

INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE



Working Paper

IIMK/WPS/183/OBHR/2015/019

April 2015

Enactment of knowledge brokering: Agents, roles, processes and the impact of immersion

Ankita Tandon¹ Unnikrishnan K. Nair²

¹ Assistant Professor, School of Business, Foundation for Liberal and Management Education, Pune, Maharashtra. email: nikytandon@gmail.com

² Professor, Indian Institute of Management Kozhikode, email: unni@iimk.ac.in

Enactment of knowledge brokering: Agents, roles, processes and the impact of immersion

This study examines the process of knowledge brokering for organizational learning. Qualitative research methodology was employed to study learning in four Indian Social Enterprises. We mapped and analysed the process by which social enterprises engaged stakeholders within and across organizational boundaries to harness knowledge. We found that knowledge brokering was a process of spanning for, interpreting and combining two types of knowledge – expert and contextual, with strategic knowledge playing a critical background role in this process. Knowledge brokering was delineated into two roles – boundary spanning and translation. Agents who assumed and/or shared these roles were identified and the corresponding learning mechanisms were described. Variations were observed across enterprises in brokering role assumption and the location of brokers with respect to the organizational boundary and hierarchy. These were explained using the concept of immersion which emerged from the data. We employ Schein's organizational cone to develop a model of knowledge brokering, and identify conditions of effective brokering.

Keywords: Knowledge brokering, immersion, learning, social enterprise, qualitative research.

INTRODUCTION

Knowledge brokering is central and critical to organizations for learning and innovation, both at the network and organizational levels. It involves moving knowledge between different social worlds existing within and across organizational boundaries resulting in novel knowledge combinations (Hargadon, 2002). Research in the domain has primarily focused on the structural dimensions of brokering from a network perspective (Boari & Riboldazzi, 2014) with studies examining structural holes and brokering structures in networks (e.g.: Burt, 1997, 2004), and groups and firms as knowledge brokers (e.g.: Hargadon, 1998; Hargadon & Sutton, 1997). While these have contributed significantly to academic knowledge, Haragadon (2002:43) observed that: "...relatively few studies have attempted to understand the individual and group processes that first see, and then transform, these existing resources into new and innovative combinations in distant contexts." Even after more than a decade of this observation, Boari and Riboldazzi (2014) note that much research is still required to explicate the behaviours and processes of brokering. In this paper, we address this concern by investigating the process of knowledge brokering.

An analysis of brokering literature from the process perspective reveals significant lacunae in extant knowledge. First, while studies describe different knowledge brokering roles (e.g.: Gould & Fernandez, 1989; Shi, Markoczy & Dess, 2009), there is limited understanding of the levels to which they engage with knowledge and the processes involved therein. Second, brokering for a single type of knowledge, predominantly technical know-how (Cillo, 2005) has been studied. However, learning in organizations could involve multiple types of knowledge such as market knowledge (Cillo, 2005), contextual knowledge (Brown & Duguid, 1991) and technical knowledge, each of which would require the employment of different brokering mechanisms and brokering roles of agents. Third, a contradiction in our understanding of the level of embeddedness of brokers in various contexts is revealed in literature. Studies such as Wenger, (1998) identify brokers as peripheral agents who are not deeply embedded into any social world. In contrast, studies of internal knowledge brokering (e.g.: Cillo, 2005; Shi et. al., 2009) indicate that in order to be able to interpret knowledge usefully, brokers need to be deeply embedded in the organizational context, rather than being peripherally situated. In order to address these knowledge gaps, an in-depth examination of the process of brokering is necessitated.

Therefore, in this study, we take the process route to examine knowledge brokering for organizational learning. First, we discuss relevant literature to develop our research question followed by a description of the qualitative research method employed. Next, we trace brokering both within and at/outside the organizational boundary for two types of knowledge – expert and contextual; identify brokers, broking roles and learning mechanisms involved. Finally, we discuss our findings theoretically by employing Schein's organizational cone to develop a model of knowledge brokering.

KNOWLEDGE BROKERING

In this section, we review literature on the process of knowledge brokering. We examine brokering roles, knowledge processing and the linkages between the two. The process of brokering has been discussed to some extent in the interpretive paradigm of learning (Bourdieu, 1977; Brown & Duguid, 1991; Lave, 1991) which examines brokering across organizational boundaries (Wenger, 1998, 2000). Boundaries are defined as permeable or impermeable discontinuities that demarcate groups/ organizations/ social worlds (Wenger, 1998). Knowledge brokers are seen as agents who participate in multiple communities across boundaries and enable transfer of practices between the boundaries resulting in learning (Wenger, 1998). Bringing together the structure-based and process perspectives, we infer that structural holes (Burt, 2004) are equivalents of spaces between non-overlapping boundaries with brokers acting as bridges across them.

Brokering roles

Significant academic interest has gone into studying knowledge brokering roles. Gould and Fernandez (1989) describe the following five brokering roles based on the affiliations of the agents involved to same or different groups, and the brokering functions performed: gatekeeper, representative, liaison, coordinator and itinerant broker. Similarly, Wenger (2000) identifies four brokering roles, based on the actions undertaken by brokers as: boundary spanners, roamers, outposts, and pairs (Wenger, 2000). These typologies highlight the facilitative and coordination roles of brokers. However, recent studies such as Shi et. al. (2009) who examine internal brokering by middle managers, reveal that in addition to facilitation, brokers also engage in deeper levels of knowledge processing such as interpretation. This indicates that different brokering roles imply different levels of engagement with knowledge.

Levels of knowledge processing

Burt (2004) identifies four levels of knowledge processing in brokering: transferring information, transferring best practices, drawing analogies between groups, and synthesising information from different social worlds. Each of these levels indicates the need for brokers to progressively engage more intensively with knowledge. A clearer understanding of the levels of knowledge processing can be achieved by looking at discussions by Carlile (2004) and Yanow (2004). They describe three processes – *transfer*, *translation* and *transformation* of knowledge. Transfer implies the movement of knowledge across a boundary without any change in its form or content. *Transfer* takes place when knowledge is objectified or codified using a common lexicon which can be understood on both sides of the boundary (Carlile, 2004; Yanow, 2004). This knowledge is not context specific and is amenable to generalization. *Translation* occurs when knowledge is interpreted in a particular context for use through development of shared meaning (Carlile, 2004; Yanow, 2004). Carlile (2004)

describes transformation of knowledge as a political process of negotiation of interests across stakeholders. Other researchers discuss *transformation* as implied in the process of translation (Gherardi & Nicolini, 2000; Harada, 2003) and resulting in development of organizational practices (Straus, Tetroe, & Graham, 2011). Since our objective was to examine knowledge processing without looking at the political aspects of knowledge transformation, in this study, we follow the latter view of translation and transformation as entwined processes.

Linking brokering roles and levels of knowledge processing

Literature on brokering roles and levels of knowledge processing has been predominantly disjointed. However, in order to further our understanding of effective brokering, it is necessary to examine how different brokering roles interact with knowledge. A few recent studies have made efforts to link these two. For instance, Boari & Riboldazzi (2014) use Gould and Fernandez's (1989) classification of brokers and link them with Burt's (2004) brokering functions. Cillo (2005) classifies internal brokering roles for market knowledge based on cognitive distance between the contexts of the groups/organizations and the complexity of market knowledge. Nevertheless, intensive research is needed in this direction.

Linking brokering roles with levels of knowledge processing also brings to attention the location of the brokers vis-a-vis interacting organizations. Brokers are viewed as peripheral agents, moving between social worlds, or placed interstitially between organizations without belonging to either (e.g.: Burt, 2004; Gould & Fernandez, 1989; Wenger, 1998; Yanow, 2004). However, when we consider internal brokering roles (e.g.: Cillo, 2005) undertaken by middle managers (e.g.: Lomas, 2007; Shi et. al, 2009), deeper levels of translation of knowledge are indicated which require brokers to be deeply embedded in an organizational context in order to interpret knowledge usefully for the organization. This paradox requires explication though research.

In this study, we address these research gaps by closely examining the process of knowledge brokering. This study was part of a larger study on organizational learning, and the choice of our context was guided by the overall objective to extend/modify learning theory in novel organizational contexts. For this, we followed Santos and Eisenhardt (2005:503) who state that: "Rather than simply looking for organizational contexts in which the efficient locus of transactions is central, researchers might consider organizations ranging from social movements and early-stage ventures to non-profits and standards-setting bodies...." We identified social enterprises [henceforth SEs] as such a context. In the next section we discuss the distinctive features of social enterprises which made them suitable for this study.

