CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 GENERAL

Though there has been a steady growth in the automobile sector in India, India is still a player of little consequence in global auto production, despite total quality management (TQM) playing an increasingly important role in the survival and growth of companies in the automobile sector (Khanna et al., 2002). TQM is a team approach strategy that integrates and encompasses the goals of the organization with its human, capital, and financial resources and must be a corporate strategy that integrates planning, operations, and the needs of customers and employees (Peter Kia Liang 1997).

Total quality management (TQM) has been a widely applied process for improving competitiveness around the world. The implementation of TQM usually consists of both TQM philosophy from Deming’s “14 points”, Juran’s “ten steps”, and Crosby’s “14 steps” and techniques such as SPC, QCC, benchmark, QFD, etc. The integration of philosophy and methods are usually used in implementing practices of TQM. The integration of TQM philosophy and tools positively influenced both cost reduction and business performance (Fenghueih Huarng et al., 2002). Total quality management (TQM) has become a part of the corporate management parlance on a global scale. While it was earlier regarded as “buzz word”, “hype” and “fad”, it is now considered a “must” for survival and success. The ever increasing number of publications is good evidence of the growing interest about TQM.
Total quality management (TQM) has spread its wings in every sphere of the global corporate world and Indian companies are no exception (Jagadeesh 1999).

The various surveys independently conducted by researchers and business publications have revealed that awareness on quality of products and services has picked up in India. With quality based competition intensifying, Indian industries and business people are showing keen interest in improving the quality of products through TQM. A number of organizations, private and government are actively propagating TQM through a variety of training and educational programs.

TQM has proved to be a vital ingredient for success, and now has its permanent roots in the “mission and vision” of the Indian corporate sector. However, based on common observations the requirements for quality to succeed in India can be summarized as follows:

- A strong consumer movement;
- A sincere and committed drive by the corporate sector to keep quality as the main focus;
- Strict enforcement of standards by the regulatory bodies and authorities;
- Avoidance of multiple grading of quality in products, like export quality, first grade, seconds, import rejects, etc.,
- Setting an example in adhering to high quality performance and output, before pointing to others.

While TQM no doubt has enabled the Indian companies to improve the quality of products and services, the international market demands still higher quality levels to give due recognition and acceptance.
This means continuing the work with more focused efforts by Indian companies in their quest for quality.

Nicholas Regan et al., (2002) states that the lack of strategic business planning is a major drawback in the implementation of business process initiatives such as total quality management. In addition, it is evident that strategic planning firms achieve better performance than other firms. However, strategic planning often fails due to problems or barriers encountered at the implementation stage. They examined the concept of strategic planning and identified the barriers to its implementation. It considers the suitability of formal strategic planning as the key to eliminating or reducing implementation barriers by comparing the extent to which the barriers are experienced in formal and informal planning firms. They also examined the extent to which the barriers are experienced by high and low performing firms.

The analysis indicates that formal planning firms emphasize the characteristics of strategic planning to a high degree than informal planning firms. It is reasonable to suggest that this emphasis is one of the key factors in the lower incidence of the barriers indicated in formal planning firms. Adopting a formal strategy approach will bring about higher performance. Finally these can be used as a basic tool to identify and overcome the barriers to effective strategy deployment. Findings provide an ideal foundation for the review of the critical aspects of the operation and to identify the actions necessary for the effective deployment of strategic planning and ultimately achieving greater competitive advantage.

TQM works in the service and production industry helping to increase motivation, leadership, and creativity. These are the factors that are vital for the productivity, efficiency, profitability and quality of work in organizations. The best strategy offered is to understand and evaluate
constantly its five building blocks for profitability, productivity, ability and quality to review its current performance and capability. It is important to realize that not all quality improvement techniques will lead to improved quality, since every organization has to face different pressures and obstacles from its leaders, employees, and environment. It can then choose the game plan that is appropriate to its current performance, resources, capability and needs. TQM cannot be accomplished overnight. The process of constant improvement of the production and service system is a mindset that requires balancing teamwork with the five pillars of TQM. It is about choosing techniques and streamlining them to implement crucial, narrow, and focused TQM activities in a small number of critical processes.

The key to business excellence and success is employee commitment and linking improvement effort in the most important areas to the needs of customers, employees and the business. It can increase employee satisfaction, accelerate revenue growth and produce good financial results (Cassidy, 1996).

2.2 LITERATURES RELATING TO POLICY DEPLOYMENT

Dale (1990) says “Policy deployment within a process of long-term planning is one of the features of “the approach” to TQC by Japanese companies”. He described the deployment of the presidents’ annual management policy plan through the organizational hierarchy. The plans and targets are discussed and debated at each level until a consensus is reached by catchballs. Further he says PDCA cycle is extensively used and that the discipline of Policy deployment and agreement at each level ensures everyone is working in the same direction. Top managers have to demonstrate leadership (Kondo, 1997) and communicate effectively throughout the
process if they are to foster alignment and continuous improvement while maintaining sufficient levels of control.

