Chapter 2

LITERATURE REVIEW

2.1 An institutionalist perspective of organisational change

According to Vit (1996), institutional theory examines the relationship between an organisation and its broader institutional context. The institutional approach has its origins in sociology (Berger and Luckman, 1967) and has been expanded on by several researchers like DiMaggio and Powell (1983), Meyer and Rowan (1991). In the context of discussing the sociology of knowledge from a phenomenological perspective, Berger and Luckman define an interesting notion of institutions. For them, the institutionalisation of a segment of social life is the typification of reciprocal habitualised actions (Berger and Luckman, 1967, p. 72). Berger and Luckman use the term institutionalisation in order to explain the construction of our social world. To illustrate this concept, Berger and Luckman draw on the institution of parenthood. In enacting this institution, parents and children behave in a typical manner. Likewise, these actions are reciprocal: parents expect their children to conduct themselves in a certain manner while children expect the same from their parents. There are also legal mechanisms in place that are further legitimated by moral or religious discourses that prescribe what is required in order to be a good parent.

Avgerou (2000) suggests that the concept of institution have a broad sense in institutionalist theory. It refers to authoritative, established, rule like procedures in society, with a self-sustaining character. Jepperson (1991) defined institution as 'those social patterns that, when chronically reproduced, owe their survival to relatively self-activating social processes'. People tend to believe that there is a functional rationale for their existence and purpose, which is a functional rationale for their existence and purpose, which is historically justified. Among the examples of 'institutions' suggested by

Jepperson are presidency, academic tenure, wage labour, the formal organisation.

Institutionalisation is the process through which a social orders or pattern becomes accepted as a social 'fact'. Zucker (1983) suggested that an innovation is first adopted and diffused partly for its technical merits, and partly under the influence of powerful actors. Subsequently, according to Avgerou (2000), through institutionalisation, an innovation is adopted and maintained because of its acquired legitimacy, irrespective of whether or not it produces its promised technical value, and without relying continuously on powerful personalities.

The institutional elements that sustain the concentration and structuring of people's work activities in formal organisations in modern society have been studied extensively in organisational theory (Scott, 1987).

Institutionalist theory probed behind the socio-structural aspects of organisations and traced the unconscious central values that keep an organisation together as an institutional entity, demonstrating that formal institutional aspects, such as the bureaucratic structure, are sustained and perpetuated by unconscious taking-for-granted the way things are, which makes alternatives unthinkable, and creates institutional inertia. According to Zucker (1983), within organisations we find conformity rooted in 'common understandings about what is appropriate and, fundamentally, meaningful behaviour'. Zucker (1987, 1991) also comments that actions follow rule-like patterns, 'norms' that are embedded in formal structures and are not tied to particular actors or situations. In this way work practices in organisations, although socially defined, are seen as being 'objective', part of 'external' world, rather than as being subjective understandings and actions.

Zucker (1987) has contributed significantly to the formalisation of institutional theory by proposing two approaches that highlight the dichotomy between institutionalisation at the organisational level (organisation as institution) and institutionalisation outside the organisation (environment as institution). Zucker notes that a dominant theme in institutional theory is that the environment, and principally the state, pressures organisations to conform in order to retain legitimacy and improve their chances of survival. This results

in ceremonial and mythical behaviour that is often divorced from the technical and efficiency-driven activities of the organisation.

Most institutional theorists agree that an understanding of shared values, or 'appreciative systems' and relationships are critical. According to Scott (1990), one of the common central tenets of institutional theory is that powerful and potentially dysfunctional pressures of conformity exist between institutions.

2.2 Organisational change

For centuries, philosophers have struggled with definitions of 'change', tough obviously not in connection with business organisation. The conventional modern idea of change typically assumes that it involves movement between some discrete and rather fixed 'states', so that organisational change is a matter of being in state 1 at time 1 and state 2 at time 2 (Kanter, Stein, and Jick, 1992, pp.9). Kurt lewin, a pioneer in the systematic study of planned change in mid-1940s, developed a classic model of change, with organisational change involving three stages; unfreezing, changing, and refreezing. This linear and static conception sees organisation as ice cube, which is so wildly inappropriate, as the organisations are never frozen, much less refrozen, but are fluid entities with many 'personalities' (Kanter *et al.*, 1992, pp. 10).

