

## **BUSINESS STRATEGIES THROUGH FIT MANAGEMENT OF HUMAN CAPITAL AS COMPETITIVE ADVANTAGE**

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### **ABSTRACT**

*Many organizations fail to interpret what the competitive advantages of their business. Based on lean philosophy about waste, one of the reasons is to unlock (by understanding and take advantages) of their employee's potential. This paper proposes a conceptual framework of the so-called 'Fitted Management'. The concept discusses two issues i.e. 1) 'Fitted Management', an integrated concept of performance challenges, performance measurement and performance management combined with the vision and missions into competitive management; 2) 'Human Transformation', a conceptual model to support the first concept. It discusses the processing of exploring human capabilities (in organization) and how to manage this (to fit with the organization) as well as business competition in dynamic market and business climates.*

**Keywords:** *human capital, competitive advantage, lean, performances, fitted management.*

### **INTRODUCTION**

Economic foundations have lately shifted from focus on natural resources to intellectual assets. This shift should therefore encourage companies to focus on the creation and growth of existing intellectual capacities, as well as its use to achieve competitive advantage (Smart, 1997). Accordingly, Hansen (1999) suggested that company executive members should test the knowledge of their business, as well as how this knowledge may be fully be utilized in entering the global market. Guthridge *et al.*,

(2008) added that this is due to the challenges companies face in the next decade, implying on the company's capacities in stimulating, selecting, and utilizing the talents acquired as an initiative in improving competitive advantage in the global market.

However, although companies under competitive atmospheres perform initiatives to improve competitive advantage, in reality there is no consensus with regards to the 'excellent point' based on measurements of its activities. As a result, current business

operations are regarded ineffective and in-optimal (Table 1). Novel strategic approaches are required to view business and management as a response to this condition. Nightingale and Rhodes (2004) suggest an integrated framework (towards organization, process, and knowledge) by designing management systems to integrate and combine core processes and activities, as well as the elimination of things that do not provide added value.

This approach, as mentioned by Ackoff (2003), suggests that a system within a framework should constitute a whole of which is determined by the functioning of a larger system, as opposed to merely consisting of its parts. This implies that the system must be inter-related with strategies from the utilization and increase of owned-company resources.

**STRATEGIC APPROACHES IN THE SYSTEMS PERSPECTIVES THROUGH COMPETITIVE ADVANTAGE, ESTABLISHING WORLD CLASS COMPANIES, AND BUSINESS PLANNING TOWARDS BUILDING HUMAN CAPITAL**

In response to the global competition, companies must acquire and implement strategies that consider competitive advantage, world class business standards, along with business planning towards building human capital, as its basis. These three elements must be integrated as a reference and measure for companies to achieve fitness in responding to the inevitable changes of the economic climate and business competition.

**Table 1.** Business Initiatives towards Competition as well as its Weaknesses

<i>Initiatives conducted towards business and competition</i>	Weaknesses towards business activities and competition based on measurement
<ol style="list-style-type: none"> <li>1. Run a management system of which its operational processes are focused in improving continuous performance, management, and the projection of risks, regulation and management, as well as innovation (Parret, 2006).</li> <li>2. Encourage and develop the workers to acquire knowledge (of which is specialized, differentiated, and related with the industry) through human capital (McGregor et. al., 2004) directed towards <i>know-how</i>, education, work-related competence, and psychometric assessment (Namasivayam &amp; Denizci, 2006).</li> <li>3. Identify and determine the assets that are owned and that bring influence towards the business, namely:                             <ul style="list-style-type: none"> <li>• Category of intellectual capital, for example human capital, social capital, process capital, as well as intellectual property (Jackson, 2007).</li> <li>• Resources that may serve as competitive advantage, for example physical capital, organizational capital resources, human resources systems and human capital resources (Barney &amp; Wright, 1997).</li> </ul> </li> <li>4. Create primary resources from the creation of economic value that consist of tangible assets (physical, structural, raw material, and production), knowledge-based economic assets, in addition to intangible assets, referring to the resources of which its values must be enhanced (Carson et al., 2004).</li> </ol>	<ol style="list-style-type: none"> <li>1. Only gives minor effects towards fundamental changes in how to manage a business well and effectively (Gilgeous &amp; Gilgeous, 1999). This is because those initiatives are conducted through trial and error rather than through systematic planning of improving quality and business abilities (Hammer &amp; Stanton, 1999; Bhasin &amp; Burcher, 2006).</li> <li>2. Only a few succeed. From those that succeed, the effect remains minor and only applies for manufacturing industries in the production unit (Sanchez &amp; Perez, 2001). However, companies should conduct performance evaluation derived from strategies to strengthen the various strategies that have been conducted (Skinner, 1969).</li> <li>3. Company success is not always achieved (Neely et al., 2000).</li> </ol>

Source: Sihombing, 2009

### Competitive Advantage

Emiliani (1998) stated that successful businesses typically implement effective strategies and procedures in sufficiently serving all concerning parties. This implies that companies, as organizations, may create

fine products, good brands, fine partnerships, good workers, as well as good financial resources. Accordingly, the following table (Table 2) lists the initiatives that must be taken by companies in dealing with the performance challenges of competitive advantage.

**Table 2.** Initiatives towards Competitive Advantage as Performance Challenges

No.	Competitive Advantage as a Challenge towards Company Business Performance	
1	Creating Value	<p>Creating value is the advantage that may be achieved through resources and activities or from the choices that result in the most profit (Besanko <i>et. al.</i>, 2000). Therefore, companies must implement the following strategies of creating value:</p> <ul style="list-style-type: none"> <li>• Exploring opportunities that earn value or are rarely owned by other companies or potential competitors (<i>rare resources</i>),</li> <li>• Imperfectly imitable, and strategically irreplaceable (Lipman &amp; Rumelt, 1982 ; Barney, 1991) based on the values of the customer (Saloner <i>et. al.</i>, 2001),</li> <li>• Acquire distinguished abilities in an industry or market (Kay, 1993), along with added value (Brandenberger &amp; Stuart, 1996).</li> </ul>
2	Performance in Competition	<p>Competitive advantage grows from the company values that enable opportunities of creation and innovation that serve as performance indicators towards their customers. This may be achieved by executing low cost strategies, differentiation advantage, and product focus on specific market targets. Ghemawat and Rivkin (1999) add that the improvement of performance needs to be based on long-term strategies towards competitors.</p>
3	Experience and Competence	<p>Company experience becomes a competitive advantage when such business and marketing actions create economic value (Barney, 2002). These experiences are gained through a combination of company-owned abilities and resources. These consist of the company's unique methods in maintaining sustenance, as well as focusing on collective learning in worker efforts towards core competence (Hoffman , 2000)</p>
4	Asset and Resource.	<p>Competitive advantage is produced by creating expertise and superior resources (Day &amp; Wesley, 1988). In order to do so, the company must:</p> <ul style="list-style-type: none"> <li>• Combine resources and abilities to its core competence (Prahalad &amp; Hammel, 1990).</li> <li>• Own intangible resources that are rare and are not easily obtained from the assets that are freely sold in the market (Dierickx &amp; Cool, 1989; Rumelt, 2003).</li> <li>• Specialize resources in the financial, physical, legal, organizational, informational, and relational aspects, above normal standards, and implemented continuously towards mobile sources (Peteraf, 1993; Hunt &amp; Morgan, 1995)</li> </ul>
5	Creation of Working Networks	<p>Development of relations requires organizational and relational resources as well as information on competitive advantage that will become the resources in creating competitive advantage (Morgan &amp; Hunt, 1996). The relations mentioned above refer to the following:</p> <ul style="list-style-type: none"> <li>• Market-related relationships that are continuous, involve the exchange of additional organizational working networks, and are required in the appropriate time (Webster, 1992).</li> <li>• Working relationships a step beyond dyadic relationships (meetings) or partnerships (Iacobucci &amp; Hopkins, 1992 ; Anderson <i>et. al.</i>, 1994)</li> <li>• Involves technological transfer and information exchange (Thorelli, 1986)</li> <li>• Emphasized on work relations with mutual trust (Jarillo, 1988) to enable the</li> </ul>