Lori Silverman et al., (1992) discussed the systems necessary to move from vision to action which includes the prerequisites of policy management system, a framework for policy management, benefits of policy management by objectives and the concepts used in policy, cross-functional and daily management system. The use of critical success factors is only common to daily and cross-functional management systems. Critical success factors are those few things an organization must have to achieve its mission. It is suggested that an organization should identify no more than six to eight critical success factors. The critical success factors are derived from the mission in conjunction with the organization’s internal and external environment assessments. The relationship between policy, cross-functional and daily management is complex, dynamic and somewhat unique to each organization.

The elements of a policy management system build upon and influence cross-functional, daily management activities. Although most of the task-level processes managed by in function work groups in daily management are driven by the organization’s mission, some work groups will have to manage task-level work processes. This assists the organization to meet its vision, impact its key cross-functional and daily management targets, which need to be aligned. So that the work done at the in-function work group level propels the organization toward it’s vision instead of diverting it according to old plans. Taking an organization from vision to action is not a simple task. It requires both daily management and cross-functional management systems to be fully operational before policy management can truly be effective. Since no one organization has discovered the perfect
answer, it is upto each organization to develop its own approach based on its quality philosophy.

Howard Eckstein (1992) reviewed the concept of TQM, policy deployment and the value analysis tool, function analysis system technique (FAST) to show how FAST adds significant value to TQM and policy deployment. The FAST diagram permits the entire customer required functions, and the means and costs of their attainment to be displayed. This offers the advantage of allowing an analysis of all of the functions and their relationship to the overall organizational goals. The identification of activities, which are at, cross-purposes, as well as activities, which are mutually supportive, is also facilitated. This is very important since, in many complex organizations, activities, which support one management policy, are often damaging to another management policy. Many organizations also have policies, which are in conflict with each other.

An organization would be more successful if all of its activities were supportive of its entire goal, and all of its policies were mutually supportive of each other and of the overall organizational goals. Finally the author concludes that the policy deployment and FAST share similar objectives and similar methods. By using the VE/VA disciplines of function definition, functional analysis and FAST, policy deployment can be made more effective. We must be forever seeking new approaches for helping our clients improve products, markets, organization, services etc., and we must spend our energies not on proving our approach to continually satisfy the needs of our customers using function based thinking. The author believed that the cultural climate encouraged by TQM will promote and cause this type of challenging activity to flourish.
Masao Kogure (1994) discussed the theoretical background and significant points of the Hoshin Management and cross-functional management system, which have been developed over the past thirty years among Japanese companies practicing TQM. With his experience in this field, he told that the above systems are applicable not only to Japanese companies but to any company in the world when certain conditions already exists. The management activities are carried out in organization, which exhibit a hierarchical functional departmental management structure. Hierarchical management refers to a management organization where management duties are allocated to hierarchical levels in the organization such as the levels represented by general manager, manager and assistant manager in an office or foreman in the factory. Functional management refers to a management organization where management activities are carried out in functional units, called as divisions or departments in general, which are made by dividing functions into two groups or types. One group of functions correspond to the functions in a production process, such as research and development, design, purchasing, manufacturing, sales etc.

Another group of functions corresponds to the division of activities in managerial processes. These functions include preparatory functions such as planning, market surveys and performing functions which would be the actual performance itself such as the line functions of research and development, design, purchasing, manufacturing etc.

So the delegation of authority and responsibility to each level of management differs according to the span of control ie., the number of immediate subordinates whom a superior can control effectively in an organization and also by other factors such as the company’s scale, the kind of industry and the state of organization. It also differs in how superiors determine their control points, a kind of managerial tool used by managers in
hoshin management and routine management. Finally, he concludes that it is difficult to uncover a standard way that is germane to all companies, but it is possible to exhibit a typical model through accumulated experiences during the long history of TQM in Japan.

Shoji Shiba et al., (1995) told that the hoshin management was developed in Japan with heavy influence from Japanese culture. It is one of the most important practices of TQM. TQM includes three types of continuous improvement within its concepts namely, process control improvement, incremental improvement and breakthrough or step function improvement. To get a step function improvement, strong alignment is necessary throughout the business. Through, hoshin management, total employee participation is aligned to achieve the breakthroughs and thus the most important business goals. Also, countries in the west may need to find their own ways to introduce hoshin management, ways that are appropriate for their particular country and company culture.

