EFFECTIVE KNOWLEDGE DIFFUSION WITHIN LEARNING ORGANISATIONS

Ted O Keeffe
Centre for Business Excellence,
Waterford institute of Technology
Waterford
Ireland

Mičo Jančev Smile IT Solutions Vienna Austria

Key Words: Change Management, Knowledge Management, Learning culture, Organisational Learning, Management Effectiveness, Knowledge Worker

ABSTRACT

Quality is now accepted as a sine qua non for business success and thus is an obvious part of a learning organisation. Companies having a Total Quality Management (TQM) focus strive for continuous improvement and such companies have much in common with learning organisations. However, while much has been written on the importance of evolving a learning culture, less attention has been given to understanding in a practical way the characteristics of learning organisations and the ways in which companies can improve their learning systems. This paper explores the characteristics of organisational learning and effective knowledge diffusion. It also recognizes that knowledge has no boundaries and can just as easily be diffused across national borders and become the property of those who are capable of using it. This understanding is especially important for former socialist countries that are endeavouring to overcome decades of economic under development.

1. INTRODUCTION

The realities of global competition and increased customer sophistication have focused organisational attention on the need to develop a learning organisation process. Some commentators argue that the aspiration of becoming a learning organisation is not only necessary but essential for long-term survival [9,10] and contended [2] that the rate at which individuals and organisations learn may become the only sustainable competitive advantage. This notion is supported by Schein [5] when he stated that current circumstances tell us that learning is no longer a choice but a necessity.

Total Quality Management (TQM) strives to create a culture, which is conducive to continuous quality improvements throughout the organisation. It focuses on the totality of the system rather than its individual parts, seeking to identify the causes of failure rather than the simple fact that failure has occurred. Much emphasis is placed on teamwork, leadership, employee motivation and the direct involvement of workers in solving technical difficulties and behavioural concerns. Indeed, in some respects, TQM may be seen as the precursor of organisational learning or a firm's tentative first steps towards becoming a learning organisation.

2. LEARNING MODEL

Seven characteristics of organisational learning have been identified from an extensive review of the literature [29,30], which are as follows.

- 1. Learning antecedents
- 2. Environment of innovation
- 3. Perceived need & learning mechanisms
- 4. Executive challenge/learning processes
- 5. Cultural imperative of resourcing learning
- 6. Organisational wide learning
- 7. Learning organisation



© Ted O Keeffe 2000

FIGURE 1: LEARNING MODEL

2.1. Learning Antecedents

However, the scope of this paper only allows the authors to review the first organisational learning characteristic in any detail as the page restraint imposed by the conference organisers prevents a more comprehensive review of the learning process. The significance of the remaining characteristics is alluded to but a more detailed examination awaits another opportunity.

2.1.1. Customer Responsive Culture

Sinkula [20] argue the organisation's culture drives the overall value system providing strong norms for sharing of information and reaching a consensus on its meaning. Day [17] elaborates: A customer driven learning culture supports the value of thorough market intelligence and the necessity of functionally co-ordinated actions directed at gaining a competitive advantage. With its external emphasis on developing understanding with regard

to customers and competitors, the market-driven learning organisation is well positioned to anticipate the developing needs of its customers and respond through the addition of innovative products and services. Thus, a customer focus is an important aspect of a learning orientation. A narrow construction of culture would lead to learning only within traditional boundaries. To develop a powerful foundation for extensive learning, the organisation must provide the opportunity for generative learning by all stakeholders.

2.1.2. Anthropomorphism within Organisations

Anthropomorphism is the attribution of human form or qualities to non-human entities. The current, acceptance of organisational learning involves anthropomorphism as the known theory glosses over the how and why organisations learn, which is not always self-evident. The argument that organisational learning cannot and should not be treated as an extension of individual learning was made by Argyris & Schon [7], understanding that learning produces knowledge, organisations and their members often know, or come to know, different things. Although organisational learning occurs through individuals, it would be a mistake to conclude that organisational learning is nothing but the cumulative result of members' learning. Organisations do not have brains, but they have cognitive systems and memories. As individuals develop their personalities and beliefs over time, so too will organisations develop their views and ideologies.

