The Effect of Mergers on Knowledge Loss in an IT Company: a Case Study

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Declaration

I, the undersigned, hereby declare that the work contained in this assignment is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

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Abstract

Although a number of studies into the reasons for merger failure point to cultural incompatibility as a major cause, little attention has thus far been given to the knowledge loss that occurs consequent to company mergers. Drawing on literature around knowledge, knowledge loss, reasons for mergers and acquisitions, organisational culture and merger failure, this case study examines the potential for knowledge loss in a company in the South African IT sector.



Opsomming

Veelvuldige studies wat handel oor redes vir die mislukking van besigheidsamesmeltings wys kulturele verskil aan as 'n hoofrede daarvoor. Tog is min navorsingsaandag gegee aan die kennisverlies wat met besigheidsamesmeltings gepaard gaan. Hierdie studie ondersoek potensiële kennisverlies by 'n maatskappy binne die IT-Sektor in Suid-Afrika deur gebruik te maak van literatuur rondom kennis, kennisverlies, redes vir samesmeltings en verwerwings, organisasiekultuur en mislukking van samesmeltings.



Dedication

To a long-suffering family who endured hardship during three years of study and to a mother whose memory drives the need for study.

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Management at E&Y/Argil/CSH/Bytes who bore the cost both tangibly and psychologically for this course.

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1

Introduction

1.1 Background: Merger Activity in the IT Sector

. He goes on to say that the feedback loop is becoming faster and faster as technology is introduced, used and developed into new applications.

Further, Castells writes that 'For the first time in history, the human mind is a direct productive force, not just a decisive element in the production system' (1996, p 31).

The technological revolution can be said to have begun with the invention of the telephone by Alexander Graham Bell in 1876, but it really only began to gain momentum during World War 2 with the first programmable computer and the transistor. Castells contends that the convergence leading to a new paradigm occurred during the 1970s in three major technological fields: micro-electronics, computers and telecommunications. It was the invention of the microprocessor in 1971 that enabled a computer to be placed on a silicon chip and the result was the personal computer. Allied to the revolution in hardware was the development of user-friendly operating software. The shortening of the feedback loop mentioned by Castells is evidenced in recent developments around the Internet and wireless technology.

Companies in the Technology sector are forced to be agile. There is a constant thrust to be ahead of new developments in the shortest possible time. The invention of the personal computer is said to have been of a similar magnitude in history to that of Gutenberg's invention of moveable type, when this new invention changed the face of printing and books. Although many printing works sprang up overnight using the new technology, within about thirty years only the best had survived.

It is not surprising therefore that IT companies are at the forefront of a new wave of merger activity. Integrating with or acquiring other companies producing similar products or products along the value chain has become commonplace in the IT sector. Firms can use acquisitions to fill out their array of products, keep ahead of innovations by buying expertise, and eliminate competition by buying it out and restructuring around the acquired skills. The IT company most famous for acquisitions is Cisco, which has made over 80 since 1993, with 23 in 2000 alone. IBM is not far behind, with two acquisitions in each of 2002 and 2003 and 6 in 2004.

In the South African context, Dimension Data is a good example of growth by acquisition, with two acquisitions in 1996, five in 1997, two in 1998, four in 1999, six in 2000 and four in 2001. Didata was listed on the Johannesburg Stock Exchange in 1987 at 15 cents a share. However, although 2003 revenues exceeded US\$2 billion, the company made a loss of just over \$9m, which initiated large-scale restructuring.

CS Holdings began life as CS Computer Services in May 1996 after a management buyout of the Gauteng branches of the Financial Consulting and Financial IT Training division of Coopers and Lybrand. The company believed that it had the ability to compete with already established companies such as Q-Data, Didata, Persetel and Anderson Consulting. A strategic decision was made to move from the small to medium market sector into the ERP market serving large corporate clients. The first acquisition was a company specialising in BaaN consulting, called TSA.

CS was listed on the Johannesburg Stock Exchange in September 1998, a move which enabled the company to invest in accelerated growth. CS sought to position itself as a leading player in the systems integration and outsourcing markets. To this end, several acquisitions were made in the proceeding four years and the company was structured into three major divisions, collectively branded under the name of CS Holdings. In Systems Integration, eight acquisitions were made between 1999 and 2002. A second division, IT Solutions provided the Technology service line which gained several large outsourcing contracts through the acquisition of three companies and a 50% share in a fourth. The training division grew from an end-user desktop applications trainer into an all-inclusive software training house by acquiring seven smaller companies.

Although the company grew fast, increasing its headcount from 80 at the time of listing in 1998 to 1100 in 2003, revenues did not increase to the same proportion. There were several waves of retrenchments as the company repositioned itself after each merger, but eventually CS Holdings itself became a target for acquisition.

It is significant that acquisitions are assumed to make companies more profitable and more productive. However, this does not appear to be the case in reality. According to a survey made by Meloria Meschi (1997), mergers are hardly ever privately profitable, providing gain only to the shareholders of the acquired company. Moreover, there seems to be a productivity dip rather than the expected increase in efficiency. Most literature suggests that as many as three-quarters of business combinations fail within the first three years (Bouchard and Pellet, 2000).

The reasons for merger failure are probably as complex as the reasons for entering mergers themselves. Nevertheless, in view of the high rate of failure, it would be valuable to investigate possible causes.

1.2 Research Problem: Knowledge Loss as a Contributing Factor in Merger Failure

This paper attempts to make a connection between knowledge loss and the often disappointing results of mergers and acquisitions by relating literature on the subjects of mergers and acquisitions, merger failure and knowledge loss to a case study undertaken at CS Holdings.

At the outset, the key concepts are defined. Often the terms 'knowledge' and 'information' are used interchangeably and there seems to be an ongoing debate in business circles whether 'Knowledge Managers' should rightfully be called 'Information Managers'. It is important to differentiate between information and knowledge.

Chun Wei Choo writes that without a clear understanding of the organisational and human processes through which information becomes transformed into insight, knowledge, and action, an organisation is unable to tap into the real value of its information resources and information technologies. The very intangibility of knowledge makes it very difficult to assign a value to it in the way accountants would set up a balance sheet, and yet there is a very definite value inherent in a knowledgeable and skilled person which makes that person valuable to the organisation. Therefore, knowledge and its management often get forgotten while executives concentrate on the more tangible aspects of the value chain that can be quantified on the balance sheet.

Sihn writes that it cannot be taken for granted, particularly in competition-oriented economic systems, that knowledge will be passed on. This seems to imply that knowledge needs to be managed. Knowledge management, then, is more about people than it is about information.

1.3 The Relationship between Organisational Culture and Knowledge

Each company that enters into a merger brings with it a unique culture. It follows that one of the biggest challenges to a successful merger is cultural difference. An increasing body of literature points out that failure to address organizational culture issues is in a large part responsible for merger failure. An interesting study by Weber and Camerer (2003) used a laboratory experiment to evaluate conflicting organizational cultures as reflected in the

common 'language' developed by members of an organization. This 'language' makes it difficult for merged groups to be as productive as when they were separate.

Relatively little has been written about the knowledge loss that occurs as a consequence of mergers and acquisitions. This appears to be accepted as implicit in the cultural aspect. However, at a time when Intellectual capital is beginning to be included as a line item on company balance sheets, it would seem important to know a little more about the loss of intellectual capital and knowledge.

Since around 1980 there has been a movement towards recognizing intangible assets such as intellectual capital. According to Patrick Sullivan

'There is growing criticism that the traditional balance sheet does not take account of those intangible factors that largely determine a company's value and its growth prospects. The 'unreported' assets are on average 5-10 times those of the tangible assets. Furthermore several studies show that future growth is determined not by historical financial accounts but by factors such as management skills, innovation capability, brands and the collective know-how of the workforce. Consequently more organizations are starting to address the measurement and management of intangible assets such as knowledge.' (2000, p 238)

In Britain, the Hawley Report recommended the identification of information as an asset (KPMG/IMPACT, 1994) in an attempt to bring information under the control and governance of boards of directors. Despite this Oppenheim, Stenson and Wilson (2001) report that there appears to be a persistent view by senior managers that information and information services are a luxury.

The objective of the research described in this paper was to verify statements made in the literature by means of a real-life example, and intimate involvement with CS Holdings made it an ideal subject. As an employee of the MCS group of Ernst & Young, the researcher developed an academic interest in the progress of that division through the acquisitions, first by CS Holdings and later by Bytes Technology.

1.4 Research Methodology

It was understood from the outset that there are dangers inherent in being closely involved with the subject of research. However, for the following reasons it was considered worthwhile to go ahead.

For many years there has been an ongoing debate in the social sciences regarding the best scientific methods with which to research the social world (Frazer, 2003). Traditionally, two methodologies have been dominant: the positivist and the interpretivist. Positivist methodology tends to be more statistical, involving an observer removed from the subject of the research who attempts to establish relationships between phenomena and uses quantitative methods of data analysis. Interpretivist methodology, on the other hand, attempts to understand the complexities of the social world through a more involved researcher who draws together data by qualitative techniques to form a rich and complex view of the subject.

Burrell and Morgan (1979) claim that base assumptions of the social scientist will shape the way that scientist investigates social reality. There are two dimensions to these assumptions, firstly those about the nature of social science and secondly those about the nature of society. The basic question facing the researcher when looking at the nature of social reality is ontological: whether the 'reality' to be investigated is external to the individual and objective, external to the researcher or is it a product of individual consciousness and therefore in a measure subjective. (Rhoode, 1993) In addition there are questions about the nature of 'truth' and the meaning of 'knowledge'.

Giddens (1993) argues that it is impossible for a social researcher not to filter information through a personal view of the world, while Berger and Luckmann (1967) contend that the reality that we collectively experience has, in fact, been constructed by our social interactions. There need not be a rigid division between these primary methodologies and indeed Fraser (2003) argues that researchers are becoming gradually aware of the assumptions that have led to the separation, and are no longer so rigid in their ontologies and epistemologies. For this approach she draws on Guba (1985) who interpreted the work of Burrell and Morgan (1979) to dictate that research should be ontological – a reality that a scientist holds to exist, a 'true', objective reality – or epistemological – whether knowledge about the social world can be proved or disproved.

There is appearing a more multidisciplinary approach, which Malhotra (1997) calls a postmodernist view. He suggests that 'the more relevant knowledge lies at the intersections and boundaries between the boxes that we have traditionally drawn for our convenience and called disciplines' (September 24, 1997) and that views from multiple 'lenses' are needed to provide perspective.

