Shhh! – Knowledge Hiding in e-Governance

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ABSTRACT

Research shows that e-governance projects in developing countries tend to have high partial or total failures. One of the problems which these projects may be facing is in the transfer of knowledge, or more specifically, knowledge hiding. Knowledge hiding is the intentional attempt to hide knowledge from a recipient group. If knowledge is hidden from the recipient group, the aims of the e-governance projects may not be met, which may also impact future projects. A review of the strategy literature on knowledge transfer should reveal the characteristics or behaviors that will lead to knowledge hiding.

Keywords*:* e-governance, knowledge knowledge hiding, knowledge transfer

1. Introduction

E-governance has been defined as the use of information and communication technologies, and particularly the Internet, as a tool to achieve better government (OECD, 2005). It allows the government to provide information to other government departments, citizens and businesses on its affairs, or aid in streamlining processes, thereby reducing time and costs for both the government and its stakeholders. Thus, the importance of implementing e-governance is being recognized in many countries today.

One of the existing challenges that India still wrestles with is continuing corruption and lack of cooperation in places where e-governance projects are being implemented and presents itself with many challenges to try and overcome these problems. One of the challenges in the provision of these e-governance services is in the transfer of knowledge. Although training programs are instituted for e-governance projects, the actual knowledge to be transferred from the local e-governance program coordinators who are responsible for providing the e-governance services may be a problem. This prevents the program from achieving its full potential and provides the project's target audience with more questions and further hurdles. One such concept that impedes the transfer of knowledge is knowledge hiding, defined as the intentional attempt to withhold or conceal knowledge that has been requested by another group or individual (Webster, Brown, Zweig, Connelly, Brodt and Sitkin 2008). Knowledge hiding comes about as a result of the individual or group's intentional behaviors that go against those that are expected from other groups or individuals. Based on a literature review identifying characteristics of knowledge transfer, this paper will look at identifying those characteristics or behaviors that may result in knowledge hiding.

2. Knowledge Transfer

Drucker suggested that the greatest change in the way business is being conducted is the accelerating

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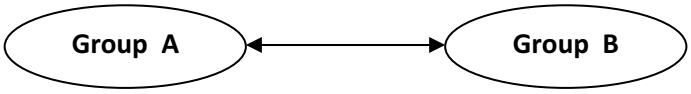
growth of relationships based on relationships (Drucker 1995).

In a dyadic relationship, knowledge flow moves from one person or group to another. Since knowledge transfer in e-governance projects typically involves two groups of people, the coordinators and the target audience, this paper will assume that the knowledge transfer will happen between groups. Hence, in the figure below, the transfer of knowledge happens from the originating group (Orig-G) to the recipient group (Rec-G). The flow of knowledge generally goes both ways and the reference of Orig-G or Rec-G depends upon which group one uses as a frame of reference. For example, in the dyadic relationship between Group A and Group B shown below, From Group A's point of view, it considers itself the Orig-G and Group B is then considered the Rec-G. Similarly, from Group B's point of view, it is the Orig-G and Group A is then considered the Rec-G. We can then talk about issues with the Orig-G or Rec-G, and it will be applicable to both groups.



Generally, when two groups initially interact, one would expect that the transfer of knowledge between groups should not be a problem. But problems do exist. The strategy literature has not adequately addressed problems in knowledge transfer. Important constructs in explaining the difficulty of knowledge transfer have received scant systematic attention from researchers (Szulanski 1996). In addition, there has been little work on the barriers to knowledge transfer (Crossan and Inkpen 1994). Problems in knowledge transfer may happen as a result of various characteristics and behaviors displayed by the Orig-G and the Rec-G. These problems will then result in a behavioral change towards the other group. This change would result in a shift in the dynamics of the dyadic relationship, resulting in a reduction in knowledge transfer efforts from the Orig-G to the Rec-G. One particular behavioral change displayed by the Orig-G is to intentionally restricting the knowledge that it could transfer to the Rec-G. Such a behavior is called knowledge hiding.

