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Factors Influencing Individual's Knowledge Seeking Behavior in Electronic Knowledge Repository

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FACTOR'S INFLUENCING INDIVIDUAL'S KNOWLEDGE SEEKING BEHAVIOUR IN ELECTRONIC KNOWLEDGE REPOSITORY

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Abstract

Among the recent challenges faced by managers is the ability to manage knowledge sharing effectively so that knowledge can be utilized strategically for the benefit of the organization. Since knowledge sharing cannot occur without contribution of knowledge, most research so far has been devoted to the contribution aspect of knowledge sharing. However, knowledge re-use, another important goal of knowledge sharing, is unattainable if motivators and inhibitors of ***knowledge seeking*** *behaviour are overlooked. This study sheds light into this underdeveloped, but critical component of knowledge management, by investigating the determinants of individual's knowledge seeking behaviour in an Electronic Knowledge Repository (EKR) based on the Decomposed Theory of Planned Behaviour (DTPB). The results from the survey conducted on 192 EKR users reveal that an intention based model provides a much clearer understanding of the latent psychological processes that influence knowledge seeking behaviour in an EKR. As posited by established IS usage theories such as Technology Acceptance Model (TAM), Perceived Usefulness and Seeking Effort (i.e. Perceived ease of Seeking) have appeared as the primary antecedents of attitude. In addition, Trust has emerged as an important determinant of intentions and attitude towards knowledge seeking behaviour. The unexplored concept of Information Asymmetry has been identified as a valuable inhibiting factor in context of knowledge seeking behaviour in EKR.*

Keywords: Knowledge Seeking Behaviour, EKR, DTPB

1 INTRODUCTION

Knowledge Management is defined as any structured activity that improves an organization's capacity to acquire, share, and use knowledge in ways that improve its survival and success (Nevis 1995). Though companies are reasonably good at acquiring knowledge, this resource is often wasted through ineffective dissemination and low levels of re-use (McShane and Von Glinow 2003). Knowledge-based theory of the firm emphasizes that the source of competitive advantage resides in the application of the knowledge rather than in the knowledge itself (Alavi and Leidner 2001).

However the focus of past research has been skewed heavily towards the contribution aspect of knowledge sharing (Constant et al 1994; Wasko and Faraj 2000). The knowledge seeking aspect of knowledge sharing has been investigated only in some exploratory studies (Kankanhalli et al 2001) in the context of Electronic Knowledge Repositories (EKR). The motivation for this research stems from the lack of investigation into the facilitators and inhibitors of knowledge seeking behaviour and their influence on shaping psychological factors such as attitudes and intention.

This research attempts to develop a behaviour intention model for knowledge seeking behaviour based on the Decomposed Theory of Planned Behaviour (DTPB) (Ajzen 1985). We attempt to develop a comprehensive model that would comprise of dominant factors that influence an individual's knowledge seeking behaviour and yet have substantial predictive power. Thus, this research primarily addresses the following question: what are the dominant factors influencing an individual's Knowledge Seeking Behaviour in an EKR?

2 LITERATURE REVIEW

In this section we define *Knowledge Management* terminology pertinent to our research and also examine the results of past studies in the context of knowledge seeking behaviour in EKR.

2.1 Knowledge Management

Knowledge Management is defined as a systematic and organizationally specified process for acquiring, organizing and communicating both tacit and explicit knowledge of employee so that other employees may make use of it to be more effective and productive in their work (Alavi and Leidner 1999). Implementations of IT that support and enhance the organizational processes of knowledge creation, storage/retrieval, transfer and application are classified as *Knowledge Management Systems* (Alavi and Leidner 2001).

There are two approaches to Knowledge Management, i.e. *Codification* and *Personalization*. The *Personalization* approach is concerned with directing people to sources of knowledge to facilitate knowledge transfer (knowledge maps and directories akin to "yellow pages"). On the contrary, the *Codification* approach focuses on storage and retrieval of knowledge (such as for sharing best practices). Electronic Knowledge Repository (EKR), which exemplifies the codification approach, is defined as "online computer-based storehouse of expertise, knowledge, experience, and documentation about a particular domain of expertise. In creating a knowledge repository, knowledge is collected, summarized, and integrated across sources" (Liebowitz and Beckman 1998). This study focuses on EKR because study of their usage has received scant attention despite being the most prevalent form of KMS (Davenport and Prusak 1998). Further implementation of EKR does not automatically guarantee success of knowledge management initiatives despite huge investment.

2.2 Past Research

As few studies have been done in the above context, this research draws heavily from two exploratory studies on knowledge seeking behaviour in EKR by Kankanhalli (2002) and Kankanhalli et al (2001). Kankanhalli et al (2001) proposed a model for knowledge seeking behaviour in EKR based on Technology Acceptance Model (TAM) (Davis 1989) and DTPB (Ajzen 1985). However their research did not explicitly measure *Intention* and its antecedents such as *Attitudes*. Kankanhalli et al (2001) hypothesized usage of EKR by knowledge seekers to be a direct determinant of *Perceived Output Quality*, *Perceived ease of Use*, *Availability of Resources*, *Mandates* and *Incentives*. Further, *Task Interdependence* and *Knowledge Tacitness* were hypothesized to have a moderating influence on each of the above mentioned relationships. The figure below represents the model for knowledge seeking behaviour in EKR that emerged from the above studies (Kankanhalli, 2002).