In organisations, storytelling is used to give researchers a natural way of understanding the prevalent cultures, (Boyce, 1996) which can then be viewed through the multiple 'lenses' of

social constructivism, interpretive organisational symbolism and critical theory. Social constructivism looks at ways people have of understanding reality. There are fundamental differences in the way different people view reality. McWhinney (1984) developed a model to describe how differently people perceive and experience reality. Organisational symbolism (Morgan, 1986) looks at paradigms and metaphors that inform meaning in organisations. Critical theory draws attention to the ways in which myth and story are used in organisations to promote and reinforce dominant ideologies (Bowles, 1989). Using such an interdisciplinary perspective attempts to give a holistic picture of an organisational culture although there are inherent strengths and weaknesses to such an approach (Boyce, 1996). The strengths include the recognition of multiple realities, perspectives and voices within the organisation and the power dynamics being used to sustain dominant ideologies. The weakness of this approach lies mainly in the lack of empirical grounding. Neither can this approach make any claim to the objectivity considered necessary for research.

The research undertaken and described in this paper attempts to take note of the multidisciplinary approach by including some organisational stories gleaned in multiple interviews, informal discussions and random interactions, often referred to by consultants as 'water-cooler' knowledge sharing. Combined with a literature study on the concepts relevant to knowledge loss and company mergers, these stories both inform the theory and provide examples.

The researcher had been involved in the company through four major changes. The Management Consulting Division had originally been part of the 'Big Five' accounting firm Ernst & Young. For reasons described in greater detail in Chapter 4, the division became a separate company, called Argil, which was acquired by CS Holdings late in 2001. By 2005 it was apparent that CSH was in trouble and a rescue was effected by Bytes Technology Group who acquired the company in October of that year. Although the major research undertaken applied to the CSH acquisition of Argil, it was possible to extend the reach by interviewing employees of other groups within CSH whose previous companies had also been acquired by CSH.

Interviewees were chosen across two broad categories: those who chose to leave, and those who chose to stay. Formal interviews were held with three people who had chosen to leave. The first was the divisional director, who had resigned shortly after the acquisition of Argil by CS Holdings, but who had returned two years later to manage the division immediately prior to the acquisition of CSH by Bytes. This person resigned again six months after Bytes took

over. The second was a senior management consultant who had left about eighteen months after the acquisition by CSH. Both were asked similar questions:

- o What motivated your decision to leave?
- What do you think were the motives for the mergers we have gone through?
- o How different do you perceive the cultures of the four companies to have been?

The last interviewee in this group was the erstwhile HR Director, who had been with CSH for only nine months during 2004. It was suspected that this was a BEE appointment and the researcher wished to probe that issue. Therefore, in addition to the questions above, the person was asked to articulate a sense of what skills were brought to the company and whether these skills were appreciated by management.

In the second category, each of the remaining consultants in the Cape Town office were interviewed and asked what their vision for their future with this company is. These interviews were largely unstructured and use was made of insights from the answers given by those who had chosen to leave, although care was taken neither to mention names nor to couch questions in a negative format.

A third category, viz. those who were retrenched, was included. In this group, an in-depth interview was held with a senior consultant who had chosen not to fight retrenchment. This person was asked to describe events surrounding the take-over by CS Holdings of the MCS group. What had made it difficult to work in the 'new' merged company? Other retrenchees were not formally interviewed. Instead, a diary was kept of major milestones in the merger process and the reactions of people to those changes were noted.

Additionally interviews were held with two sales managers from another business unit, one of whom was originally with CSH and the other with BTG. These interviews revolved around the difficulties encountered by people from different company cultures when trying to collaborate after a merger. During these interviews, insights were offered explaining memories from other acquisitions that had been experienced.

Besides the formal interviews, much discussion was conducted in informal focus groups during the period of the merge and relating to insights gained by the researcher from literature studied.

The method of presentation may be considered to be slightly unorthodox. Rather than grouping all the findings in the last chapter as is normally the case in a study of this nature,

the data collected by means of interviews and other personal means has been integrated with the information from the literature, using italics. This arrangement was made in the interests of clarity, since the concepts discussed are relatively disparate.

Firstly the various concepts, viz. data, information and knowledge, culture, mergers and acquisitions are defined. Then the relation of organisational culture to knowledge sharing is examined. Thereafter the reasons for company mergers are probed and the effect of merger activity on organisational culture noted. Knowledge loss is described and the question is asked whether knowledge loss can ever be desirable. Finally, the history of CS Holdings' many mergers is traced and conclusions drawn.

It is hoped that companies considering the acquisition of other entities will gain some insight from this research into the possibility and extent of the knowledge loss the company could face. Although all the literature around mergers stresses the importance of change management, all too often this is disregarded in the rush to show an improvement in the bottom line. Many of the interviewees noted an absence of interest by management in their skills. They seemed to feel that they had a lot to offer, which was ignored in the political squabbles that surrounded the positioning of managers in the newly merged company. If it can be clearly shown that a lack of attention to the intellectual assets can negate the benefits of a merger, then it should be possible to assign a value to the knowledge that is lost. If awareness can be increased, then it should be possible to work against those factors that cause knowledge loss and thereby increase the chances of potential merger and acquisition success.

2

Definitions

What is Knowledge and how is it lost? The hypotheses on which this study rests demand that certain key concepts are defined at the outset. These concepts include knowledge as distinct from data and information, organisational culture, and mergers and acquisitions.

2.1 Data, Information and Knowledge

Choo (1996) claims that information is a resource that is regenerative unlike labour and capital which deplete with use. He points out that the exchange of information among knowledgeable people can result in powerful new insights, while the exchange of data and information between organisations can dramatically improve their performance.

Information needs to be used to be useful. Successful companies are those who combine good IT practices, information management practices and information behaviours and values (Marchand 2001).

Although there has been global acceptance that in the post-capitalist society, knowledge is probably the 'only meaningful economic resource' (Drucker, 1993), the word 'knowledge' is used to denote a variety of meanings.

Thomas Davenport writes that the terms data, knowledge, wisdom and so forth, are merely information with differing degrees of interpretive value added. Data is defined as: a set of discrete, objective facts about events, most usefully described as structured records of transactions (Davenport, Prusak, 2000). The definition proposed for information has become well known: Information is a message, usually in the form of a document or an audible or visual communication (Davenport, Prusak, 2000). According to Oppenheim (2003), data is transformed into information when it has been corrected or summarised, and when analysed, categorised and contextualised. Information, in its turn, is transformed into knowledge when it is compared to other information, when connections can be made or consequences drawn from the information.

In terms of this thinking, there is a linear progression from data to knowledge, and sometimes even wisdom, often represented diagrammatically as a pyramid with data at the bottom and wisdom near the top.

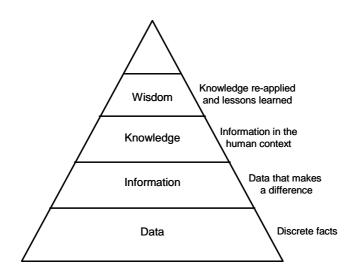


Figure 1: The Knowledge Pyramid

David Leaney, 2002

Thomas Stewart, in his book on Intellectual Capital (1997, p 69), explains:

There's *data*: The temperature is 77 degrees. There's *information*, a context into which the data can be put: That's hot for this time of year. There's *knowledge*, a conclusion drawn from the data and information: We should postpone the ski trip, or global warming is a bigger problem than we thought. Inevitably someone adds a fourth category, *wisdom*: Everybody talks about the weather, but nobody does anything about it.

He argues that knowledge cannot be rated according to a data-to-wisdom hierarchy, since what one person may consider knowledge, another might consider 'mere data'. His conclusion is that the vital lesson for organisations is:

Knowledge assets, like money or equipment, exist and are worth cultivating only in the context of strategy (p 70).

Davenport defines knowledge as what happens at the moment in time when information becomes valuable to the person seeking it.¹ Information is tangible and knowledge is something more: information put to work, requiring application; that knowledge is information that makes a difference (Manasco, 2003). The cognitive model illustrates a second approach, regarding knowledge as something intrinsic to the human mind that cannot be directly communicated. Knowledge is transformed into information in order to communicate it to others (Orna, 1999), suggesting a circular flow.

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¹ Davenport, T Working Knowledge: How Organisations Manage What They Know 1998 Harvard Business School Press

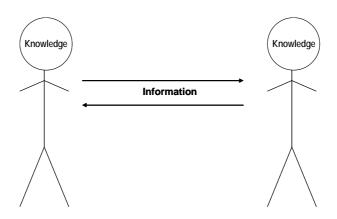


Figure 2: The Cognitive Model

Adapted from Yates-Mercer and Bawden, 2002

Some authors distinguish between tacit and explicit knowledge. Tacit knowledge is that which has been internalised by the practitioner, while explicit knowledge is knowledge that has been codified. (Nonaka, Takeuchi, 1995). Tacit knowledge is usually communicated quite quickly through face-to-face contact (Willard, 1997) while explicit knowledge has to be sought out, read, digested and understood. Wilson (2002) however argues that Nonaka and Takeuchi have understood an earlier definition of tacit knowledge, that of Polyani (1958), which in Wilson's view is non-transferable since it is the result of mental processes of comprehension, understanding and learning which are intensely personal. Acquiring knowledge for Wilson involves the act of comprehension, whereas explicit knowledge is equated with information (Wilson, 2002).

Oppenheim (2003) points out that such debates around definitions have important implications. Those who take the linear approach will focus on databases for managing information, while those who favour the cognitive approach will stress culture, believing that knowledge resides in the minds of people. Oppenheim further argues that definitions are important as they influence what items are regarded as information and knowledge assets.

Many companies seem to think that introducing comprehensive Information Technology (IT) systems will take care of their knowledge management problems. The systems in themselves do not influence productivity, it is only the *use* of IT that can (Marchand, 2000).

At Argil, the new Knowledge Manager set about re-organising the taxonomy of the database, cleaning it up and educating other employees on how to find information stored there. After a number of months, on the manager's departure from the firm, a support person was allocated to the task of Knowledge Management. Some employees, coming from a business consulting background, remembered a time when

there was a well set up 'workbench' on Lotus Notes which had become 'frozen data' since the move into the new office as a result of IT incompatibility. Other employees, from a separate acquisition, who came from a software development company, had their own database, which was valuable to them, but only they had access to it. The support person rapidly became what she terms a 'database disk-jockey', searching for items that were vaguely remembered to be contained in one or other of the databases.

It appears that this situation is not uncommon, as Nonaka writes that knowledge management as it is practiced in most firms represents a constricting paradigm rather than a transformative one (Nonaka, 2000). This is surely due to a lack of consensus on the relative meanings of Information Management and Knowledge Management.

Sue Myburgh quotes sources as diverse as Gartner, Malhotra, Barth and the APQC in noting that, although much work has been done on trying to define what Knowledge Management is, there is still a dilemma (Myburgh, 2003).

Probably, Information is akin to Choo's definition of explicit knowledge as "formal knowledge that is easy to transmit between individuals and groups." (Choo, 1998), while Knowledge includes experience and expertise gained by employees in the course of their duties, often acquired at great price (Myburgh, 2003).