2.1.3. Intellectual Capital

Up until recently manufacturing resources were determined on the basis of capital, land, and business acumen. With the advent of modern technological developments, new management practices and systematic staff development initiatives, the importance of capital and land is diminishing. While at the same time, labour and in particular intellectual labour has generated a very powerful influence across all media and even into the high technology sector. Graham [21] stated that for several decades the world's most prescient observers of societal change have predicted the emergence of a new economy in which intellectual prowess, not machine capability would be the critical resource. While Drucker [8] has been credited with foretelling the downfall of capitalism, Peters and Waterman [1] established the organisational significance of each employee within a company irrespective of size. They suggest that in excellent companies employees are identified as a key resource. Their research showed that excellent companies were, above all, brilliant on the basics. Tools didn't substitute for thinking. Intellect didn't overpower wisdom. Analysis didn't impede action. Rather, these organisations worked hard to keep things simple in a complex world. The intellectual capital of individuals must be liberated if an organisation is to have any chance of long-term survival, as it is the workforce that is the primary driving force of organisational success. In the same time, the knowledge workers, collectively, are the new capitalists because they collectively own the means of production. [11]

2.1.4. Dissatisfaction with the Traditional Management Paradigm

Drucker [9,11] contrasts the notion of need for control in modern organisations with the development of information technology and increasing numbers of 'knowledge employees' who are less likely to respond to autocratic management. Rather he sees employees seeking opportunities for challenge, as well as outlets for creative ability, while enjoying the stimulation of working with like-minded individuals. This dissatisfaction probably is best articulated by Handy [3] when he expresses the fear that in "a world where the individual is

left even more to his own devices, as the complexities of life and work develop outside the institutions of society, could be a world designed for selfishness". Though Handy's hypothesis is concerned with change in an increasingly complex society and the idea that "the only prediction that will hold true is that no prediction will hold true". Dissatisfaction with the existing paradigm is creating an empty space in the control process, which the concept of organisational learning is endeavouring to fill. The concept of learning and knowledge transfer is attracting greater acceptance because it purports to overcome many of the concerns that have led to the discrediting of the traditional paradigm. As the pace of product innovation and market place changes continue to accelerate learning organisations within dynamic environments must become more nimble, flexible and responsive to customers needs.

2.1.5. Nature of Global Business

Globalisation doesn't just mean conducting business across national borders. It also means expanding competition for almost every type of organisation. Today's executives must understand that they face foreign competitors as well as local and national ones. Such globalisation of multinational organisations presents management with the challenge of learning to operate in diverse cultural settings. Consumers now have wider choices and are becoming more sophisticated in their selection of products and services. They expect new and improved products, superior service and lower prices. The two major forces driving globalisation have been market growth and cost reduction initiatives. If an organisation wishes to gain market share, expanding operations outside its national borders is one such strategy. In recent years both trade and political barriers have been lowered or eliminated altogether by the creation of multi-country trading blocks.

2.2. Environment of Innovation

Questions on how and why firms need to be innovative are related to the more general questions of how and why firms differ in practice. However, resource based theorising has typically not been concerned with the practicalities of managing effective, innovative firms. Their prescriptions draw in varying degrees on theory and empirical observation, though their styles differ markedly. Other writers [27,28] emphasise the strategic value of managing the acquisition and application of knowledge and thus organisational learning. The only sustainable competitive advantage is an organisation's ability to learn faster than its competitors. Thus knowledge diffusion initiatives become a vital consideration for organisational learning and effectiveness. Recognising and communicating the merits of knowledge is easy; however, difficulties abound whenever organisations begin deliberate organisation wide implementation. While young, dynamic organisations emphasise creativity and innovation as key factors of organisational culture, older, more mature companies may find the implementation of learning initiatives a particularly challenging activity. Executive management in particular has a duty of care to create and communicate the dynamic vision of how knowledge can be effectively diffused throughout the organisation. "The knowledge society", say Drucker [11], "is a society of seniors and juniors rather than of bosses and subordinates".