It is more appropriate to view organisational motion as ubiquitous and multidirectional (Eccles and Nohria, 1992). Deliberate change is a matter of grabbing hold of some aspect of the motion and steering it in a particular direction that will be perceived by key players as a new method of operating or as a reason to reorient one's relationship and responsibility top the organisation itself, while creating conditions that facilitate and assist that reorientation.

Change in character is critical in any enduring change. It shifts the behaviour of the whole organisation, to one degree or another. Transformational change requires modification in patterned behaviour and therefore is reflected in and rooted in a change in character. An understanding of organisational character and its sources, and of how to modify it, is required for effecting deliberate change. That is why, people at all

levels, can enunciate new directions yet fail ultimately to make the difference they intend. Organisations cannot simply be 'ordered' to change (Kanter *et al.*, 1992, pp. 11).

What are important about organisations are therefore not the occasional event or output, but the patterns that are manifested in those outcomes. What are organisationally important are simply those things that are more or less likely 'as a routine matter'. It is just this capacity of an organisation to change the probability of events that gives organisations their power.

2.3 Institutionalising organisational change

Though having a somewhat uncertain origin, the notion of institutionalising organisational change appears the best way to describe the relative endurance of change efforts (Cummings and Worley, 2001, pp.186). Endurance suggests that the change have staying power over a length of time. In the same way, institutionalising change has come to mean that the change has become part of the ongoing, everyday activities of the organisation. For example, if employees use the steps of the redesigned workflow without anyone prompting them, then using the redesigned workflow has come to be institutionalised among the employees who had previously used another workflow to perform the work. Whether an organisational change is institutionalised, is depending on how one compare the extent of the change against some previous set of actions.

According to Goodman and Dean (1983), institutionalised behaviours in organisations are those acts that are performed by two or more persons, persist over time, and exist as part of the daily functioning of the organisation.

Searching through OD literature, one will discover that not much attention has been given to the area of how planned changes become institutionalised. The concepts of 'change before you have to' and 'if it is not broke, fix it anyway' has become common and challenged the utility of the institutionalisation concept. Many had questioned 'why border to make any change permanent given that it may require changing again soon?' This has resulted in new ways of applying institutionalisation concepts. Change itself has now become the focus of institutionalisation. Tools have been developed

to enhance the organisation's capability for change like total quality management, organisation learning, integrated strategic change, and self-design interventions (Ciampa, 1992).

2.4 Institutionalisation framework

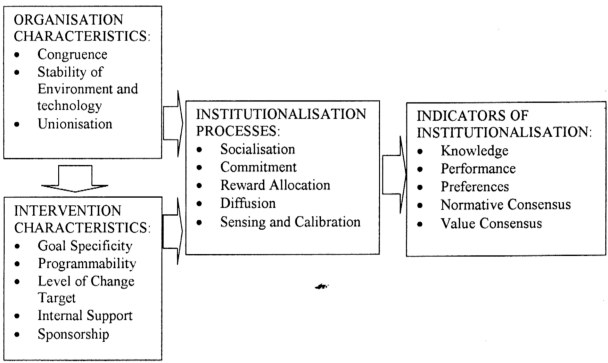
Figure 1 shows a framework for institutionalising organisational change, which has been adapted from Cumming and Worley's work (Cumming and Worley, 2001, pp.189). In brief, the framework shows how organisation characteristics influence intervention characteristics and each of them in turn influence institutionalisation processes, resulting in the desired institutionalisation outcomes. The outcomes show the extent to which the change has taken place and can, presumably be sustained over a length of time. The framework, based on the systems theory perspective, suggests that failure can occur because of inadequate or incomplete attention to any one of a combination of the organisation characteristics, the intervention characteristics, or the institutionalisation processes. Therefore, to ensure long-term success, the institutionalisation processes require as much attention as the other parts of the framework. As such, the framework can be used to explain current change situations or, it may be used to design future changes situations.

According to Jacobs (2002), the framework posits that institutionalisation processes infer a developmental order, such that employees having the competence related to the intervention is a prerequisite to employees having the level of commitment to carry out the change. In turn, employee commitment depends on the allocation of rewards, and the allocation of rewards is a prerequisite to the diffusion of the change beyond the immediate setting, and so on. Klein and Wrights (1994) on the other hand comments that logically, it follows that having the ability to meet new role expectations serves to reduce uncertainty, a primary barrier for accepting change.

