

M.M. Hugo-Burrows

## **Converting tacit knowledge into explicit knowledge in organisations: a communication challenge**

### *ABSTRACT*

Business organisations are increasingly viewing knowledge as their most valuable and strategic resource to remain competitive. Every organisation has both explicit knowledge, referring to carefully analysed and defined knowledge, and tacit knowledge, referring to complex knowledge, difficult to specify and often unrecorded. Tacit knowledge becomes embedded in an individual's personal expertise and cannot be expressed through the normal use of words. But it is precisely the tacit knowledge that often delivers a sustainable competitive advantage, as it is this part that competitors have difficulty in replicating.

Many organisations are realizing that they must explicitly manage their knowledge resources and capabilities, and they have initiated a range of knowledge management programmes. An important managerial responsibility resides in managing the knowledge-transfer context, including the assessment of all knowledge possessed by a firm. This necessitates the conversion of tacit knowledge into explicit knowledge.

This article looks at the tacit knowledge literature and focuses on the existing methods of converting tacit knowledge into implicit knowledge in organisations. A pilot survey on existing tacit knowledge articulation in a large South African province is discussed. This has pointed towards a more comprehensive research project, with the aim of providing a model for tacit knowledge communication strategies in South African multicultural firms.

## **INTRODUCTION**

Although the management of knowledge is not a new area of research, the conversion of knowledge in organisations has not received neither substantive nor explicit attention. Business organisations are beginning to view knowledge as their most valuable and strategic resource to remain competitive, and many organisations are realizing that they must explicitly manage their knowledge resources and capabilities. As a result a range of knowledge management programmes have been initiated (Davenport & Pruzak, 1997). A number of these firms realise that the most valuable knowledge is the tacit knowledge, embedded in an individual's personal expertise or shared via personal interaction and social relationships, and they are accumulating this social capital developing from repeated interaction. Leibold et al (2001: 6) point out that control of the flow of knowledge in a firm includes protection against transferring core and company specific knowledge as well as an assessment of the knowledge possessed by a firm. This necessitates the conversion of tacit knowledge into explicit knowledge.

All organisations have both explicit knowledge, referring to carefully analysed and defined knowledge, and tacit knowledge, referring to complex knowledge, difficult to specify and often unrecorded. But it is precisely the tacit knowledge that often delivers a sustainable competitive advantage, as it is this part that competitors have difficulty in replicating.

## **OBJECTIVES OF THE ARTICLE**

The objectives are to:

1. explore the various methods by which explicit knowledge can be articulated into explicit knowledge; and
2. identify and evaluate the methods of the articulation of tacit knowledge currently in operation.

## **LITERATURE REVIEW**

Polanyi considers human knowledge from the perspective that humans can know more than they can tell (Polanyi, 1966), or have the power to know more than they can tell (Polanyi, 1976), implying that knowledge that can be expressed by the individual is explicit knowledge, while the rest is tacit knowledge. In tacit knowledge literature, there is an abundance of terms. Nelson and Winter (1982) indicated that tacit knowing is similar to tacit skills. According to Corsini (1987), tacit knowledge refers to know-how, and Kogut and Zander (1992) agree, pointing out that a recipe is comparable to

know-how, and hence knowledge. Hu (1995) refers to tacit knowledge as unarticulated and uncodifiable.

Nonaka (1991) and Grant (1993) have stated that tacit knowledge occupies a central role in the development of sustainable competitive advantage. Tangible resources can be acquired via purchase or replication, leading Grant (1993:2) and Sobol and Lei (1994) to point out that knowledge, especially tacit knowledge, is one of the most critical resources of the firm. The literature has remained conceptual and there is little empirical evidence that intangible resources underlie performance differences among organisations (Rao, 1994). Ambrosi and Bowman (2001: 814) point out that the term 'knowledge' may not be the most pertinent to employ when discussing the concept in relation to the resource-based competitive advantage, and they propose that the expression 'tacit knowledge' be replaced by 'tacit skills', implying 'doing'. They believe that this distinction will clarify that tacit knowledge is not about knowing the abstract, but that it is about action or 'doing'. They state that there are tacit skills that could be accessed but cannot be expressed through the normal use of words, and they are some of the first to provide suggestions for the operationalisation of tacit skills (Ambrosi and Bowman, 2001: 815).

