MANAGERIAL ROLES ON KNOWLEDGE SHARING BEHAVIOUR AMONG
MALAYSIAN CIVIL SERVANTS

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DEDICATION

I dedicate this dissertation to:

My amazing son, Trixhan and my beautiful daughter, Karesha.
May this inspire you both to excel in life and reach out the impossible.

My husband, Khanna, thank you for loving me unconditionally and for
always believing in me, even when I cooked meals that the taste reflected my stress
or even when I spent more time with the computer than with you. Without you by my
side, this effort would have been worth nothing.

I love you and I will always will.

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ABSTRACT

Knowledge management (KM) has become a primary pillar for knowledge initiatives within the private and public sectors. Although Malaysia is rapidly moving towards a knowledge-based economy, current research shows that the Malaysian public sector is not ready to embark on knowledge sharing (KS) initiatives. In this sector, Administrative and Diplomatic Officers (PTD) play a crucial role in developing initiatives and implementing national policies aimed towards influencing knowledge productivity within the country. This study investigates how PTD demonstrate their managerial roles to cultivate knowledge sharing behaviour (KSB) within the public sector. Organisational culture (clan and hierarchical cultures) was also examined as a moderator of the study. A positivist approach was utilized through the collection of questionnaires from PTD of twenty four ministries in Putrajaya, Malaysia. Based on purposive sampling, seventeen respondents who fulfilled the research requirements were chosen from each ministry. Findings revealed that interpersonal and informational roles have significant relationships towards cultivating a positive KSB, as one desire to acquire and share knowledge will be higher in a friendlier, closer and more participative culture. However, hierarchical cultured organisations with multiple levels of rules and strict approval stages were found to be insignificant in the establishment of an effective KSB in the civil service. Based on the findings, there is a need for proper placement of PTD as it can influence an effective formation of KSB as well as creating a more harmonious working environment that emphasizes on building trust. This set up will eventually contribute to the improvement in the delivery of knowledge sharing behaviour.

ABSTRAK

Pengurusan pengetahuan (KM) telah menjadi tunggak utama dalam inisiatif pengetahuan bagi sektor swasta dan awam. Walaupun Malaysia kini pantas menuju ke arah ekonomi berasaskan pengetahuan, penyelidikan semasa menunjukkan bahawa sektor awam di Malaysia masih belum bersedia untuk memulakan inisiatif perkongsian pengetahuan (KS). Dalam sektor ini, Pegawai Tadbir dan Diplomatik (PTD) memainkan peranan penting dalam membangunkan inisiatif dan melaksanakan dasar-dasar negara, bertujuan mempengaruhi ke arah peningkatan produktiviti pengetahuan dalam negara. Kajian ini mengkaji bagaimana PTD memainkan peranan pengurusan mereka untuk memupuk tingkahlaku perkongsian pengetahuan (KSB) di sektor awam. Budaya organisasi (budaya suku dan hierarki) juga telah dikaji sebagai moderator kajian ini. Pendekatan positivis digunakan melalui pungutan borang soal selidik daripada PTD di dua puluh empat kementerian di Putrajaya, Malaysia. Berdasarkan kaedah persampelan bertujuan, tujuh belas responden yang menepati kriteria kajian telah dipilih daripada setiap kementerian. Penemuan kajian menunjukkan bahawa peranan interpersonal dan peranan informasi mempunyai hubungan yang signifikan ke arah memupuk KSB positif. Kewujudan budaya suku juga didapati memoderatkan secara signifikan hubungan positif peranan interpersonal dan peranan informasi dengan KSB kerana keinginan seseorang untuk memperoleh dan berkongsi pengetahuan adalah lebih tinggi dalam persekitaran budaya yang lebih mesra, lebih rapat dan lebih penyertaan. Walau bagaimanapun, organisasi berbudaya hierarki dengan pelbagai peraturan dan peringkat kelulusan yang ketat didapati tidak signifikan dalam pembentukan KSB yang efektif dalam perkhidmatan awam. Berdasarkan hasil kajian, terdapat keperluan penempatan yang sesuai untuk PTD kerana ia boleh mempengaruhi pembentukan KSB yang berkesan serta mewujudkan persekitaran kerja yang lebih harmoni yang menekankan pembinaan kepercayaan. Persediaan ini, akhirnya akan menyumbang kepada pembaikan dalam penyampaian tingkahlaku perkongsian pengetahuan.

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LIST OF ABBREVIATIONS

ADO   -   Administrative and Diplomatic Officer

CC   -   Clan Culture

CFA   -   Confirmatory Factor Analysis

CVF   -   Competing Value Framework

DR   -   Decisional Roles

EO   -   Executive Officer

FR   -   Informational Roles

HC   -   Hierarchical Culture

IR   -   Interpersonal Roles

JUSA   -   Premier Grade in Civil Service

KA   -   Knowledge Acquiring

KS   -   Knowledge Sharing

KSB   -   Knowledge Sharing Behaviour

MHFS   -   Malaysian Home and Foreign Services

OCAI   -   Organizational Culture Assessment Instrument

PLS   -   Partial Least Square

PTD   -   *Pegawai Tadbir dan Diplomatik*

SEM   -   Structural Equation Modelling

TPB   -   Theory of Planned Behaviour

TRA   -   Theory of Reasoned Action

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CHAPTER 1

INTRODUCTION

1.0 Introduction

The specific components that are discussed by the researcher in this chapter include background to the research, the research problem, the research questions, the research objectives and the conceptual framework that guides this research.

