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## Determinants of Knowledge Sharing Behavior

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**Abstract.** In the new global knowledge has become a central issue for organization's survival. Recently, in knowledge management (KM)-related research effective knowledge sharing (KS) is considered as a significant component of KM success. The importance of knowledge sharing in knowledge management can be interpreted as a blood circulating in the body. There has been a dramatically interest in examining the factors that encourage or hamper individual's knowledge sharing behavior in social network. Some theories such as Social Exchange Theory (SET), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TBP), and Technology Acceptance Model (TAM) are vastly used to understand human behavior and are also considered as a critical base to understand individual's knowledge sharing behavior. For the present research, the authors intend to review the previous researches that explored different factors effect on knowledge sharing behavior. So, the purpose of this paper is to review recent research in KS determinants to find out the most important factors which influence KS behavior. This will help us to understand how various examined factors influence knowledge sharing behavior and how different perspectives could correctly formulate the knowledge sharing behavior. The paper first gives a brief overview of the recent history of KS, and some social-psychological models, which have been applied for determining the KS behavior and finally gives suggestions for future scholars who are interested to study more efficient in this area.

**Keywords:** sharing behaviour; individual perspective; organizational perspective; social contexts perspective.

### 1. Introduction

Knowledge is a critical organizational resource that provides a sustainable competitive advantage in a dynamic and competitive economy [1]. To achieve a competitive advantage it is needful but inadequate for organizations to rely on staffing and training systems [2]. Organizations must know how to transfer knowledge and expertise from experts to people who need to it [3]. Viewed in this way, knowledge sharing among individuals has become one of the most important elements of effective knowledge processing [4]. Because of the potential benefits of knowledge sharing, many organizations have invested remarkable time and money into the knowledge management (KM) system including capture, storage, create, and distribution of knowledge. Recently, researches have shown that knowledge sharing is strongly related to team performance [5], reduction in production costs [6], firm innovation capacities [7], faster completion of new product development projects [8], and firm performance, including revenue and sales growth from new services and products [9]. Voelple et al [10] believed that an important reason for the failure of knowledge management system to facilitate knowledge sharing is the absence of consideration of how the individual and interpersonal as well as organizational characteristics influence knowledge sharing. In this regard, a

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significant numbers researches have been conducted to identify the important factors which influence knowledge sharing behaviour from various perspectives.

## 2. The Concept of Knowledge Sharing

According to perspectives, situations, needs, and circumstances, different definitions of KS are presented. While Levitt and March [11], believe that knowledge sharing is a process meant to obtain experience from others, so it can also be named “knowledge transfer”, which will also augment the organizational learning, Szulanski et al believe that knowledge sharing is differed from knowledge exchange and knowledge transfer.

They argue that knowledge transfer involves not only the sharing of knowledge by the knowledge source but also the acquisition and application of knowledge by the recipient. Knowledge transfer describes the knowledge movement between different units, divisions, or organizations while, knowledge sharing typically has been used to identify the knowledge movement between individuals [12]. According to Pulakos et al [13] knowledge sharing refers to preparation of task information and know-how to collaborate with others to help them and solve their problems, implement policies, or develop new ideas. Ryu et al [14] suggest that knowledge sharing is the behavior when a member diffuses her/his acquired knowledge to others within an organization. Ho and Hsu [15] argue that the reason for the difficulty in presenting a standard definition of “knowledge sharing” is due to KS consists of many elements. The three key elements tabbed from them are: 1-objects, which refer to the kind of shared knowledge, 2-the way of sharing includes; face to face, conference, knowledge network, and organizational learning, 3-and finally, level of sharing: involving individuals, teams, or organizations. It is important to distinguish that individuals may decide to share or not to share their knowledge for some reasons [16]. Previous studies have shown that employees may share knowledge since they pleasure helping others or not share knowledge because they think their knowledge is not important for others [17]. People may decide to share knowledge as a useful way to develop their relationships with colleagues. Personal characteristics may also affect the extent to which the employees share knowledge for various purposes [16]. From the power perspective, an important obstacle for knowledge sharing is that sometimes knowledge can be considered as resource of superiority and power [18]. Hence, to promote KS the employee’s motivation namely, employee’s inherent tendency and willingness to share their knowledge, is essential to success [4]. There are some theories and models, which can help us to determine the factors, which play a vital role in establishment and reinforcement the knowledge sharing behaviour as a specific component of the knowledge management cycle among organizational members. Hence, in this section, some basic theories such as Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TBP), System Exchange Theory (SET), and Technology Acceptance Model (TAM) are explained.