The author developed a model, which consists of four phases in hoshin management namely: setting the hoshin, deploying the hoshin, monitoring the hoshin and diagnosing the hoshin. He suggests that timing is critical to the hoshin setting, deploying, and monitoring phases and also setting the hoshin late, results in delayed hoshin execution and jeopardizes the planned breakthrough and also for monitoring, adequate documentation is critical to uncover any issue causing a target shortfall.

Deploying the hoshin requires adequate time for execution. In the monitoring phase, adequate documentation is critical to uncover any issue causing a target shortfall. Documenting the deviations and future implications proves useful when diagnosing the hoshin management system. The diagnosis will require going to the source.
Rainer Feurer et al., (1995) analysed the strategy formulation and implementation at HP. HP achieves this by making every individual a strategy owner. Such an approach ensures that the formulated strategies take account of the business environment and opportunities while maintaining speed and focus. The approach is supported by a structured framework, which includes a selection of tools. This ensures that strategies are constantly reviewed, changed, communicated and aligned. It also forms the basis for developing a coherent corporate strategy. In dynamic environments, researchers should constantly examine their assumptions and align the research objectives in line with changes in both the strategic focus of organizations and the underlying conditions of their competitive environments.

The implications for practitioners are fourfold. First, strategy formulation cannot be detached from strategy implementation and in this context the process of management plays a key role. Second, strategies should be developed at the point where the highest quality knowledge exists. Third, supportive structures are necessary if individuals are to act readily on such knowledge. Fourth, the knowledge generation process relies on the availability of the appropriate tools and frameworks. These implications call for an even closer relationship between researches and practitioners when studying strategy formulation and implementation in dynamic environments.

Mulligan et al., (1996) believes “a major strength of hoshin is its added dimension of adaptability that arises from the constant application of Deming’s PDCA methodology”. However, while knowledge and skill in the use of quality management tools and techniques is a prerequisite for policy deployment, perhaps the most important and most difficult aspect of policy deployment, due to the corporate culture required, for western managers is the “deployment” phase – catchball. It is essential that employees understand what targets should be achieved and how to do so. During the catchball
process, it is necessary to reach a consensus for targets and means across functions and between varying levels of the organisation.

David Walden (1997) quotes the Shoji Shiba model for hoshin management. He clarifies the important concepts found in the description of hoshin management namely the distinction between metrics and the targets for metrics, the distinction between result metrics and process metrics, the importance of planning the means for achieving a goal in addition to picking the goal itself and finally, the alteration of consideration of goals and metrics to clarify in one’s own mind what one hopes to accomplish, i.e., creation of operational definitions for goals.

Hoshin management provides an opportunity for managers to practice PDCA themselves. However, hoshin management as normally practiced includes participation of managers from throughout the company, inter level catchball and a month or two to make the yearly plan. To many US managers, hoshin management appears complex and documentation intensive, making them reluctant to try it. He says that a company’s first experience with hoshin management doesn’t have to be a company-wide level. Instead a divisional or departmental team can apply the model to a planning task. He suggests that the exercise can be modified to be an appropriate tool for actually planning substantial projects that are not part of company-wide hoshin management.

The most important policy deployment concepts to be drawn from the writings of Dale (1990) and Kondo (1997) are:

- Leadership.
- Communication.
• Control.
• Review.

However, despite the defined process and benefits to be gained from effective policy deployment, even in Japanese companies there appear to be some fundamental problems with applying the system.

Yoshio kondo (1998) described the essential steps of “hoshin kanri, or policy management, in Japanese companies and here catchball is considered as the key element which is vital during the deployment stage. The way in which the process is done differ slightly from company to company. The rotation of the PDCA cycle is of basic importance in promoting company-wide quality control. It is indispensable for continuous improvement. Hoshin kanri was started in Japanese companies to rotate a PDCA cycle of companywide size, and it is the stage where the top management displays their leadership. The author concludes that the essential points of hoshin kanri such as annual policy and medium to long-term policy, the establishment of quality policy, converting methodological policy into objective policy which is composed of aims, targets and priority strategies, the top-down and bottom-up deployment and the meaning and practice of “catch-ball” in the deployment process, and the top management internal QC audits were explained.

Lee et al., (1998) opines that the policy deployment is the way to align all efforts in the company towards its managerial goals. An increasing number of organisations, as part of a strategic planning approach to continuous improvement, are starting to use policy deployment. In Western organisations the interest in policy deployment has primarily been generated by the use of self-assessment against a recognized model for business excellence such as the European Foundation for Quality Management
(EFQM) Model and Malcolm Baldrige National Quality Award (MBNQA). It has been found that policy deployment based on the Japanese *hoshin kanri* concept is a good method of engaging all employees in the business planning process, focusing an organisation on the vital few objectives to achieve business results and providing an effective means to track progress against the set objectives.