- possibilities of reinforcing core competences (Achrol, 1997).
- Part of the company's strategic planning (Gulati, 1998).
- 6 Development of Innovation Strategies
- Competitive advantage produced from consistent innovation towards the company, either socially or technologically, by directly and in-directly providing distinguished values between customers (Foxal, 1984; Wolfe, 1994; Rogers, 1995; Gatignon & Xuereb, 1997). The following actions may serve as innovative strategies:
- Choosing strategies of sustained innovation or disruptive innovation to encourage technical changes in creating products/services (Christensen & Raynor, 2003).
  - Consider innovations related to a product/service that may be brought into the market (Cumming, 1998)
  - Create successful development and introduction of products, services and new processes (Urabe, 1988) in order survive in the dynamic and complex market in a particular economic environment (Assink, 2006).
  - Construction, development, and adaptation of an idea or behaviour, as well as the adoption of something new to the organization (Higgins, 1995)
  - Organizational change as a response to the dynamics of the external environment, or even take actions that influence the environment (Damanpour, 1996)
  - Differentiate degrees of sorting in the individual level towards improvement and company functions (in the process of improvement or adaptation) as a chain of values in the form of radical products, innovative services, business models, as well as technological break-through industries (Edquist, 1997).
  - Product, process, and market innovation (Johne, 1999).

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Source: Sihombing, 2009

## 2 World Class Companies

Greene (1991) underlined that global companies are continuously in demand to perform actions of continuous change towards its business. These changes relate with the understanding of intimacy between customers and suppliers, knowledge and awareness of competitor performance abilities, as well as their strengths and weaknesses (Recardo & Peluso, 1990). Consequently, companies must be able to acknowledge their business aspects and functions in responding to the challenges of competition that serve as performance measures of world class companies.

## 3 Business Planning towards Building Human Capital

Jackson and Schuler (1990) stated that drastic change in the business, economic, and social environment needs to create uncertainty

that encourages business organizations to integrate their business plans in a long-term perspective towards human resources. These Sihombing, 2009s' reasons that, in acknowledgement of the heated daily competition encountered by these companies, these companies must continuously improve and enhance themselves as an effort of maintaining their operations in the future. Accordingly, particularly concerning business planning and human resources, the company needs to conduct performance management (Table 4). This is also because the goal of business managements is part of the company's strategy in response to competitive management, based on its actions, improvement management and proven management. For example: Quality Management Systems (QMS), Total Quality Management (TQM), concurrent engineering, business process engineering, balance scorecard, etc.

**Table 3.** Performance Measures upon the Aspects and Functions of Business as World Class Businesses

No.	Aspects and Functions of Business as Performance Measures	
1	Business Performance	Building an operational approach that enables the achievement of sufficient and sustained improvement of business performance towards total productivity and quality, through continuous improvement and planning in all areas of the business organization (Sweeney, 1990).
2	Business Essence	From the book: “ <i>World Class Manufacturing</i> ”, Professor Richard Schonberger (1986) stated that the essence of fundamental change of world industry business refers to changes in design, organization, building human resources, quality and problem solving, accounting and control, capacity and marketing.
3	System Integration	Business success factors towards change include speed and flexibility. Accordingly, change is based on the three related and integrated systems, namely: technology management systems, human management systems, and business management systems (Recardo & Peluso, 1992).
4	Competition Priorities.	Construction of a business strategy that is equal and in line with core competition and market opportunity, is one of the standard achievements of world-class companies. Accordingly, competition priorities that serve as critical success factors towards the market include quality, price, delivery speed, delivery reliability, flexibility and innovation.
5	Customer Relationship Management.	Customer relationship management through a customer centric business strategy. This refers to the collective value of all consumer-related information including their activities, and serves as an access point to information on workers and company business partners.
6	Management Attributes	Features from an organization that are competitive, influence the area of functions and attributes based on the organizational thought patterns, organizational abilities, organizational structure, measurement of organizational performance, costs, and cost management functions (Mahadevan, 1998).
7	Products and Process	Competitive businesses are equivalent to the combination of human integrated manufacturing (Yamashina, 2000). There is a fundamental requirement involving fine maintenance, and the integration of business aspects as a system in understanding the research that is used, production engineering, improvement of abilities, and details from <i>know-how</i> towards <i>shop-floor</i> .
8	Challenge and Complexities	Businesses operated by companies (not dependent on the type of the industry, size and location) should collectively encourage its organizations to build new abilities towards: globalization, profits through growth, technology, intellectual capital, and change (Ulrich, 1998). However because its form is complex, therefore companies need to view it from an institutional/organizational systems and individual approach towards the strategic, operational, organizational and external contexts (Gates & Cooksey, 1998; Heywood <i>et al.</i> , 2007).

Source: Sihombing et al., 2009

**Table 4.** Performance Management towards Business and Human Resources

No.	Human Resources Management towards Business Performance	
1	Flexibility and individual/organizational ability to adapt	There lies a particular weakness between business planning and human resources. This is due to the traditional approaches conducted through the establishment of human resource needs, based on reactive responses towards business planning, ever since the business plan was established (Jackson & Schuler, 1990). As a result, demands and dynamics towards organizational change rapidly need to be responded to in the form of flexible organizations and individuals that easily adapt to change.
2	Creation and growth of intellectual capital as well as its optimization	Challenges of human resource planning imply the creation and growth of intellectual capital to be used for competitive advantage, thus investment in intellectual capital management should be conducted as a basis in making decisions, determining priorities, and maximizing all company-owned assets (Smart, 1997, Flamholtz, 2001).
3	Building the Organization and Technology	Since knowledgeable workers are products of their education, technological advancement, as well as the development of modernization from organizational practices or theories, thus theories that emerge from values and processes, as well as the ideas from knowledge and human resources serve as the key in boosting organizational performance as well as its success. In relation to this, Bohlander and Snell (2007) stated that it must include characteristics of being global, technological use, management of change, management of talent or human capital as a response towards the market as well as charged fees.
4	Leadership and Empowerment	<p>Understanding is required towards the forms of quality human resources, as a strategic demand in relation towards crisis and change as the key to boost modern organizations to attain higher achievements (Bassi &amp; McMurrer, 2007). Therefore, in order for management of knowledgeable workers to become effective, the following is required:</p> <ol style="list-style-type: none"> <li data-bbox="429 1089 1163 1306">a.) Relations between leader and organizational abilities in constructing proper knowledge management systems towards the organization's missions and visions. The management must be performed by improving education and opportunities of learning, redefinition of the knowledgeable leader's roles to be responsible to construct a participative system, share knowledge in efforts to accomplish the organization's problems, fulfil the visions and missions, execute critical tasks, and effectively manage change to be able to survive crisis.</li> <li data-bbox="429 1313 1163 1392">b.) Discovery of critical strategic parts of learning processes and motivational intrinsic factors that encourage knowledgeable workers towards information gathering, internalization, integration and reproduction.</li> </ol>

Source: Sihombing et al., 2009

In accordance with elaborations above, the discovery of strategies (competitive advantage, world-class companies, as well as planning and building human capital) within the company business, are based on the following questions:

1. Which system should the company choose to wholly optimize its resources (human, money, technology, and system) to make the company superior towards competition?
2. How to measure business success towards a system and competitive advantage, and

how can human capital be used as a success factor?