The definition of tacit skills may encompass different degrees of tacitness, ranging from skills that could easily be communicated, codified and shared, and tacit skills that are totally unavailable, not known to others because they are too ingrained. Between these extremes, one can find at least two other degrees of tacitness. Firstly, tacit skills that could be articulated readily if organisational members were simply asked the question: 'how do you do that?' (Ambrosi and Bowman, 2001: 816). These expert skills have been acquired explicitly (Berry, 1987) and have become tacit through time. Secondly, the tacit skills that could be accessed but cannot be expressed through the normal use of words. They could, however, be articulated differently through the use of appropriate techniques. Bukowitz and Williams (1999) emphasises the importance of those individuals in a firm with a particular talent for acquiring knowledge by asking the right questions and interpreting the data correctly. They refer to these individuals as 'knowledge brokers'.

Explicit knowledge can be expressed in words, numbers, formulae, procedures and universal principles, and can at the same time easily be communicated. This is considered 'hard' knowledge, gained through codifying previously experienced and applied information into understandable symbolisation of the tacit knowledge.

Winter (1987: 171) states that explicit knowledge can be communicated from its possessor to another person in symbolic form and the recipient of the communication is then as much 'in the know' as the originator.

The characteristics of explicit knowledge, according to Sobol & Lei (1994), are:

1. Communicability: It can readily be written down, encoded, explained or understood.
2. Possession: It can be shared and is not specific or idiosyncratic to the firm or person possessing it.

The characteristics of tacit knowledge are:

- It is difficult to write down or formalise (Nonaka, 1991) and people with tacit knowledge cannot explain the decision rules that underlie their performance (Polanyi, 1966: 49).
- It is personal knowledge held by an individual and consists of mental models that individuals follow in certain situations (Sternberg, 1994; Nonaka, 1991). Ravetz (1971) suggests that tacit knowledge becomes so embedded in the individual, and cannot be expressed as it is attached to the knower.
- It is practical (Sternberg, 1994), and is essentially 'know-how' (Kogut & Sander, 1992; Nonaka, 1991).
- It is context specific, deeply rooted in action in a craft, profession, technology or in-group activities (Nonaka, 1991). Sternberg (1994: 28) agrees with this characteristic as knowledge typically acquired in the job situation.

Examples of tacit knowledge, as compared to explicit knowledge in a company, include:

- Practical and unwritten procedures for unblocking production stoppages, as compared to the explicit knowledge of costing procedures and codes.
- Informal networks and procedures for sales order processing to be utilised in combination with the explicit knowledge of new product development through formal company review procedures.
- Experience of what has worked in practice in branding development over a number of years, combined with the explicit knowledge of the company's written history of its past events, end experiences, successes and failures – often very limited.

## **CONVERSION OF KNOWLEDGE**

Human knowledge is created and expanded through social interaction between tacit knowledge and explicit knowledge (Nonaka, 1991). The interaction is a social process between individuals and can be termed knowledge conversion. He (Nonaka, 1991) postulates that through this social conversion process, tacit and explicit knowledge expand in terms of both quality and quantity.

Four different modes of knowledge conversion can be distinguished: (1) from tacit to tacit knowledge, referred to as socialisation; (2) explicit to explicit knowledge, called combination; (3) from explicit to tacit knowledge, which is called internalization; and (4) from tacit to explicit, called articulation (Nonaka, 1991; Morden, 1999).

- Socialisation: One individual shares his or her tacit knowledge or experiences directly with another. In terms of apprenticeship, the apprentice learns the craft or skill from the expert by observing, listening, imitating and practising – absorbing some of the tacit knowledge of the expert. The use of language in this instance is not pivotal and the basic knowledge remains tacit and cannot be utilised by the organisation as a whole. The process could be initiated through brainstorming sessions away from the work environment, where workers discuss difficult problems. Criticism should be encouraged, so that solutions can be reached.
- Combination: This is a process of systemising concepts into knowledge systems. Individuals collect distinct pieces of explicit information, gleaned through documents, meetings, telephone conversations, electronic and other media, and combine them into a new whole. This reconfiguration of existing information can create new values, but does not necessarily extend the company's existing knowledge base. Morden (1999: 284) warns that these combinations will eventually reach finite limits to their potentiality for creativity or development.
- Internalisation: This is a process of embodying explicit knowledge into tacit knowledge. Explicit knowledge is shared throughout the organisation and is internalised by its staff, who then use it to broaden, extend and reconceptualise their own tacit knowledge. Explicit knowledge is internalised, applied and redefined by those who hold it.
- Articulation: This is the process of articulating tacit knowledge into explicit concepts to be shared and used by others. This mode of knowledge articulation can be seen in the process of concept creation and innovation, and is usually triggered by dialogue or collective reflection. When an adequate expression for an image cannot be found through analytical methods of deduction or induction, a non-analytical method could be implemented. This is a key step in the knowledge-creation process in an organisation. Morden (1999 285) points out that mutual trust between an individual and the company is essential. The individual who articulates his or her tacit knowledge must be confident that it is beneficial to disseminate their shared knowledge. Morden (1999: 285) recommends that the articulation process should be contained within a positive context characterised by commitment, reward or incentive.