Also, *hoshin kanri* or policy deployment is simply a PDCA applied to planning and execution of a few critical strategies of organizational objectives. They also referred to a search of ASI / INFORM database and reveals only nine or ten articles available on policy deployment. Dale (1990) concludes that, “there is little doubt that the policy deployment method can assist an organisation to attain its corporate goals”. He suggests that it ensures improvement activities, which are integrated in corporate objectives and that it can resolve conflicts in time, resource and initiatives.

Glenn Mazur (1998) introduced strategic planning and deployment methods to small and medium enterprises. The pressure on small and medium enterprises in today’s economy is to do more for their customers, to do it faster and to do it more cost effectively. Also, small and medium enterprises often lack the time and manpower to implement complicated strategic plans. A system of analyses coupled with powerful, yet easy to perform thinking tools will be explained through case studies of manufacturing and service components. This system will help executives and managers in small and medium enterprises more quickly to make informed and creative decisions and issue directives to implement them.

The author had given the essential step in small and medium enterprises strategy, which includes vision, mission, strategy and tactics. Here the verbal algorithm is used to help the entrepreneur to articulate the vision.
The value of this algorithm is that it forces clarity and measurement. A common condition of vision statements in organizations is that they tend towards the abstract. Missions are activities over which we can exert enough control so that we can predict that their performance will be adequate to achieve the vision. SWOT analysis is a useful tool for analysing the organization’s current business environment.

Mohammed Zairi (1999) pointed that the critical aspects of being successful in a modern business context is, having clear vision, a balanced journey for the future based on a market-oriented approach and building core competencies of the organisations concerned. The richness of best practices demonstrates that policy and strategy has to be tackled as a whole process, which needs to be managed and reviewed on a regular basis. Benchmarking analysis of several applications of hoshin planning in the UK and Europe has been analysed. The analysis has helped to distil out distinctive features and common generic practices, which have formed the basis of identifying what the critical factors of implementation, are in so far as hoshin planning is concerned. These factors therefore form important rules that need to be adhered so that the benefits promised by hoshin can be achieved.

Lee et al., (1999) examined the policy deployment in a business unit of a UK company’s operation as a major corporation, considered as a world leader in business improvement. In this study, the application of policy deployment at an operational level is investigated to determine how managers deploy and manage directions and assess the effectiveness of the catchball processes. In the business unit studied, policy deployment could have greater impact. A generic catch - reflect - improve - scrutinize – pass (CRISP) approach to policy deployment is proposed by which vision, mission, goals, objectives, targets and means can be more effectively deployed.
Marla Hacker et al., (2001) tells that the linkage between strategic planning and daily activities within an organization is often obscure. Perhaps as a consequence, many well-developed strategic plans fail to be implemented, and required goals and objectives are not attained. Strategy deployment processes link strategic plans with implementation activities. Instead of investing more time and energy in improving planning or implementation processes, an organization should first examine the deployment processes that can be used to link strategic plans with action. The authors studied the application of formal strategy deployment processes within three US federal agencies. Following the analysis of each individual case, an overall assessment of existing supporting and restraining forces that should be considered when working to improve deployment processes is discussed.

Finally, the author concludes that formalization of strategic planning processes beginning in the 1970s and implementation processes in the 1980s has helped many organizations improve its performance. The next step function improvement comes from helping more organizations tighten the link between their strategic plans and their daily work activities and this is especially true in the federal government where strategic objectives often seem so far removed from the daily work.

Witcher (2002) told that the policy management is a top-level management system for mobilising a company’s wide effort for realising strategy. He used a strategic management framework (FAIR) to present its characteristics, which summarises the policy management framework. The main findings from this work says that the top-level management in mobilising an organization’s wide effort must achieve four main things from its strategic management namely focus, alignment, integration and review (FAIR). The FAIR perspective is very much a strategic management one, but
it has similarities to a quality management PDCA view, where PDCA equates to plan-do-check-act. PDCA has been used in a similar way to the use of FAIR, as a framework to identify the elements of policy management. Policy management is difficult to pin down to an exact chronology since the research found that the PDCA “stages” of the annual cycle can overlap considerably in practice. The research found that policy management differed according to experience. It is recognisably the same thing in all the companies, but senior managers differed in their style of management.

A critical aspect concerned the degree to which managements administered their systems. If this is done carefully and with reflection, then policy management is more likely to be consistent throughout the organization and reviews in particular is more likely to function effectively. There is a danger in policy management that top level management may go to the other extreme and state objectives and policy as very simple, and then do more than exhort people to try harder and leave it to local interest to settle priorities.

While this is consistent with many ideas of leadership and creative management, it cannot by itself guarantee a sustained effort in daily management that is in-line with the overall corporate or organizational purpose. The system is robust enough to be managed incompletely, some elements can be neglected, and even left out, so that there is the danger that policy management may eventually degenerate into a more traditional form of top down MBO. Where it worked best, policy management had become a way of management of objectives (MOO not MBO).

