

**PEOPLE EQUITY AND THE LEARNING AND  
GROWTH OF THE MANAGEMENT OF  
LOCAL TRADITIONAL MEDICINE FIRMS**

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**In the name of Allah the Most Gracious, the Most Merciful.**

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*Dedicated to  
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**EKUITI MANUSIA DAN PEMBELAJARAN DAN PERTUMBUHAN DI  
KALANGAN PIHAK PENGURUSAN  
FIRMA UBAT-UBATAN TRADISIONAL TEMPATAN**

**ABSTRAK**

Kajian ini di lakukan bertujuan untuk menyelidik hubungan di antara ekuiti manusia dan pembelajaran dan pertumbuhan untuk pihak pengurusan firma-firma ubat-ubatan tradisional tempatan. Ia juga bertujuan untuk menentukan tahap ekuiti manusia bagi kumpulan tersebut secara keseluruhannya.

Sebanyak seratus enam puluh borang soal-selidik telah di poskan kepada pengurusan daripada lapan puluh firma-firma ubat-ubatan tradisional tempatan untuk mendapatkan data bagi tujuan kajian. Kadar respons ialah 50%. Penentu untuk dimensi pembelajaran dan pertumbuhan ialah keupayaan, keselarasan kerja dan penglibatan pekerja. Bagi dimensi pembelajaran dan pertumbuhan, elemen yang di gunakan untuk mengukur ialah akses kepada maklumat strategik, kepuasan pekerja terhadap kepimpinan yang baik, organisasi yang sesuai untuk kemajuan berterusan dan kepuasan pekerja terhadap persekitaran kerja. Dengan menggunakan analisa statistik yang bersesuaian, hasil kajian menunjukkan dua daripada elemen utama ekuiti manusia, iaitu latihan (keupayaan) dan kepuasan (penglibatan) memberi hubungan positif yang signifikan terhadap pembelajaran dan pertumbuhan. Hasil kajian ini mempunyai implikasi yang penting kepada kerajaan Malaysia secara amnya dan kepada syarikat khususnya. Syarikat dapat mengetahui tahap keupayaan tenaga kerjanya, sekaligus boleh membuat perancangan yang teliti dalam bidang-bidang tertentu untuk membangunkan tenaga kerja

sesuai dengan kehendak kerajaan bagi mencapai tahap ekonomi berasaskan ilmu. Kajian ini dapat menentukan tahap pembangunan modal insan di dalam bidang bioteknologi. Hasilnya sangat berguna untuk menganggar kesediaan pengilang-pengilang ubat tradisional dalam membantu kerajaan mencapai tahap ekonomi berasaskan ilmu pada tahun 2020.

# **PEOPLE EQUITY AND THE LEARNING AND GROWTH OF THE MANAGEMENT OF LOCAL TRADITIONAL MEDICINE FIRMS**

## **ABSTRACT**

The purpose of this research is to investigate the present relationship between people equity and the learning and growth of the management of the local traditional medicine firms. It is also to determine the level of people equity for the group under study.

One hundred and sixty sets of questionnaires were mailed to the management of eighty of the firms of local traditional medicine in Malaysia with 50% response rate. The predictors for the learning and growth (core elements of people equity) are capabilities, job alignment and employee engagement, while for the dimension of learning and growth, access to strategic information, employee satisfaction on superior executive leadership, organization structured for continuous improvement and employee satisfaction on quality work environment are being studied. The findings, using appropriate statistical analysis has shown that two of the core elements of people equity which are Training (Capabilities) and Satisfier (Engagement) have positive significant relationship with the learning and growth of the local traditional medicine manufacturers.

This study has an important implication, to the Malaysian Government in general and to the firms specifically. It would help the industries to gauge the present situation of the workforce, hence the management of the firms can plan for the activities required to enhance the human capital development plans in relevant areas in order to meet the government's objective of achieving the k-economy status. This study would be able to

determine Malaysia's present situation in terms of human capital development in the field of biotechnology. The outcome of this study would be useful in gauging the readiness of local traditional manufacturers in contributing to Malaysia's aim of achieving the K-economy status by 2020.

