

# 1 Organisational Learning

*“The best companies now know, without doubt, where productivity – real and limitless productivity – comes from. It comes from challenged, empowered, excited, rewarded teams of people. It comes from engaging every single mind in the organisation, making everyone part of the action, and allowing everyone to have a voice – a role – in the success of the enterprise. Doing so raises productivity not incrementally, but by multiples.” (Welch, 1994)*

(Jack Welch, CEO, General Electric)

## 1.1 Strategic Human Resource Management and Organisational Learning

Companies worldwide are attempting to become as globally competitive as possible, as rapidly as possible. A critical factor in this is the effective management of human resources (HR). But how should they achieve this? Can they achieve this organisational success now and in the future in the same way as they have done in the past? The rationale for strategic human resource management (HRM) is the perceived advantage of having an agreed and understood basis for developing approaches to people management in the longer term. Lengnick-Hall & Lengnick-Hall (1990) have asserted that underlying this rationale in a business is the concept of achieving competitive advantage through HRM and in particular High Performance Work Practices – HPWPs – (Schuler & Huselid, 1997). Hamel & Prahalad (1989) state that competitive advantage is obtained if an organisation can obtain and develop human resources which enable it to learn faster and apply its learning more effectively than its competitors.

A number of authors suggest that organisations cannot continue to perform and achieve competitive advantage in a dynamic global economy without organisational learning (e.g.: Appelbaum & Gallagher, 2000; Argyris & Schön, 1996; Barnes, 1991; Cairns, 1998; Carley, 1992; Dixon, 1994; Drejer, 2000;

Garratt, 1997; Garvin, 1993; Grant, 1991; de Geus, 1988; Grundy, 1994; Iles, 1997; Nonaka, 1991; Schein, 1993; Senge, 1990; Slater & Narver, 1995). Dodgson (1993) argues that the greater the degree of uncertainty in the economic environment the greater the need for learning at all levels in the organisation. Armstrong (2001) states that in order to achieve competitive advantage, HR strategy should include recruiting, developing and retaining talented people, the intellectual capital in the organisation must be developed and nurtured and HPWPs (including training, development and organisational learning) should be implemented.

Schuler (1992) argues that strategic HRM is about integration, adaptation through learning and effective human resource practices, policies and programmes. That is, HRM should be fully integrated with the organisation's strategy and the strategic needs of the business and ensure that both HR and working practices are adjusted, accepted and used across that organisation by employees as part of their everyday work (Schuler, 1992). This should also include the quality of motivation and organisational commitment of employees in contributing to the achievement of the business' objectives.

Domsch & Harms (1997) argue that strategic HRM should also include the introduction and operation of new philosophies including continuous improvement in order to improve involvement and commitment of employees. In particular Domsch & Harms (1997) suggest that organisational learning should also be included as HR Strategy in order for organisations to continuously adapt and innovate and thereby obtain and sustain employee commitment. However, Domsch & Harms (1997) do not provide any empirical research supporting a link between organisational learning and commitment.

## **1.2 HRM, High Performance Work Practices and Organisational Performance**

Schuler & Huselid (1997) suggest that HPWPs result in higher levels of profitability, higher annual sales per employee (productivity), higher market value and higher earnings per share growth than organisations that do not use effective HRM practices. HPWPs include extensive employee involvement and their training and development, compensation contingent on individual, workgroup, and overall organisation performance, job-related and competency-based selection and performance management, and employee participation and involvement, help to produce a workforce with the competencies and flexibility necessary to compete in dynamic business markets. These HPWPs have a strategic impact and help create sustainable competitive advantage. A selection of recent studies to illustrate the relationship between HPWPs and organisational performance are presented below.

Huselid (1995) evaluated the links between systems of HPWPs and company performance. The HPWPs Huselid investigated included the use of job analysis, use of employee opinion surveys, work life programs, training and development received by employees and use of performance appraisals. Huselid's (1995) results showed that in 968 businesses a one standard deviation increase in the level of HPWP deployed by an organisation was associated with 7.05% lower turnover. Huselid (1995) also observed £17,333 higher sales *per annum* and £11,930 higher market value *per employee* and £2,444 higher profits *per employee per annum*.