This involved a coordinated system of an organization’s wide review based on PDCA approaches to process management. It is best actively used by top level management to provide strategic focus, to align plan, to
integrate target and means into operations, and to ensure that the whole system can be reviewed in terms of cross functional performance. The management claimed important benefits in this respect, especially with regard to strategic transparency- where the management knows at any one time where operations stand in terms of organization’s strategic objectives.

Mike Walker (2002) says that achieving breakthrough improvements and ongoing organizational learning in complex and dynamic situations requires systematic management processes for logical, customer-driven and team-based planning and implementation, such as Quality Function Deployment (QFD) and Policy Deployment (PD). QFD is a rigorous approach to customer research, market positioning and strategic planning, whereas PD provides a disciplined approach to policy deployment and progress control. The combined approach is recently used for planning industry research and development in the Australian beef industry.

Kim Hua Tan et al.,(2002) told that much of the literature has been written about manufacturing strategy and its role in supporting firms in achieving competitive advantage in the marketplace. However, little is available on the process of manufacturing objective deployment, that is, on how to translate a given objective into the choice of action plans. There is a lack of methods to assist managers in identifying the range of alternative actions prior to arriving at a final decision. To address this problem, the authors revisit the Burbidge’s connectance model and explain how the concept could be utilised as a tool for manufacturing improvement action plan selection.

A software tool, TAPS is developed based on the concept and tested in a number of industrial case studies to assist managers in the selection of manufacturing improvement action plans. Through TAPS, the authors
provide a way for managers to approach manufacturing objectives deployment. A major impact of this tool is to increase the transparency and traceability of managerial decision making. The visualisation aspects are valuable in allowing managers to capture and share their implicit understanding of variable relationships. In doing so, underlying perceptions, beliefs, and values are exposed, and can be questioned and discussed. The final developed networks allow the logic behind a decision to be traced. These aspects are, the authors believed, transferable to other areas of decision making, and suggest this as an area for further research.

Barry Witcher (2002) studied the use of hoshin kanri (policy management) in the UK through ESRC sponsored research project. Here tracer study is used to follow in real time, the development and management of annual policies in three Japanese subsidiaries based in the UK. It involved tracing through policies in real time, to identify how targets and means were developed and deployed in daily management. The study explored hoshin kanri as a PDCA led strategic management process. There are important issues associated with each part of this PDCA cycle with which practitioner’s wrestle, but in general there remain important company-wide benefits. Top management goals were made visible in terms of their daily management, so that organizational members were able to self-manage their own targets and means in ways that enabled effective agreement with all those concerned. In other words, policy had been built into work and this had enhanced commitment to top management goals.

Alex Wright (2003) reviewed various literatures surrounding the relationship between quality and strategy. The argument presented is that quality has failed to influence organization’s strategy and strategic processes due to its continued operational bias. Operational improvements brought about by adopting a quality approach are done so within higher order or
strategic constraints. Therefore, the benefit to organizations of operational improvements is limited to their convergence with the strategic perspectives of the organization. The author proposed the traditional calls for quality as an essential operational.

In contrast to this, the call is made for quality practitioners and scholars to consider how quality thinking could be integrated into and contributed to the strategic processes of the organisation and through this to ensure it is truly on the senior management agenda. Here the approach to strategy known as “Scenario planning” or “scenarios” is proposed as an existing methodology that embodies the key quality characteristics of process learning, and is given as a potential mechanism for integrating quality and strategy.

The author concludes that the leading authors associated with the quality field have largely ignored the role of strategy in their writings. This has led to quality having been debated in an artificially constructed vacuum from other management concepts. The author proposed the argument that quality’s operational origins have been a barrier to a quality philosophy permeating organization strategy and strategic thinking.

Mohamed Zairi (2006) discussed that hoshin planning is an alternative approach to strategic planning and management. Here the origins, definition and methodology involved in hoshin, contrasts it with other approaches to strategic planning are presented first and he then argues the case by demonstrating how hoshin can be integrated with total quality management and performance measurement, the two essential requirements for modern business practice. It also covers various best practice case studies and concludes with a roadmap for the effective implementation of hoshin.
2.3 LITERATURES RELATING TO BALANCED SCORECARD

Kaplan and Norton’s balanced scorecard framework has changed the face of performance measurement in the 1990’s. The authors developed the balanced scorecard approach in response to what they described as outdated and misleading techniques for evaluating organizational performance. They found that traditional measures resulted in leaders managing their organizations by looking in the “rear view mirror”, so they developed a technique, which included measures that drive future performance.