## Chapter 1

### INTRODUCTION

#### 1.1 Background of study

There have been only three eras in all of economic history: the agrarian era, the industrial era, and the knowledge era. Each era has been defined by the factor of production that has served as the foundation for wealth creation. Not surprisingly, in the agrarian era, land was the primary source of wealth. In the industrial era, the primary sources of wealth were machinery and, to a lesser extent, natural resources. In the knowledge era, human capital is the source of wealth (Valuation of Human Capital., 2007).

Malaysia is moving from the industrial revolution to globalization and liberalization in international trade where there is free flow movement of capital, information and workers (Fong, 2006). Major changes such as in workforce diversity would require the human resources development strategy to meet the needs of the industries. People are the ultimate resource. They must be given the fullest emphasis possible for the development towards the highest standards of skills, knowledge upgrading, competencies, work attitudes and motivation. All sectors of the economy become knowledge-based when strategies are adopted to increase productivity via the application of knowledge rather than via increased input of capital or labor (National Biotechnology Policy, 2005). This type of economy is often called the knowledge

economy or K-economy. Emerging from an industrial age, this new economy distinguishes itself by a large amount of the value of the company residing in the head of the employee instead of in the tangible assets of the company (Valuation of Human Capital, 2007)

In its effort towards shifting to a knowledge-based economy, Malaysia's main responsibility lies with the development of human and intellectual capital to produce adequate supply of, support and sustain a flexible, agile, and mobile workforce with relevant knowledge and skills. One important if not the most important variable of human capital is education and training which can be measured in several ways including years of schooling, number in enrolment and level of education of the labor force (Awang, 2004).

Biotechnology is one of the manufacturing sectors that fall in the category of knowledge-based industries which has been identified as an important source of growth. With the rich biodiversity, new biotechnology industries maybe created through the exploitation of the rich collection of flora and fauna available in Malaysia. Considered one of the most biodiverse countries in the world, just a 25-acre plot of rainforest may contain over 700 species of trees, a number equal to the total tree diversity in North America. Our marine ecosystem is rich in a variety of life forms while our coral life is considered to be the most diverse in the world. Like other natural resources available in the country, these assets require exploration and production activities in order to create value. It is known that western pharmaceutical companies have been interested in natural products derived from rain forest as starting material for

active ingredients in drug development. Whilst this may be true, greater efforts have to be put in place in Malaysia in order to exploit our bioresources (National Biotechnology Policy, 2005). These naturally derived products include Nutraceuticals, Therapeutics and Cosmeceuticals. They are mainly produced through chemical methods (e.g. extraction or chemical synthesis) however biotechnology techniques in future have potential to create novel products like new drugs. For this, naturally derived products constitute only 33 USD Billion of the Global Biotechnology and Life Sciences Market in 2003. It was estimated that the figure will rise to 94 USD Billion by 2010, with an approximately 15% CAGR (Cumulative Average Growth Rate). (Source: Ministry of Science, Technology and Innovation, Malaysia, 2004). Given the strong expected growth of the Biotechnology industry, Malaysia is said to have skilled human resources, with Malaysia's current National Education Policy emphasizes on science and technology. In Malaysia, there are 13 universities offering biotechnology programs with about 3,000 undergraduates studying biotechnology annually, besides other post graduates programs. The Malaysian government estimates that over the next five years, there will be about 23,000 research personnel and more than 5,000 R&D scientists available in this field (Industries in Malaysia – The Life Sciences Industry).