1.1 Background of the Study

In today's era, society is very much driven by an abundance of information. Knowledge is considered the driver for economic growth and shall continue to be so for many years to come (Sandhu *et al*., 2011). Knowledge and skills are the critical for efficient and effective execution of internal and external organisational ventures and are becoming a major factor in creating a competitive business advantage (Mukherjee, 2011; Shaari, 2004). Knowledge is an important intellectual asset and it allows organisational members to generate new ideas, acquire valuable information and promote continuous learning (Wu, 2013; Yaakub *et al*., 2013). Therefore, the organisation will be more productive if it continuously facilitates knowledge sharing (KS) and taking it as an agenda among its organisation members (Senge, 1990).

Organisations currently place great emphasis on managing their knowledge assets. This creates a promising role in providing an effective way to gain organisational strategic advantage. Sharing knowledge throughout an organisation has intuitive appeal (Marks *et al*., 2008) and has become a good social practice (Manaf and Marzuki, 2014). Among many processes of knowledge management (KM) cycle, KS is acknowledged as the most important asset in today's knowledge-based era and plays a key role in the whole process (Wu, 2013; Yaakub *et al*., 2013; Foss *et al*., 2010).

Punia (2013) pointed out that for successful KM, there is definitely a need to promote the visibility of KM activities, particularly by encouraging the development of knowledge sharing behaviour (KSB). Therefore, to establish positive KSB it requires not only knowledge from the bringing party but also of the obtaining party (Mustafa *et al*., 2013), as when knowledge is retrieved from others who holds it and shared with other who needs it, organisational effectiveness will improve (Karkoulian and Mahseredjian, 2012).

Malaysia is a country moving towards a knowledge based economy and the Government of Malaysia has progressively taken various steps and initiatives to provide a climate conducive to knowledge production activities (Masrek *et al*., 2013). In order to compete and achieve the status of being a developed country, the Malaysian public sector employees with 1.4 million workforces (Kassim and Mokhber, 2015) plays a crucial role towards achieving a knowledge based-economy. To achieve Malaysia's vision into becoming a developed nation by 2020, emphasis on KS activities certainly need to be further explored (Tangaraja *et al*., 2015). Realizing its importance, the K-Economy Master Plan was launched in 2002 to accelerate the transformation towards an intellectual capital and making it the government's national agenda (Mustapha and Abdullah, 2004).

It is undeniable that knowledge sharing itself can generate many benefits to an organisation, however it is not a self-generated process (Wu, 2013). A main factor that can be highly influential in successful knowledge sharing is the skill of the people who are under its management, most particularly the expertise possessed by managers. Organisations consider managers with competitive skills-sets as mechanisms for success (McCrimmon, 2010; Birkinshaw, 2010; Lee *et al*., 2007; Magretta, 2003).

The demands of carrying out the varied roles of a manager are unparalleled, as they must act as leaders, think in a strategic perspective and execute plans flawlessly. These functions call for a serious set of skills and competencies in order for the value of managers as a critical asset to an organisation to be fully grasped, even by managers themselves (Augier and Teece, 2009; Fernandez and Rainey, 2006). So if positive KSB can be exercised in the Malaysian public sector, employees will be able to receive accurate information quickly, be better informed as well as make timely decisions, therefore contributing towards becoming a more competent work force.

However, in reality employees in public sector do not share knowledge voluntarily as the silo mentality is still much dominant, obstructing the creation of synergy. Voluntary knowledge sharing is not rampant in the public sector as it has not become a part of their daily job. As managers in the Malaysian public sector have different pattern of sharing at different levels, information, work culture and attitudes of managers in different Ministries could vary, therefore contributing to the challenges of establishing a positive KSB. As such, the possible connection and relationship between KSB and the importance of managerial roles is the underlying motivation for conducting a comprehensive investigation on how managers can effectively utilize their managerial roles to cultivate a positive knowledge sharing culture in the Malaysian public sector.

