment of the “Multimedia Super Corridor” (MSC) in 1996, started to change

Malaysia from a "production based economy to a knowledge based economy". According to Daud (2012), this shift is to achieve the Malaysia"s long term strategy to accomplish vision of 2020.

Furthermore, in its attempts to achieve knowledge based economy, Malaysian government had encouraged government agencies to implement a knowledge management (Daud & Yusoff, 2011). Thus, some organizations had already made their first steps in this regard. For instance, "Multimedia Development Corporation, Siemens, Bank Negara Malaysia, Nokia Malaysia, and Telekom Malaysia" were among the pioneers in the implementation of knowledge management in Malaysia (Hamid & Salim, 2011; Daud, 2012). Thus, knowledge management is identified as a key factor in achieving organizational success in Malaysia (Aman & Aitken, 2011).

Similarly, knowledge management is vital in Malaysian organizations as it develops new areas of growth in the knowledge intensive era (Daud & Yusoff, 2010). Further, in order to create an organizational value, knowledge management processes must be embedded into all of the business processes in the organization (Daud & Yusoff, 2010; Syed-Ikhsan & Rowland, 2004b). In fact, knowledge management is a sensible strategy to improve performance as it gets the right knowledge to the right people at the right time (Daud & Yusoff, 2011). This is supported by McKeen, Zack, and Singh (2006) that knowledge management practices are related to organizational success. Daud and Yusoff (2011) have reported that knowledge could affect organizations by improving organization effectiveness and causing improvements in

people, processes and products by transferring and sharing knowledge which is critical to knowledge intensive project.

In terms of knowledge, Grant (1996) asserts that the issue of knowledge transfer is important; not only between firms, but also within the firm itself. This is because it can improve performance, productivity, and competitiveness (Yusof, Ismail, Ahmad, & Yusof, 2012). Syed-Ikhsan and Rowland (2004ab) and Aman and Aitken (2011) have identified the need to transform Malaysia into knowledge intensive areas as the reason to effectively manage knowledge among organizations. Therefore, this study will focus on the processes of transferring and sharing knowledge in "Multimedia Super Corridor" due to its significance, because it is instigating in facilitating and sharing best practices which is crucial in improving organization achievement in general (Yusof et al., 2012).

Additionally, the main function of MSC status organizations is to put Malaysia in the information and knowledge age, which has three phases, namely phase one 1996-2003, phase two 2004-2010, phase three 2011-2020 (Khoo, 2009; Tasmin et al., 2010). According to Ramasamy et al. (2004) and Said et al. (2012) phase three is a challenging task for MSC status organizations as it deals with transforming Malaysia into a knowledge based society. In order to enhance MSC‟s competitiveness, it is important to have a functional knowledge transfer mechanism which can improve their effectiveness by providing appropriate practices of knowledge sharing and

knowledge transfer because they lead to the product development by enhancing the organizational learning (Daud & Yusoff, 2011).

In this context, to facilitate knowledge creation processes in MSC status organizations, this study proposes the theory of knowledge creation Nonaka (1994) to clarify the ambiguity of knowledge process that being created organizationally through the conversion processes which are "Socialization, Externalization, Combination and Internalization (SECI)". Further, SECI processes have been recognized and used as an indicator of knowledge creation (Lee & Choi, 2003; Choi & Lee., 2002; Nonaka, 1994; Nonaka & Konno, 1998; Song et al, 2011; Sandhu et al., 2011; Abdul Karim et al., 2012). In addition, the SECI process involves knowledge sharing as it is a conversion of tacit and explicit knowledge (Abdul Karim et al., 2012). The empirical studies by, Teerajetgul and Charoenngam (2006) and Lee and Choi (2003) and Choi and Lee (2002) and Nonaka (1994), found that the SECI process and knowledge creation are strongly related. At the same time, Phang and Foong (2010) and Abdul Karim et al (2012) emphasized that knowledge sharing and SECI process are related to each other.

Therefore, this study aims to enlighten and suggest some organizational factors which may enhance knowledge transfer and sharing. This study also intends to promote organizational factors which are: organizational capacity (top management support, organizational structure, learning strategy, human resource practices), organizational motivation (culture, rewards), organizational environment

(information technology, networks) as input and mechanisms that examine direct and indirect effects on knowledge transfer to facilitate inter and intra group relationships in MSC status organizations. Trust as a process describes an organizational support given to individuals by building and maintaining honest and sincere relations. Supporting members, focusing on solving problems, shaping organizational structures consistent with climate helps in developing and maintaining trust (Thomas et al., 2009). Eventually output refers to the influence of organizational capacity, organizational motivation, organizational environment and trust on knowledge transfer and sharing.

The organizational factors are chosen as input variables because of their contribution to knowledge transfer, which are the most dynamic effects to predict implementation of knowledge and most influential factors in knowledge transfer and sharing (Rhodes et al., 2008; Yusof et al., 2012). While knowledge transfer and sharing considered as the dependent variable because of its importance to how managers in MSC status organizations share knowledge based on job specifications, skills and related information with their colleagues through effective knowledge transfer process which include formal systems and social networks (tacit and explicit knowledge). Ultimately, trust as a mechanism to reflect the relationship between the input factors that lead to positive outcomes by which strong ties enable transferring and sharing knowledge between MSC status organizations.

Previous literatures (Chong et al., 2011; Syed-Ikhsan & Rowland, 2004(a)(b); Daud, 2012; Daud & Yusoff, 2011; Lin, 2007; Lee & Choi, 2003; Wei et al., 2009) have been discussed knowledge transfer and sharing partially which means studies on knowledge transfer and sharing have been based on several factors in isolation. While these factors do not exist by itself because trust or mutual trust is the pre-requisite for knowledge transfer and sharing, which needed to be explored (Zawiyah et al., 2012). However, the finding reveals inconclusive results and required another approach to explain the relationships in line with Baron and Kenny"s (1986) suggestion. In other words, this study will incorporate a comprehensive approach by including the critical factors that influence knowledge transfer and sharing. Because some studies encompassed partially relationships between trust as a mediator and knowledge sharing (Cheng et al., 2008) or between trust as an independent variable and knowledge sharing as a mediator (Zawiyah et al., 2012 & Boh et al., 2013). In addition, considering the importance of this issue, particularly in MSC status organizations which clearly stated in the vision of 2020, that they have a task of transforming Malaysia into a knowledge based society (Ramasamy et al., 2004; Said et al., 2012).

Based on this argument above, the aim of this study is to examine the effects of organization capacity (top management support, organizational structure, learning strategy, human resource practices), organizational motivation (culture, rewards), organizational environment (information technology, networks) in improving the knowledge transfer and sharing. Consequently, the research is interested to

investigate how these factors contribute to the effective knowledge transfer and sharing in MSC status organizations. The subsequent issue will be discussed in the problem statement.

1.2 Problem statement

In 1991, the Prime Minister of Malaysia, the Honorable Tun Dr Mahathir bin Mohamed asserts that there is a need to transform the economy of Malaysia towards a knowledge based economy (Tasmin et al., 2010). Thus, knowledge will be the key factor to drive growth, create new value and provide the basis to remain competitive in order to achieve fully developed status by the year 2020 (Tasmin et al., 2010; Daud, 2012; Daud & Yusoff 2011; Ramasamy et al., 2004; Said et al., 2012). In order to reach this vision, the Malaysian government established the Multimedia Super Corridor (MSC) in 1996, which promote Information and Communications Technology (ICT) environment to attain sustainable economic growth and to remain globally competitive (Daud & Yusoff, 2011; Wei et al., 2009).

In relation to the need of knowledge in the Malaysian organizations to be a knowledge based society, MSC Status organizations are grouped into four clusters, representing the five major ICT focus areas which consist of the Information Technology (InfoTech) Cluster, the Creative Multimedia (CMC) Cluster, the Shared Services & Outsourcing (SSO) Cluster, as well as Institutions of Higher Learning and Incubators (MDC, 2015).

In MSC status organizations context as knowledge intensive companies, whether these companies are categorized as SMEs or ICT industries which are grouped under the four clusters of the Multimedia Super Corridor, these organizations are considered to be focused on producing information communication technology (ICT) products or services (Daud & Yusoff, 2010). To this end, MSC status organizations are considered as the initiatives to implement the modernization of the public sectors using multimedia technologies to provide services. From this, the Ninth Malaysia Plan (9MP) that runs from 2006 to 2010 and Tenth Malaysia Plan 2011-2015 (10MP) has received complaints about the performance of public service delivery (Yusof & Ismail, 2009; PCB, 2015).

The category of complaints has been made based on unsatisfactory quality of service, unfair action, failure of enforcement, miscellaneous complaints, lack of public amenities, failure to adhere to set procedures, misconduct of civil servant, abuse of power and the inadequacies of policy implementation and law. Based on this, a total of 24,942 complaints had been recorded from 2000 to 2007 (Yusof & Ismail, 2009). Further, the number of complaints received had risen from 94, 127 to 109, 440 in 2009 and 2010. It was also noted that, in the following years (2011, 2012 and 2013) a total of complaints received are: 13,356 in (2011), 12,546 in (2012), 9,879 from 1 January to 31 December in (2013) and 7,199 from 1 January to 31 December in (2014) and 6.388 from 1 January to 31 December in (2015) and 2.397 from 1 January to 30 April (2016) (PCB, 2015).

From the statistics, a total of 51,765 complaints had been recorded in five years from 2011 until 2016. This means that even in the third phase of transforming Malaysia into a knowledge based society, the number of complaints still being recorded. The complaints made, were based on poor performance, because the level of information, transferring and sharing knowledge are limited (Yusof et al., 2012; Hamid & Salim, 2011; Yusof & Ismail, 2009), this may influence the effectiveness of organizations through its contribution in developing new knowledge. In addition, the Malaysian organizations tend to be slow in the uptake of knowledge management and that levels of knowledge management are still in the infancy stage (Yusof et al., 2012). Therefore, Malaysian Administrative and Modernization Planning Unit (MAMPU) has established knowledge bank in the public sector ICT framework to enable transferring and sharing knowledge in an organization (Hamid & Salim, 2011). For instance, Malaysian government have been promoted Shared Services and Outsourcing (SSO) industry, which is one of the four clusters of MSC status organizations to create an appropriate framework of knowledge transfer in terms of facilitating transfer process. But some e-governments do not meet their performance objectives because in most e-government projects, learning and knowledge are limited (Hamid & Salim, 2011; Yusof & Ismail, 2009), this shows that the organizations in Malaysia have not been practicing knowledge sharing; which is very important component in knowledge management stage (Yusof et al., 2012). This is because knowledge processes tend to be without records or documentation because of its informal communication, culture, organizations do not create a formal system

for organizing knowledge because of the daily routines of employees with their work (Daud & Yusoff, 2010).

Similarly, based on the literature, Hamid and Salim (2011) and Yusof and Ismail (2009) asserted that poor performance is basically related to the lack of knowledge transfer and sharing. Hence, it is the responsibility of the organizations to give more attention by providing a suitable environment to acquire and share knowledge, learn and apply new practices among members which may contribute to organizational effectiveness. In relation to this, organizations in Malaysia have always been associated with lack of skills amongst the workforce to use ICT (Alam & Noor, 2009). This lack of knowledge based on the lack of technology adoption, and the lack of technical staff with sufficient ICT expertise and skills (Hassan et al., 2009). This means that more improvement has to be done in terms of human resource practices such as, training to develop their skills. Further, Alam and Noor (2009) suggest that these organizations must learn to adopt ICT to increase their global competitiveness. This is because there is a need to accelerate the implementation of ICT to improve organizational achievement. As ICT systems assist transferring and sharing knowledge among members and organizations such as, enabling them with rapid access to search information, and supporting communication to increase organizational knowledge.

Furthermore, Yusof et al. (2012) reported that the organizations in Malaysia have not yet manage the basis of knowledge in order to be a knowledge-based society. There

are agencies that claimed to be practicing knowledge sharing, but activities are essentially based on traditional ways of communicating information such as bulletins, notice boards and face-to-face meetings. Besides, the organizations in Malaysia tend to be highly bureaucratic and have a centralized decision-making structure with lower levels of knowledge management applications and systems in place. In addition to that, the Malaysian organizations have received limited studies on knowledge transfer as most studies are only focusing on general knowledge management processes (Wie et al., 2009; Syed-Ikhsan & Rowland, 2004ab; Fathi et al., 2011; Yusof & Ismail, 2009; Ikhsan & Rowland, 2007), this is because knowledge transfer and sharing is considered as valuable source in enhancing competitive advantage for organizations (Nonaka, 1994; Syed-Ikhsan & Rowland, 2004a; Daud, 2012; Daud & Yusoff, 2011; Yusof et al., 2012). In the studies conducted by Hamid and Salim (2011) and Wei et al. (2009) stated that organizations in Malaysia have not addressed the necessity of organizational learning as it is the context of creating knowledge because of the lack of understanding and focus on it and its relations to performance outcomes.

The importance of the present study is the attempt to apply knowledge transfer and sharing processes in MSC organizations, which previous studies have not considered. This is to enable them create, use and manage knowledge dynamically in order to be knowledge based society and enhance the vision of 2020. Therefore, this study focuses on knowledge transfer and sharing as soft aspects of knowledge management. The idea of the soft perspective is that an organization should provide

trusting relationship between members to enable them to share knowledge. For this purpose, knowledge transfer and sharing has to be viewed as an integrated model that incorporates a comprehensive inclusion of all aspects that affect knowledge. The proposed integrated model comprises organizational capacity, organizational motivation and organizational environment as key factors to develop knowledge transfer and sharing environment to achieve effectiveness through highly skilled and efficient members. These factors are necessary because of the absence of a comprehensive inclusion of all aspects that affect knowledge transfer and sharing in MSC status organization. Thus, this study suggest a comprehensive approach by giving equal attention to all critical factors that needed to be integrated in terms of identifying which factor had a great relationship with knowledge transfer and sharing in MSC status organizations to create value. This value can be in the form of innovative and creative services or products (Daud & Yusoff, 2011; Yusof et al., 2012). This study brings together organizational capacity, organizational motivation and organizational environment and their dimensions because previous researches were not comprehensive. This means that these factors were investigated in isolation (Yusof et al., 2012; Lee & Choi 2003).

Since this study attempted to investigate knowledge transfer and sharing to facilitate knowledge creation processes in MSC status organizations, there must be some atmosphere of positive expectation and safety stimulating creative behaviors, which is brought with trust. In case of mistrust, people tend to focus on protecting themselves and their valuable knowledge, hindering knowledge transfer and sharing.

Furthermore, there is paucity of empirical research that examines the impact of trust on knowledge transfer and sharing, which is a serious research gap. Although literature does not provide indirect discussion about trust and knowledge transfer and sharing in MSC status organizations, this study incorporates trust as a mediator in examining the indirect relationship between organizational capacity, organizational motivation, and organizational environment on knowledge transfer and sharing. The study includes trust as a mediator variable because it has emerged as a new paradigm in the knowledge economy. In addition, the relationship between trust and knowledge transfer and sharing has been acknowledged by a number of researchers significantly but partially correlated (Rahman & Hussain, 2014; Jain et al, 2015). To our knowledge, there is no research that examines how the variables which are mentioned previously are related to each other in one model in MSC status organizations. Thus, the current study attempts to investigate the relationships between organizational capacity, organizational motivation, organizational environment, trust, and knowledge transfer and sharing. Importantly, Osmani et al. (2014) suggested that in identifying antecedents of knowledge sharing, trust is needed to better explain the influence of the predictors on knowledge sharing. This is in accordance to Baron and Kenny`s (1986) and Bennett`s (2000) assertions that mediator could examine and explain why and how predictors influence and affect criterion outcomes, which provide more meaningful research results. According to Yusof et al. (2012), trust is prerequisite for knowledge sharing, and needed to encourage knowledge sharing practices but has yet to be explored. To this end, trust

is needed to be addressed empirically because little was known about the emergence of trust and its effects within MSC status organizations context.

From this, most of the obstacles are based on unsuccessful knowledge transfer and sharing, which is one of the principal reasons for failures (Hamid & Salim, 2010). Based on the literature, these failures might be resulted from the influencing factors which are related to knowledge transfer and sharing (Al-Ahmad et al., 2009; Yusof & Ismail, 2009; Hamid & Salim, 2010; Hamid & Salim, 2011; Maidin & Arshad, 2010), as such, lack of top management background in managing ICT projects, organizational structure inflexible to face a dynamic environment, lack of learning strategy, lack of focus on human resource practices by top management, untrusted environment of work, lack of focus on rewards, lack of adoption and utilizing technology in doing business, and lack of communication skills and networks between individuals, groups and organizations (Al-Adaileh & Al-Atawi, 2011; Bairi et al., 2011; Birasnav et al., 2011; Donate & Guadamillas, 2011; Cambra-Fierro et al., 2011; Khachlouf et al., 2011; Rhodes et al., 2008; Jabar et al., 2011), which may have substantial influence on knowledge transfer and sharing in MSC status organizations. Even though these factors contribute to knowledge transfer and sharing in the literature but most of them have not received empirical attention in MSC status organizations context.

It is worthy to note that, the present study attempts to fill two main gaps; establishing (1) significant relationship between organizational capacity, organizational

motivation, organizational environment, trust, and knowledge transfer and sharing; and (2) significant mediating effect of trust on the relationship between organizational capacity, organizational motivation, organizational environment, and knowledge transfer and sharing. This is because no study has been reported in the literature regarding significant relationship between organizational capacity, organizational motivation, organizational environment, trust, and knowledge transfer and sharing, and the mediation effect of trust on the relationship between organizational capacity, organizational motivation, organizational environment, and knowledge transfer and sharing in MSC status organizations.

As mentioned earlier, this study adopts Nonaka‟s (1994) Socialization, Externalization, Combination and Internalization (SECI) processes because knowledge transfer is assumed as the creation of knowledge through formal and informal networks of relations in the organization which involved the interactions between individuals, groups and organizations (Lee & Choi, 2003; Choi & Lee., 2002; Nonaka., 1994; Nonaka & Konno, 1998; Song et al., 2011; Sandhu et al., 2011; Abdul Karim et al., 2012). Besides that, SECI processes provides a comprehensive framework for the organizations by processing effective knowledge through formal systems (explicit) or by social networks (tacit) because it has critical links to organizational effectiveness (Rhodes et al., 2008). In brief, it is needed to have a clear understanding of the organizational factors that influence knowledge transfer and sharing, and to explore and investigate whether trust mediates the

relationships between the said independent variables and knowledge transfer and sharing in MSC status organizations.

1.3 Research questions

The aim of this study is to determine the relationships between the organizational factors which are: organizational capacity, organizational motivation and organizational environment in improving the effectiveness of knowledge transfer and sharing. Thus, this study attempts to address the following specific questions:

1. Is there any relationship between organizational capacity, organizational motivation, organizational environment, trust and knowledge transfer and sharing in MSC status organizations?

2. Is there any relationship between organizational capacity, organizational motivation, organizational environment and trust?

3. Does trust mediates the relationship between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing?

1.4 Objectives of study

The specific objectives of this study are:

1. To find out the relationship between organizational capacity, organizational motivation, organizational environment, trust and knowledge transfer, sharing in MSC status organizations.

2. To determine the relationship between organizational capacity, organizational motivation, organizational environment and trust.

3. To examine the mediating effect of trust between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing.

1.5 Significance of study

This study aims to provide a clear understanding of an organizational capacity, organizational motivation and organizational environment in MSC status organizations to improve knowledge transfer and sharing. Besides that, this study attempts to provide some insights on the influencing factors in predicting the effectiveness of knowledge transfer and sharing. Indirectly, it will allow MSC status organizations to understand and adopt the process of knowledge transfer and sharing, which is needed to enhance their mission to accomplish phase three 2011-2020 to transform Malaysia into a knowledge based society. Further, by including trust as a mediator with the other independents and dependent variable. This will build appropriate knowledge and strategies in MSC companies to achieve high organizational outcomes. By examining the readiness of MSC companies in creating an appropriate environment in terms of sharing and transferring knowledge with the availability of infrastructure to accomplish knowledge based society vision in 2020.

Moreover, organizational knowledge creation theory (Nonaka, 1994; Nonaka & Konno, 1998; Lee & Choi, 2003; Choi & Lee., 2002; Song et al., 2011; Sandhu et al., 2011; Abdul Karim et al., 2012) is the dynamic process which provides a huge understanding in terms of how MSC status organizations deal with knowledge transfer and sharing. Accordingly, the findings from this study will bring a clear understanding to both sides: practitioners and policy makers to understand the influence of organizational capacity, organizational motivation and organizational environment on knowledge transfer and sharing.

In a similar vein, this study incorporates trust as a mediator in examining the influence of organizational capacity, organizational motivation and organizational environment on knowledge transfer and sharing among MSC status organizations. The mediating role of trust is needed to explain the influence of the predictor on the criterion variable. This is in line with the assertion by Baron and Kenny (1986) and Bennett (2000) that mediator could explain how and why a predictor influences an outcome variable. Which is, in turn, provides more meaningful research results.

1.6 Scope of study

This study conducted in MSC status organizations. These organizations are grouped into four clusters, including: Information Technology (InfoTech) Cluster; the Creative Multimedia (CMC) Cluster; the Shared Services and Outsourcing (SSO) Cluster and Institutions of Higher Learning and Incubators Cluster. These organizations are located in Klang Valley, Kedah, Penang, in Malaysia. The MSC status organizations are chosen because these organizations are considered to be knowledge intensive entities using knowledge as a strategic asset in their contribution to the Malaysian growing economy to achieve vision of 2020 (Sharif et al., 2005; Daud & Yusoff, 2010).

1.7 Definition of key terms

1.7.1 Knowledge transfer and sharing

The extent, to which knowledge is encouraged, adapted, transferred, promoted, collected, shared and implemented by the organizations using explicit or tacit knowledge, and the combination of the two levels conceptualized SECI processes, externalization (tacit to explicit), internalization (explicit to tacit), socialization (tacit to tacit) and combination (explicit to explicit). (Wei-he & Qiu-Yan, 2006).

1.7.2 Organizational capacity

Organizational capacity implies the extent to which an organization has the ability to use its resources to achieve its objectives; these resources involve systems and processes that can support organizations in their work (Lusthaus et al., 2002).

a) Top management support

The extent to which top management is encouraging, supporting and providing resources to share knowledge among employees to create and use new knowledge (Lin, 2007).

b) Organizational structure

The extent to which authority in the organization gives freedom to make decisions, use formal rules and determine the procedures to be used in performing it (Lee & Choi, 2003).

c) Learning strategy

The extent to which organizations provide opportunities and encouragement for learning and development in the organizations (Lee & Choi, 2003).

d) Human resource practices

The extent to which HR practices in the organization; supporting training programs, incentive systems, internal rotation, making decision, implementing and encouraging knowledge management processes and teamwork (Donate & Guadamillas, 2011).

1.7.3 Organizational motivation

Organizational motivation represents the basic motives which drive the members of the organization to implement knowledge transfer and sharing in the organizations (Lusthaus et al., 2002).

a) Culture

The extent to which culture supports and promotes knowledge in terms of common organizational language, experiment and new knowledge

implementation, tolerance of mistakes, confidence and openness, responsible behavior to share and learn new knowledge (Donate & Guadamillas, 2011).

b) Rewards

The extent to which rewards system supports knowledge transfer and sharing in the organization by giving high salary, promotion, and increase job security (Lin, 2007).

1.7.4 Organizational environment

Organizational environment means organizations need support from their environment if they are needed to survive and gain their objectives (Lusthaus et al., 2002).

a) Information technology

The degree to which IT is supporting and facilitating knowledge transfer and sharing, in terms of collaborative work, communication, searching and accessing information, simulation and prediction and support systematic storing (Lee & Choi, 2003).

b) Networks

The degree to which networks create a context of sharing and transferring knowledge through working together as a team, using workgroups, hall

talk, and calling each other from different departments to exchange information and knowledge needed (Fernandez-Perez et al, 2012).

1.7.5 Trust

The extent to which the organization assist employees to be trusted and confident in, and willing to act on the basis of the words, actions, and decisions of another (McAllister, 1995).

1.7.6 Organization and summary of chapters

This study seeks to provide better understanding of the influencing factors on knowledge transfer and sharing among MSC status organizations, by incorporating trust as a mediator and organizational capacity, organizational motivation and organizational environment as an independent variables and knowledge transfer and sharing as a dependent variable. This lead to build appropriate knowledge and strategies among MSC companies to achieve phase three 2011-2020 to transform Malaysia into a knowledge based-society. This study organized into five chapters: chapter one contains discussion of study‟s background, problem statement, research questions, research objectives, significance of study, scope of the study and definition of key terms. Chapter two highlights review of literature on knowledge transfer and sharing and variables of the study, underpinning theory, gaps in the literature, hypotheses and theoretical framework of the study. Chapter three addresses the research method. Chapter four involves data analyses and findings. Finally, chapter five provides discussions, theoretical, practical, and methodological

contributions, limitation of the study, directions of the future research, and finally the conclusions of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter introduces the literature review related to the area of the research. It conceptually gives an insight or reviews on the previous and existing works that have been conducted in the same area to show the relationship between variables in this study.

2.2 Definition and conceptualization of knowledge transfer and sharing

Knowledge transfer and knowledge sharing have been considered in several studies (Argote & Ingram, 2000; Disterer, 2001; Paulin, & Suneson, 2012; Liyanage & Elhag & Ballal & Li, 2009; Gangeswari Tangaraja & Roziah Mohd Rasdi & Bahaman Abu Samah & Maimunah Ismail, 2016; Jabr, 2007). According to Disterer, (2001), and Liyanage et al. (2009), knowledge sharing is a critical stage in the process of knowledge transfer. Similarly, Argote and Ingram (2000) stated that sharing knowledge creates knowledge, which means that knowledge transfer carries out at the same time. Because, if a person does not share knowledge, the knowledge cannot be transferred. In addition to that, knowledge sharing in organisations mostly involves exchange of knowledge at the individual level; however, knowledge transfer in organisations goes beyond this. It includes transfer of knowledge at higher

levels such as group, product line, department, or division (Argote and Ingram, 2000).

Thus, this study determines knowledge sharing as a process where individuals exchange all types of knowledge including explicit knowledge (information, know-how and know-who) and tacit knowledge (skills and competency). At the same time, knowledge transfer is a spiral of organizational knowledge creation. It starts at the individual level, continues at group level, and finishes at the organizational level. Consequently, the increase of individuals‟ interaction affects the increase of spreading knowledge within the entire organization. To this end, the current study utilized both terms as one component because knowledge transfer and sharing is created through social interactions amongst individuals and organizations. In relation to this, the effectiveness of knowledge transfer is based on the willingness of individuals as the primary sources of knowledge. This may benefit the whole organization, because products and work processes can improve. From this, knowledge sharing is a deliberate act that makes knowledge reusable by other people through knowledge transfer (Lee & Al-Hawamdeh, 2002).

Following this, the term of knowledge transfer and sharing has been defined by Szulanski (1996) as a dynamic exchange of knowledge between a source and a recipient. Harvey (2012) and Kumar and Ganesh (2009) reported that knowledge transfer and knowledge sharing are often used interchangeably to define each other. On the same note, knowledge sharing usually is meaning the activities of giving or

contributing. Additionally, knowledge transfer should involve active communication between two parties in order to learn what they both know. In a simple meaning, people share knowledge while organizations transfer knowledge (Hamid & Salim, 2011; Kumar & Ganesh, 2009). In fact, to transfer knowledge from one brain of a human to another brain perfectly is not easy like transferring files from one computer to another. This is because knowledge can be classified as explicit or tacit knowledge (Nonaka, 1994). Explicit knowledge is easily transmitted from one individual or organization. In contrast, tacit knowledge is gained through experience and it is difficult to explain because it exists in peoples‟ heads (Cumberland, 2012).

From this, knowledge is defined as a justified belief which can increase the capacity of members to take the right action. Even though knowledge is explicit or tacit, or both, but the effectiveness of it, is depends on the organization's outcomes (Ko et al., 2005). This is supported by Walczak (2005) assertion that tacit knowledge refers to person cognitive and experience. While, explicit knowledge is considered as external to a person, including documents, electronic databases and files of an organization. Based on this, Nonaka (1994) suggested that knowledge creation consists two dimensions, namely ontological and epistemological. The epistemological dimension is divided into tacit and explicit knowledge. While the ontological dimension refers to the interaction between individuals and organization (Nonaka 1994). Moreover, the interaction between these kinds of knowledge leads to create new knowledge. The combination of the two dimensions makes it possible to conceptualize four

stages of knowledge conversion as described by (Nonaka, 1994; Akhavan et al., 2013).

Socialization means that conversion of tacit knowledge into a new tacit knowledge, for instance, sharing the experiences among organization‟s members. Second stage is a combination which means a conversion of explicit knowledge into a new explicit knowledge such as, assessing papers and reports in the same sector. Further, externalization means that the conversion of tacit knowledge into a new explicit knowledge, for example, documentation of the best experiences. And internalization means that conversion of explicit knowledge into a new tacit knowledge, such as learning from writing collective discussions (Nonaka, 1994).

Knowledge transfer and sharing have emerged after Nonaka‟s original study (Nonaka, 1994). Since that article and later articles and books by him such as Nonaka and Takeuchi (1995), in which they say that knowledge sharing is a critical stage in knowledge transfer. This have had a strong impact on the research community as the starting point for the re-emergence of knowledge transfer and sharing as known today (Tangaraja et al., 2016; Jabr, 2007). As such, Jabar (2007), his study entitled “Physicians' attitudes towards knowledge transfer and sharing” where both terms have been used when discussing the same concept of knowledge transfer and sharing. Similarly, Tangaraja et al. (2016) have used both terms simultaneously. Since then, the terms have developed gradually and extensively. Therefore, the terms were used in this study simultaneously or have overlapping

content, and many authors have used both terms when discussing the same concept (Riege, 2005; 2007), so in order to explore knowledge transfer, knowledge sharing should not be ignored. From this, Wei-he and Qiu-Yan (2006) affirmed that knowledge transfer is a specific knowledge management process by which knowledge is encouraged, adapted, transferred, promoted, collected, shared and implemented by the organizations using explicit or tacit knowledge, and the combination of the two levels conceptualized SECI processes, externalization (tacit to explicit), internalization (explicit to tacit), socialization (tacit to tacit) and combination (explicit to explicit).

2.3 Factors affecting knowledge transfer and sharing

Based on the earlier discussions, knowledge receiver is the basis of the knowledge transfer process which is must have enough capabilities to learn and apply the right knowledge. In a similar vein, knowledge transfer and sharing process usually includes social interaction, whether from direct interaction or from practical interaction (Hamid & Salim, 2011). Additionally, the exchange process involves two acts: the act of delivering knowledge of the source, and the act of receiving and using knowledge by the recipient. In the absence of any act the process of transfer is incomplete (Kumar & Ganesh, 2009). In this respect, Hamid and Salim (2011) classified two procedures which are by personal procedures, for instance, training, job rotation, interactions with customers. On the other hand, technology procedures for instance, learning and business intelligence system. In this regard, in the Malaysian context, knowledge transfer is based on using staff training, meetings,

standard operating procedures, manuals and databases where most of transferring knowledge processes are the implication of strategic alliances, joint ventures, mergers and acquisitions (Hamid & Salim, 2011).

Al-Salti and Hackney (2011) stated that knowledge transfer and sharing is the best way to develop individuals and groups effectively by increase their skills and value (Mills & Smith, 2011). Further, Simonin (1999) emphasized that knowledge transfer is to learn from each other‟s experience. Pak and Park (2004) investigated knowledge transfer in cross-border joint ventures in Korea and found that such collaborative alliances provide a learning environment where the two partners enjoy the exchange of new knowledge and skills.

However, knowledge transfer and sharing usually occurs in the organizations when the individuals and groups combine external knowledge with the internal one to improve decision making and resolve problems. Because the success of knowledge transfer and sharing is depending on the characteristic of the knowledge itself and the ability of the receiver to absorb and utilize it. Moreover, different cultures, structures and goals between the source and the recipient of knowledge can prevent or motivate knowledge transfer and sharing (Al-Salti & Hackney, 2011). In this regard, many factors have been studied by the researchers which are contributing to the success or impede knowledge transfer and sharing (Xu & Ma, 2008; Gosain, 2007; Pardo et al., 2006; Ko et al., 2005; Timbrell et al., 2001; Rhodes et al., 2008; Al-Gharibeh, 2011; Ismail & Yusuf, 2010; Palacios-Marqués et al., 2013; Boh et al.,

2013; Sankowska, 2013; Riege, 2005). Based on these studies Table 2.1 highlights some particular factors that may facilitate or inhibit knowledge transfer and sharing in an organization:

Table 2.1
Motivators and inhibitor factor that impact knowledge transfer and sharing.

Study	Motivator factors	Inhibiting factors
Timbrell et al. (2001)		Knowledge causal ambiguity Lack of source motivation Lack of recipient motivation Lack of absorptive capacity of the recipient Lack of recipient retentive capacity
Ko et al. (2005)	Communication factors Motivational Factors Knowledge factors	
Pardo et al. (2006)	Trust Incentives	
Rhodes et al. (2008)	Information technology Learning strategy Trust culture Flexible structure and design	
Ismail and yusuf (2010)	Awareness Trust Personality	
Al-Gharibeh (2011)	Knowledge strategy Organizational culture Information technology Knowledge leadership	
Palacios-Marqués et al. (2013)	Holistic business view Competency based management Continuous learning	
Boh et al. (2013)	Trust Cultural alignment individualism Cultural alignment	

Study	Motivator factors	Inhibiting factors
Sankowska (2013)	Openness to diversity Organizational Trust	
Riege (2005)		**Individual barriers** Lack of time to share knowledge Fear that sharing may jeopardize job security Lack of awareness Dominance in sharing explicit over tacit knowledge Apply of strong hierarchy, position-based status, and formal power Differences in levels of experience Lack of interaction Poor verbal/written communication and interpersonal skills Difference of age Difference of gender Lack of social network Differences of education levels Lack of trust in people Lack of trust due to the source. Differences in national culture or ethnic background **Organizational barriers** Lack of leadership and managerial direction Lack of a transparent rewards and recognition systems

Study	Motivator factors	Inhibiting factors
		Knowledge retention of highly skilled and experienced staff is not a high priority Shortage of appropriate infrastructure supporting sharing practices External competitiveness Physical work environment. Internal competitiveness within business units Hierarchical organization Structure inhibits or slows down most sharing practices Size of business **Technological barriers** Lack of integration of IT systems and processes lack of technical support IT systems obstructs work routines and communication flows Unrealistic expectations of employees as to what technology can do and cannot do Lack of compatibility between diverse IT systems and processes Mismatch between individuals‟ nœd requirements and integrated IT systems Processes restricts sharing practices Reluctance to use IT systems due to lack of familiarity and experience with them Lack of training

A review of the literature shows that there are many factors that influence knowledge transfer and sharing. These factors act as facilitators or inhibitors of knowledge, in addition, refer to the practices that promote sharing and transferring knowledge in the organization. Due to the large number of factors that impact knowledge transfer and sharing, the exogenous variables of this study are: organizational capacity, organizational motivation, and organizational environment, were determined because they have received much attention in the literature in recent times (Rahman & Hussain, 2014; Jain et al., 2015; Osmani et al., 2014; Yusof et al., 2012), and have not been examined together before empirically in MSC status organizations.

As Malaysia is now striving for a knowledge-based economy, it is timely for organizations to manage the information or knowledge that they possess to achieve vision of 2020 (Yu, 2003). Even though literature show that knowledge transfer and sharing is able to transform organizations to become more productive and competitive (Palacios-Marqués et al., 2013; Riege, 2005; Rhodes et al. 2008; Martinkenaite, 2012; Gosain, 2007; Xu & Ma, 2008; Pardo et al., 2006; Ko et al., 2005; Timbrell et al., 2001; Al-Gharibeh, 2011; Ismail & yusuf, 2010; Boh et al., 2013; Sankowska, 2013), but there has yet to be investigated and there is paucity of empirical research on knowledge transfer and sharing in MSC organizations. To do so, this study proposed a comprehensive model as it provides insights into the factors that must be taken into account when implementing knowledge transfer and sharing in MSC status organizations. This may open up new perspective of knowledge transfer and sharing concepts as it is important and necessary components for the

telecommunication organizations to survive and maintain their competitiveness in this era of k-economy. This also may provide an understanding of how knowledge is transferred and shared in MSC status organizations. However, this study incorporates trust as a mediating variable between the said factors and knowledge transfer and sharing in MSC status organizations. Trust was included as a central factor to this study because of its ability to support and facilitate knowledge transfer and sharing. In addition to that, previous researches have shown trust to have this effect through creating and enhancing the necessary conditions for knowledge sharing (Osmani et al., 2014). Trust, on the other hand also influences the process of knowledge sharing by increasing openness in knowledge exchange. In addition, trust allows knowledge transfer and sharing to be less costly and increases the possibility of knowledge to be acquired. From this, knowledge transfer and sharing is based on the trust level in an organisation, in more specific, when there are trust relationships, members in an organisation are more willing to share useful knowledge among themselves (Rahman & Hussain, 2014). Due to the fact that, lack of trust is a key issue that needs to be resolved especially in inter-organizational teams, knowledge transfer and sharing still depends on the individual involved, and most individuals will not risk sharing what they know without feeling of trust. However, high degree of trust may provide significant impact on knowledge transfer and sharing.

Although literature does not provide direct discussion about trust and knowledge transfer and sharing in MSC organizations, this study provides a comprehensive model that discusses empirically the indirect relationships between organizational

capacity, organizational motivation, organizational environment and knowledge transfer and sharing through trust.

In contribution to the knowledge transfer and sharing this study suggests trust in facilitating effective knowledge transfer and sharing. Further, the study provides a better understanding of how social relations are made in terms of interaction and creating effective transferring knowledge. Besides, the dimensions of this study were chosen because they are relevant to knowledge transfer and sharing and were examined partially (Lee & Choi, 2003), these dimensions are: top management support, organizational structure, learning strategy, human resource practices, culture, rewards, information technology and networks. The study by Rhodes et al. (2008) in Taiwan revealed that IT system enhances employees in terms of sharing knowledge. Similarly, the learning strategy and rewards are crucial in the effectiveness of knowledge transfer and sharing. Further, top management support, culture and flexibility of structure had a greater impact with knowledge transfer. This is consistent with Lin (2007) who reported that knowledge sharing processes are depends on the influences of several factors such as, individual, organizational and technological factors. Referring to these factors, most authors agreed (Rhodes et al., 2008; Lin, 2007; Lee & Choi, 2003) that knowledge transfer and sharing is based on individual aspects such as experience, motivation and beliefs.

Further, the effectiveness of knowledge transfer and sharing processes is based on the influencing factors such as, reward systems and top management support to

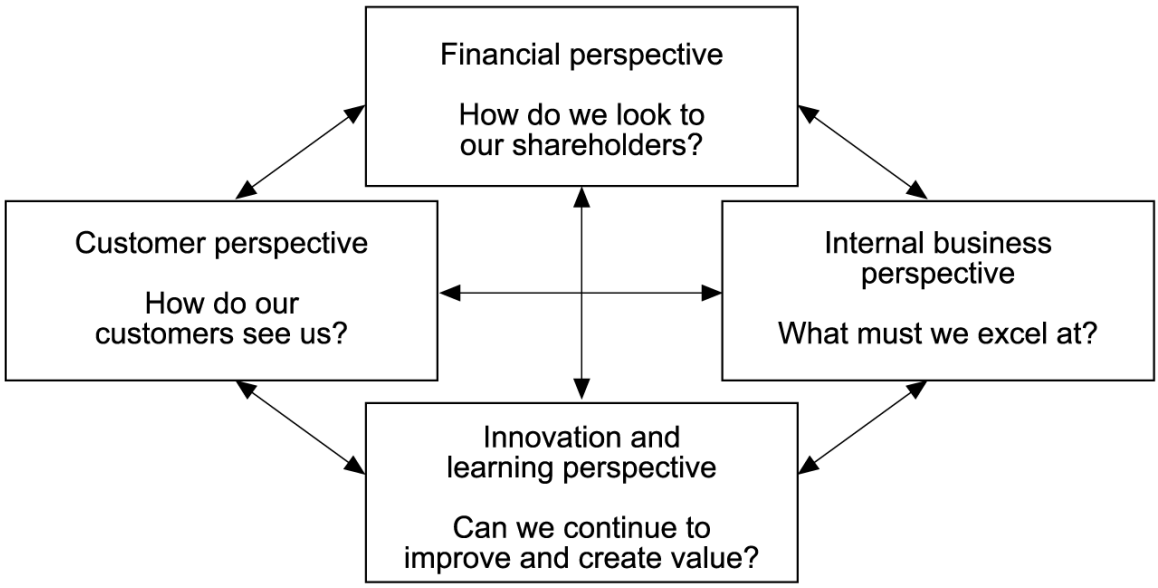
encourage employees to share intellectual capital which is considered as a social system. Besides that, information technology is considered as a technical system which can be effectively used to facilitate organizational knowledge (Lin, 2007; Lee & Choi, 2003). In fact, Lee and Choi (2003) defined these factors as influencing factors that support knowledge through creating and facilitating the sharing of knowledge. Based on this, the current study suggests the earlier factors because of their contributions towards knowledge transfer and sharing by considering trust as the best tool to promote knowledge transfer and sharing in MSC status organizations. Therefore, the effectiveness of the organization depends on knowledge transfer and sharing, which is playing a vital role in this regard (Yusof & Ismail, 2009). This is in accordance with Pan and Scarbrough (1999) assertion that the contribution of knowledge transfer and sharing occurs when the requirements of customer and employees are met.

2.4 Measurement of knowledge transfer and sharing

Wei et al. (2009) have insisted that the source of competitive advantage is the knowledge assets, which mean that managing intangible assets such as customer relationships, innovative products and services, are considered as a non-financial in nature, rather than managing tangible assets which are considered as a financial in nature. From this, knowledge is measured because the organizations incorporating various aspects that can enhance knowledge creation by using employees‟ experience, and processes that support knowledge. The financial and non-financial outcomes are distinct constructs with regard to the impact of knowledge

management (Daud, 2012). The most popular measurement of this type is the balanced scorecard (Kaplan & Norton, 1992), which emphasizes the need to achieve a balance between the use of financial and non-financial measures to achieve strategic alignment.

Thus, this study links between organizational factors and trust and knowledge transfer because there has been an increasing recognition of the importance of intangible assets for instance, expertise, experiences and patents. Thus, merely using financial measures cannot measure the value of organizations in this k-economy. Hence, it is imperative to adopt other measurement tools that could accurately determine the performance of a knowledge-based companies. Based on this, BSC is thus, a management system that enables the organization to achieve its key business strategies and objectives (Northcott & Taulapapa, 2012), which are necessary for managers in order to enable them to achieve their business goals. Further, BSC measures strategic plan as it is a strategic management system (Henri, 2004; Kloot, 1999).



Source: Adapted from Kaplan and Norton (1992)

Figure 2.1
The balanced scorecard

Kaplan and Norton (1992) introduces Balanced Scorecard (BSC) approach as a non-financial technique to measure organizations that links finance, learning and growth, internal processes and the customer (Northcott & Taulapapa, 2012). These four components have to be analysed to measure customer satisfaction and their requirements, financial requirements and focus on how to gain and capture knowledge, and how to use it to maintain a competitive advantage within markets. The purpose of the balanced scorecard is to involve non-financial aspects within the MSC status organizations strategy. Further, all of these aspects are crucial to achieve MSC organizational objectives because these critical areas provide panoramic picture and more balanced measurement to support knowledge transfer and sharing.

However, Rhodes et al. (2008) asserted that in measuring intangible aspects, it is important to note that intangible aspects are more correlated to knowledge transfer and organizational performance than tangible aspects. As such, this study reported that IT is highly correlated 0.89. It has also reported that the effect of learning strategy was highly correlated 0.94. Further, Trust culture, the Cronbach was 0.92. Similarly, the flexible structure was 0.66. In the same vein, the findings by Tasmin et al. (2010) revealed that the influencing factors on implementation of knowledge management had a high correlation. For instance, informational technology was highly correlated 0.85. Similarly, with organization structure the correlation was 0.83.

Moreover, Daud and Yusoff (2010) Schulz and Jobe (2001) Daud and Yusuf (2008) and Singh et al. (2006) affirmed that the organizational performance is improved through sharing useful knowledge as it is intangible aspect. At the same time, the potential for knowledge management to create competitive advantage is positively linked to the intangible aspects. Based on this, it is necessary for managers in MSC to use (BSC) approach to measure the overall success of the organizations, because this approach in general, provides information for managers, in terms of strategic planning and decision-making (Sillanpää, 2011; Northcott & Taulapapa, 2012).

2.5 The importance of knowledge transfer and sharing

Organizations have started to realize the need of promoting knowledge transfer and sharing among their members. Therefore, organizations start naturally viewing knowledge transfer and sharing as a response to the external pressure to reduce cost and improve the quality of services they offer to the public (Husted et al., 2005). In this respect, knowledge transfer and sharing has been identified as capable of playing significant role in organizations (Sandhu et al., 2011; Syed-Ikhsan & Rowland, 2004b; Chong et al., 2011; Nonaka, 1994; Choi & Lee, 2003; Zack et al., 2009; Hamid & Salim, 2011; Rhodes et al., 2008). In the Malaysian context, there is a limited evidence of construct validity of knowledge transfer and sharing for the Malaysian organizations to be a knowledge based society (Daud, 2012; Sandhu et al., 2011; Daud & Yusuf, 2008; Syed-Ikhsan & Rowland, 2004; Yusof & Ismail, 2009; Ikhsan & Rowland, 2004).

However, it is important to note that knowledge is viewed as a key resource and strategic asset that contributes to improve and flourish organizations, it is appropriate for MSC status organizations to base their entire business on knowledge in order to achieve a knowledge based society vision 2020 (Daud, 2012). In this respect, this study assesses the construct validity of knowledge transfer and sharing as a function of the interaction of the organizational capacity (top management support, organizational structure, learning strategy, human resource practices), organizational motivation (culture, rewards), organizational environment (information technology, networks). This is congruent to the assertion by (Yusof & Ismail, 2009) that it is

compulsory for the government of Malaysia to encourage its manpower to transfer and share their knowledge among themselves.

To fill the gap, this study intended to investigate the extent to which organizational factors have impacted knowledge transfer and sharing through trust in helping to shape a new development model in MSC status organizations to enhance the overall vision of 2020. Due to the large number of MSC status organizations, a total of 2.652 companies have been certified as MSC Status organizations as of March 2015 from the Official Portal of MSC Malaysia (http://www.mscmalaysia.my/status_company) MDC (2015). From this, it is important to know how they manage their knowledge and how the knowledge transfer and sharing affect MSC status organizations performance as it is a knowledge intensive entities. The subsequent issue will be discussed in the next section.

2.6 Knowledge transfer and sharing and variables of study

Based on the objective of this study, which is to investigate how organizational factors influence knowledge transfer and sharing, the present study adopts three sets of factors encompasses examining organizational capacity, organizational motivation and organizational environment from the previous research by Lusthaus et al. (1995) and Lusthaus et al. (2002) which can form the main basis to be tested empirically as a predictor to explain the existence of knowledge transfer and sharing in MSC status organizations. Further, the study introduced the following independent constructs in evaluating knowledge transfer and sharing in MSC status organizations, because

prior research studies has shown the link between these constructs and knowledge transfer and sharing (Yusof et al., 2012; Xu & Ma, 2008; Gosain, 2007; Pardo et al., 2006; Ko et al., 2005; Timbrell et al., 2001; Rhodes et al., 2008; Al-Gharibeh, 2011; Ismail & yusuf, 2010; Palacios-Marqués et al., 2013; Boh et al., 2013; Sankowska, 2013; Yusof & Ismail, 2009; Riege, 2005; Lee & Choi, 2003; Choi & Lee, 2002; Hamid & Salim, 2011; Song et al., 2011; Lin, 2007; Zawiyah et al., 2012).

Therefore, the present study seeks to expand the understanding of the relationship between knowledge transfer and trust by suggesting a holistic model that comprises the most significant factors as a motivators or inhibitors to knowledge transfer and sharing and trust. In relation to this, from the previous research by Lusthaus et al. (1995) and Lusthaus et al. (2002) this study attempts to extend the direct effect of these factors on knowledge transfer and sharing and trust as well as utilize trust as a mediator variable between these factors and knowledge transfer and sharing.