2.3. Perceived Need and Organisational Learning Mechanisms (OLMS)

Learning organisations are continuously engaged in developing understanding, helping others to learn and sharing their experiences. Thus, the question to what degree a particular organisation is a learning organisation can be answered by examining the range of OLMs it

regularly utilises, such as benchmarking, technology innovation and contingency approach among others. Dodgson [14] defined learning organisations as firms that purposefully adopt structures and strategies that encourage learning. This idea leads us on to the next phase of the learning model, which examines learning strategies and mechanisms. Learning occurs when organisations synthesise and then institutionalise people's intellectual capital and learning, their memories, culture, knowledge systems, routines and core competencies. Employees may come and go and leadership may change but an organisation's memories preserve behaviour, norms, values and "mental maps" over time. As an organisation addresses and solves problems of survival, it builds an organisational structure that becomes the repository for lessons learned.

2.4. Executive Challenge and Learning Processes

Learning cannot occur in a vacuum, it requires executive management commitment and functional support in order to develop from discrete to organisational wide activity. This means that all aspects of the company should be actively embracing learning. In learning organisations management decisions are seen as contingent rather than as definitive but always remain an important part of the strategic decision making process. This allows us to locate the next phase of the model dealing with the challenges facing executive management and the learning processes developed to facilitate continuous learning. Marsick and Watkins [24] contend that the juncture between emotional and cognitive aspects of learning poses the biggest challenge to human resource developers seeking to enable effective, continuous learning in the workplace. Argyris [6] points out that these emotionally charged tasks often are hardest for those that must lead the way. However, organisational development and the imperatives of developing organisational learning is not solely dependent on the competence of executive management, there is a cultural perspective that must be considered as well.

2.5. Cultural Imperatives in Resourcing Learning

Effective learning is contingent on establishing a culture that promotes inquiry, openness and trust [23]. Thus, organisational learning has two facets, a tangible "hardware" that consists of learning mechanisms and an intangible "software" facet that consists of shared values and beliefs that ensure that the mechanisms produce actual learning (i.e., new insights and behaviour) and not mere rituals of learning. According to Schein [4] organisational culture is a normative system of shared values and beliefs that shape how organisation members feel, think and behave. Values are not observable entities. Rather, their existence is inferred from the rhetoric that organisational members use to describe what is appropriate, important and worthy of sacrifice (espoused values) and from members' actions that require sacrifice or some lesser investment of resources and effort (values in use). It is here that learning corporate values such as respect for individual expression and operating principles are formally espoused within a context that inspires superior collective performance while simultaneously reducing autocratic authority [21]. While Hamel and Prahalad [13] argued that any organisation that cannot imagine the future won't be around to enjoy it.

2.6.Organisational Wide Learning

The learning process demands unlearning as much as learning. Unlearning involves the process of restructuring past successes to fit the changing environmental and situational conditions. Mistakes, poor performance or environmental uncertainty frequently trigger it. Under any circumstances, unlearning is difficult. Unlearning generates innovation, improvisation and experimentation in new ways of doing things. It leads to the creative processes of learning, change and strategy development. Organisational learning differs from individual learning in several important respects. First, it is a collective event. As a result, organisations learn only as fast as the slowest link. Adoption of new models or revision of old genre is inhibited, unless all of the major decision-makers commit to a common set of actions. Learning is not simply the sum of each member's learning. Organisational learning must blend the mental models of individual executives with those that are shared among teams and groups. Central to the success of any learning programme is the concept of failure. All learning takes place in the context of failure, if you are learning to do something and it does not involve failure, you haven't learned anything. In the real world, of course, failure often involves embarrassment and lack of self-esteem. Another part of this transition will see organisations undergoing significant structural change, developing horizontal networks of task-focused teams leading to flatter organisations. These new horizontal systems will be organised around processes rather than tasks, driven by customer needs and inputs and dependent on group performance.