Nonaka (1991, 99) comments that articulation and internalisation are the critical steps in the spiral of knowledge in an organisation. Knowledge refines and creates more knowledge, or creates more useful knowledge in a continuous virtual cycle. This could spiral onwards into the future if the conditions in the enterprise are right and mutual trust is maintained (Morden, 1999: 285).

## ARTICULATING TACIT KNOWLEDGE

Articulating tacit knowledge into explicit knowledge is a typical knowledge-creating process, taking the shape of various aids. Ambrosi and Bowman (2001) argue for the use of tacit skills instead of tacit knowledge, and suggest metaphors and storytelling as aids to articulate tacit skills that could not be expressed through the normal use of words. Nonaka (1991: 100) suggests that the creation of explicit knowledge from the articulation of tacit knowledge may be achieved by using a methodology based on metaphor, analogy and model. Martin & Hammer (1982) state that both metaphors and storytelling can serve to transmit tacit knowledge. According to Munby (1986: 198), metaphorical language can be employed to give tacit knowledge face. Srivastava and Barret (1988) also propose the metaphor, stating that metaphors can communicate meaning when no explicit language is available, especially with regard to complex ambiguous experience.

### Metaphors

A metaphor involves, or is the transfer of meaning (Ortony, 1975: 45). Morden (1999: 287) defines a metaphor as something that vividly demonstrates the character or quality of an entity by relating that entity to something else, or some concept that clearly exhibits its quality or character. Sackman (89: 465) states that metaphors provide information on the structure, substance and meaning of a particular situation. Nonaka (1991: 99) defines a metaphor as a distinct method of perception, a way that individuals with differing contexts and experiences understand something intuitively through the use of symbols and imagination without the need for analysis or generalisation. A metaphor merges different concepts or experiences into one symbol or image, by establishing a connection between two things that otherwise seem unrelated. Metaphors set up a discrepancy, divergence or contradiction.

Three forms of figurative language used by business communicators, especially in marketing communications, are similes, metaphors and allegories (Shimp, 2000: 125). A simile uses a comparative term such as *like* or *as* to join items from different classes of experience. Metaphor differs from simile in that the comparative term (*as* or *like*) is omitted, and applies a word or phrase to a concept that it does not literally denote in order to suggest a comparison and to make the abstract more concrete. The marketing communicator, in using a metaphor, hopes that by repeatedly associating his brand with a well-known and symbolic referent, the meaning contained in the referent will eventually be transferred to the brand. The last form of figurative language is an extended metaphor, referred to as an allegory.

## **Storytelling**

Ambrosi and Bowman (2001) suggest that semi-structured interviews with a pre-determined purpose are structured to extract tacit knowledge, for example to elicit participants to tell stories about their perceptions of the organisational success. Martin & Hammer (1982: 257) regard stories by interviewees as useful, because a story is one of the forms of implicit communication in an organisational context. People manage the collective memory of the organisation through storytelling (Boje, 1991: 9). Stories permit researchers to examine perceptions that are often filtered, denied, or not in the subjects' consciousness during interviews (Hansen and Kahnweiler, 1993: 1394). Ford and Wood (1992) recommend that these interviews take place in familiar surroundings, as they can serve as cues. Ambrosi and Bowman (2001) suggest that stories could be generated through interviews with employees, by asking for two stories: one positive and one negative. These stories should centre on the reasons for the firm's organisational failure and successes in the past. This could be regarded as an extension of the critical incident technique, developed by Flanagan (1964). The critical incident technique consists of a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems. During surveys, employees were asked to identify and explain positive and negative experiences with supervisors. The research results acknowledge the critical incidents as a basis for evaluating the effectiveness of a staff training programme (Flanagan, 54: 350).