Malaysia also provides strong R&D support to investors. Due to its agrarian roots, Malaysia has a well-established R&D expertise in the agriculture and food industries, especially industrial crops, food crops and ornamentals. There are also several science and technology parks, incubation centers and clinical trials centers catering to the needs of biotechnology and R&D activities. Examples of such facilities are Technology Park Malaysia, Kulim Hi-Tech Park, Centre for Health Innovation and

Medical Enterprises (CHIME), UKM-MTDC Smart Technology Centre and Malaysian Institute for Nuclear Technology Research (MINT). (Industries in Malaysia – The Life Sciences Industry).

.The Malaysian government is implementing new initiatives to accelerate the development of the biotechnology industry. Measures have been undertaken to integrate research activities at the state level, encourage industry participation and attract investments and quality human talents, provide specialized commercialization support services (patents, legal advisory, business plans, marketing plans and partners sourcing). Priority areas identified include plant biotechnology, animal biotechnology, medical biotechnology, food biotechnology, industrial and environment biotechnology, biopharmaceuticals, molecular biotechnology and bioinformatics. (Industries in Malaysia – The Life Sciences Industry).

The focus areas for further development in the biotechnology industry are:

- Food biotech/Agro biotech
- Biopharmaceuticals (antibodies and vaccines)
- Nutraceuticals
- Biodiagnostics
- Industrial enzymes
- Strategic alliances and research partnership/joint discovery of bioactive compounds for healthcare



The Malaysian pharmaceutical industry has the capability to produce almost all dosage forms, including sterile preparations such as eye preparations, injectibles, soft gelatin capsules and time release medications. Malaysian pharmaceutical manufacturers are focusing on high-margin niche segments, adding value to existing products through improved drug-delivery technologies, and increasingly moving into biopharmaceuticals and branded generics including biogenerics in order to remain competitive.

Local manufacturers have also developed and launched off-patent generics and herbal products using their own brands. Currently, the local industry is producing about 25 - 30 per cent of the domestic demand, as well as exporting to the Asia-Pacific Rim countries, the Middle East, Africa, Latin America and Europe. Total exports in 2004 amounted to RM498 million (US\$130 million). With the admission of Malaysia as a member of the Pharmaceutical Inspection Convention and Pharmaceutical Inspection Cooperation/Scheme (PIC/S) in January 2002, the country's exports of pharmaceutical products received a boost, especially among the member countries, which include the EU, Australia and Canada. As at 31st. December, 2004, a total of 205 pharmaceutical companies with Good Manufacturing Practices certification have registered with the Drug Control Authority, Ministry of Health, which is the principal regulatory authority on the production, import and sale of pharmaceuticals (including traditional medicines) in Malaysia.

Of these, a total of 74 companies are involved in the production of modern medicines comprising mainly analgesics, antacids, anti - hypertensives, diuretics, antibiotics and anti-histamines in the form of tablets, capsules, drops, powders, creams,

ointments, injectibles, syrups, ophthalmic and nasal preparations. The remaining 131 companies are local traditional and herbal medicine manufacturers.

For Malaysia to enhance its position in the new economy generated by the new opportunities in biotechnology, an evaluation of the nation's strengths and weaknesses was carried out. According to the National Biotechnology Policy, (2005), the nation's strengths include among others, pro-business Government and political stability, rich bio-diversity, excellent infrastructure for transport and communication, and its multi-ethnicity people. As for the weaknesses, the main identified factor is the limited supply of expertise required for this highly knowledge-intensive industry with a range of human resource requirements. To ensure sustainable development for the industry, it is critical that training programs be undertaken to ensure the consistent supply and quality of these human resources (National Biotechnology Policy, 2005).

For many years organizations have struggled trying to quantify human capital. For most firms, human capital represents one of their largest investments and presents one of the most—if not the most—difficult resource management challenges (Schiemann, 2006). The concept of people equity is introduced by Schiemann as an integrative way to measure and manage human capital. People equity consists of three core components: alignment, the extent of which the workforce is connected with the business strategy, capabilities, the talent, information and resources required to execute the strategy; and engagement, the degree to which workers are committed to the organization. To achieve high levels of people equity, a company must achieve high levels of performance on all three of these components: alignment, capabilities, and

employee engagement (Schiemann, 2006).