The authors introduced the idea, which is borne out of the need for an alternative to managing organizational performance, exclusively through financial measures. The authors suggested measuring organizational performance in four key areas namely financial, customer, internal business process and learning and growth.

The authors believed that the balanced scorecard’s enduring contribution to measuring and managing performance lies in the concise, holistic picture of the organization that it provides. Through gathering input from many different sources it is possible to develop a detailed map of the interconnections and interactions that occur between different areas of the organization.

From a practical point of view, they suggested using the scorecard at the strategic level of business initially, and letting the benefits “cascade” down to departments, groups and individuals. This involves completing scorecards for these subgroups to determine the extent of their contribution to organizational performance.
Although the balanced scorecard approach to measuring and ultimately improving performance was intended originally for organizations, it has proved to be more dynamic and flexible. Adopters of the scorecard have found that it supplies a framework for co-ordinating and implementing a variety of management processes at all levels of the organization. For many, it has become an essential tool for implementing change.

Tim Davis (1996) tells that an increasing emphasis is being given to corporate measurement systems, which integrate customer satisfaction, process quality, innovation and financial performance. Managers are realizing that non-financial criteria (customer service, process quality, new product development) are as important as financial criteria in corporate measurement systems. Many executives have difficulty in balancing the various types of measures at different levels of the company. Managers in large companies often have difficulty in translating objectives, strategies and performance measures at different levels of the company. Objectives at the senior management level frequently have no clear connection with performance priorities as it lowers down.

Generally, financial objectives take precedence at the top, while production volume, quality and service objectives have the highest priority at the frontline, employee level. Usually, how lower level production and service objectives translate into upper level financial results is not clear. The need to integrate objectives and strategies across levels and functions is becoming more critical as firms compete on a broader array of performance criteria. The author provided a detailed account of how a balanced set of measures is translating in a large company through corporates and groups, divisional and plant levels. He concluded that the translation of a corporate scorecard into a frontline employee scorecard is essential for the implementation of strategy in most firms. The corporate balanced scorecard
can be a valuable tool in getting all members of the organization to focus on a few common business goals. The employee scorecard is the vital link, which can increase the probability that upper level, corporate, and divisional scorecards are translated into frontline measures which the employee can achieve.

Paul Hepworth (1998) seeks to offer a brief explanation of the concept and provide an insight into why the balanced scorecard has been so successful in the USA and to question why it has not been adopted in the UK. The author has reviewed the available literature to guide further investigation into the application of the BSC and identifies specific business examples and where appropriate the specific management disciplines. The BSC is able to provide utility at all management levels, if managers have an understanding of the mechanics of the concept. Awareness of how the four perspectives are interlinked, interdependent and should not be considered in isolation is necessary to ensure that the maximum benefit is obtained. It is also critical that managers should be empowered to utilise the information to support decisions at their level.

From the literature reviewed the author concludes that there is no doubt that the concept has delivered a totally new and radical approach to business management. It has a proven track record in the USA and is now being delivered to an international audience, on a multi discipline front. The literature concerning the application of the concept is favorable, constructive and in most cases, revealing. Perhaps, such success in the UK is viewed with natural suspicion and pessimistic procrastination. Furthermore, the potentially complicated approach to soft issues might frighten those who seek to mange issues by seeking simple answers or by employing traditional solutions. The theory is now widely available, perhaps if its deployment in the military is successful, it might be applied more widely in the UK.
Lee et al., (2000) conjoined the SWOT matrix with the balanced scorecard (BSC) which makes a systematic and holistic strategic management system. The SWOT matrix clearly identifies the critical success factors that can be implemented into the identification of the different aspects toward the balanced scorecard. It is, therefore, more of a structural approach in setting up the foundation of the balanced scorecard; instead of simply identifying the “Key Performance Indicator (KPI) via gut feeling or by brainstorming. The relationships are then studied in the body of the QFD matrix. Finally, consideration is given as to how the model presented can be customized to allow the companies using this approach to develop and implement their corporate business strategic plan.

Henk Akkermans et al., (2002) tells that the Balanced Scorecard (BSC) is a popular concept for performance measurement. The balanced scorecard concept is an important one, both theoretically and practically. In this paper reviewed, the main reasons for its wide appeal may well stem from its implicit systemic nature: its focus on a limited set of key performance indicators and its ability to align functional perspectives and objectives within the organisation. Also that the current BSC practice still suffers from serious shortcomings, which can be seen as resulting from inadequately dealing with this systemic nature. The authors discussed the five limitations of the usage of the BSC, which includes focus on unidirectional causality, are unable to distinguish delays between actions and their impact on performance, have a dearth of validation capabilities, integrate insufficient strategy with operational measures and suffer from internal biases.