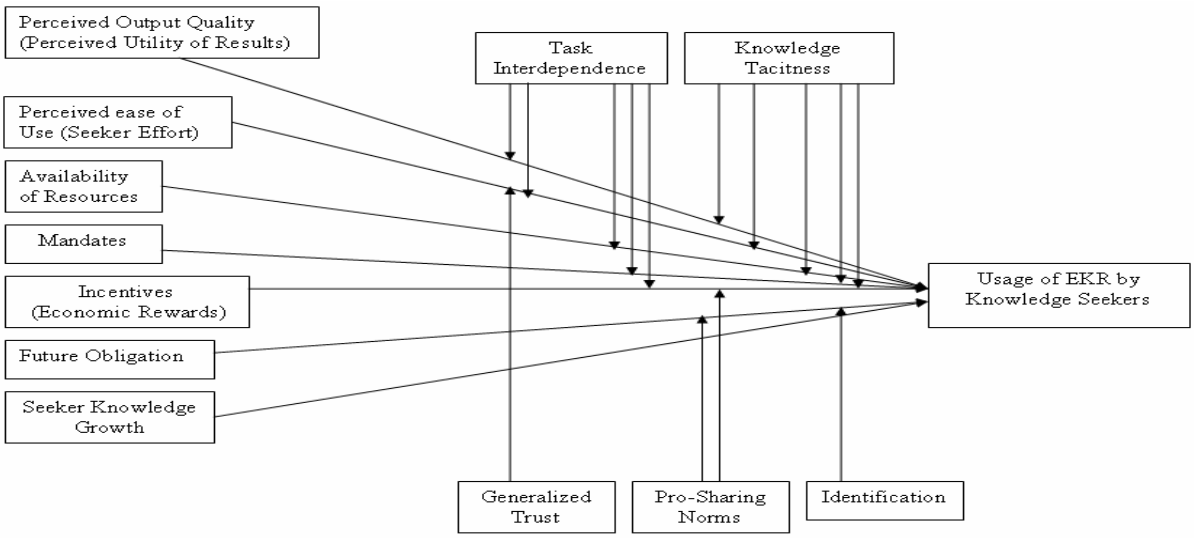

Figure 1. Model of EKR Usage.

The proposed a model for knowledge seeking behaviour in EKR is based on Social Exchange Theory (SET) and Social Capital Theory (SCT). Based on SET, determinants of knowledge seeking behaviour were classified as costs and benefits to the knowledge seeker. *Seeker Effort* and *Future Obligation*, classified as costs, were hypothesized to have a negative influence on usage of EKR. *Seeker Knowledge Growth*, *Seeker Economic Reward* and *Perceived utility of Results*, classified as benefits, were hypothesized to have a positive influence on *Usage of EKR*. As posited by SCT, the relational dimension of social capital i.e. trust, norms, obligation and identification, was chosen to study their moderating impact on the relationship between cost and benefit factors from SET and the usage of EKR for knowledge seeking.

In spite of its many contributions, there are several limitations in this model (Figure 1) which we attempt to address in our research. Firstly, there is no understanding of how the above factors influence the latent psychological processes in an individual which induce the behaviour eventually. The Theory of Reasoned Action (Fishbein and Ajzen, 1975), for example, identifies Behavioural Intention (BI) as the precursor to behaviour and BI is jointly determined by Attitude and Subjective Norm, which in turn are influenced by attitudinal beliefs and normative beliefs. Thus we chose to adopt a behaviour intention model to better understand factors influencing knowledge seeking behaviour in EKR.

Secondly, costs and benefits posited by SET are incomplete by themselves in determining usage of EKR. According to Theory of Planned Behaviour (Ajzen 1985), an extension of Theory of Reasoned

Action (TRA), “external factors” (i.e., resource facilitating conditions) as well as “internal factors” (i.e., individual characteristics) facilitate behaviour. Although Kankanhalli et al, (2001) measured resource facilitating conditions such as “Slack Time” and “Access” internal factors such as *Self-Efficacy* were not considered.

Thirdly, characteristics of an EKR itself that may influence knowledge seeking behaviour have been unexplored in past research. EKR as described in section 2.1 represent a different approach to knowledge transfer as compared to integrated messaging or face-face interaction. This difference of an EKR compared to other types of Knowledge Management Systems could influence knowledge seeking behaviour.

3 RESEARCH MODEL AND HYPOTHESES

We have adopted Deomposed Theory of Planned Behaviour DTPB as the basic framework to model Knowledge Seeking Behaviour, which is a measure of the usage of an EKR to seek knowledge.