Huselid, Jackson & Schuler (1994) demonstrated that the implementation effectiveness of HPWPs in 310 organisations resulted in a substantial increase on their performance. Sales increased by £21,994 *per employee per annum*; increased cash flow of £12,298 *per employee per annum* and market value was up to £7,475 *per employee*.

Huselid & Becker (1996) conducted a longitudinal study of 222 organisations investigating the HR management systems and organisational performance. Huselid & Becker (1996) found that the increase in market value was between £22,432 and £51,272 *per employee* and that a reduction in cash flow of £9,613 *per employee per annum* was achieved.

Huselid, Jackson & Schuler (1997) researched technical and strategic HRM management effectiveness as determinants of organisational performance. They found that for 293 organisations effectiveness was associated with capabilities and attributes of HR staff. They also found relationships between HR management effectiveness and productivity, cash flow and market value. Their results indicated that sales *per employee* rose by 5.2 %, valued at \$44,380. HRM effectiveness on profits yielded an estimated increase in cash flow of 16.3 %, valued at \$9,673 *per employee*. Market value was estimated to have increased by 6%, valued at \$8,882 *per employee*.

As discussed in sub-section 1.1 above, organisational learning as an HPWP is claimed to facilitate companies in achieving high financial performance. As will be discussed in detail later in this chapter, there are a number of authors who claim that implementing OL results in increased competitive advantage, but none provide empirical evidence that there is any link between organisational learning and organisational financial performance. It will also be demonstrated, in sub-sections thereto, that a number of authors who proposed models of organisational learning interpreted it as a collective term for training and development. A much broader view of the Organisational Learning literature is provided below and shown that OL is far from just a collective term for training and development. As will be discussed below and in subsequent chapters, training and development only constitutes a small part of OL.

### **1.3 Organisational Learning**

The focus of this thesis is Organisational Learning (OL) and its manifestation within a large global organisation during a period of substantial organisational and strategic change.

Cyert & March (1963) viewed learning in an organisation as change in behaviour in response to a stimulus. The definition is mainly a description of a reaction or adjustment to the social and physical environment, and is a behavioural approach to learning. It does not include an interpretative (cognitive) view of learning.

Cangelosi and Dill (1965) presented the concept of Organisational Learning itself and the first empirical study on the subject. Since Cangelosi & Dill (1965) a range of academic and business disciplines have undertaken the study of OL. The reason for this is that learning has been recognised as a dynamic concept, and its use in OL theory emphasises the continually changing nature of organisations (Dodgson, 1993). Learning is an integrative concept that can unify various levels of analysis, and in industry this includes individual, group and organisational (corporate) levels of analysis.

OL is a complex and multidimensional construct used to describe certain processes, together with types of activity and their outcomes, which make up the Learning Organisation. OL has now emerged as a subject of considerable interest and is researched by a number of research disciplines, including organisational theory, industrial economics, economic history, business, management (Dodgson, 1993) and psychology.

### **1.4 Business and Organisational Learning**

To put this thesis into context, the relationship between business and Organisational Learning is reviewed first. Organisational Learning has become

prominent in the corporate environment; particularly amongst those organisations who are seeking to reposition themselves in their respective markets, and to develop structures and systems which are more adaptable and responsive to change (Dodgson, 1993; Pearn, Rodderick & Mulrooney, 1995; Pedler, Boydell & Burgoyne, 1989; Pedler, Burgoyne, & Boydell, 1997). Garratt (1987) stated that learning is key to competitiveness, a view that is explored further by Stata (1989) and discussed below. Rapid technological change is increasingly influencing organisational development, in terms of systems used or the development of new systems and products, or both. This technological change in products, processes and organisation increases the uncertainty faced by firms (Dodgson, 1993). The greater the degree of uncertainty in the economic environment, the greater the need for learning. Dodgson (1993) suggested that organisations want to go beyond being 'bundles of resources', and that learning is a dynamic concept that suggests a philosophy of continuous change.