3. Knowledge Hiding

Knowledge hiding is defined as the intentional attempt to withhold or conceal knowledge that has been requested by another individual (Webster, Brown et al. 2008). Webster et al. empirically found that this newly formed construct is different than other related constructs such as knowledge hoarding (knowledge accrued which may or may not be shared), silence (not necessarily intentional) and secrecy (individual characteristic) and was shown to not be the behavioral opposite of knowledge sharing. The knowledge hiding construct is comprised of three dimensions: playing dumb (pretending to not know of the knowledge requested), evasive hiding (offering some other information instead of what is really requested) and overt or rationalized hiding (not permitted to share this knowledge). Although the knowledge hiding construct was empirically tested using a dyadic situation between members or groups within an organization, this paper attempts to extend this construct to the dyadic group situation in e-governance projects. In this case, the Rec-G requests information from the Orig-G, and it is the Orig-G that decides to hide knowledge from the Rec-G. The intention to hide knowledge can be seen as an offensive tactic by the Orig-G based on its own characteristics or motivations, or as a defensive maneuver due to negative behaviors exhibited by the Rec-G. The Orig-G may choose to only disclose a portion of the information, or no information at all. To identify the antecedents of the knowledge hiding construct in a dyadic group relationship, an extensive literature review on knowledge transfer is performed. The identified antecedents will be those that play a significant role in promoting knowledge hiding knowledge.

4. Originating Group Characteristics

4.1 Group Attitude

Group attitude reflects the attitude of the Orig-G's members towards the overall readiness to transfer information. Group attitude could be as a result of the conservativeness of the group, the attitude towards the project, or general morale. One would expect that the Orig-G whose members are generally conservative in nature will have a harder time transferring knowledge due to their nature as there would be a general uncomfortable feeling in opening up to the Rec-G members. Group attitude could also include the attitudes of members towards other groups. In some cases, there may be internal resistance to the e-governance project as this may have been a project that was implemented without their input. It may also involve further training and increased workload, which may result in the group members feeling resentment towards the e-governance project. The e-governance project may also result in group members feeling a loss of ownership, position of privilege or superiority (Szulanski 1995) due to the implementation of such projects usually being done by outside government organizations or private groups. This collective resentment could be widespread across the group members, resulting in an overall negative attitude curtailing the attempt to transfer knowledge and further resulting in the members not feeling motivated in sharing knowledge. The group members may try to sabotage any efforts group management may have in ensuring project success. Hence, the overall group attitude would result in intentional withholding of knowledge, or knowledge hiding.

4.2 Opportunistic Behaviors

Opportunistic behavior arises when a group displays advantageous behavior, advancing its individual interests against those interests agreed to or understood by both groups in the dyadic relationship (Parkhe 1993). These behaviors may come about if the benefits of sharing knowledge within the relationship do not outweigh the expected costs (Appleyard 1996). Parkhe (1993) empirically found that the performance of a relationship was negatively related to the extent to which the parties perceived each other as behaving opportunistically. The opportunistic behaviors exhibited by the Orig-G are those that are directed towards the Rec-G. Advantageous behavior may include preventing the transfer of information to establish a power relationship or control over the Rec-G, or it might be waiting for a bribe. These are behaviors that are offensive in nature rather than defensive in that the Orig-G actively takes steps to withhold knowledge without any other external triggers. Hence, the Orig-G may begin to hide knowledge as a first step towards its display of opportunistic behavior.

4.3 Lack of Incentives

The transferring of knowledge ultimately must come from the Orig-G's group members to the Rec-G. Incentives may be required for these group members to motivate them to share knowledge as they may not be motivated to transfer knowledge on their own. Individuals motivated internally (personal motivation) or externally (monetary incentives) enhance the transfer of knowledge (Osterloh and Frey 2000). O'Dell et al. (1998) state that management and co-worker reinforcement is critical to achieving support for knowledge transfer. Minbaeva et al. (2003) was able to empirically show that member incentives were able to affect the group members' abilities and motivations to transfer knowledge. Management would have to institute some incentives to entice group members to transfer knowledge. Without these incentives, group members may hide knowledge as they may not see any personal or professional gain in transferring knowledge.

4.4 Knowledge Ambiguity

Knowledge ambiguity is defined as a lack of understanding of the logical linkages between the actions and outcomes, inputs and outputs, and causes and effects that are related to process know-how (Lippman and Rumelt 1982; Reed and DeFillippi 1990). Knowledge can be ambiguous if it is difficult to imitate (Simonin 1999) or sticky in nature (Szulanski 1996). Ambiguity can also happen if knowledge is not properly

articulated or codified (Zander and Kogut 1995) or it faces barriers and is relatively immobile (Simonin 1999). If the knowledge is neither tacit nor context specific, the result may be the inability to reach a common language between Orig-G and Rec-G, increasing the ambiguity of the knowledge (Inkpen 2008). Its transfer depends upon how easily it can be transported, interpreted and absorbed (Hamel, Doz and Prahalad 1989). The Orig-G must be able to take the knowledge to be transferred, and be able to disseminate it in a way that is understood by the Rec-G. Crossan et al. (1995) state that successful relationships are accomplished when the ambiguity of the group's skills are overcome, in which one of the skills could include the transfer of knowledge. Given that the Orig-G is not able to properly translate knowledge, or it perceives this exercise to be a difficult one, it may decide to intentionally hide knowledge.