Apart from Cummings and Worley's work, Ledford had suggested a process model of persistence to explain institutionalisation (Ledford, 1984). However, unfortunately empirical support for ether model to date is nil (Cummings and Worley, 2001, pp.197).

Omar (2002) suggested that a new dimension is added into the model (Figure 5). The dimension is 'divisional performance' containing sub-dimensions related to actual performances of an organisation – market share, profit growth, labour productivity, return on sales, return on investment, development of new products, sales growth capacity utilisation, cost control, personnel development, company image, and customer satisfaction. These elements are crucial for the survival of today's organisation. Generally, it is expected that positive relationships are presence for all the five dimensions i.e., satisfactory 'organisation characteristics' and 'intervention characteristics' will lead to satisfactory 'institutionalisation processes', further lead to satisfactory 'indicators of institutionalisation' and finally lead to satisfactory 'divisional performance', and so do the reverse.

Figure 1: Institutionalisation Framework



Source: Thomas G. Cummings, and Christopher G. Worley (2001). *Organisation Development and Change*. 7th Edition, Ohio: South-Western College Publishing.

2.5 Failure of organisational change

Logically, researchers and practitioners alike have been more inclined to report their successes rather than embarrassments. However, experience suggests that failure often provides a better basis for attaining the 'teachable' moment with individuals than any other approach. For example Jacobs and Hruby-Moore (1998) may have the dubious distinction of being the first researchers in the human resource development research literature to report a failed cost-benefit analysis study. Jacobs, Jones, and Neil (1992) again pointed out that most studies of this nature have sought to report more positive information that resulted from solving human performance problems, such as reporting increases in productivity, efficiency or quality. Success may gratify the ego of those involved, but failure is likely to be more powerful teacher to guide future actions.

Interest in organisational failure and the persistence of change appears to have emerged first in scholarly literature in the late 1970s and early 1980s. Goodman and Dean (1983) examined the persistence of change in selected organisations in which change programs had been successfully introduced and where positive benefits had initially been identified. They interviewed participants four to five years after the projects had been implemented and showed that only one third of the projects remained to any discernible degree, while the other were in decline or non-existent.

Jacobs (2002) explained that, from these early declarations about organisational failure, researchers have since sought to prescribe how best to implement the change effort itself. Even the most well planned programs are doomed to fail from the start unless a system approach of organisations is undertaken. They declare that failure can be expected when change efforts are focused on addressing problems from a relatively narrow perspective, that is, fixing a problem situation without recognising the antecedents and the context of the apparent problem situation. What is often lacking is the recognition that humans do not exist in a vacuum. Instead, people work within a performance environment, the components of which should be taken into consideration whenever a change is proposed. Say for example a training addresses only a single aspect of the performance environment only and, thus, is likely to have a limited impact on the organisation. Beer, Eisenstat and Spector (1990) also propose that organisational change is likely to fail as long

as it focuses on programmatic change, rather than on addressing more fundamental human issues such as participation, teamwork and organisational culture.

In spite of recent advances in organisational theory and change in management practices, the failure of organisational change remains an issue of concern. A study conducted by a consulting firm, A.T. Kearney (1999), reported that managers in 294 European medium-sized companies reported that only one in five change efforts were viewed as being successful. The remaining efforts either made some initial improvements but had failed to sustain them, or made no improvements whatsoever. 63% of organisations reported that they made some improvements but failed to sustain them. 20% of change efforts were considered a success and 17% reported no change whatsoever. Less than half of the total quality management programs showed any demonstrable results at all. A.T Kearny concluded that organisational change is hard to achieve.

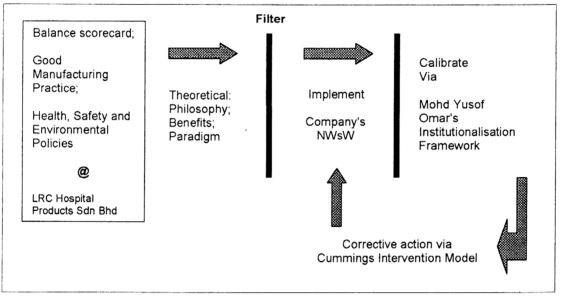
It seems that the failure of organisational change occurs as much as success, if not more. The challenge for organisational researchers and managers appears to be how to understand the variables that increase the likelihood of ensuring that organisational change persists long enough to achieve the intended goals of the change initiatives.