## **1.2 Research problem**

Biotechnology will enhance the K-content of a variety of Malaysian industries. To foster the growth of the biotechnology industry in Malaysia, a Bionexus Malaysia Hub will be the nucleus for the biotechnology in the central region. At the core of the central hub are the three Institutes, each of which has a mandate to pursue research in the fields of technology that are critical to the biotechnology industry: Genomics and Molecular Biology; Pharmaceuticals and Nutraceuticals; and Agricultural Biotechnology. Traditional medicine is one of the fields that fall in the area of Nutraceuticals (National Biotechnology Policy, 2005).

The key assets of the Biotechnology industry are people who are smart, flexible, educated, proficient and high awareness globally and have the fundamental desire to succeed. A highly skilled and motivated workforce is therefore important not only for foreign companies investing in Malaysia, but also for the growth and competitiveness of local start-ups and small and medium enterprises (SME) on the global front (National Biotechnology Policy, 2005).

One of the weaknesses of the biotechnology industries now is the limited supply of expertise. The type of resources needed ranges from personnel with strong management capabilities and a good understanding of related biotechnology activities to laboratory technicians, research scientists, etc. To ensure sustainable development for the industry, it is critical to develop skilled and competent support personnel to

ensure an adequate supply of knowledgeable and innovative labor force (National Biotechnology Policy, 2005).

This study attempts to investigate the present situation of the people equity of local traditional medicine manufacturers and how it impacted the learning and growth perspective of the balanced scorecard of the industry.

### **1.3 Research objectives**

1.3.1 To examine the present level of people equity of the management of local traditional medicine firms.

1.3.2 To examine the relationship between people equity and learning and growth of the management of the local traditional medicine firms.

### **1.4 Research questions**

Following are questions that need to be addressed:

1.4.1 What is the present level of the management's people equity in the local traditional medicine firms?

1.4.2 Does this have a significant relationship on the learning and growth of the management of the firms under study?

## **1.5 Definition of key terms**

### **1.5.1 People equity:**

A concept introduced by Schiemann (2006) as an integrative way to measure and manages human capital.

### **1.5.2 Alignment:**

It is the extent of which the workforce is connected with the business strategy. It includes employees' alignment with the business strategy, with customers and with the brand identification, in addition to simply focusing on their department or personal goals (Schiemann, 2006).

### **1.5.3 Capabilities:**

The talent, information and resources required to execute the strategy. It comprised of three sub-components: (1) the necessary employees' talents, as derived from the strategy, (2) the resources required to execute the strategy and (3) the information necessary for action to take place – right information, to the right people, at the right time (Schiemann, 2006).

### **1.5.4 Engagement:**

The degree to which workers are committed to the organization (Schiemann, 2006).

#### **1.5.5 Satisfiers**

The measurement used to gauge employee engagement (Schiemann, 2006)

#### **1.5.6 Traditional medicine:**

Traditional medicine is defined as any product used in the practice of indigenous medicine in which the drug consists solely of one or more naturally occurring substances of a plant, animal or mineral, or parts thereof, in the unextracted or crude extract form and a homeopathic medicine (URL:<http://www.bpfk.gov.my>.Retrieved 30.04.2007).

#### **1.5.7 Learning and Growth**

Learning and Growth is one of the four perspectives of the Balanced Scorecard (BSC) which is a performance measurement tool that originated in the business world. It includes employee training and corporate culture attitudes related to both individual and corporate self-improvement (<http://www.balancedscorecard.org>).

### **1.6 Significance of study**

This study would be able to determine Malaysia's present situation in terms of human capital development in the field of biotechnology. The outcome of this study would be useful in gauging the readiness of local traditional manufacturers in

contributing to Malaysia's aim of achieving the K-economy status by year 2020. Findings from the survey would be useful in evaluating the necessary steps that the government can consider in ensuring that this target is achieved.

