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Managing Multiple Identities in Organization-wide KM: A Case Study of Wipro Technologies

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ABSTRACT
A common, but important issue with large Information Technology (IT) organizations that implement Knowledge Management (KM) strategies is end-user apathy and indifference towards the KM initiative in organizational units. End-user communities associate themselves minimally with the organization-wide KM apparatus, rarely contributing to the initiative, or/and in a few cases completely dissociate themselves from the KM initiative. Here, we analyze the qualitative data collected from an in-depth case study of the KM implementation at Wipro Technologies, one of India’s largest IT organizations and a KM pioneer, through the lens of the Social Identity Theory (SIT). Evidence from the case points to the dominance of multiple social identities. The enactment of the various social identities in everyday organizational life underlay the end-user responses. It emerged from the case that evoking organizational identities in end-user communities in the context of sharing and contributing explicit knowledge is an important challenge facing organizational KM strategies.

Keywords
Knowledge management (KM), Case study research, Social Identities

INTRODUCTION
Strategic organizational interventions bracketed under the rubric of knowledge management (KM) typically involve the implementation of one or more IT-based systems designated as knowledge management systems (KMS) (Alavi and Leidner, 1999, 2001; Alavi and Tiwana, 2002; Gray, 2000; Schultze and Boland Jr, 2000). It is argued that the response of the organizational constituents to the expectations of organization-wide KM depend on unique embedded social contexts in the various organizational constituencies (Davenport, De Long and Beers, 1998; Gold, Malhotra and Segars, 2001; Hansen, 2002). Particularly so, in the case of organizations with highly decentralized multiple organizational units where organizational members, in addition to their identification with the organization, also closely identify with various local entities such as work groups, department etc. Researchers point out that the membership of each of such social entities or categories provides members with unique social identities, which guide their behavior in various organizational contexts (Ashforth and Mael, 1989; Hogg and Terry, 2001; Tajfel, 1981). This study attempts to understand the tensions inherent in the relationship between the organization-wide KM initiatives for sharing explicit knowledge and the multiple social identities enacted in everyday organizational life. Particularly the study addresses two research questions. 1. How do multiple social identities impact knowledge management behaviors? 2. How do IT organizations moderate the impact of multiple social identities in the context of organization-wide KM?

We adopt the case study methodology (Myers, 1994; Orlikowski, 1993) and consider the implementation of an organization-wide KM initiative at Wipro Technologies, India. As pointed out by Benbasat et al. (1987, p.370), the relevance of the case study method is further enhanced in the light of the shift from purely technological issues to organizational issues, such as the ones discussed in this paper. Further, the potential of the case study to generate rich data places it in a good position to explain complex social phenomenon in organizations (Yin, 1994). The paper is organized as follows: After a brief introduction, we look at the existing literature on knowledge management approaches followed by a brief review of the Social Identity theory (SIT) and related concepts. A note on the research methodology and the description of the case follows. Subsequently, we present the important findings of the case and conclude by highlighting the important theoretical and managerial contributions of the research.
A REVIEW OF KNOWLEDGE MANAGEMENT (KM) AND SOCIAL IDENTITY THEORY (SIT)

KM in organizations involves the implementation of IT-based knowledge management systems (KMS), which are equipped to capture, store and disseminate various forms of organizational knowledge (Alavi and Tiwana, 2002; Massey, Montoya-Weiss and O’Driscoll, 2002; Newell, Huang, Galliers and Pan, 2003). A typical KMS acts as a window to an organization’s specialized knowledge found in repositories and also includes various IT-enabled initiatives such as discussion forums, newsgroups etc., which promotes greater interaction among and between organizational end user communities (Ruppel and Harrington, 2001). While KM processes promise to channel dispersed knowledge resources towards more effectively meeting business objectives, researchers have also pointed out that realizing benefits from KM processes is contingent upon local socio-cultural factors in the organizational milieu (Brown and Duguid, 2001; Pentland, 1995). Unique subcultures are seen to represent an opposing force when attempts are made to integrate large enterprises (that hitherto functioned as autonomous powerhouses within the organization) through strategic initiatives like KM (Ghoshal and Gratton, 2002). Thus the challenge of a formal KM strategy is seen as the smooth integration of the KMS into the organizational mainstream such that it is not perceived as a head-on cultural intrusion. While numerous studies have linked concepts of organizational culture/subculture with KM (De Long and Fahey, 2000; Ruggles, 1998), a less examined idea that offers useful insights into drivers and limitations of KM is to relate organization-wide KM to issues of identity in organizations. Specifically the Social Identity Theory (SIT), when applied to organizational KM research potentially offers a deeper understanding of the nuances of organization-wide KM.