1.2 Research Problem

Knowledge is central to growth. Without a knowledge base, sustained economic activity is impossible. Many organisations moving toward a knowledge-based economy has considered it as the most important asset (Wu, 2013). KS, has become the primary pillar for KM initiatives, as the practices for sharing information plays a vital role in the whole process of KM. KSB which focuses on the ways and means of knowledge acquisition (KA) and knowledge sharing to others, emphasising that knowledge must be first acquired by managers and employees if they are to subsequently share it, does not occur naturally as it is a people-to-people process (Ryu *et al*., 2003). This makes it one of the most difficult processes within KM (Alajmi, 2008). KSBs have been widely studied in the past by various researchers from around the world (Yaakub *et al*., 2013; Moshari, 2013; Abzari and Teimouri, 2008; Polanyi, 1966). However the importance of the subject matter, what was being shared, has always been the primary focus of those researches, not the means of acquisition and transfer (Boateng *et al*., 2014; Wu, 2013; Karkoulian and Mahseredjian, 2012; Hitam and Mohamad, 2012; Carmeli *et al*., 2011; King, 2009; Bonner, 2002; Denning, 2001; Linde, 2001).

Although various empirical evidence has pointed out that KS contributes as a more comprehensive suite of behaviours, values, technical mechanisms, and processes to positive KSB and improvement in organisational performance (Dawes, Gharawi and Burke, 2012; Yang and Maxwell, 2011; Wang and Noe, 2010) many researchers in this field focused solely on the private sector (Yusof *et al*., 2012; Pee and Kankahalli, 2008; Syed Ikhsan and Rowland, 2004). Empirical evidence has proven that people are more motivated to engage in KSB activities in profit-based organisations compared to service-based organisations (Seba *et al*., 2012a). The main reason for this phenomenon is that the private sector and public sector have different drivers and goals for KS. In addition, civil servants are not strongly profit-motivated, as employees are more devoted in serving their community and the general public (Seba *et al*., 2012b). Unlike the public sector, in the private sector cooperation in sharing and enhancing KS practice in their daily operations are

essential, as failure to do so will lead to unsuccessful outcomes (Hitam and Mohamad, 2012). Although there are significant differences in the objectives of both sectors, the importance of developing an effective KSB in the public sector is undeniably important as they play a pivotal role in performance improvement, thus resulting in customer and employee satisfaction. Understanding how civil servant throughout their career cycle acquire knowledge and then share it to others via positive KSB is particularly needed if the wider process of KM is to be better known.

Without a doubt, Malaysia is a country moving toward a knowledge-based economy. The Malaysian aspiration in achieving Vision 2020 has urged the government to establish a number of strategies, including introducing the concept of enhancing knowledge capabilities (Manaf and Marzuki, 2014). In order to materialise its K-economy Master Plan, knowledge should become a key factor of economic production and the knowledge economy policies. These were outlined to support the country's vision in promoting the national development-knowledge link (Masrek *et al*., 2013; Yusof *et al*., 2012) and should be taken seriously. Consequently, the country should be equipped with first class human capital (Manaf and Marzuki, 2014) and thus able to compete among other nations in this globalised world (Yusof *et al*., 2012). Many scholars argued that, given current global demand, government organisations can no longer keep doing things traditionally; instead they are encouraged to do the right things well rather than doing things right (Manaf and Marzuki, 2014).

Syed Omar and Rowland (2007) found that organisations in Malaysia have yet to manage their basis of knowledge in order to be a knowledge-based society. In the study of Yusof *et al*., (2012), the authors stressed that the public sector in Malaysia is not yet ready to extensively embark on KS initiatives. Therefore, the crucial responsibility to promote and foster knowledge productivity in both the individual and corporate levels lies in the hands of policy makers (Yusof *et al*., 2012; Norwawi, 2010). These pressures imposed on civil servants who carry the brunt of the labour for developing and executing governmental policies and pose immense interest for the researcher in examining how managerial roles, organisational culture

and knowledge sharing behaviour occurs within the public sector. Although there are extensive reviews of theoretical and empirical literatures distinctively, there are still some areas that lack empirical explanation, especially on public sector managers in the KM field (Yusof *et al*., 2012). Therefore, the present study intends to fill these gaps and contribute to the scholarship in these areas.

The first issue concerns KSB in the Malaysian public service, which has yet to receive much attention (Sandhu *et al*., 2011; Reshman, Withers and Hartley, 2009). Syed-Ikhsan and Rowland (2004) study discovered a surprising result that indicated that those who have been working in the Ministry for over 10 years showed signs of low knowledge on their Ministry's KM strategy, with a majority of 51.7% indicating that it is not their responsibility to participate in KM. These employees feel that knowledge in the Ministry is only available through the ministry's policies and procedures, job manual procedures, job manual, ISO 9002, desk files and their available database (Manaf and Marzuki, 2014). Kalsom and Syed Noh (2005) also claimed that, although there are government agencies that claim to be practising KS, they are essentially based on traditional methods of communicating information: face-to-face meetings, bulletins and notice boards. This phenomenon indicates that organisation-wide adoption of KS in the public sector is not as widespread as in the private sector. The successful establishment of knowledge initiated programs not only depends on management support but also on the ability of individuals to acquire and share their knowledge (Aljanabi and Kumar, 2012). Additionally, this approach in creating positive KSB ignores KA, instead uncritically treating KS only in technical terms and procedures associated with KM.