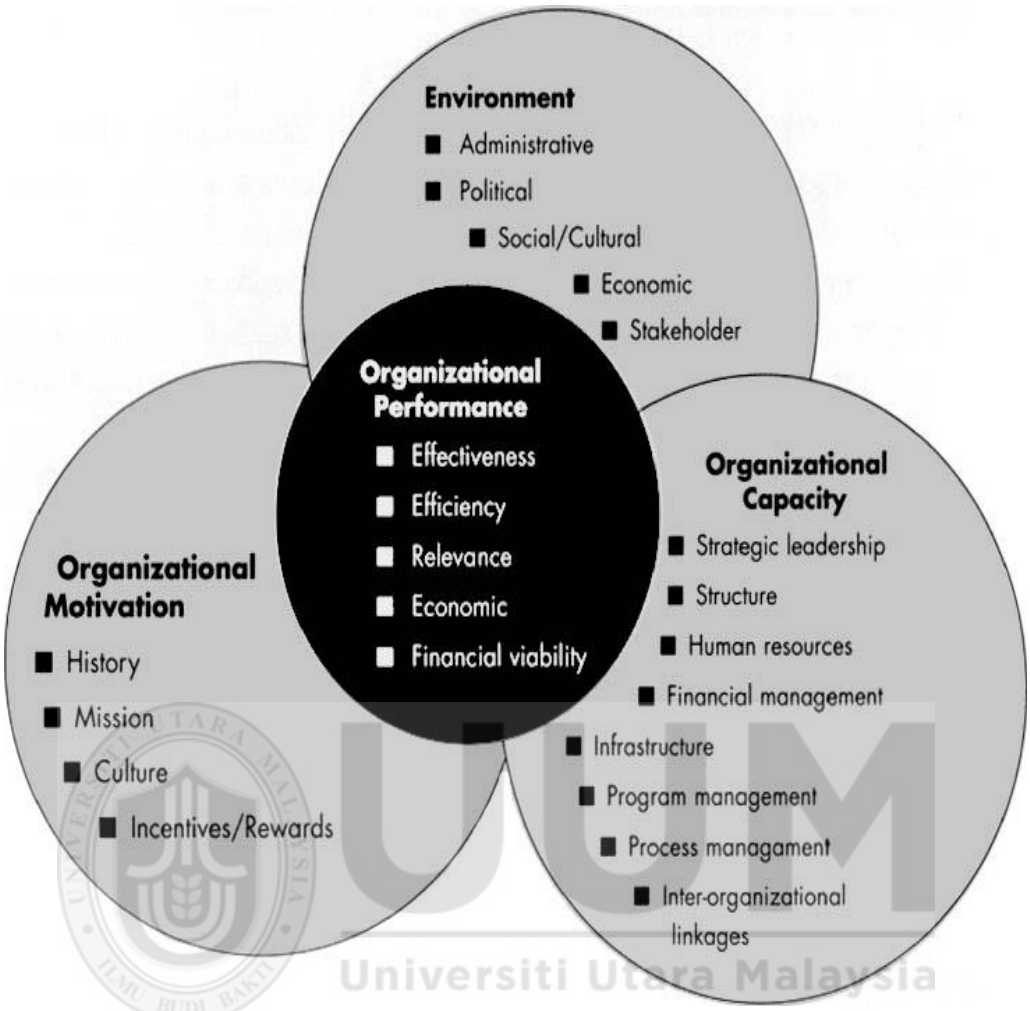


Figure 2.2
Conceptual framework adapted from Lusthaus et al. (2002 p10)

However, the following section highlights the independent and mediating variables to enhance the understanding of antecedence to knowledge transfer and sharing. Therefore, the independent variables of this study are the organizational capacity (top management support, organizational structure, learning strategy, human resource practices), organizational motivation (culture, rewards) and organizational environment (information technology, networks). Further, incorporating trust as a mediator.

2.7 Organizational capacity

Organizational capacity has been determined as the ability of an organization to use its resources to achieve outcomes (Lusthaus et al., 1995). In other words, organizational capacity describes a wide range of capabilities to achieve its mission effectively and sustain itself over the long term (Lusthaus et al., 1995; Lusthaus et al., 2002). According to Lusthaus et al. (1995) and Lusthaus et al. (2002) resources of organizational capacity involve several relevant dimensions: strategic leadership, structure, human resources, financial management, infrastructure, program management, process management, inter-organizational linkage. These elements are defined as a resources and capabilities to enhance the organization`s mission. Based on this, the present study examined some of these resources as a dimensions for the current research because of its role in enhancing knowledge transfer and sharing as it emerging in the previous studies (Lin, 2007; Singh, 2008; Rhodes et al., 2008; Donate and Guadamillas, 2011). These dimensions are, top management support, organizational structure, learning strategy and human resource practices (Birasnav, 2011; Singh, 2008; Rhodes et al., 2008; Wei et al, 2006; Wei et al, 2009; Jabar et al., 2011; Donate and Guadamillas, 2011).

2.7.1 Top management support

Based on the literature, top management support is one of these dimensions which considered as the capability of managers to impact their subordinates to enhance efficiency to attain organizational objectives (Timothy et al., 2011; Fry, 2003). Because the efficiency of top management making a positive impact on individuals

and the organization overall (Aboyassin & Abood, 2013), by encouraging and motivating employees to increase their abilities. In this context, many studies have confirmed this influence to the organizational outcomes (Timothy et al., 2011; Fry, 2003; Fry et al., 2011; Aboyassin & Abood, 2013; Chen & Silverthorne, 2005; Svensson & Wood, 2006; Birasnav et al., 2011; McMurray et al., 2012; Jong & Hartog, 2007; Cohen et al., 2012; Eisenbach et al., 1999; Mukherjee et al., 2012; Tombaugh, 2005; Wu & Zhu, 2012; Orey, 2011; Xenikou & Simosi, 2006; Hymphreys & Einstein, 2003; Kuada et al., 2010; Harris & Ogbonna, 2001; Krishnan, 2004; Muijs, 2011; Fernandez-Pérez et al., 2012) which is the main focus of the organizations (Birasnav et al., 2011).

Based on this, different styles of top level affect subordinate behaviors by influencing employees and organizational outcomes (Chen & Silverthorne, 2005). In this respect, McMurray et al. (2012) argued that transformational top management are able to exploit daily conditions of work by helping employees to meet their requirements to become more motivated. Further, usually transformational top management is trying to change circumstances of work to complete their mission. Conversely, transactional top management usually in their thinking are working with same conditions to attain their goals. In fact, different styles of top management are playing a vital role in achieving goals of both individuals and organizations. This is because top management has direct impact on the organizations in terms of creating, transferring and sharing knowledge (Lin, 2007; Singh, 2008).

The finding by Daud (2012) indicates that managers and owners of the organizations need to acquire more knowledge in order to enhance organizations, because the success of organizations is linked to the effectiveness of top management support (Svensson & Wood, 2006). Managers also need to convert knowledge they acquired, created or generated in order to improve their organization. This process enables them to refresh and update their current knowledge. This is in accordance with the findings by Lakshman (2007) who identifies the role of top management support in managing information and managing knowledge in the organizations, both internally for coordination purposes and externally as it is directed to customers. Yu et al., (2004) asserted that organizational effectiveness could be predicted by characteristics of an organization‟s top management. Accordingly, top management support can influence organizational members‟ knowledge and management activities by supporting knowledge among organization (Yu et al., 2004). This is in line with Wei et al. (2009) assertion that top management refers to the ability of an organization to link knowledge management behaviors with the organizational strategies, exploit the opportunities, promote the values of knowledge, communicate the best strategies, facilitate learning organizations to enhance knowledge (Wei et al. 2009), Because less commitment and support from top management leads to unsuccessful knowledge activities. Further, lack managerial direction can limit knowledge sharing practices in terms of facilitating the opportunities to get and learn new knowledge by training, sharing and updating new ideas and thoughts at all organizational levels (Riege, 2005).

2.7.2 Organizational structure

It is evident by Chawla and Joshi (2011) that organizational structure and levels of management play an important role in the organizations. Rhodes et al. (2008) stated that organizations are associated with a dynamic environment, so it is crucial to utilize various structures to enhance knowledge management in an organization. This is due to the fact that in an organization there are three levels of management, namely "top, middle and lower" (Chawla & Joshi, 2011).

Further, Chawla and Joshi (2011) asserted that top level has the authority as a decision maker to manage the organization in terms of resources that available to meet the objectives of its organization. The next level is to apply the goals set by top level as well as manages and motivates the individuals to achieve the objectives of the organization. Ultimately, implementation of work will be done by lower level accurately (Chawla & Joshi, 2011). In a similar note, Mahmoudsalehi et al. (2012) reported that organizational structure can be divided into three basics including "formalization, centralization, and integration". Centralization refers to the top levels of the organization in terms of making decision. On the other side, a decentralized structure can be viewed as facilitative to knowledge management success (Mahmoudsalehi et al., 2012). Because high centralization prevents interactions among members and reduces the opportunity for individual growth. Chawla and Joshi (2011) emphasized the role of top management is critical in terms of creating knowledge at all levels of the organization. This is in accordance with the finding by Hao et al. (2012) which revealed that the communication between all levels senior,

middle and junior managers very important to get very clear ideas about the working objectives. This is also consistent with Altinay and Altinay (2004) who reported that senior managers are required to understand and communicate new solutions, to face any changes of the environment. From this, the success of creating knowledge depends on the characteristics of organizational structure. Means that the structure of organization must be less centralized and less formalized to facilitate the creation, transfer and share knowledge.

Moreover, Bennett and Gabriel (1999) asserted that a centralized structure impedes sharing and communicate new ideas. This is because creation of knowledge occurs through communicating knowledge (Lee & Choi, 2003; Teece, 2000; Stonehouse & Pemberton, 1999). In contrast, formalization refers to the degree of rules and processes that used to guide the individuals and teams in doing their jobs (Mahmoudsalehi et al., 2012). In this context, formalization structure reduces the creation of knowledge because the flexibility is needed in creating and uses new knowledge such as, less rules and formal procedures among organization. Further, formalization decreases the interaction between members and organizations (Bennett & Gabriel, 1999).

Therefore, the main feature of organizational structures is the flexibility (Chawla & Joshi, 2011; Rhodes et al., 2008). Based on this, flexibility leads to informal action which in turn allows members to share their thoughts and ideas to create new knowledge (Bennett & Gabriel, 1999). This assertion is in line with the findings by

Wei et al. (2006) and Rhodes et al. (2008) and Wei et al. (2009) which argued that flexible organizational structure has the ability to share information and knowledge among teams and individuals which are facilitate the formulation of a knowledge map (Wei et al., 2006; Rhodes et al., 2008; Wei et al., 2009). In this flexible environment, organizational structure affects people and their interaction which may affect and facilitate transfer of knowledge among groups and individuals as well. Accordingly, organizational structure has the ability to influence knowledge creation, transferring and sharing amongst employees (Wei et al., 2006).

The findings by Mahmoudsalehi et al. (2012) affirmed that organizational structure and knowledge management are related in terms of creating, sharing, and utilizing knowledge. This is because of the degree of utilization of knowledge among organizations in terms of usage of its knowledge resource. In other words, the capabilities to create, transfer and share knowledge depends on the efficiency of organization for instance, decision making and problem solving, which is in turn, has a positive effect on the organizational structure. Eventually, Altinay and Altinay (2004) indicate that for organization to be capable in facing the changes in environment must decentralize decision making authority, have minimal hierarchical levels and adopt free flow communication channels. These features often enhance flexibility by rapid decision making and thus make a positive impact on an organization‟s opportunity seeking development.

2.7.3 Learning strategy

This study proposes learning strategy as a dimension of organizational capacity. Because the empirical study by Jun-ying (2010) shows that organizational learning has positive link with organizational improvement, which means that organizational learning can improve common values and behaviours of the organization. This is because of the ability of organizational learning to learn from others and share knowledge within the organization and contributes effectively on managing knowledge transfer and sharing (Rhodes et al., 2008). Jabar et al. (2011) argued that organizational learning is to create, store and apply new knowledge. In this regard, organizational learning is about empowering and motivating learning processes in MSC status organizations.

Therefore, organizational learning is based on the organizational climate, learning opportunities, individual talent management, and collaborative work process (Cho et al., 2013). In this context, organizational learning occurs only if teams learn collectively through experience and knowledge sharing among individuals (Chan et al., 2003). In fact, organizational learning is often viewed as a social process (Cavaleri, 2004). Therefore, Lin and Kuo (2007) consider that organizational learning as a continuous process of knowledge creation, acquisition and transformation of useful information. This is because learning is critical, as it provides dynamic environment to apply new knowledge (Lee & Choi, 2003). To do so, organizations develop and support learning culture by enhancing education and training (Lee & Choi, 2003). From this, the process of organizational learning is

crucial to achieve organizational objectives, as it is a vital process to innovation and creation new knowledge (Cho et al., 2013). Cho et al. (2013) and Song (2008) and Yoon et al. (2009) argue that the organizational learning process intends to create new practices, which accordingly supports knowledge transfer. These studies empirically found that knowledge creation process is crucial towards individuals in terms of gaining new knowledge, new products and services, which affect overall organization achievement (Cho et al., 2013). Mishra and Bhaskar (2011) summarized that learning results high capabilities which uses transferring and sharing knowledge to encourage innovation and development.

There have been a voluminous number of studies categorize a learning into three levels: individual, team and organizational level (Cho et al., 2013; Al-adaileh et al., 2012; Yoon et al., 2009; Albinsson & Arnesson, 2012; Stonehouse & Pemberton, 1999; Wang & Ellinger, 2011; Yeo, 2002; Jun-ying, 2010) stated that moving from individual learning to team learning to organizational learning is the basic process of the dynamic theory of organizational knowledge creation. Based on this, Al-adaileh et al. (2012) described the three levels of learning as the main component for any organization to continue learning organization (Al-adaileh et al., 2012). Further, organizational knowledge creation process, organizational learning, and individual learning are the main factors to enable organizations to learn (Yoon et al., 2009). On this note, Al-adaileh et al. (2012) stated that individual learning is converted into organizational learning through socialization process, where social interaction is the convergent point between the two. In other words, when the individual‟s elements

and organizational learning practices interact with each other, knowledge creation will be encouraged (Yoon et al., 2009). This is because learning starts with encouraging employees to develop organizations, through adapting and increasing efficiency by training and formal education of employees.

In a holistic view, the efficiency of the organizational learning depends on the extent of learning in the other levels as well as knowledge transfer and creation within the organization (Cho et al., 2013). For this, the research by Jun-ying (2010) revealed that organizational learning could effectively promote and improve business value and norms, which ultimately, contribute to innovation and growth. In general, learning is the gaining of new knowledge which can be achieved through knowledge transfer and sharing.

2.7.4 Human resource practices

It has also been reported that the organizational capacity involves another dimension, which is human resource practices (Lusthaus et al. 1995). According to Cho et al. (2013) Human resource practices is an area which increase the effectiveness of organizations, by encouraging and supporting knowledge creation practices. From this, Donate and Guadamillas (2011) argued that human resource practices support knowledge management and strongly related to member‟s behaviour, attitude and performance. In specific, the role of human resource practices as a function is to provide supportive work climate to facilitate learning among individuals by offering internal opportunities, for instance, provide training and rewards (Cho et al., 2013).

On the same note, there are many practices such as performance related pay, internal and external company training which allow interaction between employees, exchange ideas, transfer and apply new knowledge (Donate & Guadamillas, 2011). Therefore, it is crucial for an organization to manage the individuals to enhance their knowledge (Lee & Choi, 2003). In this regard, the employees are more expected to have positive attitudes toward knowledge transfer when the organization provides the appropriate programs, because, individual attitudes play a crucial role in applying knowledge transfer practices (Shiue et al., 2010). In this respect, empirical study by Kase et al. (2009) revealed the importance of interpersonal relations, by stating that human resource practices basically concentrated on enhancing interpersonal relationships and encouraging interactions. In a related vein, Cabrera & Cabrera (2005) stated that social capital is an interpersonal relationship that occur between individuals, because it facilitates the interactions among organizational members which are necessary for achieving long term objectives.

Further, Youndt and Snell (2004) reported that human resource practices increase support individual‟s knowledge by facilitating the interactions, transfer and sharing knowledge between all levels within organizations, in order to enhance mission and vision of the organization. Most importantly, Lane et al., (2001) find that training is the most important process which can be used to promote interactions and knowledge transfer between companies. This is consistent with the assertion by Cabrera and Cabrera (2005) that training and development programs increase general levels of self-efficacy among organizational employees. This is because employees

become more confident of their abilities and ready to exchange their knowledge with others. In other words, training leads to build strong relationships among employees which can increase knowledge transfer and sharing. In specific, the flexibility of knowledge transfer depends on the nature of relationships between knowledge senders and receivers within both inter and intra organizational context (Minbaeva, 2005), this is due to the fact that knowledge transfer and sharing will not only increase interactions among employees, but will result in a shared culture, shared norms and identification with others. In fact, interpersonal relationships occur during socialization processes which are necessary to affect knowledge transfer and sharing (Cabrera & Cabrera, 2005). Further, the link between social capital and knowledge highlights the importance of relationships among members in terms of innovation. Organizations can create a suitable environment in promoting knowledge transfer by applying effective practices and processes (Minbaeva, 2005). From these various perspectives, these dimensions need to be boosted with the other following dimensions of organizational motivation to achieve high results and objectives.

2.8 Organizational motivation

Organizational motivation represents the basic motives that drive individuals and organizations to achieve their objectives (Lusthaus et al., 1995; Lusthaus et al., 2002). This is due to the fact that these dimensions contribute to the organizations by affecting the quality of work and its effectiveness (Lusthaus et al., 1995). In addition, organizational motivation is basically about the understanding the processes that direct members in order to enhance organizations efficiency (Bang et

al., 2013). As stated earlier, framework by Lusthaus et al. (1995) and Lusthaus et al. (2002) has shown several sub-dimensions under the organizational motivation which were: history, mission, culture and incentives or rewards. These components considered as a motives that support both individuals and organizations. From this, to further understand knowledge transfer and sharing the present study adopts two dimensions; culture and rewards as it is revealed in the literature review (Sorakraikitikul & Siengthai, 2014; Zawiyah et al., 2012; Al-Gharibeh, 2011; Donate & Guadamillas, 2011) that they have a vital role in providing a conducive environment for knowledge transfer and sharing.

2.8.1 Culture

Based on Lusthaus et al. (1995) and Lusthaus et al. (2002) culture is a powerful motivating force: „‟by embodying the values sanctioned by the organization, the culture frames the boundaries of acceptable attitudes and behavior and creates a shared ethos‟‟‟. Culture has been defined also as a basic determinant of shared expectations, values, and beliefs that are considered as the correct way of thinking about and acting on problems and opportunities facing the organization (Al-Adaileh & Al-Atawi, 2011). On the other hand, Kriemadis et al. (2012) argue that culture as a system of shared values and beliefs that interact with a company‟‟s people, organizational structures, and control systems to produce behavioral norms. Organizational culture has essentially focused on values which encourage or hinder knowledge processes of creation and sharing (Donate & Guadamillas, 2011). From this, culture refers to the general knowledge sharing climate of an organization as

related to an integrated pattern of human behaviours including thoughts, speeches, actions, and artefacts. It is the ability to use knowledge which is based on the overall organizations culture (Wei et al., 2009).

According to Lee and Choi (2003) an appropriate culture should be established within the organization to encourage individuals to create and share knowledge. This is due to the fact that organizational culture is a tool that creates a supportive environment; it enables and influences knowledge sharing at individual, group and organizational levels (Sorakraikitikul & Siengthai, 2014). On this basis, Riege (2005) posits that knowledge transfer and sharing is based on willingness to share, which is in turn, depends on trust in creating a willingness to share knowledge (Sorakraikitikul & Siengthai, 2014).

However, if the environment does not encourage knowledge transfer and sharing the implementation of sharing knowledge amongst organization will result in failure (Donate & Guadamillas, 2011). In fact, organizations that have values of openness and trust are ready to develop behaviours through transfer and share knowledge. In this regard, Lee and Choi (2003) affirmed that organizational culture as a set of values that includes cooperation, trust and learning which improve knowledge creation process. In other words, Donate and Guadamillas (2011) argued that culture acts like a social control mechanism which, encourages or hinder the creation, transfer and share knowledge by the organization. In line with this, positive values

among organization such as openness and confidence, tolerance of errors will enhance knowledge transfer and sharing in an organization.

Overall, the study incorporates culture as a motivating force because the organizational behaviour determined by organizational culture (Suppiah & Sandhu, 2011). This is because the implementation of knowledge transfer and sharing as a policy in the organization can be affected by organization‟s culture, which is in turn, supports the individuals to transfer and share what they know between each other. Moreover, organizational culture supports organizations to improve, adapt, assimilate, and apply new knowledge. Rivera-Vazquez et al. (2009) argued that the organizations must identify and overcome some cultural barriers which are can be divided into two levels: barriers at the macro level and barriers at the micro level. For this, macro level is seeing knowledge transfer and sharing influenced by organizational culture, as the organizations have to promote good conditions and climate to share knowledge such as, provide the opportunities to communicate ideas and information internally which may enhance member‟s willingness to share knowledge. On the other side, micro level is based on national culture or national ideology which refers to cultural identity, which in turn, means a shared sense of companionship that involves the same norms, beliefs, interests and basic principles of living. The cultural identity that relates to a person‟s heritage helps them to identify with others who have the same traditions and basic belief system and this ultimately facilitate sharing knowledge (Rivera-Vazquez et al., 2009).

Based on the earlier discussion, managers are playing an important role in motivating and creating good environment which impact individuals to develop a culture of sharing knowledge, this managerial support is to create innovative products and services. Thus, the managers are the key element in overcoming cultural barriers in the organization.

2.8.2 Rewards

Rewards is a construct that empower organizational motivation. It refers to the benefits, whether financial or non-financial rewards, that can be obtained through individual‟s relationship with an organization (Newman & Sheikh, 2012). Rhodes et al. (2008) argued that rewards have the ability to encourage members in transferring and sharing knowledge. This emphasizes the link between rewards and knowledge sharing and team cooperation achievements (Al-Adaileh & Al-Atawi, 2011). At the same time, lack of incentives is one of the obstacles to knowledge transfer and sharing (Jahani et al., 2011; Soo et al., 2002).

In accordance to the previous assertion, Bartol and Srivastava (2002) and Jahani et al. (2011) found that rewards and knowledge transfer and sharing are interrelated. In this respect, Newman and Sheikh (2012) and Vuori and Okkonen (2012) stated that there are three types of rewards which are: extrinsic, intrinsic and social. Extrinsic rewards are those provided by the organization, which are do not come from the job itself. But it is considered as tangible and material benefits such as pay. On the other hand, intrinsic rewards refer to the intangible benefits that arise from the content of

the job itself and have consequences for the psychological development of the employee, such as, receive a feedback from top management and participation in making decision. The third type is social rewards which means that the positive interaction with others in the job to improve their environment work (Newman & Sheikh, 2012; Zhou et al., 2011; Williamson et al., 2009; Westover & Taylor, 2010; Lin, 2007; Osterloh & Frey, 2000).

Moreover, managers have the ability to influence workforce commitment if they are capable in how they reward their employees (Williamson et al., 2009). This means, organizations have to apply reward systems to encourage employees to share their knowledge (Lin, 2007). This is because monetary rewards possibly will encourage knowledge transfer and sharing through individual contribution and formal interactions within and between teams and knowledge transferring among organizations (Bartol & Srivastava, 2002). However, knowledge sharing through informal interactions has to be rewarded by intangible incentives such as recognition (Bartol & Srivastava, 2002). In this regard, the findings by Lin (2007) indicate that awareness of top management about knowledge sharing can influence employee willingness to share knowledge. To do so, managers must consider employees‟ responsibilities and achievement. For this reason, the availability of rewards system will guide employees‟ effort towards the achievement of the organizational objectives (Martín-Pérez et al, 2012). In a similar vein, top management should promote knowledge sharing activities, in terms of facilitating social interaction culture. This social interaction is a social exchange between two or more individuals,

it develops the interaction between all members which contribute to create a culture of transferring and sharing knowledge, which considered to be more important than extrinsically motivated employees such as those motivated by monetary compensation (Wickramasinghe & Widyaratne, 2012).

Cabrera and Cabrera (2005) recommended that the recognition of knowledge transfer and sharing by using rewards should be done with care, as rewards system should be well designed to encourage individuals to share their knowledge (Wickramasinghe & Widyaratne, 2012; Jahani et al., 2011). This is due to the fact that knowledge transfer and sharing depends on rewards system which is a common barrier to knowledge sharing in the organization of Malaysia (Sandhu et al., 2011), in this respect, organizations are encouraged to have incentive systems to reward positive behaviour of learning and sharing.

2.9 Organizational environment

Organizational environment is an attempt to understand and utilize forces outside organizational boundaries that are helping to enhance organizations (Lusthaus et al., 1995). Organizations contribute in the creation and utilization knowledge to improve their efficiency and effectiveness in order to face competitive environment. Lusthaus et al. (1995) and Lusthaus et al. (2002) suggest several dimensions to understand the organizational environment which incorporate administrative, political, social/cultural, economic, stakeholder. Based on this, the construct of organizational environment is considered to be the key factor to support organization in terms of

facilitating or inhibiting its activities. From this, the present study focuses only on information technology and networks, as it is the most emerged constructs in the literature (Sheng et al., 2013; Casimir et al., 2012; Riege, 2005; Guechtouli et al., 2013; Rhodes et al., 2008) which lead to foster and promote knowledge transfer and sharing.

2.9.1 Information technology

Information technology context is referring to the existing information technology infrastructure and capabilities supporting the knowledge management in an organization (Zander & Kogut, 1995). Sheng et al. (2013) argue that knowledge management begins and ends with building sophisticated information technology systems. This is because information technology system improves and accelerates knowledge transfer (Rhodes et al., 2008). For this, information technology plays a crucial role in transforming organization culture to ensure knowledge sharing in its activities (Gurteen, 1999). furthermore, knowledge management supports IT practices to enable organizations reach their goals easier. Further, IT facilitates, sharing and transferring knowledge by suitable ways effectively and efficiently using speed services to attain competitive advantage (Bairi et al., 2011). Sheng et al. (2013) clarifies information technology in terms of the capability of the organization to use and adopt IT in managing information, because the usage of IT is considered as the main component that enhances sharing knowledge among organizations, by using electronic tools to disseminate knowledge such as, intranets and databases (Casimir et al., 2012).

In this context, many obstacles that affect knowledge transfer and sharing are differences in education levels, lack of organizational learning climate (Riege, 2005). This is because it is challenging for the organizations in terms of creating an environment to share and transfer knowledge easier. In this regard, IT has the ability to access information to increase efficiency of the organization. Based on this, Gurteen (1999) highlighted this challenge to the managers in terms of creating appropriate environment to facilitate transferring and sharing knowledge among individuals and teams. This is because managers are the main determinant of knowledge sharing in choosing and implementing an appropriate technology that provides a close fit between all levels in organizations.

In this regard, Riege (2005) reveals some issues and obstacles to knowledge sharing such as, lack of IT in terms of maintenance and communication flows, lack of expectations of employees about the role of technology, diversity of IT systems and processes which needs effectiveness of organizational learning, lack of experience to use IT, lack of training in terms of new IT systems and lack of communication to show the advantages of new systems and processes. From this, these barriers presented the importance and needs of using IT systems among organizations.

However, to address these issues managers should be aware about these obstacles to increase the effectiveness of knowledge transfer and sharing. In this context, Sheng et al. (2013) and Casimir et al. (2012) asserted that information and communication technologies (ICT) are mostly used to transfer and store data by electronic means,

which include, e-mail, SMS text messaging, video chat, online social media and all different computing devices such as, laptop, and smart phones. Further, open communication and information exchange are considered as the key component of knowledge management (Sheng et al., 2013). Alavi and Leidner (2001) affirmed that ICT is to improve organizations by foster knowledge transfer in terms of communication among organizational members. In this line, Sher and Lee (2004) and Casimir et al. (2012) suggest ICT systems as one of the organizational factors that affect knowledge transfer.

Therefore, ICT system recognized in business intelligence areas such as portals, data mining, customer relation management and e-learning to increase knowledge of the organizations (Sheng et al., 2013). Bolisani and Scarso (1999) argued that ICT has the ability to accomplish all types of knowledge transfer tasks, for instance tacit knowledge. In addition, Johannessen (2008) asserted that ICT in the short term assists communication with a knowledge source. While in the long term, ICT contributes to the development of trust and commitment which increases social networks that can enhance knowledge transfer and sharing. In this respect, Tippins and Sohi (2003) conceptualize IT competency in three categories: ICT operations, which can be skills and processes that manage information, ICT objects means that using hardware and software to show and communicate information and eventually ICT knowledge which is the context of knowledge based know-how.

However, the existence of IT systems is necessary but sometimes not sufficient for knowledge transfer and sharing to occur (Alavi & Leidner, 2001). This is because, organizations need to implement not only proper knowledge management technologies but these technologies need to meet the expectations of employees, and those employees should be properly trained and provided with technical support (Zawawi et al., 2011; Casimir et al.,2012). To this end, Lin (2007) argues that ICT systems helping employees in receiving knowledge only but not in giving the knowledge to others which means that employees are using technology as their source of knowledge. Based on this, MSC status companies currently are using ICT systems as it is a knowledge intensive entities to achieve knowledge based society vision. To do so, MSC companies should apply ICT systems properly to build a culture of knowledge transfer and sharing to be more effective in facilitating sharing knowledge.

2.9.2 Networks

Another issue that has been debated in the literature of the organizational environment is networks. It has been reported that a personal network encompasses the interaction between people who hold different background, diverse types of knowledge, and different ideas which lead to achieve effectiveness and efficiency (Khachlouf et al., 2011). Zhou et al. (2010) stated that an individual's personal network is indeed important for the effectiveness of knowledge transfer. This is because, personal networks are the interactions between individuals which help to build knowledge. In this way, tacit knowledge is able to appear into the process of

generating ideas among members. Thus, it is important for the organizations to establish appropriate formal and informal networks to enable knowledge creation and sharing.

Further, Lee and Yu (2011) stated that closer mutual relationships are depends on the connection between members which is considered as an inter-organizational relationship. This is can be crucial in giving the organization the ability to increase exchange information and knowledge sharing (Lee & Yu, 2011). The social networks provide opportunities such as, face to face communication; produce strong ties between members and organizations which lead to empower trust between them (Chen et al., 2006).

Moreover, electronic networks are the key to transfer knowledge between organizations. But there are some difficulties in using electronic network for instance, transfer a tacit knowledge, because of its nature as it existed in the heads of people. In this context, electronic networks have the ability to transfer explicit knowledge rapidly with reducing communication cost (Chong et al., 2011; Chen et al., 2006). According to Chong et al. (2011) networks can increase the organizations‟ ability to obtain knowledge for business purpose. Further, MSC status organizations are identified as heavy users of multimedia and information and communications technology, which makes sense for them to believe in electronic social networks use to enhance knowledge transfer (Meddour et al., 2015).

However, Chen et al. (2006) revealed that both social networks and electronic networks are considered by organizations to be important source for them to get the needed knowledge. In this regard, a social network can play a key role in enhancing organizational capabilities. To do so, Fernandez-Pérez et al. (2012) examines how the characteristics of CEOs‟ social networks influence organizational performance. This is because CEO`s social networks empower the abilities of the organization‟s employees and exploiting the knowledge. In other words, the CEO‟s support is critical in an organization whether internally or externally. Externally, the CEOs are linking the organization through social networks to its environment to gain acceptance and support. Further, Internally the CEO focuses on the context of relationships that can build development to implement changes. Based on this, Riege (2007) noted that the effectiveness of knowledge transfer and sharing depends on the role of managers. This is because of their contributions as decision makers as well as they are more knowledgeable in managing diverse barriers facing organizations. To do so, managers encourage and motivate employees to transfer and share their knowledge openly.

Therefore, socialization is one of the main processes for knowledge creation, as mentioned by Nonaka (1994) who identified the importance of organizational employees‟ social interaction, which emphasize that active communication is important for knowledge creation and transfer (Yu et al., 2004). The process of knowledge transfer is often studied in the context of a social networks (Guechtouli et al., 2013; King et al., 2005), because knowledge transfer and sharing means more

interactions and networking between individuals and groups internally or externally of the organization. Socialization indeed helps all members in getting more knowledge by sharing and learning new practices.

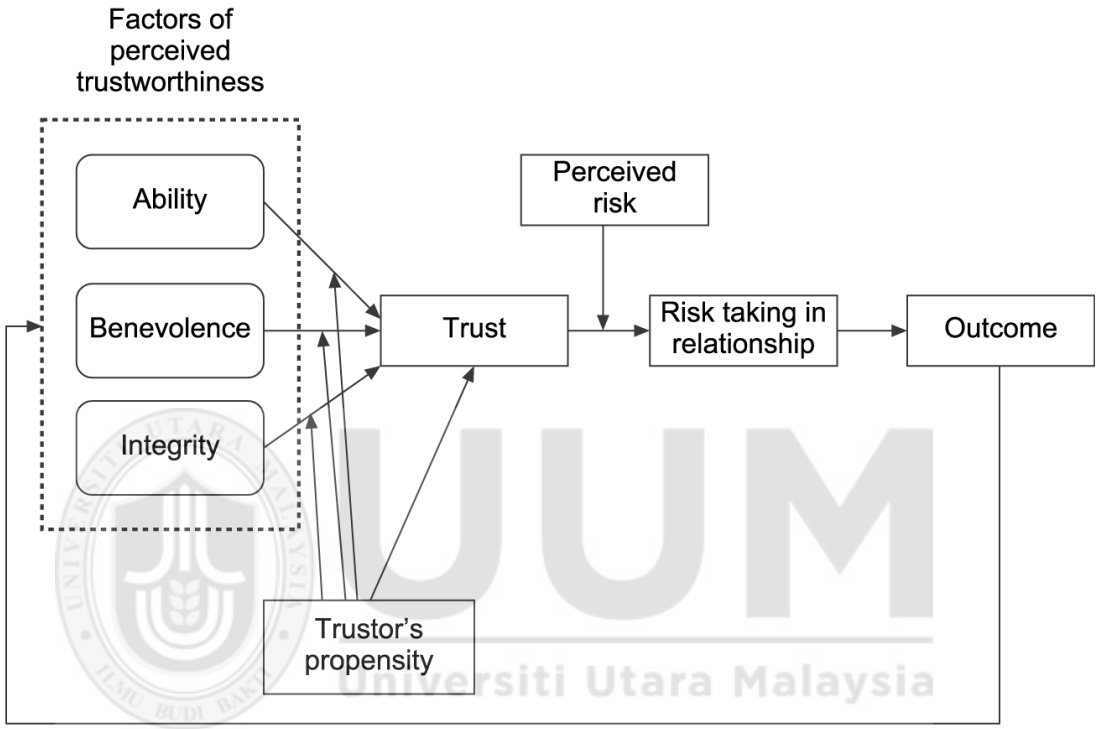
2.10 Trust

The definition of trust is proposed by Mayer et al. (1995) as:

> "*The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (p. 712).*

Mayer et al."s (1995) proposed definition of trust explains the extent to which one party is willing to trust another party which is a function of both sides to be trusted. Based on this, the trustor is the trusting party and the trustee is the party to be trusted. In other words, Mayer et al. (1995) suggested a model of organizational trust to distinguish between trust factors: the characteristics of the trustor as a propensity to trust and the perceived characteristics of the trustee such as, ability, benevolence and integrity. According to, Mayer et al."s (1995) model of organizational trust propensity to trust is defined as the general willingness to trust others. In a similar way, an ability is defined as the skills, competencies, and characteristics necessary to have influence in a specific domain. Further, benevolence is defined as the extent to which a trustor believes the trustee wants to do good to the trustor. Moreover, integrity is determined by the trustor, by making an assessment as to whether or not the trustee will adhere to an acceptable set of principles. From this, model of

organizational trust separates the relationship between a trustor and trustee characteristics. These characteristics are propensity to trust, ability, benevolence and integrity.



Source: Mayer *et al.* (1995, p. 715)

Figure 2.3

Mayer, Davis, & Schoorman's (1995) Proposed Model of Trust (p. 715)

Based on the proposed model by Mayer et al. (1995) characteristics of the trusting parties are crucial in determining the level of trust between them. In this regard, to enhance trust between a trustor and trustee, the trustor must have the propensity to trust. On the same line, to demonstrate trust towards trustee, the trustee must have the ability, benevolence and integrity which lead to a generalized expectation of trustworthiness. Therefore, Mayer et al. (1995) refer to these three characteristics as

the factors of trustworthiness. In this perspective, trustworthiness between a trustor and trustee is essential to have direct effects on knowledge transfer and sharing.

Accordingly, Levin and Cross (2004) suggested that there are two principal forms of trust which can enhance knowledge sharing: benevolence based trust and competence based trust. In this context, benevolence based trust is identified as the extent to which a trustee believed that he or she will not harm another party even when given the opportunity to do so. For instance, if a trustee (worker) needs information from a trustor (co-worker) then trustee will seek help to obtain this information, but in doing so the worker must be able to trust that the co-worker will not do harm by giving the wrong information even if the co-worker has the opportunity to do so (Ling, 2011).

On the same note, competence based trust is the extent to which trustee beliefs in trustor to be knowledgeable or competent in a given specific knowledge. For instance, to acquire information, the worker will seek and trust only the competence to give needed information. Hence, the lack of these factors will decrease or increase trust among both parties by influencing their behavior and communication (Levin & Cross, 2004; Mayer et al., 1995; Davis et al., 2000; Ling, 2011). This is because trust is identified to be the basis of which knowledge is transferred and shared in an organization. Further, the initiatives of knowledge management will fail without trust. If the individuals are not satisfied by the system of knowledge management in

their organization, they will not be ready to get into knowledge transfer and sharing activities (Ling, 2011).

In this context, Abrams et al. (2003) suggested two components of trust that promote knowledge transfer and sharing: benevolence and competence. Based on this, benevolence based trust allows individuals to request information without fear of harm to self-esteem or reputation. On the other hand, competence based trust allows individual to feel confident because the acquired information is given by competent and knowledgeable person. These two components are crucial to be important in which managers can promote interpersonal trust as a basis for knowledge transfer and sharing Abrams et al. (2003).

Further, the study by McAllister (1995) shows the interpersonal trust which incorporates both the willingness and positive expectation elements of trust. McAllister (1995) conceptualized two dimensions of interpersonal trust: cognition based trust which is among competence, responsibility, reliability and dependability to judge the trustworthiness of another party. While, affect based trust involves the emotional links between individuals which express care and concern about others. From this, Rhodes et al. (2008) affirmed that interpersonal trust plays a vital role in transferring and sharing knowledge among individuals. This is because, trust in an organization builds better relationships in order to achieve more cooperation, innovation and exchange information and knowledge. Al-Adaileh and Al-Atawi (2011) sees the atmosphere of trust is a source of sharing knowledge, which is

leading to the higher effectiveness among organizations. Further, trust promotes knowledge creation by encouraging the climate of work to reduce the fear of risk. Hence, high level of trust among members leads to high level of exchanging knowledge (Lee & Choi, 2003). Therefore, when trust occurs among individuals and teams, they are further prepared to exchange knowledge effectively (Takeuchi & Nonaka 2004). This is in line with the findings by Rhodes et al. (2008), who reported that trust can be improved through open communication between all levels in an organization, including top management because top management is considered as a source of trust among members, by motivating them "extrinsically and intrinsically" to create efficient knowledge transfers (Fernandez-Pérez et al., 2012). In this regard, managers have to encourage their employees in terms of transferring and sharing knowledge to enhance their efficiency (Cruz et al., 2009). This is because, the efficiency of employees will lead organizational knowledge processes to be essential in achieving and sustaining competitive advantage.

Top management plays a vital role in establishing knowledge transfer, because they have a critical effort to support conditions needed for knowledge sharing, through sharing information and seeking it from others in the organization. This can be valuable to solve organizational problems and improve the attitude that can create an environment of trust (Jahani et al., 2011). In other words, when the level of trust is decreased, the employees will devalue the incentives which can be a reason for them to terminate their membership in the organizations (Mayer et al., 1995; Davis et al., 2000; Colquitt et al., 2007). In fact, a willingness to engage in exchange knowledge

depending on mutual trust among team relationships (Mayer et al., 1995). Therefore, the open channels of communication within organizational interests are crucial between superiors and subordinates in terms of increasing trust (Tuan, 2012). The readiness to transfer and share knowledge can be enhanced when the mutual trust among individuals is developed.

In doing so, the current study incorporates trust as a mediator in explaining organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing links, because this study suggests that higher trust between individuals leads to higher and effective knowledge transfer and sharing as it is accepted a prerequisite for knowledge transfer and sharing (Evans, 2012). The assertion by Mayer et al. (1995) and Levin and Cross (2004) and Ling (2011) show that trusting relationships lead to a greater knowledge exchange because people are more willing to provide useful knowledge when trust exists.

Based on the literature, some studies used the construct of trust as a moderator such as, study by Brahm and Kunze (2012) has shown that trust moderates the effect of various variables on virtual team effectiveness in the German telecommunication company. For knowledge transfer and sharing to occur, trust among team members is essential (Pangil & Chan, 2014). From this, trust has been measured in a number of ways, such as, the reviewed studies did not at all explore similar settings, respondents, or relationships which have been documented by McEvily and Tortoriello (2011) the authors reviewed 171 empirical papers measuring trust in

organizational contexts which published from 1962 to 2010. Besides, they found almost 207 different psychometric trust measures. Accordingly, Evans (2012) stated that the literature revealed that trust had a relationship with effective knowledge sharing, behaviors, and activities. On the other side, from the literature review, a number of variables and models showed trust as an important aspect influencing knowledge transfer and sharing (Evans, 2012; Waheed et al., 2013; Muneer et al., 2014).

The empirical results by Ho et al. (2010), and Ho et al. (2012) in Taiwan found a direct relationship between trust and knowledge sharing. Further, several studies presented construct of trust as a mediator such as, Ho et al., (2010) utilized trust to be a mediating factor influencing knowledge sharing in Taiwan. Similarly, study by Levin and Cross (2004) examined the mediating role of trust in effective knowledge transfer in three different industries and countries: An American pharmaceutical company, a British bank, and Canadian oil and gas company, which increased their confidence in the study‟s external validity.

In the Malaysian context, Osmani et al. (2014) and Ling (2011) proposed a conceptual framework that includes motivational factors to influence knowledge sharing behaviour through trust as a moderator in IT organizations‟ members in Malaysia. With this, Osmani et al. (2014) insisted that the vital role of trust between individuals is its ability to facilitate knowledge transfer and sharing. For this, previous studies have shown the importance of trust in increasing individual‟s desire

and willingness to share information and ideas (Osmani et al., 2014; Evans, 2012). For the present study trust is a mediator variable in explaining the relationship between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing in MSC status organizations. The current study utilizes trust as a mediator because of its ability to examine and explains why and how predictor factors influence and affect knowledge transfer and sharing in terms of the capability of factors that have been used to support trust, at the same time, the consequences of trust. Which means that the study suggesting higher trust among members to gain higher knowledge transfer and sharing in MSC status organizations.

On the same note, knowledge transfer and sharing can be measured in terms of increasing exchange knowledge. To fill the gap, this study assesses the construct validity of trust as a mediator empirically and its effects to knowledge transfer and sharing by taking the most important factors that contribute towards knowledge transfer and sharing as well. This is congruent to the assertion by Osmani et al. (2014) that there is a need to examine trust and its effects on knowledge sharing empirically in the Malaysian context as it is still conceptual model, as well as, trust have been used as a moderator in his study. Besides, trust was tested overseas as a mediator for instance, the study by Evans (2012) and Ho et al. (2010) which is different from the Malaysian context.

Therefore, in creating the atmosphere of trust, it is important to enhance trustworthiness among members, as it is a social norm to be practiced in the organization (Ling et al., 2009). From this, to support knowledge transfer and sharing, the role of the organizations is to promote trust amongst individuals. With this, members will be ready to disseminate knowledge. In doing so, Ling (2011) insisted that individuals must be able to apprehend the importance of knowledge sharing, especially in terms of how knowledge sharing has helped their organization in the past. To achieve this, Ling (2011) recommended that organizations are cornerstone to make use of best practices, to train workers on the tools used to share information within the organization to provide and disseminate information when it is needed.

2.11 Underpinning theory in the study

This study utilizes the organizational knowledge creation theory (Nonaka, 1994; Nonaka & Konno, 1998; Nonaka & Toyama, 2005; Nonaka et al., 2000; Nonaka & Toyama, 2003), because, externalization, combination, internalization and socialization processes show a significant relationship to knowledge creation (Teerajetgul & Charoenngam, 2006; Lee & Choi, 2003; Nonaka, 1994; Choi & Lee, 2002). In this regard, this theory will explain the process of knowledge being created in MSC status organizations as it is a knowledge intensive entities through the knowledge conversion processes. For this purpose, this theory has been identified to be applicable in explaining the theoretical framework of this study.

This study intends to examine the readiness of knowledge transfer and sharing in MSC status organizations. Readiness is perceived when the MSC status organizations give high level of intention to be knowledge intensive entities. In this regard, the readiness can be happened when both organization and individuals are integrated to be involved in the SECI processes. These processes comprised of four components, namely: socialization, externalization, combination and internalization, which are used to understand and assess knowledge transfer and sharing in MSC. The first level of this theory is the process of converting new tacit knowledge through shared experiences (Nonaka et al., 2000). In other words, SECI processes begin with socialization, which is the process in which tacit knowledge is shared between individuals (Nonaka & Toyama, 2005). At this level, knowledge is more difficult to share because of its tacit nature, which means that it is not easily visible

and expressible and very personal (Nonaka, 1994; Nonaka et al. 2000). In the second level, externalization, which means that tacit knowledge, is transformed to explicit knowledge through documents and technical manuals. The combination level is a stage for making existing explicit knowledge into more complex explicit knowledge by gathering information from inside and outside the organization. Finally, Internalization, means that explicit knowledge is converted back to tacit knowledge through acts and practices (Nonaka, 1994; Nonaka et al. 2000). Figure 2.4 shows the SECI knowledge conversion process.

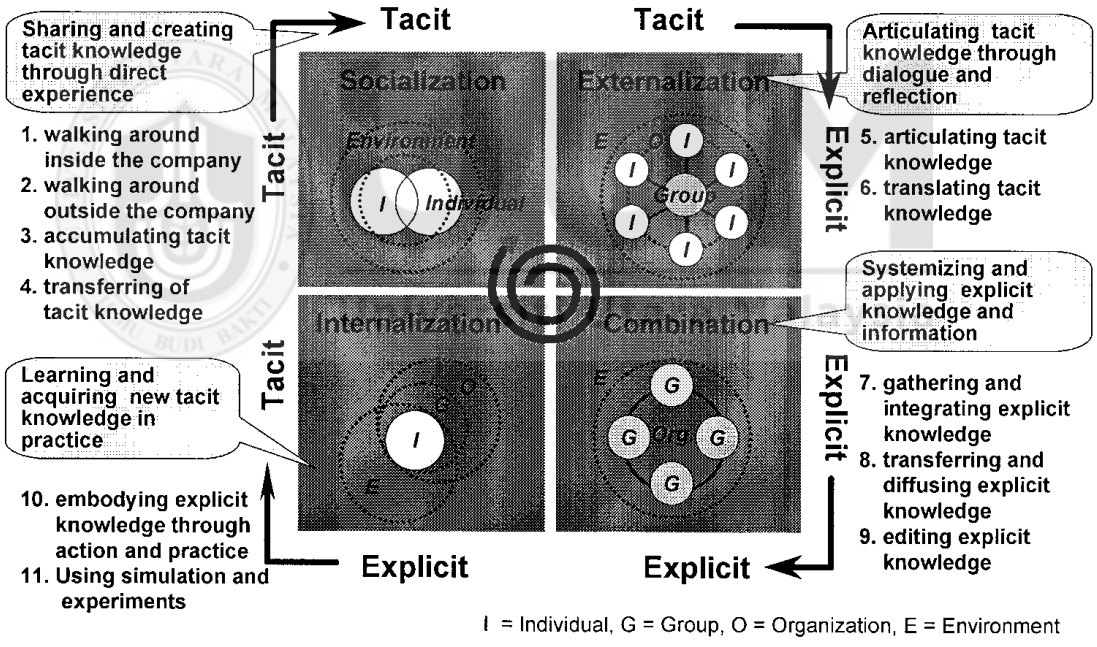


Figure 2.4
SECI model of knowledge creation.