From a systemic perspective, the improvements needed to take away these shortcomings are obvious: BSCs ask for both quantitative modeling and close involvement of more stakeholders than just the senior management team in the modeling process. The authors proposed a system
dynamics (SD) approach to develop a BSC in order to overcome the above limitations. From its origins, SD has positioned itself halfway between strategy and policies and their operationalisation. System dynamics remains, from the palette of systems interventions available, the technique that, in terms of quantitative modeling, was designed to “boldly go where no one has gone before” in areas where reliable data and theoretical models are lacking but nevertheless the need for simulation, for scenario analysis, is clearly apparent. The group model-building techniques aimed at group learning and the consensus that have been developed in this field can be highly instrumental in broadening ownership and deployment of BSCs beyond senior management. Seen from this perspective, further synergy between SD and BSC looks like a win-win scenario for all the stakeholders involved. The results suggest that developing a BSC with system dynamics is a promising approach to supplement existing BSC frameworks.

Andre DeWaal (2003) conducted a direct interview with Prof Robert S. Kaplan. He says that the balanced scorecard measures drive performance in the strategy focussed organization and how balanced scorecard companies thrive in the new business environment. In the interview Kaplan answered open-mindedly about the balanced scorecard and some of them include that there exists a huge gap between the strategy developed at the top and the things people do down in the organization. However, no bridge was made between the two initiatives namely the strategy and employee empowerment for continuous improvement.

The balanced scorecard links vision and strategy to employee’s everyday actions. Also, he had replied for the question “which of the balanced scorecard issues would you like to see researches in the near future?” as follows: “Several research topics of interest- first of all target setting, how do you set stretched targets for the indicators in the balanced scorecard and how
do you get people not only to participate in setting the stretched targets but also strive to achieve them? We also need more analytical and empiric research on how alignment of people and organizational resources create performance breakthroughs”.

Hitka et al., (2003) deals with the analysis of similarly created motivation-oriented groups of workers in the wood processing company, with the possibility of introducing motivation factors into the motivation programme. On the basis of cluster analysis, they divided similarly value-oriented groups of workers for which it is possible to develop differentiated motivation programmes. Apart from the individual value system for each employee, it is also necessary to respect the value system of the whole organization. Consequently, it is necessary to elaborate the concept of value management and to utilize the system of Balanced Scorecard, a tool of strategic management and planning and its task is to translate the vision and strategy of a company into the system of balanced targets and indicators.

Henrik Andersen et al., (2004) illustrated how an advanced version of the balanced scorecard performance management framework can be seen as embodying best-practice strategic control characteristics. Quality initiatives in the west have produced limited long-term success compared with equivalent initiatives in Japan. Some claim that this is due to the absence of explicit links between strategy and operational initiatives. The study aims to test this claim and suggests an approach that better supports quality management initiatives.

The study supports the assumptions that an explicit link between the strategy and operational initiatives is a critical success factor in deriving long-term benefits from quality initiatives. It is an equally important feature of best practice performance management system design and the author tells
that the quality management initiatives can be implemented more successfully, when associated with a robust corporate performance management approach based on modern strategic control principles. The author suggests that the successful application of quality management tools like Six Sigma, Malcolm Baldrige National excellence model, EFQM excellence model, and ISO standards can be significantly strengthened, when combined with a modern version of a corporate performance management tool based on sound strategic control principles.

The third-generation balanced scorecard has also been shown to offer effective methods of linkage to a range of the most common quality management tools used by Western organizations: helping to close the division between quality management and strategic control process in an organization. The limited success of quality initiatives, along with the continued popularity of some of these tools suggests that any approach, which effectively helps decrease the risk of failure, would carry significant value. The author focused on the application of only one strategic control tool.

Kiran Jude Fernandes et al., (2005) conducted a study for implementing the balanced scorecard in small and medium size organizations. In this study, SME demonstrates how BSC can be implemented successfully using a systematic and structured methodology. This study lists the experimental results of the proposed deployment method and highlights the experiences, successes and lessons learnt during the implementation process. In conclusion, this research exercise confirms the validity and usefulness of the proposed methodology and offers managerial insights and guidelines for similar implementations.

Shun-Hsing Chen et al., (2006) applied the balanced scorecard for the performance evaluation of Taiwanese higher education. The study is
carried out with the existing resources and targets, five major strategic themes are constructed, including an adequate financial structure, an accord with customer expectations, an excellent learning environment, organizational learning and management, and high quality staff. It states that for achieving strategic themes there should be some specific and effective strategic targets and to evaluate progress and performance, quantified performance measure indicators should be established which is simply a balanced scorecard and this can be understood by all the staff members easily.