## **Mentorship Programmes**

Mentorship originates from Homer's accounts in the *Odyssey* of Odysseus, leaving his son Telemachus in the care of his wise friend, a Greek named Mentor, when he went off to the Trojan wars. Mentor is attributed with the three fundamental roles of a mentor: guardian or protector, guide or advisor, and counsellor (Samier, 2001: 84). From this literary account, it can be deduced that not only is mentorship multifaceted, but that mentors have personal and professional effects on an individual. Carden (1990: 275) describes mentorship as a comprehensive mutual commitment. The mentor trusts the protégé's ability to perform at high standards, warranting special opportunities, while the protégé trusts the mentor's critique and evaluation in all relevant aspects.

Institutional mentorship as a systemic policy issue is compulsory and a core component of an organisation's staff training programmes (Ehrich, 1995: 70). A mentorship programme should encompass a challenge from the mentor to the protégé to create value for the company from a profitability, productivity and strategic direction perspective, while simultaneously accelerating his career opportunities (Scott, 2002: 19).

Bukowitz and Williams (1999) propose mentoring and training programmes as ways of converting tacit knowledge. Mentoring programmes entail a form of transforming knowledge and the creation of new knowledge flows, including reverse mentoring. Training programmes bring employees of different levels together to share their knowledge of new ideas, methods and processes.

## **RESEARCH METHOD**

### **Research Approach**

Survey research and focus-group research were used. This exploratory research was conducted in two phases. During the first phase, 20 companies were surveyed in a pilot survey, and during the second phase, two companies were selected for in-depth case studies.

### **Population**

A convenience sample consisting of ten service companies and ten production companies in the Western Cape was selected, based on their multicultural workforce.

### **Limiting Factors**

- Survey research involves some non-response bias. In an attempt to ensure a high response rate, the respondents were assured of their anonymity.
- The scope of the research is peripheral, due to financial constraints. It is envisaged that the cross-sectional approach of this research project will be complemented by longitudinal projects in the near future.

## **PHASE 1 – THE PILOT SURVEY**

The aims of this survey were to:

- ascertain the awareness of tacit knowledge in companies; and
- identify and evaluate methods of the articulation of tacit knowledge currently in operation.

The survey instruments used were interviews with top management, and questionnaires to a sample of the remaining employees.



**Findings of the Pilot Survey**

**Table 1a: Awareness of tacit knowledge**

<b>Issue</b>	<b>Group A Production Companies</b>	<b>Group B Service Companies</b>	<b>% of total</b>
Familiar with Knowledge Management	5	7	60
Familiar with Tacit Knowledge	4	3	35
Evidence of articulation of tacit knowledge	2	1	15

**Table 1b: Methods used by the respondents to convert tacit knowledge into explicit knowledge**

<b>Method</b>	<b>Group A Production Companies</b>	<b>Group B Service Companies</b>	<b>Total</b>
Metaphor	1	1	2
Mentor Programmes	0	1	2
Storytelling	2	1	3
Apprenticeships	2	0	2
Observation	1	1	2
Simulation		1	1
Brainstorming		1	1

**Table 1c: Methods recommended by the respondents for the articulation of tacit knowledge**

Method	Group A Production Companies	Group B Service Companies	Total
Metaphor	4	2	6
Mentor Programmes	2	1	3
Storytelling	2	1	3
Apprenticeships	2	1	3
Observation	1	1	2
Simulation		2	2
Brainstorming		1	1
Special methods		1	1

**PHASE II - CASE STUDIES****Case Study 1**

This specific service organisation was chosen because of its ability to transfer knowledge to employees on a daily basis. The research instrument was a semi-structured questionnaire organised into three areas: personal and organisational demographics, understanding of the term tacit knowledge, and selection of methods used in the firm. The questionnaire was pretested on five facilitators on the Cape Town branch, and adapted accordingly. The revised questionnaire was then sent to a convenience sample of 200 employees in Cape Town, Durban, Bloemfontein and Pretoria, and 69 usable responses (34,5%) were received.