Economic historians have studied the importance of learning in the development of new industries and technologies (Rosenberg, 1976). They have also studied the development of formal Research and Development (R&D) as institutionalised learning mechanisms (Mowery, 1981). Development economics adds that learning not only occurs in R&D but in the process itself. While R&D develops products and innovations, it also develops the organisation's ability to identify, assimilate and exploit knowledge from the environment. Cohen & Levinthal (1989) called this a firm's 'learning or absorptive capacity'. Predominantly the literature on OL, is management and business-based, and looks at the outcome of learning as comparative competitive efficiency. However, none of the authors in the management and business-based literature on OL provide empirical evidence that OL is indeed related to organisational performance. The economics literature views OL as "simple quantifiable improvements in activities or as some form of abstract and vaguely defined positive outcome" (Dodgson, 1993, p. 376). The economic definition of learning is couched in terms of the outcomes of the process of learning. These outcomes are productivity (Arrow, 1962) and industrial structures (Dosi, 1988). They do not explore what learning is

and how outcomes are achieved. Again, attention is drawn to the fact that no empirical evidence linking the economists' view of OL with productivity and organisational performance is provided.

Strategic management and the recognition of the strategic skills required for competitive advantage have highlighted the role of OL in corporate strategy (Barnes, 1991; Grant, 1991; Iles, 1997). The strategic management approach has also looked at the relationship between learning and innovation (Dodgson, 1991a). Management and innovation approaches view learning as a process with clearly defined outcomes to retain and improve competitiveness, productivity and innovation in dynamic markets.

Techno-economic paradigms discuss how rapid large-scale changes in technology create considerable turbulence in the economic environment, particularly for those organisations that have to respond to such changes (Freeman & Perez, 1988). Pavitt (1991) suggested that organisations attempt to learn in highly dynamic conditions. In this technological context, Dodgson (1991b) argued that the different rates at which organisations learn about technological opportunities result in different competitive relationships between those organisations, both small and large, which have contributed to developing the new technology. In these paradigms, Dodgson (1993, p. 378) suggested that learning is a "response to the need for adjustment in times of uncertainty".

It is the application of learning theory, that is, the process of learning and the outcome of learning, that is essential to any understanding of OL. In organisational terms OL may be defined as the way organisations create, accumulate, store, supplement and organise their knowledge and routines around their activities and cultures for competitive advantage (Dodgson, 1993; Garvin, 1993; Pearn *et al*, 1995; Pedler *et al*, 1989; Pedler *et al*, 1997).

Business approaches to the understanding of OL have given rise to three main concepts which enable learning in organisations to be investigated at an organisational rather than an individual level of analysis.

First, Metcalfe & Gibbons (1989) suggested that an organisation's knowledge base (which is what defines it in the processes by which it acquires knowledge) is what articulates, enhances and controls OL.

Second, in the context of technological development (where this is specific, cumulative and differentiated) Pavitt (1991) proposed firm-specific competences. Prahalad & Hamel (1990) suggested the concept of core competencies, described as the collective learning of the organisation. The organisation learning process involves harmonising streams of technology, the organisation of work, delivery of value, communication and involvement, and a commitment to working across functional boundaries.

Third, are the routines which operationalise an organisation's memories and knowledge bases (Nelson & Winter, 1982). Levitt & March (1988, p. 320) add that routines include "the forms, rules, procedures, conventions, strategies, and technologies around which organizations are constructed and through which they operate. It also includes the structures, beliefs, frameworks, paradigms, codes, cultures and knowledge that buttress, elaborate, and contradict the formal routine". Nelson & Winter (1982) and Levitt & March (1988) in their descriptions of learning suggested that learning is action, that is, they proposed a behavioural perspective to learning in which an organisation knows what skills it has as well as how to use them. However their definitions of learning as routines are very broad and encompass a number of organisational issues, for example culture and beliefs. Corsini (1987) argued that the learning routines are not learning, but evidence of declarative and procedural knowledge. These learning routines, however, are not routines but Organisational Learning Mechanisms (Lipshitz, Popper & Oz, 1996) and are discussed in detail in section 1.6.

The firm-specific competencies or core competencies are particular to each organisation, and Dodgson (1993) suggests that they are crucial to competitiveness. However, whilst very useful at a generic conceptual level, the literature provides very little detail in terms of what these competencies are and how they might contribute to OL.

Other disciplines also researching OL include organisational sociology (Levitt & March, 1988), which addresses the organisational context in which learning takes place and its role in facilitating and inhibiting learning (Salaman & Butler, 1994). The sociological approach focuses on the effects of organisational structures, hierarchical power, asymmetric communication and political conflicts on learning. Argyris and Schön (1978) pointed out that because other perspectives are derived, openness (the freedom to question) and constructive confrontation, are inhibited by hierarchical structures. Communication is therefore affected, “defensive routines are established” and learning does not occur (Argyris & Schön, 1996, p.101).