THE CONTEXT OF THE STUDY: SOCIAL ENTERPRISES³

We defined social enterprises as organizations created to carry out the process of social entrepreneurship (Alter, 2006; Dees, 1998a; Shaw & Carter, 2007). Social entrepreneurship is a process through which social value is created by utilizing entrepreneurial and business practices to address social disparities (Austin, Stevenson, & Wei-Skillern, 2006; Mair & Marti, 2006; Nicholls, 2006; Schwab Foundation) with the objective of social transformation. The process involves development of means of earned income, wherever possible; and innovation, both incremental and radical, is an integral part of the process.

SEs develop effective, context-specific products/services by being embedded in their varied operational contexts (Mair & Marti, 2006). They provide a unique setting where social values of the organization meet the efficiency paradigm of business (Alter, 2006). Operating in resource constrained environments (Di Domenico, Haugh, & Tracey, 2010), accessing

³ This study is part of a larger qualitative study on organizational learning in social enterprises, from which multiple writings on different themes are being developed. Therefore, literature and arguments provided in the first two paragraphs overlap with some writings of the authors, which are not cited here due to review considerations. The authors would be happy to provide details of the same to the Program Chair, if required.

human resources with required competencies becomes a challenge for SEs (Center for Advancement of Social Entrepreneurship, 2008), owing to their inability to offer market level compensation to employees (Wei-Skillern, Austin, Leonard, & Stevenson, 2007.). Hence, they tend to involve part-time members, volunteers, and the beneficiary community in key roles (Dees, 1998b), and seek to actively engage with and learn from funders, experts and partners, and the target community. Thus, for successful functioning, SEs need to look beyond organizational boundaries and actively engage with different stakeholders to garner critical resources and knowledge.

Recent studies in the commercial sector also highlight a move towards including external stakeholders in learning and innovation. The inclusion of lead users and consumers in product development (e.g. Von Hippel, 2005) has been discussed, indicating the extension of the knowledge brokering role to consumers. The role of temporary workers, also termed as contingent workers, in enabling knowledge acquisition and learning (e.g. Matusik & Hill, 1998; Tempest, 2009) has also been examined. These are employees having specific knowledge and skills who are engaged by the organization through short term contracts (Assudani, 2005; Von Hippel, Mangum, Greenberger, Heneman, & Skoglind, 1997). Such an engagement of stakeholders also brings with it the risk of loss of knowledge if not effectively harnessed. While contingent workers bring in specific knowledge and skills (e.g.: Assudani, 2006, Matusik & Hill, 1998), organizations have been warned against the loss of knowledge (Tempest, 2009) unless specific ways of accumulating it are not present (Assudani, 2006).

These risks also hold for SEs, which, in addition to permanent employees, engage a wide range of agents (e.g.: contingent workers, volunteers, target community etc.) for product/service development and delivery. These agents amass critical tacit knowledge of the organization and also the target community due to their deep involvement in enterprise activities. Successful SEs are able to harness and manage this knowledge to their benefit. This indicates the presence of effective knowledge brokering processes to capture knowledge from external and internal stakeholders. Given the unique context of SEs and the possible variations in workforce configurations, multiple configurations of brokering agents and roles are potentially indicated, the study of which can significantly further our understanding of the knowledge brokering process.

Thus, we approach this study with the following research question: What is the mechanism by which knowledge is brokered within and across the social enterprise and incorporated into the organizational knowledge repertoire? What functions and brokering roles are assumed by/designated to different stakeholders such as leaders, employees, volunteers, community members and other agents at the periphery and inside the enterprise to facilitate learning?

METHOD⁴

Research sites

We followed "purposeful sampling" (Patton, 2002: 230) to identify our research sites. First we short-listed organizations from the set of SEs run by social entrepreneurs listed on the website of Ashoka Foundation,⁵ belonging to the most vibrant domains of health, education, economic development and environment. Three of the five criteria that Ashoka Foundation used for its listing - novelty of the idea, creativity and display of entrepreneurial quality - were potential indicators of active learning processes in SEs. This was further validated by studying descriptions of SE activities detailed in their Ashoka profiles and official websites. We shortlisted 199 SEs through this process. Recognizing that

⁴ This study is part of a larger qualitative study on organizational learning, from which multiple papers on different themes are being developed. Therefore, the data and method reported here would be the same for all these papers, some of which are in the publication process. The authors would be happy to provide details of the same to the program chair, if required.

⁵ Established in 1980 in the USA, Ashoka Foundation is one of the first organizations that provide financial and strategic support to select social entrepreneurs in around 60 countries across the world. It provides one of the most comprehensive criteria for selection of social entrepreneurs (www.ashoka.org).

organizational age could introduce variability in learning processes and interactions, we narrowed the sample to two groups: those established between 1991-2000 (relatively mature, N = 44) and 2001-10 (relatively new, N = 18). Then we contacted the top management team (TMT) members of these SEs, explained to them the study objectives, and sought their own assessment of availability of data relevant for this study. Data was collected in two phases such that themes emerging from data collected (in phase 1) could be subsequently elaborated and expanded (in phase 2). In both phases, we were conscious to prioritise and choose SEs based on their openness and potential to provide relevant data. Five SEs (out of 13 contacted) consented to participate. In one, much relevant data was not available as a few key individuals had recently left the SE. Finally, we studied the following four SEs: Vision Foundation (VF), Entrepreneurship Development Network (EDN), Education Foundation (EF) and Society for Social Action (SSA).⁶

VF worked with visually disabled people, providing relevant information to enable them lead normal lives, and to facilitate their social inclusion. EDN, established with the objective of economic development of underdeveloped rural areas, later expanded to cover health, education and agricultural sectors to facilitate holistic development. EF worked with Head Masters (HMs) of Government schools to develop relevant competencies which would feed into improving the quality of education. SSA worked with families of migrant workers employed in stone quarries for regularization of their children's education. SSA also developed support programmes to improve the living conditions and quality of life of these workers. Table 1 summarizes the demographics of these SEs and sources of data collection.

⁶ Names of SEs and of other organizations referred in this article have been changed to maintain anonymity.

		Entrepreneurship Development Network (EDN)	Society for Social Action (SSA)	Vision Foundation (VF)	Education Foundation (EF)
	Sector	Economic Development	Education	Health	Education
	Domain of activity studied	Support for economic development (and better health) of underdeveloped areas	Regularization of education for children of migrant workers working in stone quarries (among other objectives)	Social inclusion and support for visually impaired by providing relevant information	Capability building of head masters of municipal schools for improving the education system
Costal	Year of establishment	1995	1997	2002	2008
Social enterprises: Demographic	Organization size	280 employees + 28 part-time employees	22 employees + 52 part time employees	12 employees + 2 volunteers	101 employees (long term interns included)
information	Office under study	Regional Office (1 district)	Head Office (also the Regional Office for the city)	Head Office (the only full fledged functioning office)	Regional Office (1 city)
	Funders	Multiple Indian and foreign funders (50-50 funding)	Multiple Indian and Foreign funders (30-70 funding)	Multiple Indian funders	Multiple Indian and Foreign funders
	Funding model	Not For Profit	Not For Profit	Not For Profit	Not For Profit
	Source of funding	Donations and grants; Market rate capital	Donations and grants	Donations and grants	Donation and grants
	No. of interviews (one to one)	9	5	7	6
	Group discussions (GD)/ interviews	2 (3 employees in 1 GD; 22 in other GD)	1 (8 executives)	-	2 (2 long term interns in 1 GD; 4 long term interns in other)
Data collection: Sources of data	Informants	CEO Head office support staff Regional Office – Head and middle managers Executives Target community	Regional Office Middle managers Executives – long term interns	CEO Middle managers (department heads) Long term intern	CEOs Middle managers Executives Target community
	Secondary sources of information	Annual Reports Company Literature	Annual Reports Company Literature	Annual Reports Company Literature	Annual Reports Company Literature
	Other data sources	Non-participant observation Field visits Informal interactions	Non-participant observation Field visits Informal interactions	Non-participant observation Informal interactions	Non-participant observation Field visits Informal interactions

Table 1: Demographic profile of the sample and data sources

Data collection

The first author (henceforth 'researcher'), did the field data collection. In consultation with the CEOs in three SEs and the middle manager in the fourth, she identified high learning projects or activity domains⁷ as the objective of the study was to trace organizational learning in the product/service development and delivery process in the SEs, which could manifest in tangible outcomes such as modifications and innovations in products/services/processes as well as intangible outcomes like changes in group mental models and changes in organizational knowledge repertoire.

Since some SEs had a large workforce and geographic coverage, data was collected from one office/unit as suggested by the respective TMT. In each of the four SEs, the researcher ensured that the offices/units from where she collected data were comparable in terms of size and scope of activities.

Site visits. The researcher visited the SEs and spent two weeks with each SE. During this time, she familiarised herself with the daily activities of the SEs, observed organizational activities and engaged with employees in informal discussions. Most of the observation was non-participative in nature. In some cases, she participated in a peripheral manner in some community activities of the SEs such as helping them with documentation, interacting during camps for children and general community meetings. In some instances she was invited by the SE members to participate in meetings she was observing. She also conducted field visits in two SEs to meet the target community and understand the context of operations of the SE. Observations, and reflections from these activities were noted in a field diary.