Similarly, another interesting study conducted by Sandhu *et al*., (2011), concluded that the 170 employees interviewed and working in the public sectors of Malaysia had limited knowledge about the implementation of KS within their workplace. Although these employees claimed they knew the importance of KS, 50% of the employees felt that this issue had not been communicated well to them. This fact negatively affected their willingness to share knowledge (Seba *et al.,* 2012a). Ironically, most employees in the ministry assumed that it is the

responsibility of the management and departmental heads to initiate KS activities (Sandhu *et al*., 2011). Although the government have continuously expressed its concern over the need to develop KS initiatives, this clearly indicates that there are issues with the disseminating of information about their current KM strategy within the Malaysian public sector (Manaf and Marzuki, 2014). Following on from these claims, it can be concluded that organisations in the public sector have not been effectively practising KS and it is extremely important to understand that there can be no KS without a proper KM strategy (Yusof *et al*., 2012).

Furthermore, empirical evidence has stated that to create a positive KSB, there should be two equally important components: knowledge acquisition and knowledge sharing (Ramachandran *et al*., 2013; Karkoulian *et al*., 2012; Mueller, 2012; Gupta, 2008; Ryu *et al*., 2003; Lee and Choi, 2003;). As illustrated above, studies incorporating these two dimensions are rare. Therefore, these two concepts are still very novel in the literature of KSB. Public organisations often deal with retirement and staff relocation within departments. To ensure knowledge stays within the organisation, it is extremely vital to capture and share knowledge among employees (Amayah, 2013; Olatokun and Nwafor, 2012) as knowledge is often required and shared during work (Szabo and Csepregi, 2015). If how knowledge is shared as a form of passing information forward, there remains a dearth of knowledge and attention on how the knowledge worth sharing was acquired in the first place. This dialectic relationship between acquisition and sharing inherent to KSB is clearly a gap that this study aims to address.

Although KM is no longer a novel concept among scholars in this field, the scarcity of it in the public sector, especially in developing countries like Malaysia, needs utmost attention (Salleh and Syed Ahmad, 2006). In addition, all these findings indicate that KM theories and frameworks that are being applied in the public sector are clearly not yet well understood (Riege and Lindsay, 2006). As supported by the claims stated earlier, the public sector of Malaysia has issues with inculcating proper management theories and KS initiatives. Therefore, the managerial role (MR) has to be more apparent within the public sectors of Malaysia.

After all, if such initiatives had been properly disseminated to the employees, then the employees should have been able to relate to KM in their organisation.

The second issue that triggers the researcher to explore this topic further is that public service managers, as empirical findings have shown, frequently view KS as an additional and supplementary procedure only and not as a crucial requisite (Seba *et al*., 2012a). KS is a human activity and understanding the humans who will do it is the first step to the success of such systems (Ryu *et al.,* 2003). Several studies in the past have identified leadership or MR as an important factor to successful KS (Seba *et al*., 2012b) and developing such behaviour. According to Moshari (2013), for successful KM implementation, visible leadership and commitment from management must be sustained throughout a KM effort.

Although it is crucial to understand the importance for MR in the context developing KS behaviour, managers around the world are still struggling to redefine their classic roles of managers espoused by Mintzberg, which is based on the US context (Pearson and Chatterjee, 2003). These are the essential MR and have been assumed to be the common and basic function of managers in any and all organisations (Schermerhorn, 2011). According to Ramezani *et al*. (2011), most managers perform all the roles described by Mintzberg to some degree and are similar in term of value and importance, however the way they perform their roles varies significantly in differing situations.

In Malaysia, the Administrative and Diplomatic (PTD) officers are the managers that have the responsibility for developing initiatives and implementing national policies that are aimed towards influencing knowledge productivity within the country (Masrek *et al*., 2013; Kumar and Rose, 2010). These officers serve as the facilitators of the nations' economic growth, enforcers of law, protectors of peace and integration, and guardians of the future generation's wellbeing. Yusof *et al*., (2012), in their recent investigation of PTD officers, have concluded that to date not much is known about whether these officers have been able to demonstrate a dynamic productivity and expertise towards a knowledge economy aspiration. On

top of this, little is known about how Malaysian managers in the civil service contribute to KS (Sandhu *et al.*, 2011; Reshman *et al.*, 2009). This statement is indeed alarming, given the fact that these public sector managers play primary roles in implementing public policies and carrying out critical responsibilities on behalf of the government. Despite that, if these MR are neglected, this could contribute to poor KS in the public sector, therefore causing serious damage to the organisations' overall performance (Gaal *et al.*, 2012).

At present, there is seemingly only one related study on Mintzberg's MR conducted in the Malaysian public enterprise since 1987. Despite Zabid's (1987) suggestion that there is a need to further conduct an in-depth study of managers in the public and private sector of Malaysia, no researcher has taken up the challenge to do so. Previous scholars in this area have often focused only on corporate and academic settings (Kraut *et al.*, 2005; Pearson and Chatterjee, 2003; Gottchalk, 2002). Therefore, there is a great need for empirical research that can serve as a basis for understanding how managers in the public sector of Malaysia demonstrate Mintzberg's MR to influence KSB in their organisation. This is another gap the researcher intends to fill in this study.