3.1 Decomposed Theory of Planned Behaviour (DTPB)

One of the most popular and influential behaviour intention models to provide an understanding of the determinants of Information System usage behaviour is the Theory of Planned Behaviour (TPB) (Ajzen 1985). TPB asserts that behaviour is a direct, weighted function of intention and perceived behavioural control; and intentions are the weighted sum of attitude, subjective norms and perceived behavioural control components. An extension of the TPB model with decomposed belief structures is the Decomposed TPB (DTPB) in Figure 2. DTPB offers two major advantages over the original model. Firstly, studies have shown that monolithic belief structures, representing a variety of dimensions, are not consistently related to the antecedents of intention (Taylor and Todd 1995). The decomposition can provide a stable set of beliefs which can be applied across various settings overcoming some of the disadvantages in operationalization noted with other traditional intention models (Berger 1993, Mathieson 1991). Secondly, due the elaborate nature of TPB, it provides a more complete understanding of usage behaviour relative to parsimonious models such as Technology Acceptance Model (TAM).

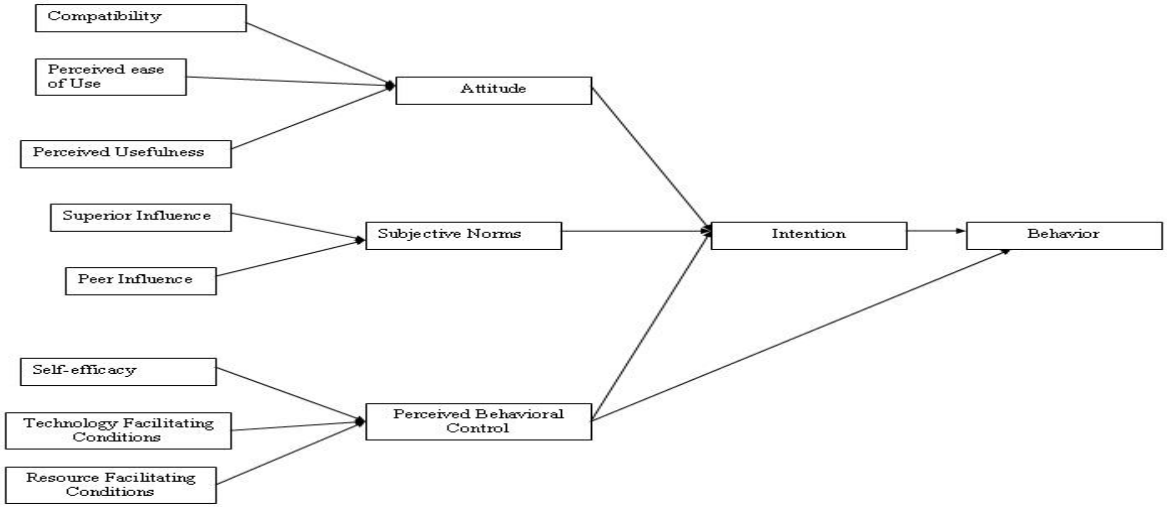

Figure 2. DTPB Model.

3.2 Research Model

3.2.1 Factors excluded from DTPB

The following factors in DTPB were either replaced or not included in our model: *Subjective Norms*, *Technology Facilitating Conditions* due to the following reasons. Theory of Reasoned Action (TRA), of which DTPB is an extension, uses the notion of *Subjective Norms* to account for social influence. We regard *Pro-Sharing Norms* (section 3.2.3) as a substitute for *Subjective Norms* as they are representative of organizational culture, i.e. superior and peer influence, and encompass the motivation to comply for what is expected as appropriate behaviour. Thus we feel *Pro-Sharing Norms* are more apt in the context of our research.

Technology Facilitating Conditions (TFC) has been widely used to measure how compatibility with technology and access to technology constrain usage. Modern day EKRs (Microsoft Sharepoint Services, Siemens FreeText etc.) have graphical user interfaces and web-based front-ends that even allow individuals to remotely access the EKR from home at their convenience. Thus we feel TFC, though not trivial, is a non-essential component for our research.

3.2.2 Factors excluded from past research

The following determinants of knowledge seeking behaviour identified in prior studies were excluded from this research –*Incentives*, *Economic Rewards*, *Task Interdependence*, *Knowledge Tacitness* and *Mandates*. The hypothesis concerning the relationship between *Seeker Economic Rewards* and *Usage of EKR* was unsupported (Kankanhalli 2002). Even in an earlier study (Kankanhalli et al 2001), the relationship between *Incentives* and *Usage of EKR* was supported only when the degree of *Knowledge Tacitness* was high and the degree of *Task Interdependence* was high. However, a high degree of *Task Interdependence* increases the Conflict among team members and *Incentives* have a punitive effect under such circumstances (McShane and Von Glinow 2003).

In addition, according to Pierce et al (2001) knowledge workers develop psychological ownership to knowledge they create as the process of knowledge creation requires considerable investment of the self. As such, it seems that *Incentives* and *Economic Rewards* are more appropriate for inducing knowledge contribution rather than knowledge seeking. *Task Interdependence* and *Knowledge Tacitness* were found to have moderating influence only on Incentives in the study by Kankanhalli et al, (2001). Since we do not directly measure *Economic Rewards* and *Incentives* in our research task characteristics and nature of knowledge (i.e. degree of explicitness) are not pertinent.