Interviews and group discussions. Semi-structured interviews were conducted with employees at all levels in the SE: CEO, middle management, executives. The interviews

⁷ High learning projects/activity domains were those domains of the SE's activities which were adjudged by the top management team members as providing varied and important learning experiences to the SE, and therefore had the potential to provide rich data to the researcher.

started with the CEO or an experienced middle manager who had information about the different projects as well as the history of the SEs. Following from these, as high learning projects/areas of activities were identified, she interviewed employees involved in the areas. Post a few interviews, she went back to the first informant to gain clarify, and gain detailed information about the project under study. The interviews were focused on eliciting learning episodes (Sole & Edmondson, 2002) experienced in projects by the participants. Interviews were conducted in an informal, conversational style, and not always in office settings. The researcher started with explaining the objectives of the study, followed by getting familiar with the background of the participant. Then, she gained information about the role of the person in the SE and the project under study. Then she led the participant to talk about specific experiences and learning episodes faced. Participants were encouraged to talk freely about their learning experiences from which the researcher generated leads into specific areas of interest. For example, in order to elicit learning episodes, she asked participants to talk about successes, failures, problems, challenges that they experienced as a team during the project. She also conducted a few group discussions with executives. All interviews and group discussions were recorded and transcribed verbatim (with the consent of the participant), and averaged 43 minutes with a range of 25 to 85 minutes.

Secondary data sources. Data from secondary sources such as photographs of the office space especially posters and charts, field activity, as internal publications of the SEs, reporting formats and documents, annual reports, and information from secondary sources was also incorporated in the study to substantiate the data further.

Data analysis

Consistent with the qualitative methodology, our data analysis involved multiple iterations between data and theory (e.g.: Eisenhardt, 1989; Glaser & Strauss, 1967). For coding the data, we took inspiration from grounded theory (Glaser & Strauss, 1967) to systematically develop themes. Coding involved constant comparisons (Glaser & Strauss, 1967) of data units and was undertaken one SE at a time. Codes developed were revisited, elaborated and modified as the researcher moved from one data unit to the next and from one SE to another. This enabled expansion of the codes and identification of higher level themes. Theoretical comparisons of the emerging themes were undertaken across the four cases (Eisenhardt, 1989) to expand and develop their dimensions.

First, data was coded to identify organizational learning episodes and potential organizational learning episodes⁸. In the initial set of iterations, we looked for all possible codes that could emerge from the data. This gave us a vast variety of codes which provided a broad-based picture of the process. In order to stream line the codes to develop coherence and deeper insights, we started coding the incidents (specifically, and also the remaining data for additional themes) to examine the type of knowledge being shared/exchanged, the context of interaction, the agents involved, the mechanism used, and outcomes of learning. The emergent codes, when combined with literature, revealed the themes of boundaries and knowledge brokering, which we then explored theoretically to explain the learning process.

The two authors undertook several in-depth discussions questioning upcoming themes for their robustness, bringing in different theoretical perspectives to examine them. The coded data was then presented to two experts, both with doctoral degrees and conversant with qualitative research. Based on their comments, discussions and relevant literature, data was again coded and discussed with them. It was then presented to a third external expert, also a doctoral degree holder and proficient in qualitative research. This process of expert reviewinputs and iteration between theory and data was repeated multiple times, resulting in

⁸ Deriving from Sole and Edmondson (2002), a learning episode was defined as a series of experiences, activities and decisions leading to a particular insight manifested in tangible or intangible learning outcomes for the organization. A potential learning episode was defined as a series of experiences and activities which indicate the possibility of organizational learning (currently or in future) as described above but the process does not complete itself to be categorised as organizational learning.

identification of knowledge brokering process as a key theme around which the theoretical narrative was developed.

In order to check further for the robustness of the methodology and the trustworthiness of emerging themes, an inter-rater agreement process was conducted for the larger study of which this study was a part. This process was conducted for one of the four themes that emerged in the larger study by involving two independent coders who were doctoral students in Organizational Behaviour and Strategy areas in advanced stages of research and conversant with qualitative research methods. 54% of the data units coded for learning and potential learning episodes were selected. These were divided into sets of 2 SEs each and provided to the coders. Before the coding, the researcher informed the coders in detail about the purpose of the study, the context of the organizations studied, the methodology being used and the coding process. A codebook of all possible basic codes for the theme under study was developed and provided to the coders. The researcher and the coders coded the data independently followed by discussions in case of differences to reach an agreement wherever possible. This exercise resulted in a high level of agreement with the coders thus indicating the trustworthiness of emerging themes.

Setting the context: Organizational role relationships

The SEs studied had three hierarchical levels: the top management, the middle management, and the executives; matching with the conventional norms of hierarchy. CEO(s) chiefly represented the TMT. Other TMT positions either did not exist formally or did not seem to have a critical decision making role. Middle management was located either at the head office (HO) or the regional office (RO); and consisted of the RO head (where applicable) and different department heads, with little vertical differentiation between them. The executives were employees at the lowest level who implemented SEs' programme(s),

and were field based in three of the four SEs. Departments were created around the SEs' social programmes/activities, alongside support functions.

ANALYSIS AND RESULTS

Analysis revealed that two types of knowledge were brokered in the SEs studied: expert knowledge and contextual knowledge. Expert knowledge refers to knowledge held by individuals due to which they are identified as specialists in any particular domain, and includes domain specific knowledge as well as knowledge gathered over time by virtue of professional experience. Contextual knowledge refers to knowledge about the social environment of the target community. It includes knowledge of target community demographics; their cognitive, affective and behavioural tendencies; and the social, cultural, political and economic context in which the community operates. The integration of these two knowledge types was found to occur in the presence of a third type of knowledge strategic knowledge, which refers to the knowledge about the organization's current and future goals and plans, which enables alignment of current activities with the organizational objectives. Learning in SEs was found to be a process through which expert and contextual knowledge located beyond enterprise boundaries were gained, integrated and converted into useful knowledge for the organization, with strategic knowledge playing a critical background function in enabling this integration. This process was complex and dynamic and included key sub-processes and agents to: locate relevant knowledge; transfer and translate knowledge and utilize and incorporate in within the organization for organizational learning.

Figure 1 summarises this process which is elaborated here. In order to develop effective, context specific products and services, SEs required two kinds of knowledge – expert knowledge and contextual knowledge. Expert knowledge about the technical aspects of products/services to be developed was located with experts outside the enterprise boundaries.

Scouting for this knowledge was done by the CEOs and some middle managers. This was brought inside the organization through formal training and in one case through mutual engagement and active participation. Contextual knowledge was located in the target community, boundary spanning for which was done chiefly by the executives, closely followed by middle managers and in one case the CEO. This knowledge was brought inside the organization through active participation and mutual engagement between the boundary spanners and the target community. Once inside the organization, these knowledge sets were integrated, combined and interpreted in the context of each other, and in context of the SEs' objectives, with strategic knowledge acting as a background factor enabling this integration. This translation and combination was undertaken by the middle managers and in one case the CEO, who acted as internal brokers and interpreters of knowledge, thus rendering the resultant knowledge being situated, and useable in the SE context. These processes are described below for each SE with illustrative data from each SE provided in Tables 2 and 3. Although they occurred simultaneously and interacted dynamically with each other, for the sake of clarity, first, the process of incorporation and integration of expert knowledge is described followed by a similar description for contextual knowledge, with a further discussion on the integration of the two knowledge types.

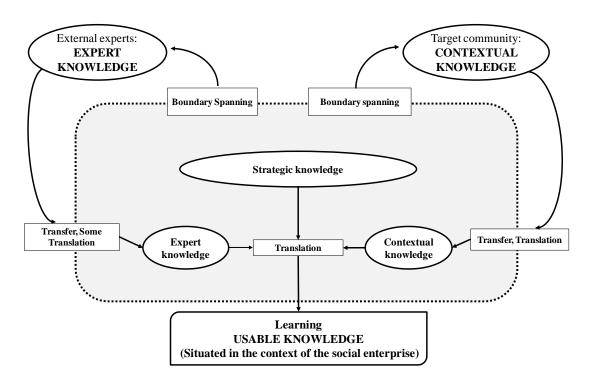


Figure 1. Overview of the learning process in social enterprises

Gaining expert knowledge

Product and service development in any organization requires the presence of domain specific expert knowledge inside it. This knowledge is most often a combination of codified domain knowledge and tacit knowledge gathered through experience in the domain, and is developed through hiring, training and business relationships.