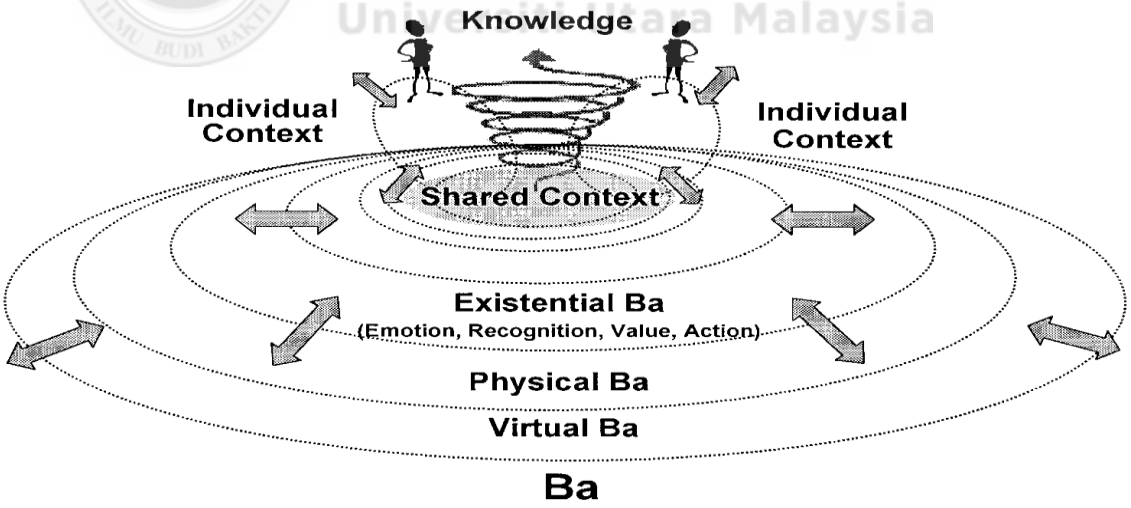
Knowledge transfer and sharing is the process of interaction that occurs among individuals, groups, and organizations (Abdul Karim et al, 2012). From this, socialization, externalization, combination, and internalization are considered as the

main processes of knowledge creation (Nonaka, 1994; Nonaka et al., 1994; Nonaka et al., 2000; Nonaka & Toyama, 2003; Nonaka & Konno, 1998; Nonaka & Toyama, 2005). Accordingly, the empirical studies conducted by Nonaka (1994) and Choi and Lee (2002) and Hamid and Salim (2011) and Song et al. (2011) and Rhodes et al. (2008) and Abdul Karim et al. (2012) and Sandhu et al. (2011) and Lee and Choi (2003) highlighted the importance of using SECI approach to enhance knowledge management in an organization. Therefore, this study proposes this theory to assess the current practices of knowledge transfer and sharing in MSC status organizations. This is because SECI approach is known in the management studies (Song et al., 2011; Rhodes et al. 2008; Abdul Karim, 2012; Sandhu et al., 2011; Lee & Choi, 2003; Choi & Lee, 2002; Nonaka, 1994; Hamid & Salim, 2011). In particular, knowledge transfer and sharing (Rhodes et al., 2008; Abdul Karim et al., 2012; Riege, 2005; Lee & Choi, 2003; Choi & Lee, 2002). In the same vein, organizations also are predicted to be a part of knowledge transfer as well. In other words, The SECI process shows different perspectives on the creation of knowledge by individuals in an organization which is positively related to the organization`s achievement (Lee & Choi, 2003).

Even though, the SECI processes exist in all organizations, but employees do not recognize that whether they are involved in this process or not. Based on this, organizations need to encourage individuals to convert their information and knowledge into explicit and share it with the other members in the organization. Successful organizations, basically are those who are able to recognize all tacit and

explicit knowledge and fully utilize it. According to Sandhu et al. (2011) this theory provides a comprehensive theoretical view on how to conceptualize the entire knowledge creation process. Within the SECI processes, knowledge transfer and sharing played a dynamic role in creating new knowledge. Because, the achievement of knowledge transfer and sharing has depended on the commitment of individuals and organizations (Nonaka, 1994).

However, as mentioned by Nonaka and Toyama (2003) the process of SECI is not enough for knowledge creation and conversion, because the SECI process needs a shared space or „ba‟ to build relationships. Figure 2.5 shows the conceptual of „ba‟ which emphasized the role of contextual and social elements in knowledge conversion.



Source: Nonaka and Toyama (2003, p. 7)

Figure 2.5
Conceptual representation of ba.

The concept of „ba" which is the Japanese word for place consisting of four platforms: originating, interacting, cyber, and exercising (Song et al., 2011). For each mode of knowledge transfer in the SECI process, there is a corresponding type of "ba" suited to that conversion mode. Originating "ba" in the socialisation phase, where people share feelings, emotions, experiences and mental models through physical, face-to-face contact. It is the primary "ba" where the knowledge creation process begins. Interacting "ba" in the externalization phase is characterized by dialogue through which individual knowledge is converted into shared terms and concepts. It is marked by extensive use of metaphors. In contrast, cyber "ba" in the combination phase is a place of interaction in the virtual world, facilitated by the use of information technology such as on-line networks and groupware. Exercising "ba" in the internalisation phase facilitates the conversion of explicit knowledge to tacit knowledge for the individual, which is enhanced primarily by using explicit knowledge in real life or simulated applications. To this end, Knowledge cannot be created without specifying the context (time, space, and relationships) because context is essential and Ba is the inter-subjective space-time for knowledge emerges (Nonaka & Konno, 1998; Nonaka & Toyama, 2003).

Based on this, SECI processes reflect the degree to which individuals are involved and ready to implement the process. At the same time, the extent to which MSC status organizations are ready to adopt these processes.

2.12 Gaps in the literature

Based on the literature, this study examines the influencing factors which are organizational capacity, organizational motivation and organizational environment in predicting knowledge transfer and sharing mediated by trust. Although several organizational factors have been identified in the literature as illustrated in Table 2.2.

Table 2.2
Factors that impact knowledge transfer and sharing and the researchers

Factor	Variable	Researcher
1. Organizational capacity	Top management support	Khalifa and Liu (2003); Timothy et al. (2011); Singh (2008); Wei et al. (2009); Riege (2005); Daud (2012); Al-Gharibeh (2011); Lin (2007).
	Organizational structure	Syed-Ikhsan and Rowland (2004ab); Lee and Choi (2003); Teece, (2000); Rhodes et al., (2008); Stonehouse and Pemberton (1999); Wei et al. (2006); Wei et al. (2009); Mahmoudsalehi et al. (2012); Chawla and Joshi (2011).
	Learning strategy	Chan et al. (2003); Lee and Choi (2003); Cho et al. (2013); Rhodes et al. (2008); Lin and Kuo (2007); Song (2008); Yoon et al. (2009); Al-adaileh et al. (2012); Yoon et al. (2009); Albinsson and Arnesson (2012); Stonehouse and Pemberton (1999); Wang and Ellinger (2011); Yeo (2002); Jun-ying (2010); Jabar et al. (2011).
	Human resource practices	Donate and Guadamillas, (2011); Lee and Choi (2003); Shiue et al. (2010); Cho et al. (2013); Minbaeva (2005); Lane et al. (2001); Cabrera and Cabrera (2005).
2. Organizational motivation	Culture	Sorakraikitikul and Siengthai (2014); Lee and Choi (2003); Wei et al. (2009); Donate and Guadamillas (2011); Riege (2005).
	Rewards	Jahani et al. (2011); Soo et al. (2002);

			Rhodes et al. (2008); Al-Adaileh and Al-Atawi (2011); Newman and Sheikh (2012), Vuori and Okkonen (2012); Zhou et al. (2011); Williamson et al. (2009); Westover and Taylor (2010); Lin (2007); Osterloh and Frey (2000).
3.	Organizational environment	Information technology	Sheng et al. (2013); Syed-Ikhsan and Rowland (2004a); Gurteen (1999); Casimir et al. (2012); Riege (2005); Riege (2007); Alavi and Leidner (2001); Sher and Lee (2004); Rhodes et al. (2008); Zawawi et al., (2011).
		Networks	Zhou et al. (2010); Zupan and Kase (2007); Lee and Yu (2011); King et al. (2005); Chong et al. (2011); Chen et al. (2006); Riege (2007); Yu et al. (2004); Guechtouli et al. (2013).

Most of these influencing factors were studied overseas, for instance; two studies by Rhodes et al. (2008) and Lin (2007) have been conducted in Taiwanese high-tech companies and organizations, which are different from the Malaysian context (Chaudhry, 2005; Choi & Lee, 2002). Therefore, the organizational factors needed to be examined locally in the Malaysian context to understand the impact of these factors on knowledge transfer and sharing in MSC status organizations.

On top of that, in the Malaysian context published work on knowledge management are limited (Fathi et al., 2011; Wei et al., 2009; Yusof et al., 2012; Sandhu et al., 2011; Yusof & Ismail, 2009; Razali & Juanil, 2011), as a result, the understanding of knowledge management in the Malaysian context become difficult (Gan et al., 2006). In addition, most studies written locally on knowledge management were conceptual framework (Osmani et al., 2014; Yusof et al., 2012). Further, some

studies on knowledge management in Malaysia (Gan et al., 2006; Wei et al., 2009; Syed-Ikhsan & Rowland, 2004ab; Fathi et al., 2011; Yusof & Ismail, 2009) indicated that Malaysian organizations tend to be slow in the uptake of knowledge management and that levels of knowledge management are still in the infancy stage and some of these studies does not address the knowledge transfer and sharing contexts (Fathi et al., 2011; Daud, 2012; Daud & Yusoff, 2011). According to Sandhu et al. (2011) some studies on knowledge sharing behaviors are done locally, for instance, Ling et al. (2009) who covered knowledge sharing behavior in an "MNC in Malaysia". On the same ground, Razali and Juanil (2011) reported that the detailed guideline or guidebooks on Knowledge management strategies are limited. On the other hand, there is a dearth of studies on knowledge management have been conducted in the telecommunication industry that covers knowledge transfer and sharing (Wei et al., 2009; Syed-Ikhsan & Rowland, 2004b; Fathi et all., 2011; Yusof & Ismail, 2009). Recently, the study by Yusof et al. (2012) and Osmani et al. (2014) is among the primary research which have addressed comprehensive knowledge sharing preliminary success factors in the Malaysian organization.

The available studies are generally on knowledge management and not on the knowledge transfer and sharing (Syed-Ikhsan & Rowland, 2004a; Daud, 2012; Daud & Yusoff, 2011). This is because knowledge transfer and sharing is considered new perception which is necessary to share information to make knowledge management work among the organizations. This is consistent with the assertion by Ikhsan and

Rowland (2007) that there is a lack of practicing knowledge sharing in the Malaysian organizations (Syed-Ikhsan & Rowland, 2004b; Sandhu et al., 2011).

Further, due to the fact that an increasing concern of the government of Malaysia to create a knowledge based economy, it is necessary to understand the nature of knowledge that is already embedded in the organization‟s business processes and how this knowledge is used as an important component source of competitive advantage (Syed-Ikhsan & Rowland, 2004ab). Based on the limited studies on knowledge transfer and sharing among MSC status organizations and its contribution to the vision of 2020, this study proposed a holistic model comprises organizational factors and trust to facilitate knowledge transfer and sharing in MSC status organizations. In other words, it is necessary to suggest a holistic model that takes into account critical factors that affect trust and its impact on knowledge transfer and sharing. Thus, this study giving equal attention to all critical factors to facilitate the implementation of knowledge transfer and sharing in MSC status organizations. This is because most studies are usually investigated partially these factors (Lee & Choi 2003). Therefore, this study attempts to incorporate a comprehensive model that provides insights into the factors that must be taken into account when implementing knowledge transfer and sharing as well as the impact of knowledge transfer and sharing on MSC status organizations.

Due to the limited empirical studies on MSC status organizations, the mediating role of trust is to explain the relation between the predictor and the criterion variables

(Bennett, 2000; Baron & Kenny, 1986). This study thus attempts to investigate the mediating effect on organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing to enhance understanding on the predictor and the criterion relationship (Bennett, 2000; Baron & Kenny, 1986). In other words, the researcher examines the construct validity of each variable in this research as follows: organizational capacity encompassing top management support, organizational structure, learning strategy and human resource practices. And organizational motivation which included culture and rewards. On the same line, organizational environment comprises of information technology and networks, as well as, trust as a mediator to explain and understand the influence of each dimension in organizational capacity, organizational motivation and organizational environment of knowledge transfer and sharing which is evaluated as the dependent variable in the study.

2.13 Hypotheses of study

Based on the literature review the objective of this study is to test the following hypotheses:

2.13.1 Relationship between organizational factors and knowledge transfer and sharing

From the literature review, an abundance of studies have demonstrated the relationship between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing such as, top management support (Khalifa & Liu, 2003; Timothy et al., 2011; Singh, 2008; Wei et al., 2009; Riege, 2005; Daud , 2012; Al-Gharibeh, 2011; Lin, 2007), organizational structure (Syed-Ikhsan & Rowland, 2004ab; Lee & Choi, 2003; Teece, 2000; ; Rhodes et al., 2008; Stonehouse & Pemberton, 1999; Wei et al., 2006; Wei et al., 2009; Mahmoudsalehi et al., 2012; Chawla & Joshi, 2011), learning strategy (Chan et al., 2003; Lee & Choi, 2003; Cho et al., 2013; Rhodes et al., 2008; Lin & Kuo, 2007; Song, 2008; Yoon et al. ,2009; Al-adaileh et al., 2012; Yoon et al., 2009; Albinsson & Arnesson, 2012; Stonehouse & Pemberton, 1999; Wang & Ellinger, 2011; Yeo, 2002; Jun-ying, 2010; Jabar et al., 2011), human resource practices (Donate & Guadamillas, 2011; Lee & Choi, 2003; Shiue et al., 2010; Cho et al., 2013; Minbaeva, 2005; Lane et al., 2001; Cabrera & Cabrera, 2005), culture (Sorakraikitikul & Siengthai, 2014; Lee & Choi, 2003; Wei et al., 2009; Donate & Guadamillas, 2011; Riege, 2005), rewards (Jahani et al., 2011; Soo et al., 2002; Rhodes et al., 2008; Al-Adaileh & Al-Atawi, 2011; Newman & Sheikh, 2012, Vuori

& Okkonen, 2012; Zhou et al., 2011; Williamson et al., 2009; Westover & Taylor, 2010; Lin, 2007; Osterloh & Frey, 2000), Information technology (Sheng et al., 2013; Syed-Ikhsan & Rowland, 2004a; Gurteen, 1999; Casimir et al., 2012; Riege, 2005; Riege, 2007; Alavi & Leidner, 2001; Sher & Lee, 2004; Rhodes et al., 2008; Zawawi et al., 2011), Networks (Zhou et al., 2010; Zupan & Kase, 2007; Lee & Yu, 2011; King et al., 2005; Chong et al., 2011; Chen et al., 2006; Riege, 2007; Yu et al., 2004; Guechtouli et al., 2013) due to the large number of factors that impact knowledge transfer and sharing. Most of these constructs for instance, IT, learning strategy and structure have been empirically examined based on western countries as mentioned earlier. Therefore, these organizational factors are needed to be conducted in the Malaysian context. In specific, needs to be tested empirically in MSC status organizations as a comprehensive model which can provide critical factors that influence knowledge transfer and sharing.

2.13.1.1 Relationship between organizational capacity and knowledge transfer and sharing

As mentioned earlier, several studies have emerged the influence of dimensions on knowledge transfer and sharing. Top management support is one of these dimensions which was reported to have a link to knowledge transfer and sharing (McMurray et al., 2012; Khalifa & Liu, 2003; Timothy et al., 2011; Singh, 2008; Wei et al., 2009; Riege, 2005; Daud , 2012; Al-Gharibeh, 2011; Lin, 2007; Nonaka & Toyama, 2005; Yu et al., 2004; Lakshman, 2007) this means that top management support plays a different roles in creating a new positive knowledge in an organization such as, top

management have to encourage and support learning among individuals and groups in the organization. Which is, in turn, lead to apply newly acquired knowledge to update current knowledge through “workshops, discussion forums, training needs and face to face communications” which are the main methods in facilitate, share and transfer knowledge. Accordingly, the study predicted that top management support exerts a positive influence on organizational members‟ knowledge and management activities by supporting knowledge among organization. Therefore, it is predicted that:

H1: Top management support will have a positive effect on knowledge transfer and sharing.

Syed-Ikhsan and Rowland (2004b) and Lee and Choi (2003) and Teece (2000) and Rhodes et al. (2008) and Mahmoudsalehi et al. (2012) and Chawla and Joshi (2011) noted that organizational structure is associated with knowledge transfer and sharing. According to Rhodes et al. (2008) flexibility in an organization has the ability to share information and knowledge among teams and individuals. In other words, the findings by Wei et al. (2006) and Rhodes et al. (2008) and Wei et al. (2009) and Mahmoudsalehi et al. (2012) has shown that the relationship between organizational structure and transferring knowledge depends on the nature of organizational structure types. The most important aspects of structure include centralization, formalization, complexity and integration which can describe the relationship between organizational structure and knowledge transfer and sharing. Structural

relationships describe the knowledge flows among organizational members. This is because decentralized organization structure can lead to the flexibility and informal communication which allow interaction between all members in an organization to share, use and create new ideas. Conversely, centralized organization is limited because the flow of ideas and communication is not occurring. Based on the different types of organizational structure, from this, it is predicted that:

H2: Organizational structure will have a positive effect on knowledge transfer and sharing.

According to these empirical studies, (Chan et al., 2003; Lee & Choi, 2003; Cho et al., 2013; Rhodes et al., 2008; Lin & Kuo, 2007; Song, 2008; Yoon et al. ,2009; Al-adaileh et al., 2012; Yoon et al., 2009; Albinsson & Arnesson, 2012; Stonehouse & Pemberton, 1999; Wang & Ellinger, 2011; Yeo, 2002; Jun-ying, 2010; Jabar et al., 2011) learning strategy related to the knowledge transfer and sharing. This is based on the fact that learning strategy is a social process which can exist through experience and knowledge sharing among individuals. Because learning has the ability to share and transfer information, create, use and apply new knowledge. To do so, organizations should encourage learning culture by offering education, training programs to enhance learning. From this, it is predicted that:

H3: Learning strategy will have a positive effect on knowledge transfer and sharing.

The empirical study by Fong et al. (2011) noted that human resource practices has a link to knowledge transfer and sharing, accordingly, this is because, the main practices of HR to facilitate and encourage knowledge transfer and sharing, are stuffing function, compensation and rewards, performance appraisal, teamwork, training and development. In a parallel fashion, Donate and Guadamillas (2011) and Lee and Choi (2003) and Shiue et al. (2010) and Cho et al. (2013) and Syed-Ikhsan and Rowland (2004a) and Minbaeva (2005) and Lane et al. (2001) and Cabrera and Cabrera (2005) reported the important role of HR practices on knowledge transfer and sharing in terms of providing a positive attitudes and appropriate programs such as training and development. For this purpose, it is predicted that:

H4: Human resource practices will have a positive effect on knowledge transfer and sharing.

2.13.1.2 Relationship between organizational motivation and knowledge transfer and sharing

Sorakraikitikul and Siengthai (2014) and Waheed et al. (2013) and Lee and Choi (2003) and Wei et al. (2009) and Donate and Guadamillas (2011) and Riege (2005) proposed that culture and knowledge transfer are related. This is because culture determines how organizational members are communicating, transfer and share knowledge within the organization as it is the most important issue in managing organizations that creates a set of values and norms to guide individuals and their actions. Conversely, Riege (2005) clarified that culture can be seen as a knowledge

transfer barrier. It does not provide sufficient support for sharing practices because culture can inhibit or facilitate the implementation of knowledge transfer and sharing. Further, transferring and sharing knowledge seem to fail because usually organizations adjust their culture based on their goals and strategy. Based on this, it is predicted that:

H5: Culture will have a positive effect on knowledge transfer and sharing.

The empirical findings by Wickramasinghe and Widyaratne (2012) reported that rewards have a relationship with knowledge transfer and sharing. Hence, rewards are identified as monetary incentives such as bonuses, and non-monetary rewards such as job security. Research findings, such as, Newman and Sheikh (2012) and Vuori and Okkonen (2012) and Jahani et al., (2011) and Soo et al. (2002) and Rhodes et al. (2008) and Al-Adaileh and Al-Atawi (2011) and Zhou et al. (2011) and Williamson et al. (2009) and Westover & Taylor (2010) and Lin (2007) and Osterloh and Frey (2000) reported that rewards could encourage teams in an organization to facilitate and share their knowledge. In this regard, it is predicted that:

H6: Rewards will have a positive effect on knowledge transfer and sharing.

2.13.1.3 Relationship between organizational environment and knowledge transfer and sharing

Another potential to support organizations is information technology, commonly recognized that IT as a key factor that enhancing organization‟s activities. From this, several studies noted that information technology is related to knowledge transfer and sharing (Sheng et al., 2013; Syed-Ikhsan & Rowland, 2004b; Gurteen, 1999; Casimir et al., 2012; Riege, 2005; Riege, 2007; Alavi & Leidner, 2001; Sher & Lee, 2004; Rhodes et al., 2008; Zawawi et al., 2011) this is because information technology plays a crucial role in transferring and sharing knowledge. It is supporting collaboration and communication among organizational members by using different computing devices to enhance knowledge transfer. Based on this, it is predicted that:

H7: Information technology will have a positive effect on knowledge transfer and sharing.

In addition, Guechtouli et al. (2013) argued that networks basically are linked to knowledge transfer and sharing. This is because networks allow the interactions between individuals and groups inside or outside the organizations. According to Zhou et al. (2010) and Zupan and Kase (2007) and Lee and Yu (2011) and King et al. (2005) and Chong et al. (2011) and Chen et al. (2006) and Riege (2007) and Yu et al. (2004) the social networks and interaction provide opportunities such as, face to face communication. Further, the success of knowledge exchange depends on the

overall relationships between the source unit and the recipient unit. Therefore, it is predicted that:

H8: Networks will have a positive effect on knowledge transfer and sharing.

2.13.2 Relationship between organizational factors and trust

2.13.2.1 Relationship between organizational capacity and trust

This study postulated that there is a link between organizational capacity and trust. The study suggested that organizational capacity related to trust by its dimensions which are considered as the most important capabilities to achieve vision and mission of the organizations. In this context, top management support is one of these resources and capabilities that can promote trust among organizations. The study by Bartram and Casimir (2007) has shown that top management and trust are correlated to achieve various outcomes such as, satisfaction. In this respect, trust considered as a willingness to depend on another party (Mayer, 1995). As well as, top management support is crucial in creating supportive climate and providing sufficient resources (Lin, 2007). For instance, sustaining trust is based on manager‟s communicative and supportive behaviors, because manager‟s behavior was directly related to employee trust (Joseph &Winston, 2005). Based on this, it is predicted that:

H9: Top management support will have a positive effect on trust.

It is evident that organizational structure and trust are linked. So there is a need to use various structures to enhance trust, this is because the organization faces a dynamic environment. Based on this, it has been argued by Krasman (2014) that different organizational structures influence subordinates‟ perceptions in terms of trust towards their supervisors and work such as, formalization and centralization structure utilizing rules to accomplish their jobs. At the same time, prevent the interaction between members which lead to inhibit trust among individuals and teams. Conversely, flexible structure could promote trust because flexible organizational structure has the ability to create climate of trust to share information and knowledge among teams and individuals which are facilitate social networks, and communication channels (Wei et al., 2006; Rhodes et al., 2008; Wei et al., 2009). This is can support a positive impact on trust. Thus, it is predicted that:

H10: Organizational structure will have a positive effect on trust.

It has been also assumed that linking learning strategy to trust is a critical relationship to implement the processes of knowledge transfer and sharing. Based on literature Jabar et al. (2011) learning is based on the level of trust between members. Similarly, employees within high trusting relationships they have the ability to be more effective by learning from others and share information within the organization which could contribute effectively in their achievement (Rhodes et al., 2008; Cho et al., 2013; Song, 2008). On the other side, the existence of knowledge and information with lack of trust this can be hinder the transferring and sharing

knowledge because trust is critical in an inter organizational team. Based on this it is predicted that:

H11: Learning strategy will have a positive effect on trust

Researchers have linked human resource practices and trust (Cho et al., 2013; Donate & Guadamillas, 2011) as the most important affective relation for transferring complex tacit and explicit knowledge. Similarly, training and development could enhance trust by providing interpersonal relations content during training (Kaše et al., 2009). Donate and Guadamillas (2011) reported that human resource practices support knowledge management and strongly related to trust by influencing employee‟s behaviour, attitude and achievement. Accordingly, Cho et al. (2013) noted that the main task of human resource practices is to provide appropriate environment to assist individuals and teams to gain new knowledge by providing some opportunities to prove themselves such as, training programs and rewards to influence trusting relationships. The empirical studies by, Vanhala and Ahteela (2011), and Gould-Williams (2003) yield that HR practices had a strong predictive effect on trust. When human resource practices systematically linked with general management strategies, the expectation of trust could be high. Based on this, it is predicted that:

H12: Human resource practices will have a positive effect on trust

2.13.2.2 Relationship between organizational motivation and trust

It is also important to assess the relationship between organizational motivation and trust. This is because organizational motivation has been posited to have a link with trust (Sorakraikitikul & Siengthai, 2014; Donate & Guadamillas, 2011). Culture is proposed by many researchers as an important dimension in enhancing trust (Wiewiora et al., 2014; Mayer et al., 1995; Rhodes et al., 2008; Sorakraikitikul & Siengthai, 2014; Donate & Guadamillas, 2011; Lee & Choi 2003; Martín-Pérez et al., 2012; Davis et al., 2000; Bang et al., 2013; Colquitt et al., 2007). Based on this, the role of culture in the organization is very important as it is a set of norms, values and procedures that direct individual"s behaviour. Further, culture provides a strong support in building knowledge transfer and sharing among the individuals by building strong bond of trust. Because the interaction between members leads to trust each other, as the trust increases the process of transferring knowledge (Waheed et al., 2013). From this, managers are required to create an appropriate environment for mutual trust which is in turn, allow members to achieve their capabilities, at the same time it will be recognized and rewarded in some ways (Martín-Pérez et al., 2012). Trust occurs in an organization when the individuals get enough support from managers by opening more channels of communication and interaction to share knowledge smoothly to enhance the overall culture based trust. Based on this, it is predicted that:

H13: Culture will have a positive effect on trust

It has also been reported that linking rewards to trust is a crucial factor in motivating employees (Tung et al., 2011). Most reward systems can improve individual relation and actions (Markova & Ford, 2011). For instance, managers should consider employees‟ tasks. Based on this, the organization could provide suitable rewards that properly guide employees‟ effort and behaviour towards the achievement of the organizational mission (Martín-Pérez et al, 2012). To do so, Organizational rewards can be through monetary incentives such as, increased salary and bonuses to non-monetary rewards such as, promotions and job security (Markova & Ford, 2011). Several organizations have provided reward systems to encourage their employees to share their knowledge (Lin, 2007). This can be a motivator factor to promote trust among individuals and teams. Therefore, to examine the importance of rewards towards trust, it is predicted that:

H14: Rewards will have a positive effect on trust

2.13.2.3 Relationship between organizational environment and trust

Based on the literature, organizational environment and its dimensions are related to trust. information technology is one of these dimensions that related to trust through interaction and communication between organizational members (Rhodes et al., 2008; Sheng et al., 2013; Casimir et al., 2012; Riege, 2005; Riege, 2007; Khachlouf et al., 2011; Chong et al., 2011; Chen et al., 2006; Fernandez-Pérez et al., 2012). Further, IT facilitates sharing and transferring knowledge by suitable ways effectively and efficiently using speed services to enhance trust. Such as groupware,

online databases, intranet. From this, organizations are using information technology to facilitate and increase available social networks by overcoming geographical boundaries and support communication and collaboration among organizational employees (Lin, 2007; Bairi, 2011; Sheng et al., 2013). Ardichvili et al. (2003) argue that to promote knowledge based trust it is advisable to support online communities because people are more comfortable working in virtual communities. As it is unlimited scope of getting and contributing to knowledge. Therefore, organizations need to have a clear expectation and processes by open channels of communication to gain useful knowledge and solve problems. To do so, the organizations have to demonstrate and support trust among their members because low trust leading to prevent transferring and sharing knowledge. Hence, it is predicted that:

H15: Information technology will have a positive effect on trust

Networks also are hypothesized to have a positive link to trust. Because network encompasses the interaction between people who hold different background to better achievement (Khachlouf et al., 2011). In this respect, a social network can play important role in enhancing organizational capabilities. For example, Fernandez-Pérez et al. (2012) examine how the characteristics of CEO‟s social networks influence trusting relationship which provides a more flexible view on the positive function of networks in explaining trust. To do so, it is predicted that:

H16: Networks will have a positive effect on trust

2.13.3 The mediating role of trust in organizational factors and knowledge transfer and sharing

This study theorizes that trust mediates the relationship between organizational factors and knowledge transfer and sharing. Evans (2012) reported that trust had a relationship to the organizational factors and knowledge transfer and sharing. This is based on the fact that all dimensions of organizational factors could facilitate and build trust in an organization. In order to rate how well an organization is implementing knowledge transfer and sharing. In other words, the literature recognizes the existence of different influences on knowledge transfer and sharing activities. Referring to the previous dimensions in this study most studies agreed that knowledge transfer and sharing depends on these organizational factors (Lee & Choi, 2003; Lin, 2007). Hence, the following hypotheses were established to investigate how trust mediates the relationship between organizational factors and knowledge transfer and sharing, and also to examine each dimension in explaining the relationship between organizational factors and knowledge transfer and sharing.

This study hypothesizes that trust mediates the relationship between top management support and knowledge transfer and sharing. In relation to this, most studies (Svensson & Wood, 2006; Timothy et al., 2011; Birasnav et al., 2011; Chen & Silverthorne, 2005; McMurray et al., 2012; Jong & Hartog, 2007; Cohen et al., 2012; Eisenbach et al., 1999; Mukherjee et al., 2012; Tombaugh, 2005; Wu & Zhu, 2012; Orey, 2011; Xenikou & Simosi, 2006; Humphreys & Einstein, 2003; Chen & Silverthorne, 2005; Kuada et al., 2010; Harris & Ogbonna, 2001; Krishnan, 2004;

Muijs, 2011; Fernandez-Pérez et al., 2012) asserted that organization achievement could be predicted by the characteristics and support of top management in terms of creating supportive climate to sustain trust which is based on manager"s communicative and supportive behaviours. Which is, in turn, affects the relationship between members. This is because top management support has the ability to offer the opportunities and communicate knowledge by the interaction that leads to promote trust (Waheed et al., 2013; Muneer et al., 2014). The success of knowledge transfer and sharing is linked to top management support to promote the climate of trust. Based on this, it is predicted that:

H17: Trust mediates the relationship between top management support and knowledge transfer and sharing.

Trust also mediates the relationship between organizational structure and knowledge transfer and sharing. For instance, the findings by Krasman (2014) show the relationship between organizational structure and knowledge transfer and trust, which is in turn, has a positive impact on creating knowledge. Further, the findings by Wei et al. (2006) and Rhodes et al. (2008) and Wei et al. (2009) and Bennett and Gabriel (1999) found that flexible organizational structure has the ability to promote trust that leads to share information and knowledge among teams and individuals. This is evident in many empirical findings such as, Palacios-Marqués et al., (2013), and Riege (2005), and Rhodes et al. (2008), and Martinkenaite (2012), and Gosain (2007), and Xu and Ma (2008), and Pardo et al. (2006), and Ko et al. (2005), and

Timbrell et al. (2001), and Al-Gharibeh (2011), and Ismail and yusuf (2010), and Boh et al. (2013), and Sankowska (2013), that Knowledge transfer and sharing is depends on the nature of organizational structure that can create the atmosphere of trust among the individuals in an organization. Accordingly, it is predicted that:

H18: Trust mediates the relationship between organizational structure and knowledge transfer and sharing.

This study also assumes that trust mediates the relationship between learning strategy and knowledge transfer and sharing. This is based on the studies by (Cho et al., 2013; Al-adaileh et al., 2012; Yoon et al., 2009; Albinsson & Arnesson, 2012; Stonehouse & Pemberton, 1999; Wang & Ellinger, 2011; Yeo, 2002; Jun-ying, 2010; Al-adaileh et al., 2012) that the organizational learning process depends on the levels of knowledge transfer and sharing which is contribute to promote trust among individuals. Which means that trust encouraging individuals and teams to transfer and share knowledge, through increasing interaction and communication. In other words, trust is a unique space for learning strategy which is, in turn leads to better achievement through knowledge transfer and sharing. From this, it is predicted that:

H19: Trust mediates the relationship between learning strategy and knowledge transfer and sharing.

This study also suggested that trust mediates the relationship between human resource practices and knowledge transfer and sharing. This is due to the fact that knowledge transfer and sharing has the ability to increase the interactions between individuals, for instance shared language, closer interpersonal ties, shared norms with others (Cabrera & Cabrera, 2005; Minbaeva, 2005; Rhodes et al., 2008; Lee & Choi, 2003). Further, human resource practices support knowledge transfer and sharing by promoting trust as a motivator to empower interpersonal relationships (Kaše et al., 2009; Cho et al., 2013). This is because, there are many practices such as performance related pay, internal and external company training which allow interaction between employees, exchange ideas, transfer and apply new knowledge by enhancing interpersonal relations to gain trust. Based on this, it is predicted that:

H20: Trust mediates the relationship between human resource practices and knowledge transfer and sharing.

It is hypothesized also trust mediates the relationship between culture and knowledge transfer and sharing. Culture is proposed as an important dimension in enhancing trust (Mayer et al., 1995; Rhodes et al., 2008; Siengthai, 2014; Donate & Guadamillas, 2011; Lee & Choi 2003) this is because transferring and sharing knowledge among members and teams enhance social ties between individuals, which is, in turn, build appropriate environment with high level of trust to promote knowledge transfer and sharing (Waheed et al., 2013; Lee & Choi, 2003; Bang et al., 2013; Mayer et al., 1995). From this, Trust plays a critical role in facilitating a

deeper exchange relationship which may represent the way in which members process information. Thus, the knowledge transfer and sharing among individuals is depends on the culture in which they are working (Waheed et al., 2013). Based on this, it is predicted that:

H21: Trust mediates the relationship between culture and knowledge transfer and sharing.

This study theorizes that trust mediates the relationship between rewards and knowledge transfer and sharing. This is based on the fact that rewards are useful in motivating individuals to share knowledge (Wickramasinghe & Widyaratne, 2012; Bartol & Srivastava, 2002; Arzi et al., 2013). The role of rewards is critical in promoting knowledge sharing activities by including extrinsic and intrinsic rewards such as, salary increases, performance bonuses or gift, certificates, points systems. In this regard, trust will be based on the reward systems provided by organizations to implement knowledge transfer (Jain et al, 2015). Therefore, organization should provide an environment that enable members to trust each other by motivating them by rewards to share knowledge. From this, it is predicted that:

H22: Trust mediates the relationship between rewards and knowledge transfer and sharing.

The study hypothesizes that trust mediates the relationship between information technology and knowledge transfer and sharing. In fact, the purpose of knowledge

transfer is to create and use new knowledge through information technology. Thus, trust is crucial once knowledge transfer and sharing adapts and utilizes IT to manage information within an organization (Sheng et al., 2013; Casimir et al., 2012; Johannessen, 2008; Riege, 2005; Riege, 2007; Alavi & Leidner, 2001; Sher & Lee, 2004; Rhodes et al., 2008; Zawawi et al., 2011). For instance, study by Tong et al. (2013) revealed that knowledge sharing is considered as one of the most practical solutions for technological enterprises because these organizations are facing rapidly change and competitive environment which is using new forms such as, Facebook, Twitter, and YouTube. From this, trust is an important issue to adopt new technology to promote and share knowledge. Based on this, it is predicted:

H23: Trust mediates the relationship between information technology and knowledge transfer and sharing.

This study also theorized that trust mediates the relationship between networks and knowledge transfer and sharing. This is due to the fact that, social networks influenced by trust which is in turn impact knowledge transfer and sharing processes (Fernandez-Pérez et al., 2012; Guechtouli et al., 2013; Argote & Ingram, 2000) This means that social networks exist once knowledge transfer and sharing occurs and transferred by moving knowledge from one unit to another which is related to trust. In this context, knowledge transfer and sharing occur when top management pays attention to the social interactions between members in an organization (Khachlouf et al., 2011). This is because the CEO‟s social networks support leads to enable

knowledge transfer and sharing among individuals (Fernandez-Pérez et al., 2012). On this basis, the appropriate environment of trust is affected by networks and skills learned during the interaction and communication (Lee & Yu, 2011). Based on this, it is predicted that:

H24: Trust mediates the relationship between networks and knowledge transfer and sharing.

2.13.4 Relationship between trust and knowledge transfer and sharing

Trust is hypothesized to have a relationship with knowledge transfer and sharing (Waheed et al., 2013; Levin and Cross, 2004; Ling, 2011; Abrams et al., 2003; McAllister, 1995; Rhodes et al., 2008; Al-Adaileh & Al-Atawi, 2011; Lee & Choi 2003; Takeuchi & Nonaka 2004; Jahani et al., 2011; Mayer et al., 1995; Evans, 2012; Pangil & Chan, 2014; Waheed et al., 2013; Muneer et al., 2014; Ho et al., 2010; Ho et al., 2012; Osmani et al., 2014). In most studies knowledge transfer and sharing is improved through creating an appropriate environment of trust (Daud & Yusoff, 2010; Schulz & Jobe, 2001; Daud & Yusuf, 2008; Singh et al., 2006; Yang, 2012). Therefore, trust has the ability to enhance effective processes of knowledge transfer and sharing. In this way, trust is a key element in promoting knowledge sharing by increasing commitment, interaction and communication among members (Waheed et al., 2013). To do so, it is predicted that:

H25: Trust will have a positive effect on knowledge transfer and sharing.

2.14 Theoretical framework of the study

Based on the review of the literature, it is hypothesized that independents variable which are organization capacity (top management support, organizational structure, learning strategy and human resource practices), organizational motivation (culture, rewards) and organizational environment (information technology, networks) influence the dependent variable which is knowledge transfer and sharing. Further, this relationship between independent variables and dependent variable is mediated by trust. However, trust as a mediator variable explains the influence relationships between independent and dependent variables. Moreover, mediator variable describes how and why this influence occurs (Bennett, 2000).

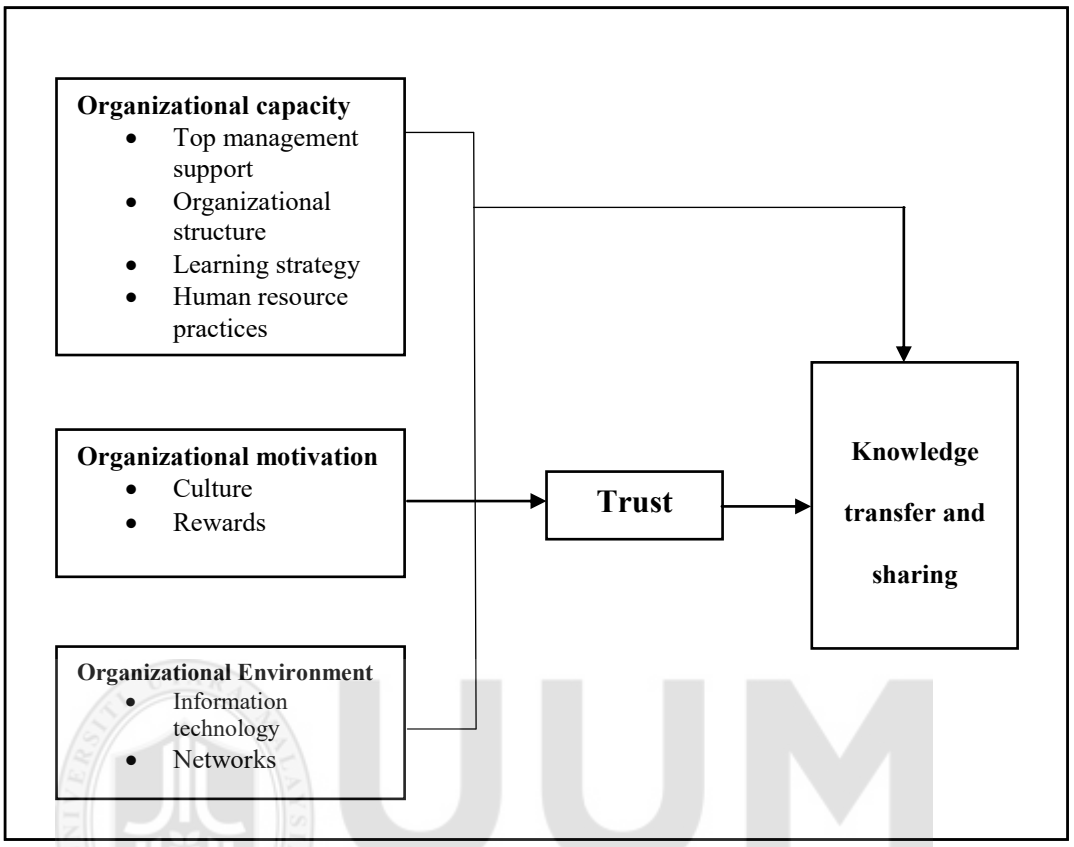


Figure2.6

The hypothesized relationships between organizational capacity, organizational motivation, organizational environment, trust and knowledge transfer and sharing

2.15 Summary of the chapter

This chapter discussed all variables in the framework of the study which show the relationships between independent and dependent variables. Based on the literature review, organizational capacity, organizational motivation and organizational environment are related to knowledge transfer and sharing. At the same time, these relationships mediated by trust to create and use new knowledge by SECI processes. The following chapter shows the research methodology.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes research methodology and techniques which include, research design, measurement of variables, operational definition, and population of the study, sampling, data collection procedures and techniques of data analysis.

3.2 Research design

The study is quantitative research which seeks to explain relationships among variables. On the same note, the purpose of this study is to test hypotheses based on organizational knowledge creation theory (Nonaka, 1994). This study is descriptive research, the method chosen to analyse the hypotheses and assess the empirical link between independent variables, which include organizational capacity (top management support, organizational structure, learning strategy and human resource practices), organizational motivation (culture and rewards), organizational environment (information technology and networks) and the dependent variable which is knowledge transfer and sharing. The study used statistical analysis, which is PLS-Structural Equation Modeling to describe and investigate the relationships between characteristics of a population (Sarstedt et al, 2014; Wong, 2013; Astrachan et al., 2014; Hair et al., 2014; Henseler et al., 2015; Hair et al., 2011; Hair et al., 2012; Farahani, 2010). McMillan and Schumacher (2006) reported that descriptive

research is usually in the form of statistics to show frequencies, percentage and averages. It is mainly valuable when an area is first investigated. In this study, descriptive research will be used to describe the personal data of the respondents which means that the approach in this study is focused on looking at variables at a specific point in one time in the process of data collection (Sekaran, 2003; McMillan & Schumacher, 2006; Kumar et al., 2013).

Based on this, trust is the mediating variable in this study, which explains the relationships between independent and dependent variables. A mediating role in this study is to explain relationships between predictors and the criterion variables (Bennett, 2000). Furthermore, mediating variable examines and explains why and how predictors influence and affect criterion outcomes (Bennett, 2000; Baron & Kenny, 1986; Sekaran, 2003). The mediating role of trust explains and conceptualizes organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing relationships. As defined by Awang (2012) and Kumar et al. (2013) and Sekaran (2003) and Awang (2013) in order to gather response in the study, a survey research questionnaire is considered the most appropriate tool. Because, in this survey research respondents‟ opinions, characteristics and behaviors are included to be investigated within a short period of time (Sekaran, 2003). Hence, for this study a questionnaire will be used as a source of the data to determine and describe the function of knowledge transfer and sharing and what the respondents of MSC status organizations had understood after the

process of knowledge transfer and sharing by examining various variables in this study.

3.3 Unit of analysis and population of the study

The Target population of this study refers to the Multimedia Super Corridor MSC status organizations in Malaysia. Therefore, the unit of analysis in the study is the organization. The sampling frame refers to the listed companies in all MSC status organizations located in Klang Valley, Kedah, and Penang, in Malaysia. The list of companies‟ name obtained from the official portal of Multimedia Development Corporation websites (http://www.mscmalaysia.my/status_company) with company details, which is the source of sampling because it encompasses all listed companies under MSC status organizations. Further, these companies are grouped into four clusters, which consist of the Information Technology (InfoTech) Cluster, the Creative Multimedia (CMC) Cluster, the Shared Services & Outsourcing (SSO) Cluster, as well as Institutions of Higher Learning and Incubators (IHLs & Incubators), these organizations were established to provide the ecosystem to attract ICT investors and promote the growth of local ICT companies to lead the nation‟s transformation towards a knowledge based economy.

Meanwhile, the respondents in this study were the middle managers in the listed companies under MSC status organizations. Each organization provide one middle manager to answer the questionnaires. The middle managers were represented by the following positions: Vice president, General manager, Branch manager, Unit

manager, Deputy Director and Director, these are positioned between top management and support staff. In other words, middle managers who are leaders of a working group or task force that mediate the exchange process between top management and support staff (Nonaka & Takeuchi, 1995). Middle managers were chosen because they played key roles in terms of managing knowledge, while top managers are often sensitive to show their roles in organizational success, also line managers are generally incapable of understanding the characteristics of the overall organization. (Choi & Lee, 2003). Further, middle managers, they are decision makers and more knowledgeable and capable in understanding the overall organization‟s characteristics to provide more information about their organizations.

3.4 Sample size and sampling techniques

A total of 2652 companies has been listed as MSC Status organizations in March 2015 from the official Portal of Multimedia Development Corporation website (MDC, 2015). It comprises four Main Clusters which are: Creative Multimedia, IHLs & Incubators, InfoTech, and Shared Services Outsourcing. According to the generalized scientific guidelines for sample size decisions by Krejcie & Morgan (1970) the appropriate sample size for this study is 335 MSC organizations as shown in Table 3.1. The sampling guidelines is used because it reflects the true population characteristic by taking into account the aspects of confidence and precision in determining the right sample size which chosen in this study (Cavana et al., 2001).

Table 3.1
Determining sample size from a given population

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Based on this, stratified random sampling was used in this study, because stratification is most efficient research sampling designs, as it provides more information about the sample size (Cavana et al., 2001). Stratification also ensures homogeneity within each group such as, the Middle Managers in MSC Cybercities and Cybercenters. And heterogeneity across groups such as, the four main clusters: Creative Multimedia, IHLs & Incubators, InfoTech, and Shared Services

Outsourcing. This sampling method also has the ability to provide accurate data from respondents of different stratums, and it is considered more practical because the research gathered different information from different groups (Awang, 2012; Cavana et al., 2001; Kumar et al., 2013; Zikmund et al., 2010; Cooper & Schindler, 2011; Hair et al., 2010).

In the sampling process, the first step is to divide respondents into mutually exclusive groups or stratum as shown in Table 3.2, these groups are the four main clusters of MSC status organizations. On this basis, this study affirmed that there is heterogeneity between groups, which means the four main clusters. Similarly, there is homogeneity within each stratum, which is the Middle Manager. After the population was stratified into four groups, the size of the sample in each stratum or group was taken in proportion to the size of the stratum, this is called proportional allocation (Sekaran, 2003). This means that proportionate stratification is a type of stratified sampling in which the sample size of each stratum is proportionate to the population size of the stratum (Awang, 2012), in more details, based on the listed companies under MSC status organizations obtained from the official portal of Multimedia Development Corporation websites (http://www.mscmalaysia.my/status_company), MSC status organizations were categorized into four main clusters as a sampling frame for this study: (1) Creative Multimedia with an estimated 331 organizations; (2) IHLs & Incubators with an estimated 109 organizations; (3) InfoTech with an estimated 1871 organizations; (4) Shared Services Outsourcing with an estimated 341 organizations. The adopted

sampling technique is the best technique for the present study as the aim of this study is to have samples drawn from the four main clusters in MSC status organizations. Stratified random sampling is appropriate for this study because a researcher is having a subdivided population that demands treating each subdivision as a stratum in order to obtain estimates of known precision, as well as, stratified random sampling as the name implied, involves classifying sample elements into strata followed by selecting the elements from each stratum using simple random sampling procedure (Sekaran, 2003). Practically, the first step is to calculate the percentage of each cluster of the total, as shown below.

- % Creative Multimedia = 331 / 2652 = 12%

Next, the number of respondents in each cluster is then calculated using the following formulae:

$$n_h = (N_h / N) * n$$

Where n_h is the sample size for stratum *h*, N_h is the population size for stratum *h*, N is the total population size, and n is the total sample size. Based on the listed companies under MSC status organizations, the sampling frame provides the total elements in each cluster as illustrated in Table 3.2. From this, the number of respondents in each cluster, is to multiply each group size by the sample size and divide by the total population size as shown below:

- Creative Multimedia = (335 / 2652) * 331 = 42 Respondents

Following the same calculation, the total numbers of respondents and percentages in each group are given in the following Table 3.2.

Table 3.2
Stratified sampling of the respondents

Stratum by main cluster	Total of elements in stratum	The percentage from each cluster	Number of respondents
Creative Multimedia	331	12%	42
IHLs & Incubators	109	4%	14
InfoTech	1871	71%	236
Shared Services Outsourcing	341	13%	43
Total	2652	100%	335

Official Portal of Multimedia Development Corporation Website (http://www.mscmalaysia.my/status_company)

After the population was stratified, simple random sampling was used, which guarantees equal and independent representation of the data chosen. The advantage of this sampling method is that there is no bias that one organization would be chosen over another and the choice of one organization does not bias the researcher against the choice of another (Sekaran, 2003). Random numbers were generated using a Microsoft Excel software for applying a mathematical formula {=rand ( )} to enable the selection of organization samples from the sample size of 335. However, stratified random sampling is more accurate because all strata in the sample are presented. Further, this sampling method can compare each stratum differently based on the variable of interest (Awang, 2012).

3.5 Measurement of variables

Questionnaires in this study involved a number of items (70) measuring organizational capacity, organizational motivation and organizational environment as an independent variable and trust as a mediating variable and knowledge transfer and sharing as a dependent variable.

The evaluation and measurements of the independent, mediating and dependent variables of this study are adapted from the other studies (Lin, 2007; McAllister, 1995; Donate & Guadamillas, 2011; Wei-he & Qiu-yan, 2006; Lee & Choi, 2003; Fernandez-Pérez et al., 2012) this is because, in these studies the unit of analysis was the organization which is the same unit with the current study, as well as, the internal consistency value for each instrument in these studies showed Cronbach coefficient alpha is above 0.6, which considered reliable. Therefore, the instruments in these studies are useful for the current study.