4.5 Knowledge Type

Knowledge type is defined as that knowledge which is unique or knowledge that is core to Orig-G, deemed as proprietary knowledge. There will always be hesitation in sharing this type of information by the Orig-G due to its sensitive nature, with leakage resulting in possible opportunistic behavior by the Rec-G. The Orig-G may have strict policies or shielding mechanisms aimed at protecting this information (Inkpen and Beamish 1997), which it may choose to implement through the partitioning of tasks and the separation of experts, rendering the proprietary technology as "walled off" (Baughn, John, Johannes and Richard 1997). Groups must be careful to find the right balance between maintaining open knowledge exchange to further the goals of the relationship and avoid unintended leakage of valuable knowledge (Oxley and Sampson 2004). Given the nature of this type of knowledge, the ability of a group to share this knowledge would be subject to hesitation, slowing down the knowledge transfer process and possibly resulting in knowledge hiding.

5. Recipient Group Characteristics

5.1 Absorptive Capacity

Absorptive capacity is defined as a group's ability to recognize the value of external knowledge, internalize it and apply it (Cohen and Levinthal 1990; Koza and Lewin 1998) which could be a function of a group's preexisting stock of knowledge (Cohen and Levinthal 1990; Szulanski 1996). However, there is always a limit to a group's capacity to absorb knowledge. The actual level of learning by a group is subject to the group's cognitive and physical limitations (Simonin 1999). The ability of a receiver of knowledge to "unpackage" and assimilate it is a function of whether the group has some overlapping knowledge base with the source (Mowery, Oxley and Silverman 1996; Szulanski 1996) which is seen as a critical component of a group's absorptive capacity (Dyer and Singh 1998). Once the capacity of a group is reached, or if it is felt that its actual capacity is very low, its ability to deal with the transfer of knowledge would be expected to degrade to some degree. With the Rec-G being unable to exploit outside sources of knowledge as a result of a limitation in its absorptive capacity (Szulanski 1996), this lower ability in the level of adaptation would result in a decreased level of knowledge transfer (Williams 2007). Szulanski (1995) found that a recipient that lacks absorptive capacity will be less likely to recognize the value of new knowledge, assimilate that knowledge and apply it successfully to commercial ends. Thus, a low absorptive capacity would cause problems in receiving the knowledge being transferred. The Rec-G may continually ask for clarification or repeated transfer of the same information, which may be signal to the Orig-G that it is not capable of absorbing the amount and depth of knowledge being transferred. This negative perception will then result in the Orig-G being hesitant in its efforts to share knowledge. This would then further result in the Orig-G hiding knowledge from the Rec-G.

5.2 Lack of Trust

Kumar (1996) defines trust as "depend-ability" by the groups in which a leap of faith is made that each group is interested in the welfare of the other. Inter-group trust will emerge between groups when they have successfully completed transactions in the past and they perceive another as complying with the norms of

equity and reciprocity (Ring and Van De Ven 1992; Dhanaraj, Lyles, Steensma and Tihanyi 2004; Inkpen and Pien 2006). Successful relationships exhibit trust between the groups (Koza and Lewin 1998; Lane, Salk and Lyles 2001) and can affect the extent and efficiency of knowledge exchange leading to transparency and openness with each other (Inkpen and Pien 2006). Groups often face a dilemma in trying to balance protection of intellectual capital with the openness and information sharing needed to successfully carry out the joint tasks for which the relationship was created (Baughn, John et al. 1997).

Trust also enhances social capital and plays a key role in the willingness to share knowledge (Inkpen and Tsang 2005). Kale et al. (2000) found that relational capital based on trust between groups created a basis for learning and transfer of knowledge. However, if the Rec-G is seen as untrustworthy, this could lead to a hesitation in knowledge transfer. Initiating a transfer of knowledge from the Orig-G will then be difficult and subject to challenge and resistance (Szulanski 1996). In addition, in many new relationships, the groups are often suspicious of each other and of the value of the collaborative opportunity, contributing to knowledge transfer problems (Inkpen and Pien 2006). A lack of trust will then result in a breakdown of the value creation process in an relationship resulting in information exchange that is low in accuracy, comprehensiveness and timeliness (Inkpen 2000). The lack of trust may not give groups the confidence in the other group's abilities, giving rise to a hesitancy in transferring information and hence the hiding of knowledge.