As well as being of considerable interest to academia, OL is receiving increasing attention from practitioners in most industries and businesses. This stems from a growing belief that learning is essential for survival in dynamic and competitive environments (de Geus, 1988; Nonaka, 1991; Schein, 1993; Senge, 1990; Slater & Narver, 1995). In the current business climate it is learning, and not knowledge *per se*, that is critical to success. Knowledge is a by-product or outcome of the process of learning and is therefore ephemeral, requiring constant updating and revision in order to inform decision making (Miller, 1996). For companies to be successful relative to their competitors, their learning must be greater than the rate of change of the economic environment. Indeed, Stata (1989) argued that the rate at which individuals and organisations learn may become the only sustainable competitive advantage. Psychologists argue that learning is the highest form of adaptation, increasing the probability of survival in dynamic environments (Dodgson, 1993). The greater the degree of uncertainty in the economic environment, the greater the need for learning. The author believes that

it is the organisation's human capability that has the power to adapt collectively to the economic environment and to influence it. Indeed, enhanced understanding of the economic environment and of customer needs, can be harnessed to change the environment by reframing it, by reconceptualising it, by physically altering it, or by a combination of the three. Learning about the environment, and deepening understanding of how to change it in OL terms, involves psychological processes at individual and group level. The author believes that the faster the rate of change, the greater the knowledge required to cope with change and consequently a greater amount of learning is involved.

### **1.5 Cognitive and Behavioural Perspectives of Organisational Learning**

Fiol & Lyles (1985, p. 806) identified cognitive and behavioural perspectives of OL and suggested that "it is essential to note the difference between cognition and behavior, for not only do they represent two different phenomena, but also one is not necessarily an accurate reflection of the other". Crossan *et al* (1995, p. 348) suggested that a number of researchers, management theorists, and practitioners of OL are "re-inventing the debate that originally surfaced in the field of psychology between cognitive and behavioral theorists".

Those who take a cognitive perspective claim that learning occurs where there has been a change in the way organisations or individuals process information, develop shared meaning and interpret events (Crossan *et al*, 1995; Duncan *et al*, 1979; Fiol & Lyles, 1985; Huber, 1981; Levitt & March, 1988; March & Olsen, 1975; Senge, 1990;). More recently, Villinger (1996; p. 185) suggested that Organisational Learning is "the process of developing a potential to improve actions (behaviour) through better knowledge and understanding (cognition)". Crossan *et al* (1995, p. 348) summarise the cognitive-behavioural perspective as follows: "learning has occurred if there is a noticeable change in thought processes (unobservable), even in the absence of adjusted behavior (observable)".

Those who take a cognitive perspective have examined one or more levels of analysis. At an individual level of analysis, focus has been on changes in knowledge or beliefs (Argyris, 1977a; 1996; Argyris & Schön, 1978; Herriott, Levinthal & March, 1988; March & Olsen 1975; 1985; Senge, 1990). A cognitive perspective with a group level of analysis focuses on shared meaning and understanding of group members (Daft & Weick, 1984; Duncan & Weiss, 1979; Garvin, 1993; Huber, 1991; Seely-Brown, 1993; Senge, 1990; Stata, 1989; Weick, 1979a). Huber (1991) focused on individuals in the context of the organisation and argues that learning changes their potential behaviours; moreover, he proposes that changes resulting from learning are not necessarily visible (and may therefore be cognitive changes). Fiol & Lyles (1985) and Shrivastava (1983) suggested that organisations have their own particular learning systems and that learning is influenced by factors such as organisational culture, strategy, structure and systems. Fiol & Lyles (1985, p. 806) took a cognitive perspective and define learning as “the development of insights, knowledge, and associations between past actions, the effectiveness of those actions, and future actions”. Shrivastava (1983) maintained an organisational level of analysis, but took a predominantly behavioural perspective while simultaneously alluding to a cognitive one, suggesting fundamental changes in theory-in-use. Theory-in-use means the manner in which an organisation’s theory of action\* is put into use to achieve organisational performance.