In the SEs studied, domain specific expert knowledge was developed predominantly through formal training and sometimes through formal/informal learning interactions with external experts. In some cases, hiring of experts was also noted⁹. Expert knowledge was transferred to and located with the CEO and the middle managers. This involved boundary spanning to identify external experts with relevant knowledge, connecting individuals on either side of the boundary and supporting transfer of the knowledge inside the SE. Once

⁹ Tacit expert knowledge is not discussed in this paper in detail but plays an important part in the learning process. Tacit expert knowledge was developed through a longitudinal process of on the job learning and due to experience in the field/domain of activity.

inside the SE, this knowledge was contextualised through the process of translation and integration with contextual knowledge. The following paragraphs describe this process for each SE. Data illustrating the same is presented in Table 2.

In EDN, the CEO, who had a clear understanding of EDN's objectives, and therefore its expert knowledge requirements, undertook the boundary spanning role to identify external experts. Formal trainings were arranged with external experts who were funders, partners, or individual subject matter experts. These trainings imparted codified knowledge of concepts and procedures of microfinance and public health to the CEO and the middle management. Thus, expert knowledge was brought inside the SE through a process of transfer (with some translation inevitable in the process of learning interactions). Once expert knowledge was incorporated in the knowledge repertoire of the middle managers, they acted as subject matter experts and trained the executives. In the internal trainings, the middle managers simplified codified knowledge, delivered it and also integrated it with knowledge specific to the context of operations of the SE by using examples from the operational context. This process of knowledge brokering through interpretation and integration was identified as translation. Translation also occurred during regular formal and informal interactions between the middle managers and the executives, and through mutual engagement for programme implementation. Thus, in EDN, the CEO acted as a chief boundary spanner, and initial translator. Later, while the boundary spanning role remained with the CEO, the middle managers assumed translation role (see Table 2).

While, the CEO was the chief boundary spanner for expert knowledge, instances of boundary spanning by middle managers were also noted. As part of his job role, a middle manager in the agriculture department at the regional office of EDN, undertook both boundary spanning and translation roles. He spanned boundaries with specific subject matter experts (agricultural scientists), identified relevant expert knowledge, translated it and disseminated it within the SE and to the target community. Other middle managers also proactively spanned SE boundaries without any specific individual or organization as target, and were sensitive to identifying new information which could be useful for the SE. In these cases, boundary spanning was voluntary and not a role requirement. For example, the Regional Office Manager, also the Microfinance Manager identified a smokeless stove during his visit to another country as a product that might be useful for their target community and facilitated its field trial in the region. Similarly, the Self Help Group Manager, through the executives, identified a high yielding cash crop in a neighbouring village, and shared this knowledge with the Agricultural Manager for further inspection and future field trial.

In SSA, the CEOs performed both boundary spanning and translation roles. They identified external expert institutions and underwent training resulting in transfer of expert knowledge within the SE. They translated and disseminated it internally to the middle management and executives through internal trainings and formal and informal interactions during meetings. During internal training, the CEOs integrated their expert knowledge with insights from the target community (context of operations) resulting in translation (see Table 2). In a few instances, middle managers, after receiving training, also undertook internal training and acted as translators.

In EF, the top management team located at the head office assumed the boundary spanning role by identifying external experts and facilitating their interactions with the middle managers. Instead of undergoing formal training, middle managers learnt on-the-job by actively engaging with external experts in development and delivery of the training programmes through mutual engagement and co-creation. EF also employed few internal subject matter experts who were also involved in this process. The middle managers brought insights form the operational context of the SE, which was integrated with expert knowledge thus resulting in its translation (see Table 2). Over time, as middle managers acquired expert

knowledge, they engaged with internal subject matter experts through mutual engagement and co-creation, and developed and delivered training internally. Thus the translation role in EF was undertaken by the middle managers (see Table 2).

VF displayed limited learning interactions with external experts. Wherever this was identified, boundary spanning for gaining relevant knowledge was undertaken chiefly by the middle managers. Expert knowledge was transferred to middle managers through formal training. The SE had also developed a proactive boundary spanning process wherein the middle managers spanned SE boundaries to identify similar organizations and sent employees (irrespective of level in the SE) as knowledge brokers to scan for, identify and bring back knowledge which could be of use to the SE. This knowledge was then translated through discussions involving all members of the SE. One such meeting was observed as it occurred. The executives were sent as boundary spanners. The executives identified novel or interesting aspects of the visited organization but when probed for its usefulness for VF by the middle and top management, they were unable to translate the knowledge. While the middle and top management were able to ask pointed questions to facilitate this translation indicating their ability to identify and translate relevant knowledge, the executives were not able to do so. A possible explanation could be lesser understanding of the strategic goals of the SE and its corresponding knowledge requirements. Since the executive's were not actively involved in the decision making activities of the SE, it was possible that their ability to identify links between the larger goals of the SE and external information was poor.

In summary, analysis revealed that the role of boundary spanning for expert knowledge was undertaken by the CEO and sometimes the middle managers. Translation of this knowledge in the SE context was done effectively by middle managers (and in one case the CEO). The mechanisms of brokering included: direct transfer of expert knowledge through training, mutual engagement with external experts, internal trainings, meetings and team discussions, and individual translation of knowledge at the boundary. Comparing data from other SEs with VF, it was inferred that boundary spanning and translation of expert knowledge was effective when agents located centrally and higher up in the organizational hierarchy undertook these activities, as they had a clear understanding of the organizations' objectives from a strategic perspective, and therefore its expert knowledge requirements.

Table 2: Illustrative quotes for expert knowledge brokering

SE	Representative data	Broker	Process of brokering
EDN	Unit manager, Microfinance, EDN [on trainings]: I got SHG training from EDN. The CEO had trained us I was working in SHG [from 2001] till July 2005 After July I went to Jharkhand [a state in India] for microfinance training in ABC [external expert organization] (<i>Expert knowledge, transfer, mode – formal training</i>). [Now] I provide training [to microfinance team] (internalization of expert knowledge, mechanism – formal training) Trainings [to new employees] are provided by our own staff. We make the training material based on our [field] experience – how to talk to the community, whom to go to for telling about loans. If there is a new employee, the most important problem will be to identify whom to go to talk about taking loans (<i>Translation – integration of contextual knowledge and expert knowledge, mechanism – formal training</i>)	CEO and chief boundary spanner and initial translator	Expert knowledge transferred through formal training Expert knowledge translated by integrating with contextual knowledge during training
	Executive, SHG, EDN: We conduct [SHG] meetings [with the villagers] in the same way as sister [middle manager] conducts it – we have two meetings in a month, 1 to deposit SHG's savings, and another is a general meeting where we talk about new policies, local government schemes, how to open a bank account, health aspects etc. (<i>Translation – integration of contextual and expert knowledge; mechanism –practice</i>)	Middle managers as translators	Expert knowledge translated by integrating with contextual knowledge by implementation in practice
SSA	CEO, SSA, on development of innovative pedagogy and trainings: we both [CEOs] have a strong background of social activism, and also we are qualified in the same line [Masters in Social Work] we also tried to get external inputs wherever it is possible to learn from them in the best possible manner. AIE [external expert organization] – we went through them for the first training programmes [in non formal teaching] (<i>Expert knowledge, Transfer, Mechanism – formal training</i>) [we developed our own pedagogy] and SSA has a training package [and] with experience [we have] developed a teaching methodology which is multi-class teaching using the Paulo-Ferrerian nonformal method of teaching it would not be theoretical but it would be contextualized. (<i>Translation – integration of contextual knowledge and expert knowledge</i>).	CEOs as boundary spanner and translator	Expert knowledge transferred through formal training Expert knowledge translated by integrating with contextual knowledge
EF	We try to [develop expertise] in-house. But partners have spent considerable amount of time in that domain. We have a good partnership with BDH [external expert organization] in terms of classroom learning BDH has its own model, we have learnt quite a lot from it we have learnt a lot from their maths pedagogy (<i>expert knowledge, translation, mechanism – mutual engagement</i>)our design team is in contact with [partners], they keep exchanging [information], they keep going there, and they have friends there (<i>expert knowledge, translation, mechanism – informal relationship based interactions</i>).	Middle managers as translators	Expert knowledge transferred and translated through mutual engagement and co-creation
VF	Middle manager [Department 1], EF: Usually what happens in the workshop, when we design the workshop [for target community and also long term interns], then I am from operations team and there is a curriculum person [subject matter expert]. Both of us sit together. I tell her that this is happening in the field, this is the requirement and then she comes up with her expertise and we integrate it (<i>Expert and contextual knowledge, Translation – integration of contextual knowledge and codified knowledge, mutual engagement and co-creation</i>)		

As briefly mentioned in this section, brokering of expert knowledge not only required its interpretation from a strategic perspective but also its integration with contextual knowledge about the target community. Contextual knowledge was located with the target community and the SEs developed mechanisms to identify, transfer, translate and integrate it with expert knowledge. The next section describes this process.