### **BUSINESS STRATEGIES THROUGH BUILDING HUMAN CAPITAL WITH THE LEAN CONCEPT TOWARDS COMPETITIVE ADVANTAGE AND STANDARDS OF WORLD CLASS COMPANIES**

Reflecting upon the production system of Toyota, competitive advantage depends on the company's abilities to respond to the changes that originate from external causes, as well its aggressive change initiatives towards flexibility and response towards customers desires (Heim & Compton, 1992; Womack & Jones, 1994). In this sense, understanding depends on how the company applies the lean philosophy towards basic principles of internal business processes (in achieving the best quality, costs, lenient prices, shorter 'lead time', better safety, high morals, and optimal business outcomes), so that the company becomes superior and establishes competitive advantage against market competition.

Therefore, based on those principles, a company must focus its business strategies towards the systems that they own and how their understanding towards world class companies may be interpreted as their internal business process (Table 5). In this sense, the application of the lean concept is not limited only to include practical actions and the use of principles towards waste, however also includes acceptance and understanding of the organization in a philosophical sense by emphasizing the integration of systems through lean thinking. Lean thinking is applied on all business processes to achieve the best quality and is based on learning foundations and continuous improvement supported by humans, partnerships and cooperation. This implies that actions should be related with the process, innovation, development of products or services, and experience as a strategic system and system strategy (Table 6), based on the interpretation of the background, expectations, relevant factors as well as its results

**Table 5.** Focus towards Improvements required by the company

<i>No</i>	<i>Focus</i>	What must be done?
1	Process	Processes in identifying changes in customer's needs and demands need to rapidly and accurately be fulfilled (Shepherd & Ahmed, 2000).
2	Innovation.	In order for the innovations to succeed, companies need to assemble the best combinations of technical and market knowledge towards a particular advantage point, compared to merely relying on the knowledge available in one particular location (Lusch <i>et al.</i> , 2006).
3	Develop Products or services	In satisfying the needs of consumers, companies need to open up to customer support and the services that are provided, as well as take use of information- technological advances in providing services to expand its functions, performance and adequacy of the products or services being offered. This is to be done in recognition of the difficulties that relate to the areal functions that affect change on the business environment (Mill <i>et al.</i> , 1995; Hayes & Wheelwright, 1984). This occurs because, according to Papadopoulau and Özbayrak (2005), business is basically dynamic.
4	Experience.	Companies need to use their experiences towards customers in creating appealing offers with higher value (towards the utility of the products being sold), rather than merely selling from the same competitors and based on internal strategic concepts towards one overall structure of the business organization. This may be conducted by emphasizing on behaviours that support the target of organization's objective through a combination of cooperation, competition, and judicial behaviours (Oliver, 1997).

Source: Sihombing *et al.*, 2009

This implies that if experience becomes the background of the actions exercised by a company, therefore expectations become part of the process. Meanwhile, the factors that need to be considered relate with innovation. Therefore outcomes rely on building products and services. Accordingly, a system is an interrelated cycle with its strategic base towards a system and model approach as well as its measurement. Focus has already broken down as mentioned in the matrix in table 6.

**1 Business Systems Approach Based on the Lean Concept**

Thoughts related to the lean concept refer to a multi-dimensional philosophy with the main focus on waste reduction. Womack and Jones (1996) defined this philosophy as the “pursuit towards perfection” to be in accord or exceed the internal and external requirements, with focus on the overall stream value of a dedication towards increase in sustenance, learning and waste reduction.

Accordingly, Liker (2004) added that unused worker creativity becomes waste and influences the effectiveness and efficiency of operational processes. This implies that the

more individuals integrated in the categories of just-in-time (JIT), total quality management (TQM), total production maintenance (TPM), and human resources management (HRM), the more likely for the organization or company to assume power in the competitive market (Shah & Ward, 2003). Meanwhile, should the companies fail to unlock their workers’ potentials; therefore the companies would be forced to bare the costs of overhead and would have much more management layers. This condition would eventually hamper their reactions towards the market as well as their reactions towards business opportunities.

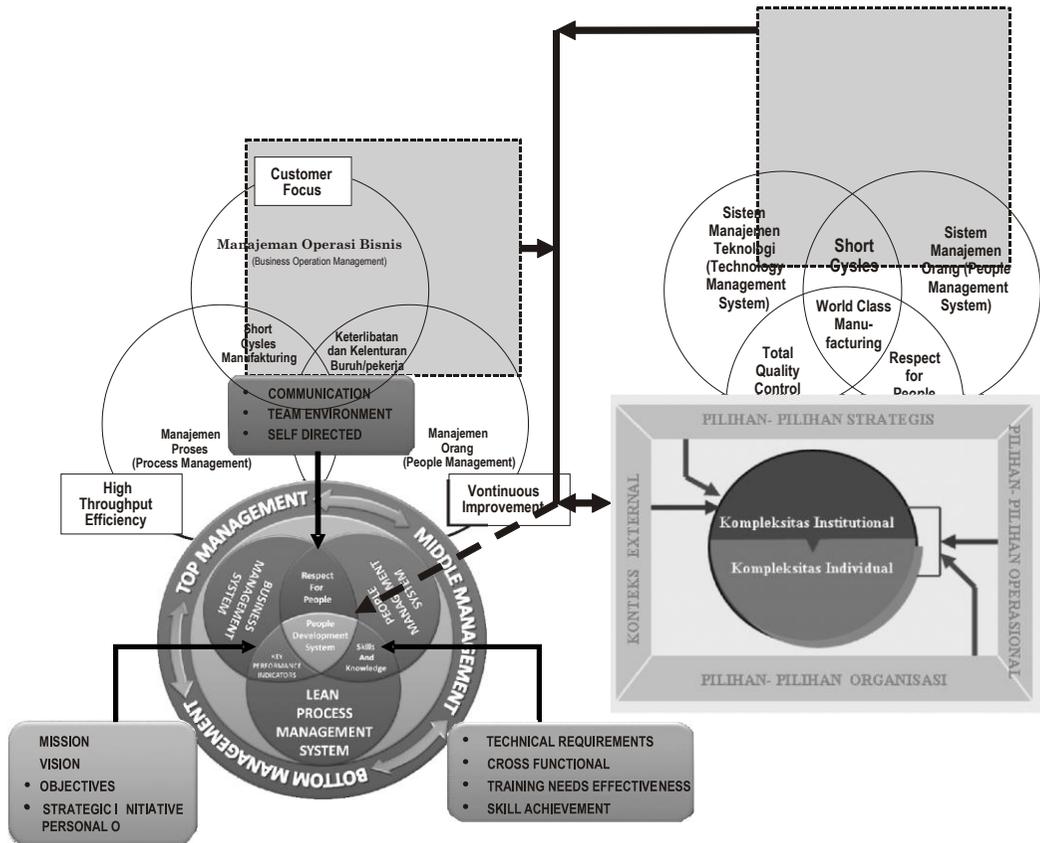
**2 Human Capital Development Model**

Punavasvaran (2009), with adaptations to the thoughts of Recardo and Peluso (1992) concerning world class manufacturing and Sweeny (1990) towards JIT, suggested human capital development to be applied under the lean concept to unlock workers’ potential as the basis for reducing waste through a system framework based on business management systems, lean process managements system, and people management system (Figure 1).