Demographic profile of the respondents:

**Table 2a: Position in company**

Managers	11
Lecturers	43
Course designers	15

**Table 2b: Gender**

Male	62%
Female	38%

**Table 2c: Age in years**

Years	Percentage
25 or less	5
26-35	45
36-45	30
46-55	18
Over 55	2

**Table 2d: Experience in current position**

Years	Percentage
Less than 10	30
10-15	50
16-25	15
26-35	5
Over 35	0

**Table 2e: Methods of introducing new recruits**

Formal training course	100 %
Over the shoulder training	80 %
Peer learning	10 %
No training given	0 %
Other methods	0 %

**Table 2f: Methods used to transfer knowledge gained through experience**

Observation	60%
Simulation	60%
Brainstorming	60%
Metaphors	33%
Story-telling	33%
Learning by doing	60%
Other methods	12%

## **Case Study 2**

The company selected is a leading food manufacturer, ranked in the top twenty in terms of market capitalisation on the JSE Securities exchange. Its main competitors are three of the world's largest multi-national food companies with an unending pool of resources – regarded by the company as a challenge. This initiated a drive for transformation into a world class company, leading towards retrenchments, relocations and general restructuring.

### **Top management Focus Group**

One functional department in the company was chosen, spread over five different divisions. A total of 34 senior executives from various geographical areas were selected, based on their participation in the company change management process. The education level of the group was significantly high, but the average length of service at the company was 2,24 years. A basic presentation on knowledge management was provided, with particular emphasis on the difference between tacit and explicit knowledge. A broad discussion followed, indicating a positive understanding of tacit and explicit knowledge.

The participants agreed on the importance of tacit knowledge in the workplace, but rated the company very low on the management of tacit knowledge. No measurement of tacit knowledge or attempts at articulation of tacit into explicit knowledge were evident, but the participants ascribed this to the fact that tacit knowledge and its measurement and conversion are new concepts in the organisation. Nonaka's views of the articulation of tacit knowledge by means of a metaphor or model were rejected. When posed the question as to how the company viewed tacit knowledge articulation during its present change and transitional process, the mean score was very low.

### **Employee survey**

Respondents from five different departments in the company were included. A convenience sample of 30 employees, including lower, middle and upper management, was selected, based on the fact that they were facing relocation. They were requested to complete a questionnaire and 40% responded. The questionnaire consisted of both closed and open-ended questions, and was accompanied by exploratory notes on tacit and explicit knowledge.

**Table 3a: Managerial level of the respondents**

Lower management	16,5%
Middle management	58,5%
Senior management	25%

**Table 3b: Number of years in current position**

0 – 6 months	42%
6 – 12 months	16,5%
1 – 2 years	25%
more than 2 years	16,5%

**Table 3c: Perceived barriers to a knowledge-creation culture in the company**

Barriers	Positive response
Job insecurity	75%
Culture	89%
Processes	67%
Infrastructure	81%
Too much information and too little knowledge	89%
Coping with continuous change	67%
Efficient communication with employees	67%
Transforming information into useful knowledge	67%
Managing time spent on learning	50%

**Table 3d: Perceptions on specified dimensions of tacit knowledge**

Dimension	Positive	Negative
1 Respondents' awareness of knowledge management	42%	58%
2 Understanding of tacit knowledge after it had been explained to the respondents	50%	50%
3 Sufficient efforts exist to convert tacit knowledge into explicit knowledge in the company	17%	83%
4 Is the company concerned about losing valuable expertise and knowledge?	42%	58%
5 Need to have a knowledge-creating culture in the company	100%	0%

Reasons provided for the lack of:

*Converting tacit knowledge into explicit knowledge*

1. No forum exists at present to capture any tacit knowledge.
2. Employees tend to keep their knowledge to themselves, fearing that if they share tacit knowledge, it will make them soft targets for replacement or retrenchment.

*Loss of expertise and knowledge*

1. Knowledge in the workplace is not regarded as valuable in middle and lower order employees. The perceptions of employees at this level include being seen as dispensable commodities that are easily replaceable; nothing is done to convert tacit into explicit knowledge. Lost expert knowledge has to be recurrently sourced.
2. Short-term myopic issues like restructuring or the over-analysis of data are leading to the avoidance of a tacit informational process.
3. Knowledge is however, regarded as a strategic asset within the executive management structure.

**SUMMARY OF THE FINDINGS**

1. Only 35% of the companies surveyed were familiar with the term 'tacit knowledge', and evidence of articulation could be found only in 15% of the companies.
2. The methods used most frequently to convert tacit knowledge into explicit knowledge

are mentoring, metaphors and storytelling.

