

## CHAPTER 1

### INTRODUCTION

During the late 1980's until the 1990's, the Malaysian economy was growing at an average rate of 8 percent, which in future would be difficult to sustain. To sustain this growth in future, organisations can achieve by investing in knowledge-intensive production and know-how, which requires increased education and on-the-job training. In the near future, with rapid industrialisation, the demand for skill-intensive occupations will increase. The country will need more scientists, technologists, and skilled and knowledge-based manpower (Poh, 1997).

In the 70's and 80's, the production-based economy of Malaysia had focused on high technology industries. With the increasing globalisation, employers are forced to upgrade the skills of the workforce. The current move towards knowledge-based economies has prompted strategies towards developing initiatives that strives to position Malaysia as a world leader in telecommunications, multimedia and the Internet.

The information age is upon us. The cycle of technology development and implementation is accelerating. The number of Internet users worldwide continues to grow exponentially (Baldock, 1999). More than 50 percent of

GDP in the major OECD economies is now production and distribution of knowledge. We are leaving the Industrial Age behind and moving into the Information Age. In the US, Australia, United Kingdom, Canada, Finland and Ireland, the growth of the Internet and other related new technologies have become the catalyst for the creation of "knowledge economies". The new information and technologies have created global markets for goods and services. Countries that have encouraged their people through education and life-long learning and by investing in research & development are well positioned to take advantage of these new global markets. Australia, Finland, Ireland, Canada, Singapore and United States are countries which have embraced the knowledge economy and are experiencing strong GDP growth as a result. There is much we can learn from them.

Malaysian researchers in particular argue that, in their business world, "knowledge is a necessity and can be used as a strategic tool against competitors" (Naquiyuddin et al. 1992). The number of knowledge workers and new knowledge-based opportunities is expected to increase dramatically in the next few years (Bontis, 2000). This new demand will force employers to further develop employees' competencies (Rischer and Fay, 1995).

The concept of organisational knowledge as a valuable strategic asset has been popularised recently by economists, consultants, and executives. The enterprise, which leverages its intellectual resources, can focus that power on critical challenges, fostering innovation and potentially altering its

competitiveness. Leading firms therefore are finding that, to remain competitive, they must efficiently and effectively create, capture, locate, and share their organisation's knowledge and expertise, and have the ability to bring that knowledge to bear on problems and opportunities. This is refer to the development and leveraging of organisational knowledge to increase a firm's competitive value.

What is knowledge management?

Knowledge management is the management of the information, knowledge and experience available to an organisation – its creation, capture, storage, availability and utilisation – in order that organisational activities build on what is already known and extend it further (Mayo, 1998). According to Martinez (1998), Knowledge management is about encouraging individuals to communicate their knowledge by creating environments and systems for capturing, organising and sharing knowledge throughout the company.

The management of organisational knowledge is fundamental to effective performance, and collaboration technologies can play a central role. While the business case for knowledge management is becoming widely accepted, few organisations today are fully capable of developing and leveraging critical organisational knowledge to improve their performance. Many organisations are so complex that their knowledge has become fragmented, difficult to locate and share, and therefore redundant, inconsistent, or not used at all. In

today's environment of rapid change and technological discontinuity, knowledge and expertise, which can be shared, is rapidly made obsolete.

## OBJECTIVES OF THE STUDY

The world is moving towards a global 'knowledge economy' which has led many organisations to refocus their business strategies. Company knowledge is used by several layers – such as personal, departmental, divisional and business level. But, however, most of the information that is required may not be accessible to those who need it at the appropriate time. Hence effective methods for transforming knowledge into forms that can be shared by other people has become critical. As competition based on knowledge intensive products and services rapidly increase, many organisations are seeking ways to harness knowledge management tools and techniques. This research is of particular interest to us, with the advent of globalisation and Malaysia being a signatory of World Trade Organisation (WTO), our companies are increasingly under pressure to compete with large multinationals. Further with the recent Asian crisis, many organisations have integrated their operations and many mergers and acquisitions have taken place. As such the objectives of the study:

1. Knowledge management in Malaysian organisations
2. Challenges to overcome the barriers to knowledge management
3. Gaining the knowledge advantage.

According to Bank Negara (April, 2000) report, "In the shift towards, K-economy, Malaysia needs to develop new areas of growth in the knowledge intensive service sector. This is because the reliance on manufactured goods and the export of traditional goods will be insufficient to generate future growth".

With the advent of information and communication technologies, the vision of perfect competition is becoming a reality. Consumers can now find out the prices offered by all vendors for any product. New markets have opened up, and prices have dropped. Competition is fostered by the increasing size of the market opened up by these technologies. Products with a high knowledge component generate higher returns and a greater growth potential. Competition and innovation go hand in hand. Products and processes can be swiftly imitated and competitive advantage can be swiftly eroded. Knowledge spreads more quickly, but to compete a firm must be able to innovate more quickly than its competitors.

## PROPOSITIONS

The study purports to test the following propositions:

Proposition1 (P1): The more competitive the environment within which the company operates, the more likely the organisation will have an extensive knowledge management system.

Proposition2 (P2): The more flexible and informal the management structure, the more likely is the organisation to have an extensive knowledge management system.

Proposition3 (P3): Positive employee attitude is positively correlated with effective knowledge management systems.

## SCOPE OF THE STUDY

In order to test these propositions, a questionnaire based on the relevant literature (Bennet, R., and Gabriel, H., 1999; Chase, 1997; Skyrme and Amidon, 1997), will be used for the survey. This survey will be conducted on senior executives of engineering companies (both foreign and local) present in Kuala Lumpur. Engineering companies means those companies that are primarily involved in the Oil & Gas and Power industries.

## ORGANISATION OF THE STUDY

The study consists of five chapters that can briefly be presented as follows. Chapter one introduces and states the problem, defines the objectives and the scope of the study. The review of literature is presented in chapter two, while chapter three provides a detail methodology to support the model of the study. The results are presented in chapter four. The conclusion and recommendations for further research are discussed in chapter five.

## LIMITATIONS OF THE STUDY

The study was limited to engineering companies in Malaysia, those of whom were involved in the Oil & Gas and Power sectors. Most of these companies were either Malaysian based or foreign companies based in Malaysia. Oil & Gas and Power sector was chosen for the study, since a lot of expertise is required to perform engineering design.