### 2.1. Theory of Reasoned Action (TRA)

Theory of Reasoned Action (TRA) is a social psychology model, which focuses on the elements that determine the intention behavior reasons [19]. Studies have shown that TRA theory is successful model in forecasting intention to knowledge sharing behavior. Based on TRA “Fig, 1”, an individual performance of a specific behavior is defined by her or his behavioral tendency to fulfill the behavior, and behavioral intention is determined by the individual’s attitude and subjective norms.

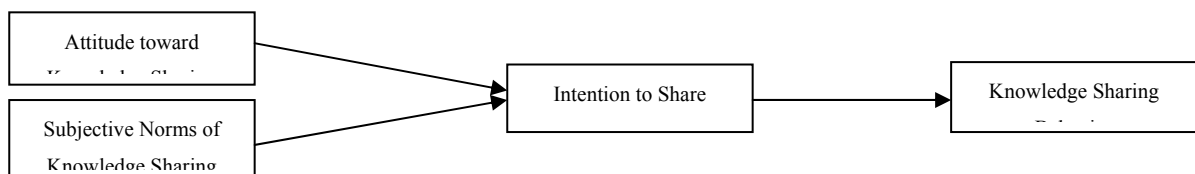


Fig 1. Theory of Reasoned Action (TRA) Adopted from Ajzen &Fishbein (1980)

Some studies have been done by using TRA to explore the role of different variables in KS. For example, Bock and Kim in 2001 conducted a study based on TRA and SET (social exchange theory). The results reported that “*expected associations and contributions*” have significant positive impact on individual’s attitude toward KS, while “*expected rewards*”, which is believed as an important incentive factor for KS by

some scholars, are not in a positive relation to the attitude toward KS[20]. In 2005, they published a paper in which based on TRA, they described that attitude toward KS and subjective norms as well as organizational climate have positive effect on KS behaviour. In addition, “*anticipated reciprocal relationships*” influence attitude and both “*sense of self-worth*” and “*organizational climate*” influence subjective norms, while “*anticipated extrinsic rewards*” are in negative relation to individual’s KS attitude [4]. In another study by Joseph and Jacob in 2011 “Fig. 2”, the above outcomes were confirmed. The results indicated that “*social-psychological*” and “*organizational climate*” factors have positive effect on KS intention, whereas “*anticipated extrinsic rewards*” have negative effect on individual’s KS attitude [21].

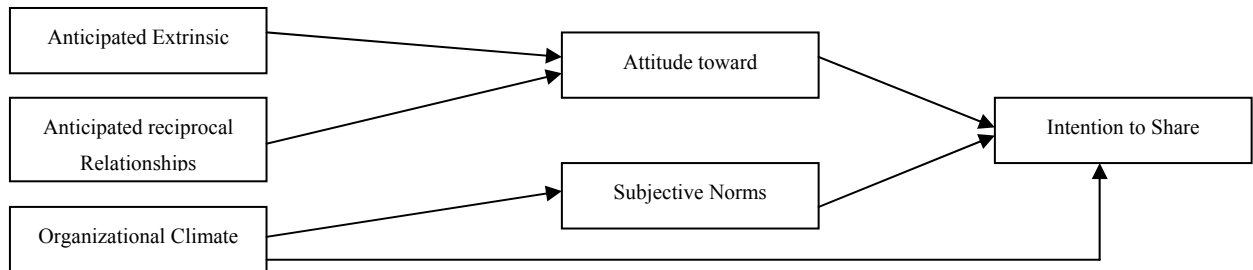


Figure 2: Joseph and Jacob research model based on TRA (2011)

## 2.2. Theory of Planed Behavior

Theory of Planned Behavior (TPB) has been shown to be practical in social behavior predicting in many functional areas. TBP is an expanded version of the reasoned action theory (TRA) [21]. The difference between TRA and TBP is the added factor: “*perceived behavioral control*” (PBC). According to TBP behavioral intention together with PBC are used to predict the outcomes of behavior “Fig. 3”. Both PBC and intention contribute to the behavioral prediction, but in some cases one of them maybe more significant than another one and actually just one predictor is necessary [21].