The third issue that could contribute to more positive KSBs among public service employees is the organisational culture (OC) itself. The OC is considered to be another issue that needs to be addressed, as this is a factor that has been apparent among all successful organisations across the globe from the time it was first identified as a key concept in the early 1980s. All successful companies that can be identified today were built up using an identifiable OC. The increasing importance of a knowledge-based company opens another essential dimension to create an environment for KS and a culture of productivity to exist (De Long and Fahey, 2000). However, in recent years, several researchers have neglected the importance of cultural factors in KS activities (Fathi *et al.*, 2011).

Government agencies are typically bureaucratic and hierarchical organisations that make sharing knowledge difficult, as people tend to keep

knowledge private as they move up the ranks (Liebowitz and Chen, 2003). Public service employees working under a bureaucratic culture tend to see KM as a management responsibility and not something that employees need to participate in (Seba *et al*., 2012a). In the Malaysian public sector setting, managers are often faced with issues of stilted information flow due to the bureaucratic culture of the organisation (Kumar and Rose, 2012; Yusof, 2005). As such, communication from higher hierarchy levels (top management) to lower hierarchy levels (employees/subordinates) can be difficult to implement, thus in the end hindering the establishment of effective KSB. Besides this, most organisational members consider knowledge as something proprietary, a valuable asset, a source of power and something that is not to be shared freely (Ramachandran *et al*., 2011; Ismail and Yusof, 2010).

A further significant observation that was also noted is that there isn't sufficient support towards establishing a KS culture within the Malaysian public sector, which is lacking of formal and informal activities to instil such positive behaviour (Sandhu *et al*., 2011, p.217). As reviews of past literatures have revealed, OC is deemed to be essential in the formation of KSB, as it presents a major influence to the effectiveness of KM (Momeni *et al*., 2013; Adenan *et al*., 2013; Ramayah *et al.,* 2013; Jacobs and Roodt, 2011; Al-Alawi *et al*., 2007; Shaari, 2004). It is definitely a component which deserves equal attention in this study. Nold (2011) concluded in his research that without an OC that encourages information and KSB, the most sophisticated KM systems will fail to generate expected results for organisations.

In this study, the researcher intends to investigate the possibility of whether or not OC in the public sector of Malaysia would have any effect on KSB, as empirical evidence has proven elsewhere that OC can either promote or hinder the success of KM initiatives (Tseng, 2010). Furthermore, a recent study by Cavaliera and Lombardi (2015), confirmed that empirical application of OC model, especially on the Competing Value Framework in investigating KSB is still lacking and needs to be further explored. Therefore, this study investigates the possible significant

moderating effect of OC within the context of the relationship between MR and KSB in the Malaysian public sector.

In summary, although there have been steady calls for better understanding of the elements that silhouette KSB in public sector organisations (Kumar and Rose, 2012), minimal effort has been taken to investigate how managers in the public sector of Malaysia demonstrate their MR to influence KSB, especially in terms of KA and KS. To date, no single study on Mintzberg's MR has been conducted in relation to the Administrative and Diplomatic (PTD) officers of Malaysia. Despite the considerable abundance of KM literature, no existing studies have thoroughly investigated the relationship between KSB and Mintzberg MR, and how these officers influence KSB in the public sector of Malaysia, is still an untapped area. In addition, the moderating role of OC within the MR and KSB is also tested.

Therefore, this study is intended to contribute significant insight by covering the loopholes in previous studies in this field, especially in Malaysia, since most studies that have been conducted in the past were focused on the private sector. Hence, this research generates a positive contribution to the body of knowledge, both theoretically and practically. Therefore, this study seeks to address three (3) primary research questions:

(i) RQ1: What is the level of knowledge sharing behaviour in the public sector of Malaysia?

(ii) RQ2: What is the relationship between managerial roles and knowledge sharing behaviour in the public sector of Malaysia?

(iii) RQ3: Does organisational culture moderate the relationship between managerial roles and knowledge sharing behaviour?

1.3 Research Objectives

This study seeks to address these three (3) main research objectives as below;

(i) RO1: To measure the level of knowledge sharing behaviour in the public sector of Malaysia.

(ii) RO2: To examine the relationship between managerial roles and knowledge sharing behaviour in the public sector of Malaysia.

(iii) RO3: To determine if organisational culture moderates the relationship between managerial roles and knowledge sharing behaviour.

1.4 Conceptual Framework

Based on the model in Figure 1.1, it can be seen that the initial variables of the study are derived from the model, framework and theory chosen to guide this research.

The three MR serve as a conceptual basis for the study were derived from the Mintzberg model, highlighting that these are the essential roles that are commonly used by most managers in their daily operations. Furthermore, the second component of the conceptual model is OC, which is based on the Competing Value Framework (CVF). This framework best describes the types of culture in an organisation and is suitable to use to explain the most appropriate culture that represents the public sector. Lastly, KSB, which is based on the Theory of Reasoned Action (TRA), guides the components of knowledge acquiring and knowledge sharing of the respondents in this study. TRA best describes these components, as the theory assumes that social behaviour is deeply motivated by an individual's attitude towards executing a specific behaviour (Ramayah and Jantan, 2004).