3.2.3 New factors explored

Instead, we have included the role of *Trust*, *Information Asymmetry and Pro-Sharing Norms* in influencing Knowledge Seeking Behaviour in EKR. Recently the results of a study by IBM Institute for Knowledge-Based Organizations (IKO) revealed that, although trust could be created through frequent and ongoing communication, it could also form between people who do not converse with each other on a regular basis (Levin et al 2002). From this, it is manifest that trust has significant role in seeking knowledge from an EKR where there is no face-face and verbal interaction with the knowledge contributor. KM literature has widely acknowledged role of Trust in facilitating knowledge exchange by reducing risk and uncertainty (Roberts 2000), reducing costs (Zaheer et al 1998) and increasing the likelihood of newly acquired knowledge being sufficiently absorbed so as to be useful to the recipient (Levin et al 2002). Numerous studies have been conducted which prove that trust is indeed a major factor for product purchase intentions in a buyer-seller dyad (Gefen 2000; Gregory and Ashley 2003). Knowledge exchange through an EKR involves a contributor and a seeker which is analogous to economic exchange which involves a seller and a buyer. Thus trust could enhance the intentions of an individual to seek knowledge from an EKR.

This study also explores the role of *Perceived Information Asymmetry* as an inhibiting factor in usage of EKR. In a typical knowledge transfer process using an EKR between a knowledge seeker and a knowledge contributor who have no personal relationship, even if the knowledge contributor knows his/her own expertise and the exact value of the knowledge he/she is able and willing to provide, the seeker is not certain about the value of the knowledge that (s)he is going to acquire because of either unknown quality or unknown relevancy (Geng et al 2003). Thus, a knowledge seeker with little knowledge or, as a matter of fact, no knowledge about the topic of interest is more likely to associate little value to knowledge sought from the EKR.

Although Kankanhalli (2002) had studied the moderating role of *Pro-Sharing Norms* governing usage of EKR by knowledge seekers, we envisage a more significant role of *Pro-Sharing Norms*. The reason is norms exist only for behaviours that are important in organizations and develop as individuals learn that certain behaviours help them function more effectively (Feldman 1984). Further, norms are deeply entrenched in organizational culture. Previous KM literature shows that norms of collaboration and teamwork (Goodman and Darr 1998; Orlikowski 1993) can enhance exchange of intellectual capital. This emphasizes that *Pro-Sharing Norms* have more than just a moderating role in influencing knowledge seeking behaviour in an EKR.

3.3 Research Hypotheses

Synthesizing the strengths and limitations of past research, we propose the following model based on DTPB for understanding factors influencing individual's knowledge seeking behaviour in EKR.

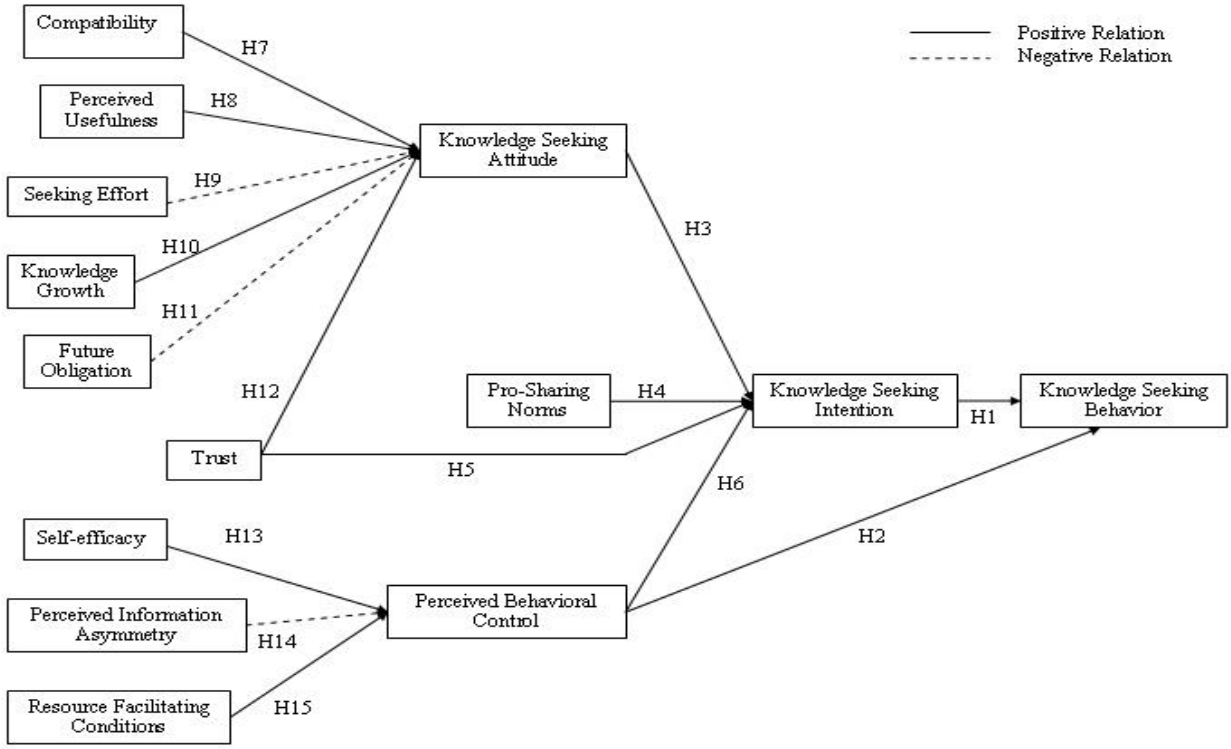

Figure 3. Proposed Model.