### **1.7 Organization of remaining chapters**

The remaining chapters of this research are organized as follows. In Chapter 2 are the literature review, theoretical framework and development of hypotheses. In Chapter 3, we describe the methodology of the study. Here, Research design variables, data collection, population/sample, and data analyses are included. We present and discuss the profile of respondents and the results in Chapter 4. Finally, we discuss the findings, implications and limitations of our findings in Chapter 5.

References and Appendices are included at the end of the dissertation with a copy of the questionnaire, and the relevant SPSS outputs.

## Chapter 2

### LITERATURE REVIEW

#### 2.1 Introduction

Human resources are playing a central role in the knowledge economy that emerged in the Western world as the human capital embodied in both high-tech capital goods and the working population is a main determinant of the performance of individuals, organizations and national economies (Grip, 2004). All enterprises, including small and medium-sized ones need the resourceful and innovative thinking of knowledge workers who constitute their intellectual assets, i.e., its human capital, which is the most important asset (Fong, 2004).

Schiemann (2006) introduced the concept of people equity as an integrative way to measure and manage human capital. According to the author, people equity consists of three core elements: *alignment*, the extent to which the workforce is connected with the business strategy, *capabilities*, the talent, information and resources required to execute the strategy; and *engagement*, the degree to which the workers are committed to the organization.

As mentioned by Grip (2004), human capital is the main determinant of the performance of individuals, organizations and national economies. Hence, it can be said that the level of performances of individuals, organizations or economies depends on



how well human capital is managed. In this study, the researcher investigated the extent that human capital is managed in local traditional medicine manufacturers using the concept of people equity introduced by Schiemann (2006).

For the performance of the firms, the researcher uses the learning and growth perspective of the balanced scorecard as an instrument for measurement. This perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement (URL <http://www.balancedscorecard.org>. Retrieved on July 2<sup>nd</sup> 2007). In a knowledge-worker organization, people, the only repository of knowledge, are the main resource. In the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode (URL <http://www.balancedscorecard.org>. Retrieved on July 2<sup>nd</sup> 2007). It is hypothesized that there is significant positive relationship between the people equity and the learning and growth of the firms. The following literature review attempt to demonstrate and support this hypothesis.

## **2.2 Human Capital**

The term Human capital was first used by Nobel Laureate, Theodore W. Shultz in the 1961 American Economic Review Article, and “Investment in HC.” Dess and Picken (2000) referred human capital as the embodiment of productive capacity within people and is generally understood to consist of the individual’s capabilities, knowledge, skills and experience of the company’s employees and managers, as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills, and experience through individual learning.

In a report published by the Organization for Economic Cooperation and Development, OECD in 1998, human capital is defined as the knowledge, skills, competencies and other attributes embodied in individuals that are relevant to economic activity. This definition defines human attributes broadly - not just the level at which a person has been educated, but also the degree to which they are able to put a wide range of skills to productive use. At the same time, it narrows the definition to refer only to attributes that have benefits via economic activity. It acknowledges attributes that create better health insofar as this has economic or social spin-offs, for example in containing public healthcare spending, but does not regard the intrinsic personal benefit of being healthy as a return to human capital investment (OECD, 1998).

Investing in human capital is a proven way to boost a firm's market capital. On the other hand, human capital is not something that can be grown, easily found or created. It remains within the individual, gained from their experiences in an organization (Bogdanowicz & Bailey, 2002), and the vigor of Knowledge-based industries, unlike other industries, require human resources with knowledge and skills that takes time to acquire.

### **2.3 Measuring and Managing Human capital**

Cheese and Thomas (2003) stated that while measurement of supply chain, research and development, and sales activities has been commonplace, consistent and routine gauging of the performance of the workforce—as well as the impact of human capital investments—has been virtually nonexistent. This was not particularly problematic in the days when competitive advantage was defined by one's physical

assets or proprietary products, and people were merely replaceable parts in the organizational machine. Today, though, it is becoming an increasingly important issue on the executive agenda, as knowledge and information—largely developed, managed and represented by people—has assumed more prominence as a company's "products." In the process, a company's workforce has evolved into arguably the biggest competitive differentiator for organizations in virtually all industries. The simple fact is that the most successful organizations today and in the foreseeable future will be those that are able to measure the business impact of their investment in people—whether that investment is employee recruiting, performance management, skills development or benefits administration.