5.3 Lack of Relationship

The relationship between groups plays a significant role in the transfer of knowledge. Previous research in this area suggest that when knowledge exchanges take place, social considerations between parties in the relationship are in play (Kachra and White 2008). As the transfer of knowledge may be between members from each group in the relationship, Lei et al. (1992) state that interaction between members leads to faster learning. Attachment between groups develops through investments the groups make in the relationship over time (Seabright, Levinthal and Fichman 1992) and allow knowledge to be transferred (Inkpen and Pien 2006). Kale et al. (2000) found that relational capital, defined as close interaction at the personal level between groups, that was based on respect and friendship, enhanced the transfer of knowledge across the exchange interface. Dhanaraj et al. (2004) were able to show that the strength of a relationship positively influenced the transfer of both tacit and explicit knowledge, leading to higher performance in the relationship. Kachra et al. (2008) were able to empirically show that stronger social relationships contribute to a higher level of know-how transfer. In contrast, lack of a relationship was found to be a barrier to the transfer knowledge (O'Dell and Grayson 1998) and an arduous relationship was shown to affect the transfer of knowledge (Simonin 1999). This would be further compounded by the fact that the Rec-G members may not be part of a group where members are able to interact on a daily basis. This would lead to a group with no social cohesion further dampening the relationship with the Orig-G members. Thus, the lack of a relationship between groups would result in a loss of confidence in the group's abilities. This might allow the Orig-G to lose motivation in communicating with the Rec-G, resulting in knowledge hiding.

5.4 Opportunistic Behaviors

Opportunistic behaviors of the Rec-G are those demonstrated by the Rec-G and recognized by the Orig-G. One example of such a behavior could be the intentional provision of false information or an attempt to shift the power in the relationship towards the Rec-G. The Orig-G may have an impression that there is an imbalance in reciprocity (Kachra and White 2008) due a perceived lack of effort or contribution by the Rec-G. The Rec-G may also be perceived as a free rider in receiving information, one who enjoys the benefits of the collective good without contributing to its establishment and/or maintenance by also transmitting information back to the Orig-G (Dyer and Nobeoka 2000) where such an exchange is warranted. These opportunistic behaviors as demonstrated by the Rec-G will result in the Orig-G losing confidence in the Rec-G, resulting in it hiding knowledge from the Rec-G as a defensive strategy to protect itself.

5.5 Organizational Distance

Organizational distance represents the degree of dissimilarity between each group's organizational culture (Simonin 1999). If two groups in a relationship are similar in nature, then there is a comfort level associated in dealing with each other. Certain assumptions regarding certain practices such as communication and working styles can be made, making it easier to identify and resolve issues. Szulanski (1996) empirically shows that the transfer of knowledge is dependent upon supportive organizational characteristics. It was also found that there are higher patterns of knowledge transfer between relationships that were culturally similar (Mowery, Oxley et al. 1996). Here, culture would be representative of a group's collective values and ways of thinking or even social class. A low cultural dissimilarity would result in a smoother transfer of information from one group to the other. The ability to absorb knowledge from external sources requires flexibility in adapting to knowledge created in dissimilar cultures (Bhagat, Kedia, Harveston and Triandis 2002). Given that a dissimilar culture may exist, greater efforts would be required to try and transfer knowledge to the Rec-G. However, there are limits to the amount of effort and flexibility that a group may want to go through to transfer information. If the efforts are too cumbersome, then the transfer of information may not happen. Thus, group diversity can cause problems in the knowledge transfer process (Inkpen and Pien 2006). This would then lead to the Orig-G restricting the amount of knowledge it will transfer to the group and engage in some form of knowledge hiding.

6. Concluding Remarks

One of the aims of e-governance projects is to provide access to knowledge (or reduce access time) that a recipient group might not have had previously. Knowledge transfer between groups could be hampered based on characteristics or behaviors of each of the groups in the relationship which could lead to the group originating knowledge transfer hiding knowledge from the recipient group. Reviewing the literature on knowledge transfer provides a list of characteristics that may become problems in knowledge transfer. Based on these problems in knowledge transfer, they may result in the intentional withholding of information to the recipient group, known as knowledge hiding. If knowledge hiding continues, then the original aims of the e-governance projects will not be met, leaving a dampened energy towards future e-governance projects.

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