3.3.1 Antecedents of Knowledge Seeking Behaviour

In our research model, Knowledge Seeking Behaviour is jointly determined by Knowledge Seeking Intention and Perceived Behavioural Control. We define Knowledge Seeking Behaviour as the degree to which one actually uses the EKR to seek knowledge. Based on DTPB, Knowledge Seeking

Behaviour will be determined by Knowledge Seeking Intention which is defined as the degree to which one believes that one will engage in the act of seeking knowledge from an EKR. Thus, we hypothesize:

H1: Knowledge Seeking Intention will have a positive effect on Knowledge Seeking Behaviour.

According to Ajzen (1985), Perceived Behavioural Control reflects beliefs regarding access to the resources and opportunities needed to perform behaviour, or alternatively, to the internal and external factors that may impede performance of the behaviour. This notion encompasses the component of "facilitating conditions" (Triandis 1980) and self-efficacy (Bandura 1982). In this research, we define Perceived Behavioural Control as the degree to which external and internal factors influence knowledge seeking behaviour in an EKR. Thus, we hypothesize:

H2: Perceived Behavioural Control will have a positive effect on Knowledge Seeking Behaviour.

3.3.2 Antecedents of Knowledge Seeking Intention

In our research model, behavioural intention, that is Knowledge Seeking Intention, is jointly determined by the individual's Knowledge Seeking Attitude, Pro-Sharing Norms, Trust, and Perceived Behavioural Control. Based on DTPB, we define Knowledge Seeking Attitude as the degree of one's positive feelings about seeking knowledge from the EKR. We expect a higher attitudinal disposition to seek knowledge to increase Knowledge Seeking Intention. Thus, we hypothesize:

H3: Knowledge Seeking Attitude will have a positive effect on the Knowledge Seeking Intention.

Previous studies have shown that norms of collaboration and cooperation may have significant influence on the process of knowledge exchange (Nahapiet and Ghoshal 1998). As Pro-Sharing Norms encompass the notion of Subjective Norms mentioned in DTPB, we hypothesize:

H4: Pro-Sharing Norms will have a positive effect on the Knowledge Seeking Intention.

Although there is no universally agreed upon scholarly definition of trust, Rousseau et al (1998) define Trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions and behaviour of another" based on the syntheses of the different conceptualizations of trust that exist across academic disciplines. Among numerous classifications, affect based (i.e., benevolence trust) and cognition based (i.e., competence) trust appear as two generally accepted dimensions of trust (McAllister, 1995). Numerous studies have been conducted which prove that trust is indeed a major factor for product purchase intentions in electronic commerce (Gefen 2000; Gregory and Ashley 2003). The nature of risk and uncertainty, not necessarily the extent, faced by the individual both in online ecommerce transactions and knowledge transactions in an EKR are generally similar. Thus, we hypothesize:

H5: Trust will have a positive effect on Knowledge Seeking Intention.

As mentioned earlier in 3.3.1, Perceived Behavioural Control reflects beliefs regarding access to the resources and opportunities needed to perform a behaviour, or alternatively, to the internal and external factors that may impede performance of the behaviour. Based on DTPB, we hypothesize:

H6: Perceived Behavioural Control will have a positive effect on Knowledge Seeking Intention.

3.3.3 Antecedents of Knowledge Sharing Attitude

The antecedents of Knowledge Seeking Attitude were developed from Triandis's (1980) notion of "Perceived Consequences", Tornatzky and Klein's (1982) meta-analysis of innovation adoption studies, and DTPB. The only exceptions were Future Obligation and Trust which has been adopted from Kankanhalli (2002) and Gambetta (1988), respectively (Table 1).

Triandis (1980)	Tornatzky and Klein (1982)	DTPB	Our Model
Job-Fit	Compatibility	Compatibility	Not applicable
	Relative Advantage	Perceived Usefulness	Perceived Usefulness
Complexity	Complexity	Perceived Ease of Use	Seeking Effort
Long-Term Consequences of Use			Knowledge Growth

Table 1. Antecedents of Attitude

We define Compatibility as the degree to which seeking knowledge from an EKR is perceived as being consistent with existing values, needs and past experiences (Moore and Benbasat 1991). Thus, we hypothesize:

H7: Compatibility will have a positive effect on the Knowledge Seeking Attitude.

Perceived Usefulness is defined as the degree to which a person believes that seeking knowledge would enhance his or her job performance (Davis 1989). Previous studies have also cited usefulness of results obtained from EKR as a major motivation for knowledge seeking behaviour (Kankanhalli 2002). Accordingly, we hypothesize:

H8: Perceived Usefulness of EKR will have a positive effect on Knowledge Seeking Attitude.

All else being equal, we claim, an EKR that is perceived to be easy to use is more likely to be used by knowledge seekers (Davis 1989). Seeking Effort is defined as the degree to which a person believes that the act of seeking knowledge would be free from effort (Davis 1989). Hence, we hypothesize:

H9: Seeking Effort will have a negative effect on Knowledge Seeking Attitude.