Gaining contextual knowledge and its integration with expert knowledge

The process of harnessing contextual knowledge involved identification of relevant knowledge from the target community, its transfer inside the SE, translation in the SE context and consequent utilization. The target community context for each SE was unique thus necessitating their deep involvement in the context in order to develop specific and useful products and services. This implied that SEs gain knowledge not only of the generic social needs, but also understand the intricacies of the social fabric – its sociological and psychological aspects, which impacted target community behaviours and belief systems. These played a crucial role in programme effectiveness by determining whether produces/services developed by the SEs were accepted and adopted by the target community. The following paragraphs describe how contextual knowledge was brokered in each SE. Data illustrating the same is presented in Table 3.

Table 3: Illustrative quotes for contextual knowledge brokering and its integration with expert knowledge

SE	Representative data	Broker	Process of brokering
EDN	RO manager on the process of disbursing agricultural innovations: We help with convergence of new agricultural technologies with the farmers. A lot of people sow wheat but they are not aware of the SWI method [new technology for higher yield]. Initially, we test it with 20-50 farmers in 10 hectares of land. When yield is good, other farmers will automatically ask about it If a farmer gets to know about seeds with high yielding variety, and he sows them, the yield will improve. By seeing him others will also start using it, adoption will happen on its own, we just need to demonstrate. (<i>Broker – middle manager, Contextual knowledge, expert knowledge, translation – integration of contextual knowledge and expert knowledge</i>) Unit manager, Microfinance, EDN on changes in microfinance loan process: We made mistakes initially that we gave [microfinance]	Executives as primary boundary spanners and secondary translators Middle managers as primary translators and	Contextual knowledge translated by integration with expert knowledge
	loans to the men but would get signatures or thumb impressions of the wives. If the wife was not there, then we would get the mother's signature. In these cases loan recovery was difficult [since the wife would not know about the loans and the men would use the money for some other purposes]When we used to give loans to men, it was a little dangerous, men would want that he takes the loan and the wife does not get to know about it, that loan is dangerous. When we give loans to women, the husband will know about it, and this way 2 people in the house know about the loanSuppose we give loan to the husband and the wife does not know about it, when we go for recovery, she will say I don't know, did you ask me before giving the loan? But when we give loan to the wife, the husband is also attached. If the man is not there, at least she will talk properly. Women are better than men [for giving loans and for loan recovery] (<i>Contextual knowledge, Broker – middle manager, translation – integration of contextual and expert knowledge</i>).		
SSA	CEO, SSA, on development of innovative pedagogy and trainings: we both [CEOs] have a strong background of social activitism, and also we are qualified in the same line [Masters in Social Work] we also tried to get external inputs wherever it is possible to learn from them in the best possible manner. AIE [external expert organization] – we went through them for the first training programmes [in non formal teaching] (<i>Expert knowledge, Transfer, Mechanism – formal training</i>) [we developed our own pedagogy] and SSA has a training package [and] with experience [we have] developed a teaching methodology which is multi-class teaching using the Paulo-Ferrerian nonformal method of teaching it would not be theoretical but it would be contextualized. (<i>Translation – integration of contextual knowledge and codified knowledge</i>).	Executives, CEOs as boundary spanners, CEOs as translators	Contextual knowledge translated by integration with expert knowledge
EF	Team member [Department 3], EF on training workshops in the programme: [In] capacity building work there are two kinds of inputs, one goes directly from the programme team from the Programme Leaders [PL, middle managers] in the form of Kick Start Workshop[KSW][the target community and the long term interns attend the workshops] immediately after the 4 days of KSW [the training workshop for target community], at the 4th day, each Head Master [HM, target community] makes a plan. He creates a vision for his/her school then share with the GFs. That is the 1st version then that plan is being reviewed by PLs, Gandhi Fellows and senior fellows [GF, executives]. Then GF makes another plan, version 2, again it happens mutually with the HM again the PL and GF will sit on version 3 and again there are some more changes [until a final version is created] (<i>Broker – middle manager and executives; translation – integration of expert and contextual knowledge; Mechanism – mutual engagement and co-creation</i>).	Executives as primary boundary spanners and secondary translators Middle managers as primary translators and secondary boundary spanners	Contextual knowledge translated by integration with expert knowledge
VF	CEO, VF on changes in the a workshop content: So it's happened when we [CEO and middle manager of a department] were recently doing workshops in Orissa last yearin February, November and December in 2010 what we were doing though we felt that it was important for them, [but] they were in a situation where living life with disability was a huge effort, therefore we needed to kind of mentally prepare them with baby steps rather than showing them the sky. So we had to kind of draw back and come forward with little steps for them which encourage them to move on (<i>Broker – CEO, MM; Contextual knowledge, Translation – integrating expert and contextual knowledge, Mechanism – field based interaction</i>)	CEO & Middle managers as boundary spanners and translators	Contextual knowledge translated by integration with expert knowledge

In order to harness contextual knowledge, EDN employed target community members as executives in the Self Help Group [SHG] and Health departments, the SHG being the common vehicle for delivering all of EDN's services to the target community. These executives had field based roles which necessitated regular engagement with the target community. Field engagement was followed up by regular interactions between the executives and the middle managers, and regular field visits by the middle managers. The executives belonged to the target community and therefore had insider knowledge about it. At the same time, being part of the SE, they also had peripheral knowledge about its objectives and activities. This enabled them to effectively span the target community boundary, identify relevant knowledge, and transfer it within the SE to middle managers. They also enabled some translation of the knowledge by facilitating its interpretation in their interactions with middle managers. The middle managers closely worked with the executives and the target community through regular participation in field activities, thus assuming a secondary boundary spanning role. At the same time, due to their deeper understanding of the strategic objectives of the SE, they acted as primary translators of contextual knowledge in the SE context. The middle managers also held expert knowledge and integrated it with the contextual knowledge to develop effective programmes for the target community. Thus, contextual knowledge brokering in EDN was a multi-actor process with the executives acting as primary boundary spanners and secondary translators at the boundary and middle managers taking up some boundary spanning and a primary translation role (see Table 3).

Similarly in SSA, the executives belonged to and spanned target community boundaries. At the same time, the CEOs were also directly and actively involved with the target community therefore taking a prominent boundary spanning role. By virtue of their expert and strategic knowledge, the CEOs were identified as the chief translators of contextual knowledge. The role of the middle managers in the translation process was not prominently identified. They had more of a coordination role rather than a strategic role. They could be identified more as boundary spanners who worked alongside the executives and supervised them. The development of the innovative education programme in SSA illustrates this process. In the initial phases of the programme, the CEOs undertook field visits, worked and engaged with the target community to understand their context. They combined this information with the expert knowledge they had by virtue of their education, and trainings undertaken, to develop the progressive education programme. Later, during the implementation of the programme, the field based executives would span for and bring back contextual knowledge which was shared with the CEOs in regular meetings and discussions and translated by the CEOs in the SE context (see Table 3). Some instances of integration of expert and contextual knowledge were also noted at the field level as executives combined expert knowledge about pedagogy with contextual objects and understanding of the community's children's behaviour to develop their own pedagogical tools and approaches. This learning was then shared within the SE through regular meetings.

In contrast to EDN and SSA, EF did not employ target community. The executives were long term interns of their programme. During their initial induction and training, the executives spent a month each with their immediate target community – primary schools run by the government; and the larger community – families of the children who studied in the schools (generally living in underdeveloped communities). The executives taught students in the schools for a month. This was followed by a month of 'slum immersion' during which they lived with the target community and find acceptance and accommodation. The SE would support them only in cases of critical problems faced during this time. These two processes enabled the executives to understand the nuances of teaching, the system of the municipal schools as an insider as well as experience the social and psychological aspects, behavioural tendencies, belief systems and problems of the larger community. This induction was followed up by daily engagement with the target community in the field (schools) for programme execution as well as regular visits to the larger community to engage them in the education process. The executives became the chief boundary spanners for the SE, with the middle managers undertaking a few need based field visits. The translation role for contextual knowledge was shared between middle managers and the executives with the middle managers leading the role. This occurred through a process of action-reflection, co-creation and mutual engagement between the executives and the middle managers during regular, formal and informal discussions and mentoring sessions (See Table 3).

VF employed target community members at all levels (including the CEO). However, in this case, employment did not enable learning. This was due to the fact that the employees were distanced from the actual community context. Service provisioning in VF was designed such that contact between the SE and the target community was mediated by technology such as the telephone line at the helpdesk, the radio programme and website. In the few instances where the SE came in direct contact with the target community, the middle managers and sometimes the CEO acted as boundary spanners and translators. They were able to gather contextual knowledge about the target community and translate them suitably (see Table 3). The executives were office based and were not involved in boundary spanning or translation. Therefore, in VF, lack of proximity to the target community context led to fewer learning experiences and sometimes failure to learn.