The two concepts are inexorably linked, since the use of information produces "a change in the individual's state of knowledge and capacity to act" (Choo, 1998), but then it is also acknowledged that a significant proportion of an employee's knowledge is stored in his or her mind (Probst, 1999). This is another reason why one cannot represent knowledge as part of a hierarchy. It is true that information produces knowledge, but it is also true that knowledge produces information.

It might be more useful to see knowledge as a continuous dynamic spiral of idenitifying tacit knowledge, making it explicit, sharing it and allowing others to internalize and create new knowledge from it. This spiral is represented in the diagram below, which is based on Stewart's description in his book Intellectual Capital (1997).

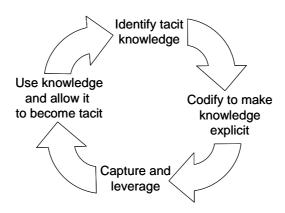


Figure 3: Dynamic Knowledge Spiral

Adapted from Stewart, 1997

This definition of knowledge as being a dynamic concept held in tension between the tacit (or wisdom) and the explicit (or information) seems most satisfying, and it will be this understanding of the term knowledge that informs this research. Stewart asserts that corporations exist to enable knowledge workers to capture the full value of their services: 'When people work together, they create something that is worth more than the sum of their individual efforts' (p 106). That 'something of value' exists as a result of the dynamic exchange of tacit and implicit knowledge between individuals and shared in groups. As such, knowledge is a 'people thing' – information can be stored but it remains passive. Turned into knowledge by people it becomes active and the implementation leads to new insights and knowledge.

2.2 Culture

Wendy Clark (2005) describes culture as the shared assumptions, beliefs, values and norms of a group or organisation and an acquired body of knowledge about how to behave, including shared meanings and symbols. She claims that each culture is unique and often largely a representation of the values of the founders or top management.

Edgar Schein (1992) writes that culture is the outcome of a group's attempts to adapt to problems presented by the outside world while trying to retain consistency within the group. Charles Handy and others suggest rather that culture is determined by the organisation's structure.

Kotter and Heskitt, in their book Corporate Culture and Performance subscribe to Schein's approach, claiming further that actual organisational culture is often quite different from the

lists of 'Company Values' that adorn the walls of most organisations. These values, they assert, reflect more of a leadership wish-list than actual reality.

That actual culture can differ from what management intends appears to be validated by the following illustration:

The difference in actual staff behaviour from the expected behaviour as laid out in the staff manual of CS Holdings became apparent quite soon to the recently acquired management consulting group and team from Getronics. An orientation session was held where the facilitator from HR was half an hour late. The Foreword of the Induction Manual handed out at this session reads as follows: "CS Holdings is a group of companies in the IT services industry and as such, its main value lies in its people, the intellectual capital that is the heart of the Company." Once she had introduced herself, the facilitator asked of the participants who belonged to the Systems Integration Division. When greeted with a bewildered silence, she explained that management consulting would henceforth fall into this division. The presentation centred on the wonderful achievements of the group as a result of its exalted leadership. In later interactions with 'original' CS staff, it was found that very few of them had actually read the staff manual and instead tended to follow procedures which had originated in companies for whom they had previously worked. When shown the company values listed in the manual, most ridiculed them. Formal values at CSH included Innovation, Passion, Professionalism, Commitment, Dedication, Honesty, Caring and Team Play. Interestingly, between 2001 and 2004 these quietly changed to Excellence, Passion, Integrity, Teaming and Innovation. While deviant staff behaviours did not attract attention, they went largely unnoticed.

The definition of culture then, adopted for this study is that derived from Schein's model (2001). Culture is a pattern of shared basic assumptions learned by a group as it integrates within and adapts to external stimuli. These assumptions become to be considered as valid over time and are taught to new members as the correct way to perceive and deal with similar problems.

2.3 Mergers and Acquisitions

Business organisations 'engage in mergers and acquisitions (M&As) to accomplish various objectives, including, but not limited to, increasing growth potential, expanding product lines, entering new markets at a faster speed, eliminating competitors, gaining access to intellectual capital and gaining desired technologies' (Baro 2004, p 4).

On the surface, merger refers to the combination of two companies, while acquisition suggests the take-over of one firm by another.

According to Brealy and Myers (2003), there are never really any 'mergers of equals' as management of one company will always dominate the other. They claim that mergers are part of a broader market for corporate control. Lawrence Schein (2001) made an extensive study of the nature and disposition of power in mergers and acquisitions. He suggests that an understanding of the power structures facilitates enculturation which he sees as key to a successful merger.

It appears that the double term, 'mergers and acquisitions' is a useful one in that it encompasses both the softer, less offensive term 'merger' while still acknowledging the real state of affairs with the word 'acquisition'. As such it covers a broad spectrum of connotations and will be treated as a single phenomenon for the purposes of this study.

Organisational Culture and Knowledge Sharing

3.1 Linking Organisational Culture to Performance

Since knowledge as defined in Chapter 2 is largely a people issue, it stands to reason that one of the greatest challenges for Knowledge Managers is to enable employees to share the knowledge they possess, and this goes far beyond enabling easy access to databases, even though that is important. Nonaka and Takeuchi compare information, as a flow of messages, to knowledge as being created by that very flow of information, anchored in the beliefs and commitment of its holder (Nonaka, Takeuchi, 1995). They say further that middle managers are the true "knowledge engineers" in a knowledge-creating company. Davenport argues that there is a continuum of data-information-knowledge, along which the amount of human involvement increases (Davenport, 1997).

How does one stimulate the sharing of knowledge in an organisation? One of the first steps is to make people aware of their own company culture according to Probst (1999), since knowledge management systems depend on companies' cultures and how well those cultures support the efforts of the people who produce the information in them (Honeycutt, 2000).

Many writers agree that the starting point is to re-evaluate they way the organisation actually applies its knowledge, then to strategise towards a future goal and to encourage the organisation towards that goal (Koulopoulos, et al, 1999). In order to manage unstructured knowledge, the culture should be less 'controlling' and more 'leading, facilitating and stimulating' (Tissen, et al, 2000).

In four studies undertaken among companies between 1987 and 1991, Kotter and Heskitt tried to determine whether a relationship exists between corporate culture and long-term economic performance² Although the popular view was that strong cultures produce strong results, they found that strong cultures could also inhibit change. Often, companies that had been successful under strong leadership would perform well, but as time went by, the culture would 'harden' into arrogance, which became inward-looking and less customer-centric. Many of

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² The results are contained in the book *Corporate Culture and Performance*, published in 1992

these companies were able to turn themselves around by undertaking radical changes in leadership and by stimulating cultural change.

The quality of leadership is a major theme in Kotter and Heskitt's book, *Corporate Culture and Performance*. Managers who believe in the leader are able to initiate change. Another theme is the devolution of decision-making and the treating of employees as adults. Ricardo Semler (1989) points out that adults who have often undergone tertiary training are treated like adolescents the moment they walk into the factory by being subjected to rigid timekeeping, having to wear badges and nametags and follow instructions without asking a lot of questions.

3.2 Organisational Culture and Knowledge Sharing

A culture of openness and trust certainly seems to all major authors on Knowledge Management to encourage knowledge sharing. Honeycutt (2000) writes that empowered staff producing high-value content will get more use and benefit from a knowledge-management system than will people in companies that do not support sharing of information and ideas in an open fashion. The sharing of tacit knowledge is critical to creating organisational knowledge sharing among multiple individuals with different backgrounds, perspectives and motivations (Nonaka and Takeuchi, 1995). Many channels exist in an organisation for the development of informal networks and communities of practice, and the identification of these needs to be an important knowledge activity (Marchand and Davenport, 2000).

One such important discovery was made by Xerox, where researchers working on artificial intelligence (AI) tried to replace paper documentation that their technicians used on the road with an electronic form. A meeting in the cafeteria that allowed interaction between researchers and technicians revealed that the problem was not the paper-based system, but one that allowed technicians to share experiences in order to avoid delays and find answers quickly while on the road. This led to knowledge management rather than AI (Mitchell, 2000).

Xerox is often held up as an example of a company that values knowledge sharing. Bob Wang writes that knowledge flows like electricity or blood and the most important element in flow is culture (Wang 2000).

There are social networks of informal relationships in any organisation which remain largely hidden from management which have a critical influence on work and innovation (Cross,

Parker, 2004). Research shows that identifying and stimulating these networks can have immense positive effects for the organisation.

It appears that although encouraging a vibrant culture is cheap in monetary terms it is easier to spend money on technology in the hope that it will act as a panacea. Good knowledge management practices need to be championed at the highest level and need to form part of the corporate strategy in order for them to succeed. This is because the traditional balance of power is being changed by the rise of knowledge workers, creating new tensions between managers and workers (Hope, 1997). Middle managers are notorious for filtering out negative information from their superiors, but this is a very primitive, and often harmful, form of selective dissemination. (Davenport 1997). It could be that a flatter organisational structure as advocated by Semler would help, but it seems that companies should be careful how they proceed. Building an open, sharing culture would be of great value. Meister (1998) claims that even if the total head count remains the same in a company, at a ten percent turnover rate that company will lose half of its experienced workers within five years. In fact, the recognition of knowledge as an asset was largely due to the panic that ensued after a period of downsizing, when companies realised that they lost expertise and experience when they lost employees (Myburgh, 2002).

This loss of expertise is borne out by the following graphic illustration:

The auditors have been busy with their annual check. They are asking for documentation that proves that contractors have a right to avoid having income tax deducted on work they have done for us in the past year. I had understood that the paying of income tax was the problem of the person paying it. I remember that we have divided contractors in the past into two groups: one group being those that work as individuals, who are temporarily put onto the payroll and removed at the end of their contract, and a second group who are registered as close corporations and as such deal with their own taxation. "Times have changed", I am told, "the Government is trying to make everyone pay tax and they require of us to prove that we know who is who." I remember that two years ago, before our company became a department in this larger listed firm, that we used to solicit and file a document called a Tax Clearance Certificate for each contractor who was part of a CC. These were all collected at Head Office, where payments were made, and all contractors were paid as creditors. So I call the payments department at Head Office, only to find that the person I used to deal with has left. Her files are in the storeroom. A call to her

reveals that the certificates were filed in a black ring-book marked 'contractors'. After two days spent searching the storeroom, the clerk reports that there is no such file available. Yes, she can remember the file, but it must have been moved when the debtors' section was merged into Shared Services. Shared Services makes use of temporary staff, who do as they are told and have no incentive to remember what was in which box when the office moved. The company is left at the mercy of the Revenue Services who may demand a fine.

That is only one side of the coin. Kotter and Heskitt note that, in the ten successful cases of cultural change that they studied, initiatives to drive new strategies usually focus on behaviours rather than on values (Kotter and Heskitt, 1992). There appears to be a great deal of confusion within the various cultures which are brought together after mergers and it is essential that change management be an integral part of restructuring. Kotter and Heskitt provide the following model to illustrate how a new culture can be institutionalised.