**Table 6.** Focus towards the Required Improvements in a Company

	<b>PROCESS</b>	<b>INNOVATION</b>	<b>BUILDING PRODUCTS AND SERVICES</b>	<b>EXPERIENCE</b>
<b>PROCESS</b>		Innovation towards the process	Building processes towards products and services	Experience towards processes
<b>INNOVATION</b>	Processes towards innovation		Building innovation towards product and services	Experience towards innovation
<b>BUILDING PRODUCTS AND SERVICES</b>	Processes towards building products and services	Innovations towards building products and services		Experience towards building products and services
<b>EXPERIENCE</b>	Processes towards experience	Innovation towards experience	Building experience towards products and services	

Source: Sihombing et al., 2009



Source: Recardo & Peluso (1992), Sweeney (1990), Puvanavarana (2009), Heywood *et. al.* (2003)

**Figure 1.** Human Development System towards Complexity

Nevertheless, ever since business challenges had to be solved in a complex manner (because of the competitive factors that are dynamic and human conditions in the organization), therefore the companies are faced with individual and institutional complexities (Gates & Cooksey, 1998; Heywod *et. al.*, 2007). This is because, in order for an organization to become truly lean, its workers must work in line with the guidelines of the new philosophy applied in the business approach, as well as the processes in their

system (Liker, 2004). On the other hand, challenges towards companies or organizational businesses based on customer demands and requirements actually depends on how the competition takes effect and what type of competition is going to be focused on (*competition as a game*). Therefore, a company must know how and must also determine its focus based on its visions, missions and objectives.

This is quite similar with sports competitions, for instance badminton. What are needed from 'performance challenges' are the agility, speed, precision, patience, and durability. In relation to this, performance challenge for other sports may not always be similar (for example weight lifting), because weight lifting requires more strength, durability, and strong muscles. Therefore this implies that the type of the competition and game will influence the type of performance that is required as a challenge, and therefore how does the performance need to be built and improved as a force to become superior and eventually triumph in this particular competition. Although both needs to fulfil some basic requirements, for example concentration and fit health conditions. However, if only concentration and fit health conditions were fulfilled (as implied by proven management), this has not yet secured victory. This applies even though fit health conditions serve as the main requirement in winning competitions.

Therefore, the following are needed in company competitions related to their performance challenges:

- 1) A great degree of involvement and behavioural changes of its workers must emphasize on prioritizing openness, honest communication, and delegation of Sihombing, 2009ities (Spear & Bowen, 1999; Gagnon & Michael, 2003; Emiliani & Stec, 2005).
- 2) Full involvement from organization towards improving quality in achieving high quality standards towards a work environment based on the foundations of discipline, standardization, and success (O'hEocha, 2000).
- 3) Human capital development systems are developed through the following:
  - a) Improving problem solving capabilities among workers in all levels, work

towards visions and missions, full commitment of workers, as well as to become agents of change through culture and values (Flamholtz, 2001; Barnes *et al.*, 2001; Puvanasvaran, 2009).

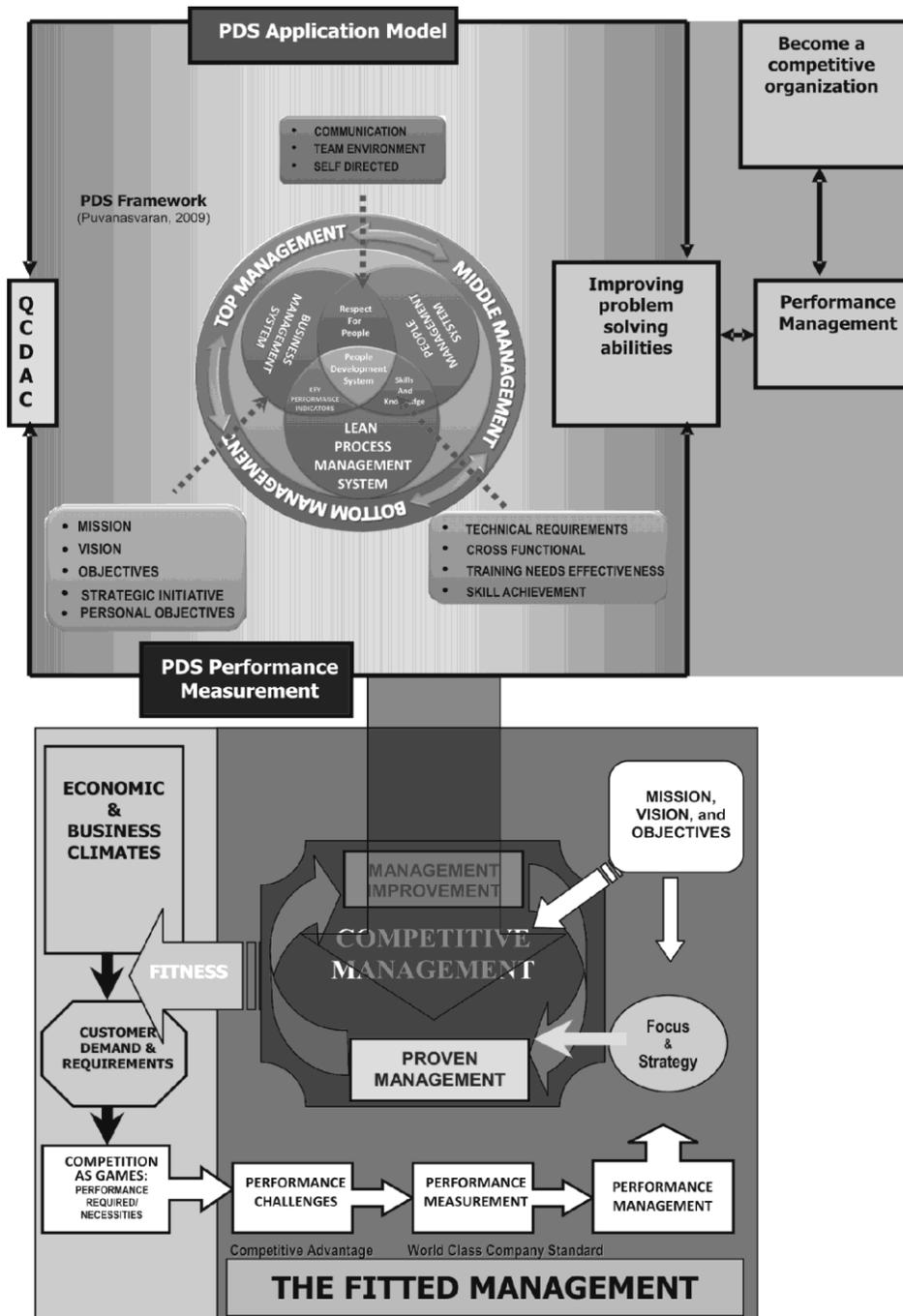
- b) Produce workers with abilities and knowledge in using lean apparatus and techniques, as well as improving continuous activities, as well as achievement of cost-competitive targets.

Nevertheless, because the targets of a business management system needs to be cautiously implemented towards the organization's limited resources (towards capital assets, infrastructure, mass/time, and also humans), therefore its use must be directed towards a strategy on how an organization becomes a competitive organization (figure 2).

Accordingly, the approach and perspectives are established as the following:

- What are the challenges faced by companies/organization towards performance challenges?
- How to measure existing performance and performance challenge, so that performance may continuously be improved.
- How to manage the required performance to manage existing challenges, the future, as well as how to measure it (performance management) through the used system (*proven management*) (for example: Lean, JIT, TQM, HRM, etc.)

Therefore to achieve a fit management against competition as well as the needs of the market, revival is required on the continuous improvement cycle towards strategic choices towards the organization, operations, and external contexts (Heywood et. al, 2007). This in addition to the measurement factors on methods, objectives, as well as the improvement initiatives as displayed in Table 7.