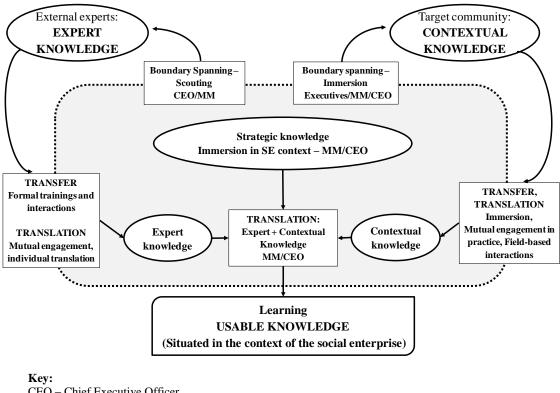
Summarizing from the above discussion, contextual knowledge was gained primarily through the SEs embedding themselves in the context of the target community either through employment of the target community or getting a lived experience of the community through the executives. We termed this process as immersion (the code emerged 'in-vivo' from the data and has been theoretically expanded in the discussion section). This was followed by regular field based interactions with the target community. The boundary spanning role was primarily performed by the executives, while the translation role was performed by the middle managers or the CEO, who worked and interacted closely with the executives, undertook some field based interactions with the target community, and possessed expert knowledge.

Combining expert and contextual knowledge

As indicated in the above discussion, the interpretation, and translation of expert and contextual knowledge did not occur independent of each other. Each knowledge base required the other as a significant component for translation and transformation. Learning in the SE occurred when these knowledge bases were combined resulting in effective contextspecific product/service development and delivery. This required brokers to have a strategic level understanding of the SE's activities and objectives such that the two knowledge bases could be integrated effectively to further the SE's objectives. At the same time, brokers also needed to have both expert and contextual knowledge. Therefore, the translators in the process were middle managers, and sometimes the CEO who possessed strategic knowledge to interpret, integrate and situate the expert and contextual knowledge in the context of the SE. For example, in EDN, the middle managers combined expert knowledge about SHG processes and microfinance with knowledge about family structures and family dynamics to develop delivery processes which enhanced programme effectiveness in the target community context. Similarly, in SSA, the CEOs developed the complete programme on progressive education considering the psychological and social dynamics of the mining community. The middle managers at EF enabled the incorporation of the community context by closely working with the executives who in turn worked closely with the target community to develop individualised action plans for the target community members thus tuning their programme to the target community. Learning instances in VF also indicated this integration as middle managers attempted to tune generic programmes to the target community context of an undeveloped region.

Figure 2 elaborates upon Figure 1 and depicts the different knowledge brokers, brokering roles and processes as discussed in this section. The new term of immersion which has been briefly mentioned above also appears in Figure 2 and is detailed in the discussion section.

Figure 2. Learning process in Social Enterprises – Brokering roles and processes



CEO – Chief Executive Officer MM – Middle Manager

DISCUSSION

Hargadon (2002:78) likens research on the structural dimensions of brokering to that of developing a map which requires details to be filled in, and observes that "the map is not the territory". In this study, we attempt to detail this map by closely examining the enactment of brokering. Data analysis revealed that brokering role was delineated into boundary spanning and translation processes. Knowledge brokering was found to be a process of spanning for

and combining two types of knowledge – expert and contextual with strategic knowledge playing a critical background role. The brokering roles for each type of knowledge were taken up by different agents. While expert knowledge was spanned for and translated at the top and middle management levels, variations were noted in spanning for and translation of contextual knowledge, with middle managers, CEOs and executives variously assuming and sharing these roles (see Figure 2). These observations are theoretically interpreted in this section by relating brokering to the concept of immersion and discussing them using the organizational cone from Schein's (1971) model of organizational socialization.

Knowledge brokering

This study delineates two facets of knowledge brokering – boundary spanning and translation. In literature, these two terms have been used to describe overlapping and synonymous processes. Long, Cunningham and Braithwaite (2013) list the common terms that have been used in literature to describe brokering indicating ambiguity in its meaning. For example, Tushman and Scanlan (1981) describe boundary spanners as scouts at the boundary and as disseminators of knowledge, which implies a predominant scouting role. Brokers are also seen as individuals located at structural holes (Burt, 1992) and enabling knowledge transfer and translation from one side to the other (e.g.: Wenger, 1998, 2000), thus implying a predominant translation role. This conceptual overlap can lead to the neglect of the changes in these roles depending upon the types of knowledge (e.g.: Currie & White, 2012), the location of agents, and stakeholders involved.

We clarify this conceptual overlap by demarcating the two brokering roles (it should be noted that the distinction between the two roles is not absolute). The boundary spanning role involved identification of relevant knowledge, connecting individuals on either side of the boundary and supporting transfer of knowledge inside the organization. The translation role included interpretation of knowledge in the operational and strategic context of the SE and its utilization for product/service development and delivery.

Depending upon the type of knowledge and the corresponding stakeholder involved, differences in brokering processes and agents were identified. For brokering expert knowledge, boundary spanning and translation roles were shared between the top management and the middle management. For incorporating contextual knowledge, boundary spanning and translation roles were differentiated between the executives and the middle managers respectively in two of the four SEs with some degree of overlap between the two as the executives and middle managers worked closely; were distinctly enacted by the executives and the CEOs respectively in one SE and lay solely with the middle managers in one SE. These variations can be explained coherently through the concept of immersion, which is the second concept brought out in this paper.

Immersion

Analysis reveals the emergence of immersion as an important concept impacting knowledge brokering and consequently organizational learning. Immersion emerged as an 'in-vivo' code from interactions between one SE and the target community, and was expanded by the constant comparison process to analyse the different SE contexts.

On a literal level, the term immersion implies complete submergence in a liquid. This indicates that the object being immersed is subjected to the pressure in the liquid, but it does not get dissolved. In a social context, immersion can be translated into a process by which an individual lives the experiences of being a member of a social group without losing his/her own identity. This group could be a community, an organization, an interest group, a team or a community of practice. The immersed individual would be able to understand the socio-cultural-psychological-behavioural fabric of the context and would possess both tacit and explicit knowledge about it. For instance, in an organizational context, employees are

immersed in the socio-cultural context of the organization and undergo a lived experience of the organization, thus knowing the formal and informal aspects of organization.

The concept of immersion has been extensively utilized in language studies to teach a second language to students (e.g.: Genesee, 1985; Kearney, 2010). Immersion is also the core of the ethnographic research methodology as the researcher immerses himself/herself in the context of the community under study. The concept has not been extensively discussed in management studies. It has been sparingly mentioned in international human resource management with respect to expatriate managers' experiences (e.g.: Bird & Dunbar, 1991), and studies of organizational culture change (e.g.: Wilkinson, Fogarty, & Melville, 1996). It has not been examined for its role in product/service or programme development in literature. Similarly, SE literature is recognizing the importance of context embeddedness (Mair & Marti, 2006), and the role of stakeholders in innovating for social value creation (e.g.: Datta & Gailey, 2012; Khavul & Bruton, 2013) which indicates immersion but it has not been studied. This study contributes to extant literature as it brings this concept to the forefront, describes it in two different social contexts and links it to knowledge brokering and learning. In this study, immersion had two facets: immersion as a process of gaining access to contextual knowledge of the target community; and immersion in a social context as a precondition to the ability to translate and transform knowledge in the social context.

Immersion in the target community enabled the agents to experience the socio-culturaleconomic-political context of the target community. This knowledge was tacit and a critical input to product/service development. SEs used two modes of immersion: community employment and community lived experience. A dominant mode of gaining immersion was to employ the target community as regular employees of the SE. In one case, the SE facilitated lived experiences of their employees in the target community. Effective learning occurred when both these modes were followed up by regular field-based interactions and engagement of the employees with the target community ensuring sustained immersion. It was noted that effective immersion was not achieved by merely employing members of the target community. Instead, lived experience was essential thus indicating the importance of geographic and interactional proximity of the employees to their target community. Employees belonging to the target community, if distanced from the social context of operations, brought in only partial information based on their personal experience which differed from the actual social context where the SE is operating. This was seen in VF which employed 5 visually disabled individuals (which was their target community also), including the CEO. These individuals were from the urban areas and the educational, social and economic context in which they had experienced their disability was different from that of the community they were working for. This aspect was not realised until there was a visible clash of assumptions when some employees went to the field where the target community was situated. In contrast, EF achieved successful immersion without employing the target community. It ensured initial lived experience at two levels with the target community followed by intense interactions with them in daily practice. Thus, for gaining the tacit contextual knowledge from the target community, it was essential for the SE to gain immersion into the target community, through lived experience in the community followed by regular field based interactions, active participation and mutual engagement.