The behaviourist perspective is one where learning is assumed to have occurred to accompany a change in behaviour or action (Crossan *et al*, 1995), even where not preceded by a change in thinking. Fiol & Lyles (1985) suggested that learning involves changes in cognition, and adaptation involves changes in behaviour. However, Crossan *et al* (1995, p. 348) argued that adaptation may be cognitively rooted, and add that the cognitive and behaviourist distinction may be “misleading and runs the risk of being reduced to an argument of semantics”. The behavioural perspective examines the individual and group level of analysis

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\* Theory of action - how tasks are represented as systems of beliefs or as procedural prescriptions for action which include strategies for action and the values governing such strategies.

because behaviours reside within people (Crossan *et al* 1995). Chapman, Kennedy, Newell & Biel (1959) examined the learning process in air defence teams during a simulation exercise. They concluded that learning was not observable and not obvious to observers. Chapman *et al* (1959, p. 191; discussed in Crossan *et al*, 1995, p. 349) reported that “procedures often changed without any signs in prior discussion or actions that change was impending, and changes were sometimes made in one direction, although discussions were proceeding in a different direction”. It is suggested that learning had occurred at the group level, and that the observation was a subtle shift in behaviour as acknowledged by Chapman *et al* (1959); the change of behaviour had occurred as a result of a change in cognition amongst members of the group. Therefore although Chapman *et al*’s (1959) view was behavioural, it is suggested here that it is also a cognitive change. This view is supported by Cangelosi & Dill (1965) who concluded that learning had occurred due to change in behaviour and improved performance. Cangelosi & Dill (1965) acknowledged that learning (and adaptation) is not simply evidenced by observable changes in behaviour; they suggest that interpretation at the different levels of analysis (individual, group and organisational) is also required to add meaning to the information being dealt with. It is clear that although some authorities take a behavioural perspective, they nevertheless discuss changes in cognition even though these were not discussed explicitly or in great detail.

The organisational level of analysis focuses on the systems, structures and procedures an organisation possesses; their effect on an individual’s behaviour and how individuals contribute to these systems and structures (Cangelosi & Dill, 1965; Cyert & March, 1963; Shrivastava, 1983). Levitt & March (1988) discussed routines including forms, rules, procedures, conventions, strategies and technology and stated that individuals and groups encode learning into routines that guide behaviour. Weick (1979a) suggested that organisations possess thought, ascribing to them cognitive ability beyond the sum of their parts (individuals and groups) and ascribing that cognitive maps exist at the organisational level. Hedberg (1981, p. 6) also proposed a cognitive perspective

at the organisational level and suggested that “organizations have cognitive systems and memories. Individuals come and go, but organizations preserve knowledge, behaviors, mental maps, norms and values over time”. It was assumed that individuals learn these structural elements, though to what extent was not discussed by the authors cited above. The direction an organisation follows may be the result of this cognition. The feedback from this output (for example, is the organisation achieving its objectives?) may change the cognitive process and alter the output. Processes or models explaining how these levels of analysis and the cognitive and behavioural perspective function were not provided by the authors cited above. The cognitive and behaviourist perspectives to OL have resulted in numerous definitions and are discussed in more detail in section 1.6.

## **1.6 Definitions of Organisational Learning**

As a consequence of the above levels of analysis and perspectives, the definitions of learning in terms of Organisational Learning and the Learning Organisation literature have been fragmented into either a predominantly behavioural or cognitive approach. The definitions of OL are the consequence of different theoretical traditions and academic disciplines, all of which start from different assumptions and perspectives.

Definitions of OL are numerous. Table 1.1 (page 15) provides a sample of definitions that best define OL. Assumptions have been made about these levels of learning and whilst these approaches have contributed to the understanding of OL individually, none has been comprehensive or able to suggest how the levels of learning interact with each other.

Although they recognised that there are processes at work linking these different levels, none of these definitions discuss what these processes might be. Outcomes only are discussed. It should be noted that a recognition and

understanding of the processes leading to OL outcomes are important because it is at the process level that change can be most effectively implemented.