In a research by Bhutoria (Valuation of Human Capital, 2006), the author suggested that measuring and managing human capital includes:

- Employee's satisfaction with the quality of their learning/development opportunities
- Employee's satisfaction with the management skills/abilities of their immediate supervisor.
- Employee's satisfaction with the extent to which they are treated fairly, feel appreciated and acknowledged for their work
- Employee's sense that the work they do makes a difference
- Retention rate of key employees

These measurements provide a research-based foundation for the human capital that has consistently been demonstrated to be determinants of organizational performance. They

provide a strong analytic foundation for the human capital inputs into a balanced scorecard type of measurement system.

Cheese & Thomas (2003) further wrote that human capital capabilities are the most immediate and visible (though not always measured) people-related qualities for achieving critical business outcomes, such as workforce proficiency, workforce adaptability and employee engagement. Their influence is felt through key performance drivers. Phillips (2003) in an article entitled Human Capital Measurement: A Challenge for the CLO identified among the first tier measures that constitutes the most common human capital measures are employee satisfaction/attitudes, organizational commitment/engagement, HR investments, experience, learning, competencies, education level, and leadership. Schiemann (2006) introduced a fresh approach of measuring the return on investment of human capital which is referred to as people equity. He defined people equity as an integrative way of measuring and managing human capital. The three elements that he used to measure people equity are alignment, capabilities and engagement. This supports the findings of other researchers as described above. For example, Phillips (2003) identified engagement as the first tier measure for human capital, and Cheese and Thomas (2003) identified capabilities as the most immediate and visible measure of human capital. To achieve high levels of people equity, a company must achieve high levels of performance on all three of these components: engagement, capabilities and alignment. Low performance in any area can severely impact the overall company performance (Schiemann, 2006).

In this study the concept of people equity which is adopted from Schiemann

(2006) is used to measure human capital development. According to Schiemann there are three main components of people equity, which are capabilities, alignment and engagement. The three components are described below.

## **2.4 Components of people equity**

### **2.4.1 Capabilities**

There are several definitions of the term “Capabilities”. According to Schiemann (2006), capabilities comprised of three sub-components: (1) the necessary employees’ talents, as derived from the strategy, (2) the resources required to execute the strategy and (3) the information necessary for action to take place – right information, to the right people, at the right time. Amit and Schoemaker (1993) refer capabilities as firm’s ability to exploit and combine resources through organizational routines, in order to accomplish its targets. Collis (1994) described capabilities as the socially complex processes that determine the efficiency and effectiveness by which organizations are able to transform inputs into outputs, while Grant (1991) refer capabilities as the capacity of the firm to deploy existing resources to perform some task or activity.

Spanos and Prastacos (2004) described that Organizational capabilities are generally conceptualized as socially constructed entities, organized in networks of knowledge carrying relations among individuals and inanimate firm assets that, as a whole, aim at performing efficiently and effectively a given task. In this sense, it may be said to represent the realization of an act of ‘weaving’ together those otherwise

disparate assets of a firm, particularly human capital.

### **2.4.2. Alignment**

Alignment refers to the extent to which employees (or other labor sources) are connected to the business strategy. It includes employees' alignment with the business strategy, with customers and with the brand identification, in addition to simply focusing on their department or personal goals (Schiemann, 2006).