For incorporation of expert knowledge into the SE, immersion was found to play a different role. Expert knowledge was codified, explicit and decontextualized. Therefore, it did not require knowing through experience and practice. Instead, it required contextualization within the SE through integration with contextual knowledge in light of the SE's objectives, so as to make is understandable, useful and applicable in the SE's context. In this process, immersion acted as a precondition to translation and transformation with the SE. The ability of middle managers and the top management to interpret incoming expert and

contextual knowledge from the perspective of the SE and utilize it for programme development was achieved due to their lived experience as employees located deep into organization in decision making and coordinating roles. This enabled the development of strategic knowledge and understanding about the SE context which in turn was used for integrating expert and contextual knowledge.

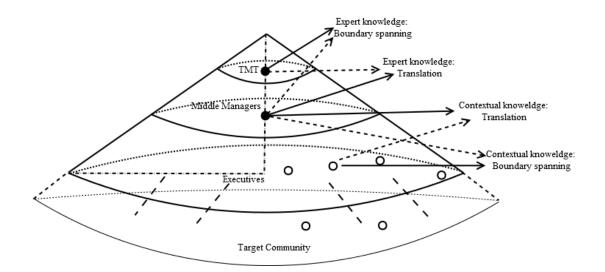
Abstracting this explanation to a higher level, we can understand immersion as lived experience in a social group. While interacting across boundaries, contextual differences between individuals immersed in different contexts come in sharp contrast. Different contexts imply different modes of understanding, different mental models, action and interaction processes, norms and values as well as socio-economic differences. These result in differences in way the groups interpret a given set of knowledge. Learning occurs when differences between these knowledge sets are identified and relevant inputs from one context are interpreted and utilized in the other context. Organizations can develop modes of immersion as illustrated in this study to develop effective products/services based on the incoming information from both experts and target community/customers.

Knowledge brokering and immersion

The above discussion describes the importance of immersion for gaining and translating knowledge. However, as described above, knowledge brokering roles varied in the SEs studied. The segregation of boundary spanning and translation roles between the executives and the middle managers/CEO for contextual knowledge and similarly between the CEO and middle managers for expert knowledge was impacted by immersion in different contexts. Translation roles required immersion in the SE context, while boundary spanning for expert and contextual knowledge had different immersion requirements, thus resulting in different agents taking up these roles in the SEs. We explain these observations coherently by developing a model using the organizational cone from Schein's (1971) model of

organizational socialization (which describes vertical, radial, and circumferential location and movement of individuals in an organization). Through the model, which is presented in Figure 3, we link immersion in various contexts to corresponding brokering roles. The flat organizational cone depicts the flat organizational structure of the SEs. The target community is added as another layer in the structure with dotted lines to indicate that there is active involvement of the target community in enabling the SE to conduct its activities (as seen in 3 out of four SEs). In this sense, the target community members act as extensions of the SE, while not being part of the SE. The solid black dots represent agents highly immersed in the SE context: the middle managers and the top management team (CEO) who are centrally immersed along all three dimensions of Schein. The hollow dots represent the executives who are target community members employed in the SE. They are immersed in two contexts: the target community context which is their native context as well as the SE context. Their position in the SE indicates that they are vertically and radially distanced from the centre of the SE thus indicating low immersion in the SE context, while being highly immersed in the target community context.





Boundary spanning for expert knowledge required the spanner to have knowledge about the knowledge requirements of the SE from a strategic level. Thus the boundary spanner had to be immersed into the SE both vertically and radially, and therefore was either a middle manager or at a higher position, who was also central to the strategic decision making related activities of the SE. Being strategically embedded into the SE, this agent(s) was also capable of translating the expert knowledge into the context of the SE and utilising it. Boundary spanning for contextual knowledge required close connect with the context of operations, in this case the target community. This implied that the spanner needed to be embedded in the target community as well as be part of the organization. This agent was therefore the executive who was located at the lower end of the hierarchy of the organization, thus being closer to its periphery and in close contact with the target community. Yanow (2004) describes such agents as bicultural translators as it requires them to understand two social contexts. For translation of contextual knowledge, it needed to be interpreted in light of strategic (and expert) knowledge which did not reside with the executives due to their distance from the centre of the SE, both vertically and radially. Thus, translation of contextual knowledge required an agent who was immersed high enough vertically and centrally into the SE and also had access to the contextual knowledge. The middle manager was identified as such as agent.

This model can be directly applied to EDN and EF while there were deviations from this model in SSA and VF. In SSA, the middle managers and executives performed similar functions, and had similar sets of knowledge meaning that the middle managers were not immerse high enough vertically or radially into the SE context (see Figure 4), thus reducing their ability to act as effective translators. Thus, the translation role in SSA was therefore taken up by the CEOs themselves who were highly immersed in the SE context. On the other hand, in VF, the distance between the executives (and consequently the middle managers)

and the target community was large due to no immersion in the target community context (see Figure 5). This reduced the ability of the executives to act as effective boundary spanners and the managers to translate this knowledge.

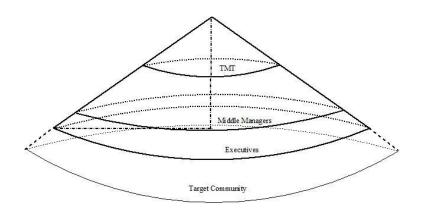
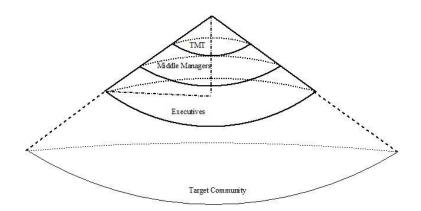


Figure 4. Organizational cone – SSA

Figure 5. Organizational cone - VF



These inferences suggest that, effective brokering requires agents to be immersed to different levels in social contexts of the organization and external groups/communities.

CONCLUSION

Addressing the recent calls for examining the process of brokering (Boari & Riboldazzi, 2014; Hargadon, 2002), this study provides a detailed description of brokering as it is enacted

in an organization by focusing on the complete process of learning resulting in effective product/service development. We provide a comprehensive picture of both internal and external brokering, at an individual organizational level. Following Cillo's (2005) call for examining different knowledge sets, we detail the sources, the agents and the processes of brokering different knowledge sets (expert and contextual knowledge) and highlight the significance of strategic knowledge in enabling brokering. We delineate the brokering role into boundary spanning and interpretation. Further, we describe the conditions in which these roles can be enacted by same or different individuals in the organization or can be shared between them, by explaining it logically through the process of immersion. We bring out a less examined but critical phenomenon of immersion which can enable brokering for learning. By using the immersion lens, we also clarify the paradox of embeddedness versus peripherality of brokers by linking it to the level of immersion in different contexts and the types of knowledge brokered. Using Schien's (1971) organizational cone to understand the immersion conditions under which agents assuming brokering roles will be effective, we provide a model for social enterprises (and other similar organizations) to assess, designate and deploy human resources effectively in boundary spanning and translation roles.

This study reinforces the significance of the roles of middle manager as a critical interpreter and knowledge broker (e.g. Beck & Plowman, 2009; Lomas, 2007; Sharma & Good, 2013) and takes this understanding further by showing that for middle managers to understand different social worlds, they need to closely work with the executives as well as be immersed centrally in the organizational context. This provides suggestions towards designing jobs of middle managers for making them effective brokers.

This study examined four social enterprises with small office sizes and minimal hierarchies. The brokering roles, conditions of effectiveness, and processes are likely to vary

with changes in organizational size and hierarchies. Therefore, inferences from this study should be used keeping in mind organizational differences.

REFERENCES

- Alter, S.K. 2006. Social enterprise models and their mission and money relationships. In A. Nicholls (Ed.), *Social Entrepreneurship: new models for sustainable social change*, 205–232. Oxford: Oxford University Press.
- Assudani, R. H. 2005. Catching the chameleon: understanding the elusive term "knowledge." *Journal of Knowledge Management*, 9: 31–44.
- Austin, J., Stevenson, H., & Wei-Skillern, J. 2006. Social and commercial entrepreneurship: same, different, or both? *Entrepreneurship Theory and Practice*, 30: 1–22.
- Beck, T. E., & Plowman, D. A. 2009. Experiencing rare and unusual events richly: The role of middle managers in animating and guiding organizational interpretation. *Organization Science*, 20: 909–924.
- Bird, A., & Dunbar, R. 1991. Getting the job done over there: Improving expatriate productivity. *National Productivity Review*, 10: 145–156.
- Boari, C., & Riboldazzi, F. 2014. How knowledge brokers emerge and evolve: The role of actors' behaviour. *Research Policy*, 43: 683–695.
- Bourdieu, P. 1977. *Outline of a theory of practice*. Cambridge university press.
- Brown, J. S., & Duguid, P. 1991. Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science*, 2: 40– 57.
- Burt, R. S. 1992. Structural holes. Cambridge, Mass.: Harvard University Press.
- Burt, R. S. 1997. The contingent value of social capital. *Administrative Science Quarterly*, 42: 339–365.
- Burt, R. S. 2004. Structural holes and good ideas1. *American Journal of Sociology*, 110: 349–399.
- Carlile, P. R. 2004. Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries. *Organization Science*, 15: 555–568.
- Cillo, P. 2005. Fostering Market Knowledge Use in Innovation:: The Role of Internal Brokers. *European Management Journal*, 23: 404–412.