2.6 The research framework

This research is done based on Omar (2003) calibrating change model as shown below (Figure 2),

In the first stage of study, three change initiatives; Balanced Scorecard, Good Manufacturing Practices and Health, Safety and Environmental in the company will be examined in terms of its theoretical background, which covers the philosophies, benefits, and the paradigm of each of the intervention.

Figure 2: Mohd Yusof Omar Calibrating Change Model



Source: Mohd Yusof Omar (2003), *Unpublished Manuscript*, University of Malaya, Kuala Lumpur

Implementation of the concepts will normally be going through a filtration process in which the company will interpret the intervention concepts based on their perception and grasp elements that they perceived to be useful for the company. The implementation of changes is a process of translating the intervention initiative concepts into the organisational day-to-day practice and further making it a permanent part of the organisation, which is manifested as a form of new ways of working (NWsW). The second part of the study is concentrating on exploring the implementation of change initiatives in the company, with focus on how the company translates the three change initiatives into its organisational practice.

The third stage of study is concentrating at calibrating the change based on Mohd Yusof Omar's institutionalisation framework, with the aim to discover the level of institutionalisation achieved. The shortcomings and weaknesses will also be detected through the framework.

The final stage of the study would be to come out with complete corrective actions plan working out based on the findings in stage three. The corrective action plan will be developed based on Cummings intervention model, with four major dimensions; human process intervention, human

resources intervention, techno-structural intervention, and strategic intervention. The corrective action plans will finally be feeding into the implementation of NWsW in the company by targeting at all the shortcomings detected in stage three.

2.7 Balanced scorecard framework

A new synthesis: Balanced Scorecard was created out of the need to have a collision between the need to build long-range competitive capabilities and the immovable object of the historical-cost financial accounting model. The Balanced Scorecard retains traditional financial measures. However, financial measures are inadequate for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, vendors, employees, technology, and innovation.

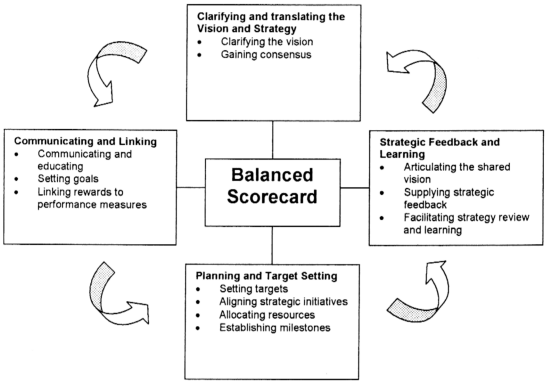
The Balanced Scorecard complements financial measures of the past performance with measures of the drivers of future performance. The objectives and measures are derived from an organisation's vision and strategy. It views organisational performance from four perspectives: financial, customer, internal business processes, and learning and growth. These four perspectives provide the framework for the Balanced Scorecard, as shown in figure 3. Corporate leaders may use the model to measure how their business units create value for current and future customers and how they must enhance their internal capabilities and the investment in people, systems, and procedures necessary to improve future performance (Kaplan and Norton, 1996, pp. 7-8).

2.7.1 Balanced scorecard as a management system

Balanced scorecard emphasised that financial and non-financial measures must be part of the information system for employees at all levels of the organisation. Front-line employees must understand the financial consequences of their decisions and actions. Senior managers must understand the drivers of long-term financial success. The objectives and measures are more than just an ad hoc collection of financial and non-financial performance measures. They are derived from a top-down process driven by the mission and strategy of the business unit.

Figure 3: Balanced Scorecard Framework

(Translating a Strategy into Operational Terms)



Source: Robert S. Kaplan and David P. Norton, 'Using the Balanced scorecard as a strategic Management System', Harvard Business Review (Jan – Feb 1996): 77

The model is translating a business unit's mission and strategy into tangible objectives and measures. The measures represent a balance between external measures for shareholders and customers, and internal measures of critical business processes, innovation, and learning and growth. The measures are balanced between the outcome measures – the results from past efforts – and the measures that drive future performance (Kaplan and Norton, 1996, pp. 9-10).