The concept of fit or alignment is a central theme in the field of strategic management (Venkatraman and Camillus, 1984; Tan and Tan, 2005). Alignment requires a shared understanding of organizational goals and objectives by managers at various levels (vertical alignment) and within various units of the organizational hierarchy (horizontal alignment). A firm's ability to seek and maintain a competitive advantage rests on its ability to acquire and deploy resources that are coherent with the organization's competitive needs (Porter, 1996). The findings of the study by McAdam and Bailie (2002) confirmed the Kaplan and Norton (2006) recommendation that an appropriate mix of measures will yield the best alignment with business strategies.

### **2.4.3 Engagement**

Another important item monitored by most organizations is employee satisfaction. Using feedback surveys, employers monitor the degree to which the employees are satisfied with the employer, the policies, the work environment, the supervision and leadership, the actual work itself, as well as many other factors. Sometimes a composite rating is developed to reflect an overall satisfaction value or

index value for the organization, division, department or region (Phillips, 2003).

A classical relationship exists with employee satisfaction, recruitment and retention. Firms with excellent satisfaction ratings are often attractive to potential employees. The ratings become a subtle recruitment tool. “Employers of Choice” and “Best Places to Work,” for example, often have high levels of job satisfaction ratings. Employee satisfaction and turnover are usually related, and this helps to tackle the retention issue that is projected to be critical in the future. Employee satisfaction has taken on new meanings in connection with customer service as research projects are beginning to show a correlation between employee satisfaction scores and customer satisfaction scores.

In recent years, organizational commitment (OC) or engagement measures have complemented or replaced employee satisfaction measures. OC measures go beyond employee satisfaction and include the extent to which the employees identify with organizational goals, mission, philosophy, value, policies and practices. The concept of involvement and becoming engaged in the organization is the key issue because OC correlates with productivity and other performance-improvement measures. Employee satisfaction does not always correlate with improvements in productivity. As organizational commitment scores—taken on a standard index—improve, a corresponding improvement in productivity should develop (Phillips, 2003). It is a more recent evolution of the earlier employee satisfaction and commitment movements. Over the past several decades there has been a transition in the literature from job satisfaction and high morale to employee commitment to workforce engagement, with

the latter implying an even higher level of connectedness to the successful operation of the organization (Saks, 2006). High levels of People Equity require more than happiness and satisfaction—they require employees to be fully committed to – and engaged in – executing the ultimate strategies and goals of the organization (Schiemann, 2006). Employee engagement has been defined also in many other ways. Kahn (1990) defined personal engagement as “the harnessing of organization members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, or emotionally during role performances”. In other words, Kahn refers to engagement as psychologically present when occupying and performing an organization role.

## **2.5 Balanced scorecard - Learning and Growth**

In this study, the researcher only focused on the perspective of learning and growth as the dependent variable. From the literature review on human capital it showed that human capital is all about people’s knowledge, skills, experience, satisfaction, etc which is directly related to learning, both at individual and organization level. The following literature review attempt to look at the learning and growth perspective of the balanced scorecard.

Learning and Growth is one of the four perspectives of the Balanced Scorecard (BSC) which is a performance measurement tool that originated in the business world. Performance measurement is a way to track performance over time to assess if goals are being met. The BSC was introduced by Robert Kaplan, a Harvard Business School professor, and David Norton, the founder and president of Balanced Scorecard



Collaborative, Inc., in the early 1990s as a new way to measure business performance. Organizations measure their performance to monitor how they are doing in achieving their overall mission and goals. Traditionally, companies measured their performance by looking only at how they were doing financially, for example measuring only profit increases or cost efficiencies. Kaplan and Norton's (1992) BSC concept challenged this traditional, single focused approach to performance measurement. They noted that examining only financial outcomes did not provide a company the full picture of its overall performance – that it in fact ignored the other factors at play in a company's performance. BSC is used to measure not just “how you've been doing, but also how well you are doing (current indicators) and can expect to do in the future (“leading indicators”) to have a clear picture of reality.