At the root of the Social Identity Theory (SIT) formulated by Henri Tajfel and John Turner (Tajfel, 1981; Tajfel and Turner, 1985; Turner, 1975, 1982) is the concept of social identification. Ashforth and Mael (1989, p 20) define social identification as “the perception of oneness with or belonging to some human aggregate.” According to the social identity theory, social categories (e.g., organization, work group, etc.) to which one belongs provides a definition of who one is, in terms of the defining characteristics of the category (Hogg and Terry, 2000). The membership of each social category is represented in the mind of the individual as a unique social identity, which prescribes and regulates the individual’s behaviors in various contexts of everyday life (Ashforth and Mael, 1989). Thus the Social Identity Theory (SIT) has the potential to explain behavior at the collective level as also groups of people hold on to and identify with unique multiple social identities, which provide them a frame of reference for conducting themselves in everyday life (Pratt and Foreman, 2000).

A relatively recent development is the application of the Social Identity theory (SIT) in organizational research (Dutton and Dukerich, 1991; Peteraf and Shanley, 1997). Social Identity Theory (SIT), by virtue of being a theory that seeks to explain group processes and intergroup relations (Hogg, Terry and White, 1995) is equipped to offer insights into the complex dynamics of organizational life. Particularly so since within an organization there are various social categories/entities whose membership leads to the presence of a number of social identities (Hogg and Terry, 2001). One way of categorizing these multiple social identities is to view them as comprising of higher order identities (e.g. the organization) and lower order identities (e.g. work group, job, department etc) (Ashforth and Johnson, 2001). In organizational life, in addition to the obvious organizational identity (Dutton and Dukerich, 1991; Scott and Lane, 2000), which could be considered as a higher order identity, members also hold on to a number of other lower order social identities such as identities corresponding to one’s work group, department, unit, project team and so on (Hogg and Terry, 2000). Thus the range of the social identities, which organizational groups evoke in various circumstances, extends from their own group identity to other larger identities, of which the groups form a part. When specific social identities are evoked, group members tend to enact behaviors that favor the evoked social identity and counter groups that are perceived as infringing upon their evoked social identity (Ashforth and Mael, 1989). We base this research on a possible simple research framework, which could be extrapolated from the principles of Social Identity Theory (SIT) and applied to large IT organizations. The framework involves looking at the interplay of three obvious social identities in IT organizations with the implementation of organization-wide KM, namely the project team identity, the business unit identity & the client identity.

RESEARCH METHODOLOGY

We adopted the case study methodology to understand the major issues surrounding the implementation of the KM initiative at Wipro Technologies. In Information Systems Research, the case study method remains one of the frequently adopted research methods, and the felicity of the method is well documented (Cavaye, 1996; Myers, 1994; Orlikowski, 1993). In particular, our study follows the traditions of interpretivist research that underscores and recognizes the difficulties of objectively accessing reality in organizational research. In our study, we benefited hugely from the open-ended interviews and free-wheeling discussions with organizational members which guided us towards understanding the often understated, but obvious themes underlying the language and actions people used, to explain their responses to the organization-wide KM initiative. We utilized different sources of evidence. We conducted 30 open-ended interviews and 10 follow-up discussions with software engineers, middle level managers and the KM implementation team. Typically each interview lasted for an hour and was conducted at the Bangalore, India, development center of Wipro Technologies. All interviews were taped with
prior permission and transcribed. Qualitative data that assisted the case analysis included the transcripts of the taped interviews, follow up discussions via e-mail and telephone, KM artifacts and notes made during the informal interviews.