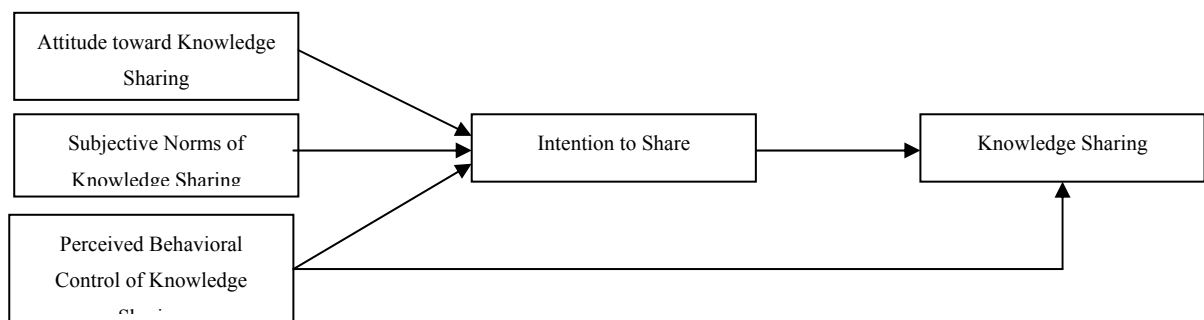


Figure 3: Theory of Planned Behaviour (TPB) Adopted from Ajzen (1991)

Lin and Lee (2004) published a paper in which they described factors that influence encouragement of KS intention and behaviour by senior managers. The results showed that the research model (TPB) fitted the data well, and the encouraging intention of senior managers was the main determinants of enterprise KS behaviour. In addition, senior managers’ “subjective norms” and “attitudes” and “perceived behavioural control” were found to have positive effect to encourage KS [22]. In another study “Fig. 4”, Joen et al (2011) found that, while both intrinsic factors such as “enjoyment in helping” and “need for affiliation” and extrinsic motivational factors such as “image” and “reciprocity” have positive effect on attitude toward KS; intrinsic motivational factors were more influential. Additionally, type of communities of practice (CoP) and facility conditions influence KS behaviour [23].

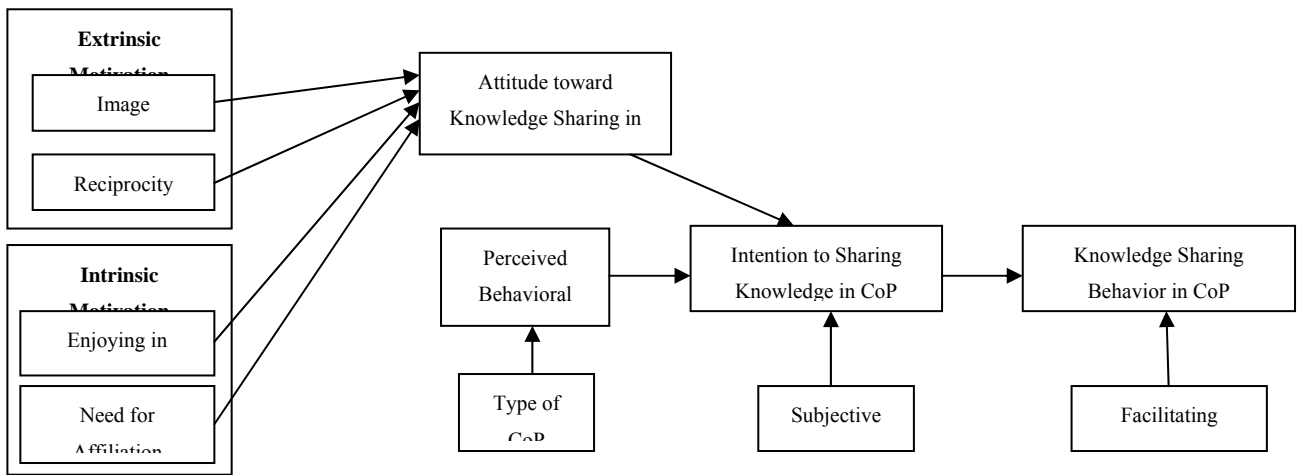


Figure 4: Jeon et al research model based on TPB (2011)

### 2.3. Technology Acceptance Model (TAM)

There have been numerous models applied to study the usage behaviour of information technologies. Technology Acceptance Model (TAM) [24] which is adopted from TRA is the most frequently applied model of technology user acceptance. TAM identifies that two specific components; perceived usefulness and perceived ease of use determine the individual behavioural intention toward the use of technology “Fig, 5”.