2.7. Learning Organisations

A learning company is an organisation that facilitates the learning of all its members in a transformational rather than in the more normal transactional manner. According to Garvin [15] it is an organisation skilled at creating, acquiring and transferring knowledge and at transforming itself to reflect new knowledge and insights. This brings us to the central conundrum of the learning organisation, if management can be learned, can learning be managed. It is accepted that organisations have the capacity to learn collectively and that such learning occurs at different speeds and levels within companies. However, it is employees within organisations rather than organisations themselves that learn, individuals create transformation learning within firms. Organisations do not have brains but they have cognitive systems and memories. Individuals come and go and leadership change, but organisations' memories preserve certain norms and values. However, so long as organisational learning refers exclusively to the sum total of the organisation working in unison without reference to expanding and building on that, which remains undeveloped, then the point of the learning organisation concept is being missed [18].

Learning to be effective needs to coincide with the processes of maturation, self-fulfilment, perspective and self-determination of the individual learner, it needs to relate to and build on what individuals bring to their learning [19]. For all its elusiveness, organisational learning is more than a metaphor it is attainable, it has a recognisable and distinctive feel. Dale [16] captured this understanding when she stated that a learning organisation strives to create values, policies and procedures in which 'learning' and 'working' are synonymous throughout the organisation. Achieving a learning organisation, then, requires activity on a wide range of fronts. According to Mabey and Salaman [22] it demands serious, far-reaching and probably uncomfortable commitments and change from senior management, penetrating to the core of the organisation.

3. CONCLUSION

The competitive nature of the business environment with its progressively increasing pressure on companies to respond to customers changing needs is placing undue demands on organisations. The relationship between the business environment and customer needs is not immediately apparent but it is a consequence of a greater variety of products to choose from. The advent of the global market gives customers the opportunity to select products or services from companies from all parts of the globe, which in turn gives customers the opportunity to demand improved performance from their suppliers particularly when alternative quality producers are available. Developing a customer responsive culture and intellectual capital imperatives are opposite sides of the same coin. The relationship between these two drivers is not immediately apparent but when one speaks of an organisation's capacity to learn, we are in effect reflecting the firm's approach to the development of its human resources, which is a consequence of an organisation's cultural prerogative. More and more companies perceive the learning organisation process as an appropriate response to some or all of these developments. The move towards a learning organisation begins with the integration of the antecedents together with a convergence of circumstances both internal and external to the organisation.

In parallel with the increasing rate of technology change, the post-socialist countries in Central and Eastern Europe are still trying to come to terms with the great political upheavals that have occurred towards the close of the second millennium. A series of parallel change processes initiatives such as entrepreneurship, leadership, training and development programmes and ethical issues must be addressed in order that the necessary transformation that will enable these countries to compete on the open market might occur. Currently, the informed insider view recognises that the processes of transition, reorganisation and reforming in said countries is more complicated than it initially appears to those looking in from the outside [25,26]. The collapse of the "socialist" system is a natural consequence of ignoring intellectual capital (knowledge) as one of the key factors for successful economic development [27]. Maybe the learning organisation process is an appropriate response to some of these problems.

4. REFERENCES

- [1] Peters, T. J. & R. H. Waterman: In Search of Excellence Lessons from America's Best-Run Companies, Harper & Row, New York, 1982.
- [2] State, R.: Organizational learning: The Key to Management Innovation, Sloan Management Review, Vol. 30, Spring: pp. 63-74, 1989.
- [3] Handy, C. B.: The Age of Unreason, Business Books, London, 1989.
- [4] Schein, E.H.: Organizational Culture, American Psychologist, Vol. 45, February, 1990., pp 109-119.
- [5] Schein, E.H.: On Dialogue, Culture and Organizational Learning, Organizational Dynamics, Autumn, 1993.
- [6] Argyris, C.: Teaching Smart People How to Learn, Harvard Business Review, Vol. 72, May/June, 1991., pp. 99-109.
- [7] Argyris, C. & D. A. Schon: Organizational Learning 11, Addison-Wesley, 1996.
- [8] Drucker, P.: Managing For the Future: The 1990s and Beyond. Dutton, New York, 1992.
- [9] Drucker, P.: Post-Capitalist Society, Butterworth-Heinemann, Oxford, 1993.
- [10] Drucker, P.: Management Challenges for the 21st Century, Harper&Row, New York, 1999.
- [11] Drucker, P.: Managing in the Next Society, Truman Talley Books, New York, 2002.
- [12] Schein, E.H.: On Dialogue, Culture and Organizational Learning, Organizational Dynamics, Autumn, 1993.
- [13] Hamel, G. & C.K. Prahalad: Corporate imagination and Expeditionary marketing, Harvard