INSTITUTIONALISING IN A CULTURE A NEW VISION AND A NEW SET OF BUSINESS STRATEGIES

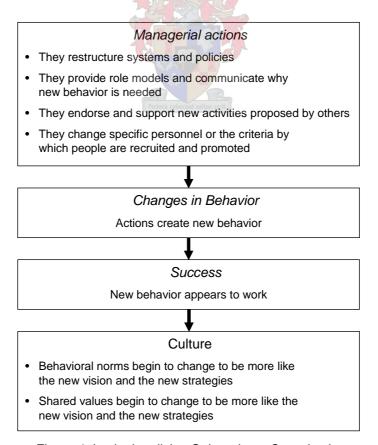


Figure 4: Institutionalising Culture in an Organisation

Kotter & Heskitt, 1992

This presumes that, although there will need to be personnel changes, care should be taken to handle them in a way that promotes behaviours that will form part of the new culture. In the case of a merger, efforts will need to be made to retain those employees who exhibit the right sort of characteristics to support the new culture.

3.3 Assigning Value to Information

When the Hawley Committee met in 1994 they felt that it was important as a first step in benefiting from the information held and used by organisations to formally indentify different types of information assets. These were: market and customer information, product information, business process information, management information, human resource information, supplier information, accountable information and specialist knowledge. The last, specialist information, was at the time of the Hawley Report not a well-established concept. It referred to knowledge and information for operating in a particular area. Often residing in people's heads, this type of knowledge is not always easily transferred, even in associated areas such as grocery supermarkets and other retail outlets. This type of knowledge is nowadays, according to Oppenheim et al (2001), being addressed by knowledge management techniques. However they found little evidence that models, formulae and equations developed over the years have convinced senior managers that information is an essential resource. Despite numerous studies that have shown a link between the effective use of information and business success, Oppenheim points out that a view persists that information and information services are luxuries. It is perhaps the very fact that knowledge is largely resident in heads that makes it difficult to quantify, and the softer issues like change management and cultural change are hard to implement.

4

Why do Companies Merge?

4.1 Perceived Advantages of Mergers and Acquisitions

Mergers and acquisitions are complex events in an organisation's life (Larsson, Finkelstein, 1999). The motives can be grouped into three major categories: financial, strategic and operational (Baro, 2004).

There is a lot of literature suggesting that there is an array of economic advantages to mergers, the most frequently cited being gains to be had from a reduction of competition and the economies of scale that can be obtained from a larger entity (Gort, 1969). Another popular classical hypothesis is that mergers are a consequence of personal ambitions of managers.

Gort further suggests (1969, p 629) that acquisitions are more likely to take place in slow- or non-growing industries if the primary objective if the merger is to decrease competition.

Empirical evidence indicates that the value of a merged firm is greater than the sum of the values of each individual firm (Gupta and Gerchak, 2002). Gort (1969) suggests that two conditions need to be met before a transaction can take place. These are: a) the acquirer has a higher estimate of the target's value than does the target, and b) the difference between the acquirer's estimated value of the target and its market price (investor's surplus) is greater for this target than for other available targets at the time. Companies can look to sell divisions in order to get cash to offset losses. Companies can also look for buyers in order to achieve liquidity or to gain a stronger partner. Sometimes firms are looking for capital for future leveraged buy-outs (Buono, Bowditch, 1989).

Financial synergies can result in lower cost of capital (Trautwein, 1990) in three ways. Firstly, a company can lower risk by widening the scope of its investment portfolio and investing in an unrelated business. A company may also be able to gain access to cheaper capital by increasing its size. Lastly, if a company can establish an internal capital market, it might be able to allocate capital more efficiently through superior information (Trautwein, 1990).

Strategic types of mergers and acquisitions include *horizontal*, where the target company produces similar products to the acquiring one; *vertical*, where the acquirer targets a firm along its value chain, possibly a supplier or distributor; *product extension*, where production and distribution methodologies are similar but products differ; *market extension*, where a

similar product is produced but in a different market. A company can also acquire a firm that operates in a completely different market (Buono, Bowditch, 1989).

One operational reason for acquisitions is to acquire in-depth experience and skills of specific groups of technical and managerial personnel (Ranft and Lord, 2002). Examples include Microsoft, who made a series of acquisitions during the mid 1990s aimed at keeping pace with innovations in terms of the Internet, and Intel, who allocated twice the amount reserved for research and development to acquisitions in new technologies and markets. Cisco Systems made 42 acquisitions within six years in the 1990s, including 18 in 1999 alone – primarily of smaller firms with new technologies in various stages of development (Kaplan, 2001).

Expansions can extend a firm's products, markets, technologies and other resources and can provide instruments for diversification (Pennings, Barkema, 1994). They are also a convenient way to do away with competitors in the market.

Mergers can provide the opportunity for achieving managerial synergies where the acquiring firm believes it can do a better job at managing than the target's management (Trautwein, 1990). Certainly, it appears as if mergers often result where there is a difference between the quality of managerial skills in two firms (Gort, 1969).

Operational synergies can be obtained by combining similar departments in firms in order to reduce costs and increase efficiency. In this case, horizontal mergers provide most operational benefits. Combining firms that produce closely related products can achieve economies of scale (Baro, 2004). Overheads can be reduced by integrating similar departments and functions (Buono, Bowditch, 1989).

Finally, mergers and acquisitions can stimulate operational synergies (Trautwein, 1990) and knowledge transfer (Porter, 1985). This could mean that companies are enabled to offer unique products or services (Trautwein, 1990). Clever acquisitions can facilitate skills transfer and develop capabilities that facilitate value creation (Rosenzweig, 1993).

4.2 The Case of Management Consulting Services

Despite the positive attributes of mergers and acquisitions, however, research shows that 75% of all business combinations fail within the first three years (Bouchard and Pellet, 2000) Lack of attention to organisational culture has played a key role in making the merged company unable to meet organisational and financial goals within a specified period of time.

Without access to strategic secrets, it is very difficult to know exactly the motives and reasons for the various acquisitions that the Management Consulting Division has been involved in. The reason for the first seems clear: The US Senate promulgated legislation aimed at preventing Accounting firms from also being Consulting firms. Ernst & Young made a strategic decision to split away their MCS divisions, which merged with Cap Gemini to become Cap Gemini Ernst Young in most countries around the world. (Interestingly, the Ernst & Young was dropped from the name "with the launch of its new primary business model" providing interesting conjectures into who might have been the dominant partner in the merger.)

Certain countries, including South Africa, were not included in the Cap Gemini deal for various reasons, and so MCS, after being 'NewCo' for nearly a year, was acquired by Worldwide African Investment Holdings, and began trading under the name Argil as the largest Black-owned consulting business in South Africa. This appears to have made the business a strategic target for CS Holdings, a technology group who were in an aggressive acquisition phase and needed to increase their BEE shareholding. Argil had planned to list on the JSE and might have found the offer from another listed company attractive. Following an 'error of judgement' by the erstwhile CEO, CS Holdings itself became a target for acquisition and was formally purchased by Bytes Technology Group towards the end of 2004.

Year 1999 2000 2001 2002 2003 2004 2005 Newco Newco Division of Ernst & Young Argil Acquisition of Idion

117 National

19 Cape Town

Management Consulting Services (MCS)

Figure 5: The transformation of the Management Consulting Division

157 National

26 Cape Town

61 National

14 Cape Town

The diagram above illustrates the changing fortunes of the Management Consulting Division as it transformed from being a division of Ernst & Young, through 'Newco' to Argil, being

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Employee Numbers:

21 Cape Town

12 National

6 Cape Town

³ According to the website http://www.big4.com/CapGeminiErnstYoung/Alliances.aspx section on alliances.

acquired by CS Holdings in late 2001 and finally when CSH was acquired by BTG at the end of 2005. The staff numbers, while relatively stable during the 'Newco'/ Argil period, diminished drastically after the group became part of CSH. The acquisition of Idion added 40 employees nationally, bringing the Cape Town staff numbers up to 26, but by the beginning of 2004, 9 people were retrenched and 11 resigned. At the end of 2005 there were only 6 employees left in Cape Town. (Staff numbers were taken from telephone lists of the time).

One valuable discussion was around the reasons for the varying fortunes of the management consulting group. One of the consultants, highly educated in classical accounting had the following take: Management consulting group had been built to a peak by a charismatic leader and the top of the Bell curve had appeared – the only way was down. Therefore selling was a good option and the choice of a BEE investment company was inspired. However, in the search for shareholder wealth, the investment group, who had been watching the mercurial rise of CS Holdings, was happy to exchange shares in CSH for Argil. CSH for their part were glad of the twofold bounty of a cash injection and BEE credentials. BTG were able to pick up a bargain with the opportunity to harness the second largest IT outsourcing company in South Africa to add to their stable.

One of the more cynical interviewees, when asked about possible reasons for the acquisition of CS Holdings by the Bytes Technology Group, postulated that it could very well have been to acquire the prime real estate in Midrand. "After all, so long as the operating divisions are making a profit there is no cause for alarm, but should they not, they can easily be sloughed off and the very visible Midrand property remains!"

Organisational Culture is Disturbed by Merger Activity

Comparisons of organisations typically reveal vast differences in how they see themselves (Veldsman,1997) which affects they way they function. Groups of people develop a unique, shared way of understanding, interpreting and responding to each other and the outside world. Meek (1992) calls organisational culture a socially constructed reality constituted and reconstituted on an ongoing basis by its members. It is this dynamic that makes collective action possible. Culture, because it is lived through its members, can be both inclusive and exclusive, as it tends to include those who have internalized the common views of the culture and exclude those who do not hold similar views (Meyerson, Martin, 1987; Turner, 1992). Furthermore, there is a very real possibility that a variety of cultures can co-exist in the same organisation (Veldsman, 1997). Culture both creates and sustains the organisation (Boyce, 1996; Linstead, Grafton-Small, 1992) and could be called the "fabric" of, or even the "glue/cement" that holds the organisation together (Graves, 1986; Schneider, 1988).

Organisational culture can be better understood using the following model:

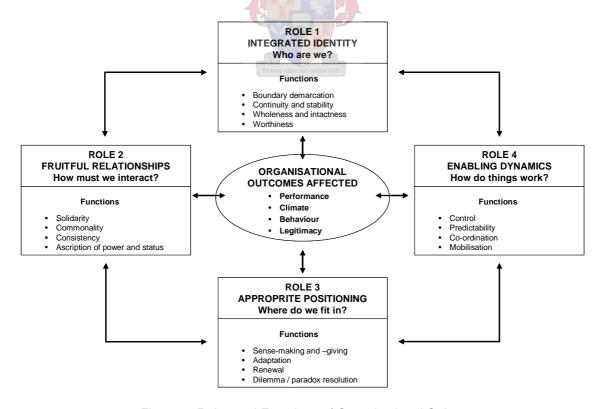


Figure 6: Roles and Functions of Organisational Culture

Theo Veldsman, 1997

The model illustrates basic choices expressed in the form of critical questions, the answers of which are essential to the organisation's existence (Veldsman,1997). These answers fulfill roles and functions for members of the organisation and in turn affect outcomes from the group. The organisation performs smoothly according to these until changes demand new answers. Providing these answers are found, the organisation renews itself, but if not, it can be disabled or even become pathological, threatening the viability of the organisation as a living entity (Kets de Vries, Kets de Vries and Miller, 1984; Trice, Beyer, 1993; Veldsman, 1993).