THE CASE

Wipro Technologies is the global IT services and products segment of Wipro Limited, an India based IT organization headquartered in Bangalore, India. At present, Wipro Technologies employs close to 25,000 people and accounts for more than 75% of the Wipro Limited revenues. Wipro Technologies operates as an autonomous entity headed by a CEO, who reports directly to the Chairman of Wipro Limited. In this paper, all references to the “organization” refer to Wipro Technologies. Wipro Technologies has more than 300 global clients, offering them a host of IT solutions including software application development and maintenance, research and development services, package implementation, systems integration and Business Process Outsourcing (BPO) services. Organized into a number of strategic business units called verticals (defined, based on the industry segment of the customer, e.g. Retail, Manufacturing etc.) and horizontal (defined, based on the technology focus), Wipro Technologies has offices spread across countries in Asia, Europe and North America and employs people from as many as 14 different nationalities.

In late 2000, a top management driven organization-wide KM initiative was initiated and a dedicated, full-time knowledge management (KM) implementation team was set-up. At present, the head of the KM implementation team reports to the CQO (Chief Quality Officer) of Wipro Technologies and holds complete responsibility for implementing KM at Wipro Technologies. Reporting to the Head of the KM team are knowledge managers responsible for implementing and managing the knowledge management activities in each of the strategic business units. The knowledge managers also report to the heads of their respective business units. In addition, part-time volunteers in each strategic business unit assist respective knowledge managers to manage KM related activities in their units. The KM initiative, riding on the strong IT capabilities of the organization aimed to enhance the ability to access existing information in real time and shorten product and project life cycles. It was also anticipated that the KM initiative would foster a collaborative work culture and capture the explicit and tacit elements of the dispersed organizational knowledge. Over the past three years the KM initiative has evolved gradually and at present revolves around the organization-wide knowledge portal called KNet (see Figure 1 and Table 1).
Managing Multiple Identities in KM implementation

Figure 1. A Snapshot of KNet

A full-fledged KM development team headed by a development team leader takes up responsibility for developing and maintaining the KM applications. The KM initiative at Wipro Technologies follows three key recurring and overlapping phases, namely 1) Planning and Refining the IT-based KM infrastructure 2) Awareness and Acceptance phase 3) Benefits measurement phase.

The KM implementation team plans for new IT-based KM applications while refining the existing ones on a continuous basis based on the feedback from the end-user communities (Phase 1). The implementation team also employs different metrics to measure the benefits of the KM initiative (Phase 3). A member of the development team responsible for the management of the KM applications explained: “For the KM initiative, we use a KM engagement index and KM effectiveness index. The engagement index involves parameters like the usage of KM applications and contributions to the KM initiative. The effectiveness index involves the measurement of our KM systems against parameters like response to queries and improvements in productivity and quality.” However, one of the most vital phases of the organization-wide KM initiative remains the ‘Awareness and Acceptance phase’ during which the end-user responses to the KM initiative unfold.

<table>
<thead>
<tr>
<th>KM initiative (KNet)</th>
<th>KM system</th>
<th>System description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecting people to content</td>
<td>Sales support knowledge base</td>
<td>Provides key information to sales personnel</td>
</tr>
<tr>
<td>5500 knowledge artifacts are spread across 150 categories &amp; 20 document types.</td>
<td>Technology support KM system (TecKnet)</td>
<td>Captures and allows for sharing of technical knowledge artifacts, which reduces rework and also improves time-to-market</td>
</tr>
<tr>
<td>On an average 400 knowledge artifacts are added every month</td>
<td>Reusable components repository</td>
<td>Eliminates redundancies and allows for sharing of components</td>
</tr>
<tr>
<td></td>
<td>Project data bank</td>
<td>Provides instant access to all project information</td>
</tr>
<tr>
<td>Connecting people to people</td>
<td>Communities and special interest groups (KNetworks)</td>
<td>Leverages tacit knowledge by getting people to come together and share</td>
</tr>
<tr>
<td></td>
<td>Yellow pages/Find-the-expert (KoNnect)</td>
<td>Profiles employees with regards to their area of expertise making it easier to contact experts</td>
</tr>
<tr>
<td></td>
<td>War rooms</td>
<td>A virtual space for top management and middle level managers at different physical locations to collaborate</td>
</tr>
<tr>
<td>KM sustenance programs</td>
<td>KM effectiveness and engagement index</td>
<td>Uses Six Sigma methodologies to gauge engagement and effectiveness of all KM systems</td>
</tr>
<tr>
<td></td>
<td>Rewards and recognition</td>
<td>Attempts to institutionalize the KM initiative across the organization and motivate employees through virtual cash points, certificates of recognition etc.</td>
</tr>
</tbody>
</table>