The study used close ended questionnaire to gather information about organizational capacity, organizational motivation, organizational environment, trust and knowledge transfer and sharing. These instruments are totally five types to measure independent, mediating and dependent variable of the study. The subsequent section provides more about these instruments.

3.6 Measures of dependent variable

Knowledge transfer and sharing is measured by fifteen items. These items were adapted from (Wei-he & Qiu-yan, 2006) this instrument has been used in this study because its reliability and validity are all above 0.6, which were acceptable for the research purpose (Sekaran, 2003). The study by Wei-he and Qiu-yan (2006) was conducted in the consultant firms, where a total of 300 enterprises were selected, and most responders are a CEO, or KM functionaries of these enterprises. Based on, Wei-he and Qiu-yan (2006), these enterprises all attended the training in KM sponsored by the consultant firm, and developed KM activities at different levels. Therefore, the items are suitable to be adapted from related measurement. Further, this instrument has been chosen to measure the level of involvement of MSC status organizations in knowledge transfer and sharing. To do so, the combination between explicit and tacit knowledge and the interaction between organizations and individuals will conceptualize SECI processes to create new knowledge in MSC status organizations. In this study, four modes of knowledge creation were included to measure this process; Externalization (E) consisted of four items from 1 to 4. Internalization (I) consisted of five items from 5 to 9. Socialization (S) consisted of three items from 10 to 12. Finally, Combination (C) consisted of three items from 13 to 15 as depicted in Table 3.3.

3.7 Measures of independent variables

The study included three main independent variables: organizational capacity, organizational motivation and organizational environment.

3.7.1 Measures of organizational capacity

In this study organizational capacity encompasses four constructs: top management support, organizational structure, learning strategy and human resource practices. Top management support is measured using four items. All of these items were adapted from (Lin, 2007) because the findings by Lin (2007) show that the alpha coefficients are reliable all above 0.72. Further, these instruments have been adapted by Lin (2007) from the previous studies in the context of knowledge sharing. Therefore, these instruments are suitable to be adapted directly to measure the dimension of top management support. Because it assesses the extent to which employees are getting support to encourage knowledge transfer and sharing from top management in an organization.

Similarly, the measurements of organizational structure divided into centralization and formalization which comprised of ten (10) items to determine the extent to which centralization and formalization are involved in organizational structure. These items were adapted from (Lee & Choi, 2003), this instrument has been used because its reliability and consistency is all above 0.84.

Further, five items are used to measure learning strategy, these items were adapted from (Lee & Choi, 2003) which showed an alpha value of 0.89. This instrument has been adapted in this study because it had been tested by Lee and Choi (2003), to a total of 1,425 middle managers in 147 organizations in Korea. Therefore, the instrument is suitable to be adapted to measure the dimension of learning strategy locally in Malaysia among MSC status organizations.

Eventually, six items are used to measure human resource practices and these items were adapted from (Donate & Guadamillas, 2011) this instrument has been adapted in this study because of its reliability and consistency which is an acceptable value of 0.81.

3.7.2 Measures of organizational motivation

This variable encompasses two dimensions: culture and rewards. Seven items are used to measure culture, these items were adapted from (Donate & Guadamillas, 2011) the items were chosen because its reliability and consistency shows high value. The Cronbach‟s alpha offers an acceptable value of 0.89. Further, the study by Donate and Guadamillas (2011) was conducted in Spain and a total of 802 industries were selected as technology intensive firms. In this regard, the instrument of culture has been tested in different environment that the current study willing to examine it locally in the Malaysian context. Therefore, these items suitable to be adapted from related measurements.

Similarly, four items have been used to measure rewards which are adapted from Lin (2007) this instrument showing high reliability of 0.75. Further, this instrument has been tested widely in a total of 50 organizations selected from 1000 firms. According to Lin (2007) these instruments have been adapted from the previous studies for use in the context of knowledge sharing.

3.7.3 Measures of organizational environment

This variable also consisted of two dimensions: information technology and networks. Five items are used to measure information technology, these items were adapted from (Lee & Choi, 2003) this instrument chosen because its reliability and consistency showed values of 0.86. Based on, Lee and Choi (2003) most of the instruments have been validated and used in the other studies of knowledge management area. From this, the study adapted the instrument to test it in the Malaysian environment.

Further, five items are used to measure networks, these items were adapted from (Fernandez-Pérez et al., 2012) the instrument showed high values of between 0.88 and 0.92. Additionally, it has been conducted in 900 Spanish organizations (Fernandez-Pérez et al., 2012). Thus, the items are considered to be suitable to measure dimension of networks in MSC status organizations.

3.8 Measures of mediating variable

Trust hypothesized to mediate the relationships between independent and dependent variables. Nine items are used to measure trust; these items were adapted from (McAllister, 1995). The items were chosen because its reliability and consistency shows high value of 0.89 and 0.91. This instrument was designed to measure manager‟s trust. Therefore, these instruments are suitable to be adapted directly to measure the dimension of trust in the current study. The study by McAllister (1995) was conducted in southern California, and a total of 194 managers were selected to test interpersonal trust which is based on cognition based trust and affect based trust. In this regard, these items are suitable to be adapted and tested in this study.

This study utilizes a total of 70 items to measure independent, mediating and dependent variables. Table 3.3 shows the items and source of the items for organizational capacity, organizational motivation, organizational environment, trust and knowledge transfer and sharing.

Table 3.3
Items and source of items for each variable

Variables	Operational definitions	Items / measures
Knowledge transfer and sharing	The extent, to which knowledge is encouraged, adapted, transferred, promoted, collected, shared and implemented by the organizations using explicit or tacit knowledge, and the combination of the two levels conceptualized SECI processes, externalization (tacit to explicit), internalization (explicit to tacit), socialization (tacit to tacit) and combination (explicit to explicit). (Wei-he & Qiu-Yan, 2006)	1.Our company encourages employees to communicate their knowledge using ways of induction, deduction, and others. 2.Our company encourages employees to describe new concepts using ways of story-telling and creative. 3.Our company encourages employees to exchange different ideas and concepts frequently. 4.Our company encourages employees to give specific and relevant information. 5. Our company adapts team module to implement various projects, and share the experience within the whole company. 6.Teams in our company continuously search and share new value. 7.Our company promotes the communication among different functional departments by setting up cross-department teams. 8.Our company encourages employees to understand and share organizational vision and enterprise value through continuous communication. 9. Our company spread new concepts and ideas among employees. 10.Our company regularly collects information from various departments. 11.Our company regularly shares experience with suppliers, customers, external experts, and partners. 12.Our company finds new strategies and market opportunities through intra and inter organization learning by doing.

		13.Our company set up abundant data base of products and services. 14.Our company increases organizational knowledge by collecting various management data and technique information. 15.Our company implementing advanced management theory (e.g. benchmarking management) and marketing concepts (e.g. market test). (Wei-he & Qiu-Yan, 2006)
Trust	The extent to which the organization assist employees to be trusted and confident in, and willing to act on the basis of the words, actions, and decisions of another (McAllister, 1995)	1.Most team members trust and respect the other players. 2.I can talk freely to the employees about difficulties I am having at work and know that they will want to listen. 3.If I share any problems with team members, they would respond constructively and caringly. 4.I can freely share any ideas, feelings, and hopes with my team. 5.I would feel a sense of loss if one of us transferred and we could no longer work together. 6. My team approach their job with professionalism and dedication. 7. Given my team‟s track record, I see no reason to doubt their competence and preparation for the job. 8. I can rely on team not to make my job more difficult by careless work. 9. Other work associates of mine are trustworthy. (McAllister, 1995).
Top management	The extent to which top management is encouraging, supporting and providing resources to share knowledge among employees to create and use new	1.Top managers are encouraging knowledge transfer and sharing with colleagues. 2.Top managers usually support and

support	knowledge. (Lin, 2007)	encourage individuals to share and transfer their knowledge with others. 3.Top managers provide and facilitate the necessary help and resources to enable individuals to share and transfer their knowledge. 4.Top managers are usually encouraging sharing and transferring knowledge with the colleagues and subordinates. (Lin, 2007).
Organizational structure	The extent to which authority in the organization gives freedom in making decisions, using formal rules and determine the procedures to be used in performing it (Lee & Choi, 2003).	1.Employees of our company are acting without the permission of supervisors. 2.Employees of our company usually are encouraged to make their own decisions. 3. Employees of our company made their decision by their own. 4. Employees of our company usually do not ask their supervisor to act. 5.Employees in our company usually made their decisions without approval. 6.In our company most of the activities are not under formal procedures. 7.Contacts which have been made with our company are based on formal procedures or planned basis. 8.Usually the rules and procedures of our company are written and documented. 9.Usually employees ignore the rules to handle some situations by using informal agreements. 10.Employees usually make their own rules to fulfil their jobs (Lee & Choi, 2003).
Learning strategy	The extent to which organizations provide opportunities and encouragement for learning and development in the organizations (Lee & Choi, 2003)	1.Our company provides formal training programs to perform well. 2.Our company provides informal opportunities to develop individuals such

		as work assignments and job rotation. 3.Our company usually encourages members to attend seminars and conferences. 4.Our company usually provides and supports various programs such as clubs and community gatherings. 5.Employees of our company are satisfied by the contents of formal training and self-development programs. (Lee & Choi, 2003).
Human resource practices	The extent to which HR practices in the organization; supporting training programs, incentive systems, internal rotation, making decision, implementing and encouraging knowledge management processes and teamwork (Donate & Guadamillas, 2011).	1.Training programs are provided to transfer and share knowledge among individuals to attain the objectives of the company. 2.Incentive systems (monetary and non-monetary) are provided by the company to reward the individuals and teams. 3.Programs of internal rotation have been developed and implemented by the company to facilitate employees move to different departments. 4.In our company usually encourages participation in making decisions to resolve the problems. 5.In our company, knowledge management have been practiced, assessed and controlled continuously (creation, storage, transfer, application...) 6.In our company, teamwork has been promoted as a regular practice (Donate & Guadamillas, 2011).
Culture	The extent to which culture supports and promotes knowledge in terms of common organizational language, experiment and new knowledge implementation, tolerance of mistakes, confidence and openness, responsible behavior to share and learn new knowledge.	1. There has been a common language to support knowledge exchange and sharing between employees and departments. 2. An effort is made to encourage employees to experiment and implement new ideas in their working day. 3. An effort is made to inform employees

	(Donate & Guadamillas, 2011)	that mistakes are a learning consequence and are tolerated up to a certain limit. 4. Culture is based on confidence and openness. 5. The employees are encouraged to share knowledge at an informal level. 6.The employees demonstrate responsible behavior and a high learning disposition. 7.All organizational members perceive the same purpose and feel bound to it. (Donate & Guadamillas, 2011).
Rewards	The extent to which rewards system supports knowledge transfer and sharing in the organization by giving high salary, promotion, and increase job security (Lin, 2007).	1.Sharing and transferring knowledge between employees is based on the rewards system that given by company. 2.Sharing and transferring knowledge between employees is rewarded by high salary. 3.Sharing and transferring knowledge between employees is based on promotion that given by company. 4. Sharing and transferring knowledge between employees is rewarded by increasing job security. (Lin, 2007).
Information technology	The degree to which IT is supporting and facilitating knowledge transfer and sharing, in terms of collaborative work, communication, searching and accessing information, simulation and prediction and support systematic storing (Lee & Choi, 2003).	1. Our company supports collaborative works by using IT to facilitate sharing and transferring knowledge. 2. Our company using IT to support communication between employees. 3. Our company using IT to facilitate searching and accessing necessary information. 4. Our company using IT to support simulation and prediction. 5. Our company using IT to support systematic storing. (Lee & Choi, 2003).

Networks	The degree to which networks create a context of sharing and transferring knowledge through working together as a team, using workgroups, hall talk, and calling each other from different departments to exchange information and knowledge needed (Fernandez-Perez et al., 2012).	1. Top management of the company is working together as a team. 2. Our company has cross-functional teams to exchange and facilitate knowledge between departments. 3. Our company uses temporary workgroups to transfer and share knowledge between units on a regular basis. 4. Our company provides the opportunities for informal "hall talk" among employees. 5. The employees from different departments are calling each other to exchange information and knowledge needed. (Fernandez-Perez et al., 2012).

3.9 Pre-test and pilot test

A pilot test was conducted from February 2015 until March 2015, to pre-test and examine the reliability value of each dimension in the instrument. To this end, validity test is an important issue that should be considered, because validity is defined as the accuracy of the measurement, it is an assessment of the exactness of the measured relative to what actually exists (Kumar et al., 2013). The process of reliability and validity are considered to be important to ensure accuracy and consistency of the responses gathered from the questionnaires.

In developing new instruments, the validity needs to be tested by using: content validity, construct validity and criterion validity. At the stage of identifying items, the study adapts the questionnaires from a well-established instrument, but the content validity still needed to be conformed because the items that have been adapted were from the overseas studies. Which means different responders of organizations from different cultural and demographic background will respond differently to the items. From this, the content validity has been discussed with some scholars, experts in the management field and practitioners from different departments in UUM as it is one of the MSC`s organizations, to complete the missing items, delete duplicated items and adjust the construct of questionnaire to guarantee the relevancy and probability to be distributed. Then, a total of 36 middle managers were involved in the pilot test. Based on the responses that have been gathered the results of testing reliability of measurement of constructs indicated that all Cronbach`s coefficient alpha of constructs was 0.96.

Table 3.4
Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.961	.963	70

According to (Cavana et al., 2001; Zikmund et al., 2010; Cooper & Schindler, 2011; Hair et al., 2010) Cronbach`s Alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. Generally, an Alpha Coefficient of 0.6 and above is acceptable, especially for initial investigations. Table 3.5 details the reliability analysis for all constructs in the research model.

Table 3.5
Reliability of each variable

Dimensions	**Number of items**	**Mean**	**Cronbach`s Alpha**
Top Management Support (TMS)	4	3.958	0.808
Organizational Structure (OS)	10	2.628	0.678
Learning Strategy (LS)	5	3.750	0.870
Human Resource Practices (HRP)	6	3.681	0.889
Culture (CULT)	7	3.683	0.886
Rewards (REW)	4	2.743	0.917
Information Technology (IT)	5	3.944	0.957
Networks (NET)	5	3.606	0.932
Trust (T)	9	3.620	0.920
Knowledge Transfer and Sharing (KTS)	15	3.556	0.960

3.10 Data collection procedure

Data collection was conducted through self-administered questionnaire. Questionnaires are sent out to the respondents directly through their e-mail address. In this technique, the researcher creates a survey form (questionnaire) on Gmail account, this is because, the survey through Gmail will allow the recipients to respond with a simple email reply, as well as, enable researcher to reach a large number of potential respondents in a variety of locations. However, the response rate for self-administered surveys is relatively low as it is one of the disadvantages of e-mail survey (Awang, 2012). Due to the expectation of a low response rate which is common among Malaysian organizations (Jusoh, 2007; Khan & Ismail, 2013; Jaafar et al., 2007; Kassim et al., 2012; Daud & Yusoff, 2011), the researcher decided to implement over sampling, this method of over sampling is not new to the field of social sciences, Salkind (1997) have suggested the over sampling method where sample sizes are increased 50% to make up for unusable responses and low response rate. Therefore, in order to achieve the maximum number of usable samples, the number of questionnaires sent out was 670 questionnaires. This option considered to be appropriate because there are multiple groups of interest (four main clusters) that would need to be oversampled (Salkind, 1997).

Based on this, data collection was conducted in April 2015 until September 2015. The process started with contacting the selected companies through their e-mail address, phone calls, followed by a cover letter collected from the School of Business Management, Universiti Utara Malaysia, which explains the objectives of

study to get approval for data collection. The letter helped greatly in facilitating the conduct of the current study by building confidence and trust in the participating organizations to give permission for distribution of the questionnaires. After the approval, respondents would complete and return their respective responses through the researcher‟s e-mail address. This technique is chosen because the sample of this study covers wider geographical areas which are located in Klang Valley, Kedah, and Penang in Malaysia with low cost and no interviewer bias (Awang, 2012).

The major unexpected problem encountered during data collection was the slowness in collecting back the completed questionnaires. Therefore, the researcher made phone calls to the respective organizations at least twice in a week to remind them. Through phone calls the researcher was informed by many participated organizations that they do not have enough time to open their e-mail address and requested the researcher to walk in to their organizations to distribute the questionnaires by hand. In this stage, the researcher prints out the questionnaires based on the number needed then he made arrangements to visit and distribute the questionnaires because all details of the organizations are provided such as, address, contact number, names, and so on. Respondent in each organization was given two weeks to answer the questionnaires.

The researcher made arrangements again to collect the questionnaires from the organizations about two weeks after the date of the first visit. In some organizations, once they finished filling up the questionnaires they made phone calls or send an e-

mail to the researcher to inform and to collect back the data. There were also cases when the questionnaires were not ready for collection even after two weeks. In some organizations, the delay in data collection took more than three months because the respondents have been absent or busy doing their jobs as they are holding high position in their respective organizations, as a result, the researcher has to wait for their approval to collect data. Furthermore, some of these organizations that are located in Kedah are branches to the main companies in Klang Valley. In this case, the researcher has to wait for the approval from Klang Valley in Kuala Lumpur first before he can proceed with the distribution of questionnaires with the branch in Kedah (Kulim). Eventually, after six months of weekly follow up with each organization, a total of 132 or 39.4% of the questionnaires were collected. After six months of collecting data the researcher decided to stop distributing the questionnaires because the duration of study is short and the current study is not a longitudinal study which may take years to be conducted. It is cross-sectional study which collects data at a single point in time to get responses in a short time. Furthermore, 132 responses were gathered from MSC status organizations, this proves to be appropriate during the data analysis using PLS-SEM as it deals with small sample size (Hair et al., 2014).

The number of questionnaires was distributed to the middle managers according to the number of respondents in each cluster as shown in the previous section of stratified sampling of the respondents in Table 3.2. Further, these questionnaires are divided into six parts. The first part is about respondent‟s profile, while the second

part is about organizational capacity, the third part is about organizational motivation, the fourth part is about the organizational environment, the fifth part is about trust and the last part is about knowledge transfer and sharing as shown in the following Table.

Table 3.6
Questionnaire design

Questionnaire parts	Descriptions
Part 1	Profile of respondents: gender, age, education level. Working experience, position, location of the organization and type of the organization
Part 2	Contains of 25 questions on organizational capacity
Part 3	Involves of 11 questions on organizational motivation
Part 4	Consists of 10 questions on organizational environment
Part 5	Comprises of 9 questions on trust
Part 6	Consists of 15 questions on knowledge transfer and sharing

Further, five point Likert scale is used to construct questionnaires. Each item is measured from (1) strongly disagree to (5) strongly agree (Kumar et al., 2013; Awang, 2012; Cavana et al., 2001), this is because Likert scale allows respondents describe their feelings and perceptions with the given statement to increase the validity of measurement.

3.11 Data analysis method

3.11.1 Descriptive analysis

Data was analysed to examine the profile of the respondents using Statistical Package for Social Sciences (SPSS). SPSS was used to generate the statistic of the research. Descriptive statistics, such as, frequency and percentage were used to describe respondents profile. Further, data screening was done by checking the accuracy of the data input.

Descriptive analysis also was conducted to describe the overall data situation of all constructs, organizational capacity (top management support, organizational structure, learning strategy, human resource practices), organizational motivation (culture, rewards), organizational environment (IT, networks). This analysis provides a clear meaning of the data through standard deviation, mean, maximum and minimum values of the constructs, as shown in Table 3.7

Table 3.7
Descriptive statistics of the dimensions

Dimensions	N	Minimum	Maximum	Mean	Std. Deviation
Top management support (TMS)	132	1	5	4.106	.7440
Organizational structure (OS)	132	1	5	2.219	.9516
Learning strategy (LS)	132	1	5	3.901	.8898
HR practices (HRP)	132	1	5	3.871	.8233
Culture (CULT)	132	1	5	3.833	.7222
Rewards (REW)	132	1	5	2.954	.9639
Information technology (IT)	132	2	5	3.901	.8275
Networks (NET)	132	2	5	3.878	.7914

Table 3.7, shows that the overall constructs have the means from 2.219 to 4.106, and two variables (organizational structure and rewards) have a lower average mean of 2.219 and 2.954. Similarly, descriptive statistics show standard deviation ranges from .7222 to .9639. All items were measured on a five-point scale.

3.11.2 Partial Least Squares (PLS) technique

After the process of selecting the appropriate data to be analysed, this study was used Smart (PLS) which is one of the prominent software applications for Partial Least Squares Structural Equation Modeling (PLS-SEM) (Sarstedt, 2014; Wong, 2013; Astrachan et al., 2014; Hair et al., 2014; Henseler et al., 2015; Hair et al., 2011; Hair et al., 2012; Farahani, 2010). This approach focuses on explaining the variance in the dependent variables when examining the model, besides, PLS-SEM allows for a flexible handling of more advanced model elements (Sarstedt et al., 2014). PLS-

SEM is the preferred alternative since it enables researchers to create and estimate such models without imposing additional limiting constraints. Furthermore, PLS-SEM applications‟ address topics such as long-term survival of firms (Hair et al., 2012), this is clearly confirmed in this study that MSC status organizations have a task of transforming Malaysia into a knowledge based society which is a long-term strategy to accomplish vision of 2020.

The use of PLS-SEM methods is recommended, because it works efficiently with small sample sizes, complex models with numerous endogenous and exogenous constructs and indicator variables (Hair et al., 2012), the current study examined twenty-five relationships within the structural model and hence the use of PLS-SEM techniques can easily handle reflective and formative measurement models, as well as single-item constructs, with no identification problems. It can therefore be applied in a wide variety of research situations. When applying PLS-SEM, researcher has also benefited from high efficiency in parameter estimation which is established in the greater statistical power. Therefore, PLS-SEM is more likely to render a specific relationship significant when it is in fact significant in the population (Hair et al., 2014). The study used PLS-SEM because it is currently accessible to everyone; the software can be downloaded at no cost, the instructions are provided on the website, and the active PLS-SEM community are extremely helpful in becoming familiar with the software. For this study, the research model was assessed using PLS which is a variance-based approach to structural equation modeling (SEM) (Hair et al.,

2014), and his approach is well suited for analyzing predictive models with multiple-item constructs.

3.11.2.1 The measurement model

Regarding this study, the process of PLS analysis follows two steps. The process contains the assessments of the measurement model and the structural model. The current study employed these two steps in analyzing the data. The first step is to assess the measurement model. The two main criteria used in PLS analysis to assess the measurement model, or the outer model, include the assessment of validity and reliability of the indicators (Hair et al., 2014). To do so, the current study tested composite reliability to evaluate the construct measures‟ internal consistency reliability. Validity also was examined using convergent validity, which is the degree to which multiple items measuring the same concept. As proposed by Hair et al. (2010), the study evaluated convergent validity using factor loadings, composite reliability and average variance extracted (AVE). Similarly, the study tested the discriminant validity by examining the cross loadings of the indicators where the square root of the (AVE) should exceed the inter-correlations of the construct with the other constructs to demonstrate discriminant validity (Sarstedt, 2014).

3.11.2.2 The structural model

Further, the current study proceeds to examine the structural model to test the hypotheses. Since PLS-SEM does not assume a normal distribution, the study applies the bootstrapping technique to determine the level of significance of all the

path coefficients because in PLS analysis, bootstrapping is the only mechanism for examining the significance of path coefficients (Hair et al., 2014). To determine whether the coefficients are statistically significant or not bootstrapping was conducted where a large number of subsamples (5000) are taken from the original sample to give t-value for significance test (Hair et al., 2011).

3.11.2.3 The prediction power, relevance, and the effect size of the Model

In PLS analysis, the predictive power of the model was assessed by the R squared (R^2) values to facilitate the assessment of the model‟s quality. In tandem with this, cross validated redundancy (Q^2) was conducted to assess the inner model‟s predictive relevance using a sample re-use technique (Henseler et al., 2009; Hair et al, 2012). The effect size (f^2) of both trust and knowledge transfer and sharing as endogenous constructs was conducted also. The effect size for each path model was determined by calculating Cohen‟s f^2, if an exogenous construct strongly contribute to explain an endogenous construct the (f^2) value will be high (Hair et al., 2014).

3.11.3 The mediating effects

The mediating effects of trust (mediator) on the relationship between organizational capacity, motivation, organizational environment and knowledge transfer and sharing were analyzed using the PLS mechanisms of bootstrapping to estimate the size of the indirect effect by computing the variance accounted for value (VAF) which represents the ratio of the indirect effect to the total effect. These analyses are described in the following chapter.

3.12 Summary of the chapter

This chapter describes the methodology used for this study, which includes research design, measurement of dependent, independent and mediating variables, data collection strategies and methods for data analysis to answer the research questions. The analytical method that"s been used in the current study is Statistical Package for Social Sciences (SPSS) and Partial Least Squares (PLS) (Sarstedt, 2014; Wong, 2013; Astrachan et al., 2014; Hair et al., 2014; Henseler et al., 2015; Hair et al., 2011; Hair et al., 2012; Farahani, 2010). The purpose of using this method is to examine the relationship between the independent, mediating and dependent variables to assess the hypotheses of this study.

CHAPTER FOUR

RESULTS

4.1 Introduction

This chapter presents the findings of the study. The chapter begins by presenting respondents‟ profile, including respondents‟ age, gender, education level, working experience, position, location of the organization and the type of the organization. Data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) approach. Smart-PLS 2.0 software was utilized to analyse the quantitative data through a multi-stage process to assess the outer and inner model (Hair et al., 2014). The analysis is divided into two stages, the measurement model to assess validity and reliability of the items, and structural model to assess relationship between LVs where the hypotheses are tested. In addition, determine the mediation effect of trust on the relationship between each variable in this study.

4.2 Respondents' profile

The study was conducted at MSC status organizations located at Klang Valley, Penang, and Kedah in Malaysia. There are about 2,652 companies under MSC status organizations. A total of 335 questionnaires were distributed to these companies (Krejcie and Morgan, 1970). A total of 132 questionnaires were used for further analysis and the response rate was 39.4%. In the Malaysian context, the responses received from the questionnaire delivered are quite sufficient as compared with the other previous studies which were 35.74% percent (Khan & Ismail, 2013), 24

percent (Jaafar et al., 2007), 47 percent (Kassim et al., 2012), and 35 percent (Daud & Yusoff, 2011).

As shown in Table 4.1, a total of 77.3 percent hold the position of Unit managers, 9.8 percent are having the other position category comprised of Deputy Director at 3.8 percent, followed by the Directors of the organizations at 6.1 percent. A total of 4.5 percent are General Managers, 8.3 percent are Branch managers. The majority of the organizations that responded were from the Klang valley which comprised of 64.4 percent, followed by Penang and Kedah with a response rate of 12.8 percent, and 22.7 percent, this shows that the major cities with the highest population of MSC status organizations. Finally, the major percentage were from InfoTech organizations at 57.6 percent, then Shared service outsourcing organizations with 19.7 percent, while Creative multimedia organizations had responded, 15.9 percent, and IHLs & incubator organizations had only responded 6.8 percent. Table 4.1 shows the details.

Table 4.1
Profile of the respondents

Demographic factors	Category	Frequency (N=132)	%
Position	General manager	6	4.5
	Branch manager	11	8.3
	Unit manager	102	77.3
	Others	13	9.8
Other Position	Deputy Director	5	3.8
	Director	8	6.1
Organization`s Location	Klang valley	85	64.4
	Penang	17	12.8
	Kedah	30	22.7
Type of the Organizations	Creative multimedia	21	15.9
	IHLs & incubators	9	6.8
	InfoTech	76	57.6
	Shared service	26	19.7
Total		132	100

4.3 Case screening

Before the process of data analysis, it is necessary to ensure the accuracy of the data entry and missing values using SPSS program. Therefore, the data were screened for any errors in coding, to enhance the statistical methods of data analysis. Thus, all data in this study were subjected to the accuracy of the entered data by addressing missing data, and outliers as suggested by Tabachnick and Fidell (2007). After the collected data were edited, coded, saved and analyzed using SPSS. The process of data screening was carried out in several steps as follows.

4.3.1 Accuracy of data input

This study employed descriptive statistics to test the mean, median and standard deviation. As shown in the Appendix C, the results of the frequency test showed that there were no errors in the data entry, thus the data was clean. Besides, unengaged responses were conducted on the major variables using standard deviation to discover who respond with same exact value for every single question. Further, all responses were used 5-point Likert scale. Similarly, the overall demographic responses were within the specified range.

4.3.2 Outliers

Outliers are defined by Hair et al. (2010) as an observation with a unique combination of characteristics that is substantially different from the other observations. Extreme values in a single variable are called univariate outliers, while multivariate outliers are extreme values displayed on a combination of two or more variables. Hair et al. (2010) indicate that the existence of Univariate Outliers can be detected by using graphically inspecting the frequency distribution, such as boxplots, histograms and normal probability plots or by using standardized variable values or Z-scores. In this study, Z-scores was conducted and each item must be less than 3.29 (Tabachnick & Fidell, 2007). As shown in the Appendix D, this study has not detected any outliers and all z-scores were less than 3.29.

Multivariate outliers also were examined by measures of Mahalanobis distance, Cook`s distance and standardized residual (Tabachnick & Fidell, 2007). In this

study, multivariate outliers were determined using Chi-Square Distribution Table and it was found that Mahalanobis distance values for all cases were less than 100.425 as illustrated in the Appendix E, means that Mahalanobis distance does not exceed the upper critical value of Chi-Square distribution (X^2.010) = 100.425.

4.4 Variable screening

4.4.1 Missing data in columns

The present study discovered few missing data, which were not recorded by the respondents. However, a total of six values was revealed, two missing values were found for Age, two missing values for the variable organizational capacity (OC), and two missing values for the variable knowledge transfer and sharing (KTS). As illustrated in Table 4.2, since data were missing in only six cases, there were a total of 0.061 percent out of 9,762 data points randomly missing values. According to Tabachnick and Fidell (2007), if five percent or less in a random pattern from the overall data set, almost any procedure for handling missing values will yield similar results. Therefore, the data is considered as a small percentage of randomly missing values. To address this issue, the missing values in this study were replaced by the mean value for all related cases because there were only a small number of missing data. In this case, the mean value could be the best guess about the value of the variable (Tabachnick and Fidell, 2007). As a whole case in this study missing data was not deleted and was not a problem. Figure 4.1 and Table 4.2 show the total of missing data.

Figure 4.1
Summary of missing values

Table 4.2
Total and percentage of missing data

Dimensions and variables	Number of Replaced Missing Values	Creating Function
Age	2	SMEAN(Age)
Organizational structure	2	SMEAN(OS7) SMEAN(OS8)
Knowledge transfer and sharing	2	SMEAN(KTS59) SMEAN(KTS63)
Total percentage		6 of 9.762 data points 0.06%

4.5 Testing for multicollinearity

Multicollinearity occurs when there is a high correlation of at least one independent variable with a combination of the other independent variables (Hair et al., 2010), It is because some of them may measure the same concepts. In addition,

multicollinearity is problematic because it can increase the variance of the regression coefficients, making them unstable and difficult to interpret, with a correlation value more than 0.90 (Hair et al., 2010). From this, multicollinearity was conducted by looking at variance influence factor (VIF) and tolerance value. VIF is the amount of variability of the selected independent variable that is explained by other independent variables while tolerance is the inverse of VIF (Hair et al., 2010). The VIF and tolerance values cut-off points are 10 and 0.10, respectively, which shows that VIF closer to 1.00 represents little or no multicollinearity.

As shown in Table 4.3, the collinearity statistics for all independent variables were conducted, and the correlation values between variables were below 0.90, which means no problem in multicollinearity. VIF values were ranged between 2.407 and 3.164 and tolerance values were ranged between 0.316 and 0.415. Hence, the data did not suffer from multicollinearity issue. This means, all of the indicators in variance inflation factor (VIF) values are lower than 5 and their tolerance values are higher than 0.2, so there is no collinearity problem.

Table 4.3
Multicollinearity test

Model	**Collinearity Statistics**	
	Tolerance	VIF
Organizational capacity	.409	2.446
Organizational motivation	.405	2.469
Organizational environment	.316	3.164
Trust	.415	2.407

a. Dependent Variable: knowledge transfer and sharing.

4.6 Testing non-response bias

The tool for data collection in this study was the survey questionnaire as mentioned earlier. The questionnaires were self-administered in MSC status organizations, therefore, it was necessary to test the non-response bias because the respondents took a long time to respond from April, 2015 to September, 2015 for data collection, as they were busy because of their position in the organizations. Further, many reminders through phone calls and e-mails have been made to ensure their responses.

To assess non-response bias, the t-test was conducted to compare the two groups based on the early (83) and late responses (49) and every variable of the study were taken into account. The equality of variances between the early and late group was conducted by Levene‟s test, which confirmed the equality of variances for all dimensions in independent, mediating and dependent variables detect if there is any response bias between the early and late responses.

The results of the independent-samples t-test showed no differences of the mean score between the early and late response groups for all variables as shown in Table 4.4. Hence, the respondents from each group were free from data bias. From this, Levene‟s test for equality of variance showed that there was no difference between the early and late response for all variables (p-value at the 0.05 significance level). In other words, the result of independent-samples t-test indicated that the equal variance significance values for each variable were greater than the 0.05 significance level of Levene's test for equality of variances as suggested by Pallant (2010). Table 4.5 depicted the results of Levene`s test for equality.

Table 4.4
Group statistics of early and late respondents (n=132)

Variables	Early/Late response	N	Mean	Std. Deviation	Std. Error
Organizational capacity	Early Responses	83	3.3027	.35532	.03900
	Late Responses	49	3.2904	.38237	.05462
Organizational motivation	Early Responses	83	3.4053	.58406	.06411
	Late Responses	49	3.1967	.48045	.06864
Organizational environment	Early Responses	83	3.7904	.65194	.07156
	Late Responses	49	3.6796	.57336	.08191
Trust	Early Responses	83	3.7523	.62212	.06829
	Late Responses	49	3.5397	.56565	.08081
Knowledge transfer and sharing	Early Responses	83	3.6261	.57848	.06350
	Late Responses	49	3.4408	.46979	.06711

Table 4.5
T-test results for non-response bias

Variables	Early/Late response	Leven's Test of Equality of Variances		Test of Equality of the Means		
		F-Value	Sig	T-Value	DF	Sig
Organizational capacity	Early Responses	0.698	0.405	.186	130	.853
	Late Responses			.182	94.966	.856
Organizational motivation	Early Responses	0.488	0.486	2.113	130	.037
	Late Responses			2.221	116.418	.028
Organizational environment	Early Responses	0.793	0.375	.985	130	.326
	Late Responses			1.018	111.287	.311
Trust	Early Responses	0.428	0.514	1.961	130	.052
	Late Responses			2.010	108.611	.047
Knowledge transfer and sharing	Early Responses	2.723	0.101	1.901	130	.060
	Late Responses			2.005	117.350	.047

4.7 Testing the measurement model (Outer Model) using the PLS approach

To assess the model, this study used PLS structural equation modelling (SEM). The first step in the PLS analysis before testing the hypotheses of the study, is to assess the measurement model or the outer model. To do so, the two main criteria to assess the measurement model were convergent validity and discriminant validity (Hair et al., 2014; Khozaei et al, 2012). Figure 4.2, shows the research model with structural dimensions.

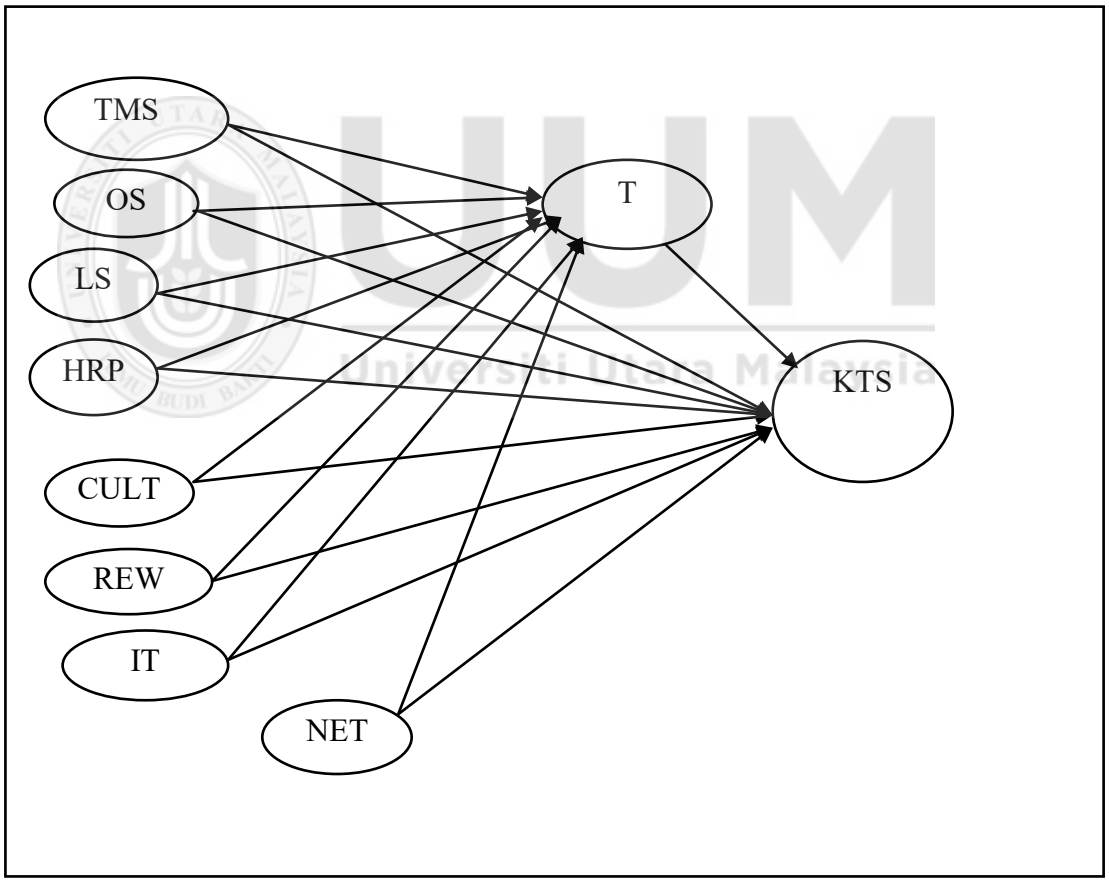


Figure 4.2
The research model

4.7.1 The construct validity

In achieving the analytic validity, the current study tests three kinds of validity through content validity, convergent and discriminant validity.

4.7.1.1 The content validity

Content validity in this study measures the extent to which the indicators represent the concepts under study. As mentioned earlier in the chapter three, the experts in management field and practitioners from different departments in UUM have examined the instrument in order to detect any deficiencies and provide suggestions for improvement. The selection of these academicians was based on their experience and their previous research activities. Further, 70 items that have been used in the current study were already established and tested in the previous studies. As shown in Table 3.1, it is clear that the measurement scales representing the main constructs of this study.

In the present study, 51 items have loaded adequately on their respective constructs, all the items have a loading mixed range from 0.705 to 0.944, Neupane et al (2014) and Hair et al. (2010) affirmed that a score of outer loading over 0.7 is acceptable. As a result, the factor loading has exceeded the recommended threshold of 0.7. As it is the correlation of the latent constructs and the item. Similarly, a total of 19 items were deleted to get highly adequate because of their low loadings. Thus, from the conducted analysis, the loadings were significantly confirming the content validity, as presented in Table 4.6

Table 4.6
Factor analysis and cross loadings

Constructs	Items	CULT	HRP	IT	KTS	LS	NET	OS	REW	T	TM
Culture	CULT26	0.708062	0.563648	0.418409	0.421086	0.449866	0.486485	0.119831	0.157807	0.398653	0.406723
	CULT27	0.779495	0.603431	0.524317	0.607436	0.434607	0.592154	0.111247	0.364698	0.41974	0.376279
	CULT28	0.718393	0.428069	0.446962	0.524817	0.306086	0.517585	0.151122	0.208806	0.425814	0.426181
	CULT29	0.715318	0.515892	0.329753	0.44657	0.385448	0.503553	0.363354	0.415286	0.536314	0.352975
	CULT30	0.754571	0.422652	0.466405	0.603951	0.364997	0.514935	0.111515	0.206403	0.410854	0.272148
	CULT31	0.743601	0.511567	0.513613	0.587605	0.385566	0.521332	0.011986	0.2852	0.485051	0.4524
Human Resource Practices	HRP22	0.570548	0.723354	0.516839	0.468037	0.649283	0.539695	0.073471	0.358499	0.455728	0.27072
	HRP23	0.55993	0.863334	0.577552	0.589094	0.583431	0.588555	0.247638	0.329566	0.610176	0.431332
	HRP24	0.472928	0.806823	0.508496	0.461444	0.668987	0.494686	0.058064	0.385558	0.384808	0.354822
	HRP25	0.594204	0.811759	0.54746	0.5074	0.545111	0.579625	0.061116	0.303592	0.551295	0.455543
Information Technology	IT37	0.589592	0.582417	0.899251	0.626986	0.513784	0.620092	0.170326	0.25473	0.565896	0.26328
	IT38	0.576014	0.61698	0.916673	0.601224	0.513795	0.652848	0.133048	0.229199	0.602235	0.260318
	IT39	0.486529	0.519233	0.893852	0.508889	0.471415	0.605262	0.08682	0.159008	0.522976	0.212494
	IT40	0.493659	0.545557	0.813904	0.546897	0.45886	0.450219	0.161518	0.273381	0.411392	0.13732
	IT41	0.505245	0.653014	0.810653	0.510643	0.526635	0.567907	0.168602	0.368084	0.491992	0.165842
Knowledge Transfer and Sharing	KTS56	0.525497	0.518005	0.493091	0.776223	0.368321	0.521193	0.238921	0.351494	0.437011	0.355075
	KTS57	0.605915	0.457116	0.596426	0.801256	0.396717	0.544646	0.300548	0.37741	0.479245	0.321497
	KTS58	0.59392	0.505858	0.448239	0.821721	0.308192	0.489856	0.239437	0.222448	0.531942	0.397454
	KTS59	0.588655	0.506819	0.518198	0.859207	0.387808	0.564291	0.180522	0.259921	0.600407	0.37985
	KTS60	0.53606	0.548712	0.462988	0.766675	0.381538	0.480204	0.1726	0.229882	0.584149	0.424169
	KTS61	0.528997	0.5178	0.498214	0.793255	0.426761	0.51245	0.171037	0.231068	0.532676	0.382753
	KTS63	0.581226	0.463249	0.429093	0.708923	0.39389	0.559519	0.183123	0.208107	0.558003	0.430519
	KTS64	0.52372	0.420262	0.502449	0.799932	0.334877	0.576283	0.209001	0.318539	0.557425	0.330882
	KTS65	0.536378	0.447388	0.488868	0.731314	0.439564	0.480682	0.125125	0.38513	0.444727	0.278441
	KTS67	0.649246	0.580564	0.595814	0.747497	0.468484	0.59356	0.178641	0.386557	0.538126	0.304329
Learning Strategy	LS15	0.312086	0.589947	0.366781	0.239748	0.73269	0.347528	0.032789	0.223652	0.366911	0.221428
	LS16	0.526379	0.645414	0.429057	0.49121	0.795287	0.535705	0.161632	0.36941	0.433011	0.337173
	LS17	0.472281	0.591536	0.560299	0.415122	0.850958	0.447149	0.075359	0.349498	0.401655	0.226015
	LS18	0.411079	0.597525	0.52882	0.485932	0.846982	0.488868	0.051823	0.373091	0.358591	0.252246
	LS19	0.287538	0.552393	0.341874	0.26924	0.718076	0.377798	-0.038758	0.359912	0.323599	0.272415
Networks	NET42	0.558408	0.545199	0.568347	0.468767	0.352214	0.77297	0.126009	0.181723	0.617563	0.376355
	NET43	0.548185	0.593323	0.569061	0.476632	0.480556	0.783942	0.118219	0.287978	0.638903	0.388619
	NET44	0.48224	0.517835	0.500456	0.584147	0.488229	0.746818	0.2046	0.473516	0.500048	0.334842

Table 4.6
(Continued)

Constructs	Items	CULT	HRP	IT	KTS	LS	NET	OS	REW	T	TM
	NET45	0.515622	0.487615	0.419787	0.46065	0.385727	0.762421	0.263393	0.366126	0.555469	0.30593
	NET46	0.632509	0.51977	0.532024	0.638635	0.477436	0.799956	0.095941	0.419698	0.579521	0.291338
Organizational Structure	OS6	0.171714	0.112231	0.117416	0.228094	0.033379	0.162301	0.905411	0.265885	0.174787	0.032788
	OS7	0.178805	0.155116	0.182487	0.239039	0.116869	0.209153	0.912913	0.296682	0.17944	-0.086589
Rewards	REW33	0.272832	0.43098	0.229293	0.300599	0.422886	0.337045	0.175616	0.744467	0.321569	0.133883
	REW34	0.314842	0.308904	0.193067	0.331729	0.327006	0.338159	0.307974	0.921044	0.266194	0.039122
	REW35	0.336305	0.37673	0.291521	0.326991	0.383676	0.442596	0.278768	0.944125	0.336067	-0.011932
	REW36	0.391644	0.379975	0.309872	0.380852	0.381166	0.452018	0.325391	0.923492	0.369907	-0.011995
Trust	T47	0.468546	0.398429	0.402596	0.557895	0.344072	0.630207	0.259622	0.33017	0.739232	0.351511
	T48	0.47572	0.439237	0.425505	0.49345	0.455209	0.57675	0.137229	0.273999	0.757035	0.358427
	T49	0.459228	0.516216	0.514765	0.566333	0.341595	0.604132	0.215031	0.392757	0.843251	0.235675
	T50	0.525197	0.584105	0.547991	0.536881	0.453999	0.616956	0.129029	0.310689	0.820398	0.279465
	T52	0.458101	0.602781	0.485429	0.552211	0.395846	0.57761	0.124239	0.222268	0.796819	0.317249
	T53	0.460877	0.519541	0.47241	0.47332	0.344867	0.58537	0.023886	0.246884	0.798306	0.329276
	T55	0.48788	0.423669	0.459885	0.528857	0.300367	0.519373	0.173677	0.24004	0.741619	0.274808
Top Management Support	TM1	0.39288	0.380516	0.179598	0.320891	0.278579	0.310469	-0.0895	-0.000058	0.290142	0.838871
	TM2	0.431105	0.354775	0.187405	0.407896	0.226333	0.381452	-0.010923	-0.001669	0.315714	0.88243
	TM3	0.512358	0.500528	0.260941	0.461766	0.358156	0.439167	0.00347	0.087621	0.398853	0.900609

4.7.1.2 The convergent validity of the measures

Convergent validity for this study is the extent to which multiple items are measuring a particular concept (Khozaei et al, 2012). To assess convergence validity the present study used outer loadings, composite reliability (CR) and the average variance extracted (AVE), as suggested by Hair et al. (2014) Table 4.7 provides results of loadings which has exceeded the recommended value of 0.7 (Hair et al., 2014; Khozaei et al, 2012; Neupane et al, 2014).

Composite reliability (CR) values also was assessed to depict the extent to which the indicators reflect the latent construct, all values ranged from 0.876 to 0.940. Which exceeded the recommended value of 0.7 (Hair et al., 2014). The value of average variances extracted (AVE) is greater than the recommended value of 0.5 (Hair et al., 2014), ranged from 0.543 to 0.826. Cronbach"s alpha also is greater than the recommended value of 0.7 ranged from 0.790 to 0.928.

For the present study, it was evidently enough to confirm that the values are all above the cut off values given in the literature for loadings (> 0.5), CR (>0.7) and the AVE (> 0.5), Cronbach"s alpha (>0.7). From this, the measures have sufficient convergent validity. As depicted in Table 4.7.

Table 4.7
The convergent validity analysis (after deleting 19 items)

Constructs	Items	Loadings	CR	AVE	Cronbach's alpha
Culture	CULT26	0.708	0.876	0.543	0.831
	CULT27	0.779			
	CULT28	0.718			
	CULT29	0.715			
	CULT30	0.754			
	CULT32	0.743			
Human Resource Practices	HRP22	0.723	0.878	0.644	0.816
	HRP23	0.863			
	HRP24	0.806			
	HRP25	0.811			
Information Technology	IT37	0.899	0.938	0.753	0.917
	IT38	0.916			
	IT39	0.893			
	IT40	0.813			
	IT41	0.810			
Knowledge Transfer and Sharing	KTS56	0.776	0.940	0.611	0.928
	KTS57	0.801			
	KTS58	0.821			
	KTS59	0.859			

Table 4.7
(Continued)

	Constructs	Items	Loadings	CR	AVE	Cronbach's alpha
		KTS60	0.766			
		KTS61	0.793			
		KTS63	0.708			
		KTS64	0.799			
		KTS65	0.731			
		KTS67	0.747			
	Learning Strategy	LS15	0.732	0.892	0.625	0.850
		LS16	0.795			
		LS17	0.850			
		LS18	0.846			
		LS19	0.718			
	Networks	NET42	0.772	0.881	0.598	0.832
		NET43	0.783			
		NET44	0.746			
		NET45	0.762			
		NET46	0.799			
	Organizational	OS6	0.905	0.905	0.826	0.790
	Structure	OS7	0.912			
	Rewards	REW33	0.744	0.936	0.786	0.906
		REW34	0.921			
		REW35	0.944			
		REW36	0.923			
	Trust	T47	0.739	0.9186	0.617	0.896
		T48	0.757			
		T49	0.843			
		T50	0.820			
		T52	0.796			
		T53	0.798			
		T55	0.741			
Top	Management	TMS1	0.838	0.906	0.764	0.847
	Support	TMS2	0.882			
		TMS3	0.900			

Notes: TMS: Top Management Support; OS: Organizational Structure; LS: Learning Strategy; HRP: Human Resource Practices; CULT: Culture; REW: Rewards; IT: Information Technology; NET: Networks; KTS: Knowledge Transfer and Sharing: Trust; T: Composite reliability; CR: average variances extracted; AVE.