The basic building blocks of organisational culture are illustrated in the following table:

	Description	Example	Function
Assumption	Self-evident or 'taken-for- granted' premise	"There will always be abundant resources to which we shall have easy access"	Provides a vantage point from which to understand, interpret and respond to entities, events and outcomes
Belief	Accepted truth about entities, events, outcomes and their interrelationships	"People are inherently lazy, lack initiative and cannot be trusted"	Gives organizational members a world view
Value	Relative worth ascribed to entities, events or outcomes	"The customer is always right" or "People are our most important asset"	Forms the organisation's philosophy and people's work ethic
Norm	Accepted and/or excepted standards of acting towards entities, events or outcomes	"Don't make waves" or "Show respect to your superior at all times" or "Wear a tie to work"	Spells out the rules of the game in the organisation, one concrete expression is business ethics
Attitude	Learned predispositions to respond in a consistent manner, whether positively or negatively, to specific entities, events or outcomes	"Performance appraisals are bad for our organisation" or "Our unions are destructive" or "Management in our company is autocratic"	Enables organisational members to direct, guide and prioritise their actions

Theo Veldsman, 1997

5.1 Cultural Carriers

These entities in themselves have no life and are sustained, protected and renewed by cultural carriers which use culture in order to make culture (Trice, Beyer, 1993). The functions of making (innovative) and using (maintaining) are often in dynamic tension (Linstead, Grafton-Small, 1992; Meek, 1992) and their effectiveness depends on their perceived legitimacy and credibility (Veldsman, 1997). Power struggles within organisations often centre around the control of cultural carriers. The success of cultural carriers in bringing about a common but unique culture is mediated by two interdependent factors, namely variety and integration. The greater the variety and differentiation, the more difficult it is to achieve a general culture in the organisation.

5.2 The Effects of Mergers on Culture

Deal and Kennedy (1982) describe three cultural effects of the impact of mergers.

The 'over-your-shoulder effect' describes the anxiety felt by employees as they work through the uncertainty related to rationalising. There is an assumption that the increased size of a firm following a merger will bring greater effectiveness. As the restructuring starts, anxiety builds and efficiency actually drops. People start looking over their shoulders to see who will be next. Bouchard and Pellet (2000) estimate that up to 2 hours per day can be spent among employees discussing what will happen next.

The 'winners-and-losers' effect describes the way employees experience the 'winning' culture taking hold. Regardless of due diligence studies that show congruence between cultures, there is always a perception that there is a stronger and a weaker party to a merger. Often the more powerful partner imposes his culture on the less powerful one (Recklies, 2001). More often than not, however, little notice is taken of the cultural differences and the parties are expected to settle in on their own. They do, but often as the cost of highly skilled workers who perceive that they cannot contribute or develop within the new structure.

The 'cultural isolation effect' describes tension in areas where there is less cultural alignment between merging groups. Even if there is a high degree of cultural alignment, for example, where leaders come from similar class and professional backgrounds, a rivalry might develop over items seemingly petty, such as approaches to decision-making or formality of dress.

A research study of Chief Financial Officers (CFOs) and senior financial management of Forbes 500 worldwide companies showed that organisational problems are both more likely and more damaging to a merger, acquisition or new partnership than financial factors. The following diagram, from the Bureau of Business Research at American International University, shows the likelihood and negative impact measured on a 7 point scale. The bracketed numbers indicate ranking.

Likelihood of Negative Impact	Occurrence	Impact
Incompatible corporate culture	4.85 (1)	5.61 (1)
Clashing management styles and/or egos of two CEOs	4.71 (2)	5.11 (6)
Acquiring firm paid too much resulting in disappointing ROI	4.34 (3)	5 (7)
Acquiring firm must spin off or liquidate too many target firm assets to meet debt obligations	2.89 (9)	4.05 (9)
Acquiring firm overestimated ability to manage target firm's business	3.70 (6)	5.40 (2)
Acquiring firm unable to implement organisational / operational transformation needed to achieve synergy	3.75 (5)	5.32 (3)
Synergy between firms nonexistent and grossly overestimated by senior management	3.56 (7)	5.22 (4)
Acquiring firm's business too unhealthy or poorly managed to benefit from target firm	2.58 (10)	4.50 (8)
Two firms have incompatible management control / or other systems	3.07 (8)	4.07 (10)
Acquiring firm did not forecast unfavourable market events	4.05 (4)	5.14 (5)

Bureau of Business Research, American International University

Considering that culture is and should be continually evolving in order to prevent hardening and arrogance (Kotter, Heskitt, 1992) it would be erroneous to think that mergers are necessarily bad. Mergers can provide a necessary stimulus to healthy change and remediate stagnant cultures, provided the change management is handled appropriately.

Organisations hit by change experience a power surge. There's a burst of new energy as the destabilisation rouses people like a wake-up call. The old culture goes on red alert.

The new energy that's generated will either work for you or against you. You need to make a pre-emptive strike and focus the energy on driving culture change. Unless you move quickly, people will spend their new energy in ways that interfere. They'll waste it on self-protective behaviour. Or even worse, it will fuel resistance to change. (Pritchett, Pound, 1993, p 10)

In a study conducted into organisational alliances, Patricia Norman (2002) discusses several hypotheses pertaining to alliances that could just as well refer to individuals in a post-merger firm. Consequent to a merger, personnel from both firms need to make alliances in order to access knowledge and share it. There seems to be a 'mating dance' phase following the merge during which power-plays are evident. Previously helpful people suddenly become defensive and withdrawn. Some uncomfortable discussions take place between members of each side of the merger during which information seems to be sought and supplied. Norman quotes Huber (1991) as suggesting that 'an entity learns if, through its processing of information, the range of potential behaviours is changed.' (p 89). This suggests that the behaviour described above relates to the learning and positioning that needs to take place before the entity can truly merge. New alliances have to form and social networks might get split up. Cross and Parker (2004) relate the case of a colleague who was a member of a small research group and who had become reliant on four members of the group. Following a merger, he found that two had moved to a different organisation while the other two had been repositioned in a department operating from premises in another town. After about six months, he began to realise that, although still accessible to him for advice, their expertise had stagnated and their advice was no longer as up-to-date as he required. They make the point that although he was able to form a new network, his dislike of change made the process long and arduous.

Each partner in an alliance is simultaneously trying to gain knowledge from each other, such knowledge that they can use to their own advantage (Richter, Vettel, 1995). While some learning is needed to achieve alliance goals, too much learning by one partner can strip the other of critical knowledge (Norman, 2004). Benefits of knowledge sharing can accrue to the organisation, however, the benefits can just as easily be private (Khanna, et al., 1998) and be used to one partner's disadvantage. The power-play is complex, since limiting communication and information exchange may inhibit the learning necessary to meet the objectives of the alliance (Millar et al., 1997).

The key seems to be trust, the willingness to be vulnerable to another party when the other party's behaviour cannot be controlled (Mayer, 1995). If the other party acts opportunistically

or in self-interest, the first party will attempt to limit the other's learning opportunities (Moschandreas, 1997). However, as Norman (1997) notes, restricting information sharing can hinder the development of a mutually beneficial relationship. 'The literature has argued both that trust leads to greater information sharing (i.e. less knowledge protection) and that greater information sharing leads to trust' (Norman, 1997, p. 617).

Interviews were held with two sales managers who hold similar positions in the firm, each from one of the previously separate companies. Although they sit alongside each other in a collegial atmosphere, each reported that he approaches the other very carefully around information sharing, even though they essentially have different products to sell. Their experiences, shared separately, seem to attest to the validity of Norman's thesis.

Certain industries naturally experience a high turnover rate of employees. Advertising is one of these, and another is IT, as evidenced by the high number of acquisitions made by Microsoft and Cisco as quoted above.

The high number of staff movements in the IT industry often mean that people meet up with one another in different companies, whole teams relocate to other firms and customers find their supplier pool changing or diminishing.

CS Holdings instituted the so-called 'pizza round table' in an effort to try and bring different business units into contact with one another. This was an informal lunch at which the company supplied pizza and a cross-section of employees was invited. There was only one held in Cape Town, with representatives from Education Solutions, Outsource and Management Consulting Services. It was very interesting to see, as participants introduced themselves, that at least four of the twelve found they had worked as colleagues in the past, They had been brought together again for a multitude of reasons, not the least the number of mergers and acquisitions that had taken place in the industry over the previous 15 years. The meeting took on the tone of a high-school reunion.

After months of negotiation and a full tender process, CSH was awarded a contract with a large retail group over the previous supplier, BTG. The client had indicated that fresh blood was needed and customer service could be better. While still congratulating themselves, the business development group heard the news that BTG had acquired CSH.

These kinds of movement must have consequences in terms of organisational culture and might prove fertile ground for further research.

5.3 The Outer Context to Culture

There is also an outer context to culture (Veldsman, 1997). The organisation is positioned in terms of the industry in which it operates, the country in which it is located and the broader world system, for example developed vs developing or Western vs Oriental, etc. (Furnham, Gunter, 1993; Hampden-Turner, 1990; Lessem, 1993; McWhinney, 1989; Slabbert, Opperman, 1995).

Multi-national corporations which have offices scattered around the globe have an opportunity to experience the different textures provided by different national cultures. Used well, experiences with culture can have an invigorating effect on staff. Some companies exploit the opportunities provided by different national cultures to expose employees to wider experience. Ernst & Young, for example, had a programme where employees could be transferred to E&Y offices in other countries for a period of two years to broaden their experience.

A discussion of organisational culture in South Africa would not be complete without mention of multi-culturality in the same organisation. Veldsman (1997) cites multi-nationals operating in more than one country, as well as diversified conglomerates that operate in more than one industry. Apartheid South Africa created several distinct national cultures in one country and post-apartheid South Africa is having to deal with the fundamental tensions caused by cultural clashes which are emerging in the inner context of the organisation's culture. BEE targets are producing their own uncertainty and cultural carriers.

A very talented and experienced senior manger recently chose to emigrate as a result of the need to comply with governmental targets which resulted in a promising consultant being leapfrogged into a senior position by virtue of being previously disadvantaged.

Knowledge Loss

When one approaches the subject of knowledge loss, it becomes apparent that there are a variety of causes.