Table 1. Knowledge management systems (KMS) at Wipro Technologies

Awareness and Acceptance phase

‘Awareness and Acceptance phase’ is the phase wherein the knowledge managers engage themselves fully in spreading awareness about the KM initiative within their respective business units and make attempts to get the end user communities such as software development teams and sales and business teams to participate in the KM initiative. The four-year old KM initiative has been accepted at a broad level by the end-users in the various organizational units. While in some units, this acceptance is restricted to merely acknowledging the presence of the KM initiative, in others it has taken the shape of active participation. Considering that the organizational work force is 25,000 strong and still growing, this phase of the organization-wide KM initiative remains a continuous process with the knowledge managers attempting to reach out to more and more project teams and individuals everyday.

A knowledge manager responsible for managing the KM initiative in a vertical business unit related to the telecom sector said: “I am putting in a lot of time and effort trying to brand our KM initiative within the unit. I attend most of the meetings..."
that take place in the vertical and communicate to the middle level managers the scope and reach of our KM initiative. They in turn strongly encourage their team members to have a look at, and utilize the KM setup.”

A senior software engineer, who is a part of a 20 member project team in the same business unit however had difficulties in relating with the organization-wide KM initiative: “I don’t mind sharing my expertise with people from outside my team and from other business units, but the emotional satisfaction I get out of seeing some one in my own project team benefit from my expertise beats everything. So naturally, I am guilty of sharing information and exchanging notes mostly with my own team members. Yes, I understand that we have a KM initiative at the organizational level but for me to feel a sense of ownership towards that is not very easy.”

In another strategic business unit, a senior project-manager heading a 60 member software development team and reputed within the organization as being as a strong votary of the KM initiative said: “At least in my team, I do not see any resistance to the KM initiative. But what we need to overcome is the indifference, which I am able to do by articulating to my team how we can benefit from the KM initiative. Now, for people in my team KNet is a part of their everyday work, whether it is with regards to uploading documents or sharing information or re-using artifacts. So we just need to clearly explain to people how they as individuals can benefit and how their project team or business unit benefits from KM.”

According to a software engineer, “In units where people just don’t care or don’t see any value in KM, the role of the knowledge manager is critical. He has to do some serious selling of the KM initiative in the unit. Also, whenever heads of the strategic business units and senior project managers drive KM from the top, teams are quite enthusiastic about sharing their know-how and contributing to the KM initiative. In my team, since my manager is very keen on KM, it has become a habit for us to access KNet regularly for our needs. I guess it’s a part of the culture of our team.”

A knowledge manager with 2 years of experience in her current KM role provided a contrasting view: “In our offshore development centers (ODC) here in India we have our people developing software for large client organizations. In many cases, our clients’ biggest competitors also happen to be our clients for whom (too) we develop software. So the clients are very particular that our teams working for them don’t share vital information outside the team. Of course, we have very strong policies to ensure and protect the intellectual property of our clients. But in a KM scenario, what happens is that some of our people working in these teams tell us that they can share nothing at all with the rest of the organization claiming that everything they do is the intellectual property of the client.”

In the words of a software developer who is also a KM volunteer assisting the knowledge manager in his unit: “Some project teams and people are put-off by the term ‘KM’. They tell us that they already have a knowledge repository of their own just like KNet and suggest that KNet may not be very useful either for them or their clients. In fact, they also seem to think that they are better off staying away from any KM related activity. In such cases to make them aware of the possibilities, we avoid the use of the term KM and instead talk about ‘Making your life much easier’ and ‘sharing things that you can share’. This is another approach that we have taken towards making the KM initiative popular.”

**DISCUSSION**

Our study aimed to understand the impact of multiple social identities on knowledge management and organizational efforts to manage the impact of the multiple identities. The study brought to the fore the tensions inherent in the relationship between organizational business units/project teams and the organization-wide KM. We discuss three important findings of the study below.