Source: Puvanasvaran, 2009

**Figure 2.** Application of Human Capital Model to become a Fit and Competitive Organization (Management)

**Table 7.** Measurement Factors towards Improvement

No	Method and Objective	Measurement Factors
1	Done through various strategies used in the improvement process	Its measurement according to Kaplan and Norton (2000), needs to be done through a range of strategies that are used in improvement processes based on performance measurement towards the QCDAC principles including <i>quality, cost, delivery, accountability, and continuous improvement</i> .
2	Framed through an internal perspective	Hoffman (2000) stated that the approach must be framed through an internal perspective, because of the following reasons: a) Benefits from optimization, as a means of providing solutions/ answers towards the limitations of reasonable decision making. b) Thoughts towards change are inadequate, because within it, other factors are needed for instance speed towards modification and innovation as a result of ideas and worker creativity that are driven by motivation, culture, communication, and cooperation between workers.
3	Performing measurement over time towards perspective and social investment	Murray and Häubl (2003) suggested that the application of measurement (which is applied by learning by doing) needs to be in line with time through experience that stimulates abilities and expertise. As a consequence, the focus of attention of the company needs to be placed upon on the worker's abilities as a competitive advantage whereby: a) Its measurement needs to be implied towards the operational perspective. This means that measurement becomes a reflection of the organization's ways in creating value. b) Its measurement needs to be implied towards the perspective of social investment. This means that the abilities of the company that need to be achieved include developing, obtaining, and maintaining its workers as a long term organizational strategy.
4	Done as a strategy towards self placement based in business planning through a combination of abilities, coordination, key criteria, and identification of human resources	Aseltine and Alletson (2006) suggested that strategic measurement may be done on how the organization is viewed as placing themselves towards business planning. As a result, the measurement used must be able to capture both direct and indirect effects, processes must be simple, repeatable, directed towards solution-based actions, and its results must be combined to the following: a) Combination from the abilities and resources in distinct and sustainable ways (Thomas et. al, 2003). b) How to coordinate efforts of all workers to facilitate growth from specific competence, as channels to the customers who identify differences of the products that are offered by the company. c) Attributes towards products or its supplies, as a key criteria market purchase (Coyne, 1986). d) Architectural perspectives for identifying human resources based on work relations towards different workers, strategic values and uniqueness according to the used human resources configuration, expert groups, and the natural forms of their contributions (Kang et. al, 2003).
5	Done as optimization and effectiveness	Measurement done towards individual performance needs to be interpreted as optimization and effectiveness from the company's resources. Through an integration of the measurement system towards the 3 parameter elements of lean application (KPI, S&K, RFP in figure 2 of Puvanasvaran, 2009), based on critical success factors and a matrix towards measured performance, therefore its size will indicate a particular firmness, consistency, and understanding towards processes that are run based on objectives, decision variables, and relevant shortcomings towards the organization.

**Table 8.** *Fitness for Business*

No	Types of Fitness	Description
1	<i>Fitness to specification</i>	Implying that products or services are proper in accordance with the specified requirements towards performance that become the organization's challenge. This refers to understanding of quality as the 'little q' under the context as explained by Joseph M. Juran
2	<i>Fitness for use.</i>	This becomes the main requirement to ensure that products or services, as performance, are not only proper according to its specifications. However, it also satisfies the needs of customers towards utility in various aspects and must also reasonably be the result of performance measurement.
3	<i>Fitness for cost.</i>	This concept is theoretically related to the dynamics that centre on competition as performance management. Where all things that are related are formed as 'balanced-one-faced'. For example: " <i>the lower the cost, the better</i> ". (In the lean concept, implying to 'do better with less')
4	<i>Fitness for latent needs</i>	This is to interpret the understanding from opportunities towards innovation and all things related with continuous improvement, as management to become <i>competitive management</i> towards how the business strategy is translated.

Source: Sihombing et al., 2009

Moreover, because challenges that emerge from measurement also include how to evaluate relations between fit working networks upon competitive advantage, therefore companies need to understand what is needed from their workers, what is expected from their masters, how to adapt ideas of management and new possibilities, worker effectiveness, management towards talent, as well as the formulation of proposition value from the core work. Therefore, all the above (as well as its combination) needs to be dynamically used towards the dimensions of product quality of which according to Garvin (1998) takes the form of: performance, features, appropriateness, credibility, serviceability, aesthetics, and perceived quality consistent with the views of what is given and requested by the customer (Table 8). This must also be implemented in the managerial and operational context in business strategy that is dependent upon the roles of developing human capital towards business abilities and competitive advantage that needs to:

i) Understand individual ability, knowledge, expertise, and experience form workers or even company managers that are relevant

towards the tasks that they deal with, or even towards the capacities to add to the reservoir of knowledge, expertise, and experiences through individual learning (Dess & Picken, 1999).

- ii) Shape and focus on the achievement of the company in the environmental context and consistent with the logic of competition, where there is no substitute towards knowledge and learning, creativity and innovation, competence and abilities (Rastogi, 2000).
- iii) Encourage innovation towards products and services that are offered in the market, through communication towards messages that are delivered and related to "treatment" towards human capital and brands. In this sense, the form that is used is the unification that brands serve as the employee value proposition.
- iv) Be interpreted as the opportunity in opening the challenges through required experiences needed by the company, so that it draws expectations of quality individuals of his/her talents to enter the organization.

v) Improve, for the sake of society perception towards the organization, so that it can be seen as distinct within the market space. In relation to this, namely from the perspective of the brand, that is made from the company to become a company platform towards the prospects of recruitment.

Where its development is later mapped based on the strategies, abilities, regulation as well as space between workers in the company business framework. In relation to this, values and worker modes (as internalization) and its relation (as a relational uniqueness) acquire high value and uniqueness (Figure 3).

Those high positions are also transformed into human capital categorizations based on intensity (human capital) and its model (organization operations) as the differentiator (Figure 4), since the abilities of the company shifts from owned assets to human capital (based on knowledge), of which drives and arouses company's awareness to explore the possession of new abilities based on the steps related with external factors as well as internal factors as opportunities towards generation (Figure 5).

## CONCLUSION

The formulation and development of innovation strategies in product and market development (as a competitive advantage) is required for developing human capital towards problem solving capabilities and improvement. By using the lean philosophy, the results are not only internalized as business ability but also become a competitive differentiation strategy, externalized in arousing innovation and market growth.

As a consequence, in developing business abilities and competitive advantage, companies need to reinforce views oriented towards problem solving (Womack & Jones, 2005). For this matter, a company strategic approach towards human development as a competitive advantage, needs to be implemented based on

performance management, to make it a competitive organization based on competitive management strategies.

Furthermore, based on the proven management strategy of continuous improvement (so that the output is in accordance with customer satisfaction (customer demand and requirements) and fitness towards the economic or business climate or competition), improvement management should be interpreted as what performance challenges are needed and how to conduct performance measurement and management. Accordingly, human capital comprises of the following:

1. Beginning from evaluation towards a value that is relatively related to key performance indicators in key improvement indicators (Setijono & Dahlgard, 2007) based on critical success factors, with its main focus on humans as workers. In relation to this, through a performance measurement system towards the organization and humans, therefore this would propel organizational and human behaviour, as well as its abilities in achieving target strategies that are in line with long-term targets (Cochran *et al.*, 2000).
2. Based on organizational performance improvement in the scope of business, technique and human factors that are based on leadership to direct lean transformation through involvement. The consistency becomes evident within the application of the principles of continuous improvement and respect to people. Concerning this, direct involvement in kaizen activities or improvement processes, will indicate effectiveness of the most important behavioural aspects as a dimension of understanding when the lean concept is applied (Emiliani, 2006; Balle, 2005). Moreover, when it focuses on the improvement of individuals and humans, therefore the results would seem from the individual or the person that has the proper expertise.