Companies may also use the scorecard as a strategic management system, to manage their strategy over their long run, and to accomplish their critical management processes (refer to figure 4):

- Clarify and translate vision and strategy
- Communicate and link strategic objectives and measures

- Plan, set targets, and align strategic initiatives
- Enhance strategic feedback and learning

2.7.2 The benefits of Balanced Scorecard

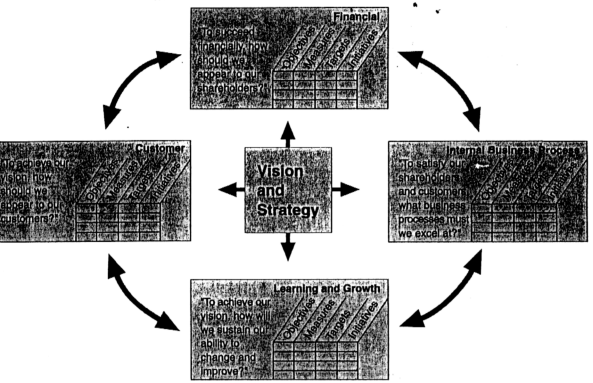
The Balance Scorecard provides executives with a comprehensive framework that translates a company's vision and strategy into a coherent set of performance measures. It translates mission and strategy into objectives and measures. It provides a framework, a language, to communicate mission and strategy; uses measurement to inform employees about the drivers of current and future success. A Balanced Scorecard should be used to articulate and communicate the strategy of the business, and to help align individual, organisational, and cross-departmental initiatives to achieve a common goal. The balanced Scorecard does not strive to keep individuals and organisational units in compliance with a pre-established plan, the traditional control system objective. Instead, it should be used as a communication, informing, and learning system, not a controlling system.

The four perspectives of the scorecard permit a balance between short and long-term objectives, between outcomes desired and the performance drivers of those outcomes, and between hard objective measures and softer, more subjective measures (Kaplan and Norton, 1996, pp. 25).

2.7.3 Applications of Balanced Scorecard in LRC

The application of Balanced Scorecard concept was started with developing the overall vision and strategy for the company by management team members (appendix 1). This was followed by setting objectives, measures, and targets based on the four perspectives suggested by the framework (financial, customer, internal business processes, and learning and growth). The objectives, measures and targets set will then be published and put on notice boards across all the departments in the company, as a tool to communicate to all the employees.

Figure 4: Balanced Scorecard as a Strategic Framework for Action



Source: Robert S. Kaplan and David P. Norton, "Using the Balanced Scorecard as a Strategic Management System," *Harvard Business Review* (January-February 1996); 76. Reprinted with permission.

The management team on monthly basis will monitor the actual results, where unachievable objectives will be highlighted for corrective actions by respective personnel/ department. The details of the results will be communicated to all the employees by publishing and putting on each department's notice boards. Overall evaluation on the objectives, measures and targets will be done towards the company's financial year-end and new objectives and target will be set for the subsequent year. The objectives, measures, and targets for year 2001/ 2002 can be seen in appendix 2. Samples of monthly-published balanced scorecard results are also presented in appendix 3.

In general, the basic concepts of Balance Scorecard were followed. However, certain crucial parts suggested by Kaplan and Norton in the

Balanced Scorecard as a strategic framework for action are seriously in absence. The elements are,

- Educating
- Linking rewards to performance measures
- Aligning strategic initiatives
- Allocating resources
- Articulating the shared vision
- Facilitating strategy review and learning

Apart from that, the company is using the framework as a controlling system, rather than as a communication, informing, and learning system as being proposed by Kaplan and Norton.

2.8 Good Manufacturing Practices (GMP)

Good Manufacturing Practices (GMP) regulated by United States Food and Drug Administration (FDA) in 21 CFR part 110 are minimum sanitary and processing requirements for foods, drugs, biologics and medical devices companies.

GMP set forth in the Quality System (QS) regulation are promulgated under section 520 of the Food, Drug and Cosmetic (FD & C) Act in the United States of America (USA). They require that domestic or foreign product manufacturers have a quality system for the design, manufacture, packing, labelling, storage, installation, and servicing of finished medical devices intended for commercial distribution in the United States. The regulation requires that various specifications and controls be established for devices; that devices be designed under a quality system to meet these specifications; that devices be manufactured under a quality system; that finished devices meet this specifications; that devices be correctly installed, checked and serviced; that quality data be analysed to identify and correct quality problems; and that complaints be processed. Thus, it helps to assure that medical devices are safe and effective for their intended use. The Food and Drug Administration (FDA) monitors device problem data and inspects the

operations and records of device developers and manufacturers to determine compliance with the GMP requirements in the QS regulation.