BSC provides a framework for selecting multiple performance measures that supplement traditional financial measures with operating measures of customer satisfaction, internal processes, and learning and growth activities. Under the BSC system, financial measures are the outcome, but do not give a good indication of what is or will be going on in the organization. Measures of customers satisfaction, growth and retention is the current indicator of company performance and internal operation (efficiency, speed, reducing non-value added work, minimizing quality problems) and Human Resource system and development are leading indicators of company performance. The following is the basic categorization for balanced measures of firm performance (Balanced scorecard-Performance measurements for success).

- Financial perspective-how do we look to investors? Measures that indicate

whether the company's strategy, implementation, and execution are contributing to bottom line improvement. This includes Cash flow, sales growth, market share and ROE.

- Customer perspective-how do customers see us? Customer concerns in four categories; time (for company to meet customers' needs), quality (defect level), performance (how company's products/services contribute to creating value for its customers) and cost (what does it "cost" the customer when he finally uses it).
- Internal/Operational perspective-this comprise of Business processes that have the greatest impact on customer satisfaction and what competencies are needed to maintain market leadership.
- Learning and growth perspective-can we continue to improve and create value? Ability to innovate, improves, and learns ties directly to company's value, Launch new products, and more value for customers, Penetration of new markets, Access to strategic information, Employee satisfaction on superior executive leadership, Organization structured for continuous improvement and employee satisfaction on Quality work environment.

The concept of organizational learning and learning organization did not emerge until the 1980s, but its principles are rooted into many perspectives of management (Garratt, 1999), and its practices recognize a wide range of factors, such as organization strategy, culture, structure, absorptive capacity, problem-solving ability, employee participation, etc (Wang & Ahmed, 2003). Learning and Growth perspective includes employee training and corporate cultural attitudes related to both individual and

corporate self-improvement. In a knowledge-worker organization, people are the main resource. In the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode. Government agencies often find themselves unable to hire new technical workers and at the same time are showing a decline in training of existing employees. Kaplan & Norton (1992) emphasize that 'learning' is more than 'training'; it also includes things like mentors and tutors within the organization, as well as that ease of communication among workers that allows them to readily get help on a problem when it is needed. It also includes technological tools such as an Intranet.

In order to achieve business objectives, companies most likely will have to invest in re-skilling employees, enhancing information technology and systems, and aligning organizational procedures and routines. One of the key pillars of the learning organization, empowerment, cannot be taken from philosophy to action, unless the employee has solid, practical on-the-job training (Wright & Belcourt, 1995). Practicing managers concerned about the long-term future of their organization will find it increasingly harder to ignore many of the principles of developing learning in organizations (Francis, 1997).

The concept of a “learning organization” was, above all, an underlying principle of doing business. This insight improved their understanding of their organization, the variety of initiatives that organizations are undertaking, and how these initiatives can be integrated within a greater context of improving learning. Organizational learning must begin with improved individual learning. Learning must become an explicit part of the

organization's culture. Leadership must demonstrate individual learning and facilitate widespread dissemination of all learning, both about the operations of the business and about how to learn better. (Illeris, 2003).

Increased global competition, where high quality and low cost are at premium, led to increased in continuous improvement. The success of continuous improvement initiatives is dependent on many factors that include leadership, structure and shared organizational values Fabnoun, (2001). Fabnoun identified two sets of values that underlie continuous improvement. The first set is composed of driving values while the second set includes the enabling values. It was argued that the values driving continuous improvement are basically the values that ensure commitment to customer satisfaction.

Learning is critical to organizational growth, transformation and success. Many organizations are striving to become learning organizations where there are a variety of opportunities for employees to learn new skills, tasks and processes. Some organizations attempt to measure learning by the investment in learning, the number of hours of learning or the number of learning and development programs offered. While the numbers are important as a reflection of the commitment to learning, they do not represent results. Other measures are needed (Phillips, 2003).

Measures of learning are easily developed at the micro level but are often difficult and vague at the macro level. A learning measurement at the micro level is a measure of new skills and knowledge in formal learning activities, using testing, simulation or demonstration. Sometimes a more informal process, such as self-