- Business School Review, Vol. 69, No. 4: pp. 81-92. July/August, 1994, Boston, MA.
- [14] Dodgson, M.: Technological Collaboration in Industry: Routledge, London, 1993.
- [15] Garvin, D.A.: Building a learning organisation, Harvard Business Review, 71(4), July/August, 1993., pp.78-91.
- [16] Dale, B. G.: Managing Quality Control: McGraw-Hill, London, 1994.
- [17] Day, G. S.: Continuous Learning About Markets, California management Review, Vol. 36, Summer, pp. 9-31, 1994.
- [18] Jones, A. M. & C. Hendry: Research Note: The Learning Organization: Adult Learning and Organisational Transformation, British Journal of Management, Vol. 5: 1994., pp. 153-162.
- [19] Rodgers, R.: Explorations of Negotiation Behaviours in Ten Foreign Cultures Using a Model Developed in the United States, Management Science, Vol. 40, January, 1994., pp. 72-95.
- [20] Sinkula, J. M.: Marketing Information Processing and Organizational Learning, Journal of Marketing, Vol. 58, January, 1994., pp. 35-45.
- [21] Graham, A.: The learning organisation: Managing knowledge for business success, The Economist Intelligence Unit, New York, 1996.
- [22] Mabey, C.I.P. & G. Salaman: Human Resource Management: A Strategic Introduction, Blackwell Business, Oxford UK, 1998.
- [23] Slocum, J. W. Jr., McGill, M.E. & D. Lei: Designing Organisations for Competitive Advantage, Organisational Dynamics, Winter, 1999., pp. 24-38.
- [24] Marsick, V. J. & K. E. Watkins: Looking again at learning in the learning organisation: a tool that can turn into a weapon, The Learning Organisation Vol. 6, 1999., pp. 207-211.
- [25] Cernetič J., Jančev, M.: Implementation of Advanced Technology in Post-socialist Countries, Preprints of the 7th IFAC Symposium on Automated Systems Based on Human Skill, Aachen, Germany, June 2000, pp. 251-254.
- [26] Jančev, M. & Cernetic J.: A Social Appropriate Approach for Managing Technological Change, Preprints of the 8th IFAC SWIIS Conference on Social Stability: The Challenge of Technology Development, Vienna, Austria, September 27-29, 2001, pp. 79-84.
- [27] Jančev, M. & O'Keeffe, T.: The Knowledge Environment: Building Bridges Between Theory and Practice. Paper presented at the IFAC Workshop on Technology and International Stability: Ethics, Technology and Stability, Waterford, Republic of Ireland, July 03-05, 2003.
- [28] O'Keeffe, T., & Harrington D.: Learning to Learn: An Examination of Organisational Learning in Selected Irish Multinationals, Journal of European Industrial Training, MCB University Press, Vol. 25: Number 2/3/4, 2001.
- [29] O'Keeffe, T.: An Action Learning Model Facilitating Knowledge Transfer in Stable and Dynamic Environments. Paper presented at the 8th IFAC SWIIS Conference on Social Stability: The Challenge of Technology Development, Vienna, Austria, September 27-29, 2001.
- [30] O'Keeffe, T.: Organisational Learning: A New Perspective, Journal of European Industrial Training, MCB University Press, Vol. 26: Number 2/3/4, 2002.
- [31] O'Keeffe. T.: A New Management Development Process, Paper presented to the Strategic Management Initiative Committee of the Irish Government in March 2002 on organisational learning and human resource development in government departments, 2002.
- [32] O'Keeffe, T.: Preparing Expatriate Managers of Multinational Organisations for the cultural and learning imperatives of their new environment, Journal of European Industrial Training, MCB University Press, Vol. 27, Number 5., 2003.