In the conceptual framework of this study, it is important to note that the independent variable is the MR, the dependent variable is the KSB, and the moderator is the OC. Figure 1.1 shows a visualization of the conceptual framework that guides the study.
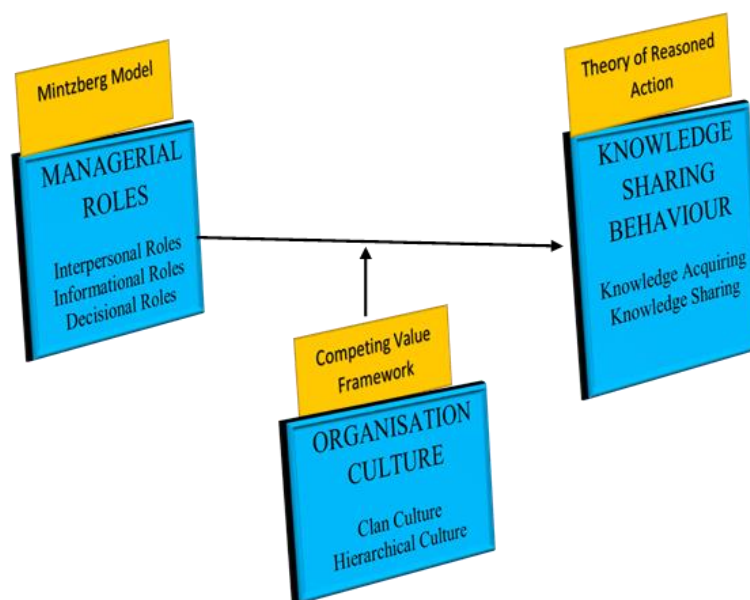
Figure 1.1: Proposed Conceptual Model

1.5 Significance of the Study

The completion of this research will be of great significance as supplementary evidence in the KM literature. This particular research has three main contributions. First and foremost, this study contributes to existing empirical research and can serve as a basis for further development of policy on KSB. It does so by incorporating both equally substantial dimensions of KSB (KA and KS), mainly in the public sector and specifically on the PTD officers. KSB is a behaviour of disseminating acquired knowledge, therefore both KA and KS are significant in contributing towards a positive KSB. A defined new construct of KSB is proposed and such empirical implication will foster the academic contribution in terms of new

knowledge to the existing literature in the KM field of the public sector, not just in Malaysia, but also in other parts of the world.

Secondly, in terms of theoretical contribution, this study explores views on the influence of OC, specifically looking into the CVF model and focusing only on clan culture (CC) and hierarchical culture (HC), the closest to the culture represented in the public sector of Malaysia. Integrating this model with Mintzberg's MR to investigate KSB establishes a novel interrelationship between these three areas, as one's behaviour towards KS is greatly influenced by his or her internal and external environment.

Finally, this study will significantly contribute in the practical context of understanding public sector managers and in particularly to the (PTD) scheme. With the minimal number of studies in this area, this study will indeed be an eye opener that will promote a more comprehensive knowledge of how it will be possible to establish a KS culture and to identify the best managerial roles to cultivate such behaviour. To be more specific, this study significantly contributes to the Public Service Department (PSD) of Malaysia as a whole, which will gain practical knowledge and insights in developing effective policy and also act as a guide in the placement of the right officer who will appropriately suit the right culture in establishing positive KSB in the organisation.

Additionally, this research is also be significant for others who have an interest in the topic, although not necessarily belonging to the public sector. The research will also be significant in the provision of knowledge to people in the academic field who are interested in the researcher's field of research.

1.6 Scope of the Study

While past studies on KS have focused more on the private sector, this study is focused on the public sector of Malaysia and emphasises the acquisition and

sharing nature of KSB as part of the wider concept of KM. The population of this study consists of the PTD officers, also known as *Pegawai Tadbir dan Diplomatik*. Officers between Grade M41-M54, who represent the middle level managers in the Malaysian public sector, are the respondents who assist in achieving the research objectives of this study. These specific group of PTDs are chosen as they fit the definition of middle managers who occupies positions which are two level below the head of the organisation and one level above supervisory staff (Al-Hakim and Hassan, 2011). They work in various ministries in Putrajaya and also in other public service departments throughout the country. A non-probability sampling technique (more specifically purposive sampling) was used and the respondents were nominated by their respective Human Resource Departments (HOD), based on the criteria set by the researcher. The criteria places great emphasis on respondents' commitment and suitability to aid this research.

1.7 Definition of Terms

The following are the relevant terms that were used in this research:

1.7.1 Managerial Roles

Managerial roles refer to the set of roles that define what managers are expected to do (Mintzberg, 2004). These can be classified based on the following:

1.7.1.1 Interpersonal Roles (IR)

The conceptual definition and operational definition of the IR are explained in detail below.