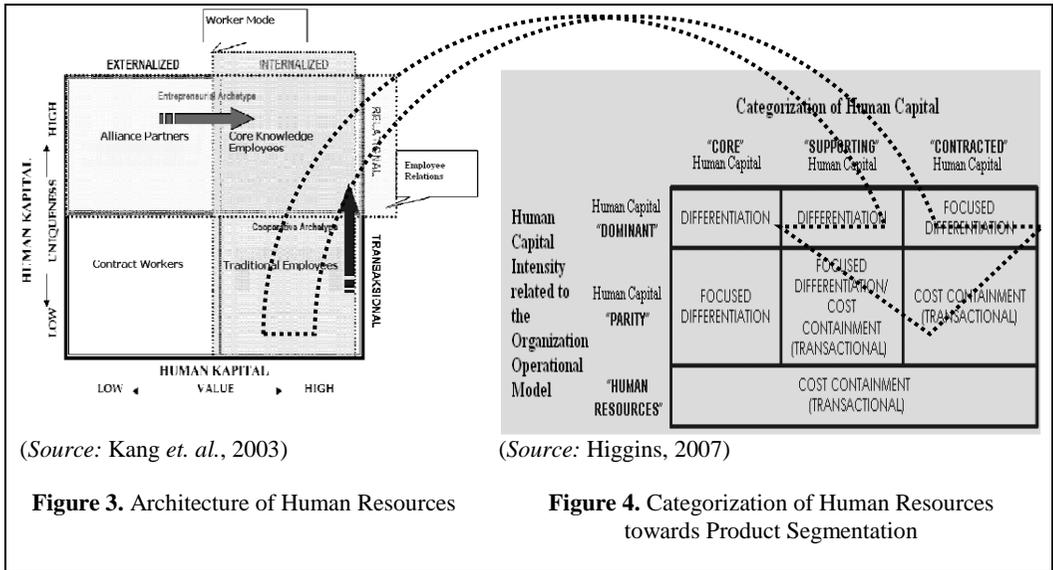


Figure 3. Architecture of Human Resources

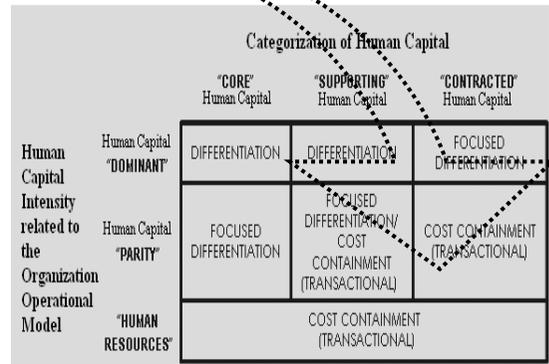


Figure 4. Categorization of Human Resources towards Product Segmentation

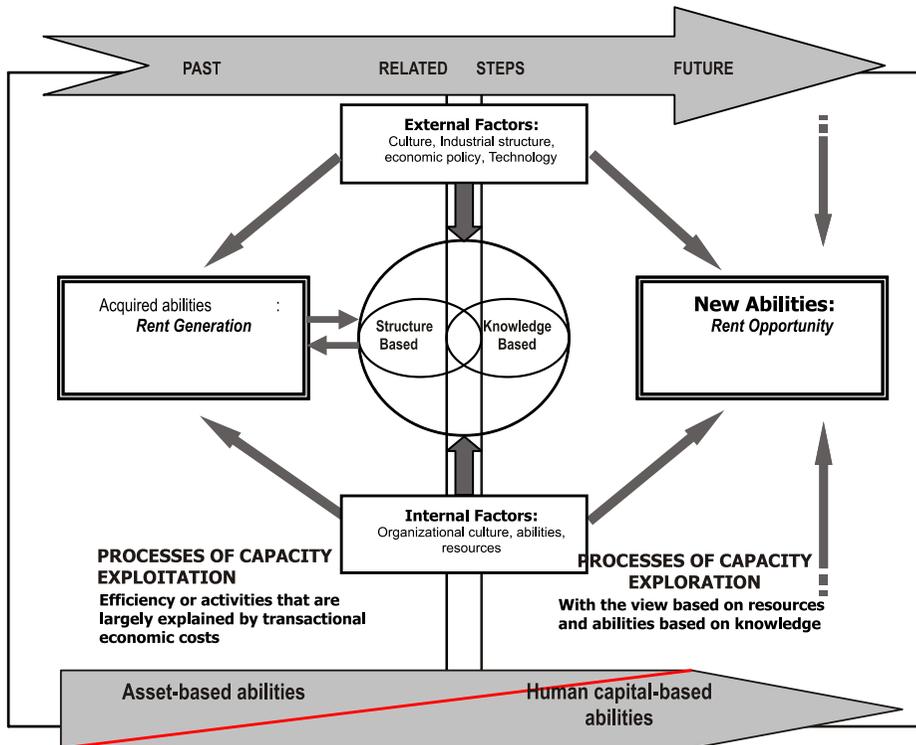


Figure 5 Dynamic Model: Transformation (in the evolutionary perspective) towards Abilities, Regulation and Business Strategy

Basically, the success of a business strategy towards human capital through the application of lean is through an operational approach that is characterized as a system, rather than merely being an apparatus or tool. This reality emerges as an agreement towards the viewpoint that becomes proof for most organizations. Whereby, managerial commitment is needed as a reason why the application of lean is so difficult to be applied (Balle, 2005).

One of the principles that is most important here, is "Not through performance improvement as separate parts, however improvement of performance as a whole" (Ackoff, 2003). For this to occur, the abilities of a business lay from its "pull" from external forces, so that companies interpret how to form their strategies. However, this is also depends in internal preparedness as a form of push, in form of fitted management towards the challenges of market competition, of which its focus lays on the development and management of human capital as competitive advantage towards the required abilities that must continue to be explored of its benefits as well as its utility.

Nevertheless, further thorough studies are required between the relations of "Fitness for Business" (Table 8 towards performance) to achieve 'Fitted Management' (Figure 3) based on categorization in form of differentiation towards each form of business aspect, as well as the strategy that is used and forms of proven management, as well as its focus towards improvement initiatives (Table 6).

## REFERENCES

- Achrol, R.S., 1997. 'Changes in the Theory of Interorganizational Relations in Marketing: Towards a Network Paradigm'. *Journal of the Academy of Marketing Science* 25(1), 56-71
- Ackoff, R.L., 2003. 'Creating a Competitive Strategic Advantage'. *Journal of Innovative Management*, 9(1), 61-79.
- Anderson, J.C, H. Häkansson, and J. Johanson., 1994. 'Dyadic Business Relationships within a Business Network Context'. *Journal of Marketing*, 58 (October),1-15
- Aseltine, K., and K. Alletson., 2006. 'A New Deal for the 21<sup>st</sup> Century Workplace'. *Ivey Business Journal*, March/April,1-7.
- Assink, M., 2006. 'Inhibitors of Disruptive Innovation Capability: A Conceptual Model'. *European Journal of Innovation Management*, 9(2), 215-233.
- Balle, M., 2005. 'Lean Attitude'. *IEE Manufacturing Engineer*. April/May,14-19
- Barney, J., 1991. 'Firm Resources and Sustained Competitive Advantage'. *Journal of Management*, 17(1), 99-120.
- Barney, J.B., and P.M. Wright., 1997. "On Becoming a Strategic Partner: The Role of Human Resources in Gaining Competitive Advantage", CAHRS Working Paper 97-09. ILR School: Cornell University.
- Barney, J.B., eds., 2002. *Gaining and Sustaining Competitive Advantage*, 2<sup>nd</sup> ed. Reading, Mass: Addison-Wesley
- Barnes, J., J. Bessant, N. Dunne, and M. Morris., 2001. 'Developing Manufacturing Competitiveness within South African Industry: The Role of Middle Management.' *Technovation*, 21, 293-309
- Bassi, L and D. McMurrer., 2007. "Human Capital and Organizational Performance: Next Generation Metrics as a Catalyst for Change". White Paper, Mc Bassi & Company.
- Besanko, D., D. Dranove, and M. Shanley, eds., 2000. *Economy of Strategy*. 2<sup>nd</sup>ed. New York: John Wiley & Sons.
- Bhasin, S. and P. Burcher., 2006. 'Lean Viewed as a Philosophy'. *International Journal of Manufacturing Technology Management*, 17(1), 56 -72.
- Bohlander, G., and S. Snell, eds., 2007. *Managing Human Resources*. 14<sup>th</sup> ed. Mason, Ohio: Thomson-South western.