Knowledge Growth can serve as a positive motivator for knowledge seekers who want to accelerate this learning process by imbibing the experiences of others (Wasko et al 2000). According to Triandis (1980), Perceived Consequences is an important determinant of behaviour. Of its 3 dimensions, Complexity and Job-Fit are near-term in nature (Thompson et al 1991) and are analogous to Perceived ease of Seeking and Perceived Usefulness as defined above. Long Term Consequences of Use represents outcomes that are likely to payoff in future by increasing flexibility to change jobs or increase opportunities for more meaningful work. A study by Ernst & Young LLP revealed that employees seek knowledge because it adds distinct value to them. Therefore, we hypothesize:

H10: Knowledge Growth will have a positive effect on Knowledge Seeking Attitude.

We define Future Obligation as the perceived belief of being indebted to the knowledge contributor for having sought his or her knowledge from the EKR, out of one's morality and/or conscience. Although knowledge could be regarded as a 'public' good in theory, workers often prefer to hoard their knowledge in practice because they perceive that knowledge sharing reduces their personal utility (Orlikowski 1996). According to Constant et al. (1994), "Knowledge sellers provide their knowledge to buyers expecting to be paid back with reciprocal exchange..." Thus, we hypothesize:

H11: Future Obligation will have a negative effect on Knowledge Seeking Attitude.

Trust makes knowledge exchanges less costly (Zaheer et al 1998) and increases the likelihood that newly acquired knowledge is sufficiently absorbed so as to be useful to the recipient (Levin et al 2002). According to Gambetta (1988), trust influences the degree of positive attitude regarding the trustee. In the context of our research, trust in the knowledge contributor and knowledge in the EKR itself, can lead to a favorable disposition to seek knowledge from the EKR. Thus, we hypothesize:

H12: Trust will have a positive effect on Knowledge Seeking Attitude.

3.3.4 Antecedents of Perceived Behavioural Control

We attempt to measure the "internal factors" that constitute perceived behavioural control as *Self-Efficacy* and *Perceived Information Asymmetry*. The "external factors" are measured as *Resource Facilitating Conditions*.

Causal tests have indicated that, the higher the level of induced self-efficacy, the higher the performance accomplishments (Bandura 1982). The role of self-efficacy in IS usage behaviour has been studied in earlier studies (Taylor and Todd, 1995; Compeau and Higgins 1991). Extending the notion of *Self-Efficacy* by defining it as the individual's belief that he or she has the technical capability for seeking knowledge from the EKR, we hypothesize:

H13: Self Efficacy will have a positive effect on Perceived Behavioural Control.

Perceived Information Asymmetry is defined as an individual's belief regarding their lack of information about the knowledge sought from the EKR. We feel that, for an individual with a high degree of *Perceived Information Asymmetry,* the usage of EKR to seek knowledge is of little value. In a typical knowledge transfer process (using an EKR) between a knowledge seeker and a knowledge contributor who have no personal relationship, even if the provider knows his/her own expertise and the exact value of the knowledge he/she is able and willing to provide, the knowledge seeker is not certain about the value of the knowledge that he is going to acquire because of either unknown quality or unknown relevancy (Geng et al 2003). Thus, we hypothesize:

H14: Perceived Information Asymmetry will have a negative effect on Perceived Behavioural Control.

Resource Facilitating Conditions are defined as technology unrelated objective factors, 'out there' in the environment, such as *Training*, *Management Support*, *Slack Time* and low *Time Pressure* that several judges or observers can agree to make the act of seeking knowledge in an EKR easy to do. Thus, we hypothesize:

H15: Resource Facilitating Conditions (availability of Training, Management Support, Slack Time and low Time Pressure) will have a positive effect on Perceived Behavioural Control.

4 RESEARCH METHODOLOGY

4.1 Instrument Development

Questionnaires represent an exploratory survey approach which is structured and allows quantitative analysis for hypothesis testing. All constructs were operationalized based on our literature review for item measurement on a 5 point Likert Scale. Items were self-developed for *Knowledge Seeking Behaviour*, *Compatibility* and *Seeking Effort*. Prior to actual data collection pretesting was done with a sample of 44 full-time working professionals through an electronic questionnaire (MS Word form document) distributed by email. Instrument validity was assessed after the pretest phase as described in the following section.

4.2 Instrument Validity Analysis

SPSS was used to calculate the required reliability for each construct. Measures with Cronbach Alpha above 0.70 were acceptable and considered to be reliable. Divergent Validity of the instrument was assessed by obtaining the rotated component matrix using Varimax rotation with Kaiser Normalization. All the loadings above 0.50 were retained and all the other irrelevant items dropped. Convergent Validity of the instrument was assessed by looking at inter-item correlations among measures of the same construct. All items that had item-to-total correlations of less than 0.5 were dropped.

4.3 Data Collection

For the actual data collection we also administered the survey to part-time and full-time post graduate students at some universities. The questionnaire was personally administered to the students although full-time working professionals were still reached by email. A total of 192 respondents were surveyed eventually.