The QS regulation is contained in Title 21 Part 820 of the Code of Federal Regulations. This regulation covers quality management and organisation, device design, buildings, equipment, purchase and handling of components, production and process controls, packaging and labelling control, device evaluation, distribution, installation, complaint handling, servicing, and records (Food and Drug Administration, 2001). FDA is generally working towards harmonising its GMP requirements with international standards like ISO9001, ISO13485, and EN46001 (Food and Drug Administration, 1996).

2.8.1 The benefits of GMP

It is a compulsory requirement for companies producing foods, drugs, biologics or medical related products to strictly adhere to United States FDA strict requirements to enable them selling their products in US.

Since LRC is producing medical latex gloves, and its largest potential market is US, it is a must for the company to strictly adhered to the strict rules and regulations set by FDA. Failing to do so would means a lost of half of its global surgical gloves market. Successful penetrations of US market will directly or indirectly improve/ help in penetrating other markets around the world. A good example would be Japanese market, which is always following the standards set by US.

Apart from having reactive needs to establish necessary systems and procedures outlined by FDA in GMP, GMP itself is a useful tool to ensure effective and safe environment and procedures in producing critical medical products, hence resulting in producing safe finished medical products. This will definitely help in ensuring the company's long-term survival in medical products industry.

2.8.2 Applications of GMP in LRC

Apart from being a ISO9001: 2000 certified company, with basic quality management system in place for many years, LRC is also maintaining appropriate ISO13485, the requirements of the Medicines Act, the Medical

Devices Directive 93/42/EEC, the Personal Protective Equipment Directive 89/686/EEC, the Cosmetic Directive 76/768/EEC and the US FDA QSR (Appendix 4). Therefore, at the system and documentation level, it is not an issue for the company to fulfil FDA requirements on GMP. All the requirements have been maintained and monitored by the company's quality assurance department stationed in HQ.

The more critical part under the local management responsibility is the application of GMP plant wide at operational level, especially among the plant workers. With that in mind, the company had outlined some crucial GMP requirements in simple language and published in small pocket booklet to be distributed to employees at all levels as a general guide to comply with GMP in their day-to-day work, in both English and Bahasa Melayu (Appendix 5). Basic operative training on GMP is conducted during orientation for each newly joined employees from top to bottom ranks. GMP related posters and work instructions with simple languages are also displayed at various highly visible corner of the plant to further enhance GMP awareness among workers. It is expected that each employee in the company will develop GMP as part of their working attitudes and culture in long run.

2.9 Health, safety and environmental policies

2.9.1 Health and safety

A safe and healthy work environment refers to both the physical work environment and its hazards for the physical safety and health of the organisation's human resources and to those aspects of work and organisation which may adversely affect people's psychological, as well as their physical, safety and health. Workplace health and safety is best achieved by enabling those in workplaces to manage safety in ways that make sense to them. Good processes must be in place to assess, eliminate, isolate, or minimise hazards that may harm people.

According to Occupational, Safety and Health Act 1994 (Act 514), Part IV, Section 15 (20) (OSHA), it is the duties of employers to take all practicable steps to ensure the safety of employees while at work. The duty extends include in particular,

- The provision and maintenance of plant and systems of work that are, so far as is practicable, safe and without risks to health;
- The making of arrangements for ensuring, so far as is practicable, safety and absence of risks to health in connection with the use or operation, handling, storage and transport of plant and substances;
- The provision of such information, instruction, training and supervision as is necessary to ensure, so far as is practicable, the safety and health at work of his employees;
- So far as is practicable, as regards any place of work under the control of employer or self-employed person, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of the means of access to and egress from it that are safe and without such risks;
- The provision and maintenance of a working environment for his employees that is, so far as is practicable, safe, without risks to health, and adequate as regards facilities for their welfare at work.

Employers are required to have systems for identifying hazards to employees at work, and must assess whether or not each hazard is significant. This means that employers must take all practicable steps to eliminate a significant hazard, to isolate a significant hazard if it cannot be eliminated, or to minimise the likely harm to employees, if the hazard cannot be totally eliminated or isolated.