6.1 Staff Turnover

As the 'baby boom' generation ages, many organisations are beginning to experience substantial knowledge loss in terms of the number of employees nearing retirement. A Hay Group study estimates that nearly 20% of American executives, administrators and managers are set to retire before 2008 (Cross, 2005).

The American Society of Petroleum Engineers estimates that their industry will lose 44% of its engineers to retirement in the next 10 years, while upstream oil and gas will likely lose more than 60% of its employees by 2010 (Sapient, 2001). It is estimated that around 71% of the current permanent employees of the US Government will be eligible for retirement by 2010 and it is predicted that 40% of those will retire. All of these employees have experience and knowledge which will be lost when they leave (EPF,1999).

Retirement is not the only factor to consider when looking at knowledge loss. Others include rapid growth, turnover, mergers and acquisitions and internal redeployment (APQC, 2002).

Corning Inc. lost an estimated 2000 cumulative years of knowledge in research and development when the company offered retirement packages in 1998.

Tom de Marco estimated that AT&T's 1996 reduction of 40,000 jobs was equivalent to wiping out more than one third of the company's stock in property, plant and equipment. (Stewart, 1997, p 85).

In a benchmarking study, the American Productivity and Quality Center (APQC) found that half of all American employees have been with their current employer less than 3.5 years and 25% have served less than one year. Turnover usually occurs in early career years, but the median tenure in the age-group of 35-44 years is 4.8 years. They cite Best Buy as an example of a company that implemented knowledge management and retention approaches in an effort to reduce the potential loss suffered as a result of the rapid turnover of its young workforce.

Stewart (1997) writes: 'A company with a 10 percent annual turnover rate, which is better than average, will lose half its experienced workers within five years, even if its total headcount stays the same' (p 114).

Information can be forgotten, misplaced or destroyed as a result of technological and organisational change, management decisions and staff turnover. Some companies have unconsciously erased whole areas of past corporate memory (Coulson-Thomas, 2003).

At the time that Ernst & Young split off the Management Consulting Services division, an agreement was made to allow access to E&Y's superior knowledge database. This was achieved by setting a date on which to 'freeze' content, which information items then belonged to 'newco'. E&Y uses Lotus Notes for its database and for a while everything functioned almost as before until licensing issues emerged. As a result of these, 'newco' no longer had access to Lotus Notes. One of 'newco's software developers built a dashboard through which the frozen content could be accessed, but no sooner was this achieved than 'newco' (now Argil) was acquired by CS Holdings. The frozen content was put on a backburner until the acquisition by CSH of Idion, which had one Lotus Notes license. After about six months, the engineer who was custodian of the servers began to make sections of the content and a rudimentary knowledge database available with web-based access. However, shortly after this the engineer was retrenched and the database was once more inaccessible. Not long after the departure of the engineer, the software developer who had built the original dashboard resigned. Now only two staff members know of the existence of the frozen content and of these only one would be able to access the servers to find it. However, by now five years have passed and it could be argued that whatever usefulness the database contained has become outdated.

Corporate restructuring can disrupt established practices, flows and relationships that support and enable the flow of information (Coulson-Thomas, 2003).

Through both mergers there was a noticeable drop in productivity in the finance department as financial clerks struggled to find processes that would be compatible. Finance was still trying to integrate two disparate financial reporting systems into CSH when BTG took over and they had to begin again with new systems.

Perhaps the most frightening potential outcome is contained in the following anecdote: A major project had been in process for about a year with various

extensions. The Project Manager had been contracted from outside CSH for the original project which involved building a web-based knowledge database for a large organisation. The contractor relied on an administrator within CSH for the collation of billable hours and expenses, application of these to the budget and the drawing up of invoices. The administrator encountered frustration at delays in obtaining expense amounts on a regular basis, which meant that often the expense part of the invoice was running a month or two behind the chargeable hours. Billing was achieved by sending an invoice requisition to head office for processing, with the final invoice being e-mailed back to the branch for printing and delivery. Often material errors in invoices demanded that the process be repeated several times a month. Since the accounting system did not allow changes to invoices, a credit note would be issued and a new invoice drawn up. Delays in this process meant that invoices were often substantially late. Then the administrator was retrenched. By the time the Project Manager was alerted, the customer's account was showing in excess of 120 days and CSH wanted to take legal action against them. It took another administrator the best part of a month to audit the various invoices and credit notes, compare them with the budget and draw up a spreadsheet which would be intelligible to the Project Manager. When the account manager visited the customer with new invoices and details, he found that the budgetary year had elapsed, and his client had difficulty in authorising payment. In addition, the travel and expense budget had been overrun as a result of the extensions and an inability to track expenses.

'Some organisations have become populated with energetic individuals whose understanding has become glib and superficial. Their mercurial 'progress' around and up the corporate structure is ever more dependent upon the support of a diminishing band of ageing colleagues and 'back-room' specialists with a greater depth of expertise who can 'rescue' them whenever they encounter questions they cannot answer' (Coulson-Thomas, 2003, p 28). An added dimension in South Africa is the quest to meet government-imposed BEE targets, an effort which can disrupt the normal course of career paths and cause uncertainty which might lead to resignations and consequent knowledge loss. It is also quite possible that newly appointed staff from the previously disadvantaged individuals (PDI) group will be prevented from reaching their potential within the company as a result of not being given the space to move by their peers. Furthermore, those whose progress is jeopardised by the new appointee find

themselves in an invidious position. They are expected to support the very person who has stopped their progress.

The new PDI director was introduced with great fanfare in the internal staff newsletter. The goals that were articulated were lofty and challenging, and in retrospect might have set her up for failure. From the start, she felt alienated by a lack of interest in what she had to present to the Executive team. Her plan to transform culture by embracing current staff and growing a resource blueprint of as part of a larger transformation strategy was ignored. She felt that she had been hired merely to implement the ideas of the CEO and not to be part of a team. She even found herself being sabotaged by her own staff by being given incorrect information for board meetings. As a change management practitioner, she understood the climate of fear. Even so, she was amazed at the number of executives who called her after she resigned (after only nine months in the position) to tell her that they supported her initiatives but had felt that voicing their support would have been a career-limiting move. Subsequently this person has found a new position with a public utility where she has been given the scope she lacked at CSH. She has been there for two years and is very happy as she feels she is able to contribute. In the interview she shared an anecdote about a job interview she had attended: she was invited to become a director alongside another person who had risen through the ranks in the firm. She quickly realised that she was being hired for the BEE numbers rather than for her skills, so she declined the position, not prepared to work alongside someone who would necessarily feel threatened by her presence.

6.2 The Fear Factor

Fear in a workforce and cause paralysis. A case study in Hewlett-Packard (Pfeffer, Sutton, 1999) describes the redesign of a manufacturing facility which stalled from employee fear. Employees became more concerned about their jobs than the redesign of the division. 'One production manager explained, "uppermost in most people's minds is not redesign or what they learned . . . it's finding a job. People want to know if they're going to be here tomorrow" (Zell, 1997).

Another major cause of fear is mergers and acquisitions. Deal and Kennedy (1982) describe three cultural effects of the impact of mergers: the 'over-your-shoulder effect' describes the anxiety felt by employees as they work through the uncertainty related to rationalising, the 'winners-and-losers' effect describes the way employees experience the 'winning' culture taking hold, and the 'cultural isolation effect' describes tension in areas where there is less cultural alignment between merging groups. Even if there is a high degree of cultural alignment, for example, where leaders come from similar class and professions backgrounds, a rivalry might develop over items seemingly petty, such as approaches to decision-making or formality of dress.

As discussed above, there are really no 'mergers of equals' as management of one company will always dominate the other (Brealy, Myers 2003). The story is recounted of a pre-merger meeting between IBM senior vice president John Thompson and a group of Lotus senior managers in 1995. The Lotus group had dressed conservatively in suits and ties, while Thompson arrived in a T-shirt and jeans. It has been suggested (Gallagher, 2000) that Thompson's act was strategic. IBM was at pains not to alienate Lotus engineers as it had a lot to lose should those engineers resign. Gallagher (2000) quotes an Edgar Schein description of a larger company that acquired a smaller firm with a significant number of engineers with skills needed by the larger company. Within a few years, most of those engineers had left for other jobs because they did not feel comfortable in the new setting. According to a research study performed by A.T. Kearney, in many mergers the dominant culture is more a result of power plays than the result of an evaluation of which culture would be the more suitable for the merged organisation (Recklies, 2001).

An interesting aspect of knowledge loss concerns what psychologists term the MUM effect (Pfeffer, Sutton, 1999). This refers to the fact that people try and distance themselves from bad news. It has already been stated that middle managers filter out negative information from their superiors (Davenport 1997). Nonaka and Takeuchi, (1995) assert that middle managers are the true "knowledge engineers". Not only middle managers but also personal assistants also use this tactic. Pfeffer tells of an executive assistant to a CEO who filters out bad news because it makes her job more pleasant if her boss is not in a bad mood (Pfeffer, Sutton, 1999, p 122). This tendency for gatekeepers to filter out negative information means that leaders can develop an inaccurate view of their organisations.

According to Zell (1997), who made a study of Hewlett-Packard, before employees are willing to accept changes, take on more responsibility for decision making, work as a team, or learn new tasks, they must feel a sense of security, feel that they are fairly treated, feel that they can trust managers and fellow employees, and feel that they will be compensated for

their efforts. The HP philosophy acknowledges that employees care about being treated with trust and respect and their achievements recognised.

6.3 Knowledge Sharing

Knowledge may be lost through experts who are not willing to share their knowledge. Knowledge is an agent of power (Sihn, Lenz, Michalski, 2005). A person's economic value increases with knowledge and experience gained over years. When working conditions become unstable people become less willing to share their knowledge. The Fraunhofer Institute study undertaken by Sihn, Lenz and Michalski indicates that, while people can be quite open in face-to-face meetings, barriers to knowledge sharing become apparent when people are asked to make their experience available to readers in a software system. Sihn claims that transparency can be seen as an increase in control. They also found that people are less inclined to document work as it is seen as extra, unpaid 'stupid work'.

In an interview, a senior consultant described his frustration with lack of access to information. A large project, lasting 2.5 years, for which he had been brought to Cape Town as a supply chain specialist came to an end at the same time as Management Consulting Services became 'newco' en route to becoming Argil. The change brought a change in roles for consultants, who found themselves having to be more sales orientated, being urged to generate their own work without the help of the dedicated account managers they had been able to rely on in E&Y. His stress at having to prepare his own proposals was increased by a lack of access to the knowledge databases he had been able to access as part of E&Y. Apart from this, each consultant had amassed a private database on his or her own laptop computer. Despite efforts by the designated Knowledge Manager, consultants did not share readily for the combined database. The interviewee felt keenly the lack of training in sales methodology. Later, when Argil was acquired by CSH, he felt that the consultants were downgraded to becoming package implementers. He said he felt that it was degrading to sell commodities and he was beginning to lose skills from lack of practice. He felt bitter that no attempt had been made to do a skills audit. Nobody knew his skills and nobody bothered to try and use them, so when retrenchment came he was not surprised and did not fight it.