5 DATA ANALYSIS

Reliability was assessed by calculating Composite Reliability and Convergent Validity through Average Variance Expected (AVE). Discriminant Validity was assessed by comparing AVE of each construct with the square of its correlation coefficient with other constructs (Table 3).

Measures	Items	Composite Reliability	Average Variance Extracted
Knowledge Seeking Behaviour (KSB)	2	0.799	0.665
Knowledge Seeking Intention (KSI)	3	0.833	0.627
Knowledge Seeking Attitude (ATT)	3	0.833	0.624
Pro-Sharing Norms (PSN)	3	0.876	0.704
Trust (TR)	10	0.918	0.533
Perceived Behavioural Control (PBC)	3	0.820	0.603
Compatibility (COMP)	2	0.824	0.701
Perceived Usefulness(PU)	3	0.806	0.511
Seeking Effort (SEEFF)	6	0.919	0.656
Knowledge Growth (KG)	3	0.740	0.500
Future Obligation (FO)	3	0.882	0.714
Self-Efficacy (SE)	3	0.829	0.621
Perceived Information Asymmetry (PIA)	3	0.743	0.503
Resource Facilitating Conditions (RFC)	12	0.939	0.565

Table 2. Results of Confirmatory Factor Analysis

	KSB	KSI	PBC	ATT	PU	TR	SEEFF	KG	COMP	FO	SE	RFC	PIA	PSN
KSB	0.665													
KSI	0.239	0.627												
PBC	0.281	0.067	0.603											
ATT	0.075	0.154	0.110	0.624										
PU	0.124	0.189	0.065	0.272	0.511									
TR	0.035	0.030	0.031	0.007	0.027	0.533								
SEEFF	0.001	0.002	0.009	0.001	0.008	0.022	0.656							
KG	0.138	0.120	0.144	0.122	0.300	0.117	0.001	0.500						
COMP	0.026	0.054	0.095	0.073	0.239	0.288	0.022	0.162	0.701					
FO	0.006	0.007	0.005	0.011	0.072	0.062	0.001	0.109	0.064	0.714				
SE	0.149	0.045	0.135	0.026	0.100	0.004	0.017	0.035	0.087	0.021	0.621			
RFC	0.044	0.019	0.040	0.050	0.010	0.138	0.018	0.147	0.018	0.015	0.003	0.565		
PIA	0.041	0.006	0.135	0.194	0.126	0.056	0.016	0.061	0.017	0.000	0.041	0.241	0.530	
PSN	0.004	0.000	0.003	0.003	0.003	0.005	0.008	0.010	0.007	0.001	0.008	0.006	0.003	0.704

Table 3. Squared correlation coefficients (Diagonal cells indicate AVE)