4.7.1.3 Discriminant validity of the measurements

To examine the construct validity of the measurement model, discriminant validity is another type in which the square root of the AVE and cross-loading exceed the intercorrelations of the construct with the other constructs to demonstrate discriminant validity (Amin et al., 2014). To assess discriminant validity the square root of the AVE is using the method of Fornell and Larcker (1981).

For this study, discriminant validity examined by comparing the correlations between each construct, at the same time, the square roots of the average variance extracted (AVE) should be greater than the squared correlation for each construct. In other words, the squared (AVE) for all the constructs were presented in the correlation matrix along the diagonal. This means squared (AVE) should be higher than the off-diagonal elements in the responding row and column to provide good evidence of discriminant validity, as shown in Table 4.8.

Table 4.8
Discriminant validity analysis

Constructs	CULT	HRP	IT	KTS	LS	NET	OS	REW	T	TMS
CULT	**0.737**									
HRP	0.686	**0.802**								
IT	0.613	0.671	**0.868**							
KTS	0.728	0.636	0.646	**0.781**						
LS	0.523	0.752	0.572	0.500	**0.790**					
NET	0.710	0.689	0.671	0.683	0.566	**0.773**				
OS	0.192	0.147	0.165	0.257	0.083	0.204	**0.909**			
REW	0.375	0.423	0.293	0.380	0.428	0.447	0.309	**0.886**		
T	0.606	0.635	0.602	0.675	0.479	0.748	0.194	0.368	**0.786**	
TMS	0.515	0.477	0.243	0.461	0.333	0.438	-0.030	0.038	0.388	**0.874**

Notes: Square roots of average variances (AVEs) extracted shown on diagonal; bold data indicates the square root of the AVE for discriminant validity

The correlations for each construct used in this study were less than the squared root of (AVE). From this, the measurements have discriminant validity of the outer model. Once the reliability and validity of the outer model is established, the next step is to present results of the structural model within the inner model to evaluate the hypothesized relationships.

4.8 The assessment of the inner model and hypothesis testing procedures

After assessing the validity of the measurement model, researcher move to the next step which is testing the hypothesized relationship by running the PLS algorithm and Bootstrapping procedure in SmartPLS 2.0. The research framework for this stage involved five variables, organizational capacity, organizational motivation and organizational environment as the exogenous constructs, trust as the mediating construct, and knowledge transfer and sharing as the endogenous variable.

After running the PLS-SEM algorithm, path coefficients represent the hypothesized relationship among the constructs. To determine whether the coefficients are statistically significant or not, bootstrapping was conducted where a large number of subsamples (5000) are taken from the original sample to give t-value for significance test (Hair et al., 2011). After running the bootstrapping procedure Table 4.9, shows the standardized path coefficient (β), standard error, t-values, p-values and decision taken.

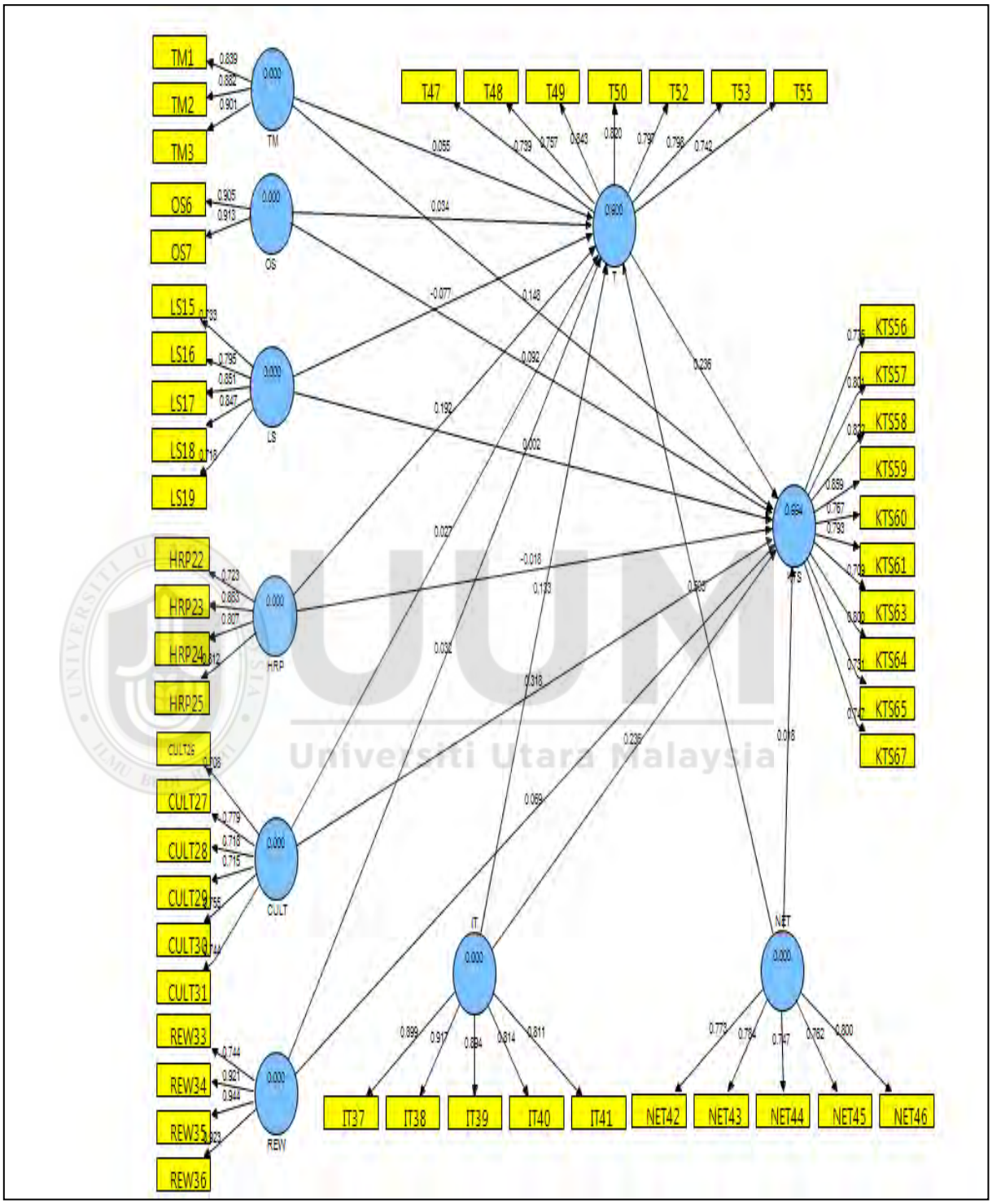


Figure 4.3
Path model results

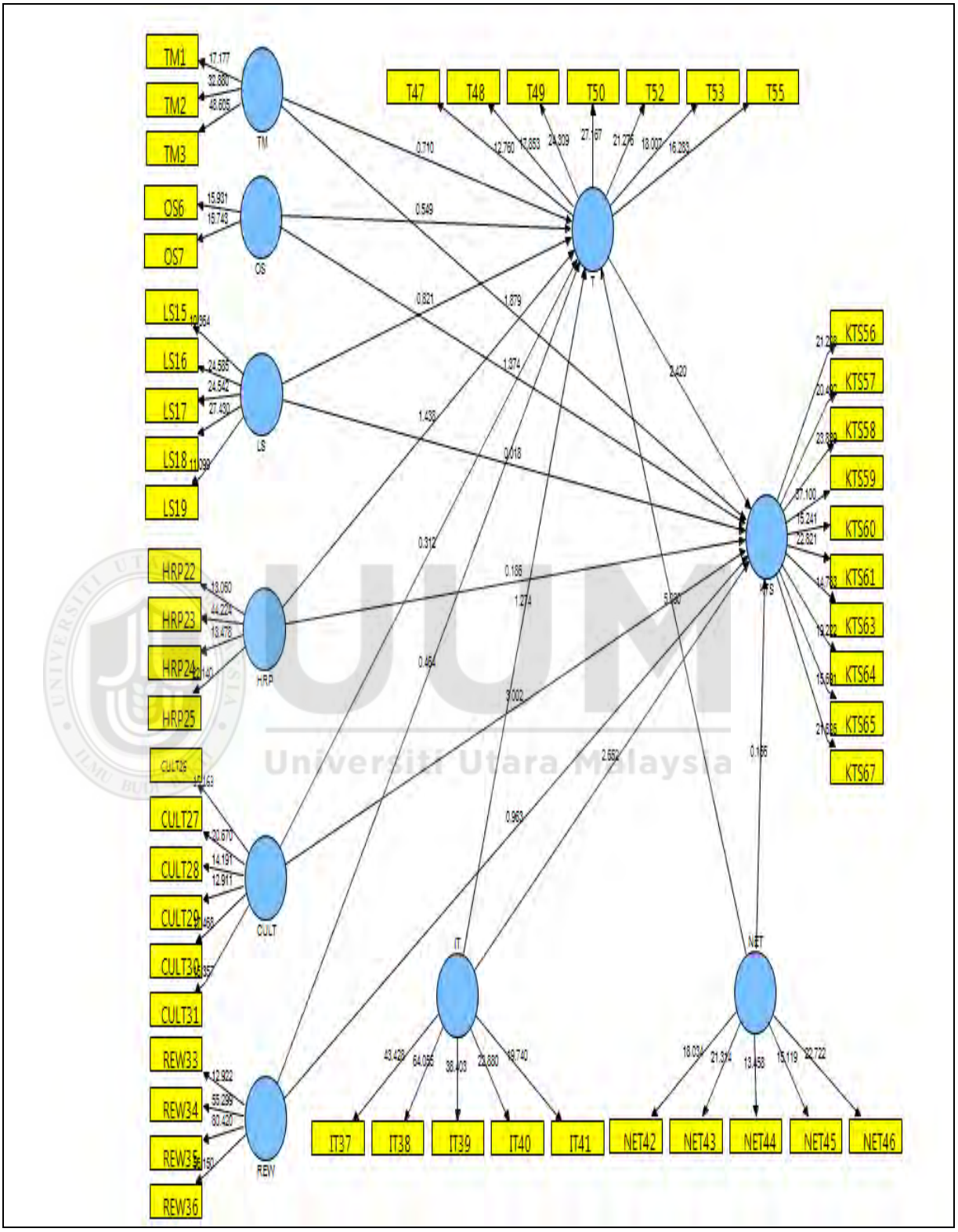


Figure 4.4

Path model significance results

Table 4.9
Results of the inner structural model

Relationship	Path coefficient	Std. Error	T-value	P-value	Decision
HRP -> KTS	-0.018	0.097	0.186	0.42	Not Supported
LS -> KTS	0.002	0.104	0.018	0.49	Not Supported
OS -> KTS	0.092	0.067	1.374	0.08	Not Supported
TMS-> KTS	0.148**	0.079	1.879	0.03	Supported
HRP -> T	0.192*	0.134	1.438	0.07	Supported
LS -> T	-0.077	0.093	0.821	0.20	Not Supported
OS -> T	0.034	0.062	0.549	0.29	Not Supported
TMS -> T	0.055	0.077	0.710	0.24	Not Supported
CULT -> KTS	0.318***	0.106	3.002	0.00	Supported
REW -> KTS	0.069	0.072	0.963	0.16	Not Supported
CULT -> T	0.027	0.086	0.312	0.37	Not Supported
REW -> T	0.032	0.069	0.464	0.32	Not Supported
IT -> KTS	0.236***	0.089	2.652	0.00	Supported
NET -> KTS	0.018	0.118	0.156	0.43	Not Supported
IT -> T	0.133*	0.104	1.274	0.10	Supported
NET -> T	0.505***	0.100	5.080	0.00	Supported
T -> KTS	0.235**	0.097	2.420	0.00	Supported

Note: *p < .10; **p< .05; *** p < .01

Results of this study showed the relationship effects within the constructs. As indicated in Table 4.9, seven out of the seventeen direct relationships between organization capacity, motivation, organizational environment, trust and knowledge transfer and sharing have demonstrated positive significant effects. Therefore, ten paths have demonstrated non-significant effects. More details are presented in the following sections.

4.8.1 Testing the relationship between organizational capacity and knowledge transfer and sharing.

This section presents main effects for organization capacity and knowledge transfer and sharing as hypothesized earlier in chapter two. As shown in table 4.9, the standardized path coefficient (β), standard error, t-values, p-values and decision taken have been demonstrated. Likewise, figure 4.4, graphically indicate path coefficient (β), and t-values for the hypothesized relationships.

As illustrated in Table 4.9, the relationship between human resource practices and knowledge transfer and sharing is not supported at 0.01 level of significance (β= -0.018, t= 0.186, p= 0.42). Learning strategy and knowledge transfer and sharing is not supported at level of significance of (β= 0.002, t= 0.018, p= 0.49). Organizational structure and knowledge transfer and sharing is not supported at 0.01 level of significance (β= 0.092, t= 1.374, p= 0.08). The relationship between top management support and knowledge transfer and sharing is supported at 0.05 level of significant (β= 0.148, t= 1.879, p= 0.03).

4.8.2 Testing the relationship between organizational capacity and trust

As indicated in Table 4.9, and Figure 4.4, the relationship between human resource practices and trust was positive and significant at 0.01 level of significant of (β= 0.192, t= 1.438 p < .10). The results also revealed that the relationship between learning strategy and trust not supported at 0.01 level of significant (β= -0.077, t= 0.821, p= 0.20). The relationship between organizational structure and trust is not

supported at 0.01 level of significant of (β= 0.034, t= 0.549, p=0.29). Similarly, top management support and trust is not supported at 0.01 level of significant (β= 0.055, t= 0.710, p= 0.24).

4.8.3 Testing the relationship between organizational motivation and knowledge transfer and sharing

The results in this section are concerned with the relationships between organizational motivation and knowledge transfer and sharing. As depicted in Table 4.9, and Figure 4.4, the results reveal that culture has positive and significant impact on knowledge transfer and sharing at 0.01 level of significance (β= 0.318, t= 3.002, p= 0.00). While, the relationship between rewards and knowledge transfer and sharing was not supported at 0.01 level of significance (β= 0.069, t= 0.963, p= 0.16).

4.8.4 Testing the relationship between organizational motivation and trust

As shown in Table 4.9, and Figures 4.4, the PLS results reveal that the relationship between culture and trust was not supported at 0.01 level of significance (β= 0.027, t= 0.312, p= 0.37), and similar to the relationship between rewards and trust which is not supported at 0.01 level of significance (β= 0.032, t= 0.464, p= 0.32).

4.8.5 Testing the relationship between organizational environment and knowledge transfer and sharing

This section also represents the results for organizational environment, and knowledge transfer and sharing. Table 4.9, and Figure 4.4, demonstrate that the

relationship between information technology and knowledge transfer and sharing is supported and has positive and significant impact at 0.01 level of significance (β= 0.236, t= 2.652, p= 0.00). Results also revealed that networks and knowledge transfer and sharing are not related and not supported at 0.01 level of significance (β= 0.018, t= 0.156, p= 0.43).

4.8.6 Testing the relationship between organizational environment and trust

The results between organizational environment and trust are provided in Table 4.9, and Figure 4.4, the relationship between information technology and trust has positive and significant impact on trust at 0.01 level of significance (β= 0.133, t= 1.274, p < .10). Similar to the results of the relationship between networks and trust which has positive and significant impact on trust at 0.01 level of significance (β= 0.505, t= 5.080, p= 0.00).

4.8.7 Testing the relationship between trust and knowledge transfer and sharing

The results provided in this section are concerned with the relationship between trust and knowledge transfer and sharing. As shown in Table 4.9, and Figure 4.4, PLS results demonstrate that the relationship between trust and knowledge transfer and sharing is supported at 0.01 level of significance (β= 0.235, t= 2.420, p= 0.00). The subsequent Table and Figures depict the results.

4.9 Prediction relevance of the model

The ability of the proposed model to predict the endogenous constructs is based on the assessment of Coefficient of determination (R^2), cross validated redundancy (Q^2), and path coefficients. Which is to facilitate the assessment of the model‟s quality.

4.9.1 Variance Explained (R^2)

The quality of the structural model can be assessed (R^2), the (R^2) for endogenous construct represents the predictive power of the model, it assesses the effect of the combined exogenous variables in the endogenous variable. The (R^2) value was assessed based on Cohen (2013) suggestion, where 0.26 is considered as substantial, 0.13 moderate, and 0.02 weak. Form this, the obtained (R^2) values of 0.59 and 0.66 are considered substantial values. Which indicate that 59% of the variance in trust and 66% in knowledge transfer and sharing is explained by all three constructs of organizational capacity, motivation and organizational environment.

4.9.2 Cross-validated Communality

Another criterion to assess the inner model‟s predictive relevance is (Q^2) by using a sample re-use technique (Hair et al, 2012; Hair et al., 2014). The (Q^2) technique proposed by Geisser (1974) and Stone (1974) to assess the model‟s predictive validity by means of the cross-validated redundancy measure (Q^2). Therefore, Hair et al. (2012) argue that the (Q^2) technique, it fits PLS-SEM applications. In particular, the PLS-SEM approach follows a blindfolding procedure to measure predictive capability. Thus, in this study since the sample size is 132 then the researcher used

an omission distance, called (D), the (D) can be any number from 5 to 10 but 5 and 10 cannot be selected (Vinzi et al., 2010). After the (D) value being selected from the remaining numbers 6, 7, 8 and 9. The software calculated two values: cross validated redundancy (CV-red) and cross validated commonality (CV-Comm). The (CV-red) was taken into account because of the purpose of validation. As indicated by Henseler et al. (2009) and Hair et al. (2014) the cross-validated redundancy (CV-red) value higher than zero shows that there is predictive relevance. While, a value less than zero indicates a lack of predictive relevance. The calculated values of the study are illustrated in Table 4.10, from this, the cross-validated redundancy for trust and knowledge transfer and sharing are 0.370 and 0.398. Indicating that the model has predictive relevance. The following Table 4.10, shows the prediction relevance of the model.

Table 4.10
Prediction relevance of the model

Variable	R Square	Cross-Validated Redundancy
Knowledge transfer and sharing	0.66	0.398
Trust	0.59	0.370

4.10 Effect size

By following the guidelines given in Cohen`s (2013) measures, the effect size concludes (0.02=small, 0.15=medium, 0.35=high). From this, the effect size was conducted using the formula as follows:

$$Effect\ size(f) = \frac{R^2_{incl} - R^2_{excl}}{1 - R^2_{incl}}$$

4.10.1 Effect size of trust

The effect size of trust was observed with the exogenous variables from the model (culture, human resource practices, information technology, learning strategy, organizational structure, rewards, top management support, and networks). As illustrated in Table 4.11, the effect size of trust and (CULT), (NET), and (HRP), were the largest, consequently, these results suggest that the effect size of the three variables were large according to Cohen‟s (2013) criterion. In addition, the effect size of (IT) and (REW) were medium as described to be less than 0.15. Similarly, the effect size of (LS), (OS) and (TMS) were small as indicated in Cohen‟s (2013) criterion.

Table 4.11
The effect size of trust and the interaction constructs

Latent Variables	R2incl	R2excl	R2incl-R2excl	1-R2incl	Effect Size
CULT	0.399	0.144	0.255	0.601	0.42
HRP	0.434	0.327	0.107	0.566	0.19
IT	0.583	0.567	0.016	0.417	0.04
LS	0.434	0.434	0.000	0.566	0.00
NET	0.583	0.368	0.215	0.417	0.52
OS	0.434	0.425	0.009	0.566	0.02
REW	0.399	0.378	0.021	0.601	0.03
TMS	0.434	0.426	0.008	0.566	0.01

4.10.2 Effect size of knowledge transfer and sharing

The effect size of knowledge transfer and sharing and the interaction constructs was shown in Table 4.12. The results of the effect size of (CULT), and (NET) were the largest among the other variables. The effect size of (HRP), (IT), (OS), (REW), (TMS) were medium. Finally, the results have also demonstrated that the effect size of (LS) was small as described in Cohen‟s (2013) criterion.

Table 4.12
The effect size of knowledge transfer and sharing and the interaction constructs

Latent Variables	R2incl	R2excl	R2incl-R2excl	1-R2incl	Effect Size
CULT	0.555	0.161	0.394	0.445	0.89
HRP	0.480	0.413	0.067	0.520	0.13
IT	0.545	0.482	0.063	0.455	0.14
LS	0.480	0.476	0.004	0.520	0.01
NET	0.545	0.426	0.119	0.455	0.26
OS	0.480	0.445	0.035	0.520	0.07
REW	0.555	0.540	0.015	0.445	0.03
TMS	0.480	0.438	0.042	0.520	0.08

4.11 Analysis of mediation effects

This section presents a mediation test to find in which a mediator variable can significantly carry the effect of an exogenous on an endogenous construct in the PLS path model. From this, mediation test is to assess the indirect effects of the independent variables (organizational capacity, organizational motivation and organizational environment) on the dependent variable (knowledge transfer and sharing) through the mediator variable (trust). Based on Hayes and Preacher (2010), and Castro and Roldan (2013), mediation analysis is achieved through many techniques, such as, the causal step approach by Baron and Kenny (1986), Sobl test by Sobl (1982), and newer approaches for mediation analysis such as, bootstrapping procedure which is one of the most valid and powerful methods in testing the mediation effect (Hayes & Preacher, 2010; Hair et al, 2014).

Therefore, bootstrapping is the PLS procedure used in this study to assess the statistical significance of the path coefficients. This technique has been reported to be suitable for mediation test (Hayes & Preacher, 2010). To this end, this section is to answer the third research questions of this study as follows.

4.11.1 PLS structural indirect effects

In PLS, mediation is determined by indirect effects. With this, the indirect effect is concerned with the influence of the exogenous variables (X) on endogenous variable (Y) through a mediator variable (M). Based on Hayes and Preacher (2010), (X), (Y), and (M) quantified as the product of paths a, b which are interpreted as the quantity.

(Y), is expected to change because (X) changes. As a result, (X) effect (M). Which is, in turn, effect (Y). To do so, the significance (t-value) of the indirect path coefficients and standard error were calculated to determine mediation effect. In other words, the PLS formula was used to assess the mediating effects.

$$T = a*b / sd\ (a*b)$$

To create the bootstrap *t*-statistic, mediation was determined by the results of the average of paths *a, b* divided by the standard error of paths (*a*b).* This means that *(a)* demonstrate the direct path of predictor variables (TMS, OS, LS, HRP, CULT, REW, IT, and NET) and (*b)* represents the path between trust (T) and knowledge transfer and sharing (KTS). Similarly, (*Sd)* refers to the standard deviation of paths *(a*b)*. The results from (*a*b)* and *(sd)* were achieved through PLS bootstrapping. Finally, (*T)* shows the significance coefficient. Consequently, the calculation was conducted to present the mediating effects of trust (T) on the relationship between exogenous variables (TMS, OS, LS, HRP, CULT, REW, IT, and NET) and endogenous (KTS) variable.

Generally, these procedures of bootstrap t-statistic lead this study to the next step for mediation test for all constructs.

4.11.2 Mediation results

The mediation test for this part was conducted to assess if the mediator (trust) could mediate the relationship between organizational capacity, organizational motivation,

organizational environment and knowledge transfer and sharing. The PLS bootstrap presents the results in Table 4.13.

Table 4.13
Mediation results

Hypotheses	*a*b* Coefficient	Std. Dev	T-Value	P-Value	Decision
CULT -> T-> KTS	0.010	0.023	0.452	0.33	Not Supported
HRP -> T-> KTS	0.039	0.038	1.039	0.15	Not Supported
IT -> T ->KTS	0.030	0.028	1.067	0.14	Not Supported
LS -> T -> KTS	-0.014	0.023	-0.603	0.27	Not Supported
NET -> T -> KTS	0.119	0.057	2.080	0.02	Supported
OS -> T -> KTS	0.009	0.016	0.549	0.29	Not Supported
REW -> T -> KTS	0.006	0.017	0.375	0.35	Not Supported
TMS-> T -> KTS	0.010	0.019	0.544	0.29	Not Supported

From Table 4.13, the results indicate that one out of the eight hypothesized mediational relationship has confirmed to be statistically significant. Whereas, the results have demonstrated that trust (T) has statistically failed to mediate the relationship between Culture (CULT), and (KTS). Human resource practices (HRP), and (KTS). Information technology (IT), and (KTS). Learning strategy (LS), and (KTS). Organizational structure (OS), and (KTS). Rewards (REW), and (KTS). Top management support (TMS), and (KTS).

For more details, after establishing mediation test, results show that trust has statistically failed to mediate the relationship between (CULT) and (KTS) at 0.01 levels of significance (β= 0.010, t= 0.452, p= 0.33). The results have also demonstrated that trust has statistically failed to mediate the relationship between

(HRP), and (KTS) at 0.01 levels of significance (β= 0.039, t= 1.039, p= 0.15). Similarly, the mediation of trust on the relationship between (IT), and (KTS) statistically failed at 0.01 levels of significance (β= 0.030, t= 1.067, p= 0.14). Results also between (LS), and (KTS) have a negative impact and statistically failed to be mediated by trust at 0.01 levels of significance (β= -0.014, t= -0.603, p= 0.27). In the same vein, trust has statistically failed to mediate the relationship between (OS), and (KTS) at 0.01 levels of significance (β= 0.009, t= 0.549, p= 0.29). The relationship between (REW), and (KTS) has also statistically failed to be mediated by trust at 0.01 levels of significance (β= 0.006, t= 0.375, p= 0.35). Trust has failed statistically to be mediated on the relationship between (TMS), and (KTS) at 0.01 levels of significance (β= 0.010, t= 0.544, p= 0.29). Finally, the statistical evidence demonstrated strong mediating effect of trust on the relationship between (NET), and (KTS) at 0.01 levels of significance (β= 0.119, t= 2.080, p= 0.02).

4.11.3 The variance accounted for (VAF)

Based on the previous calculation of the mediation results, this section indicates that there is an indirect effect of networks through trust on knowledge transfer and sharing. Thus, to estimate the size of the indirect effect, the variance accounted for value (VAF) was conducted to determine the ratio of the indirect effect to the total effect of networks on knowledge transfer and sharing which explained by the trust. To do so, the study used the formula of variance accounted for value (VAF) as follows:

$$VAF = a*b / a*b+c$$

By examining the significance of the paths (*a*b)*, this study used the estimates gained by bootstrapping method to get the standard error of the paths (*a*b)* and then divide them by the standard error as shown in the previous results in Table 4.13.

From this, the resulted values in Table 4.13, have provided a significant value of 0.02. Which, in turn, needs to be estimated by employing the formula of (VAF).

$$VAF = (0.119/0.119+0.018) => VAF = 0.87$$

The result of (VAF) is 0.87 meaning that 87% percent of the total effect of networks on knowledge transfer and sharing is explained by indirect effects of trust. Indicating that trust has a full mediation and power relationship between networks and knowledge transfer and sharing. To this end, the (VAF) has very large outcomes of above 80%, which can be described as a full mediation as determined by Hair et al. (2014).

4.12 Summary of the findings

This study has provided the evidence in assessing the relationship between organizational capacity, organizational motivation, and organizational environment through the mediating effect of trust. Before applying PLS-SEM, this study follows a multi-stage process to ensure the accuracy of the data entry using SPSS program. In the review of these processes, PLS technique used to establish the reliability and

validity of the outer model. Next step was to evaluate the hypothesized relationships within the inner model. Instead, to facilitate the assessments of the model, PLS technique has provided evidence of predictive relevance of the model and the importance of trust as a good mechanism through which (OC), (OM), and (OE) influences knowledge transfer and sharing (KTS). To this end, structural model was examined and reported in details as shown in Table 4.14.

Table 4.14
Summary of results for hypotheses testing

Hypotheses Number	Hypotheses	Results
H1	TMS -> KTS	Supported
H2	OS -> KTS	Not Supported
H3	LS-> KTS	Not Supported
H4	HRP -> KTS	Not Supported
H5	CULT -> KTS	Supported
H6	REW-> KTS	Not Supported
H7	IT -> KTS	Supported
H8	NET -> KTS	Not Supported
H9	TMS -> T	Not Supported
H10	OS-> T	Not Supported
H11	LS-> T	Not Supported
H12	HRP -> T	Support
H13	CULT -> T	Not Supported
H14	REW -> T	Not Supported
H15	IT -> T	Supported
H16	NET -> T	Supported
H17	TMS -> T -> KTS	Not Supported
H18	OS -> T -> KTS	Not Supported
H19	LS -> T -> KTS	Not Supported

Hypotheses Number	Hypotheses	Results
H20	HRP -> T-> KTS	Not Supported
H21	CULT -> T-> KTS	Not Supported
H22	REW -> T -> KTS	Not Supported
H23	IT -> T ->KTS	Not Supported
H24	NET -> T -> KTS	Supported
H25	T-> KTS	Supported

Notes: TMS: Top Management Support; OS: Organizational Structure; LS: Learning Strategy; HRP: Human Resource Practices; CULT: Culture; REW: Rewards; IT: Information Technology; NET: Networks; KTS: Knowledge Transfer and Sharing: Trust; T.

As indicated in Table 4.14, the hypotheses H1, H5, H7, H12, H15, H16, H24, and H25 were statistically supported by the findings of the study. On the other hand, the hypotheses H2, H3, H4, H6, H8, H9, H10, H11, H13, H14, H17, H18, H19, H20, H21, H22, and H23 were not statistically supported. More details of these findings are discussed in Chapter Five.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter presents the summary of the study, discussion and conclusion of the study. The objective of this study was to provide a clear understanding of the organizational capacity, organizational motivation and organizational environment in MSC status organizations through the mediation effect of trust. This chapter starts with a summary of the study, followed by discussions of the results, the chapter also provides the implications of the study, limitations and future research directions. Finally, the chapter presents the conclusion of this study.

5.2 Summary of study

The purpose of this study was to explore the impact of organizational capacity, organizational motivation, organizational environment on knowledge transfer and sharing in MSC status organizations in Malaysia through the mediating role of trust. This study was greatly motivated by the findings in the recent relevant literature concerning the importance of knowledge transfer and sharing in the Malaysian organizations (Yusof & Ismail, 2009), and the impact of factors that lead to enhance knowledge transfer and sharing in the Malaysian context. Most of the studies that have been conducted on knowledge transfer and sharing were in western countries, while in Malaysian context scarce researches were done (Yusof et al., 2012). In addition to that, the Malaysian organizations tend to be slow in the uptake of

knowledge management and that levels of knowledge management are still in the infancy stage. Even though, Malaysian government have been promoted Shared Services and Outsourcing (SSO) industry, which is one of the four clusters of MSC status organizations to create an appropriate framework of knowledge transfer in terms of facilitating transfer process. But some e-governments do not meet their performance objectives, this is because in most e-government projects, learning and knowledge are limited. In tandem with this, researchers argue that the lack of performance is basically related to the lack of knowledge transfer and sharing (Hamid & Salim, 2011; Yusof & Ismail, 2009). From this, Yusof et al. (2012) emphasized that the organizations in Malaysia have not been practicing knowledge sharing, and have not yet manage the basis of knowledge in order to be a knowledge-based society, besides that, the Malaysian organizations have received limited studies on knowledge transfer as most studies are only focusing on general knowledge management processes.

The present study is expected to provide more understanding on knowledge transfer and sharing by incorporating different factors and their influence on knowledge transfer and sharing. These factors are necessary because of the absence of a comprehensive inclusion of all aspects that affect knowledge transfer and sharing in MSC status organization. Thus, this study offers a comprehensive approach by giving equal attention to all critical factors that needed to be integrated in terms of identifying which factor had a great relationship with knowledge transfer and sharing in MSC status organizations to create value. The study attempts to examine

knowledge transfer and sharing and its most influential factors in MSC status organizations.

One of these factors that have been hypothesized to influence knowledge transfer and sharing is the organizational capacity and its dimensions (top management support, organizational structure, learning strategy, and human resource practices), these dimensions are related to knowledge transfer and sharing (Lin,2007; Rhodes et al., 2008; Sandhu et al., 2011; Choi & Lee, 2002). Among the other important factors that have been hypothesized to influence knowledge transfer and sharing are organizational motivation (culture, rewards), and organizational environment (information technology, networks), this study is giving equal attention to all critical factors to facilitate the implementation of knowledge transfer and sharing in MSC status organizations, this is because most studies are usually investigated partially these factors (Lee & Choi 2003). Therefore, this study attempts to incorporate a comprehensive model that provides insights into the factors that must be taken into account when implementing knowledge transfer and sharing in MSC status organizations. At the same time, the present study attempts to examine empirically the relationship between these factors in MSC status organizations especially that there is a limited researches that attempted to examine this relationship in MSC organizations in Malaysia.

Osmani et al. (2014) recommend that future researchers who attempt to examine knowledge sharing in the Malaysian organizations should look into the mediating

role of trust in the relationship between the motivating factors and knowledge sharing. As indicated in previous studies, trust plays a major role in facilitating knowledge sharing (Yusof et al., 2012). In addition to that, there is paucity of empirical research that examines the impact of trust on knowledge transfer and sharing in MSC status organizations.

According to the comprehensive review of the relevant literature conducted in Chapter one, and Chapter two, this study aimed to achieve the following main objectives:

1. To find out the relationship between organizational capacity, organizational motivation, organizational environment, trust and knowledge transfer, sharing in MSC status organizations.
2. To determine the relationship between organizational capacity, organizational motivation, organizational environment and trust.
3. To examine the mediating effect of trust between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing.

5.3 Discussion

This study has provided descriptive analyses to examine respondents‟ profile, and also to investigate the relationship between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing and the effect of trust as a mediator in this relationship, and this is confirmed by the findings of the current study as follows.

Regarding the respondents‟ profile, the majority of respondent were male 57.6 percent. In addition to that, the most respondent age in this study was 41 years old and above, with 47 percent. Majority of the respondents hold bachelor degree 61.4 percent. In relation to respondents‟ experience, majority of the respondents had worked more than 10 years, 75.8 percent. A total of 77.3 percent hold the position of Unit managers, and the majority of the organizations that responded were from the Klang valley which comprised of 64.4 percent. Finally, the most respondents were from InfoTech organizations at 57.6 percent. The details of respondents‟ profile are demonstrated in Table 4.1.

The present study used SmartPLS technique which is one of the prominent software applications for Partial Least Squares Structural Equation Modeling (PLS-SEM). Regarding this study, the process of PLS analysis follows two steps, the process of measurement model and the structural model. The predictive power, relevance, and the effect size of the model were also examined by the R squared (R^2), (Q^2), and (f^2) values. Hypotheses H1, H5, H7, H12, H15, H16, and H24, were statistically supported by the findings of the study, and hypothesis of mediation effect H25 was

also supported and tested according to the bootstrapping procedure which is one of the most valid and powerful methods in testing the mediation effect. The results revealed that trust has a full mediation and power relationship between networks and knowledge transfer and sharing.

Table 4.14 revealed the overall results, including all relationships between organizational capacity as independent variable and knowledge transfer and sharing as a dependent variable. In the same vein, organizational capacity as independent variable and trust as a mediator. Also, the relationship between organizational motivation as independent variable and knowledge transfer and sharing as dependent variable. Similarly, organizational motivation as independent variable and trust as a mediator. Further, the relationship between organizational environment as independent variable and knowledge transfer and sharing as a dependent variable. In the same way, organizational environment as independent variable and trust as a mediator. In addition, the relationship between trust as a mediator and knowledge transfer and sharing as dependent variable. Finally, mediating effects of trust on the relationship between the overall IVs and knowledge transfer and sharing. From the examined relationships, twenty-five hypotheses assessed statistically the dimensional relationships, and the empirical findings support eight hypotheses, while seventeen hypotheses were not supported.

5.3.1 Relationship between organizational capacity and knowledge transfer and sharing

In relation to the organizational capacity and knowledge transfer and sharing. This study reveals that, organizational structure (OS), learning strategy (LS), and human resource practices (HRP), were not found to be a predictor of knowledge transfer and sharing. Only one dimension, namely top management support (TMS), was significantly related to knowledge transfer and sharing.

From Table 4.14, and based on the objective of study, it was found that top management support (TMS), significantly related to knowledge transfer and sharing. This was consistent with the earlier study by Lin (2007), who also studied the relationship between top management support and knowledge sharing processes. top management support in the current study influence members‟ willingness to share knowledge by encouraging, supporting and providing resources to facilitate knowledge transfer and sharing with colleagues and subordinates. The results also consistent with Wei et al. (2009) findings who stressed that the support of top management provides a proper environment to create, organize and share knowledge. From this, top management support is very important in ensuring knowledge transfer and sharing effectiveness. In other words, transferring and sharing knowledge is based on the organizational support, and this is confirmed by the findings of the current study.

In addition to that, the current findings reject the proposition that organizational structure (OS) is related to knowledge transfer and sharing. This results were not

supporting the findings by Rhodes et al. (2008) that the flexible structure directly influences knowledge transfer. Basically, with the current study, the authority in MSC status organizations tend to be highly bureaucratic and have a centralized decision-making structure with lower levels of encouraging members to make their own decision. This is because of formal procedures as it is usually written and documented. This finding are consistent with the assertion by Yusof et al. (2012) that the Malaysia organizations are highly centralized decision-making structure. Hence organizational structure in the present study is preventing knowledge transfer and sharing because there are no opportunities to transfer and share knowledge with each other. This is confirmed the findings of the current study.

On the other hand, the effect of learning strategy (LS) on knowledge transfer and sharing is not supported, indicating that the formal training programs that provided by the organizations do not assist members of the organizations to transfer and share knowledge. This is because, formal training programs that provided by the organizations reduces the informal opportunities to develop individuals that can be happened through seminars, conferences and community gatherings. To do so, this may satisfy members to share and transfer knowledge. This argument supports the proposition that, when the individual‟s needs and organizational learning practices interact with each other, knowledge creation will be encouraged. This finding is not supporting the previous studies by Rhodes et al. (2008), and Lee and Choi (2003), and Sorakraikitikul and Siengthai (2014) that they found a positive relationship between organizational structure and knowledge sharing. This is because of the

cultural and context differences as these studies conducted overseas which are deferent from the current study context.

Another dimension under organizational capacity in this study was human resource practices (HRP). This study indicates that human resource practices (HRP) and knowledge transfer and sharing were not related, this is because the organizations under study do not consider or support training programs, incentive systems, internal rotation, participation in making decisions, assess and control knowledge and teamwork. This is probably impeding knowledge transfer and sharing to be effective. This finding inconsistent with the previous studies (Fong et al., 2011; Donate & Guadamillas, 2011; Lee & Choi, 2003; Shiue et al., 2010; Cho et al., 2013; Syed-Ikhsan & Rowland, 2004b; Minbaeva, 2005, Lane et al., 2001; Cabrera & Cabrera, 2005). In other words, most organizations are seeking competitive advantage through HR (Theriou & Chatzoglou, 2008), where organizations can create a suitable environment in promoting knowledge transfer by applying effective practices and processes through effective human resources practices.

5.3.2 Relationship between organizational capacity and trust

Based on the objective of study, the relationship between organization capacity and trust were examined, and it was found that organizational capacity, including, top management support (TMS), organizational structure (OS), learning strategy (LS) did not significantly related to trust. While, human resource practices (HRP) found to have an impact on trust.

This study indicates a non-significant association of top management support and trust, this is most probably because trust in the current study is not important for top management support as they are not deeply engaged in encouraging knowledge transfer and sharing with colleagues and subordinates which may lower the level of cooperation and communication on the management team and individual levels, eventually, this could affect the level of trust between the managerial level and the othe members in the organization. Top management are mainly concerned with performing routin tasks on a daily basis, and complying with the stipulated rules and policies in their organizations. Therefor, in the present study encouraging knowledge transfer and sharing is not something that they would look forward to at work. In fact, this is consistent with the strategic attention by Feng and Zhao (2014), and the attention-based theory by (Ocasio, 1997) that the managerial attention is the most valuable resources in the organization.

Furthermore, the study reveals that organizational structure is not related to trust. the finding was different from the previous study by Krasman (2014) and Latifi and Shooshtarian (2014), this is because organizational structure is not perceived to be a good motivator for trust. Indicating that most of the activities in the organizations were under formal procedures with high centralization in making decisions. This is, perhaps, because of the size of the organizations were large with formal structure. In other words, small organizations are more likely to be with the less formal structure. This is consistent with the assertion by Mahmoudsalehi et al. (2012), and Rhodes et al. (2008) that high centralization is prevented interactions among members and reduces the opportunity for individual growth, which in turn affect the level of trust.

Based on Latifi and Shooshtarian (2014), different organizational structure had an impact on organizational trust. On the other hand, learning strategy and trust were not related, which is different from the findings of previous study by Swift and Hwang (2013). The result indicates that the opportunities of learning strategy that been provided by the organization is more formal, and formal learning usually has its own rules, procedures and regulations which may reduce members‟ interaction, which is accordingly affect trust, because the interactions among members are limited.

Human resource practices was found to have significant impact on trust. This result consistent with the empirical study by Vanhala and Ahteela (2011), and Gould-Williams (2003) that HR practices had a strong predictive effect on trust. In line with this, the current results of this study confirmed the importance role of HR practices in predicting trust, this is because HR practices in the studied organizations support training programs, incentive systems, internal rotation, making decision, implementing and encouraging knowledge management processes and teamwork. Moreover, the positive relationship between HR practices and trust might be because of the respondents` satisfaction and commitment towards their organizations. This may simply reflect their predicting to change. Based on the empirical study by Tzafrir (2005) the significant relationship between HR practices and trust could positively influence managers with a high level of trust, which is, in turn, affect their teams to shape HR practices to show high performance.

5.3.3 Relationship between organizational motivation and knowledge transfer and sharing

As stated earlier, Table 4.14, demonstrate support relationship between culture and knowledge transfer and sharing. This finding was consistent with the previous studies by Sorakraikitikul and Siengthai (2014) and Waheed et al. (2013) and Lee and Choi (2003) and Wei et al. (2009) and Donate and Guadamillas (2011), the result conceptualized culture in terms of values to provide a strong support for knowledge transfer and sharing among employees of the organization. Therefore, culture is measured as a major catalyst for knowledge processes (Donate and Guadamillas, 2011). Similarly, the study of Ooi et al., (2012) has shown a significant relationship between the culture of the organization and knowledge sharing among the employees by determining the value of knowledge in creating an effective knowledge transfer and sharing practices in the organization. The current positive finding of culture and knowledge transfer and sharing, affirmed that even though culture holds a diverse group and notions, but these groups they share similar views and norms to deal with knowledge transfer as an outcome of this view. From this, when the culture of the organization involved common language, experiment and implement new knowledge, tolerance of mistakes, confidence and openness, common sense for all organizational members, these norms eventually lead to create and develop a supportive context of culture.

The study also assessed the relationship between rewards and knowledge transfer and sharing and it was not related. This implies that the organizations under study do

not engage in the rewarding system, this means that the organization does not consider rewards system as a motivator to encourage knowledge transfer and sharing. This is inconsistent with the findings by Wickramasinghe and Widyaratne (2012), and Lin (2007), and Jahani et al., (2011), and Soo et al. (2002), and Williamson et al. (2009) and Westover & Taylor (2010) who demonstrate the importance of both intrinsic and extrinsic rewards in encouraging knowledge transfer and sharing. In the current study giving high salary, promotion, and increase job security were not enough to be a motivator to share knowledge. In this context, organizations have to create a suitable climate that motivates their subordinates. The current findings have also demonstrated that rewards are important to guide employees‟ behavior by applying a balanced reward system to enhance knowledge transfer and sharing.

5.3.4 Relationship between organizational motivation and trust

As shown in Table 4.14, the study found a non-supportive relationship between culture and trust. This is dissimilar to the previous study by, Wiewiora et al. (2014). This finding also was different from the previous result in the current study that culture is related to knowledge transfer and sharing. This is because the common organizational language, experiment and implement new knowledge, tolerance of mistakes, confidence and openness, common sense for all organizational members were not worthy to support trust between members. Respondents in this study would be more satisfied with the environment of the workplace which is promoting open communication, motivation, incentives which in turn boost the interpersonal trust.

On the other hand, the result may suggest that a high level of interaction between employees and organizations would demonstrate a high level of trust.

On the other hand, it was found that rewards and trust were not related to each other. This finding inconsistent with the previous studies by, Lin (2007), and Zhang et al. (2015) that rewards system is one of the important processes to empower interpersonal trust. In the current study, organizational rewards is concerned with giving high salary, promotion, and increase job security as a motivator to enhance interpersonal trust. The organizations in this study perhaps do not exhibit beneficial rewards to promote trust, which in turn have an effect on the interpersonal relationships. This finding also was plausibly attributed to the fact that the respondents of the study were not valued as contributors to the organization, which means they were not rewarded appropriately by the organization, because sufficient support builds trust and increases opportunities for growth.

5.3.5 Relationship between organizational environment and knowledge transfer and sharing

Based on Table 4.14, the results demonstrate a support relationship between IT and knowledge transfer and sharing. This indicates that the respondents of the study agreed that information technology had a great impact on knowledge transfer and sharing. This finding is consistent with results provided by Al-Gharibeh (2011), and Rhodes et al. (2008), and Lin (2007). The results also confirm the importance of IT in MSC status organization as it is knowledge intensive entities to achieve the

knowledge based society vision. Further, the respondents of this study, they would have awareness towards the importance of IT in which knowledge being transferred and shared in terms of collaborative work, communication, searching and accessing information, simulation and prediction and support systematic storing. This is because managers are the main determinant of knowledge sharing in choosing and implementing an appropriate technology that provides a close fit between all levels in the organizations. Because information technology is only a tool in business intelligence areas which needs the willingness of individuals to share knowledge (Rhodes et al., 2008).

The empirical results also demonstrate that networks and knowledge transfer and sharing were not supported, This is inconsistent with the previous studies by Guechtouli et al. (2013), Zhou et al. (2010), and Zupan and Kase (2007), and Lee and Yu (2011), and King et al. (2005), and Chong et al. (2011), and Chen et al. (2006), and Riege (2007), and Yu et al. (2004). The finding justified that managers in MSC status organization in their process of creating, transferring, and sharing knowledge were not using informal procedures. This is because networks in the studied organizations do not create a context of sharing and transferring knowledge, even though working together as a team, using workgroups, hall talk, and calling each other from different departments to exchange information and knowledge needed. From this, the efficiency of knowledge transfer and sharing is determined by informal organizational structure of networks (Deflorin et al., 2012). Further, both social and electronic networks are critical to increase the ability of the organizations. Even though, MSC status organizations are identified as heavy users of multimedia

and information and communications technology, which makes sense for them to believe in electronic social networks use to enhance knowledge transfer, but the findings of the current study confirmed that networks and knowledge transfer and sharing not related.

5.3.6 Relationship between organizational environment and trust

As shown in Table 4.14, findings demonstrate a significant effect of information technology on trust, indicating that the respondents in this study might be more comfortable in using information technology in their jobs which in turn contribute to support communication and collaboration among organizational employees, searching and accessing information, simulation and prediction and support systematic storing. This is to enable interrelationship and build strong ties of trust. The finding was consistent with the empirical study by Ryssel et al. (2004), that (IT) positively related to trust. This is because the respondents of the study might expect more processes that makes subordinates reliable because information technology supports open channels of communication, which, in turn, subordinates‟s trust will increase. In other words, (IT) enables individuals to process information faster with more accuracy and more reliable to each other (Lin, 2007; Bairi, 2011; Sheng et al., 2013). On the other hand, the result indicates that (IT) supports the interactions internally and externally as it is one of the key success factors in any organization. Particularly, in MSC status organizations as users of multimedia and information and communications technology.

The findings also demonstrate the importance role of networks in creating support environment of trust through working together as a team, using workgroups, hall talk, and calling each other from different departments to exchange information and knowledge needed. The result was found to be the greatest impact in this study, which is congruent to the previous study by, Fernandez-Pérez et al. (2012), that social networks influence trusting relationships with the organizations. From this, the current results considered that the respondents of the study value networks process to enhance impersonal and interpersonal trust as suggested by social capital theory (Sodano et al., 2008), that interpersonal trust occurs when two parties are involved in the relationship of exchange which is individual. While impersonal trust is a social expectation that everyone involved to exchange. To this end, the positive finding might be involved both individual relationships to exchange and the shared expectations that everyone in the organization involved in the exchange.