3. The method recommended by the respondents for articulating tacit knowledge is by utilizing metaphors.
4. An excess of information communicated throughout the firm and the different cultures in a firm were seen as the major barriers to a knowledge-creation culture.
5. A total of 83% of the respondents indicated that they were insufficient efforts to convert tacit knowledge into explicit knowledge in the company.
6. It was clear that there was a lack of trust from the employees' perspective towards management. The respondents found it easy to list barriers that prevented them from parting with their knowledge willingly. Job security is regarded as a critical barrier and few employees are willing to sacrifice that leverage without guarantees to prevent exploitation of their vulnerability. Trust is essential in a knowledge-creation environment, especially in the articulation of tacit knowledge.
7. Employees tend to believe that a person will automatically retain a certain amount of knowledge, which they are unable to express. Skilled communicators will be needed to overcome this barrier.
8. The part of human capital that is tied up in the tacit knowledge of individuals is not regarded as a priority by top management. Loss of expertise could be costly for the firm, as job descriptions and manuals are inadequate to provide the required information.

## RECOMMENDATIONS

1. The cost of knowledge articulation should be seen as research and development expenditure, essential to the future profitability of the company. While financial managers appreciate and acknowledge the importance of knowledge management, they tend to weigh the costs of knowledge management against the current profitability. Furthermore, research and development expenditure should include not only methods of knowledge articulation, but also a process of continued learning and development, to sustain the knowledge creation in the company.
2. Storytelling could be taken further. Employees attending conferences could be asked to take photographs at their conferences, and share them with colleagues when presenting their experiences to team members. The audience then write down details that strike them on index cards, and these form the basis of the trip report. In this way, context, rather than content, is created. Furthermore, the pictures could be posted on the web for employees to recreate the context with ease.

During interviews with employees, they could be asked to tell two stories, one positive and one negative, concerning the causes of organisational failure and success in the past. As recommended by Ford and Wood (1992), the interviews



should take place in familiar surroundings, as they serve as cues for the generation of stories.

3. Creating an awareness of the potential value of the tacit knowledge of a firm embedded in its employees' skills. Companies should evaluate this key essence and strive to retain their key employees. In addition, knowledge-sharing proficiencies should be developed at all levels of employment. A dedicated team with special skills should act as knowledge-brokers, focusing on the tacit knowledge to be articulated.
4. Additional means of knowledge articulation should be developed for companies with diverse cultural backgrounds, as western countries tend not to view concepts or systems in a holistic way. These methods could include the following:
  - **Music:** Music, which is often a derivative of a specific culture, particularly in South Africa, could form an important articulation method.
  - **Mentoring:** Through a process of monitoring, the senior personnel of a company develop a close working relationship with specific employees, passing on the tacit knowledge over time.
  - **Interviewing:** Through formal and informal interviews, a skilled communicator could articulate knowledge from certain individuals or groups in the company.
  - **Workplace Forums:** Through the development of communication channels within an organisation, knowledge could be articulated on a social level within a company.
  - **Theatre:** The use of theatre or 'Roadshows' could also assist in distributing information, which stimulates and encourages an environment for knowledge creation.
  - **Technology:** In labour-intensive companies, the incorporation of technology into the articulation process could yield positive results.
5. Mapping the tacit knowledge accumulates all sources of knowledge and creates a virtual roadmap to assist all employees in finding the required knowledge.
6. Removing Barriers. A company should identify its organisational barriers to trust, which will initiate the process of the articulation of tacit knowledge. A forum should be made available for people to share information, address fears and create mutual trust. It is envisaged that the Academy of Excellence will eventually present a forum where skilled staff will have the opportunity to share their knowledge and experience.
7. In multicultural organisation's expertise in intercultural communication and negotiation becomes essential, as employees of multinational corporations must

deal with staff members who belong to different cultures. Because of cultural heterogeneity within a nation, there will be cultural diversity among workers. One of the dilemmas of managing communications in a multicultural company is that to conduct business, particulars about a number of cultures must first be assimilated. Providing a culture-general framework within which the right questions regarding culture-specific questions may be asked will partially solve the problem. Linguistic differences influence multicultural communications, and managing communication within a business environment must therefore include the elimination of linguistic determinism and sociolinguistics.