Conceptual Definition

IR are defined as manager's duties, which they repeatedly do on a daily basis and that evolve from the position's authority and responsibilities (Gabarro, 1992). This role is developed to maintain a good working relationship with colleagues and subordinates (Chatterjee and Pearson, 2002).

Operational Definition

In this research, a middle manager in fulfilling his or her IR, must assume the following roles: to act as a figurehead, leader and liaison. The figurehead role involves the fulfilment of various inspirational, ceremonial, legal and social duties. This simply means that managers are expected to always be on-hand for people. The manager also assumes the leadership role within the organisation, which involves mainly maintaining their authority and leading their subordinates. Finally, under the interpersonal role, the manager must act as a liaison, focusing on communication and acting as an information centre of the organisation.

1.7.1.2 Informational roles (FR)

The conceptual definition and operational definition of the FR are explained in detail below;

Conceptual Definition

Receiving information and the act of transmitting the knowledge within and outside of the organisation are defined as FR. The manager is in charge of seeking, receiving and acquiring work related information from various sources to ensure information is disseminated to improve the organisation's performance (Mintzberg, 2004; Chatterjee and Pearson, 2002).

Operational Definition

FR of the middle managers in this study pertain to the following information-related roles: as a monitor, a disseminator and a spokesman. As a monitor, the manager perpetually scans the environment for information, interrogates liaison contacts, and receives unsolicited information from various sources. As a disseminator, the manager is in charge of facilitating the information flow within the organisation, while ensuring that all the relevant stakeholders are able to acquire the right information. The manager must assume the role of a spokesman, which means that the manager must inform or must keep the stakeholders and key influencers of the organisation informed of any important information in the environment that could affect the organisation at all times.

1.7.1.3 Decisional Roles

The conceptual definition and operational definition of the DR are explained in detail below.

Conceptual Definition

The DR of a manager involves making important decisions on behalf of the organisation, as it clearly defines the manager's authority and power. It involves a manager making significant decisions that affect the organisation (Chatterjee and Pearson, 2002).

Operational Definition

The DR of the middle managers in this research basically involves fulfilling the following relevant managerial roles, which include: as an initiator/changer, a disturbance handler, as resource allocator and as a negotiator. As an initiator or changer, the manager leads the strategy making process of the organisation and

generates critical decisions. As a disturbance handler, on the other hand, the manager fulfils the role of taking charge over the organisation, especially when certain disturbances or issues occur, while ensuring that everything is being dealt with in a calm and appropriate manner. As the resource allocator, the manager oversees the resource allocation process of the organisation and have authorization of the actions. Finally, on behalf of the organisation, the manager is in control of the most important negotiating processes as the negotiator of the organisation.

1.7.2 Knowledge Sharing Behaviour

KSB is a set of individual behaviours that involves first acquiring and then sharing one's expertise and work-related knowledge (Yi, 2009). It is a behaviour used to disseminate and share the acquired valuable knowledge among members of the organisation (Ryu *et al*., 2003; Ipe, 2003; Lee and Choi, 2003). If knowledge resides in an individual, and they are able to capture it well then only effective KS can be executed, contributing to a successful KSB. Jayasingam *et al*., (2010) revealed that by acquiring knowledge, people tend to share knowledge to a greater degree.

It is not an easy task to develop this kind of behaviour, because such behaviour can only possibly take place if an organisation's members believe that sharing knowledge is valuable and important (Ryu *et al*., 2003). KA and KS are two equally important elements in the establishment of positive KSB of an individual. This study focuses on KSB of individuals because the behaviour of organisational members is what management wants to evaluate and measure in their yearly performance review.

1.7.2.1 Knowledge Acquiring

The conceptual definition and operational definition of KA is explained in detail below.

Conceptual Definition

In his study, Gupta (2008) describes KA as collecting knowledge or capturing information from various sources. KA is a process of bunching up information through the application of different methods from external sources and embedding it within one's existing knowledge (Boateng *et al*., 2014). The knowledge that will be obtained will be used for the purpose of leading the organisation towards success.

Operational Definition

The middle managers referred to in this research can capture knowledge from various sources within an organisation, including books, journals, databases, reports, expert opinion and also through training programs. Generating new knowledge through experiments with new ways of working, discussion with senior managers and colleagues is also included in KA. The development of quality and original ideas can also be derived through employees' work experience and individual skills, as knowledge resides in people. Thus, in creating a solid base of KA within an organisation, employees need to commit to understanding and willingly capturing this knowledge, in order to ensure that knowledge is acquired and sustained successfully for the benefit of the individual and also the organisation. Failure to acquire knowledge can cause organizations to be unable to sustain and hold up in a competitive and dynamic industry.

1.7.2.2 Knowledge Sharing

The conceptual definition and operational definition of KS is explained in detail below.