- Brandenburger, A., and G. Stuart, 1996. 'Value-Base Business Strategy'. *Journal of Economics and Management Strategy*, 5, 5-24.
- Carson, E., R. Ranzijn, A. Winefield, and H. Marsden, 2004. 'Intellectual Capital Mapping Employee and Work Group Attributes'. *Journal of Intellectual Capital* 5(3), 443-463.
- Chaithanakij, S., 2008. 'Nature of the Firm Strategy and Capability.' *4th National Conference of Economists*, Chiangmai University (24 October 2008).
- Christensen, C.M., and M.E. Raynor, eds., 2003. *The Innovator's Solution: Creating Sustaining Successful Growth*. Harvard Business School Press
- Cochran, D.S, Y.S. Kim, and J. Kim, 2000. "The Impact of Performance Measurement on Manufacturing System Design". 1<sup>st</sup> International Conference on Axiomatic Design. MA: Cambridge.
- Coyne, K.P., 1986. "Sustainable Competitive Advantage: What it is, What It isn't." *Business Horizons*, 29: 54-61.
- Cumming, B.S., 1998. 'Innovation Overview and Future Challenges'. *European Journal of Innovation Management*, 1(1), 21-29.
- Damanpour, F., 1996. 'Organizational Complexity and Innovation: Developing and Testing Multiple Contingency Models.' *Management Science*, 42(5), 693-716.
- Day, G.S., and R. Wensley, 1988. 'Assessing Advantage: A Framework for Diagnosing Competitive Superiority'. *Journal of Marketing*, 52 (April), 1-20.
- Dess, G. D., and J.C. Picken, eds., 1999. *Beyond productivity: How Leading Companies Achieve Superior Performance by Leveraging Their Human Capital*. New York: American Management Association.
- Dierickx, I. and K. Cool, 1989. 'Asset Stock Accumulation and Sustainability of Competitive Advantage'. *Management Science*, 35 (December), 1504-1511
- Edquist, C., eds., 1997. *System of Innovation: Technologies, Institutions, and Organization*. London: Pinter.
- Emiliani, M.L., 1998. 'Continuous Personal Improvement'. *Journal of Workplace Learning*, 10(1), 29-38.
- Emiliani, M.L and D.J. Stec, 2005. 'Leaders Lost in Transformation'. *International Leadership & Organizational Development Journal*, 26(5), 370-387.
- Emiliani, M.L., 2006. 'Origins of Lean Management in America'. *Journal of Management History*, 12(2), 167-184.
- Flamholtz, E., 2001. 'Corporate Culture and the Bottom Line.' *European Management Journal*, 19(3), 268-275.
- Foxall, G., eds., 1984. *Corporate Innovation: Marketing and Strategy*. Australia: Croom Helm, Ltd.
- Gagnon, M.A., and J. H. Michael, 2003. 'Employee Strategic Alignment at a Wood Manufacturer: An Exploratory Analysis Using Lean Manufacturing'. *Forest Products Journal*, 53(10), 24-29.
- Garvin, D.A., eds., 1988. *Managing Quality: The Strategic and Competitive Edge*. New York: The Free Press.
- Gates, G.R. and R.W Cooksey, 1998. 'Learning to Manage and Managing to Learn'. *Journal of Workplace Learning*, 10(1), 5-14.
- Gatignon, H and J.M Xuereb, 1997. 'Strategic Orientation of the Firm and New Product Performance'. *Journal of Marketing Research*, 34 (February), 77-90.
- Ghemawat, P. and J. Rivkin, eds., 1999. *Strategy and the Business Landscape*. Reading, PA: Addison-Wesley.
- Gilgeous, V. and M. Gilgeous, 1999. 'A Framework for Manufacturing Excellent'. *Integrated Manufacturing Systems*, 10(1), 33-44.
- Greene, A., 1991. 'Plant-Systems: A World Class Perspective'. *Production Inventory Management*, 11(7), 14-15

- Gulati, R., 1998. 'Alliances and Networks'. *Strategic Management Journal*, 19(April), 293-317
- Guthridge, M., Komm, A., and E. Lawson, 2008. 'Making Talent a Strategic Priority'. *The McKinsey Quarterly*, January
- Hammer, M. and S. Stanton, 1999. 'How Process Enterprises Really Work'. *Harvard Business Review*, November-December, 2-10
- Hansen, M., 1999. 'The Search-Transfer Problem: The Role of Weak Ties in Sharing Knowledge across Organization Subunits'. *Administrative Science Quarterly* 44(1), 82-111.
- Hayes, R.H., and S.C. Wheelwright, eds., 1984) *Restoring Our Competitive Edge: Competing Through Manufacturing*. New York, NY: John Wiley & Sons.
- Heim, J.A and W.D. Campton, eds., 1992. *Manufacturing Systems: Foundations of World-Class Practice*. Washington DC: National Academy Press
- Heywood, S., J. Spungin, and D. Turnbull, 2007. 'Cracking the Complexity Code'. *McKinsey Quarterly*. McKinsey & Company.
- Higgins, J.M., 1995. 'Innovation: The Core Competence'. *Planning Review*, 23(6), 32-50.
- Higgins, J.M., 2007. 'Competitive Advantage through Strategic Human Capital Management'. *Journal of Applied Human Capital Management*, 1(1), 13-33.
- Hoffman, N.O., 2000. 'An Examination of the "Sustainable Competitive Advantage" Concept: Past, Present, and Future'. *Academy of Marketing Science Review*, 4, 1-16.
- Hunt, S.D. and R.M., Morgan, 1995. 'The Comparative Advantage Theory of Competition'. *Journal of Marketing*, 59 (April), 1-14.
- Iacobucci, D. and N. Hopkins, 1992. 'Modeling Dyadic Interactions and Networks in Marketing'. *Journal Marketing Research*, 29 (February), 5-17
- Jackson, P., 2007. 'Knowledge Asset Management: A Systems Approach for Human Capital Management'. *The Journal of Information and Knowledge Management Systems*, 37(4), 399-403
- Jackson, S.E. and R.S. Schuler, 1990. 'Human Resources Planning: Challenges for Industrial/Organizational Psychologist'. *American Psychologist*, 45(2), 233-239.
- Jarillo, J.C., 1988. 'On Strategic Networks'. *Strategic Management Journal*, 9, 31-41.
- Johne, A., 1999. 'Successful Market Innovation.' *European Journal of Innovation Management*, 2(1), 6-11.
- Kang, S.C., S.S. Morris, and S.A. Snelt, 2003. 'Extending the Human Resources Architecture: Relational Archetypes and Value Creation'. *CAHRS Working Paper 03-13*, Cornell University
- Kaplan, R.S. and D.P. Norton, eds., 2000. *The Strategy Focused Organization*. Boston, USA: HBS Press.
- Kay, J., eds., 1993. *Foundations of Corporate Success*. Oxford University Press.
- Liker, J.K., eds., 2004. *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*. New York: McGraw-Hill.
- Lipman, S. and R. Rumelt, 1982. 'Uncertain Imitability: An Analysis of Interfirm Differences in Efficiency under Competition'. *Bell Journal of Economics* (13), 418-438.
- Lusch, R.F., S.L. Vargo, and A.J. Malter, 2006. 'Marketing as Service-Exchange: Taking a Leadership Role in Global Marketing Management'. *Organizational Dynamics*, 35(3), 264-278.
- Mahadevan, B., 1998. 'Principles of World Class Manufacturing'. *The Management Accountant*, 645-649.
- McGregor, J., D. Tweed, and R. Pech, 2004. 'Human Capital in The New Economy:

- Devil's Bargain?' *Journal of Intellectual Capital*, 5(1), 53-164.
- Mill, J.F., K. Platts, and M.J. Gregory, 1995. 'A Framework for the Design of Manufacturing Strategy Processes: A Contingency Approach'. *International Journal of Operation & Production Management*, 15(4), 17-49
- Morgan, R.M. and S.D. Hunt, 1996. "Relationship-based Competitive Advantage: The Role of Relationship Marketing in Marketing Strategy", Working Paper. University Alabama.
- Murray, K.B and G. Häubl, 2003. 'A Human Capital Perspective of Skill Acquisition and Interface Loyalty'. *Communication of the ACM*, December, 46(12), 272- 278.
- Namasivayam, K. and B. Denizci, 2006. 'Human Capital in Service Organizations: Identifying Value Drivers'. *Journal of Intellectual Capital*, 7(3), 381-393
- Neely, A.D., J. Mills, K. Platts, H. Richards, M. Gregory, M. Bourne, and M. Kennerley, 2000. 'Performance Measurement System Design: Developing and Testing a Process-Based Approach'. *International Journal of Operations & Production Management*, 20(10), 1119-1145.
- Nightingale, D.J. and D.H Rhodes, 2004. "Enterprise Systems Architecting: Emerging Art and Science within Engineering Systems", MIT Engineering Systems Symposium. Massachusetts: Cambridge, MIT Press.
- O'heocha, M., 2000. "A Study of the Influence of Company Culture, Communications and Employee Attitudes on the Use of 5Ss for Environmental Management at Cooke Brothers Ltd.: Case Studies". The TQM Magazine, 12(5), 321-330.
- Oliver, D.W., 1997. 'Optimizing the Organization's Structure'. *IEEE Computer*, 30(7):110-112
- Papadopoulou, T.C. and M. Özbayrak, 2005. 'Leanness: Experiences from the Journey to Date'. *Journal of Manufacturing Technology Management*, 16(7), 784-807.
- Parret, W.G., 2006. "Sustainable Competitiveness: A Global Perspective". Deloitte, Speech to Confederation of Indian Industry, New Delhi.
- Peteraf, M.A., 1993. 'The Cornerstone of Competitive Advantage: A Resource-Based View'. *Strategic Management Journal*, 14,179-191
- Prahalad, C.K. and G. Hammel, 1990. 'The Core Competence of the Corporation'. *Harvard Business Review*, 68 (May-June), 79-91.
- Puvanasvaran, A.P., 2009. "People Development System to Enhance Problem Solving Capability". Unpublished Dissertation, PhD Thesis. Malaysia: University Putra Malaysia.
- Restage, P. N., 2000. 'Sustaining Enterprise Competitiveness – is human capital the answer?'. *Human Systems Management*, 19: 193-203.
- Recardo, R.J., and L.A. Peluso, eds., 1992. *The People Dimension, Managing the Transition to World-Class Manufacturing*. Quality Resources Pubs.
- Rogers, E.M., eds., 1995. *Diffusion of Innovations*. 4<sup>th</sup> Ed. New York, NY: The Free Press.
- Tumult, R.P., 2003. 'What is the World is Competitive Advantage?'. *Policy Working Paper 2003-105* of The Anderson School at UCLA.
- Saloner, G., A. Shepard, and J. Podolny, eds., 2001. *Strategic Management*. New York: John Willey & Sons.
- Sanchez, A.M., and M.P. Perez, 2001. 'Lean Indicator and Manufacturing Strategies'. *International Journal of Operations & Production Management*, 21 (11), 1433-1452
- Schonberger, R.J., eds., 1986. *World Class Manufacturing: The Lessons of Simplicity Applied*. New York, NY: The Free Press.

- Setijono, D. and J.J. Dahlgaard, 2007. 'Customer Value as a Key Performance Indicator (KPI) and a Key Improvement Indicator'. *Measuring Business Excellence*, 11(2), 44-61
- Shah, R. and P.T Ward, 2003. 'Lean Manufacturing: Context, Practice Bundles, and Performance'. *Journal of Operations Management*, 21(2), 129-149
- Shepherd, C. and P.K. Ahmed, 2000. 'From Product Innovation to Solutions Innovation: A New Paradigm for Competitive Advantage'. *European Journal of Innovation Management*, 3(2), 100-106
- Sihombing, H., 2009. "Kepuasan Pelanggan = Mutu, adalah Quality Myopia Bagian 2" [Customer Satisfaction = Quality is Myopic Quality Part 2]', Binus QMC Bulletin, No.18.
- Skinner, W., 1969. 'Manufacturing-Missing Link in Corporate Strategy'. *Harvard Business Review*, May-June: 136-145.
- Smart, K.L, 1997. "The Competitive Distinguisher: Developing and Maximizing Investments in Human Capital", Proceeding of IEEE 6<sup>th</sup> Annual Human Factors Meeting.
- Spear, S.J. and H.K Bowen, 1999. 'Decoding the DNA of the Toyota Production System'. *Harvard Business Review*, 77(5), 96-106.
- Sweeney, M.T., 1990. "Breakthrough to World Class Manufacturing – A Strategy for the Transformation". Proceeding 5<sup>th</sup> International Conference on Manufacturing Strategy, UK Operations Management Association.
- Thomas, R.J, P. Cheese, and J.M Benton, 2003. "Human Capital Development. Research Note of Human Capital Development", Issue 1 (November), Accenture.
- Thorelli, H.B., 1986. 'Networks: Between Markets and Hierarchies'. *Strategic Management Journal* 7:37-51
- Ulrich, D., 1998. 'A New Mandate for Human Resources'. *Harvard Business Review*, 76(2), 123-134. (September-October)
- Urabe, K., eds., 1988. *Innovation and Management*. New York: Walter de Gruyter.
- Webster Jr, F.E., 1992. 'The Changing Role of Marketing in the Corporation'. *Journal of Marketing*, 56(October), 1-17
- Wolfe, R.A., 1994. 'Organizational Innovation: Review, Critique, and Suggested Research Directions'. *Journal of Management Studies*, 31(3), 405-431
- Womack, J.P., and D.T. Jones, eds., 1994. 'From Lean Production to the Lean Enterprise'. *Harvard Business Review*, March-April: 93-103
- Womack, J.P. and D.T. Jones, eds., 1996. *Lean Thinking*. London: Simon and Schuster.
- Womack, J.P and D.T. Jones, eds., 2005. *Lean Solution*. New York: Free Press Pubs.
- Yamashina, H., 2000. 'Challenge to World-Class Manufacturing'. *International Journal for Quality & Reliability Management*, 17(2), 132-143.