## **CONCLUSION**

If South Africa is to succeed economically, it has to invest in knowledge-intensive industries. As the competitive advantage of knowledge-intensive industries is knowledge, it becomes clear that the future growth of the SA economy includes the constant improvement of our ability to articulate tacit knowledge in order to encourage the growth of knowledge in the economy. These conclusions are in line with South Africa's Industrial Trade Policy Framework, which implies that investment in knowledge-intensive industries is critical to South Africa's prosperity – and knowledge management plays a vital role in the country's prosperity.

In this paper, the preliminary results of a research project in progress are provided. The pilot survey indicated the need for extensive further research in tacit knowledge articulation in multicultural South African companies. It is envisaged that the cross-sectional approach of this research project will be complemented by longitudinal projects in the near future. Because of the preliminary nature of the research results at this stage, no specific measures of analysis, validation, etc. are provided here.

Although language is not alone in making knowledge explicit, articulating tacit knowledge is becoming very important for knowledge creation, which is vital for the continued existence of any business amid increased competition and more educated consumers. It become clear that the identification and use of appropriate methods of articulating tacit knowledge are not only necessary, but becomes essential in multicultural societies like South Africa. The need for business communication research and specifically the articulation of tacit knowledge in a dynamic South Africa will increase, and effective techniques and strategies will undoubtedly be needed – and developed.

## References

---

- Ambrosi, V & Bowman, C (2001). Tacit knowledge: Some suggestions for operationalization. *Journal of Management Studies*, 38(6), September.
- Berry, D.C. 1987. The problem of tacit knowledge. *Expert Systems*, 4(3).
- Boje, D.M. 1991. Consulting and change in storytelling organisation. *Journal of Organizational Change Management*, 4(3).
- Bukowitz, W.R. & Williams, R.L. 1999. *The Knowledge management Field Book*. Edinburgh: Pearson Education Ltd.
- Carden, A. 1990. Mentoring and adult career development: The evolution of a theory. *The Counselling Psychologist*. 18(2).
- Corsini, R. 1987. *Concise Encyclopaedia of Psychology*. New York: Wiley.
- Davenport, T H & Prusak, L. 1997. *Working Knowledge: How organizations manage what they know*. Harvard Business School Press, Boston.
- Drew, S. 1999. Building knowledge management into strategy: Making sense of a new perspective. *Long Range Planning*. January, 32(1).
- Ehrlich, L.C. 1995. Professional mentorship for woman educators in government schools. *Journal of Educational Administration*. 33(2).
- Fahey, L & Prusak, L. 1998. The Eleven deadliest sins of knowledge management. *California Management Review*. Spring, 40(3).
- Fitzgerald, T K. 1997. Understanding diversity in the workplace: Cultural metaphors or metaphors of identity? *Business Horizons*, July/August.
- Flanagan, J C. 1964. The critical incident technique. *Psychology Bulletin*, 51.
- Ford, J M & Wood, L E. 1992. Structuring and documenting interactions with subject-matter experts. *Performance Improvement Quarterly*. 5(1).
- Foucault, M. 1980. *Power in knowledge*. New York: Pantheon.
- Geisler, E. 1999. Harnessing the Value of Experience in the Knowledge-Driven Firm. *Business Horizons*, May/June.
- Gordon, J. 1993. *Organizational behaviour*. Allyn & Bacon, Boston, MA.
- Grant, R.M. 1991. The Resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*. 33(3).
- Grant, R.M. 1993. *Organisational capabilities within a knowledge-based view of the firm*. Paper presented at the Annual Meeting of the Academy of Management, Atlanta, Georgia.
- Hansen, C. D. & Kahnweiler, W.M. 1993. Storytelling: An instrument for understanding the dynamics of corporate relationships. *Human Relations*. 46(12), Sept/October.
- Hiebeler, R J. 1996. Benchmarking knowledge management. *Strategy and Leadership*. March/April.
- Hu, Y.S. 1995. The international transferability of the firm's advantages. *California Management Review*, 37(4).
- Kogut, B & Zander, U. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. *Organisational Science*, 3.