**Inability to evoke organizational identity in KM contexts**

The centralized IT-based KM infrastructure demanded that the various units identify themselves strongly with the organization. The idea being that such a strong identification often would lead organizational members to actively support and contribute to the KM initiative. However qualitative data from the case suggest that in the KM contexts, members were unable to evoke their organizational identities, but rather, were more prone to enact their project team level/ business unit level identities. In other words, the lower order identities were enacted more frequently than higher order ones as members’ frame of reference for behavior were predominantly local. The need to share and contribute information in an organization-wide setting such as the KM initiative often clashed with the underlying belief that the rightful owner of the information is the unit/team. We had informants justifying their non-involvement in the KM initiative with comments like “I don’t contribute much to the KM portal because I don’t see how what I know will be of use to anybody outside my unit.” In the case of long-duration projects with a single client, identification with the client organization also became a dominant lower-order identification. For instance, the head of the KM initiative and a few knowledge managers pointed out that people refrain from sharing even basic domain knowledge with the rest of the organization taking refuge in the claim that they are violating the intellectual property of the client organization. (“I am reluctant to share because the client may not approve of my sharing project details with the rest of the organization” – A software engineer working for a leading global telecom company). A senior project manager with 8 years of experience noted: “While it is true that we cannot share classified information with the
rest of the organization, it is also true that there is a lot which we can share, but don’t.” Thus, the inability of organizational members to evoke their organizational identities remains an important challenge to overcome for the KM implementation team.

Circumventing problems of identity through middle-level managers

Lower order identities dominated the thinking patterns of organizational members at Wipro Technologies, and they were mostly guided in their KM behaviors by their lower order identities. However, KM managers, have been successful in eliciting the support of middle-level managers in promoting KM in their respective units. In fact, the extent to which KM has made inroads into the organizational milieu has depended to a large extent on the middle-level managers in the various units. Many middle-level managers have able to generate interest towards KM among members in their project teams and business units. Business units where middle level managers such as Project leaders, Project managers and Technical managers have articulated to their subordinates the benefits of KM, did exceedingly well in terms of contributing to the KM initiative. In other words, in units and teams where a strong case for KM was made out by their immediate superiors, notwithstanding the inhibitions and restrictions created by the lower order identities corresponding to project teams, business units and clients, people actively participated in the KM initiative.

Viewing the KM implementation team as an outgroup

One of the important concepts of the Social Identity Theory (SIT), v.i.z. Ingroup vs. Outgroup comparison, tells us that various elements with strong social or group identities in the organization compare themselves with other groups, and generally see themselves in a favorable light (Hogg et al., 1995). In the case of organization-wide KM, some end-user groups explained their staying away from KM by comparing themselves with the KM team. They felt that while they were the breadwinners for the organization, the KM group was merely a support group in the organization and therefore did not merit serious consideration. Thus members rationalized their behavior in relation to the KM initiative by evoking their respective lower order social identities (e.g. project team identity) and viewing themselves in a favorable light in comparison with the KM team. While the comparison with the KM team did not give them good logical reasons to refrain from participating in KM, it nevertheless further reinforced their multiple social identities.

CONCLUSIONS, CONTRIBUTIONS AND FUTURE RESEARCH

Our case study has attempted to address the major issues surrounding the implementation of an organization-wide KM initiative at Wipro Technologies. It emerged from the case that organizational members are engaged by a host of multiple social identities (e.g., business unit identity, project team identity, client identity) in everyday organizational life. Further, organizational members often choose to enact their lower order identities, which in the context of strategic initiatives having organizational relevance like KM, is an important barrier to overcome. Middle level managers play a crucial role in clearly articulating the benefits of organization-wide KM to members in their constituencies and ensuring that end user communities relate better to KM.

Traditionally, researchers have tried to explain KM behaviors by using concepts of organizational culture and subcultures. In utilizing the concept of identities, specifically a simple research framework having its origins in the Social Identity Theory (SIT), this study has attempted to move towards a theoretical explanation that has the potential to offer greater depth when understanding issues of organizational KM implementation.

From a managerial viewpoint, a key challenge in organizational KM implementation is to articulate to the end-user communities very clearly, the benefits of the KM initiative. KM implementation teams need to co-ordinate better with the organizational units and convince middle-level managers to push the initiative in their respective business units and project teams. Further research needs to be conducted to explore other issues of social and organizational identities that impact and interact with organizational KM strategies.

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