Employers are also required to make the following information available to employees,

- What to do in the event of emergencies.
- Where safety clothing and equipment are kept.
- Hazards to which they might be exposed, or which they might create while at work, and told how they should minimise the likelihood of those hazards causing harm to others.
- Given the results of any safety and health monitoring of the workplace or of their own health.

Employees, on the other hands, are also required to take all practicable steps to ensure their own safety while at work, and to ensure that nothing they do, or fail to do, causes harm to others.

Generally, to ensure an effective safety and health system is in place, presence of the following elements is essential,

- Management commitment
- Documented safety and health policy
- Committee organisation for safety and health
- Line responsibility
- Standards of performance
- Audits
- Communications
- Safety training
- Safety and health goals and objectives
- Accidents/ potential accidents investigation and reports
- Safety and health support staff

2.9.1.1 The benefits of safety and health

Inevitably, the improvement of workplace safety and health has both direct and indirect costs. For most organisations, the benefits soon outweigh the costs. Those organisations already face significant direct costs – in the form of lost time and production following accidents and injuries increased accident compensation premiums, fines and damages payments if prosecuted, and the repair or replacement of equipment. Indirect costs – loss of morale, labour turnover, absenteeism, and the effect of positive employee relations, for example – are less easy to quantify, but can be significant too.

To emphasise this point, here is a list of the costs, which could be caused by a single accident in the work place (Rudman, 2002, pp.602):

- Wages paid to workers who are attracted to the accident site and, therefore, are not working;
- Equipment or work in progress that is interrupted, spoiled or damaged;
- Subsequent lost and delayed production;

- Repair of damaged equipment or work in progress;
- Clearing and cleaning the accident site;
- Diminished productivity from the injured employee after returning to work but before being able to resume full work output;
- Additional supervisory or management time (incurred because accidents must be investigated, and reports made and processed);
- Extra overtime costs to overcome the initial interruption of work;
- Recruitment, selection or transfer, and training of a replacement for the injured worker while he or she is recuperating;
- Temporary hire of plant or equipment while transfer unsafe or damaged equipment is repaired or replaced.

2.9.2 Environmental systems and policies

The past two decades have been characterised as the era of environmental consciousness. A substantial number of environmental laws and regulations have been enacted to hold businesses accountable for their environmental responsibilities. There are two significant types of environment accountability: mandatory requirements and voluntary initiatives. Mandatory requirements involve corporations' compliance with applicable governmental laws and regulations governing the ongoing environmental conduct of corporations. Voluntary initiatives are an integral part of corporate social responsibilities, which demonstrate corporation's commitment to environmental consciousness and obligations.

Rezaee and Elam (2000) suggested that corporations are now shifting away from environmental compliance toward environmental management that continuously improves their environmental advances. International organisation for standardisation (ISO) provided global business with the unique opportunity to (ISO14000 standards) to manage their environmental issues. ISO14000 environmental standards will eventually require companies to provide information on their environmental management system (EMS) by issuing annual environmental reports.

Effective compliance with environmental laws and regulations requires commitment by companies to environmental concerns as well as environmental management systems, accounting, and auditing.

The ISO14000 environmental series consists of 21 standards intended to assist organisations in managing their environmental requirements and to ensure that their environmental policies and practices conform with their missions and goals. These environmental standards are divided into six categories:

- Environmental management systems;
- Environmental auditing;
- Environmental performance evaluation;
- Environmental labelling;
- Life-cycle assessment; and
- Environmental aspects in product standards.

This international standard specifies the requirements of such an environmental management system. It has been written to be applicable to all types and sizes of organisations and to accommodate diverse geographical, cultural and social conditions. The basis of the approach covers the following elements,

- Environmental policy
- Planning
- Implementation and operation
- Checking and corrective action
- Management review

The above must be supported by continual improvement. The success of the system depends on commitment from all levels and functions, especially from top management. A system of this kind enables an organisation to establish, and access the effectiveness of, procedures to set an environmental policy and objectives, achieve conformance with them, and demonstrate such conformance to others. The overall aim of this international standard is to support environmental protection and prevention of pollution in

balance with socio-economic needs (International Organisation for Standardisation, 1996).