One manager told of a merger in which he had been involved, where the acquiring company decided not to pursue alliances with one of the products they had supported.

Unfortunately for them, it was this product that became the market standard but by this time it was too late to find and re-instate the technicians they had lost. When asked whether anyone had been far-sighted enough to try and tell management, the person said that there had been people, but that to speak out was considered to be a career-limiting move.

Other managers spoke of frustration at seeing projects into which they had poured a lot of energy being subsumed into a new company structure, or being dropped because of software incompatibility issues.

An aspect of cultural change that occurs as a result of mergers is the drop in morale that manifests in the social networks. In some cases this leads to teams of people resigning. Should such teams be specialised groups on which the company depends (Cross, Parker, 2004) the departures could be devastating to the company.

6.4 Factors that Counteract Organisational Learning

Over-managing can lead to barriers to learning. Stewart (1997) cites a study conducted by academics Ronald Purser, William Passmore and Ramkrishnan Tenkasi of two product-development projects in the same bit American manufacturer. One group was rigorously managed, relying on fortnightly meetings to keep everyone up to speed. The other group was hardly managed at all. The former group struggled while the latter soared. The barriers were identified as: 'failure to use already-available knowledge, withholding important knowledge because of mistrust or conflicts between groups, holding discussions from which key people were missing, failure to take heed of important information from other divisions in the business environment, and divergent values between groups. Essentially, the formal structure of the first group prevented people from talking; the second group...was full of places where people felt free to speak up.' (p98)

Finally, the loss of knowledge could be seen in terms of processes within a company that counteract learning (Togero, 1997). Malhotra (1997) argues that there are two ways to understand processes that counteract learning: one leading to stagnation and the other, namely 'unlearning' is not only positive but necessary.

Does knowledge loss matter? The answer rather depends on the motive for the merger. If the acquiring company made the acquisition in order to access the expertise of the target firm,

then it matters a lot. Conversely, if the merger strategy does not focus on the group, it is likely that the acquiring company will not even know what it has lost.

As an example of unfulfilled expectations, the following quote from the CSH internal newsletter is interesting:

'The acquisition of Argil (the ex-Ernst & Young management consultants) placed CS Holdings on par with the "Big Five", nay Four! Management consulting houses.' (Corporate Chronicle, May 2002, p1)

Placed alongside the bitterness of one of the interviewees who felt his skills had been degraded by becoming 'integration advisors' rather than true consultants, a view that is held in varying degrees by all the management consultants interviewed, this boast of potential market share seems overambitious.



Is Knowledge Loss Ever Desirable?

When Malhotra replied to Togero in the discussion outlined above, (1997) he described a scenario where a cultural 'shake-up' is useful in a culture that might be perceived to be stagnating. When top executives are 'let go' there can be an infusion of new blood and new ideas. 'In such cases there is essentially loss of knowledge, however, it does not necessarily imply loss of learning capability or capacity' (Malhotra, September 24, 1997 at 02:02:28).

7.1 Creative Destruction

For Schumpeter, just like Keynes and Marx, capitalism is an inherently a dynamic system displaying structural instability (Vercelli 1985), in which the accumulation of capital always requires to find new methods of production, new forms of industrial organisation, new methods of transportation, and new markets (Schumpeter, 1942: 83). That is, the accumulation process is characterised as a creative destruction process in which economic structure is revolutionized from within, in the form of the destruction of the old one so as to give rise to a new one (Schumpeter, 1942: 83). The key for this creative destruction is the notion of innovation, which notion could be just as profitably applied to organisational culture.

Similarly, according to Malhotra, 'unlearning' is desirable for operating in what he terms turbulent or 'wicked' environments, since it requires that assumptions be continually reframed and prevents behaviour becoming reinforced and what he calls 'hardwired'.

In the same discussion, Denham Grey points out that captured 'knowledge' can be detrimental if decisions are based on outdated, irrelevant or inapplicable 'knowledge'. He claims that 'knowledge and opportunity loss through atrophy and failure to adjust, amend or update is often larger than losses due to employee turnovers. This risk is also increased where there is greater staff churn indicating a negative feedback loop and multiplying the loss of learning.' To counteract this he suggests that a programme of continual individual and group learning is more valuable to an organisation than building a corporate memory. 'To learn something new we have to replace, modify or erase the past' (Grey, September 14, 1997 at 23:46:04).

7.2 Information Management and Accountability

When two firms come into a merger there is a vast amount of stored information to be managed. As far back as the mid-1970s, the US Government set up a Commission on Federal Paperwork when it realised that it was in danger of drowning under paperwork at an unsustainable cost (Black, Marchand, 1982). This commission stated that information can and must be managed in the same way as other resources, subject to the same budgetary, managerial and audit disciplines as any other resource. A similar move took place in the UK, culminating in the Hawley Report, which recommended that information assets be identified and classified by value and importance, and that skilled resources be employed to manage these resources. Oppenheim (2003) notes that, although directors were by that time aware of intangibles like brands, people and intellectual property, very few organisations recognised the value of information. Since then the need to manage information has become common knowledge, but not always practice. Each party to the merger has stores of information, which together with the people, form the basis of organisational memory. Much of this information is either on databases or resides in other electronic systems. Often there is a felt need to cling to the organisational memory by each partner of the merged firm. When the information is felt to be useful in building out the knowledge of the people, that information is worth keeping.

Both MCS and Idion had databases carrying organisational memory. Unfortunately these were on different servers. By the time that the systems engineer had managed to make both accessible, restructuring had taken place and the people who could have benefited most from the merged database had left the company. The irony is that cultural differences had caused most of the delay.

It is important that information is stored adequately. In South Africa, the recently promulgated Promotion of Access to Information Act (PAIA) requires that companies not only store information, but produce it on demand to potentially anyone who requests it.

There is a case in point at present where a client has asked for copies of all invoices issued from April 2003 to present. Accounting systems have changed three times since then and the information is not readily accessible without ordering the return of boxes of data stored off-site. Similarly, in the example quoted above where billing had not taken place on a major project, support staff spent several days searching for material in boxes after being given vague clues to the whereabouts of information by

an employee who had left, but insisted that the files were in her boxes, which were stacked in the corner of her erstwhile office.

Besides the shared databases, each member of the acquired divisions: Getronics, Idion and MCS, had their own 'stash' of useful information. However, without any formalised knowledge sharing, nobody other than themselves was aware of its value. One can only conjecture as to the potential value that could be unlocked by sharing and amalgamating this information. Is it possible that the acquiring company never realises the potential value of knowledge in the organisation since it simply does not know what it has?

7.3 Ownership of Knowledge

An integral part of organisational culture is the development of a number of interconnected communities in which members develop a shared understanding, memories and jargon which help them to function more smoothly.

Weber and Camerer's study on cultural conflict and merger failure (2003) used laboratory experiments to explore conflicting organisational cultures. They created two groups (equivalent to firms) and encouraged the members of each to develop a shared language (equivalent to culture) which enabled quick recognition of a set of photographs. They then merged members from each group with the other and tried the same exercise again. After several rounds of the game each group had developed one-word clues that enabled quick recognition. After the merger, new members took significantly longer to understand the clues than the original members had taken to develop them. Weber and Camerer quote Schall (1983), Schein (1983) and Cremer (1993) to support their hypothesis that language plays an important part in organisational culture. Language, in the form of codes, symbols, anecdotes and rules, contributes to the development of a shared understanding held by members of the organisation. When conflicts of interest occur after the merge, groups of employees can use this shared language code as a vehicle for the exclusion of 'outsiders'.

The development of a shared language can have very positive spin-offs. Within a group, a shared understanding contributes to relevant and useful communication. Consequently, information can be readily exchanged and interpreted.

Passed on from person to person, knowledge retains a dynamism that codified information cannot approach. Therefore a community that collaborates well can be useful for the initiation

of newcomers and the stewardship of competencies. If people identify with the working community it gains a vibrancy which contributes positively to the learning organisation as a whole. Wenger (1998) notes that communities have boundaries as well as a core, both of which need to be active in complementary ways. If the expertise becomes insular, the community can become a liability rather than an asset. It is for this reason that it is important for both organisational and technological infrastructures to recognise, support and leverage the evolution of learning communities.

Although there is a time when it is beneficial to a company to let knowledge go, it is important to examine motives. Too often people and skills become sidelined in the 'push-and-shove' that takes place as managers jostle for position during a merger. There should be some kind of strategic planning that takes account of the skills that are resident in the merged company and a way forward should be plotted intentionally to make best use of those skills. Judging by interviews with staff that left or were retrenched this sadly is often not the case. The catch-phrase of knowledge management, "if HP knew what HP knows" applies as much to the people who embody the knowledge as it does to information that can be stored in databases.

Perception also plays a role. There was an interesting counterpoint between one senior consultant who refused to allow retrenchment to take place while he believed he had something to offer the company. Many discussions and threats of legal action culminated in re-skilling and redeployment. Another senior consultant did not see a future for his skills and indeed saw the acquisition by CS as a step downwards from true management consulting to commodity broking. One of the support people asked for retrenchment after taking a narrow view and deciding that there was no real future. Presumably this is what Malhotra means when he describes a potentially 'wicked' environment: the attitude of the employees determines whether knowledge will be shared or not.

The Case of CS Holdings

A company that wishes to remain a force in business needs to be agile and move with the times. Stewart (1997) tells the story of Kodak as an example:

"...a great company built on the silver-halide chemistry that underlies the photography business, is struggling to build the human capital it needs to succeed as the electronic processing of digital images threatens to erode the chemistry-based business." (p88)

Although this example is extreme – few companies face the likelihood that their entire business might become based on a completely different science – the pace of change is accelerating. The IT sector has been likened to the early days of mechanical printing after Gutenberg invented moveable type. At that time, many printing companies sprang up taking advantage of the new technology, but within thirty years the industry had stabilised and only the best survived (Meggs,1992). Today in the IT industry, mergers and acquisitions have become the order of the day as the industry stabilises itself. As has been seen with companies like Cisco, Microsoft and indeed, CS Holdings, aggressive acquisitions can build a formidable organisation.

CSH acquisitions from the beginning of 1998 were as follows:

Date of Acquisition	Company Acquired
March 1998	TSA
September 1998	R-3 Online
November 1998	Nielen Compu-Ed
January 1999	EUC
February 1999	Netcomm
March 1999	IMS
March 1999	Kronos
March 1999	Consulting Connection
June 1999	Welcompt

June 1999	Sirad
June 1999	Telecom
October 1999	Sapics Education (SA)
October 1999	ENI, ICIS and Realtime
November 1999	BLTS
February 2001	IT-IQ People Development
October 2001	Getronics SA
November 2001	Argil Intellect
April 2002	JD Edwards consulting group (division of PricewaterhouseCoopers)
May 2002	Section of Idion Technologies

As a result of the acquisitions the staff complement of CSH grew from 80 to more than 1100 within four years. Revenue at the time of listing on the JSE was R28 million. But four years later, in September 2003, when staff numbers had risen from 80 to 1100, revenue had only increased to R400 million, indicating that the mergers had brought higher cost structures that needed to be contained. The alignment and integration phases were painful. At one stage the attrition rate was as high as 30% per month.