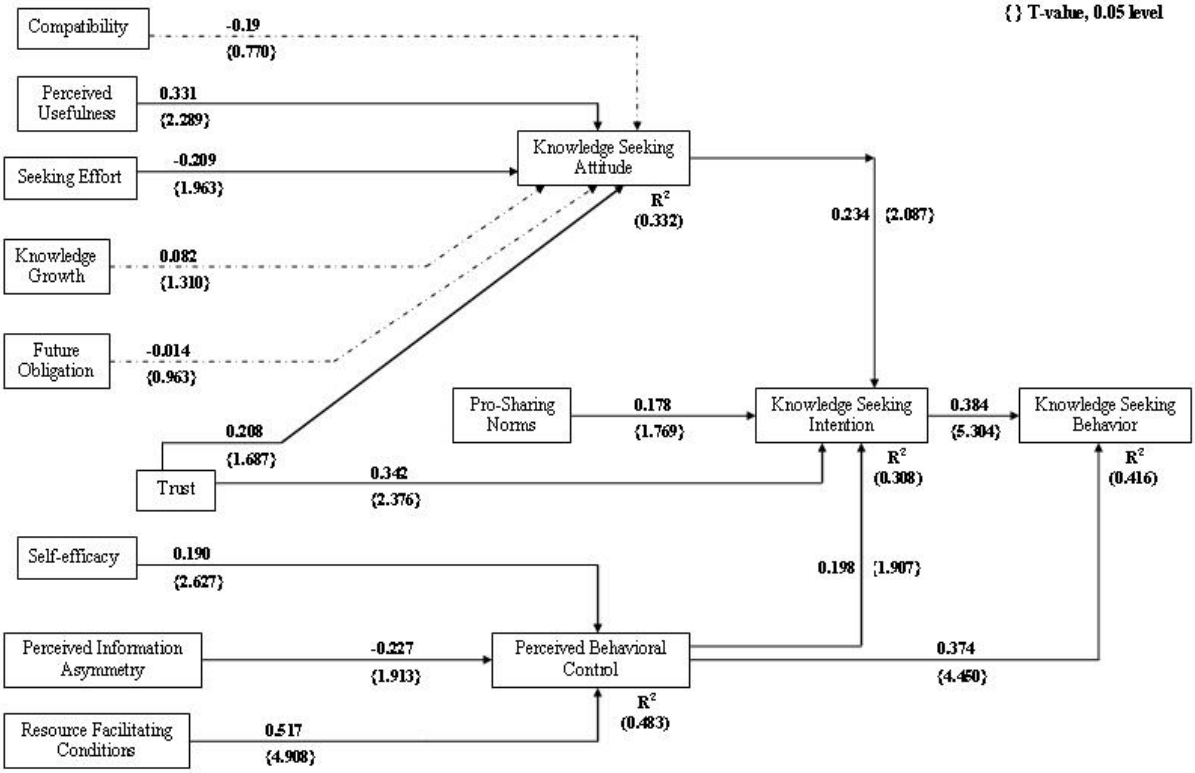

Figure 4. PLS Results

6 DISCUSSION AND IMPLICATIONS

6.1 Discussion of Findings

All hypotheses except H7, H10 and H11 were supported. Our results clearly indicate that *Knowledge Seeking Behaviour* in EKR is a direct weighted function of intention and perceived behavioural control. This is in accordance with DTPB. All hypotheses i.e. H3, H4, H5 and H6 pertaining to the antecedents of Knowledge Seeking Intention were supported. The empirical support for H3 and H6 is consistent with DTPB. It is interesting to note that *Pro-Sharing Norms* have appeared as credible substitute for *Subjective Norms.* Trust has been found to be an important determinant of consumer purchase intentions in e-commerce transactions (Gefen 2000; Gregory and Ashley 2003). However such a role of Trust has never been quantitatively measured as far as knowledge seeking behaviour in EKR is concerned. Our findings reveal that *Trust* is an important determinant of *Knowledge Seeking Intention* (H5)

Our findings re-confirm that individual's will only seek knowledge from an EKR if they perceived that its usage will greatly enhance their performance (H8) at work both due to the quality of knowledge in the EKR and the ease of finding (H9) the desired knowledge from the EKR. Although *Resource Facilitating Conditions* were statistically the most significant determinant of *Perceived Behavioural Control* it was interesting to find empirical support for the negative influence of *Perceived Information Asymmetry* on *Perceived Behavioural Control.*

We feel lack of empirical support for H7 can be explained primarily by two reasons. Firstly, the poor initial experience of respondents with EKR, would have kept them from further usage of EKR which have evolved a great deal, in terms of sophistication and user friendliness, since then. Secondly, it

could be that the belief of using an EKR to seek knowledge is not as widespread in practice as purported in theory. Informal interviews with some of the survey respondents revealed that they preferred seeking knowledge through direct means.

Knowledge Growth has been credited to be an important motivator for seeking knowledge by prior research. However the very nature of knowledge i.e. explicit knowledge stored in an EKR might tend to weaken this motivation. KM literature has long likened explicit knowledge to a "commodity" and implicit knowledge as an "expertise". Informal interviews suggested that usage of EKR was largely confined to gaining an overview of a relatively new knowledge domain as "expertise" was perceived to reside in the knowledge contributor(s).

Although in Kankanhalli'(2002) study empirical evidence supported influence of Future Obligation on usage of EKR by seekers the results of our research suggest a reversal in such thinking. We feel obligation is more likely to develop significantly in situations where there is face-face or verbal interaction between the knowledge seeker and contributor. In an EKR the contributors never really find out who sought their information. For seekers, knowledge in an EKR is akin to a "public good" owned by the organization and not the knowledge contributor. Furthermore the fact, that in general knowledge contribution is driven by extrinsic rewards (Davenport et al 1998), obviates the need for seekers to be obliged to contributors.

6.2 Implications

Firstly, as *Perceived Usefulness* and *Seeker Effort* have emerged as dominant antecedents of seeker's attitude towards EKR usage, it is manifest that for knowledge re-use to take place quality (measured as reliability, relevance and currency) of knowledge in the EKR has to be high. Secondly, the need for cultivating a positive culture in the organization regarding knowledge re-use can not be overemphasized. Superiors have to encourage their subordinates to re-use existing knowledge where appropriate. Thirdly, the role of *Trust* in seeking knowledge from EKR is of paramount importance. Only if employees have a high level of assurance that knowledge contributed to the EKR is carefully pruned for accuracy and integrity will employees use EKR for seeking knowledge for complex issues. The direction for future research would include conducting a comparative study between our model (Figure 2) and the one established in prior research (Figure 1) to cross-examine the strengths and limitations of each model. Secondly, a longitudinal study merits attention to investigate what and how determinants of knowledge seeking behaviour in EKR differ among new adopters of EKR and experienced users of EKR.

7 CONCLUSIONS

Despite being confined to investigating knowledge seeking behaviour in the context of EKR's some valuable contributions have been made by this research. Firstly and fore mostly, this is the first research of its kind that has developed an intention based model for knowledge seeking behaviour in EKR. Our proposed model (see Figure 2) provides understanding of latent psychological processes that induce knowledge seeking behaviour eventually. Secondly, our research has identified factors that are most relevant to understanding knowledge seeking behaviour in the context of EKR. For instance, *Perceived Information Asymmetry* is a concept highly applicable in knowledge transfer through a mechanism such as EKR where there is no means of face-face, verbal or interactive (e.g. integrated messaging) communication. Thirdly, our model is largely validated by empirical results to be consistent with established behaviour theories in social psychology such as Decomposed Theory of Planned Behaviour (DPTB) and Technology Acceptance Model (TAM). Further our model meets reasonable expectations of parsimony and predictive capability.

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