5.3.7 Relationship between trust and knowledge transfer and sharing

Table 4.14 shows strong and significant relationship between trust and knowledge transfer and sharing. Indicating that the respondents of the study agreed that the high level of trust in their organizations is the key element in promoting knowledge transfer and sharing. The strong linkage between trust and knowledge transfer and sharing demonstrated in the results has reaffirmed the propositions articulated by Abrams et al. (2003), and McAllister (1995), that there were two components of trust that promote knowledge transfer and sharing: benevolence and competence. The finding was also consistent with results by Rhodes et al. (2008), and Lee and Choi

(2003), Osmani et al. (2014), and Rahman and Hussain (2014), and Wickramasinghe and Widyaratne (2012), and Ding et al. (2013). The current finding reveals that the interpersonal trust is very important predictor to knowledge transfer and sharing, therefore, the respondents of the study they have a strong belief of trust towards the other party in doing their job, which, in turn, assist the members of the organization to be more confident in, and willing to engage in the process of knowledge transfer and sharing. The result also indicates that respondents might be more likely to be trusted to create a good team member with trusted work environment. This could be done by having team members closely that willing to act on the basis of the words, actions, and decisions of another party to provide awareness on why share, what to share, when to share, and how to share and who to share with.

5.4 The mediating role of trust in organizational factors and knowledge transfer and sharing

This section discusses the mediating role of trust in the relationships between organizational capacity, organizational motivation and organizational environment and knowledge transfer and sharing. To do so, the linkages between all of these variables were tested using Partial Least Squares (PLS). According to the research model of the study, the hypothesized mediation represents how the IVs variables affect DV variable through mediating variable (trust). In specific, the current study tests the hypothesized mediation to determine the mediation effect as mentioned earlier in chapter four. As described by Hayes (2009) the traditional technique of

mediation test was Sobel test or called the product-of coefficients approach, which is commonly cannot be applied with (PLS) as it is cannot provide raw unstandardized path coefficients required by the Sobel test. It requires the assumption of normality on the sampling distribution of the indirect effect. From this, the recommended approach to mediation analysis was bootstrapping. Because, it does not require the assumption of normality at the same time demonstrate higher performance than the Sobel test (Hayes, 2009; Hayes & Preacher, 2010; Castro & Roldán, 2013). To this end, the study applied the bootstrapping technique to test indirect effects.

Eight Hypotheses as depicted in Table 4.14 that were H17, H18, H19, H20, H21, H22, H23, and H24, were concerning to test the mediating effects of trust on the relationship between organizational capacity, organizational motivation, organizational environment and knowledge transfer and sharing. As illustrated in Table 4.14 seven hypotheses H17, H18, H19, H20, H21, H22, and H23, empirically tested and found to be not supported while the remaining one H24 is significantly supported. The discussion is presented in the subsequent section.

5.4.1 Insignificant mediation effects

The findings show that seven hypotheses H17, H18, H19, H20, H21, H22, and H23, were found to be not significant and not supported. This means that trust did not mediate these hypotheses and knowledge transfer and sharing links. The plausible explanations for this as follows.

Results demonstrate that the mediating role of trust did not support the relationship between top management support and knowledge transfer and sharing. The current findings in Table 4.14 were found to be incongruent to the direct effect between top management support and knowledge transfer and sharing which is supported. This means that trust (T) did not exist in the indirect effects between (TMS) and (KTS). This is because trust or interpersonal ties were not viewed as an important aspect to top management support in the process of knowledge transfer and sharing as the processes of knowledge transfer and sharing occurs based on the rules of the organization just to accomplish its mission and vision which are applied through formal procedures such as, workshops, seminars, to get reputation. As planned in the MSC status organizations to be a catalyst for growth in achieving fully developed status by the year 2020. On the other hand, this finding inconsistent with the previous study by Levin & Cross (2004) that trust between top managers is an important process which contribute to knowledge transfer with high level of performance. The respondents also do not value the role of trust in transferring and sharing knowledge because they are completing their tasks as a daily routine, and complying with the stipulated rules and policies in their respective organizations (Moynihan & Pandey, 2007).

Based on the Table 4.14, the relationship between organizational structure (OS) and knowledge transfer and sharing (KTS) through trust (T) is failed to be supported, this is because of the lack of mediating effect of trust on the relationship between organizational structure and knowledge transfer and sharing. In addition to that, the participants of this study are not stimulated by the organizational structure to be a

good motivator for trust and knowledge transfer and sharing. In specific, they are more complacent in the current organizational structure. Therefore, most probably trust is not something that they are looking for to transfer and share knowledge. This is may be because of the big size of some organizations where the strategies will look for direct effects on knowledge transfer and sharing using different tools to influence the individuals and teams such as information and communication technology to support the development and relationships with subordinates. As it is a part of the MSC status organizations strategy to employ ICT in enhancing their mission and vision. Another reason for this result that the dissimilar structures in the studied organizations could affect the perceptions of respondents towards trust as a mediator that influence relationships between organizational structure and knowledge transfer and sharing. This is consistent with the findings by Krasman. (2014) that participation in making decisions is basically related to the nature of the organizational structure.

The study also indicated that the finding has a negative impact and statistically failed to be mediated by the trust on the relationship between learning strategy and knowledge transfer and sharing. This finding also fails to support the indirect effect concerning the influence of learning strategy on (KTS) through trust. in the current study learning strategy in the studied organizations is determined by the level of confidence in which individuals can openly transfer and share valuable knowledge. This is because trust was defined earlier as the extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another. The failure of trust to mediate the relationship between (LS) and (KTS), is basically

because of the lack of social capital structure in creating strong ties to establish enhanced platform for knowledge transfer and sharing within the organization, which in turn promotes organizational learning. This is supported by the theory of social capital, Li and Luo (2010), which affirmed that the strong ties between team members will affect the opportunities to exchange ideas, eventually create high and good conditions for learning. Therefore, individuals and team members in the organization respond to the good conditions by developing a strong sense of trust to learn and share more information. In support of this, the empirical study by, Nielsen and Nielsen (2009) found trust to be significantly associated with learning and contribute to knowledge exchange.

Table 4.14 emphasized that human resource practices have no indirect influence on knowledge transfer and sharing through trust. Similarly, human resource practices have no direct influence on knowledge transfer and sharing. This finding was probably attributed to the fact that the respondents in the current study they are not being motivated by trust to be a mediator between human resource practices and knowledge transfer and sharing, this is because the relationship between human resource practices and trust it was found to be supported partially in the previous result. This means that MSC status organizations seem to be more formal in dealing with human resource practices as a set of policies and procedures that have been made to direct members‟ attitudes and behaviors. As a result, the respondents of the study may not have the opportunity to capture the role of trust as an intangible component that can influence the entire organization. This is inconsistent with the empirical evidence by Gould-Williams (2003) that the importance of human resource

practices is based on trust to achieve better outcomes. The current findings also indicated low levels of the opportunities for participating in organizational decision-making, and lack of internal and external training opportunities with the lack of incentive systems. Because the effectiveness of HR practices is based on the evaluation of members which in turn represent more relationships, opportunities, interaction and communication between the organizations and their individual employees. This perhaps explains if HR practices are well designed it would affect perceptions of trust. As noted by exchange theory (Tzafrir et al., 2004) that the development of relations is based on the social exchange circle which includes both trust and uncertainty.

Moreover, the study indicates that the mediating role of trust in the relationship between culture (CULT) and knowledge transfer and sharing (KTS) is not supported. Based on the Table 4.14, the research finding fails to affirm the indirect effects link between culture and knowledge transfer and sharing through trust. This is because in the studied organizations trust was not captured as an important link in their jobs because of the formal barriers such as rules and regulations. This is consistent with the previous study by Hauke (2006), and Carrillo et al. (2009). Besides, the direct relationship between culture and (KTS) was supported because of the respondents‟ expectation and perceptions which arise within common shared norms such as common organizational language, tolerance of mistakes and confidence and openness. In addition to that, different background and different culture in the studied organizations can be taken into account as it is inhibitor or motivator to link culture with knowledge transfer and sharing through trust, because some of these

organizations are not lacal. Eventually, the result is inconsistent with the findings by Jain et al. (2015), that in the Malaysian context the organizational culture is related and promotes trust which in turn contribute to knowledge sharing.

As indicated in Table 4.14, the findings have not supported the mediating role of trust in the relationship between rewards (REW) and (KTS). Indicating that the respondents of the current study do not value trust to be a motivator in enhancing the relationship between rewards and knowledge transfer and sharing, because the expected rewards to transfer and share knowledge occurred based on performance-based reward systems. Further, the monetary and non-monetary rewards were designed to encourage knowledge transfer and sharing rather than interpersonal relationships. The finding was inconsistent with the previous study by Rahman and Hussain (2014), that trust is the most influencing factor in the context of knowledge sharing than rewards. Therefore, the respondendents of the study, perhaps seeking ways to encourage members‟ knowledge transfer through different methods whereas interpersonal relationships were neglected.

In addition to that, the indirect influence of information technology (IT) on (KTS) through trust was failed, because the respondents of the study and based on their position, they were very careful in using information technology in terms of the accuracy of knowledge before posting in the system. Further, the security and privacy of the organization also may taken into account as they are dealing with the competitive environment, this imposes to use different ways to contact individuals such as, telephone, mailing files to response their questions and give more

information rather than posting on the system. This is consistent with the previous study by, Ardichvili et al. (2003). The findings have also demonstrated that MSC status organization is part of the marketplace where (IT) utilized and shared with the other organization. From this, the relationship between buyers and sellers is based on information technology investments at the same time mutual trust is based on these investments. Similarly to the internal use of (IT) with suppliers which, in turn speed the processes of communication.

To this end, MSC status organizations as a heavy users of information technology they are more likely to be careful to avoid any mistakes or wrong relationships which may lead to reduce thrust. This is consistent with the empirical study by Ryssel et al. (2004) that in the era of competitive advantage and wide usage of information technology, organizations have to be more aware about their privacy as one of the potential to deal with competitive environment.

5.4.2 Significant mediation effects

The results from the PLS analysis indicated that the mediating effects of trust on the relationship between networks and knowledge transfer and sharing was positively and significantly supported. As illustrated in Table 4.14.

The study stated that trust (T) mediates the relationship between networks (NET) and knowledge transfer and sharing (KTS), indicating that the present mediation result is supported by the respondents of study because they are surrounded by dense networks that lead to increase strong ties between individuals, which, in turn, affect

knowledge transfer and sharing. Trust was seen by the respondents as a crucial matter for collaboration to exchange knowledge in particular tacit knowledge. This result is in tandem with previous researchers where trust contribute in a more collaborative Hardwick et al. (2013), and Khachlouf et al. (2011). However, the respondents of this study found that networks within a trust environment is an important component to transfer and share knowledge. This means the current study affirmed that social relations established through networks which in turn may provide organizations with channels to transfer and share knowledge with their members and teams. In accordance with Yang et al. (2011), social capital theory provides theoretical bases for this finding because network ties provide individuals access to knowledge, whether those networks are internal or external social capital. This refers to the importance of networks between each other inside the organization or externally with customers and suppliers. In other words, the results show that trust not only has a direct effect on knowledge transfer and sharing, but also has an indirect effect by supporting personal networks and inter organizational transfer of knowledge.

To sum up, the third objective of this study was evaluated. Thus, the overall study had examined all variables of interest which established in the theoretical framework. Hence, based on the study results and empirical support from the literature, the validity of the constructs was determined to add more empirical support in the respective domain of knowledge indicating the value of all variables in the Malaysian context, particularly MSC status organizations.

5.5 Implications of the study

This section presents, theoretical, methodological, and practical implications of the study. The highlighted implications were made based on the research findings and discussion of the results.

5.5.1 Theoretical implication

This study has theoretically pushed the boundary of knowledge forward by achieving the importance of organizational capacity, organizational motivation, and organizational environment in encouraging knowledge transfer and sharing through a trust. The current composition has emphasized the use of knowledge creation theory in explaining the entire knowledge creation process through the direct and indirect relationships between the studied dimensions and knowledge transfer and sharing. The theory posits shared space in MSC status organizations to build socialization, externalization, combination, and internalization relationships by the emerging practices which include various dimensional relationships (top management support, organizational structure, learning strategy, human resource practices, culture, rewards, IT, and networks), and these relationships were including SECI processes to facilitate knowledge transfer and sharing in MSC status organization.

More specifically, from the results, knowledge was valued and acquired, which means that knowledge transfer and sharing in MSC status organizations was done by formal and informal ways where explicit and tacit knowledge was communicated among individuals and groups based on the SECI processes. This means, members

are ready and willing to transfer and share knowledge between each other. From this, the proposed model for this study was empirically supported which in turn helps to extend Nonaka`s knowledge creation theory (1994), especially, in the field of management studies. The non-significant results in this study also show some implications in terms of formalization in MSC status organizations which may contribute to prevent tacit knowledge to be shared, while the explicit knowledge was encouraged. Further, the current study has provided understanding of the direct and indirect relationships between organizational capacity, organizational motivation, organizational environment, trust, and knowledge transfer and sharing in the Malaysian context. By considering the differences between Western and Asian contexts in terms of respondents, research context, and the structural composition of the current model. These aspects differentiate the present study from the past similar studies in the field of knowledge transfer and sharing.

Further, the present study adds an extension to the existing body of knowledge management concerning knowledge transfer and sharing investigation while utilizing MSC status organizations as its setting. Extensive review of literature reveals limited knowledge transfer and sharing studies in MSC status organizations (Fathi et al., 2011; Wei et al., 2009; Yusof et al., 2012; Sandhu et al., 2011; Yusof & Ismail, 2009; Razali & Juanil, 2011; Osmani et al., 2014; Syed-Ikhsan & Rowland, 2004b; Daud, 2012; Daud & Yusoff, 2011). Therefore, the current study was conducted empirically in MSC status organizations as most previous studies still in the infancy stage.

This study has also provided empirical evidence on the significant role of trust as a mediator in the relationship between networks and knowledge transfer and sharing. Indicating that members of the organization are more willing to contribute knowledge in a trusting atmosphere. Therefore, this finding validated and extended social-psychological context (Rempel et al., 1985), that the atmosphere of mutual trust as a psychosocial variable has the ability to encourage knowledge transfer and sharing. The study also has provided a new perspective regarding the validity and the ability of PLS-SEM in predicting the impact of networks on knowledge transfer and sharing through a trust.

5.5.2 Methodological implication

This study has explored new tool of analysis PLS-SEM to explain the structural relationships between the main constructs of organizational capacity, motivation, organizational environment, trust and knowledge transfer and sharing. In contrast, the previous knowledge transfer and sharing studies have used the analytical tools including (SPSS) and (SEM-AMOS) or qualitative data analysis to produce results (Sankowska, 2013; Lee & Choi, 2003; Lin, 2007; Renzl, 2008; Rhodes et al, 2008; Agarwal & Islam, 2015).

The use of (PLS-SEM) in the present study includes principal components of analysis, measurement and structural models, where the validity and reliability of the constructs are assessed, the study also examined the structural model with bootstrapping procedures to find the significance of each path coefficient. For this,

this analytical tool provides the opportunity for the predictive power of (PLS-SEM) to explore the integrative relationships of knowledge transfer and sharing, as it is (PLS-SEM) an exploratory approach. On the other hand, (PLS-SEM) in the current study provides a new framework for knowledge transfer and sharing rather than the previous studies that used different analytical tools.

Furthermore, the current study contributes to the literature of knowledge management in general and trust and knowledge transfer and sharing, by providing additional validation about bootstrapping method as a new testing for the mediating effects. By taking this approach, the mediating effects highlighted the importance of trust as a good mechanism in understanding the dynamics of knowledge transfer and sharing in MSC status organizations. In other words, by examining the structural model, this study managed to support psychosocial variables in the knowledge management literature Renzl (2008), and Nonaka and Konno (1998), and Krogh (1998) Krogh et al. (2000), and Krogh et al. (1997) as illustrated in the theoretical framework of the present study.

5.5.3 Practical implication

In the light of the findings, it is obvious that the integral relationships between all variables have important contributions for managers in MSC status organizations. It is vital for managers to understand the influencing factors that have an impact on knowledge transfer and sharing. It is therefore evident that the atmosphere of trust has a direct and strong relationship in promoting knowledge transfer and sharing.

Thus, managers can facilitate knowledge transfer and sharing regarding trust through their support, learning strategy, and flexible structure of the organization, human resource policies and practices, including training programs for more interactions, which in turn enhance the culture of management at all levels by providing rewards system which may foster knowledge transfer and sharing. Certainly, this contributes to the effective connection between the organization and its subordinates using information technology in their networks to improve and speed up the flow of knowledge among the overall levels in the organizations. This implies that managers should encourage the atmosphere of openness for knowledge transfer and sharing. In order to overcome barriers that promote or hamper successful knowledge, managers have to develop the individual thinking by creating a sense of confidence among employees which is a good reason for trustworthiness. Moreover, the results suggest that managers‟ attitudes and actions should be sensitive in the emotional bonds, including mutual care, emotional healing, assisting employees to succeed and grow. It is therefore more likely that these efforts will be successful if the MSC status organizations have the environment of trust.

In addition, managers have to understand the benefit of knowledge transfer and sharing to minimize fear of sharing and transferring knowledge as seen in the previous results in the relationship between learning strategy and knowledge transfer and trust, which was not supported, it is possible that because of the fear to share as it is a tacit knowledge which is hard to be transferred and shared. From this, managers should understand and value the interrelations existing between management and employees for better sharing and transferring knowledge.

The impact of this on MSC status organizations is more forthright. In terms of competitive advantage, MSC status organizations would better understand the role of organizational factors could affect knowledge transfer and sharing, as it is a knowledge intensive entities not much is known on knowledge transfer and sharing in the context of MSC status organizations. From this, the current study contributes to be crucial evidence concerning their needs to put Malaysia in the information and knowledge age. By including the overall factors that affect knowledge transfer and sharing, MSC status organization would be able to achieve phase three 2011-2020 and compete locally and globally in a business environment.

5.6 Limitations of study

The purpose of this study was to produce a better understanding into the key factors that affect knowledge transfer and sharing in MSC status organizations. The study suggests sets of factors (organizational capacity, motivation, and organizational environment) that needed to be considered in the process of knowledge transfer and sharing in MSC status organizations. To this end, the use of these factors as a holistic model was directed more to the prediction than causality and the technique used for the proposed model was PLS-SEM, as it is an exploratory approach than a confirmatory one (Neupane et al., 2014).

Even though the small size of respondents considered to be satisfactory using PLS-SEM but this is may affect the generalizability of the findings. Because, more data can be collected in the future with the new scope. The data were collected from

multiple main clusters; it could produce general understanding about MSC status organizations. Hence, collecting data from a single cluster it can be more useful. On the other hand, by using stratified random sampling this could provide some interesting results. Similarly, the information that's been gathered from MSC status organization was provided from the same individual or level. The results would be more valuable if there were multiple respondents and relationships. At the same time, the information gathered might be limited. This is because, respondents not willing to share certain information based on the confidentiality or may biased to give a positive image on their respective organizations. This is probably because of the actual position in an organization as they are holding high level position in MSC status organizations.

This study also utilized both terms of knowledge transfer and sharing as the same concept which is not easy to understand or practice, especially due to the lack of a clear-cut definition or proven best practice for transfer of knowledge. Therefore, for the purpose of this study, many factors were linked to understand the concept and the process of knowledge transfer and sharing in general.

Another limitation of the present study was, lack of time, which is short involving six months as a common challenge to collect data. Lack of adequate time may affect the findings and its accuracy.

5.7 Suggestions for future direction

From the results of the study, the future direction would be useful to provide a clear understanding of MSC status organizations and knowledge transfer and sharing. Thus, the findings indicate that many issues need to be investigated in MSC status organizations. Therefore, the future research needs to explore more dimensions to provide more insights on knowledge transfer and sharing in MSC status organizations such as, environmental indicators, to control the organizational cultural differences.

In addition, the scope of this study was MSC status organizations which means the results could be generalized only to MSC status. The future research should consider covering all organizations (manufacturing, services) including MSC organizations. Besides that, a comparative study using the other organizations would be very insightful in providing more understanding factors related to knowledge transfer and sharing different cultural environments. By doing so, the theoretical framework of this study may be more applicable in other settings. Because different organizations mean different structure and different nature of work, which is, in turn, may provide different findings related to knowledge transfer and sharing.

This study has provided support for trust in facilitating or inhibiting the flow of knowledge transfer and sharing as a mediator. Future research needs to examine trust as moderator on the relationship between the said factors and knowledge transfer and sharing. As well as, investigate which factor is potentially more valuable in the relationship between trust and knowledge transfer and sharing in MSC status

organizations. However, future research also could use the mixed methodology in terms of qualitative and quantitative approach with the big size of the sample to provide a deeper understanding of knowledge transfer and sharing in MSC status organizations.

In relation to the establishment of MSC status organizations in 1996 to change Malaysia from a production based economy to a knowledge based economy. The current study provides empirical evidence showing the relationship between the said organizational factors, trust and knowledge transfer and sharing. Future research could extend these aspects with new measurements that influence knowledge transfer and sharing to enhance the vision of 2020. To do so, a longitudinal research could be extended, and it is suggested that longitudinal approach could explain this complex relationship over a long period of time.

5.8 Conclusion

This study has provided a clear understanding of the organizational capacity, organizational motivation, organizational environment, trust, and its impact on knowledge transfer and sharing in MSC status organizations. The importance of the contribution of MSC status organizations to the Malaysian economy remains the same reason why this study has to investigate the previous issues. This study reveals that how knowledge transfer and sharing could contribute to MSC status organizations. However, the empirical evidence has provided in tandem with the validity of the theoretical framework. The present study has contributed to the body

of knowledge by answering all of the research questions and determinants of new perspectives of knowledge transfer and sharing.

Furthermore, this study has contributed to the empirical literature by incorporating trust as a mediator of the relationship between the said organizational factors and knowledge transfer and sharing. Which means the direct and indirect influences of organizational capacity, motivation, and organizational environment were also assessed. The current results were consistent with and validating the previous findings in the field of knowledge management regarding the significant relationships with knowledge transfer and sharing. In a similar vein, this study validates the overall instruments that have been used to evaluate the constructs of study, which were utilized previously in the western context. In addition, by using stratified random sampling the gained results were more productive.

However, the findings also managed to provide theoretical, methodological, and managerial implications which ultimately provide a valuable notion to foster knowledge transfer and sharing in MSC status organizations. The suggestions for future direction were established based on limitations of the study.

In conclusion, MSC status organizations could use the findings of this study in order to optimize the opportunities for better knowledge transfer and sharing. This may provide a clear understanding to enhance knowledge transfer and sharing in MSC status organizations. Given the importance of knowledge transfer and sharing, this study was conducted in relation to the Tenth Malaysia Plan, where knowledge will

be the key factor to drive growth, create new value and provide the basis to remain competitive in order to achieve fully developed status by the year of 2020.

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APPENDIX A
RESEARCH QUESTIONNAIRE

Pusat Pengajian Pengurusan Perniagaan
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Dear Prof / Dato / Dr / Mr / Mrs / Ms,

ACADEMIC RESEARCH QUESTIONNAIRE

I am a PhD student from School of Business Management, Universiti Utara Malaysia. I would like to invite you to participate in a survey on the Determinants to knowledge transfer and sharing in multimedia super corridor in Malaysia: The mediating role of trust which is for my PhD thesis.

The main interest of this study is to determine the relationship between organizational capacity, motivation, organizational environment, trust and knowledge transfer and sharing. This survey is undertaken for an academic purpose only and you are not required to write your name on the questionnaire. I really hope that you will spend some time to participate in this study by completing the attached questionnaire.

For the successful completion of this study, I need your cooperation and honest response in answering each question. Your help will be appreciated greatly.

Thank you.
Yours sincerely,

Meddour Houcine
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Tel: 01133275105/ 0194332351/ 04-9287522

SURVEY QUESTIONNAIRE
Part One: Respondent's Profile

Please answer the following questions concerning your demographic. Please tick (/) each question.

1. Age

Please state your age _____

2. Gender

☐ Male ☐ Female

3. Education level

☐ Diploma or lower
☐ Degree
☐ Masters" Degree
☐ Doctoral Degree
☐ Professional Certification:
Please state your certificate _____

4. Working experience

Please state to how long have you worked in this company:

7-10Years ☐
More than 10 Years ☐

5. Position

☐ Vice President
☐ General Manager
☐ Branch Manager
☐ Unit Manager
☐ Others (please specify) _____

6. Location of the organization

☐ Klang Valley (Wilayah Persekutuan + Selangor)
☐ Kedah
☐ Penang

7. Type of the organization

☐ Creative Multimedia
☐ IHLs & Incubators
☐ InfoTech
☐ Shared Services Outsourcing

Part Two: Organizational capacity

Directions**:** Please indicate your level of agreement with the following statements that describe the level of top management support, organizational structure, learning strategy and human resource practices among your company**.** Please circle the number representing the most appropriate answer based on the scale below.

Strongly disagree	Disagree	Moderate	Agree	Strongly agree
1	2	3	4	5

	Top management support (TMS)					
1	Top managers are encouraging knowledge transfer and sharing with colleagues.	1	2	3	4	5
2	Top managers usually support and encourage individuals to share and transfer their knowledge with others.	1	2	3	4	5
3	Top managers provide and facilitate the necessary help and resources to enable individuals to share and transfer their knowledge.	1	2	3	4	5
4	Top managers are usually encouraging sharing and transferring knowledge with the colleagues and subordinates.	1	2	3	4	5
	Organizational structure (OS)					
5	Employees of our company are acting without the permission of supervisors.	1	2	3	4	5
6	Employees of our company usually are encouraged to make their own decisions.	1	2	3	4	5
7	Employees of our company made their decision by their own.	1	2	3	4	5
8	Employees of our company usually do not ask their supervisor to act.	1	2	3	4	5
9	Employees in our company usually made their decisions without approval**.**	1	2	3	4	5
10	In our company most of the activities are not under formal procedures.	1	2	3	4	5
11	Contacts which have been made with our company are based on formal procedures or planned basis.	1	2	3	4	5
12	Usually the rules and procedures of our company are written and documented.	1	2	3	4	5
13	Usually employees ignore the rules to handle some situations by using informal agreements.	1	2	3	4	5
14	Employees usually make their own rules to fulfil their jobs.	1	2	3	4	5
	Learning strategy					
15	Our company provides formal training programs to perform well.	1	2	3	4	5
16	Our company provides informal opportunities to develop individuals such as work assignments and job rotation.	1	2	3	4	5
17	Our company usually encourages members to attend seminars and conferences.	1	2	3	4	5
18	Our company usually provides and supports various programs such as clubs and community gatherings.	1	2	3	4	5
19	Employees of our company are satisfied by the contents of formal training and self-development programs	1	2	3	4	5
	Human resource practices					
20	Training programs are provided to transfer and share knowledge among individuals to attain the objectives of the company.	1	2	3	4	5
21	Incentive systems (monetary and non-monetary) are provided by the company to reward the individuals and teams.	1	2	3	4	5
22	Programs of internal rotation have been developed and implemented by the	1	2	3	4	5

	company to facilitate employees move to different departments.					
23	In our company usually encourages participation in making decisions to resolve the problems.	1	2	3	4	5
24	In our company, knowledge management have been practiced, assessed and controlled continuously (creation, storage, transfer, application...)	1	2	3	4	5
25	In our company, teamwork has been promoted as a regular practice	1	2	3	4	5

Part Three: Organizational motivation

Directions: Please indicate your level of agreement with the following statements that describe the level of culture and rewards in your company. Please circle the number representing the most appropriate answer based on the scale below.

Strongly disagree	Disagree	Moderate	Agree	Strongly agree
1	2	3	4	5

	Culture					
26	There has been a common language to support knowledge exchange and sharing between employees and departments.	1	2	3	4	5
27	An effort is made to encourage employees to experiment and implement new ideas in their working day.	1	2	3	4	5
28	An effort is made to inform employees that mistakes are a learning consequence and are tolerated up to a certain limit.	1	2	3	4	5
29	Culture is based on confidence and openness.	1	2	3	4	5
30	The employees are encouraged to share knowledge at an informal level.	1	2	3	4	5
31	The employees demonstrate responsible behavior and a high learning disposition.	1	2	3	4	5
32	All organizational members perceive the same purpose and feel bound to it.	1	2	3	4	5
	Rewards					
33	Sharing and transferring knowledge between employees is based on the rewards system that given by company.	1	2	3	4	5
34	Sharing and transferring knowledge between employees is rewarded by high salary.	1	2	3	4	5
35	Sharing and transferring knowledge between employees is based on promotion that given by company.	1	2	3	4	5
36	Sharing and transferring knowledge between employees is rewarded by increasing job security.	1	2	3	4	5

Part Four: Organizational environment

Directions: Please read each of the following statements and indicate to what extent do your company involved in the information technology and networks. Please circle the number representing the most appropriate answer based on the scale below.

Strongly disagree	Disagree	Moderate	Agree	Strongly agree
1	2	3	4	5

	Information technology					
37	Our company supports collaborative works by using IT to facilitate sharing and transferring knowledge.	1	2	3	4	5
38	Our company using IT to support communication between employees.	1	2	3	4	5
39	Our company using IT to facilitate searching and accessing necessary information.	1	2	3	4	5
40	Our company using IT to support simulation and prediction.	1	2	3	4	5
41	Our company using IT to support systematic storing.	1	2	3	4	5
	Networks					
42	Top management of the company is working together as a team.	1	2	3	4	5
43	Our company has cross-functional teams to exchange and facilitate knowledge between departments.	1	2	3	4	5
44	Our company uses temporary workgroups to transfer and share knowledge between units on a regular basis.	1	2	3	4	5
45	Our company provides the opportunities for informal "hall talk" among employees.	1	2	3	4	5
46	The employees from different departments are calling each other to exchange information and knowledge needed.	1	2	3	4	5

Part Five: Trust

Directions: The following indicators reflect trust among members. Please circle the appropriate number that best represent your company based on the scale below.

Strongly disagree	Disagree	Moderate	Agree	Strongly agree
1	2	3	4	5

47	Most team members trust and respect the other players.	1	2	3	4	5
48	I can talk freely to the employees about difficulties I am having at work and know that they will want to listen.	1	2	3	4	5
49	If I share any problems with team members, they would respond constructively and caringly.	1	2	3	4	5
50	I can freely share any ideas, feelings, and hopes with my team.	1	2	3	4	5
51	I would feel a sense of loss if one of us transferred and we could no longer work together.	1	2	3	4	5
52	My team approach their job with professionalism and dedication.	1	2	3	4	5
53	Given my team"s track record, I see no reason to doubt their competence and preparation for the job.	1	2	3	4	5
54	I can rely on team not to make my job more difficult by careless work.	1	2	3	4	5
55	Other work associates of mine are trustworthy.	1	2	3	4	5

Part Six: Knowledge transfer and sharing

Directions: Please read each of the following statements and indicate the degree of knowledge being transferred and shared inside your company. Please circle the number representing the most appropriate answer based on the scale below.

Strongly disagree	Disagree	Moderate	Agree	Strongly agree
1	2	3	4	5

56	Our company encourages employees to communicate their knowledge using ways of induction, deduction, and others.	1	2	3	4	5
57	Our company encourages employees to describe new concepts using ways of story-telling and creative.	1	2	3	4	5
58	Our company encourages employees to exchange different ideas and concepts frequently.	1	2	3	4	5
59	Our company encourages employees to give specific and relevant information.	1	2	3	4	5
60	Our company adapts team module to implement various projects, and share the experience within the whole company.	1	2	3	4	5
61	Teams in our company continuously search and share new value.	1	2	3	4	5
62	Our company promotes the communication among different functional departments by setting up cross-department teams.	1	2	3	4	5
63	Our company encourages employees to understand and share organizational vision and enterprise value through continuous communication.	1	2	3	4	5
64	Our company spread new concepts and ideas among employees.	1	2	3	4	5
65	Our company regularly collects information from various departments.	1	2	3	4	5
66	Our company regularly shares experience with suppliers, customers, external experts, and partners.	1	2	3	4	5
67	Our company finds new strategies and market opportunities through intra and inter organization learning by doing.	1	2	3	4	5
68	Our company set up abundant data base of products and services.	1	2	3	4	5
69	Our company increases organizational knowledge by collecting various management data and technique information.	1	2	3	4	5
70	Our company implementing advanced management theory (e.g. benchmarking management) and marketing concepts (e.g. market test).	1	2	3	4	5

Thank you

APPENDIX B

LETTER FOR DATA COLLECTION AND RESEARCH WORK

UUM
Universiti Utara Malaysia

APPENDIX C
FREQUENCY TEST

Statistics

		OC	OM	OE	T	KTS
N	Valid	132	132	132	132	132
	Missing	0	0	0	0	0
Mean		3.2981	3.3278	3.7492	3.6734	3.5573
Median		3.3200	3.3636	3.8500	3.7778	3.6000
Std. Deviation		.36419	.55528	.62401	.60839	.54627
Minimum		2.40	2.18	2.00	2.00	2.00
Maximum		4.20	4.91	5.00	5.00	4.60
Sum		435.35	439.27	494.90	484.89	469.56

MULTICOLLINEARITY

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.807	3.957		.709	.479		
	OC	.168	.073	.187	2.301	.023	.409	2.446
	OM	.291	.110	.217	2.660	.009	.405	2.469
	OE	.318	.121	.242	2.622	.010	.316	3.164
	T	.426	.121	.285	3.531	.001	.415	2.407

a. Dependent Variable: KTS

APPENDIX D
RESULT OF UNIVARIATE ANALYSIS

Gender	Education	Experience	Position	Other-position	Location	Organization	OC1	OC2	OC3	OC4	OC5	OC6	OC9	OC10
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	-1.93866	-1.48662	-1.71409	-1.43428	-1.00863	-1.28172	-0.87286	-0.96249	-1.19729	0.51805
-0.85514	-2.03334	-1.76106	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	0.25936	-1.28172	-1.95981	-0.96249	-1.19729	0.51805
1.16054	0.96555	0.56354	0.12615	-0.74078	-1.93866	-1.48662	-0.19557	-1.43428	-1.00863	-0.23087	-0.87286	0.2475	-0.1842	1.94268
1.16054	0.96555	-1.76106	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	0.25936	-1.28172	-0.87286	-0.96249	-1.19729	0.51805
1.16054	-0.53389	0.56354	-1.53906	-0.74078	0.20279	-1.48662	1.32295	0.04482	1.52736	-1.28172	0.2141	0.2475	1.84198	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	-0.86794	1.20152	-0.19557	0.04482	0.25936	-1.28172	-1.95981	-0.96249	-1.19729	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	1.20152	1.32295	1.52393	1.52736	-0.23087	0.2141	0.2475	0.82889	0.51805
1.16054	0.96555	0.56354	-3.20427	-0.74078	-0.86794	1.20152	1.32295	0.04482	1.52736	0.81998	1.30105	1.45748	-0.1842	0.51805
1.16054	-0.53389	-1.76106	1.79136	-0.74078	1.27352	-0.14255	-1.71409	0.04482	0.25936	1.87083	0.2141	-0.96249	1.84198	0.51805
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	1.20152	1.32295	0.04482	-1.00863	-0.23087	1.30105	-0.96249	-1.19729	0.51805
1.16054	-0.53389	-1.76106	0.12615	-0.74078	-1.93866	-0.14255	-0.19557	0.04482	0.25936	0.81998	1.30105	0.2475	0.82889	0.51805
-0.85514	2.465	0.56354	0.12615	1.33971	-0.86794	-0.14255	-0.19557	0.04482	0.25936	-0.23087	0.2141	0.2475	-0.1842	0.51805
1.16054	2.465	0.56354	1.79136	1.33971	-0.86794	-0.14255	-0.19557	-1.43428	1.52736	-1.28172	-0.87286	-0.96249	-0.1842	-0.90658
1.16054	0.96555	0.56354	0.12615	1.33971	-0.86794	-0.14255	1.32295	0.04482	0.25936	-1.28172	1.30105	0.2475	-0.1842	0.51805
1.16054	0.96555	-1.76106	0.12615	1.33971	0.20279	-0.14255	-0.19557	-1.43428	-1.00863	0.81998	1.30105	0.2475	-1.19729	-0.90658
-0.85514	-0.53389	-1.76106	0.12615	1.33971	-0.86794	-0.14255	-0.19557	0.04482	0.25936	0.81998	1.30105	2.66746	1.84198	0.51805
1.16054	0.96555	0.56354	0.12615	-0.74078	0.20279	1.20152	1.32295	1.52393	1.52736	-1.28172	-1.95981	-0.96249	-1.19729	1.94268
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	-3.54462	-1.28172	-1.95981	-0.96249	-1.19729	0.51805
-0.85514	0.96555	0.56354	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	0.25936	0.81998	-0.87286	1.45748	1.84198	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	1.87083	1.30105	0.2475	-0.1842	-0.90658
-0.85514	0.96555	0.56354	0.12615	-0.74078	-0.86794	-0.14255	-0.19557	0.04482	-1.00863	0.81998	1.30105	1.45748	0.82889	-0.90658
-0.85514	0.96555	0.56354	0.12615	-0.74078	-0.86794	-0.14255	-1.71409	0.04482	0.25936	-0.23087	-0.87286	0.2475	-0.1842	0.51805
1.16054	0.96555	-1.76106	0.12615	1.33971	1.27352	-0.14255	-0.19557	0.04482	0.25936	0.81998	-1.95981	-0.96249	-1.19729	1.94268
-0.85514	-0.53389	0.56354	0.12615	1.33971	-0.86794	1.20152	1.32295	1.52393	1.52736	-1.28172	0.2141	-0.96249	-1.19729	1.94268
-0.85514	0.96555	0.56354	0.12615	1.33971	0.20279	-1.48662	-1.71409	-1.43428	-1.00863	-0.23087	1.30105	0.2475	1.84198	-0.90658
1.16054	-0.53389	0.56354	1.79136	1.33971	0.20279	-1.48662	-1.71409	0.04482	-1.00863	-0.23087	0.2141	0.2475	-0.1842	0.51805
1.16054	0.96555	0.56354	0.12615	1.33971	1.27352	-1.48662	-1.71409	-2.91339	-2.27663	0.81998	0.2141	0.2475	-0.1842	0.51805

Gender	Education	Experience	Position	Other-position	Location	Organization	OC1	OC2	OC3	OC4	OC5	OC6	OC9	OC10
-0.85514	0.96555	0.56354	-1.53906	1.33971	0.20279	-4.17476	-0.19557	0.04482	0.25936	1.87083	2.38801	0.2475	1.84198	0.51805
-0.85514	2.465	0.56354	1.79136	1.33971	0.20279	1.20152	-0.19557	0.04482	0.25936	-0.23087	0.2141	0.2475	-1.19729	0.51805
-0.85514	-0.53389	-1.76106	0.12615	1.33971	-1.93866	-1.48662	-1.71409	-2.91339	0.25936	0.81998	1.30105	-0.96249	0.82889	-2.33122
1.16054	-0.53389	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	0.25936	2.92168	2.38801	-0.96249	-0.1842	0.51805
-0.85514	-0.53389	0.56354	0.12615	1.33971	1.27352	-0.14255	-0.19557	0.04482	0.25936	-1.28172	-0.87286	-0.96249	-1.19729	0.51805
-0.85514	0.96555	0.56354	1.79136	1.33971	0.20279	1.20152	1.32295	0.04482	0.25936	-1.28172	0.2141	-0.96249	-1.19729	0.51805
1.16054	0.96555	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	-1.43428	0.25936	-0.23087	0.2141	0.2475	-0.1842	0.51805
-0.85514	0.96555	0.56354	0.12615	1.33971	0.20279	1.20152	1.32295	1.52393	1.52736	-0.23087	-0.87286	-0.96249	-0.1842	0.51805
-0.85514	2.465	-1.76106	1.79136	1.33971	-1.93866	1.20152	1.32295	1.52393	1.52736	0.81998	0.2141	1.45748	0.82889	0.51805
1.16054	-0.53389	-1.76106	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	-1.00863	0.81998	0.2141	1.45748	0.82889	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	0.25936	-0.23087	1.30105	-0.96249	0.82889	0.51805
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	0.20279	-2.83069	-0.19557	0.04482	0.25936	-0.23087	0.2141	0.2475	1.84198	0.51805
1.16054	-0.53389	-1.76106	0.12615	-0.74078	0.20279	1.20152	1.32295	1.52393	-1.00863	-0.23087	0.2141	-0.96249	-1.19729	0.51805
-0.85514	-0.53389	-1.76106	-3.20427	-0.74078	0.20279	1.20152	1.32295	0.04482	-1.00863	-1.28172	-1.95981	-0.96249	-0.1842	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	1.27352	1.20152	1.32295	1.52393	1.52736	0.81998	0.2141	0.2475	1.84198	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	1.27352	1.20152	-0.19557	0.04482	1.52736	0.81998	0.2141	1.45748	-0.1842	0.51805
1.16054	-0.53389	0.56354	0.12615	-0.74078	1.27352	1.20152	1.32295	1.52393	1.52736	-0.23087	1.30105	-0.96249	-0.1842	0.51805
1.16054	-0.53389	-1.76106	0.12615	-0.74078	-1.93866	1.20152	1.32295	1.52393	1.52736	-0.23087	1.30105	0.2475	1.84198	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	1.27352	-0.14255	1.32295	0.04482	0.25936	-0.23087	0.2141	-0.96249	-1.19729	-0.90658
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	1.27352	1.20152	1.32295	1.52393	-2.27663	0.81998	0.2141	0.2475	-1.19729	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	1.87083	0.2141	-0.96249	-0.1842	0.51805
1.16054	-0.53389	0.56354	1.79136	-0.74078	1.27352	1.20152	1.32295	1.52393	0.25936	0.81998	0.2141	0.2475	-0.1842	-2.33122
1.16054	-0.53389	-1.76106	0.12615	-0.74078	0.20279	-1.48662	-1.71409	-1.43428	-1.00863	-0.23087	0.2141	-0.96249	-0.1842	-0.90658
1.16054	-0.53389	-1.76106	0.12615	-0.74078	0.20279	-1.48662	-0.19557	0.04482	0.25936	-1.28172	0.2141	-0.96249	0.82889	0.51805
-0.85514	-2.03334	-1.76106	0.12615	-0.74078	0.20279	1.20152	-0.19557	0.04482	0.25936	-0.23087	-1.95981	-0.96249	-0.1842	0.51805
1.16054	-0.53389	-1.76106	0.12615	-0.74078	1.27352	1.20152	-0.19557	-1.43428	0.25936	0.81998	1.30105	0.2475	0.82889	-0.90658
-0.85514	-2.03334	0.56354	0.12615	-0.74078	0.20279	-0.14255	-1.71409	0.04482	0.25936	0.81998	0.2141	2.66746	0.82889	0.51805
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	-0.23087	0.2141	0.2475	1.84198	-0.90658

Gender	Education	Experience	Position	Other-position	Location	Organization	OC1	OC2	OC3	OC4	OC5	OC6	OC9	OC10
1.16054	0.96555	0.56354	1.79136	-0.74078	0.20279	-0.14255	-1.71409	0.04482	0.25936	-0.23087	-0.87286	-0.96249	-0.1842	-0.90658
-0.85514	0.96555	0.56354	-3.20427	-0.74078	0.20279	1.20152	1.32295	1.52393	0.25936	-1.28172	0.2141	-0.96249	-1.19729	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	-1.28172	-0.87286	0.2475	-0.1842	1.94268
-0.85514	0.96555	0.56354	-1.53906	-0.74078	0.20279	1.20152	1.32295	1.52393	0.25936	-1.28172	0.2141	-0.96249	-1.19729	0.51805
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	0.20279	1.20152	-0.19557	1.52393	1.52736	-0.23087	0.2141	0.2475	-0.1842	0.51805
-0.85514	2.465	0.56354	0.12615	-0.74078	0.20279	1.20152	1.32295	1.52393	0.25936	-1.28172	0.2141	-0.96249	-1.19729	0.51805
1.16054	-0.53389	0.56354	0.12615	-0.74078	1.27352	1.20152	1.32295	1.52393	0.25936	-1.28172	0.2141	-0.96249	-1.19729	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	-1.00863	-1.28172	0.2141	0.2475	-0.1842	1.94268
-0.85514	-0.53389	0.56354	0.12615	-0.74078	1.27352	-0.14255	-0.19557	-1.43428	0.25936	1.87083	0.2141	2.66746	0.82889	-0.90658
1.16054	-0.53389	0.56354	-1.53906	-0.74078	1.27352	-0.14255	-0.19557	0.04482	0.25936	-1.28172	0.2141	-0.96249	-1.19729	0.51805
1.16054	-0.53389	-1.76106	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	0.25936	-0.23087	0.2141	0.2475	0.82889	-0.90658
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	1.27352	-0.14255	1.32295	0.04482	0.25936	-0.23087	0.2141	-0.96249	-0.1842	0.51805
-0.85514	0.96555	0.56354	1.79136	-0.74078	1.27352	-0.14255	-0.19557	-1.43428	-1.00863	0.81998	-0.87286	0.2475	-0.1842	-0.90658
-0.85514	0.96555	0.56354	0.12615	-0.74078	1.27352	-0.14255	-1.71409	0.04482	-1.00863	1.87083	0.2141	1.45748	1.84198	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	1.20152	-0.19557	0.04482	0.25936	-0.23087	0.2141	-0.96249	-0.1842	-0.90658
1.16054	-0.53389	0.56354	-1.53906	-0.74078	0.20279	-0.14255	1.32295	0.04482	0.25936	0.81998	0.2141	2.66746	-0.1842	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	-1.00863	-0.23087	0.2141	0.2475	-1.19729	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	-1.93866	-0.14255	-0.19557	0.04482	-1.00863	0.81998	0.2141	0.2475	0.82889	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	-1.00863	-0.23087	0.2141	0.2475	0.82889	-0.90658
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-1.48662	-0.19557	-1.43428	-1.00863	-0.23087	-0.87286	0.2475	-0.1842	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	-1.93866	-0.14255	1.32295	1.52393	0.25936	0.81998	0.2141	0.2475	-0.1842	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	-1.28172	1.30105	-0.96249	-1.19729	1.94268
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-1.48662	-0.19557	-1.43428	-1.00863	0.81998	-0.87286	-0.96249	0.82889	0.51805
-0.85514	-2.03334	0.56354	0.12615	-0.74078	1.27352	-0.14255	-0.19557	0.04482	-1.00863	1.87083	0.2141	-0.96249	-1.19729	0.51805
-0.85514	-2.03334	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	-1.43428	-1.00863	-1.28172	-0.87286	0.2475	1.84198	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	1.27352	1.20152	-0.19557	0.04482	0.25936	-1.28172	0.2141	-0.96249	-1.19729	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-2.83069	-1.71409	-1.43428	-1.00863	-0.23087	0.2141	1.45748	0.82889	0.51805
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	-1.00863	-0.23087	-0.87286	0.2475	-0.1842	-0.90658

Gender	Education	Experience	Position	Other-position	Location	Organization	OC1	OC2	OC3	OC4	OC5	OC6	OC9	OC10
1.16054	-0.53389	-1.76106	0.12615	-0.74078	0.20279	-1.48662	-1.71409	-1.43428	-1.00863	0.81998	-0.87286	0.2475	0.82889	-0.90658
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	1.20152	1.32295	0.04482	1.52736	-0.23087	0.2141	-0.96249	-0.1842	1.94268
-0.85514	2.465	-1.76106	1.79136	1.33971	-1.93866	1.20152	1.32295	1.52393	1.52736	0.81998	0.2141	1.45748	0.82889	0.51805
-0.85514	0.96555	0.56354	1.79136	1.33971	0.20279	1.20152	1.32295	1.52393	1.52736	-0.23087	-0.87286	-0.96249	-0.1842	0.51805
1.16054	0.96555	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	-1.43428	0.25936	-0.23087	0.2141	0.2475	-0.1842	0.51805
-0.85514	0.96555	0.56354	1.79136	1.33971	0.20279	1.20152	1.32295	0.04482	0.25936	-1.28172	0.2141	-0.96249	-1.19729	0.51805
-0.85514	-0.53389	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	0.25936	-1.28172	-0.87286	-0.96249	-1.19729	0.51805
-0.85514	2.465	0.56354	1.79136	1.33971	0.20279	-0.14255	-0.19557	0.04482	0.25936	-0.23087	0.2141	0.2475	-1.19729	0.51805
1.16054	0.96555	0.56354	-1.53906	1.33971	0.20279	1.20152	-0.19557	0.04482	0.25936	1.87083	2.38801	0.2475	1.84198	0.51805
1.16054	0.96555	0.56354	0.12615	1.33971	0.20279	-1.48662	-1.71409	-2.91339	-2.27663	0.81998	0.2141	0.2475	-0.1842	0.51805
1.16054	-0.53389	0.56354	-1.53906	1.33971	0.20279	-1.48662	-1.71409	0.04482	-1.00863	-0.23087	0.2141	0.2475	-0.1842	0.51805
-0.85514	0.96555	0.56354	0.12615	1.33971	0.20279	-1.48662	-1.71409	-1.43428	-1.00863	-0.23087	1.30105	0.2475	0.82889	-0.90658
-0.85514	-0.53389	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	0.25936	-1.28172	0.2141	-0.96249	-1.19729	1.94268
-0.85514	0.96555	0.56354	0.12615	1.33971	0.20279	-0.14255	-1.71409	0.04482	0.25936	-0.23087	-0.87286	0.2475	-0.1842	0.51805
-0.85514	0.96555	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	-1.00863	0.81998	1.30105	1.45748	0.82889	-0.90658
1.16054	-0.53389	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	-1.00863	0.81998	1.30105	0.2475	-0.1842	-0.90658
-0.85514	0.96555	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	0.25936	0.81998	-0.87286	1.45748	1.84198	-0.90658
-0.85514	-0.53389	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	-1.00863	0.81998	-1.95981	-0.96249	-1.19729	0.51805
1.16054	0.96555	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	1.52736	-1.28172	-1.95981	-0.96249	-1.19729	-3.75585
1.16054	-0.53389	-1.76106	0.12615	1.33971	-1.93866	-0.14255	-0.19557	0.04482	-1.00863	0.81998	1.30105	2.66746	1.84198	0.51805
1.16054	0.96555	0.56354	0.12615	1.33971	-1.93866	-0.14255	-0.19557	-1.43428	-1.00863	1.87083	1.30105	0.2475	-1.19729	-0.90658
-0.85514	0.96555	0.56354	0.12615	1.33971	-1.93866	-0.14255	1.32295	0.04482	0.25936	-1.28172	0.2141	0.2475	-0.1842	0.51805
1.16054	2.465	0.56354	-3.20427	1.33971	0.20279	-0.14255	-0.19557	0.04482	1.52736	-1.28172	-0.87286	-0.96249	-0.1842	-0.90658
-0.85514	-0.53389	-1.76106	0.12615	1.33971	-1.93866	-0.14255	-0.19557	0.04482	0.25936	-1.28172	-1.95981	-0.96249	-1.19729	0.51805
1.16054	-0.53389	0.56354	-1.53906	1.33971	0.20279	-0.14255	1.32295	0.04482	1.52736	-1.28172	0.2141	0.2475	0.82889	-0.90658
-0.85514	-0.53389	0.56354	0.12615	1.33971	-1.93866	1.20152	-0.19557	0.04482	0.25936	-1.28172	-1.95981	-0.96249	-1.19729	-3.75585
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	0.20279	1.20152	1.32295	1.52393	1.52736	-0.23087	0.2141	0.2475	0.82889	0.51805
1.16054	0.96555	0.56354	-3.20427	-0.74078	0.20279	-0.14255	-0.19557	0.04482	1.52736	0.81998	1.30105	1.45748	-0.1842	0.51805
1.16054	-0.53389	0.56354	-1.53906	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	1.87083	0.2141	-0.96249	0.82889	-0.90658