Conceptual Definition

KS is an organisational activity wherein knowledge through the form of skills, information, data and expertise, is exchanged among stakeholders and organisational members. It is a kind of behaviour that governs the human exchange of information, or in general, knowledge (Aulawi *et al*., 2009). It is also defined as sharing task-related expertise, ideas and suggestions with others (Gupta, 2008).

Operational Definition

KS is a process where an employee imparts his or her knowledge, expertise and insight to other employees within an organisation. A sharing behaviour can also refer to what extent an individual is interested in willingly welcoming other people to have access to their experiences. In this research, KS refers to attempts and contributions of middle managers towards creating an organisation knowledge database to ensure that employees of the public sector are better equipped with the right knowledge to serve the public and to ensure that knowledge stays within the organisation even as people leave or retire from the service.

1.7.3 Organisational Culture

This is often a reflection of the typical characteristics that can be seen within an organisation, which, collectively, could define the kind of culture that is present within that environment. It is also a reflection of the management's beliefs about the right approaches to getting things done, as well as the right initiatives to provide a

solution to a problem. OC is important in having a collective understanding as it formulates strategic actions and initiatives to influence organisational success (Shahzad *et al.*, (2012). In public sector, KS involves sharing some degree of governmental confidentiality and this necessitates the presence of trust culture, which resembles the clan culture (Kumar and Rose, 2012). Similarly according to the same authors, public service employees also face issues with stilted information flow resulting from its bureaucratic nature. Therefore for this study, the focus is on clan and hierarchical culture as these are the cultures which are closest to represent the Malaysian public sector.

1.7.3.1 Clan Culture

The conceptual definition and operational definition of acquiring a CC is explained in detail below.

Conceptual Definition

CC refers to a type of culture wherein the behaviours of organisational members are shaped and defined by their individual loyalty and commitment, as well as the accepted norms and traditions of the organisation. It emphasises flexibility and internal focus (Ramachandran *et al.*, 2011). This entails the long tenure and service of employees who later on get promoted and act as mentors for new employees that occupy positions the managers or mentors once occupied (Papa, 2008).

Operational Definition

In this study, organisations with a clan structure are often related to a more flexible structure of management will lesser control on strict rules and procedures. Organisational members are driven through vision, shared goals, outputs and outcomes and people work more as a team. In the public sector, smaller departments and units often adhere to this type of culture. Clan cultured organisation are driven

by loyalty and that creates a sense of family atmosphere which forms a strong bond. Leaders facilitates and are more supportive although rules still exist but they are often communicated and inculcated clearly among organisational members. If this kind of culture is present, the organisation is deemed to be a very friendly work environment, bounded by commitment, loyalty, and tradition, with people treating each other like family.

1.7.3.2 Hierarchical Culture

The conceptual definition and operational definition of HC is explained in detail below.

Conceptual Definition

HC is a type of culture that focuses on social ranking and the levels of positions within an organisation (Tseng, 2010). The traditional approach of the HC is similar to Max Weber's original view of bureaucracy with a more controlled structure that flows from a strict chain of command, whereby subordinates follow orders given by their superiors empowered by rational-legal authority.

Operational Definition

In an organisation with a HC, the focus is more on respect for position and power. Organisations with this structure have well-defined policies, processes and procedures. Leaders in this type of culture typically keep a close eye and control on what is happening within and outside the organisation. Most central agencies have the following common characteristics of a hierarchical culture: routinisation, stability, information management, control, and centralisation.

1.8 Organisation of the Thesis

The current chapter introduces the context of this research, covering issues such as the research background, the research problems, the objectives and significance, in order to give an overview idea of this study. To explain the further insights of this research, the remaining sections are as follows:

Chapter 2: Literature Review – in this chapter, the discussions is directed towards an identification of what is already known about the topic. A thorough review of available references is conducted and presented to provide insights on what has already been written and studied, in connection to the focus of the study.

Chapter 3: Theoretical Background and Hypothesis – this section further discusses the theories that guides this study, which contributed to the formulation of the research hypotheses. Basically, the theories related with or about MR, KSB and OC is explored with the aid of literature to support this study.

Chapter 4: Research Methodology – this section provides detailed discussions of the methodology that was used in the process of collecting and analysing information that enables the research questions to be answered and the research objectives to be achieved. This provides a clear enumeration of the procedures for completing the research to assist in its replication in the future, and to validate and elaborate the findings.

Chapter 5: Data Analysis – this constitutes the major component of the research. This chapter provides the key insights and findings of the data collection through statistical analysis. The findings in this section are useful for potential users of the study because it outlines the results and outcomes of the investigation through quantitative analysis.

Chapter 6: Discussion of Results – this session provides summary of the hypothesis from the statistical analysis. It reports the research findings and its consistency or inconsistency from various literatures relevant to the research.

Chapter 7: Conclusion – this chapter is intended to provide a summary of the discussions that were presented in the earlier chapters. It encapsulates the themes emerged from the study and provides recommendations regarding future studies, as well as its limitations that were encountered throughout this research.

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