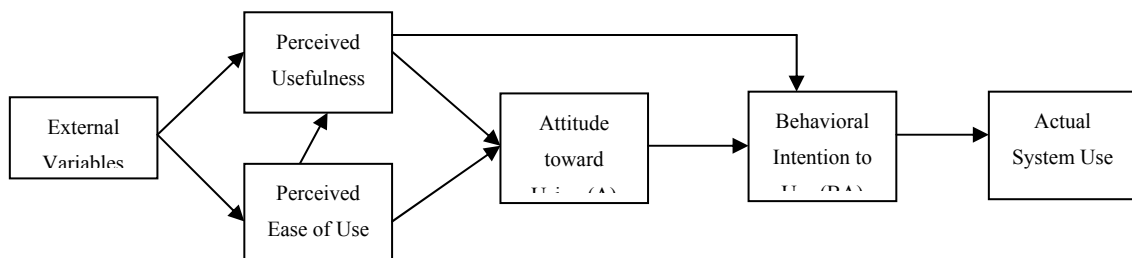


Figure 5: Technology Acceptance Model (TAM) Adopted from Davis (1993)

For example, in 2005 Noor conducted a study in which TAM was used a conceptual model. The results produced evidence that “*perceived sharing*” and “*perception of trust*” resulted in positive intention to sharing behaviour. Additionally, the results yield evidence that “*perceived risk*” has a negative effect on intention to “*sharing behaviour*”. The findings also was consistent with other TAM constructs, “*perceived usefulness*”, “*ease of use*, and “*intentional behaviour*” [25]. In another research Hsu and Lin (2008) studied the effect of social factors on blog usage behaviour based on TAM “Fig, 6”. The results indicated that “*ease of use*” and “*enjoyment*” as well as “*altruism*” and “*reputation*” positively influence the attitude toward blogging. In addition, “*community identification*” as social factor and “*attitude toward blogging*” were positively related to a “*blog participant’s intention*” to continue the blog use behaviour [26].

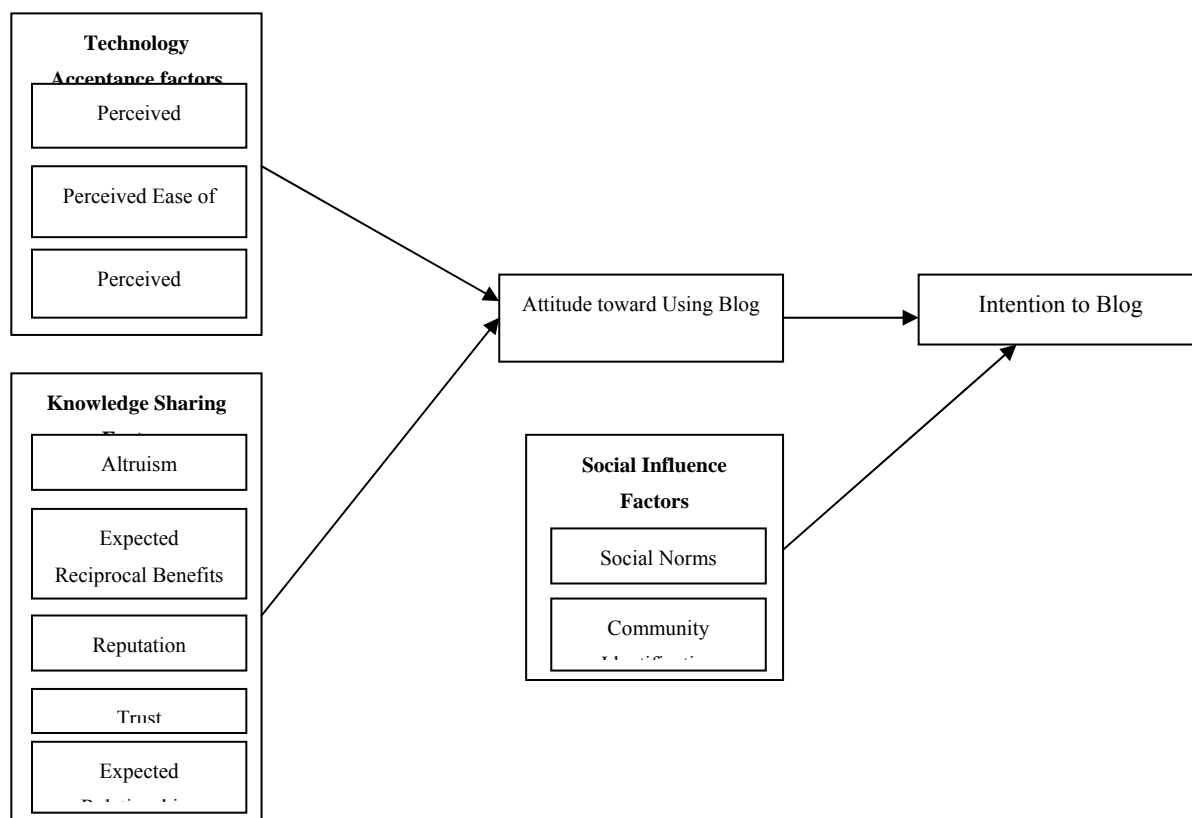


Figure 6: Hsu and Lin research model based on TAM (2008)