Different definitions of “organisation” will also influence the definition of OL (Crossan *et al*, 1995). Crossan *et al* suggested that if the organisation is viewed as the sum of its members then the OL definition will be an individually-based phenomenon. If, however, the organisation is viewed as “more than the sum of its individual members, even though the learning resides within individuals” then the OL definition is mainly group-based (Crossan *et al*, 1995, p. 343). Those definitions of OL as representing “something more than the integration of its individual members” view OL as “an organizationally-based phenomenon” (Crossan *et al*, 1995 p. 343).

These definitions of organisations lack consistent terminology for comparable concepts, and consequently, as illustrated in Table 1.1, there are a large number of definitions to describe the subject. There are as many definitions as there are authors on the subject. There is rarely agreement within or between disciplines as to what OL is and how it occurs. Although the definitions vary, none of them are wrong. All include elements that are part of learning *in toto*, though none offers a complete and accurate definition. Given the multidisciplinary and multilevel approach to OL, there has been considerable development of OL models. Most current models are discussed in chapter 3, page 34.

**Table 1.1: Definitions of Organisational Learning.**

"[Organisational] learning is a change in behaviour in response to a stimulus" (Cyert & March, 1963).

"Organizational learning is a process of detecting and correcting error" (Argyris, 1977).

"Organizations learn through the collective capability of its members to learn...there is no organizational learning without individual learning, and that individual learning is a necessary but insufficient condition for organizational learning" (Argyris and Schön, 1978).

"Organizational learning includes both the processes by which organizations adjust themselves defensively to reality and the processes by which knowledge is used offensively to improve the fit between organizations and their environments" (Hedberg, 1981).

"Organizational learning means the process of improving actions through better knowledge and understanding" (Fiol & Lyles, 1985).

"Organizations are seen as learning by encoding influences from history into routines that guide behavior" (Levitt & March, 1988).

"Organizational learning occurs through shared insights, knowledge, and mental models...[and] builds on past knowledge and experience - that is, on memory" (Stata, 1989).

"An entity learns if, through its processing of information, the range of its potential behaviours is changed" (Huber, 1991).

"...the acquiring, sustaining, or changing of intersubjective meanings through the artifactual vehicles of their expression and transmission and [through] the collective actions of the group" (Cook & Yanow, 1993).

"A learning organization is an organization that institutes OLMs [Organisational Learning Mechanisms] and operates them regularly" (Lipshitz, Popper, & Oz, 1996).

"Organisational Learning is the process of developing a potential to improve actions (behaviour) through better knowledge and understanding (cognition)" (Villinger, 1996).

### 1.6.1 Themes underlying Organisational Learning Definitions

Although there are a number of approaches to and definitions, of Organisational Learning, with notable differences between them, Dixon (1994) identified four themes which are common to the definitions: (1) There is a causal relationship between the quality of knowledge of the employees and the effectiveness of an organisation's actions. (2) The environment is used as a reference about which the organisation must learn, and which it must subsequently manipulate or adapt to. (3) The employees have in common shared assumptions or understandings. These shared understandings must be uncovered, corrected and modified to facilitate effective action. (4) The definitions suggest that a proactive stance be taken in terms of the organisation changing itself. Moreover, Dixon (1994) suggested that through learning, the organisation is able to self-correct in response to the changes in the economic environment, or to transform itself in anticipation of a desired future. Lundberg (1995) added that the definitions are an institutionalised process whereby organisations and their members notice, interpret and manage their experience; that is, it is a psychological process. Although Dixon (1994) linked all the definitions of OL under four useful themes, none of the themes have been researched empirically (either quantitatively or qualitatively). The themes are useful in that they attempt to bring together the theories and definitions, but they do not give examples of the competencies required to support OL.

Dodgson (1993) suggested that collectively the various definitions incorporate a number of assumptions. First, learning itself is positive, even though the initial outcome may not be; that is, mistakes occur, from which the lessons learnt result in a positive outcome. Second, although learning is an individual phenomenon, amongst the workforce it is a collective process. This is because, as individuals learn, they share their knowledge and experience. Dodgson (1993) suggested that corporate and group culture is influenced by individual learning and can assist the direction and use of that learning. Consequently, it may also influence the strategic direction of a company. Third,

all activities of a company involve learning, which occurs at different speeds and levels. Encouraging and co-ordinating the variety of interactions in learning is a key organisational task. Unfortunately, Dodgson (1993) does not explain what is meant by a variety of interactions in learning.