Gender	Education	Experience	Position	Other-position	Location	Organization	OC1	OC2	OC3	OC4	OC5	OC6	OC9	OC10
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	1.52393	-1.00863	-0.23087	1.30105	0.2475	-0.1842	0.51805
1.16054	-0.53389	-1.76106	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	1.52736	0.81998	1.30105	0.2475	-0.1842	0.51805
-0.85514	-0.53389	0.56354	-1.53906	-0.74078	-1.93866	1.20152	1.32295	0.04482	0.25936	0.81998	0.2141	2.87745	-1.19729	-0.90658
1.16054	-0.53389	0.56354	-1.53906	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	-0.23087	-0.87286	-0.96249	0.82889	-0.90658
-0.85514	0.96555	0.56354	0.12615	-0.74078	-1.93866	-0.14255	-1.71409	-1.43428	0.25936	-0.23087	-0.87286	1.45748	1.84198	-0.90658
1.16054	-0.53389	-1.76106	0.12615	-0.74078	-1.93866	-0.14255	-0.19557	0.04482	-1.00863	0.81998	-1.95981	-0.96249	-1.19729	-0.90658
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	0.25936	-0.23087	-0.87286	-0.96249	-0.1842	0.51805
1.16054	0.96555	0.56354	0.12615	-0.74078	0.20279	1.20152	1.32295	1.52393	0.25936	-1.28172	1.30105	0.2475	-0.1842	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	-1.93866	1.20152	1.32295	1.52393	0.25936	0.81998	0.2141	0.2475	-0.1842	-0.90658
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	-1.43428	-1.00863	-0.23087	-0.87286	0.2475	-0.1842	-0.90658
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	-1.00863	-0.23087	-0.87286	0.2475	0.82889	-0.90658
-0.85514	-0.53389	-1.76106	0.12615	-0.74078	0.20279	-0.14255	-0.19557	0.04482	-2.27663	-0.23087	-0.87286	0.2475	0.82889	-0.90658
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-1.48662	-1.71409	-1.43428	-1.00863	0.81998	-0.87286	-0.96249	-0.1842	0.51805
1.16054	-0.53389	0.56354	0.12615	1.33971	0.20279	-0.14255	-0.19557	0.04482	0.25936	1.87083	0.2141	-0.96249	-1.19729	0.51805
-0.85514	-0.53389	0.56354	0.12615	1.33971	-1.93866	-0.14255	-0.19557	0.04482	0.25936	-0.23087	-0.87286	0.2475	-0.1842	0.51805
-0.85514	0.96555	0.56354	0.12615	1.33971	0.20279	-1.48662	-1.71409	-1.43428	-1.00863	0.81998	-0.87286	0.2475	0.82889	-0.90658
-0.85514	-0.53389	0.56354	0.12615	1.33971	-1.93866	1.20152	1.32295	1.52393	-1.00863	-0.23087	-0.87286	0.2475	-0.1842	0.51805
-0.85514	-0.53389	0.56354	0.12615	-0.74078	0.20279	1.20152	1.32295	1.52393	1.52736	0.81998	0.2141	0.2475	-0.1842	-0.90658
1.16054	-0.53389	0.56354	0.12615	-0.74078	0.20279	-1.48662	-1.71409	-1.43428	-1.00863	-0.23087	0.2141	0.2475	-0.1842	0.51805

OC11	OC12	OC13	OC14	OC15	OC16	OC17	OC18	OC19	OC20	OC21	OC22	OC23	OC24	OC25
-0.0809	0.51506	-0.18617	0.11068	-1.60345	-0.986	-0.62449	-0.78788	-1.0581	0.60096	-2.36573	-1.86782	-1.88986	-1.18646	-1.15382
1.25399	-1.45559	-1.35641	0.11068	-2.66172	-0.986	-0.62449	0.51212	0.15641	0.60096	-0.38302	0.41507	0.4747	0.11865	0.23076
1.25399	1.50038	0.98406	-1.01316	-0.54517	0.136	-2.61081	-0.78788	0.15641	-0.44281	-0.38302	-1.86782	-1.88986	-1.18646	0.23076
1.25399	-0.47027	-0.18617	1.23452	-1.60345	-0.986	-0.62449	1.81212	1.37093	1.64474	1.59968	0.41507	0.4747	1.42376	0.23076
-1.4158	2.4857	2.15429	-3.26084	-1.60345	-3.23	-2.61081	-3.38787	-2.27262	0.60096	-2.36573	-1.86782	-3.07214	-2.49157	-2.5384
1.25399	-0.47027	-0.18617	1.23452	-1.60345	1.258	1.36183	1.81212	1.37093	-0.44281	-0.38302	-1.86782	-0.70758	-1.18646	0.23076
1.25399	0.51506	0.98406	0.11068	0.5131	0.136	0.36867	0.51212	1.37093	1.64474	1.59968	0.41507	0.4747	0.11865	1.61535
1.25399	-0.47027	0.98406	1.23452	1.57138	1.258	1.36183	0.51212	1.37093	0.60096	1.59968	1.55651	1.65698	1.42376	1.61535
-0.0809	-1.45559	-1.35641	-1.01316	-2.66172	-2.108	-2.61081	-2.08787	-3.48713	-2.53036	-1.37437	-1.86782	-0.70758	0.11865	-1.15382
-0.0809	-0.47027	-0.18617	0.11068	1.57138	1.258	1.36183	0.51212	1.37093	1.64474	1.59968	1.55651	1.65698	1.42376	1.61535
-0.0809	0.51506	2.15429	0.11068	0.5131	-0.986	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	-0.47027	0.98406	0.11068	0.5131	0.136	0.36867	-0.78788	-1.0581	0.60096	-0.38302	0.41507	0.4747	0.11865	0.23076
-2.75069	0.51506	-0.18617	-1.01316	-1.60345	0.136	0.36867	-0.78788	0.15641	-0.44281	-1.37437	0.41507	0.4747	-1.18646	0.23076
-0.0809	-0.47027	-0.18617	0.11068	-0.54517	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	-0.47027	-1.35641	-1.01316	-0.54517	-0.986	-0.62449	0.51212	0.15641	0.60096	-0.38302	0.41507	-0.70758	0.11865	-1.15382
-0.0809	-0.47027	2.15429	1.23452	1.57138	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
1.25399	2.4857	2.32453	1.23452	1.57138	0.136	0.36867	-0.78788	1.37093	-0.44281	1.59968	0.41507	0.4747	1.42376	1.61535
-0.0809	0.51506	-0.18617	1.23452	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	-0.70758	0.11865	-1.15382
-2.75069	1.50038	-0.18617	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	-0.38302	-1.86782	0.4747	0.11865	-1.15382
-0.0809	-0.47027	-0.18617	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	0.51506	2.15429	1.23452	1.57138	0.136	0.36867	0.51212	-1.0581	-0.44281	-0.38302	0.41507	-0.70758	-1.18646	0.23076
-0.0809	1.50038	-0.18617	0.11068	-0.54517	0.136	0.36867	-0.78788	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	1.50038	-1.35641	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	-1.45559	-1.35641	0.11068	-0.54517	1.258	1.36183	0.51212	0.15641	-0.44281	0.60833	0.41507	0.4747	0.11865	1.61535
-2.75069	-0.47027	0.98406	0.11068	-0.54517	0.136	-0.62449	-0.78788	-1.0581	-1.48659	0.60833	-1.86782	-1.88986	-2.49157	-1.15382
-0.0809	-0.47027	-0.18617	1.23452	0.5131	1.258	1.36183	0.51212	0.15641	1.64474	0.60833	0.41507	1.65698	1.42376	0.23076
-0.0809	0.51506	-0.18617	-1.01316	-0.54517	-2.108	-1.61765	-0.78788	-1.0581	0.60096	0.60833	-0.72637	-0.70758	-1.18646	0.23076
-0.0809	0.51506	-0.18617	1.23452	0.5131	1.258	1.36183	0.51212	0.15641	0.60096	0.60833	1.55651	1.65698	1.42376	0.23076
1.25399	-0.47027	-1.35641	0.11068	0.5131	0.136	0.36867	-0.78788	0.15641	-0.44281	0.60833	-0.72637	-0.70758	0.11865	0.23076

OC11	OC12	OC13	OC14	OC15	OC16	OC17	OC18	OC19	OC20	OC21	OC22	OC23	OC24	OC25
-1.4158	-0.47027	-0.18617	-1.01316	-1.60345	0.136	-0.62449	-0.78788	-1.0581	-1.48659	-1.37437	-1.86782	-1.88986	-1.18646	-1.15382
-0.0809	-0.47027	-0.18617	0.11068	0.5131	0.136	1.36183	0.51212	0.15641	-1.48659	0.60833	0.41507	0.4747	0.11865	0.23076
1.25399	-1.45559	-1.35641	1.23452	0.5131	1.258	1.36183	0.51212	1.37093	0.60096	0.60833	1.55651	0.4747	0.11865	0.23076
1.25399	-1.45559	-1.35641	0.11068	0.5131	1.258	0.36867	0.51212	1.37093	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-1.4158	1.50038	-0.18617	0.11068	0.5131	1.258	-1.61765	-2.08787	0.15641	-2.53036	-0.38302	0.41507	-1.88986	0.11865	1.61535
1.25399	-1.45559	-1.35641	1.23452	0.5131	1.258	1.36183	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	1.42376	0.23076
-0.0809	0.51506	0.98406	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	0.51506	0.98406	-1.01316	-0.54517	0.136	-0.62449	0.51212	0.15641	-0.44281	-0.38302	0.41507	-0.70758	0.11865	0.23076
-0.0809	1.50038	0.98406	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	-0.47027	-0.18617	-1.01316	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	0.51506	-0.18617	-1.01316	0.5131	0.136	-0.62449	0.51212	0.15641	-0.44281	0.60833	0.41507	0.4747	0.11865	1.61535
-1.4158	0.51506	0.98406	0.11068	1.57138	1.258	1.36183	1.81212	1.37093	1.64474	0.60833	1.55651	1.65698	1.42376	0.23076
-1.4158	-0.47027	-0.18617	-1.01316	0.5131	-0.986	-0.62449	-0.78788	0.15641	0.60096	-0.38302	0.41507	-0.70758	0.11865	0.23076
-0.0809	0.51506	-0.18617	-1.01316	-0.54517	0.136	-0.62449	-0.78788	0.15641	-1.48659	-1.37437	0.41507	-0.70758	0.11865	-1.15382
1.25399	0.51506	-0.18617	1.23452	1.57138	1.258	-0.62449	-0.78788	0.15641	-0.44281	0.60833	0.41507	1.65698	1.42376	1.61535
-0.0809	-0.47027	0.98406	0.11068	-1.60345	-0.986	0.36867	-2.08787	-1.0581	-0.44281	-1.37437	1.55651	-1.88986	1.42376	0.23076
-0.0809	-0.47027	-0.18617	-1.01316	0.5131	0.136	-0.62449	0.51212	0.15641	-0.44281	-0.38302	-0.72637	0.4747	0.11865	0.23076
-0.0809	-0.47027	-0.18617	-1.01316	-0.54517	-0.986	-1.61765	0.51212	0.15641	-0.44281	-1.37437	1.55651	-1.88986	1.42376	0.23076
-0.0809	0.51506	0.98406	-1.01316	-0.54517	-0.986	0.36867	-0.78788	0.15641	-0.44281	0.60833	-0.72637	-0.70758	-1.18646	0.23076
-0.0809	-1.45559	-0.18617	0.11068	0.5131	0.136	-0.62449	-0.78788	0.15641	0.60096	0.60833	0.41507	0.4747	1.42376	1.61535
-0.0809	-0.47027	-0.18617	0.11068	0.5131	0.136	0.36867	-0.78788	-1.0581	-0.44281	-0.38302	-0.72637	-0.70758	-1.18646	-1.15382
-0.0809	1.50038	0.98406	1.23452	0.5131	0.136	0.36867	-0.78788	0.15641	-0.44281	-0.38302	0.41507	-0.70758	1.42376	0.23076
1.25399	-0.47027	-0.18617	1.23452	0.5131	0.136	0.36867	-0.78788	0.15641	0.60096	0.60833	0.41507	0.4747	1.42376	0.23076
-0.0809	-0.47027	0.98406	0.11068	-1.60345	0.136	-1.61765	-0.78788	-2.27262	0.60096	-1.37437	1.55651	-0.70758	1.42376	0.23076
-0.0809	-0.47027	0.98406	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	-0.38302	0.41507	0.4747	0.11865	0.23076
1.25399	1.50038	0.98406	0.11068	-0.54517	0.136	0.36867	0.51212	0.15641	0.60096	-0.38302	0.41507	0.4747	-1.18646	-1.15382
1.25399	1.50038	0.98406	0.11068	-0.54517	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	-1.18646	-1.15382
-0.0809	1.50038	-0.18617	0.11068	0.5131	0.136	-0.62449	-0.78788	0.15641	-0.44281	0.60833	0.41507	0.4747	-1.18646	-1.15382
1.25399	-1.45559	-0.18617	1.23452	1.57138	1.258	1.36183	1.81212	1.37093	0.60096	0.60833	1.55651	1.65698	1.42376	1.61535

OC11	OC12	OC13	OC14	OC15	OC16	OC17	OC18	OC19	OC20	OC21	OC22	OC23	OC24	OC25
1.25399	-0.47027	-1.35641	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	1.64474	1.59968	0.41507	0.4747	0.11865	0.23076
1.25399	-1.45559	-0.18617	1.23452	1.57138	1.258	1.36183	0.51212	1.37093	0.60096	0.60833	1.55651	1.65698	1.42376	1.61535
-0.0809	1.50038	-0.18617	1.23452	1.57138	1.258	1.36183	1.81212	1.37093	1.64474	1.59968	0.41507	0.4747	1.42376	0.23076
1.25399	-1.45559	-0.18617	1.23452	1.57138	1.258	1.36183	1.81212	1.37093	0.60096	0.60833	1.55651	1.65698	1.42376	1.61535
1.25399	-1.45559	-0.18617	1.23452	1.57138	1.258	1.36183	0.51212	1.37093	0.60096	0.60833	1.55651	1.65698	1.42376	1.61535
1.25399	-0.47027	-0.18617	0.11068	0.5131	0.136	0.36867	1.81212	0.15641	0.60096	0.60833	0.41507	1.65698	0.11865	0.23076
-0.0809	1.50038	0.98406	-1.01316	0.5131	0.136	-0.62449	-0.78788	-1.0581	0.60096	-0.38302	-0.72637	0.4747	0.11865	0.23076
-0.0809	1.50038	-1.35641	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	1.61535
-1.4158	0.51506	0.98406	-1.01316	-0.54517	0.136	0.36867	0.51212	-1.0581	-0.44281	-0.38302	-0.72637	-0.70758	0.11865	0.23076
1.25399	-0.47027	-1.35641	1.23452	-0.54517	1.258	1.36183	1.81212	1.37093	0.60096	0.60833	0.41507	-0.70758	0.11865	-1.15382
1.25399	-0.47027	-0.18617	0.11068	-0.54517	0.136	-0.62449	-0.78788	-1.0581	-0.44281	-1.37437	-1.86782	0.4747	-1.18646	0.23076
-0.0809	0.51506	0.98406	0.11068	0.5131	-0.986	0.36867	-0.78788	-1.0581	0.60096	0.60833	-0.72637	-0.70758	-1.18646	-1.15382
-0.0809	0.51506	-0.18617	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	-1.37437	0.41507	0.4747	0.11865	-1.15382
-0.0809	0.51506	-0.18617	0.11068	-0.54517	0.136	0.36867	-0.78788	0.15641	-0.44281	0.60833	-0.72637	0.4747	0.11865	-1.15382
-0.0809	-0.47027	-1.35641	0.11068	0.5131	0.136	-0.62449	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	-1.15382
-1.4158	0.51506	0.98406	-2.137	-1.60345	-2.108	-0.62449	-0.78788	0.15641	-1.48659	-1.37437	-1.86782	-0.70758	-1.18646	-1.15382
1.25399	-1.45559	-1.35641	0.11068	-0.54517	-0.986	-0.62449	-0.78788	-1.0581	-0.44281	-1.37437	-0.72637	-0.70758	-1.18646	0.23076
-0.0809	-0.47027	-0.18617	0.11068	-0.54517	1.258	0.36867	0.51212	0.15641	0.60096	-1.37437	-0.72637	-0.70758	0.11865	0.23076
-0.0809	0.51506	0.98406	-1.01316	-0.54517	0.136	-0.62449	-0.78788	0.15641	0.60096	-0.38302	-0.72637	-0.70758	0.11865	0.23076
1.25399	-1.45559	-1.35641	1.23452	-2.66172	-2.108	-2.61081	-0.78788	0.15641	-2.53036	-2.36573	0.41507	-0.70758	0.11865	-1.15382
-0.0809	-0.47027	-1.35641	0.11068	-0.54517	0.136	-1.61765	-0.78788	-1.0581	0.60096	0.60833	-0.72637	-0.70758	0.11865	-1.15382
1.25399	-0.47027	-1.35641	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	-0.38302	0.41507	0.4747	0.11865	0.23076
-0.0809	-0.47027	-0.18617	-1.01316	-0.54517	0.136	-1.61765	0.51212	0.15641	-0.44281	0.60833	-1.86782	-0.70758	-1.18646	-1.15382
1.25399	-1.45559	-1.35641	1.23452	0.5131	0.136	0.36867	0.51212	1.37093	1.64474	0.60833	0.41507	0.4747	1.42376	1.61535
-0.0809	0.51506	-0.18617	-1.01316	-0.54517	-0.986	0.36867	-0.78788	-2.27262	-1.48659	-1.37437	-0.72637	-0.70758	-1.18646	-3.92299
-0.0809	0.51506	0.98406	0.11068	0.5131	-0.986	-0.62449	0.51212	-1.0581	-0.44281	0.60833	0.41507	0.4747	0.11865	-1.15382
-1.4158	0.51506	-0.18617	-1.01316	-1.60345	-0.986	-1.61765	-2.08787	-2.27262	-1.48659	-1.37437	-0.72637	-0.70758	-1.18646	0.23076
1.25399	-0.47027	-1.35641	0.11068	-0.54517	-0.986	-1.61765	0.51212	0.15641	-2.53036	-1.37437	-0.72637	-0.70758	-1.18646	0.23076
-0.0809	0.51506	0.98406	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076

OC11	OC12	OC13	OC14	OC15	OC16	OC17	OC18	OC19	OC20	OC21	OC22	OC23	OC24	OC25
1.25399	-1.45559	-1.35641	1.23452	0.5131	1.258	1.36183	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	1.42376	0.23076
-1.4158	1.50038	-0.18617	0.11068	0.5131	1.258	-1.61765	-2.08787	0.15641	-2.53036	-0.38302	0.41507	-1.88986	0.11865	1.61535
1.25399	-1.45559	-1.35641	0.11068	0.5131	1.258	0.36867	0.51212	1.37093	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
1.25399	-1.45559	-1.35641	1.23452	0.5131	1.258	1.36183	0.51212	1.37093	0.60096	0.60833	1.55651	0.4747	0.11865	0.23076
1.25399	-0.47027	-1.35641	0.11068	0.5131	0.136	0.36867	-0.78788	0.15641	-0.44281	0.60833	-0.72637	-0.70758	0.11865	0.23076
-0.0809	0.51506	-0.18617	1.23452	0.5131	1.258	1.36183	0.51212	0.15641	0.60096	0.60833	1.55651	1.65698	1.42376	0.23076
-0.0809	0.51506	-0.18617	-1.01316	-0.54517	-2.108	-1.61765	-0.78788	-1.0581	-0.44281	-0.38302	-0.72637	-0.70758	-1.18646	0.23076
-0.0809	-0.47027	-0.18617	1.23452	0.5131	1.258	1.36183	0.51212	0.15641	1.64474	0.60833	0.41507	1.65698	1.42376	0.23076
-2.75069	-0.47027	0.98406	0.11068	-0.54517	0.136	-0.62449	-0.78788	-1.0581	-1.48659	0.60833	-1.86782	-1.88986	-1.18646	-1.15382
1.25399	-1.45559	-1.35641	0.11068	-0.54517	1.258	1.36183	0.51212	0.15641	-0.44281	0.60833	0.41507	0.4747	0.11865	1.61535
-0.0809	1.50038	-0.18617	0.11068	-0.54517	0.136	0.36867	-0.78788	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	0.51506	0.98406	1.23452	1.57138	1.258	0.36867	0.51212	-1.0581	-0.44281	-0.38302	0.41507	-0.70758	-1.18646	0.23076
-0.0809	-0.47027	-0.18617	0.11068	0.5131	0.136	0.36867	-0.78788	-1.0581	0.60096	0.60833	0.41507	0.4747	-2.49157	-1.15382
-2.75069	1.50038	-0.18617	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	-0.38302	-1.86782	0.4747	0.11865	-1.15382
-0.0809	0.51506	-0.18617	1.23452	0.5131	0.136	0.36867	0.51212	-1.0581	-0.44281	0.60833	0.41507	-0.70758	0.11865	-1.15382
-0.0809	1.50038	2.15429	0.11068	0.5131	0.136	0.36867	-0.78788	1.37093	-0.44281	0.60833	0.41507	0.4747	1.42376	0.23076
-0.0809	-0.47027	0.98406	0.11068	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	-0.47027	-1.35641	-1.01316	-0.54517	-0.986	-0.62449	0.51212	0.15641	0.60096	-0.38302	0.41507	-0.70758	0.11865	0.23076
-0.0809	-0.47027	-0.18617	0.11068	-0.54517	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-2.75069	0.51506	-0.18617	-1.01316	-1.60345	0.136	0.36867	-0.78788	-1.0581	-0.44281	-0.38302	0.41507	0.4747	-1.18646	0.23076
-0.0809	-0.47027	-0.18617	-3.26084	-0.54517	-0.986	0.36867	0.51212	0.15641	0.60096	-0.38302	0.41507	0.4747	0.11865	0.23076
-1.4158	2.4857	2.15429	-3.26084	-1.60345	-3.23	-2.61081	-3.38787	-2.27262	0.60096	-2.36573	-1.86782	-3.07214	-2.49157	-2.5384
-1.4158	2.4857	-0.18617	-2.137	0.5131	-2.108	0.36867	0.51212	0.15641	0.60096	-0.38302	-1.86782	-0.70758	-1.18646	0.23076
1.25399	0.51506	0.98406	0.11068	0.5131	0.136	0.36867	0.51212	1.37093	1.64474	1.59968	0.41507	0.4747	0.11865	1.61535
-0.0809	-0.47027	0.98406	0.11068	0.5131	0.136	0.36867	1.81212	0.15641	0.60096	0.60833	1.55651	1.65698	1.42376	1.61535
-1.4158	-1.45559	-1.35641	-1.01316	-2.66172	-2.108	-1.61765	-2.08787	-3.48713	-2.53036	-2.36573	-1.86782	-0.70758	0.11865	-1.15382
-0.0809	-1.45559	-1.35641	-1.01316	0.5131	0.136	0.36867	0.51212	0.15641	0.60096	0.60833	0.41507	0.4747	0.11865	0.23076
-0.0809	0.51506	2.15429	0.11068	0.5131	-0.986	-0.62449	-0.78788	0.15641	0.60096	0.60833	0.41507	0.4747	-1.18646	0.23076
-1.4158	0.51506	-0.18617	-1.01316	0.5131	0.136	0.36867	0.51212	0.15641	-0.44281	0.60833	-0.72637	0.4747	0.11865	0.23076

OC11	OC12	OC13	OC14	OC15	OC16	OC17	OC18	OC19	OC20	OC21	OC22	OC23	OC24	OC25
-0.0809	-0.47027	-0.18617	0.11068	0.5131	0.136	0.36867	0.51212	1.37093	-0.44281	-1.37437	0.41507	0.4747	1.42376	-1.15382
-0.0809	0.51506	0.98406	0.11068	0.5131	0.136	-0.62449	-0.78788	-1.0581	0.60096	0.60833	-0.72637	-0.70758	-1.18646	0.23076
1.25399	-0.47027	-0.18617	0.11068	-0.54517	-0.986	0.36867	-0.78788	0.15641	-0.44281	-1.37437	-1.86782	1.65698	-1.18646	0.23076
-0.0809	-0.47027	-0.18617	1.23452	0.5131	1.258	1.36183	1.81212	1.37093	0.60096	0.60833	-0.72637	-0.70758	0.11865	-1.15382
-0.0809	-1.45559	-1.35641	0.11068	-1.60345	-2.108	-2.61081	-0.78788	1.37093	-1.48659	-1.37437	-0.72637	-0.70758	0.11865	-1.15382
-0.0809	0.51506	0.98406	-1.01316	-0.54517	1.258	-0.62449	-0.78788	1.37093	0.60096	-0.38302	-0.72637	-0.70758	0.11865	0.23076
-0.0809	-1.45559	-1.35641	1.23452	-0.54517	1.258	0.36867	0.51212	0.15641	0.60096	-2.36573	-0.72637	-0.70758	1.42376	0.23076
-0.0809	-0.47027	-0.18617	1.23452	-0.54517	-0.986	-0.62449	-0.78788	-1.0581	-1.48659	-1.37437	-0.72637	-0.70758	-1.18646	0.23076
-1.4158	0.51506	0.98406	-2.137	-1.60345	-0.986	0.36867	0.51212	0.15641	-1.48659	-1.37437	-1.86782	-0.70758	-1.18646	-1.15382
-0.0809	-0.47027	-0.18617	0.11068	0.5131	0.136	-0.62449	-0.78788	-1.0581	1.64474	1.59968	-0.72637	-0.70758	0.11865	-1.15382
-0.0809	-0.47027	-0.18617	0.11068	0.5131	0.136	0.36867	1.81212	1.37093	-0.44281	-0.38302	0.41507	0.4747	0.11865	-1.15382
-0.0809	-0.47027	-0.18617	-1.01316	-0.54517	-0.986	-0.62449	0.51212	0.15641	-1.48659	-1.37437	-0.72637	-0.70758	-1.18646	0.23076
-1.4158	0.51506	-0.18617	-2.137	-1.60345	-0.986	-0.62449	-0.78788	-1.0581	-1.48659	-0.38302	-0.72637	-0.70758	-1.18646	0.23076
-0.0809	0.51506	0.98406	1.23452	1.57138	-0.986	-0.62449	0.51212	-1.0581	-0.44281	1.59968	1.55651	1.65698	1.42376	-1.15382
-0.0809	-0.47027	-0.18617	1.23452	1.57138	1.258	0.36867	0.51212	1.37093	1.64474	1.59968	1.55651	0.4747	0.11865	1.61535
-0.0809	0.51506	0.98406	-1.01316	-0.54517	-0.986	0.36867	0.51212	-1.0581	-1.48659	-1.37437	-0.72637	-0.70758	-1.18646	-1.15382

OM26	OM27	OM28	OM29	OM30	OM31	OM32	OM33	OM34	OM35	OM36	OE37	OE38	OE39	OE40
-2.48714	-0.87192	-1.87165	-1.89193	-0.67651	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	-1.18838	-1.18394	-2.03132	-0.97082
0.40539	-0.87192	-0.63015	-0.71947	0.58123	0.51805	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	-0.87192	0.61134	-0.71947	-1.93426	-0.90658	1.08454	1.4194	1.20944	0.14711	-2.29769	-2.39505	-2.40488	-2.03132	-2.21498
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	-0.99024	-0.60612	0.23599	0.14711	1.32735	1.22495	1.25794	1.60851	1.5175
-1.04087	0.58496	-1.87165	0.453	-1.93426	-0.90658	-2.02762	-1.61888	-1.71092	-1.7947	-2.29769	-2.39505	-1.18394	-2.03132	-3.45914
-1.04087	-0.87192	-0.63015	-0.71947	-0.67651	-0.90658	0.04715	0.40664	-0.73746	-0.8238	-2.29769	-2.39505	-2.40488	-2.03132	-2.21498
1.85166	2.04184	1.85284	1.62546	1.83898	1.94268	-0.99024	-0.60612	-0.73746	0.14711	1.32735	1.22495	1.25794	1.60851	1.5175
1.85166	2.04184	1.85284	1.62546	1.83898	1.94268	2.12193	1.4194	1.20944	1.11801	1.32735	1.22495	1.25794	1.60851	1.5175
-1.04087	-0.87192	-0.63015	-0.71947	0.58123	-0.90658	-2.02762	-1.61888	-1.71092	-1.7947	-1.08934	0.01828	-1.18394	0.39523	-0.97082
1.85166	-0.87192	0.61134	0.453	0.58123	0.51805	0.04715	-0.60612	-0.73746	-0.8238	1.32735	1.22495	1.25794	1.60851	1.5175
0.40539	-0.87192	0.61134	0.453	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	-0.90658	0.04715	0.40664	0.23599	1.11801	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	0.58496	-1.87165	0.453	0.58123	-0.90658	-0.99024	-1.61888	-1.71092	-0.8238	1.32735	1.22495	1.25794	1.60851	-0.97082
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	-0.63015	-0.71947	-0.67651	0.51805	0.04715	0.40664	1.20944	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	1.85284	0.453	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	1.32735	1.22495	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	1.62546	1.83898	0.51805	1.08454	-1.61888	-1.71092	-1.7947	1.32735	1.22495	1.25794	0.39523	1.5175
-1.04087	-0.87192	0.61134	-0.71947	-0.67651	-0.90658	-0.99024	-1.61888	-0.73746	-0.8238	0.119	0.01828	1.25794	0.39523	0.27334
-1.04087	-0.87192	-0.63015	0.453	0.58123	-0.90658	1.08454	-0.60612	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	-0.71947	-0.67651	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	-0.81804	-0.97082
0.40539	-0.87192	-0.63015	0.453	0.58123	-0.90658	-0.99024	1.4194	1.20944	1.11801	0.119	0.01828	0.037	-0.81804	0.27334
1.85166	2.04184	0.61134	1.62546	0.58123	0.51805	-0.99024	-0.60612	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	-0.99024	-0.60612	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
-2.48714	-2.3288	-0.63015	0.453	-0.67651	-0.90658	0.04715	-0.60612	0.23599	0.14711	0.119	0.01828	0.037	-0.81804	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	-0.99024	-0.60612	0.23599	1.11801	1.32735	1.22495	1.25794	0.39523	1.5175
-1.04087	-2.3288	-0.63015	0.453	-1.93426	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	-2.29769	-2.39505	-1.18394	-0.81804	-0.97082
0.40539	0.58496	0.61134	0.453	0.58123	-0.90658	1.08454	1.4194	1.20944	1.11801	1.32735	1.22495	1.25794	1.60851	1.5175
0.40539	0.58496	-0.63015	0.453	0.58123	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334

OM26	OM27	OM28	OM29	OM30	OM31	OM32	OM33	OM34	OM35	OM36	OE37	OE38	OE39	OE40
-1.04087	0.58496	0.61134	-1.89193	-1.93426	-0.90658	0.04715	-0.60612	-0.73746	1.11801	-1.08934	-2.39505	-2.40488	-0.81804	-0.97082
0.40539	0.58496	0.61134	1.62546	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	1.25794	0.39523	0.27334
0.40539	-0.87192	-0.63015	-0.71947	-0.67651	-0.90658	1.08454	0.40664	0.23599	0.14711	0.119	0.01828	1.25794	1.60851	1.5175
0.40539	0.58496	-0.63015	-0.71947	-0.67651	0.51805	0.04715	-1.61888	-1.71092	-1.7947	1.32735	1.22495	1.25794	-0.81804	-0.97082
0.40539	0.58496	0.61134	0.453	-1.93426	0.51805	-2.02762	-1.61888	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	0.453	0.58123	0.51805	1.08454	0.40664	0.23599	0.14711	1.32735	1.22495	1.25794	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	0.61134	-0.71947	0.58123	0.51805	0.04715	0.40664	0.23599	0.14711	1.32735	1.22495	1.25794	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	0.037	-0.81804	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	0.037	0.39523	0.27334
1.85166	2.04184	1.85284	1.62546	1.83898	1.94268	1.08454	1.4194	1.20944	1.11801	1.32735	1.22495	1.25794	-0.81804	0.27334
0.40539	0.58496	-0.63015	1.62546	1.83898	1.94268	2.12193	-0.60612	0.23599	0.14711	1.32735	1.22495	1.25794	1.60851	1.5175
-1.04087	0.58496	0.61134	0.453	0.58123	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	0.453	-0.67651	-0.90658	-0.99024	0.40664	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	-0.97082
1.85166	0.58496	0.61134	0.453	-0.67651	0.51805	0.04715	0.40664	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	1.85284	1.62546	0.58123	0.51805	-0.99024	-0.60612	-0.73746	0.14711	1.32735	1.22495	1.25794	-0.81804	0.27334
0.40539	0.58496	-0.63015	0.453	0.58123	0.51805	-0.99024	-0.60612	-0.73746	0.14711	0.119	0.01828	0.037	-0.81804	1.5175
0.40539	0.58496	1.85284	1.62546	0.58123	0.51805	0.04715	0.40664	0.23599	0.14711	1.32735	1.22495	-1.18394	0.39523	1.5175
0.40539	0.58496	-0.63015	0.453	0.58123	0.51805	0.04715	1.4194	0.23599	1.11801	0.119	-1.18838	0.037	-0.81804	-0.97082
1.85166	2.04184	1.85284	1.62546	1.83898	1.94268	2.12193	1.4194	2.18289	2.08891	1.32735	1.22495	1.25794	1.60851	1.5175
-1.04087	-0.87192	-0.63015	-0.71947	-0.67651	-0.90658	0.04715	0.40664	0.23599	0.14711	-1.08934	-1.18838	-2.40488	-0.81804	-0.97082
1.85166	0.58496	0.61134	0.453	-0.67651	-2.33122	0.04715	-0.60612	-0.73746	1.11801	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	0.453	-0.67651	0.51805	0.04715	0.40664	1.20944	1.11801	0.119	1.22495	0.037	-0.81804	0.27334
-1.04087	-2.3288	0.61134	-1.89193	-0.67651	1.94268	0.04715	2.43216	0.23599	1.11801	-2.29769	0.01828	-1.18394	0.39523	1.5175
0.40539	-0.87192	0.61134	-0.71947	-0.67651	0.51805	1.08454	0.40664	1.20944	1.11801	0.119	0.01828	0.037	0.39523	-0.97082
0.40539	0.58496	-1.87165	-1.89193	-1.93426	0.51805	-0.99024	0.40664	0.23599	0.14711	0.119	0.01828	0.037	-0.81804	-0.97082
0.40539	0.58496	-0.63015	-1.89193	-1.93426	0.51805	-0.99024	0.40664	0.23599	0.14711	1.32735	0.01828	0.037	-0.81804	-0.97082
0.40539	0.58496	0.61134	0.453	-0.67651	0.51805	0.04715	0.40664	0.23599	1.11801	0.119	1.22495	0.037	0.39523	-0.97082
0.40539	0.58496	1.85284	0.453	0.58123	1.94268	0.04715	0.40664	1.20944	1.11801	0.119	1.22495	0.037	0.39523	0.27334

OM26	OM27	OM28	OM29	OM30	OM31	OM32	OM33	OM34	OM35	OM36	OE37	OE38	OE39	OE40
-1.04087	2.04184	0.61134	0.453	0.58123	0.51805	0.04715	0.40664	2.18289	2.08891	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	1.85284	0.453	0.58123	1.94268	0.04715	0.40664	1.20944	1.11801	0.119	1.22495	0.037	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	2.12193	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	1.85284	0.453	0.58123	1.94268	0.04715	0.40664	1.20944	1.11801	0.119	1.22495	0.037	0.39523	0.27334
0.40539	0.58496	1.85284	0.453	0.58123	1.94268	0.04715	0.40664	1.20944	1.11801	0.119	1.22495	0.037	0.39523	0.27334
0.40539	-0.87192	0.61134	0.453	-0.67651	0.51805	0.04715	0.40664	2.18289	2.08891	1.32735	0.01828	0.037	0.39523	0.27334
1.85166	0.58496	0.61134	1.62546	1.83898	0.51805	1.08454	2.43216	2.18289	2.08891	1.32735	1.22495	1.25794	0.39523	0.27334
0.40539	-0.87192	0.61134	0.453	-0.67651	-0.90658	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	1.25794	1.60851	0.27334
-1.04087	0.58496	-0.63015	0.453	0.58123	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	0.61134	1.62546	0.58123	0.51805	-0.99024	0.40664	0.23599	0.14711	0.119	0.01828	1.25794	0.39523	0.27334
-1.04087	-2.3288	-1.87165	-1.89193	-0.67651	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	0.01828	-1.18394	-0.81804	-0.97082
0.40539	-0.87192	0.61134	-0.71947	0.58123	-0.90658	1.08454	0.40664	0.23599	1.11801	0.119	0.01828	-1.18394	-0.81804	0.27334
0.40539	0.58496	-0.63015	-0.71947	-0.67651	-0.90658	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	-1.18394	-0.81804	0.27334
0.40539	0.58496	-0.63015	0.453	0.58123	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	-0.87192	0.61134	0.453	0.58123	0.51805	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	-0.97082
-2.48714	-0.87192	-0.63015	-1.89193	-0.67651	-2.33122	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	-2.39505	-2.40488	-2.03132	-0.97082
-1.04087	-0.87192	0.61134	0.453	-0.67651	-0.90658	-0.99024	-0.60612	-0.73746	0.14711	-1.08934	-1.18838	-1.18394	-0.81804	-2.21498
-1.04087	-0.87192	-0.63015	0.453	0.58123	-0.90658	0.04715	0.40664	0.23599	0.14711	-1.08934	0.01828	0.037	-0.81804	-0.97082
0.40539	0.58496	0.61134	-0.71947	0.58123	0.51805	1.08454	0.40664	1.20944	1.11801	-1.08934	-1.18838	0.037	0.39523	0.27334
-2.48714	-0.87192	0.61134	-3.06439	-0.67651	-0.90658	1.08454	-1.61888	-1.71092	-1.7947	-1.08934	-1.18838	-1.18394	-3.24459	-0.97082
0.40539	-0.87192	-0.63015	0.453	0.58123	0.51805	0.04715	-0.60612	0.23599	-0.8238	0.119	0.01828	-1.18394	-0.81804	0.27334
-1.04087	-0.87192	-0.63015	0.453	-0.67651	0.51805	1.08454	0.40664	0.23599	0.14711	-1.08934	-1.18838	-1.18394	-0.81804	0.27334
-1.04087	0.58496	-0.63015	-0.71947	-1.93426	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	-0.81804	-0.97082
1.85166	0.58496	-0.63015	-0.71947	0.58123	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	1.32735	1.22495	1.25794	0.39523	1.5175
-1.04087	-0.87192	-1.87165	-1.89193	-1.93426	-0.90658	0.04715	-0.60612	0.23599	0.14711	0.119	0.01828	1.25794	1.60851	0.27334
-1.04087	-0.87192	-0.63015	-0.71947	-0.67651	-0.90658	1.08454	0.40664	0.23599	0.14711	-2.29769	-2.39505	-2.40488	-2.03132	-0.97082
-1.04087	-0.87192	-1.87165	-0.71947	-1.93426	-0.90658	-0.99024	-1.61888	-1.71092	-0.8238	-2.29769	0.01828	0.037	-0.81804	0.27334
-1.04087	-0.87192	-0.63015	-0.71947	-0.67651	0.51805	-2.02762	-1.61888	-1.71092	-1.7947	-1.08934	0.01828	0.037	-0.81804	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334

OM26	OM27	OM28	OM29	OM30	OM31	OM32	OM33	OM34	OM35	OM36	OE37	OE38	OE39	OE40
0.40539	0.58496	-0.63015	0.453	0.58123	0.51805	1.08454	0.40664	0.23599	0.14711	1.32735	1.22495	1.25794	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	-1.93426	0.51805	-2.02762	-1.61888	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	-0.71947	-0.67651	0.51805	0.04715	-1.61888	-1.71092	-1.7947	1.32735	1.22495	1.25794	-0.81804	-0.97082
0.40539	-0.87192	-0.63015	-0.71947	-0.67651	-0.90658	1.08454	0.40664	0.23599	0.14711	0.119	0.01828	1.25794	1.60851	1.5175
0.40539	0.58496	-0.63015	0.453	0.58123	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	0.61134	0.453	0.58123	-0.90658	1.08454	1.4194	1.20944	1.11801	1.32735	1.22495	1.25794	1.60851	1.5175
-1.04087	-2.3288	-0.63015	0.453	-1.93426	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	-1.18838	-1.18394	-0.81804	-0.97082
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	0.04715	0.40664	0.23599	1.11801	1.32735	1.22495	1.25794	0.39523	1.5175
-2.48714	-2.3288	-0.63015	0.453	-0.67651	-0.90658	0.04715	-0.60612	0.23599	-0.8238	0.119	0.01828	0.037	-0.81804	0.27334
1.85166	0.58496	0.61134	0.453	0.58123	0.51805	-0.99024	-0.60612	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	-0.71947	-0.67651	0.51805	0.04715	-0.60612	1.20944	1.11801	0.119	0.01828	0.037	-0.81804	0.27334
0.40539	0.58496	-0.63015	-0.71947	-0.67651	-0.90658	0.04715	-0.60612	-0.73746	-0.8238	0.119	0.01828	0.037	-0.81804	-0.97082
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	-0.63015	0.453	0.58123	-0.90658	1.08454	-0.60612	-0.73746	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	0.61134	-0.71947	-0.67651	0.51805	-0.99024	-1.61888	-0.73746	-0.8238	0.119	0.01828	1.25794	0.39523	0.27334
0.40539	0.58496	-0.63015	1.62546	1.83898	0.51805	1.08454	-1.61888	-1.71092	-1.7947	1.32735	1.22495	1.25794	-0.81804	0.27334
0.40539	-0.87192	1.85284	0.453	0.58123	0.51805	1.08454	1.4194	0.23599	0.14711	1.32735	1.22495	0.037	0.39523	0.27334
0.40539	0.58496	0.61134	-0.71947	-0.67651	-0.90658	0.04715	0.40664	1.20944	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	-0.71947	0.58123	1.94268	1.08454	1.4194	1.20944	1.11801	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	0.58496	-1.87165	0.453	0.58123	-0.90658	-0.99024	-1.61888	-1.71092	-1.7947	1.32735	1.22495	1.25794	1.60851	-0.97082
0.40539	-0.87192	-0.63015	-0.71947	0.58123	0.51805	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	0.58496	-1.87165	0.453	-1.93426	-0.90658	-2.02762	-1.61888	-1.71092	-1.7947	-2.29769	-2.39505	-1.18394	-2.03132	-3.45914
0.40539	-0.87192	-0.63015	-0.71947	-0.67651	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	-2.29769	-2.39505	-2.40488	-2.03132	-2.21498
1.85166	2.04184	1.85284	1.62546	1.83898	1.94268	-0.99024	-0.60612	-0.73746	0.14711	0.119	0.01828	0.037	0.39523	0.27334
1.85166	2.04184	1.85284	0.453	0.58123	0.51805	1.08454	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	-0.63015	-0.71947	1.83898	0.51805	-2.02762	-1.61888	-1.71092	-1.7947	-1.08934	-1.18838	-1.18394	0.39523	-0.97082
-1.04087	-0.87192	0.61134	0.453	0.58123	0.51805	0.04715	-1.61888	-1.71092	-1.7947	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	-0.71947	0.58123	1.94268	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-0.63015	-0.71947	-0.67651	-0.90658	0.04715	0.40664	0.23599	0.14711	1.32735	1.22495	1.25794	1.60851	1.5175

OM26	OM27	OM28	OM29	OM30	OM31	OM32	OM33	OM34	OM35	OM36	OE37	OE38	OE39	OE40
0.40539	0.58496	-0.63015	-0.71947	-0.67651	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	-0.87192	0.61134	-0.71947	0.58123	-0.90658	1.08454	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334
0.40539	-2.3288	-1.87165	-1.89193	-0.67651	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	0.01828	0.037	-0.81804	-0.97082
-1.04087	0.58496	0.61134	1.62546	0.58123	-0.90658	-0.99024	0.40664	0.23599	0.14711	0.119	0.01828	1.25794	1.60851	1.5175
-1.04087	-0.87192	0.61134	-3.06439	-0.67651	-0.90658	1.08454	-1.61888	-1.71092	-1.7947	-1.08934	-1.18838	-1.18394	-3.24459	-2.21498
0.40539	-0.87192	-0.63015	-0.71947	0.58123	0.51805	1.08454	1.4194	1.20944	1.11801	-1.08934	-1.18838	0.037	0.39523	0.27334
-1.04087	-0.87192	0.61134	0.453	0.58123	-0.90658	0.04715	0.40664	0.23599	0.14711	-1.08934	0.01828	0.037	-0.81804	-0.97082
-1.04087	-0.87192	0.61134	0.453	0.58123	0.51805	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	-1.18838	-1.18394	-0.81804	-2.21498
-1.04087	-0.87192	-0.63015	-1.89193	-0.67651	-2.33122	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	-2.39505	-2.40488	-0.81804	-0.97082
0.40539	0.58496	0.61134	0.453	0.58123	0.51805	0.04715	-0.60612	0.23599	-0.8238	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	-0.63015	0.453	0.58123	0.51805	1.08454	0.40664	0.23599	0.14711	-1.08934	-1.18838	-1.18394	-0.81804	0.27334
-1.04087	-0.87192	-0.63015	-0.71947	-0.67651	1.94268	-2.02762	-1.61888	-1.71092	-1.7947	0.119	0.01828	0.037	0.39523	0.27334
0.40539	0.58496	-1.87165	-0.71947	-1.93426	-0.90658	-0.99024	-0.60612	-0.73746	-0.8238	-1.08934	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	-0.63015	-0.71947	-0.67651	-0.90658	1.08454	-0.60612	-0.73746	-0.8238	-2.29769	-2.39505	-2.40488	-0.81804	-0.97082
0.40539	0.58496	-0.63015	0.453	0.58123	-0.90658	-2.02762	-1.61888	-1.71092	-1.7947	0.119	0.01828	0.037	0.39523	0.27334
-1.04087	-0.87192	-1.87165	-1.89193	-1.93426	-0.90658	0.04715	0.40664	0.23599	0.14711	0.119	0.01828	0.037	0.39523	0.27334