## 2.4. Social Exchange Theory (SET)

Social Exchange Theory (SET) is one of the most important conceptual models for understanding organizational behavior. Although various approaches of social exchange are being involved a set of interactions, which produce obligations. These interactions within SET are often looked as interdependent actions and depend on another person action [27]. In this regard, several studies have been done based on SET to explore the relationship between individual's communication and knowledge sharing behavior. For example, Wu and Lin (2006) in a study about knowledge sharing in virtual communities based on SET found that three factors have indirect effect on knowledge sharing including, "*mutual communication, understanding, and trust*" while, factors including, "*mutual influence, commitment, and conflict*" have direct effect on knowledge sharing [28]. In another research Hall and Walff (2008) in a survey to find about motivational knowledge sharing factors in *online environment* reported that the extent to which information may be exchanged in an online environment depends on the degree to which actors are integrated with other actors. So, this means that who hope to develop online information sharing should to pay more attention and help to build trust-based relationship between employees [29].

## 3. Knowledge Sharing Research issues

Prior researches have highlighted the various factors that influence the individual's tendency to share knowledge. For example, researches focusing on organizational factors attempt to answer questions regarding what might be the organizational structure or culture that facilitates knowledge sharing behaviour. Other researches also address the impact of psychological factors on knowledge sharing. Some researchers investigated the intention to knowledge sharing considering its cost and benefits. Each domain of knowledge sharing research includes related topics that we illustrated in our review of knowledge sharing determinants.

### 3.1. Individual Influence Perspective

Many studies have investigated the effect the individual's factors on knowledge sharing. The personal characteristics of employees may influence the extent to which they share knowledge for different purposes [30]. Based on social exchange theory (SET), and theory of reasoned action (TRA), Bock and Kim [20]

found that “*expected associations*” and “*contribution*” are the major determinants of the individuals’ attitude toward knowledge sharing while, “*expected rewards*” as the most important motivator factor for knowledge sharing are not related to attitude toward knowledge sharing. Lin [31] based on a survey of 172 employees from 50 large organizations in Taiwan showed that motivational factors such as “*enjoyment in helping others*”, “*knowledge self-efficacy*” were significantly associated with employees knowledge sharing attitude and knowledge sharing behaviour.

### 3.2. Issues Derived from Organizational Perspective

Most of KM researches affirm the importance of organizational configuration for the success of KM initiatives especially cultural dimensions that affect knowledge sharing. For example, Suppiah and Sandhu [32] found that tacit knowledge sharing behavior is influenced positively by “*clan culture*”, but “*market*”, and “*hierarchy culture types*” are negatively contributed to tacit knowledge sharing behavior. In another survey by Lin [31], based on TRA, she found that “*reciprocal benefits*” as an organizational factor was positively in relation with knowledge sharing intention while, she did not find any significant association between “*expected organizational rewards*” and knowledge sharing attitude and intention.

### 3.3. Knowledge Sharing from Social Contexts Perspective

Knowledge sharing is relatively easy to achieve and sustain when networks have strong connections and direct ties between their members [33]. To explore the effectiveness of social contexts on knowledge sharing behavior some studies have conducted. For example, in a survey Lin and Hung [34] investigated the relationships between “contextual factors”, “personal perception” of knowledge of knowledge sharing, knowledge sharing behavior, and “community loyalty”. The result showed that trust has a significant effect on “perceived relative advantage”, “knowledge sharing self-efficacy”, and “perceived compatibility”, which in turn have positively influence on knowledge sharing behavior. Chang and Chuang [33] suggest that when members trust to each other and have intensive interaction, they are more willingness to share reliable knowledge.

## 4. Conclusion

This review provides a small organizing framework for current knowledge sharing perspectives. Although, experimental studies have been conducted to explore more ambiguous angles of this concept but, it seems that some issues should be considered. According to knowledge sharing literature most of the researches have been conducted in Western and East Asia countries. So considering different cultural characteristics and economical situations, which influence the type of organizational structure as well as interpersonal communication between members, more investigate is needed to be conducted in another area such as Middle East and African countries. Furthermore, considering the importance of social capital theory as a significant issue, which affects KS behavior, is needed to more profound studies. Hence, we hope future researchers interested in examining social and organizational factors influence on knowledge sharing behavior conduct more studies in these areas to determine the more sightless aspects.

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