- Leibold, M., Gibbert, M. & Kaes, B. 2001. The knowledge management dilemma in corporate strategic alliances: A review of current theory and a framework to guide future research. *Management Dynamics: Contemporary Research*. 10(2), Autumn.
- Leonard, D & Sensiper, S. 1995. The role of tacit knowledge in group innovation. *California Management Review*. Spring, 40(3).
- Martin, J. 1982. *Stories and scripts in organizational setting*. In Hastoraf, A.H. & Isen, A.M. (Eds), *Cognitive Social Psychology*. New York: Elsevier, 255-305.
- Martin, J N & Hammer, M R. 1982. Behavioural categories of intercultural communication competence: Everyday communicators' perception. *International Journal of Intercultural Relations*. 13(3).
- McAllister, P. 1996. Australian multiculturalism: Lessons for South Africa. *Indicator*, 13(2).
- McFadzean, E. 2000. What can we learn from creative People? *Management Decision*. 38(1).
- Morder, T. 1999. *Business Strategy*. London: McGraw-Hill.
- Mullin, R. 1996. Knowledge management: A cultural evolution. *Management*. September/October.
- Munby, H. 1986. Metaphor is the thinking of teachers: An exploratory study. *Journal of Curriculum studies*, 18(2).
- Nelson, R.R. & Winter, S.G. 1982. *An evolutionary theory of economic change*. Cambridge, MA: The Belknap Press.
- Nonaka, I. 1991. The knowledge-creating company. *Harvard Business Review*. Vol. 69.
- Nonaka, I & Takeuchi, H. 1995. *The knowledge-creating company*. Oxford University Press: Oxford.
- Ortony, A. 1975. Why metaphors are necessary and not just nice. *Educational Theory*; Vol 25(1).
- Polanyi, M. 1966. *The tacit dimension*. Doubleday & CO; New York.
- Polanyi, M. 1976. *Tacit knowing*. In Marx, M H & Goodson, F E (Eds): *Theories in contemporary Psychology*. 2nd Ed., MacMillan: New York.
- Polanyi, M. 1998. The tacit dimension. in L Prusak (Ed): *Knowledge in Organisations*. Butterworth-Heinemann: Boston.
- Rao, H. 1994. The social construction of reputation: Certificate contests, legitimization, and the survival of organisations in the American automobile industry: 1895-1912. *Strategic Management Journal*, 15.
- Ravetz, J.R. 1971. *Scientific knowledge and its social problems*. Oxford: Clarendon Press.
- Sackman, S. 1989. The role of metaphors in organization transformation. *Human Relations*, Vol 42(6).
- Samier, E. 2000. Public Administration mentorship: Conceptual and pragmatiaic considerations. *Journal of Educational Administration*. 38(1).
- Schimp, T.A. 2000. *Advertising promotion: Supplemental aspects of Integrated marketing communications*. Orlando, FL: Harcourt, Inc.
- Schultz, M & Jobe, L A. 2001. Codification and tacitness as knowledge management strategies: An empirical exploration. *Journal of High Technology Management Research*. Spring, Vol 12(1).
- Scott, M.P. 2002. You get what you give. *Office Professional*. Jan/Feb, 62(1).
- Sobol, M G. & Lei, D. 1994. Environment, manufacturing technology and embedded knowledge. *International Journal of Human Factors in Manufacturing*. 4(2).
- Spinello, R A. 1998. The knowledge chain. *Business Horizons*. November/December.

- Srivastava, S. & Barrett, F.J. 1988. The transforming nature of metaphors in group development; A study in group therapy. *Human Relations*, 41(1).
- Sternberg, J.J. 1994. *Tacit Knowledge and Job success*. In Anderson, N & Harriet, P. (Eds). Assessment and selection in organizations: Methods for practice, recruitment and appraisal. London: John Wiley, 27-39.
- Teece, D J. 1998. Capturing value from knowledge assets: The next economy, markets for know-how and intangible assets. *California Management Review*. 40(3).
- Von Krogh G, Ichijo, K & Nonaka, I. 2000. *Enabling knowledge creation to unlock the mystery of tacit knowledge and release the power of innovation*. Oxford: University Press.
- Von Krogh G, Nonaka, I & Nishiguchi, T. 2000. *Knowledge creation: A source of value*. St Martin Press.
- Von Krogh, G & Roos, J (Ed). 1996. *Managing knowledge: Perspectives on co-operation and competition*. Sage Publishers.
- Von Krogh, G & Roos, J (Ed). 1995. *Organisational epistemology*. St Martin Press.
- Von Krogh, G., Roos, J & Kleine D. (Ed). 1999. *Knowing in firms: Understanding, managing and measuring knowledge*. London: Corwin Press.
- Winter, S.G. 1987. Knowledge and competence as strategic assets. In Teece, D.J. (Ed). *The Competitive Challenge*. Cambridge, MA : Ballenger Publishing Company, 159-84.