OE41	OE42	OE43	OE44	OE45	OE46	T47	T48	T49	T50	T51	T52	T53	T54	T55
-2.37381	-2.21645	-0.55484	-0.54318	-1.79333	-1.00783	-0.66709	-1.86832	-0.80851	0.55382	-1.06737	-1.07663	-0.70361	-1.03386	-2.17087
0.15315	0.38418	-0.55484	-1.62954	0.419	0.27134	0.52286	0.49166	0.33905	-0.4476	0.17947	0.26408	0.58634	0.30408	-0.83183
-2.37381	-2.21645	-1.71737	-1.62954	-1.79333	0.27134	-1.85705	-1.86832	-1.95606	-1.44902	-2.31422	-2.41734	-1.99356	-2.37179	-2.17087
1.41663	1.6845	1.77021	1.62954	1.52517	0.27134	0.52286	0.49166	0.33905	-0.4476	1.42631	1.60479	-3.28351	1.64201	-0.83183
-1.11033	-2.21645	0.60768	-0.54318	-0.68716	0.27134	-1.85705	-1.86832	-3.10362	-1.44902	-2.31422	-2.41734	-0.70361	-1.03386	0.50721
-2.37381	-2.21645	-1.71737	-1.62954	-1.79333	-2.28699	-1.85705	-3.04831	-1.95606	-2.45044	-2.31422	-1.07663	-1.99356	-1.03386	-2.17087
1.41663	1.6845	1.77021	1.62954	1.52517	1.5505	1.71281	1.67166	1.48661	1.55524	1.42631	1.60479	1.87629	1.64201	1.84625
1.41663	1.6845	0.60768	-0.54318	-0.68716	-1.00783	0.52286	1.67166	1.48661	1.55524	1.42631	1.60479	1.87629	1.64201	0.50721
-1.11033	-0.91613	-2.87989	-2.7159	-2.8995	-1.00783	-0.66709	-1.86832	-0.80851	-1.44902	-1.06737	-1.07663	-0.70361	-1.03386	-0.83183
1.41663	1.6845	1.77021	1.62954	1.52517	0.27134	-0.66709	-0.68833	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	1.5505	0.52286	1.67166	0.33905	1.55524	0.17947	1.60479	0.58634	1.64201	0.50721
0.15315	-0.91613	0.60768	-0.54318	-0.68716	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	0.50721
-1.11033	-2.21645	-0.55484	-1.62954	0.419	-1.00783	-1.85705	0.49166	0.33905	0.55382	0.17947	0.26408	1.87629	1.64201	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	-1.85705	0.49166	0.33905	-0.4476	-1.06737	0.26408	-0.70361	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	1.52517	1.5505	0.52286	0.49166	1.48661	0.55382	1.42631	0.26408	0.58634	1.64201	1.84625
1.41663	1.6845	1.77021	1.62954	1.52517	0.27134	0.52286	-0.68833	1.48661	0.55382	1.42631	1.60479	0.58634	1.64201	0.50721
0.15315	0.38418	-0.55484	-1.62954	-1.79333	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	-0.83183
0.15315	0.38418	-0.55484	-0.54318	-0.68716	-1.00783	0.52286	-0.68833	0.33905	-1.44902	-2.31422	-1.07663	0.58634	-1.03386	-0.83183
0.15315	0.38418	0.60768	0.54318	0.419	-1.00783	0.52286	0.49166	-0.80851	0.55382	0.17947	0.26408	-0.70361	-1.03386	0.50721
-1.11033	0.38418	-0.55484	-0.54318	-0.68716	0.27134	0.52286	-0.68833	-0.80851	0.55382	-1.06737	-1.07663	-0.70361	-1.03386	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	-1.85705	-0.68833	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	1.52517	0.27134	-0.66709	0.49166	0.33905	1.55524	1.42631	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	-0.4476	0.17947	0.26408	0.58634	0.30408	0.50721
-1.11033	-0.91613	-0.55484	-0.54318	-0.68716	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	-0.83183
1.41663	0.38418	-0.55484	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	-0.70361	-1.03386	-0.83183
-1.11033	-2.21645	-1.71737	0.54318	-1.79333	-2.28699	-0.66709	-0.68833	-0.80851	-1.44902	-1.06737	-2.41734	-0.70361	-2.37179	-0.83183
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	-1.85705	-0.68833	0.33905	-0.4476	0.17947	-1.07663	-0.70361	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	-0.68833	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721

OE41	OE42	OE43	OE44	OE45	OE46	T47	T48	T49	T50	T51	T52	T53	T54	T55
-2.37381	-2.21645	-0.55484	-1.62954	-0.68716	-2.28699	-0.66709	-1.86832	-1.95606	-0.4476	-1.06737	-2.41734	-1.99356	-1.03386	-3.50991
0.15315	0.38418	0.60768	-0.54318	-0.68716	-1.00783	-0.66709	0.49166	0.33905	-1.44902	1.42631	0.26408	-0.70361	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	-0.68716	0.27134	0.52286	0.49166	1.48661	0.55382	1.42631	0.26408	-0.70361	-1.03386	0.50721
0.15315	0.38418	-0.55484	-0.54318	-0.68716	0.27134	0.52286	0.49166	1.48661	1.55524	-1.06737	-1.07663	-0.70361	1.64201	-0.83183
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	-0.68833	-0.80851	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
1.41663	0.38418	0.60768	1.62954	0.419	1.5505	1.71281	1.67166	1.48661	-0.4476	0.17947	0.26408	1.87629	1.64201	0.50721
0.15315	0.38418	0.60768	1.62954	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
1.41663	1.6845	-0.55484	1.62954	1.52517	1.5505	1.71281	1.67166	1.48661	1.55524	1.42631	1.60479	1.87629	1.64201	0.50721
1.41663	0.38418	1.77021	-0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	-1.06737	0.26408	0.58634	-1.03386	-0.83183
0.15315	-0.91613	0.60768	-0.54318	0.419	0.27134	0.52286	-0.68833	0.33905	-1.44902	-1.06737	-1.07663	-1.99356	-1.03386	0.50721
1.41663	-0.91613	-1.71737	-0.54318	0.419	0.27134	0.52286	0.49166	0.33905	-0.4476	0.17947	0.26408	0.58634	0.30408	-0.83183
0.15315	0.38418	0.60768	-0.54318	0.419	1.5505	0.52286	-0.68833	0.33905	0.55382	0.17947	0.26408	-0.70361	0.30408	-0.83183
1.41663	0.38418	-0.55484	0.54318	1.52517	1.5505	0.52286	0.49166	1.48661	0.55382	1.42631	0.26408	0.58634	1.64201	1.84625
1.41663	0.38418	-0.55484	0.54318	0.419	0.27134	1.71281	1.67166	1.48661	1.55524	1.42631	0.26408	1.87629	1.64201	-0.83183
0.15315	-0.91613	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	1.48661	0.55382	1.42631	0.26408	-0.70361	-1.03386	1.84625
0.15315	0.38418	0.60768	-0.54318	0.419	0.27134	-0.66709	-0.68833	0.33905	0.55382	-1.06737	0.26408	-0.70361	0.30408	-0.83183
1.41663	1.6845	0.60768	0.54318	0.419	0.27134	-0.66709	0.49166	1.48661	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
-2.37381	-0.91613	-0.55484	-1.62954	-0.68716	0.27134	0.52286	0.49166	0.33905	-1.44902	0.17947	0.26408	0.58634	0.30408	-0.83183
0.15315	0.38418	-0.55484	0.54318	0.419	1.5505	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	1.84625
1.41663	0.38418	0.60768	1.62954	0.419	0.27134	1.71281	0.49166	0.33905	1.55524	0.17947	0.26408	-1.99356	0.30408	0.50721
-1.11033	-0.91613	0.60768	-0.54318	0.419	-1.00783	-0.66709	1.67166	-0.80851	0.55382	-1.06737	0.26408	-1.99356	0.30408	0.50721
0.15315	0.38418	-0.55484	0.54318	0.419	0.27134	0.52286	-0.68833	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	-0.55484	-0.54318	-0.68716	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	-1.07663	-1.99356	-1.03386	0.50721
0.15315	0.38418	-0.55484	-0.54318	-0.68716	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	-1.07663	-1.99356	-1.03386	0.50721
0.15315	-0.91613	-0.55484	-0.54318	0.419	0.27134	0.52286	0.49166	-0.80851	0.55382	0.17947	0.26408	-0.70361	-1.03386	0.50721
1.41663	1.6845	1.77021	0.54318	1.52517	1.5505	1.71281	1.67166	1.48661	1.55524	1.42631	1.60479	-0.70361	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	-0.4476	0.17947	1.60479	0.58634	-1.03386	0.50721

OE41	OE42	OE43	OE44	OE45	OE46	T47	T48	T49	T50	T51	T52	T53	T54	T55
1.41663	1.6845	1.77021	0.54318	1.52517	1.5505	1.71281	1.67166	1.48661	1.55524	1.42631	1.60479	-0.70361	0.30408	0.50721
1.41663	1.6845	1.77021	0.54318	1.52517	1.5505	1.71281	1.67166	1.48661	1.55524	1.42631	-1.07663	-0.70361	0.30408	0.50721
1.41663	1.6845	1.77021	0.54318	1.52517	1.5505	1.71281	1.67166	1.48661	1.55524	1.42631	1.60479	-0.70361	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	1.52517	0.27134	0.52286	0.49166	0.33905	1.55524	0.17947	0.26408	-0.70361	0.30408	0.50721
0.15315	1.6845	1.77021	0.54318	0.419	1.5505	1.71281	1.67166	0.33905	0.55382	0.17947	1.60479	1.87629	1.64201	0.50721
-1.11033	-0.91613	0.60768	1.62954	0.419	1.5505	0.52286	0.49166	-0.80851	0.55382	0.17947	0.26408	0.58634	1.64201	1.84625
0.15315	-0.91613	-0.55484	-0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	-0.83183
-1.11033	-0.91613	-0.55484	1.62954	0.419	0.27134	0.52286	0.49166	-0.80851	0.55382	1.42631	1.60479	0.58634	0.30408	-0.83183
-2.37381	-0.91613	-0.55484	-2.7159	-0.68716	-2.28699	-1.85705	-1.86832	-0.80851	-0.4476	-2.31422	-2.41734	-1.99356	-2.37179	-0.83183
0.15315	-0.91613	-0.55484	-0.54318	0.419	-1.00783	-0.66709	0.49166	0.33905	-0.4476	0.17947	0.26408	-0.70361	0.30408	0.50721
-1.11033	0.38418	-0.55484	0.54318	-0.68716	0.27134	-0.66709	0.49166	0.33905	-0.4476	-1.06737	-1.07663	-0.70361	-1.03386	0.50721
1.41663	0.38418	0.60768	0.54318	-0.68716	0.27134	0.52286	0.49166	-0.80851	-0.4476	-1.06737	0.26408	0.58634	0.30408	0.50721
0.15315	-0.91613	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	-1.44902	0.17947	0.26408	0.58634	0.30408	0.50721
-2.37381	-0.91613	-1.71737	-0.54318	-0.68716	-1.00783	-0.66709	-0.68833	-0.80851	-0.4476	-1.06737	-1.07663	-0.70361	-1.03386	-0.83183
0.15315	0.38418	-1.71737	-0.54318	0.419	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	0.26408	-0.70361	0.30408	-0.83183
1.41663	-0.91613	-0.55484	0.54318	1.52517	1.5505	0.52286	0.49166	1.48661	-1.44902	0.17947	0.26408	0.58634	0.30408	-0.83183
0.15315	-0.91613	0.60768	0.54318	0.419	-1.00783	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	0.50721
1.41663	0.38418	-1.71737	0.54318	-2.8995	0.27134	-0.66709	0.49166	0.33905	-1.44902	0.17947	0.26408	-0.70361	-1.03386	-3.50991
-1.11033	0.38418	-1.71737	-0.54318	0.419	-1.00783	-0.66709	-0.68833	-0.80851	0.55382	0.17947	0.26408	0.58634	-1.03386	0.50721
0.15315	-0.91613	0.60768	-0.54318	-0.68716	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	-1.07663	-0.70361	-1.03386	0.50721
-1.11033	0.38418	0.60768	-0.54318	0.419	-1.00783	-0.66709	0.49166	-0.80851	0.55382	-1.06737	-1.07663	0.58634	-1.03386	-0.83183
1.41663	1.6845	-1.71737	1.62954	1.52517	0.27134	-0.66709	-0.68833	-0.80851	-1.44902	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	-0.54318	-0.68716	0.27134	0.52286	-0.68833	0.33905	1.55524	0.17947	0.26408	0.58634	0.30408	-0.83183
-1.11033	-0.91613	-0.55484	-1.62954	-0.68716	-1.00783	-0.66709	-0.68833	0.33905	-1.44902	0.17947	0.26408	0.58634	1.64201	0.50721
0.15315	0.38418	-1.71737	-1.62954	-0.68716	-2.28699	-0.66709	0.49166	-0.80851	-0.4476	0.17947	0.26408	-0.70361	-1.03386	-0.83183
0.15315	-0.91613	-1.71737	-1.62954	-1.79333	-2.28699	-1.85705	-0.68833	-1.95606	-1.44902	-1.06737	-1.07663	0.58634	-1.03386	-0.83183
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	-0.68833	-0.80851	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	-0.55484	-0.54318	-0.68716	0.27134	0.52286	0.49166	1.48661	1.55524	-1.06737	-1.07663	-0.70361	1.64201	-0.83183

OE41	OE42	OE43	OE44	OE45	OE46	T47	T48	T49	T50	T51	T52	T53	T54	T55
0.15315	0.38418	0.60768	0.54318	-0.68716	0.27134	0.52286	0.49166	1.48661	0.55382	1.42631	0.26408	-0.70361	-1.03386	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	-0.68833	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
-1.11033	-0.91613	0.60768	0.54318	0.419	0.27134	-0.66709	-0.68833	0.33905	-0.4476	0.17947	-1.07663	-0.70361	0.30408	0.50721
-1.11033	-2.21645	-1.71737	0.54318	-1.79333	-2.28699	-0.66709	-0.68833	-0.80851	-1.44902	-1.06737	-2.41734	-0.70361	-2.37179	-0.83183
1.41663	0.38418	-0.55484	0.54318	0.419	-1.00783	-0.66709	-0.68833	0.33905	0.55382	0.17947	-1.07663	-0.70361	-1.03386	-0.83183
-1.11033	-0.91613	-0.55484	-0.54318	-0.68716	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	-0.83183
0.15315	0.38418	0.60768	0.54318	0.419	-1.00783	0.52286	0.49166	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	-1.85705	-0.68833	-0.80851	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
-1.11033	0.38418	0.60768	-0.54318	-0.68716	0.27134	0.52286	-0.68833	-0.80851	0.55382	-1.06737	-1.07663	-0.70361	-1.03386	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	-1.00783	0.52286	0.49166	-0.80851	0.55382	0.17947	-1.07663	-0.70361	-1.03386	0.50721
0.15315	0.38418	-0.55484	-0.54318	-0.68716	-1.00783	0.52286	-0.68833	-0.80851	-1.44902	-2.31422	-1.07663	0.58634	-1.03386	-0.83183
0.15315	0.38418	-0.55484	-1.62954	-1.79333	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	-0.83183
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	-0.68833	1.48661	0.55382	1.42631	1.60479	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	1.48661	0.55382	0.17947	0.26408	0.58634	1.64201	1.84625
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	-1.85705	0.49166	0.33905	-0.4476	-1.06737	0.26408	-0.70361	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
-1.11033	-2.21645	-0.55484	-1.62954	0.419	-1.00783	-1.85705	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	-0.55484	-1.62954	0.419	0.27134	0.52286	0.49166	0.33905	-0.4476	0.17947	0.26408	0.58634	0.30408	-0.83183
-1.11033	-2.21645	0.60768	-0.54318	-0.68716	0.27134	-1.85705	-1.86832	-3.10362	-1.44902	-2.31422	-2.41734	-0.70361	-1.03386	0.50721
-1.11033	-0.91613	-0.55484	-0.54318	-0.68716	-2.28699	-1.85705	-3.04831	-1.95606	-2.45044	-2.31422	-1.07663	-1.99356	-1.03386	-2.17087
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	-0.55484	-0.54318	-0.68716	0.27134	0.52286	0.49166	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
-1.11033	-0.91613	-2.87989	-2.7159	-2.8995	-1.00783	-0.66709	-1.86832	-1.95606	-1.44902	-1.06737	-1.07663	-0.70361	-1.03386	-0.83183
0.15315	0.38418	0.60768	0.54318	0.419	0.27134	0.52286	-0.68833	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	0.54318	0.419	1.5505	1.71281	1.67166	0.33905	0.55382	1.42631	1.60479	0.58634	1.64201	0.50721
0.15315	1.6845	0.60768	0.54318	-0.68716	1.5505	1.71281	1.67166	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	0.50721
-1.11033	-0.91613	-0.55484	0.54318	0.419	0.27134	0.52286	-0.68833	-0.80851	0.55382	-1.06737	-1.07663	-0.70361	-1.03386	0.50721
0.15315	-0.91613	-0.55484	0.54318	0.419	0.27134	-0.66709	0.49166	0.33905	0.55382	-1.06737	-1.07663	0.58634	0.30408	0.50721
0.15315	-0.91613	-0.55484	-2.7159	-0.68716	-1.00783	-0.66709	-1.86832	-0.80851	-0.4476	-2.31422	-2.41734	-1.99356	-2.37179	-0.83183

OE41	OE42	OE43	OE44	OE45	OE46	T47	T48	T49	T50	T51	T52	T53	T54	T55
-1.11033	-0.91613	0.60768	1.62954	1.52517	0.27134	0.52286	0.49166	0.33905	-0.4476	-1.06737	1.60479	1.87629	1.64201	-0.83183
-1.11033	-0.91613	0.60768	0.54318	0.419	-1.00783	-0.66709	-0.68833	0.33905	0.55382	0.17947	0.26408	0.58634	0.30408	0.50721
1.41663	0.38418	0.60768	0.54318	1.52517	1.5505	1.71281	0.49166	1.48661	-1.44902	0.17947	0.26408	0.58634	0.30408	-0.83183
1.41663	1.6845	-1.71737	-0.54318	0.419	0.27134	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	0.26408	0.58634	0.30408	-0.83183
-2.37381	-0.91613	-0.55484	-0.54318	-0.68716	-1.00783	-0.66709	-0.68833	-0.80851	-0.4476	-1.06737	-1.07663	-0.70361	-1.03386	-0.83183
-1.11033	-0.91613	0.60768	0.54318	0.419	-1.00783	-0.66709	-0.68833	-0.80851	0.55382	0.17947	0.26408	0.58634	-1.03386	0.50721
0.15315	0.38418	0.60768	0.54318	-0.68716	-1.00783	-0.66709	-0.68833	-0.80851	-0.4476	0.17947	-1.07663	-0.70361	-1.03386	0.50721
0.15315	-0.91613	-1.71737	-1.62954	-1.79333	-2.28699	-1.85705	-1.86832	-1.95606	-1.44902	-1.06737	0.26408	0.58634	0.30408	-0.83183
0.15315	0.38418	-0.55484	-0.54318	-0.68716	-2.28699	-1.85705	0.49166	-0.80851	-0.4476	1.42631	1.60479	-0.70361	-1.03386	-0.83183
-1.11033	-0.91613	-0.55484	-0.54318	-0.68716	-1.00783	-0.66709	0.49166	0.33905	-2.45044	1.42631	1.60479	1.87629	1.64201	0.50721
0.15315	0.38418	-1.71737	0.54318	0.419	0.27134	0.52286	-0.68833	-0.80851	-1.44902	0.17947	0.26408	0.58634	0.30408	0.50721
0.15315	0.38418	0.60768	-0.54318	-0.68716	0.27134	0.52286	0.49166	0.33905	1.55524	0.17947	0.26408	0.58634	-1.03386	-0.83183

KTS56	KTS57	KTS58	KTS60	KTS61	KTS62	KTS64	KTS65	KTS66	KTS67	KTS68	KTS69	KTS70
S-1.6224	-2.18311	-2.45044	-2.34028	-2.28075	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-1.5929	-1.08122
-0.43264	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	-0.63106	0.58441	0.67206	0.70792	0.89542	0.38293
-1.6224	-2.18311	-2.45044	-2.34028	-2.28075	-2.3288	-1.74313	-1.95327	-2.03058	-1.93713	-1.78397	-1.5929	-1.08122
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	-0.87192	-0.52571	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	0.58496	-1.74313	-1.95327	-0.72308	-1.93713	-0.53802	-0.34874	0.38293
-1.6224	-2.18311	-2.45044	-2.34028	-2.28075	-2.3288	-1.74313	-1.95327	-2.03058	-1.93713	-1.78397	-1.5929	0.38293
1.94687	1.76443	1.90101	1.81555	1.92007	2.04184	1.90915	2.01337	1.8919	-1.93713	-0.53802	-0.34874	-1.08122
1.94687	1.76443	1.90101	1.81555	1.92007	0.58496	1.90915	0.69116	0.58441	0.67206	0.70792	0.89542	0
-0.43264	0.44858	-0.99996	-2.34028	0.5198	-0.87192	-1.74313	-0.63106	-0.72308	1.97666	0.70792	-0.34874	-1.08122
0.75712	0.44858	0.45053	0.43027	1.92007	0.58496	-0.52571	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	2.01337	0.58441	0.67206	1.95387	0.89542	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	-0.52571	-0.63106	0.58441	-0.63253	0.70792	0.89542	0.38293
0.75712	0.44858	0.45053	-0.955	-0.88048	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	-1.5929	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
-0.43264	-0.86726	-0.99996	0.43027	-0.88048	0.58496	-0.52571	-0.63106	-0.72308	0.67206	-0.53802	-0.34874	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	-0.52571	0.69116	1.8919	1.97666	1.95387	0.89542	-1.08122
-0.43264	0.44858	1.90101	1.81555	-0.88048	0.58496	-0.52571	0.69116	0.58441	1.97666	1.95387	0.89542	0
-1.6224	-2.18311	-0.99996	-0.955	-0.88048	-0.87192	-1.74313	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	-1.08122
-0.43264	-0.86726	-0.99996	0.43027	0.5198	-0.87192	-0.52571	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
-0.43264	-0.86726	0.45053	-0.955	-0.88048	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	1.84709
-0.43264	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	-0.63253	-0.53802	-0.34874	-1.08122
-0.43264	1.76443	1.90101	1.81555	1.92007	2.04184	1.90915	0.69116	1.8919	1.97666	-0.53802	2.13958	-1.08122

KTS56	KTS57	KTS58	KTS60	KTS61	KTS62	KTS64	KTS65	KTS66	KTS67	KTS68	KTS69	KTS70
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	1.84709
-0.43264	-0.86726	0.45053	-0.955	-0.88048	-0.87192	-0.52571	-0.63106	0.58441	0.67206	-0.53802	-0.34874	1.84709
-1.6224	-0.86726	-0.99996	-2.34028	0.5198	-2.3288	-1.74313	-0.63106	-0.72308	0.67206	-0.53802	-1.5929	0.38293
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	1.84709
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	-1.74313	0.69116	0.58441	-0.63253	0.70792	0.89542	0.38293
-2.81215	-0.86726	-2.45044	-0.955	-2.28075	-0.87192	-0.52571	-1.95327	-0.72308	-1.93713	-0.53802	-0.34874	-1.08122
0.75712	0.44858	1.90101	1.81555	0.5198	0.58496	0.69172	0.69116	0.58441	1.97666	0.70792	0.89542	-1.08122
0.75712	0.44858	0.45053	0.43027	-0.88048	-0.87192	-0.52571	-0.63106	-0.72308	0.67206	-0.53802	0.89542	0.38293
0.75712	1.76443	0.45053	1.81555	0.5198	0.58496	-0.52571	0.69116	0.58441	-0.63253	-0.53802	-0.34874	1.84709
-0.43264	0.44858	0.45053	0.43027	0.5198	-0.87192	-0.52571	-0.63106	-0.72308	-1.93713	-3.02992	-2.83706	0.38293
0.75712	-0.86726	0.45053	0.43027	0.5198	0.58496	0.69172	-0.63106	0.58441	0.67206	0.70792	-0.34874	1.84709
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
-0.43264	-0.86726	0.45053	0.43027	0.5198	0.58496	-0.52571	-1.95327	0.58441	-0.63253	-0.53802	-0.34874	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
-0.43264	0.44858	-0.99996	-0.955	0.5198	0.58496	0.69172	-1.95327	0.58441	0.67206	0.70792	-0.34874	-1.08122
-1.6224	0.44858	0.45053	0.43027	0.5198	2.04184	1.90915	-1.95327	1.8919	-0.63253	-0.53802	2.13958	-1.08122
-0.43264	0.44858	-0.99996	-0.955	-0.88048	-0.87192	-0.52571	-0.63106	0.58441	-0.63253	-0.53802	-0.34874	0.38293
-0.43264	0.44858	0.45053	0.43027	-0.88048	0.58496	-1.74313	-0.63106	-0.72308	-1.93713	-0.53802	-0.34874	1.84709
-0.43264	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	-0.63106	0.58441	0.67206	1.95387	-0.34874	-1.08122
1.94687	1.76443	1.90101	1.81555	1.92007	2.04184	1.90915	-0.63106	0.58441	-0.63253	-0.53802	-0.34874	-1.08122
0.75712	-0.86726	0.45053	0.43027	0.5198	0.58496	1.90915	0.69116	1.8919	0.67206	1.95387	0.89542	0.38293
1.94687	1.76443	1.90101	1.81555	1.92007	0.58496	0.69172	0.69116	0.58441	-0.63253	-0.53802	-0.34874	0.38293

KTS56	KTS57	KTS58	KTS60	KTS61	KTS62	KTS64	KTS65	KTS66	KTS67	KTS68	KTS69	KTS70
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	0.38293
-0.43264	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	-1.95327	-0.72308	-1.93713	0.70792	0.89542	0.38293
0.75712	1.76443	1.90101	1.81555	1.92007	0.58496	0.69172	-0.63106	0.58441	0.67206	0.70792	-0.34874	-1.08122
-0.43264	0.44858	0.45053	0.43027	-0.88048	0.58496	-0.52571	2.01337	0.58441	0.67206	0.70792	0.89542	-1.08122
-0.43264	0.44858	0.45053	-0.955	1.92007	2.04184	-1.74313	0.69116	-2.03058	0.67206	-0.53802	2.13958	-1.08122
-0.43264	0.44858	0.45053	0.43027	-0.88048	0.58496	0.69172	-0.63106	0.58441	0.67206	0.70792	-0.34874	0.38293
-0.43264	-0.86726	-0.99996	0.43027	0.5198	-0.87192	0.69172	-0.63106	-0.72308	-0.63253	-0.53802	0.89542	0.38293
-0.43264	-0.86726	0.45053	0.43027	0.5198	-0.87192	0.69172	-0.63106	-0.72308	-0.63253	-0.53802	0.89542	1.84709
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	-0.87192	0.69172	0.69116	0.58441	-0.63253	-0.53802	-0.34874	0.38293
0.75712	1.76443	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	1.84709
0.75712	0.44858	0.45053	-0.955	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	-0.34874	0.38293
0.75712	1.76443	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
1.94687	1.76443	1.90101	0.43027	0.5198	2.04184	0.69172	0.69116	0.58441	0.67206	1.95387	0.89542	-1.08122
0.75712	1.76443	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
0.75712	1.76443	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	-0.87192	0.69172	0.69116	0.58441	0.67206	0.70792	-0.34874	0.38293
1.94687	0.44858	0.45053	1.81555	0.5198	0.58496	1.90915	0.69116	0.58441	0.67206	1.95387	2.13958	0.38293
1.94687	1.76443	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	1.8919	1.97666	1.95387	0.89542	-1.08122
-0.43264	0.44858	0.45053	-0.955	-0.88048	0.58496	-0.52571	0.69116	0.58441	-0.63253	-0.53802	-0.34874	-1.08122
-0.43264	0.44858	1.90101	1.81555	0.5198	0.58496	0.69172	2.01337	-0.72308	-0.63253	-0.53802	-0.34874	-1.08122
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	-0.87192	-0.52571	-0.63106	-2.03058	-1.93713	-1.78397	-0.34874	0.38293
0.75712	-0.86726	0.45053	0.43027	-0.88048	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	0.38293

KTS56	KTS57	KTS58	KTS60	KTS61	KTS62	KTS64	KTS65	KTS66	KTS67	KTS68	KTS69	KTS70
-0.43264	0.44858	-0.99996	0.43027	0.5198	-0.87192	0.69172	-0.63106	0.58441	0.67206	-0.53802	-0.34874	0.38293
0.75712	1.76443	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	-0.72308	0.67206	-0.53802	-0.34874	1.84709
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	-0.63106	0.58441	-0.63253	0.70792	-0.34874	-1.08122
-1.6224	-0.86726	-0.99996	-0.955	0.5198	-0.87192	-0.52571	-0.63106	-2.03058	-0.63253	-1.78397	-1.5929	0.38293
-0.43264	-0.86726	-0.99996	-0.955	0.5198	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	0.38293
-0.43264	-0.86726	-0.99996	-0.955	0.5198	0.58496	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	0.89542	0.38293
0.75712	0.44858	0.45053	-0.955	-0.88048	-0.87192	-0.52571	0.69116	0.58441	0.67206	0.70792	0.89542	0.38293
-2.81215	-0.86726	0.45053	-0.955	0.5198	-2.3288	-2.96056	-1.95327	-3.33807	-1.93713	-1.78397	-2.83706	0.38293
0.75712	0.44858	-0.99996	-0.955	0.5198	-0.87192	0.69172	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	0.38293
-0.43264	0.44858	0.45053	0.43027	-0.88048	0.58496	0.69172	-0.63106	-0.72308	0.67206	0.70792	-0.34874	0.38293
0.75712	-0.86726	-0.99996	-0.955	0.5198	0.58496	0.69172	-1.95327	-0.72308	-0.63253	-1.78397	0.89542	0.38293
0.75712	0.44858	-0.99996	0.43027	-0.88048	0.58496	1.90915	2.01337	0.58441	0.67206	1.95387	2.13958	0.38293
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	0.58496	-0.52571	-0.63106	-0.72308	0.67206	0.70792	0.89542	-1.08122
-1.6224	-0.86726	0.45053	0.43027	-0.88048	-0.87192	-0.52571	0.69116	0.58441	0.67206	0.70792	0.89542	0.38293
-0.43264	-0.86726	-2.45044	-0.955	-2.28075	-2.3288	-1.74313	-0.63106	-2.03058	-0.63253	-0.53802	-1.5929	0.38293
-1.6224	-0.86726	-0.99996	0.43027	-2.28075	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	0.38293
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	0.38293
0.75712	-0.86726	0.45053	0.43027	0.5198	0.58496	0.69172	-0.63106	0.58441	0.67206	0.70792	-0.34874	1.84709
-0.43264	0.44858	0.45053	0.43027	0.5198	-0.87192	-0.52571	-0.63106	-0.72308	-1.93713	-3.02992	-2.83706	0.38293
0.75712	1.76443	0.45053	1.81555	0.5198	0.58496	-0.52571	0.69116	0.58441	-0.63253	-0.53802	-0.34874	1.84709
0.75712	0.44858	0.45053	0.43027	-0.88048	-0.87192	-0.52571	-0.63106	-0.72308	0.67206	-0.53802	0.89542	0.38293
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	-1.74313	0.69116	0.58441	-0.63253	0.70792	0.89542	0.38293
0.75712	-0.86726	-0.99996	0.43027	0.5198	0.58496	-0.52571	-0.63106	0.58441	0.67206	-0.53802	-0.34874	1.84709

KTS56	KTS57	KTS58	KTS60	KTS61	KTS62	KTS64	KTS65	KTS66	KTS67	KTS68	KTS69	KTS70
-0.43264	-0.86726	0.45053	-0.955	-0.88048	-0.87192	-0.52571	0.69116	0.58441	0.67206	-0.53802	-0.34874	1.84709
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	1.84709
0.75712	0.44858	0.45053	0.43027	-0.88048	0.58496	0.69172	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	1.84709
-1.6224	-0.86726	-0.99996	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	-0.63253	-0.53802	-0.34874	-1.08122
-0.43264	-0.86726	-0.99996	0.43027	0.5198	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	1.84709
0.75712	0.44858	-0.99996	-0.955	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	-0.53802	-0.34874	-1.08122
-0.43264	-0.86726	0.45053	0.43027	0.5198	-0.87192	0.69172	0.69116	0.58441	0.67206	-0.53802	-0.34874	0.38293
-1.6224	-2.18311	-0.99996	-0.955	-0.88048	-0.87192	-1.74313	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	-1.08122
-0.43264	0.44858	0.45053	0.43027	-0.88048	0.58496	-0.52571	0.69116	0.58441	1.97666	1.95387	-0.34874	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	-0.52571	2.01337	1.8919	0.67206	0.70792	0.89542	0.38293
-0.43264	-0.86726	-0.99996	0.43027	-0.88048	0.58496	-0.52571	-0.63106	-0.72308	0.67206	-0.53802	-0.34874	-1.08122
0.75712	-0.86726	-0.99996	-0.955	-0.88048	0.58496	0.69172	0.69116	0.58441	-0.63253	-0.53802	-0.34874	-1.08122
0.75712	0.44858	0.45053	-0.955	-0.88048	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	-1.5929	0.38293
-0.43264	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	-0.63106	0.58441	0.67206	0.70792	0.89542	0.38293
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	0.58496	-1.74313	-1.95327	-0.72308	-1.93713	-0.53802	-0.34874	0.38293
-1.6224	-2.18311	-2.45044	-2.34028	-2.28075	-2.3288	-1.74313	-1.95327	-2.03058	-1.93713	-1.78397	-1.5929	0.38293
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	0.58441	-0.63253	-0.53802	-0.34874	-1.08122
0.75712	0.44858	1.90101	1.81555	1.92007	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	0.38293
-0.43264	1.76443	-0.99996	0.43027	0.5198	-0.87192	-0.52571	-0.63106	-0.72308	0.67206	0.70792	-0.34874	-1.08122
0.75712	0.44858	0.45053	-0.955	-0.88048	-0.87192	0.69172	0.69116	0.58441	-0.63253	-0.53802	-0.34874	0.38293
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	2.01337	0.58441	-0.63253	0.70792	-0.34874	-1.08122
0.75712	0.44858	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	-0.72308	-0.63253	-0.53802	-0.34874	0.38293
0.75712	0.44858	-0.99996	0.43027	0.5198	-0.87192	0.69172	0.69116	-0.72308	0.67206	0.70792	-0.34874	0.38293

KTS56	KTS57	KTS58	KTS60	KTS61	KTS62	KTS64	KTS65	KTS66	KTS67	KTS68	KTS69	KTS70
-0.43264	-0.86726	0.45053	-0.955	-0.88048	-0.87192	-0.52571	-0.63106	-2.03058	-1.93713	-1.78397	-0.34874	-1.08122
-0.43264	-0.86726	0.45053	0.43027	0.5198	0.58496	0.69172	2.01337	-0.72308	-0.63253	-0.53802	-0.34874	-1.08122
-2.81215	-2.18311	0.45053	-0.955	0.5198	-2.3288	-1.74313	-1.95327	-3.33807	-1.93713	-1.78397	-2.83706	0.38293
0.75712	0.44858	0.45053	-0.955	-0.88048	-0.87192	-0.52571	0.69116	0.58441	0.67206	0.70792	0.89542	0.38293
-0.43264	0.44858	-0.99996	-0.955	0.5198	0.58496	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	0.89542	-1.08122
-0.43264	-0.86726	-0.99996	-0.955	0.5198	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	0.38293
-1.6224	-0.86726	0.45053	0.43027	0.5198	0.58496	0.69172	0.69116	-2.03058	-0.63253	-1.78397	-1.5929	-1.08122
0.75712	-0.86726	-0.99996	0.43027	0.5198	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	0.38293
0.75712	0.44858	0.45053	0.43027	-0.88048	-0.87192	-0.52571	-0.63106	0.58441	0.67206	-0.53802	-0.34874	0.38293
-0.43264	-0.86726	0.45053	0.43027	-2.28075	-0.87192	-0.52571	-0.63106	-0.72308	-0.63253	-0.53802	-0.34874	0.38293
-0.43264	-0.86726	-0.99996	-0.955	-2.28075	-2.3288	-1.74313	-0.63106	-0.72308	-0.63253	-0.53802	-1.5929	0.38293
-1.6224	-0.86726	0.45053	0.43027	-0.88048	-0.87192	-0.52571	0.69116	0.58441	0.67206	0.70792	-0.34874	0.38293
0.75712	0.44858	-0.99996	-0.955	0.5198	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	-0.34874	0.38293
-0.43264	-0.86726	-0.99996	-0.955	-0.88048	0.58496	0.69172	0.69116	0.58441	0.67206	0.70792	0.89542	-1.08122

APPENDIX E
CHI-SQUARE DISTRIBUTION TABLE

APPENDIX F
PLS OUTPUT FOR OVERALL MEASUREMENT MODEL

Quality criteria overview

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
CULT	0.543175	0.876935		0.831801	0.543175	
HRP	0.644626	0.878455		0.816037	0.644626	
IT	0.753503	0.938434		0.917671	0.753503	
KTS	0.611108	0.940007	0.664183	0.92879	0.611108	0.219926
LS	0.625291	0.892502		0.850171	0.625291	
NET	0.5982	0.881515		0.832036	0.5982	
OS	0.82659	0.905062		0.790288	0.82659	
REW	0.786691	0.936021		0.906375	0.786691	
T	0.617986	0.918689	0.599668	0.896422	0.617986	0.019728
TM	0.764495	0.906804		0.847448	0.764495	

Latent variable correlations

	CULT	HRP	IT	KTS	LS	NET	OS	REW	T	TM
CULT	1									
HRP	0.686388	1								
IT	0.613582	0.671641	1							
KTS	0.728017	0.636681	0.646535	1						
LS	0.523803	0.752589	0.572467	0.500482	1					
NET	0.710329	0.689101	0.671579	0.683035	0.566509	1				
OS	0.192831	0.147481	0.165624	0.257000	0.083527	0.204774	1			
REW	0.375017	0.423354	0.293135	0.380631	0.428200	0.447723	0.309695	1		
T	0.606100	0.635301	0.602576	0.675400	0.479330	0.748165	0.194844	0.368455	1	
TMS	0.515486	0.477518	0.243930	0.461385	0.333304	0.438032	-0.03088	0.038461	0.388825	1

APPENDIX G
PLS OUTPUT FOR OVERALL STRUCTURAL MODEL

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (|O/STERR|)
CULT -> KTS	0.318414	0.317134	0.105798	0.106798	3.002658
CULT -> T	0.02796	0.042597	0.087524	0.086524	0.31203
HRP -> KTS	-0.018023	-0.016352	0.098748	0.097748	0.186519
HRP -> T	0.192206	0.172041	0.1355	0.1345	1.438497
IT -> KTS	0.236886	0.231189	0.090781	0.089781	2.652413
IT -> T	0.133071	0.134013	0.104419	0.104419	1.274389
LS -> KTS	0.002926	0.009274	0.10682	0.10482	0.018034
LS -> T	-0.077673	-0.067204	0.092626	0.093626	0.821772
NET -> KTS	0.018484	0.014979	0.119255	0.118255	0.156996
NET -> T	0.505471	0.506522	0.097042	0.100042	5.080771
OS -> KTS	0.09237	0.088211	0.065532	0.067532	1.37455
OS -> T	0.034975	0.035334	0.061896	0.062896	0.549911
REW -> KTS	0.069411	0.075973	0.071117	0.072117	0.963008
REW -> T	0.032863	0.029436	0.067432	0.069432	0.46451
T -> KTS	0.235825	0.232399	0.099035	0.097035	2.420217
TM -> KTS	0.148063	0.150569	0.078139	0.079139	1.879858
TM -> T	0.055652	0.053344	0.076271	0.077271	0.710548

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (|O/STERR|)
CULT26 <- CULT	0.188215	0.189004	0.023055	0.023055	8.163779
CULT27 <- CULT	0.239184	0.238854	0.018562	0.018562	12.885995
CULT28 <- CULT	0.219796	0.219127	0.023061	0.023061	9.530973
CULT29 <- CULT	0.223233	0.222228	0.022326	0.022326	9.998783
CULT30 <- CULT	0.236464	0.236093	0.021022	0.021022	11.248262
CULT31 <- CULT	0.247818	0.247395	0.024864	0.024864	9.966862
HRP22 <- HRP	0.284609	0.285013	0.029596	0.029596	9.616381
HRP23 <- HRP	0.369479	0.36951	0.032767	0.032767	11.276083
HRP24 <- HRP	0.260749	0.259426	0.032084	0.032084	8.127097
HRP25 <- HRP	0.326161	0.326437	0.029953	0.029953	10.88921
IT37 <- IT	0.254434	0.255231	0.014522	0.014522	17.520753
IT38 <- IT	0.25622	0.256613	0.015115	0.015115	16.951443
IT39 <- IT	0.219588	0.219241	0.014662	0.014662	14.977198
IT40 <- IT	0.205044	0.205556	0.015973	0.015973	12.836732
IT41 <- IT	0.21361	0.21329	0.011843	0.011843	18.036992
KTS56 <- KTS	0.120391	0.12214	0.008403	0.008403	14.326461
KTS57 <- KTS	0.136233	0.135542	0.008718	0.008718	15.626365
KTS58 <- KTS	0.127931	0.128903	0.00884	0.00884	14.472061
KTS59 <- KTS	0.134618	0.135202	0.007298	0.007298	18.4455
KTS60 <- KTS	0.126659	0.125936	0.009791	0.009791	12.93621
KTS61 <- KTS	0.12393	0.124101	0.007189	0.007189	17.239268
KTS63 <- KTS	0.127562	0.12577	0.009377	0.009377	13.60399
KTS64 <- KTS	0.126357	0.127101	0.00844	0.00844	14.970388
KTS65 <- KTS	0.116787	0.117159	0.0102	0.0102	11.449155
KTS67 <- KTS	0.139495	0.139033	0.010182	0.010182	13.700071
LS15 <- LS	0.200218	0.197748	0.040177	0.040177	4.983405
LS16 <- LS	0.306828	0.311528	0.052891	0.052891	5.801133
LS17 <- LS	0.270886	0.27083	0.032886	0.032886	8.237149
LS18 <- LS	0.2809	0.281606	0.033326	0.033326	8.428973
LS19 <- LS	0.196158	0.192824	0.037879	0.037879	5.178521
NET42 <- NET	0.255255	0.253671	0.019234	0.019234	13.271216
NET43 <- NET	0.262218	0.261145	0.018169	0.018169	14.432317
NET44 <- NET	0.252281	0.253214	0.022322	0.022322	11.302116
NET45 <- NET	0.238286	0.238871	0.023106	0.023106	10.312641
NET46 <- NET	0.283828	0.285052	0.020237	0.020237	14.025185
OS6 <- OS	0.539094	0.534941	0.117137	0.117137	4.602234
OS7 <- OS	0.56073	0.559977	0.114452	0.114452	4.899263
REW33 <- REW	0.266423	0.26572	0.043648	0.043648	6.103954
REW34 <- REW	0.256638	0.255205	0.02708	0.02708	9.476918

REW35 <- REW	0.284026	0.282999	0.023098	0.023098	12.29675
REW36 <- REW	0.321741	0.324635	0.039951	0.039951	8.053296
T47 <- T	0.186499	0.1855	0.018994	0.018994	9.818888
T48 <- T	0.170367	0.170817	0.013368	0.013368	12.744006
T49 <- T	0.191801	0.191047	0.011629	0.011629	16.493767
T50 <- T	0.190502	0.190681	0.012445	0.012445	15.307714
T52 <- T	0.187752	0.187445	0.011545	0.011545	16.263267
T53 <- T	0.173479	0.174136	0.013671	0.013671	12.689639
T55 <- T	0.171305	0.171773	0.016609	0.016609	10.313719
TM1 <- TM	0.31629	0.314768	0.050536	0.050536	6.258683
TM2 <- TM	0.377016	0.377589	0.042076	0.042076	8.960443
TM3 <- TM	0.446346	0.444382	0.040812	0.040812	10.93658

APPENDIX H
CALCULATED MEDIATION RESULTS

Mediation results for trust

	a1	a2	a3	a4	a5	a6	a7	a8
	CULT -> T	HRP -> T	IT -> T	LS -> T	NET -> T	OS -> T	REW -> T	TM -> T
Sample 4986	0.081935	0.360775	0.127743	0.017449	0.317281	-0.01248	0.08891	-0.06158
Sample 4987	0.125447	0.107871	0.157911	-0.018000	0.419122	0.107147	0.036851	0.002413
Sample 4988	-0.02771	0.31062	0.144752	-0.07094	0.614203	0.053538	-0.07195	-0.10196
Sample 4989	0.010778	0.350671	0.083291	-0.01896	0.419683	0.151763	0.001407	-0.07103
Sample 4990	0.018382	0.083947	-0.04801	-0.10506	0.653177	0.037572	0.006499	0.128722
Sample 4991	0.115303	0.085511	0.193598	-0.01474	0.483038	-0.04286	0.030831	-0.01999
Sample 4992	0.178399	0.020426	0.298952	-0.16331	0.526858	0.034732	0.000915	-0.03797
Sample 4993	-0.03302	0.1345	0.346389	-0.17429	0.504988	0.074	-0.01919	0.076653
Sample 4994	-0.02904	0.276692	0.072439	0.048981	0.350858	0.054492	0.089381	0.077153
Sample 4995	0.073741	0.266936	0.208971	-0.16241	0.425719	-0.03584	0.06279	0.100217
Sample 4996	0.104159	0.223541	0.106608	-0.03965	0.515207	0.072606	0.034336	0.026044
Sample 4997	0.052092	0.281574	0.087908	-0.12129	0.49812	0.064242	0.102326	-0.0215
Sample 4998	-0.15084	0.11301	0.153085	-0.04299	0.708972	0.087382	-0.03754	0.128909
Sample 4999	0.151976	0.340276	-0.05932	0.045997	0.354498	-0.05593	0.071961	-0.03355

b	a1*b	a2*b	a3*b	a4*b	a5*b	a6*b	a7*b	a8*b
T->KTS	CULT=T=KTS	HRP=T=KTS	IT=T=KTS	LS=T=KTS	NET=T=KTS	OS=T=KTS	REW=T=KTS	TM=T=KTS
0.393389	0.032232328	0.14192492	0.050253	0.00686	0.12481486	-0.00491107	0.03497622	-0.02422411
0.337157	0.042295334	0.03636946	0.053241	-0.00607	0.14130992	0.03612536	0.01242457	0.00081356
0.206857	-0.00573221	0.06425392	0.029943	-0.01468	0.12705219	0.01107471	-0.01488315	-0.02109093
0.193181	0.002082105	0.06774297	0.01609	-0.00366	0.08107478	0.02931773	0.00027181	-0.01372107
0.277849	0.00510742	0.02332459	-0.01334	-0.02919	0.18148458	0.01043934	0.00180574	0.03576528
0.094235	0.010865578	0.00805813	0.018244	-0.00139	0.04551909	-0.00403872	0.00290536	-0.00188395
0.198331	0.035382052	0.00405111	0.059291	-0.03239	0.10449227	0.00688843	0.00018147	-0.00752983
0.278775	-0.00920376	0.03749524	0.096565	-0.04859	0.14077803	0.02062935	-0.00535081	0.02136894
0.378347	-0.01098682	0.10468559	0.027407	0.01853	0.13274607	0.02061688	0.03381703	0.02919061
0.133755	0.009863227	0.03570402	0.027951	-0.02172	0.05694204	-0.00479338	0.00839848	0.01340452
0.198478	0.02067327	0.04436797	0.021159	-0.00787	0.10225725	0.01441069	0.00681494	0.00516916
0.212386	0.011063612	0.05980238	0.01867	-0.02576	0.10579371	0.0136441	0.02173261	-0.0045663
0.185893	-0.02803936	0.02100777	0.028457	-0.00799	0.13179293	0.0162437	-0.00697787	0.02396328
0.242683	0.036881992	0.0825792	-0.01439	0.01116	0.08603064	-0.01357253	0.01746371	-0.00814129
AVERAGE	0.010508478	0.03988156	0.030935	-0.01433	0.11949347	0.00918684	0.00668209	0.01086928
STD ERR	0.023227503	0.03835657	0.028968	0.02376	0.05744524	0.01672686	0.01777539	0.01996656
T-Value	0.452415323	1.03975833	1.067881	-0.60325	2.08012813	0.54922669	0.37591805	0.54437408

APPENDIX L
APPENDIX F LIST OF PUBLICATIONS

Houcine Meddour, Abdul Majid. A. H., & Yusoff Rushami Z. (2016). The impact of information technology and networks on knowledge transfer and sharing: The mediating role of trust. *World Journal of Management and Behavioral Studies, 4*(1), 31-40. DOI: 10.5829/idosi.wjmbs.2016.4.1.1326.

Meddour Houcine, Abdul Majid. A. H., & Yusoff Rushami Z. (2015). *Organizational Capacity, Organizational Motivation, External Environment and Knowledge Transfer and Sharing: A Conceptual Framework.* Paper presented at the 3rd International Conference on Business Strategy and Social Sciences, (3-4 October), Langkawi Lagoon Resort, Malaysia.

Meddour Houcine, Abdul Majid. A. H., & Yusoff Rushami Z. (2015). Organizational capacity, organizational motivation, external environment and knowledge transfer and sharing: a conceptual framework. *International journal of economic perspectives* (3rd ICBSSS-746/Scopus impact factor: 0.12).

Meddour Houcine, Abdul Majid. A. H., & Yusoff Rushami Z. (2015). Organizational capacity, organizational motivation, external environment and knowledge transfer and sharing: a conceptual framework. *Handbook on Business Strategy and Social Sciences,* 3, 2015.