Center for the Advancement of Social Entrepreneurship, Duke University. 2008. Developing the field of social entrepreneurship. http://www.caseatduke.org/documents/CASE_Field-Building_Report_June08.pdf, accessed Jan 10, 2012.

- Currie, G., & White, L. 2012. Inter-professional barriers and knowledge brokering in an organizational context: the case of healthcare. *Organization Studies*, 33: 1333–1361.
- Datta, P. B., & Gailey, R. 2012. Empowering women through social entrepreneurship: Case study of a women's cooperative in India. *Entrepreneurship Theory and Practice*, 36: 569–587.
- Dees, J. G. 1998a. Enterprising nonprofits. *Harvard Business Review*, 76(1): 54-69.
- Dees, J.G. 1998b. The Meaning of "Social Entrepreneurship". http://www.redalmarza.cl/ing/ pdf/TheMeaningofSocialEntrepreneurship.pdf, accessed Jan 5, 2012
- Di Domenico, M., Haugh, H., & Tracey, P. 2010. Social bricolage: Theorizing social value creation in social enterprises. *Entrepreneurship Theory and Practice*, 34: 681–703.
- Eisenhardt, K. M. 1989. Building theories from case study research. *Academy of Management Review*, 14: 532–550.
- Genesee, F. 1985. Second language learning through immersion: A review of US programs. *Review of Educational Research*, 55: 541–561.
- Gherardi, S., & Nicolini, D. 2000. To transfer is to transform: the circulation of safety knowledge. *Organization*, 7: 329–348.
- Glaser, B., & Strauss, A. 1967. The discovery grounded theory: strategies for qualitative inquiry. *Aldin, Chicago*.
- Gould, R. V., & Fernandez, R. M. 1989. Structures of mediation: A formal approach to brokerage in transaction networks. *Sociological Methodology*, 89–126.
- Harada, T. 2003. Three steps in knowledge communication: the emergence of knowledge transformers. *Research Policy*, 32: 1737–1751.
- Hargadon, A. 1998. Firms as knowledge brokers. *California Management Review*, 40(3): 209–227.
- Hargadon, A. B. 2002. Brokering knowledge: Linking learning and innovation. *Research in Organizational Behavior*, 24: 41–85.
- Hargadon, A., & Sutton, R. I. 1997. Technology brokering and innovation in a product development firm. *Administrative Science Quarterly*, 42: 716–749.

- Kearney, E. 2010. Cultural immersion in the foreign language classroom: Some narrative possibilities. *The Modern Language Journal*, 94: 332–336.
- Khavul, S., & Bruton, G. D. 2013. Harnessing innovation for change: Sustainability and poverty in developing countries. *Journal of Management Studies*, 50: 285–306.
- Lave, J. 1991. Situating learning in communities of practice. In L. Resnick, J. Levine, and S. Teasley (Eds.), *Perspectives on socially shared cognition*, 63–82. Washington, DC: APA.
- Lomas, J. 2007. The in-between world of knowledge brokering. BMJ, 334: 129–132.
- Long, J. C., Cunningham, F. C., & Braithwaite, J. 2013. Bridges, brokers and boundary spanners in collaborative networks: a systematic review. *BMC Health Services Research*, 13: 158.
- Mair, J., & Marti, I. 2006. Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41: 36–44.
- Matusik, S. F., & Hill, C. W. 1998. The utilization of contingent work, knowledge creation, and competitive advantage. *Academy of Management Review*, 23: 680–697.
- Nicholls, A. 2006. *Social entrepreneurship: New models of sustainable social change*. Oxford University Press.
- Patton, M. Q. 2002. Qualitative research & evaluation methods, 3rd ed. CA: Sage.
- Santos, F.M., & Eisenhardt, K.M. 2005. Organizational boundaries and theories of organization. *Organization Science*, 16: 491–508.
- Schwab Foundation. http://www.schwabfound.org/sf/SocialEntrepreneurs/ Whatisasocialentrepreneur/index.htm, accessed Jan 10, 2012.
- Schein, E. H. 1971. The individual, the organization, and the career: A conceptual scheme. *The Journal of Applied Behavioral Science*, 7: 401–426.
- Sharma, G., & Good, D. 2013. The Work of Middle Managers Sensemaking and Sensegiving for Creating Positive Social Change. *The Journal of Applied Behavioral Science*, 49: 95– 122.
- Shaw, E., & Carter, S. 2007. Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes. *Journal of Small Business and Enterprise Development*, 14: 418–434.
- Shi, W., Markoczy, L., & Dess, G. G. 2009. The role of middle management in the strategy process: group affiliation, structural holes, and Tertius Iungens. *Journal of Management*, 35: 1453–1480.

- Sole, D., & Edmondson, A. C. 2002. Situated knowledge and learning in dispersed teams. *British Journal of Management*, 13: S17–S34.
- Straus, S. E., Tetroe, J. M., & Graham, I. D. 2011. Knowledge translation is the use of knowledge in health care decision making. *Journal of Clinical Epidemiology*, 64: 6–10.
- Tempest, S. 2009. Learning from the alien: knowledge relationships with temporary workers in network contexts. *The International Journal of Human Resource Management*, 20: 912–927.
- Tushman, M. L., & Scanlan, T. J. 1981. Boundary spanning individuals: Their role in information transfer and their antecedents. *Academy of Management Journal*, 24: 289– 305.
- Von Hippel, C., Mangum, S. L., Greenberger, D. B., Heneman, R. L., & Skoglind, J. D. 1997. Temporary employment: Can organizations and employees both win? *The Academy* of *Management Executive*, 11: 93–104.
- von Hippel, E. 2005, Democratizing innovation. The MIT Press: Cambridge.
- Wei-Skillern, J., Austin, J. E., Leonard, H. & Stevenson, H. (Eds.) 2007. *Entrepreneurship in the social sector*. Los Angeles: Sage.
- Wenger, E. 1998. *Communities of practice: Learning, meaning, and identity*. Cambridge university press.
- Wenger, E. 2000. Communities of practice and social learning systems. *Organization*, 7: 225–246.
- Wilkinson, M., Fogarty, M., & Melville, D. 1996. Organizational culture change through training and cultural immersion. *Journal of Organizational Change Management*, 9: 69– 81.
- Yanow, D. 2004. Translating local knowledge at organizational peripheries. *British Journal of Management*, 15(S1): S9–S25.

Indian Institute of Management Kozhikode

Type of Document (Working Paper/ Case): (please choose one)

Full text or only abstract to be uploaded on website: (please choose one)

Ref. No.: (to be filled by Research office)

IIMK/WPS/183/OBHR/2015/019

Title:

Enactment of knowledge brokering: Agents, roles, processes and the impact of immersion

Author(s):	Designation(s) and Institution(s):	
Ankita Tandon	Assistant Professor, School of	
	Business, Foundation for Liberal and	
	Management Education, Pune, India	
Unnikrishnan K. Nair	Professor, Indian Institute of	
	Management Kozhikode	
Subject Area(s):	Research Grant/Project No.(s), if any:	
Supporting Agencies, if any:	Date of Issue: (to be filled by Research office; same as month of submission) April 2014	

Abstract:

This study examines the process of knowledge brokering for organizational learning. Qualitative research methodology was employed to study learning in four Indian Social Enterprises. We mapped and analysed the process by which social enterprises engaged stakeholders within and across organizational boundaries to harness knowledge. We found that knowledge brokering was a process of spanning for, interpreting and combining two types of knowledge – expert and contextual, with strategic knowledge playing a critical background role in this process. Knowledge brokering was delineated into two roles – boundary spanning and translation. Agents who assumed and/or shared these roles were identified and the corresponding learning mechanisms were described. Variations were observed across enterprises in brokering role assumption and the location of brokers with respect to the organizational boundary and hierarchy. These were explained using the concept of immersion which emerged from the data. We employ Schein's organizational cone to develop a model of knowledge brokering, and identify conditions of effective brokering.

Keywords: Knowledge brokering, immersion, learning, social enterprise, qualitative research.

Research Office

Indian Institute of Management Kozhikode

IIMK Campus P. O.,

Kozhikode, Kerala, India,

PIN - 673 570

Phone: +91-495-2809238

Email: rcp@iimk.ac.in

Web: http://www.iimk.ac.in/faculty/respub/workingpapers.php