From the literature reviewed thus far, two elements of OL have emerged. First are the structures, rules, procedures and mechanisms in organisations that the organisational level of analysis has defined. These are called Organisational Learning Mechanisms (OLMs) and are discussed in section 1.5. Second are cognitive and behavioural elements, important to Organisational Learning (OL). These cognitive and behavioural elements are Organisational Learning Facilitators (OLFs) and are discussed in chapter 2. However, it is important to establish the research approaches for OL which have also shaped OL theory and practice before examining OLFs.

## **1.7 Prescriptive Vs Descriptive Research Approaches**

Approaches to research on Organisational Learning differ. Tsang (1997) identifies two types: prescriptive and descriptive research. The former deals with the question 'How should an organisation learn?' and the latter deals with 'How does an organisation learn?'. In the descriptive approach judgement and evaluation are avoided, whereas in the prescriptive approach they are included and best practice is given. Along the continuum between the two approaches the literature has a tendency to be based at one of the extremes, rather than having an integrated approach.

### **1.7.1 The Prescriptive Approach**

Because it is directed toward business and business practitioners which are action-orientated, the prescriptive approach addresses behaviour, and hence how an organisation should learn (Argyris, 1994; Argyris & Schön, 1978; Garvin, 1993; Lipshitz *et al*, 1996; Senge, 1990). The prescriptive approach considers the best practice behaviours and cognitions required by Organisational Learning to be a

Learning Organisation, that is “how should an organisation learn?” (Easterby-Smith, Snell & Gherardi, 1998). The prescriptive research on Organisation Learning has been more prominent and successful in the business literature than descriptive research. The reason for this is that the prescriptive approach is action-orientated, implying a simple cause-effect relationship (Weick, 1991). It suggests an immediate intervention or response, following a stimulus in the economic environment, in order to address the client’s perception of the need of improved performance. Followers of the prescriptive approach make the assumption that organisational success is attributable to learning. It is the author’s view that this is erroneous. The prescriptive approach appears to be based on the consultancy experience of the authors and not on systematic research. If systematic research has been undertaken, it is rarely cited. Tsang (1997) argued that the objectivity of models and theories in the prescriptive approach is confounded, since the researchers are paid as consultants and not to do research.

Theories and models of the prescriptive approach tend to be derived from action research and case study approaches (Tsang, 1997), and are based on Western companies, the majority of which are North American companies. Furthermore, research methodology is rarely explained. However, although these authors have contributed to the knowledge of OL, they have not provided any empirical evidence to support these claims. Such generalisation is flawed because, as Hofstede (1993) pointed out, management theories developed in one culture or nation do not necessarily apply to another. Indeed, each prescriptive approach needs to take into account the company’s industry, economic environment, size, structure and culture - as well as its perceptions of its current situation - to know where it stands in terms of OL.

### 1.7.2 The Descriptive Approach

The descriptive approach is concerned with how the organisation learns (Easterby-Smith *et al*, 1998); it recognises that cognition is important, that behaviour is associated with it and that it is a process (Cook & Yanow, 1993; Fiol & Lyles, 1985; Levitt & March, 1988; Shrivastava, 1981; Villinger, 1996). The

descriptive approach recognises that outcomes at the psychological level include new cognitions and behaviours, which in turn contribute to improved performance at the individual, group and organisational levels. The descriptive approach acknowledges that cause and effect is a multidirectional, multilevel and a non-linear relationship, with feedback loops from all levels and directions. It is a more complete approach, in that it recognises that learning is a complex process. The methodologies used are rigorous and apply systematic data collection techniques. Examples of methodologies for these studies include simulations (Cangelosi & Dill, 1965; Carley, 1992) and questionnaire surveys (Nonaka, Byosiore, Borucki, & Konno, 1994; Villinger, 1996). These studies highlight difficulties and limitations with current OL research. Few follow on from previous descriptive or prescriptive studies, suggesting areas of possible future research. There are no studies that are a replication of previous research. The descriptive approach unfortunately does not give any prescriptive interventions.