2.9.2.1 The benefits and environmental systems and policies

Many companies are now facing exposure to environmental costs and obligations under environmental laws and regulations. Environmental risks are uncertain, and its outlays are significant. ISO14000 environmental standards assist organisation in managing their environmental requirements and in ensuring that their environmental policies and practices conform with their mission and goals. Organisations of all sizes and in all industries will be challenged with obtaining ISO14001 certification. ISO14000 establishes environmental standards that assist organisations in addressing their environmental issues.

ISO14000 environmental standards provide guidelines for the proper implementation of an effective EMS, which can be integrated with other managerial functions to assist organisation in achieving environmental and economic goals. ISO14000 also set forth standards for conducting environmental auditing and registration to ISO14001. ISO14000 registration may benefit organisations by helping them to:

- Comply with a major customer who may require registration to ISO14000.
- Achieve a competitive advantage in the global market.
- Improve compliance with applicable environment laws, regulations, and standards.
- Reduce their exposure to environmental liability.
- Improve community goodwill by preventing pollution and waste.

2.9.3 Applications of Health, Safety and Environment systems and policies in LRC

Proper health, safety and environment systems and policies are already in existence in LRC for long. All the 11 points outlined in 2.9.1 are already in place in LRC. The overall systems worked out based on the group's

health and safety policy (appendix 6), which is applicable across the group's sites throughout the world.

Locally the systems are controlled and coordinated by health, safety and environmental department headed by a manager, overseeing all the three plants in Malaysia producing surgical gloves. Apart from being ISO14001 accredited company for it's two manufacturing sites, and the Selangor site (which is the case of this study) scheduled to obtain the accreditation by June 2003, all the local policies and systems are also strictly adhered to all the local related legislations. These include, Environmental Quality Act 1974 (Act 127), Factory and Machinery Act 1967 (Act 139), Occupational Safety and Health Act 1994 (Act 514), Local Government Act 1976 (Act 171) and Malaysia Law Act 551 – Malaysia Rubber Board (LGM) 1996. The group is also producing a proper safety and health guides for all it's subsidiaries based on OHSAS18001.

The group formulated proper safety and health policies, which is applicable to all sites throughout the world (appendix 6). Locally, it is monitored and managed by a safety and health committee, with proper representative from employer and employee per OSHA requirement. The group also formulated safety and health standards in its safety and health manual, which is formulated based on OHSAS18001, applicable to all sites across the world (appendix 7). HSE manager as well as group representatives from UK also conducted proper audits on frequent basis. An example of audit report done by group HSE manager is shown in appendix 8. Proper Standard Operating Procedures (SOPs) were also in place (an example is shown in appendix 9). Specific local safety and health objectives were also formulated and revised on yearly basis. For example, the local objectives formulated for year 2003/04 were – i. Reduce accident rate by 25%, ii. Reduce loss time by 50%, iii. Plant wide H&S Procedure in dual language, iv. H&S Training for Contractors, and v. OHS 18001 by 2004. Proper reports (e.g. accident reports) were also being generated on frequent basis and communicated to staff at all levels through company notice boards (appendix 10).

LRC is also having a proper environmental policy, formulated by the group for global application (appendix 11). Specific environmental objectives were also being set for two of it's other plants (appendix 12), but yet in it's

Selangor plant. Proper information being communicated through distribution of leaflets (appendix 12) in language understands by operators. Global environmental report were also being published each year and distributed/ communicated to each sites (appendix 13).

Even though at organisation and documentation levels the systems are well in place with proper accreditation, it remain a great challenge for the local management team to institutionalise the essence of safety, health and environmental systems and policies so to make employees aware of the importance and hence incorporate the practice into their daily works, or in another words, to make it an attitude among the employees. It is also noted that the controlling department, which is stationed at its national HQ in Kulim, Kedah, is paying more attention at it's two plants in Kedah, and relatively less attention has been given to it's Selangor plant. This is especially clear at implementation level with lots of programs being behind the planned schedule. Examples like HSE committee meeting has not being carried out on pre-set schedule, setting up of emergency rescue team (ERT) has been postponed for three years, ISO14001 accreditation is behind the schedule for a year, various safety and health equipment operating training has keep postponing and many more. This has generally contributed to lack of commitment and awareness among the employees on health, safety and environmental issues.