It is likely that CSH moved too far too fast. It seems commonplace for companies to overestimate the potential benefits and underestimate the potential difficulties of mergers. According to Weber and Camerer (2003), public and media perceptions are that mergers are 'grand things' and beneficial to everyone involved, whereas the reality is of widespread merger failure. 'Participants express disappointment in the merger's results, and surprise at how disappointed they are.' (p. 400) Quoting Ravenscroft and Scherer (1987, 1989) they contend that the acquirer's stock prices fall at the announcement of the merger, the profitability of the target is lower after the merger and many acquired firms are later sold off.

Some interviewees suggested that the main reason for the aggressive wave of acquisitions was to satisfy the hubris and personal ambitions of the CEO. This would align to the classical studies cited by Gort (1969). However, the strategic planning and repositioning work seems to have been considered valuable, as Reunert acquired a stake in the company in November of 2003.

Gort (1969) refers also to the need to obtain shareholder approval for acquisitions. In a footnote (p626) he writes that the need for stockholder approval depends on the contents of the corporate charter. It appears as if this was not a requirement at CSH. In the memory of most people interviewed, the only time shareholder approval was solicited was when the offer was made by BTG to buy CSH.

In spite of a seemingly cavalier attitude towards shareholders, it is the shareholders who ultimately have to be satisfied. In the climate of uncertainty following a merger and during the restructuring phase, the need to be profitable and valuable seems to promote the climate of fear which can act as a paralysis. Divisions which perceive themselves to be marginal are in danger unless they can re-invent themselves, or convince the executive that they have a value worth investing in.

In this climate and based on the research conducted in CSH, most employees seemed to assess their own skills against the changing paradigm. Those who perceived that their skills no longer fitted began to seek a way to bring back a balance. Some felt degraded by the changes and therefore needed to find somewhere else to go where they could exercise their skills, feel valued once again and obtain work satisfaction. Others tried to adapt their skills to meet the new paradigm. Still others tried to build a market around their skills. The procedure seems to be understood by researchers.

Greenberg and Guinan (2004) assert that there are two keys to a successful merger: knowledge transfer and an entrepreneurial mindset. They write:

'When technologically and knowledge oriented businesses acquire or merge with a company, one of the primary goals is to drive value by leveraging core competencies and R&D expertise. All too often, the integration process involves significant layoffs and a demoralised team – usually the target. The subsequent loss of security and uncomfortable environment leads many of the remaining employees – who presumably were retained due to their extensive base of knowledge – to reduce productivity and often leave in search of greener pastures. This can be disastrous and can really cut into the muscle of a deal's potential to drive value.'

However.

'What appears to distinguish those organisational members who engage in knowledge transfer activities from those who don't is an entrepreneurial mindset. Entrepreneurial mindset refers to individual organisational members who have the ability to act quickly under pressure, think creatively about new products and services, behave flexibly when competitors strike, and take appropriate risks for appropriate rewards. Rather than focusing on the stress and uncertainty that would result from the merger, these organisational members, or knowledge transfer individuals, see the acquisition as an opportunity for themselves and their team to take advantage of new opportunities.'

It appears that the process cannot be planned and managed but has to develop organically. The entrepreneurs will begin the knowledge transfer process and their behaviour will drive the energy of the merger. This process is well described by Nonaka and Takeuchi (1995), who state that individuals are usually seen in the role of the facilitating entrepreneur.

While it is interesting to conjecture about possible motives for the mergers discussed in this case study, there is no certainty, and it is virtually impossible to know if the impressions created in the minds of employees who were affected by downsizing and retrenchments were intended by management or not.

Judging by the performance of many IT companies, it is apparent that mergers and acquisitions will remain commonplace as vehicles for growth and reduction of competition as the industry stabilises itself.

In most departments of CSH, little attention seems to have been paid to knowledge management. There were databases of information that were brought with knowledge-based acquisitions such as Idion, JD Edwards and Management Consulting Services, but for various reasons these remained inaccessible. Individuals had their own stocks that they found useful and they kept these for their own use. There seems to have been little incentive to document, probably since the process was not part of performance agreements and was considered a waste of time. Although valuable information exists on consulting processes, there are few people left who can attest to the value, so the resources remain largely unused.

People seem to be 'precious' about documentation that they have collected during their tenure at a company. When they leave, there is always a residue that either gets stored or thrown out. There is a real danger that, in the absence of a knowledge management system, information could become lost that might be required in the future.

In the Cape Town office, there are two individuals in Management Consulting who appear to have the entrepreneurial spark alluded to by Greenberg and Guinan (2004). It is possible that the positive attitude of these two people could be the catalyst for building the department

again. If not, it is likely that they will be redeployed and the division closed. Most of the other Cape Town employees who did not leave or get retrenched have been redeployed.



Conclusion

The literature points to an on-going debate around the concepts of Information and Knowledge. This is more than just a semantic debate as the way these concepts are understood will affect the practice of companies. What many managers call knowledge management often refers to knowing and being able to reach what is stored in the databases and office library. The idea that a knowledge manager can play a role in identifying social networks and influencing knowledge sharing seems to be a nebulous concept. Until the concept of knowledge sharing as a people management issue is understood and acted upon, companies will remain unaware of either the potential for becoming learning organisations or, indeed of the knowledge they are losing.

Mergers and acquisitions have become an accepted part of the business world (Baro, 2004) despite the fact that a majority of corporate mergers fail (Weber, Camerer, 2003). Although merger activity appears to occur in waves, (Golbe, White, 1993) and researchers are divided as to whether or not the latest wave has reached its peak (Bailey, 2001) they are still prevalent today.

Much literature cites incompatible organisational cultures as being a major cause of merger failure, however a significant group points to the potential for revitalisation in changing cultures. Success seems to depend on the motives for the merger as well as senior management commitment to change management and culture creation.

Knowledge loss occurs due to a variety of factors. Significant among these are personnel loss resulting from confusion, lack of communication and transparency, and power-plays which are prevalent following mergers. Since knowledge transfer (Greenberg, Guinan, 2004) has more to do with people of an entrepreneurial mindset (Nonaka, Takeuchi, 1995) than with explicit knowledge, there is a clear link between organisational culture and knowledge sharing or loss.

Mergers and acquisitions will remain commonplace as vehicles for growth and reduction of competition into the foreseeable future, particularly in the IT sector. Therefore, attention needs to be focused on ways to make them less painful and more successful. Organisational culture difficulties are well documented and knowledge loss is understood to be an adjunct to dysfunctional culture. As such, a study of this nature adds to the body of literature.

If a numerical value can be assigned to intellectual capital then it should be possible to calculate better the risks associated with knowledge loss as a result of mergers and acquisitions. Since numbers are more meaningful to those in control of companies, it could be surmised that potential knowledge loss would be a more favourable driver for organisational change management than the softer issues around culture.

With the concern over high people turnover, experts are pushing for people-centred knowledge management rather than IT based databases. To lessen the potential of knowledge loss, companies are trying to spread the collaboration wider and share the load in teams, or communities of practice (CoPs). Successful companies are more concerned with widening the knowledge base to lessen the impact of knowledge loss.

Communities of practice exist everywhere, according to Wenger (1998). Some are formal but mostly they are informal and distinct from organisational units. A community of practice can even include people who have worked together before but now work in different companies. Wenger writes

We now recognize knowledge as a key source of competitive advantage in the business world, but we still have little understanding of how to create and leverage it in practice. Traditional knowledge management approaches attempt to capture existing knowledge within formal systems, such as databases. Yet systematically addressing the kind of dynamic "knowing" that makes a difference in practice requires the participation of people who are fully engaged in the process of creating, refining, communicating, and using knowledge.

We frequently say that people are an organization's most important resource. Yet we seldom understand this truism in terms of the communities through which individuals develop and share the capacity to create and use knowledge. Even when people work for large organizations, they learn through their participation in more specific communities made up of people with whom they interact on a regular basis. (Page 1)

Communities of practice are a company's most versatile and dynamic knowledge resource and form the basis of an organization's ability to know and learn. They form around 'things that matter to people' (Wenger, 1998, p 2) with a shared repertoire, or 'language' that they have developed through mutual experience and capability.

It would appear that communities of practice cannot be set up artificially because membership depends on participation rather than on official status, relying on the learning that people have

done together rather than the business unit they report to, and the community forms a living organisation that defines itself in the doing. They can however can be encouraged to develop organically. Communities of practice are found in many organizations and have been referred to by different names at various times, names such as "learning communities" at Hewlett-Packard Company, "family groups" at Xerox Corporation, "thematic groups" at the World Bank, "peer groups" at British Petroleum, p.l.c., and "knowledge networks" at IBM Global Services, but they remain similar in general intent.

At IBM, communities of practice were encouraged to a greater or lesser extent by the knowledge management function (Gongola and Rizzuto, 2001). The programme started with an acknowledgement by the company that communities of practice are valuable and deserve to be facilitated. Sometimes, the business itself identified the need for a knowledge network and a sponsor or leader instigated the formation of a group. Sometimes an existing informal group was recognised and encouraged to develop. As the concept took root, some communities sought assistance from the knowledge management programme. It is important that room is made for individuals to find one another, connect and begin to establish personal links with one another. It can be that these activities happen on their own, without the knowledge or interest of the organisation. But group formation can be encouraged by providing opportunities for socialising. A knowledge manager can act as a 'broker' by identifying potential connections and playing a 'matchmaking' role.

Technology can play a major role in encouraging the formation of communities of practice. An intranet which provides for discussion groups or 'blogs' can stimulate connections between people even at vast geographic distances.

Given that informal communities of practice exist often without the knowledge or interest of the organisational hierarchy, it follows that these communities can be catalysts for raising or lowering morale. If attention was paid to identifying social networks and communities of practice during a merger, these groups could be catalysts for raising morale. On the other hand, it could be detrimental to force new connections to take place merely because individuals are now part of a merged business unit.

In conclusion, there are a few facts that are worth considering:

- o Mergers and acquisitions seem to be a fact of business life, particularly in the IT sector.
- Knowledge loss occurs as a consequence of the cultural upheaval resulting from mergers and acquisitions.

o Knowledge assets, like money or equipment, exist but are worth cultivating only in the context of strategy (Stewart, 1997, p 70).

Therefore it would seem important that companies embarking on merger activity should be clear about their motives, aware of the potential for crippling knowledge loss and ready to take steps to minimise that which could negate the value of the proposed merger altogether.



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