### 1.7.3 Empirical Research

Much of the empirical research that has been conducted on OL consists of unpublished doctoral theses, to which both academics, and to a much greater extent practitioners, have only limited access. Much of the literature on OL is anecdotal (based on practitioner experience) and normative. There is little integration and cumulative theory on OL (Huber, 1991). It is fragmented (Shrivastava, 1983) and without direction (Fiol & Lyles, 1985). Few details on the methodology of OL research are provided (exceptions include Nevis, DiBella & Gould 1994; Pearn *et al* 1995; Pedler *et al* 1997). A number of authors have stated that limited empirical research is a weakness in the OL literature (Easterby-Smith *et al*, 1998; Miner & Mezias, 1996). Only methods of implementing best practice to build a Learning Organisation have been given (Nevis *et al* 1994; Pearn *et al* 1995; Pedler *et al* 1997). It is of great importance that research on OL is empirical (both quantitative and qualitative) using rigorous methodology and research design, supported by apposite data collection and analysis.

More reliable theories and models are needed, together with better and more stringent validation. What is required is an interdisciplinary approach to learning that avoids the unitarist, introspective and parochial views currently found in the literature and provides a more substantive definition and model to apply to industry. The research conducted for this thesis takes a competency-based approach, discussed further in chapter 3, in order to address some of the issues raised above concerning empirical research. It is important however to examine briefly the mechanisms which might facilitate the use of OL in an organisation.

### **1.8 Organisational Learning Mechanisms**

Organisational Learning (OL), as defined by Lipshitz *et al* (1996), is the “regular implementation of Organisational Learning Mechanisms (OLMs)...which are institutionalized structural and procedural systems that allow an organisation to collect, analyze, store, disseminate, and use information that is relevant to the effectiveness of the organization” (Lipshitz *et al*, 1996, p. 293). Popper & Lipshitz (1995) also suggested that the cognitive description is relevant to the detection and correction of error, an important process in learning. Indeed their definition of OL recognises the relationship of process to outcome in OL and how the process works. The authors predominantly follow a cognitive approach to OL, included in which is organisational memory - the storing and retrieving of information. The behavioural component of their theory is the implementation of OLMs. Lipshitz *et al* (1996) developed their theory in relation to the development of a Learning Organisation. Hirschman (1970) discussed learning as part of organisational development in which it is governed by structural enablers, institutional structures of incentives that compel or attract individuals to learn to produce behaviour conducive to development (Argyris & Schön, 1996). These structural enablers are similar to those given by Lipshitz *et al* (1996), but examples of them are not given.

The definitions of OLMs or structural enablers are the only ones in the current literature and have therefore not been questioned. Lipshitz *et al* (1996) and Hirschman (1970) have not given a clear definition of what they mean by “institutionalised structural...systems”, “procedural systems”, or “institutional structures”. The distinction between structural systems and procedural systems is unclear. Lipshitz *et al* (1996) gave only one example of an OLM, namely after-action reviews (AARs) which are “postproject or periodic debriefings” following military operations. The AAR is a “procedural system”. Therefore, following this definition, it is suggested that other OLMs will include other systems such as appraisal, feedback, training, Employee Assistance Programmes (EAPs), Investors in People Procedures, ISO 9000 Procedures and Safety Procedures, all of which are an essential aspect of the means employed by organisations to improve effectiveness and efficiency. Included in these procedures are the standard operating procedures (SOPs) or routines which are the structures, procedures and policies of an organisation.

However, the definitions of OLMs are insufficient for the understanding of OL. OLMs make the assumption that OL is solely organisational (that is, in structures and procedures), based on a cognitive theory of learning to improve effectiveness. Lipshitz *et al* (1996) did not offer an operationalised definition of “effectiveness” and no example of it (in terms of the procedural system they use) is given. Lipshitz *et al* (1996) recognised that there are facilitative factors required to drive OLMs and subsequently OL. They gave no examples or definitions of facilitative factors, nor did they suggest how these might operate to promote the objectives of OLMs in successfully aiding the development of a Learning Organisation. It is agreed that OLMs are required to develop the Learning Organisation, but this is a rather limited purpose. It is also suggested, therefore, that the concept of the OLM is not restricted to developing a Learning Organisation, but can also be used in the maintenance and ongoing development of one. Consequently, the facilitative factors will be necessary to build, maintain and develop a Learning Organisation. These facilitating factors are called Organisational Learning Facilitators and are explored in detail in chapter 2. As

the focus of this research is on the behavioural aspects of OL and not on an organisation's implementation of it, OLMs will not be explored further here.