Ali Assiri et al., (2006) identified the comprehensive set of potential determinants influencing the successful implementation of balanced scorecard. They have developed a model, which contains 27 critical factors that are affecting the balanced scorecard implementation. Those factors are divided into three levels namely dominant, main and supporting factors. So the main aim of the study is to empirically test and refine the proposed factors, and explore relationships among the various variables by collecting data from organisations that have already implemented BSC. The result of this research will help management in making crucial decisions and in resource allocations that are required to make the BSC implementation a success.

Imad Alsyouf (2006) applied the balanced scorecard approach for measuring the maintenance performance. A study is conducted to test the suggested balanced scorecard framework and found that it is possible to measure and identify the cause and effect relationship of using an effective maintenance strategy, and assess its impact on the company's competitive advantages. The modified BSC makes it easier for the maintenance and production staffs who are technically oriented to communicate with the top management in terms that managers understand, i.e. in terms of money. Furthermore, this approach facilitates the making of cost-effective decisions.
Abihijit Sinha (2006) tells that the balanced scorecard is an important strategic management tool, which not only helps an organization to measure the performance but also decide/manage the strategies, which are needed to be adopted/modified so that the long-term goals are achieved. The success of any organization is reflected upon by its performance, which is in turn highly dependent upon its strategies. In this era of cut-throat competition, what an organisation requires is not just framing the right strategies, but also managing the same. The impact of the right strategies will automatically be reflected in the results. Moreover, any organisation has to understand that it needs to give impetus not only towards the financial results but also towards satisfaction of the customers, development of state-of-the-art technologies and creation of an environment of learning and growth.

The balanced scorecard is such an innovative tool, which has considered not just the financial indices but also the nonfinancial indicators as equally critical in determining organizational performance. This tool brings a link between strategy and action. Due to these, the framework is gaining increasing importance among different business houses. However, one fact is that it is not easy to implement this tool because it involves a lot of subjectivity. Also, the tool is much more complex compared to the other tools. The measures that need to be taken are contingent upon the kind of environment, industry and the business the organization is in. The reason behind its gaining popularity is that the organizations have understood the capability of this tool has in bringing the desired results to the business by managing the strategies. The tool has tried to fill up the void that exists in most management systems- i.e., the lack of a systematic process to implement and obtain feedback about the organization’s strategy. But, a lot of refinement is still required to be done so that it becomes understandable to every stakeholder associated with the organization and the subjectivity is removed to a large extent.
Majidul Islam (2007) underwent a study to investigate the relationship between perceptions by an organisation's employees about the Balanced Scorecard (BSC) approach and the financial performance of the company measured in terms of return on equity, return on total assets and profit margin on sales. Although, the results do not provide support for all the perception variables used in the study, analysis of the data shows a positive relationship between perceptions of the use of the BSC Company performance.

Robert Kaplan and David Norton (1996) discussed that all balanced scorecard use certain generic measures. These generic measures tend to be core outcome measures, which reflect the common goals of many strategies, as well as similar structures across industries and companies. These generic outcome measures tend to be lag indicators such as profitability, market share, customer satisfaction, customer retention and employee skills. The performance drivers, the lead indicators, are the ones that tend to be unique for a particular business unit. Also, a good balanced scorecard should have an appropriate mix of outcomes (Lagging indicators) and performance drivers (Leading indicators). Outcome measures without performance drivers do not communicate how the outcomes are to be achieved.

2.4 DISCUSSION

The literatures relating to policy deployment and balanced scorecard have been reviewed. It indicates that to many US managers, the existing hoshin process appears complex and documentation intensive making them reluctant to try it. Since, the hoshin management was developed in Japan with heavy influence from Japanese culture, other countries have to find their own ways to introduce hoshin management, the ways that are appropriate for their country and culture. Despite the defined process and benefits to be
The relationship between policy, cross-functional and daily management is complex, dynamic and somewhat unique to each organization. Also taking an organization from vision to action is not a simple task. Since no one organization has discovered the perfect answer and it is upto each organization to develop its own approach based on its quality philosophy. Hoshin kanri process differs slightly from company to company. Also it is said that it is difficult to uncover a standard way that is germane to all companies. Also, audits tended to focus only on the achievement of the annual policies and there were no audit of how the process of hoshin kanri had been used.

In dynamic environments, researchers should constantly examine their assumptions and align the research objectives in-line with changes in both the strategic focus of organizations and the underlying conditions of their competitive environments. The most important and most difficult aspect of policy deployment, due to the required corporate culture, for western managers is the “deployment” phase – catchball.

Also, various approaches available in hoshin kanri has been studied. The approaches given by various authors reveals that either the target or the means are getting deployed to all the level and none of the approaches show the simultaneous deployment of target and major measures. Thus there is no proper deployment methodology available in any of the approaches. There exist a huge gap between the strategy developed at the top and the thing people do down in the organization. Many executives have difficulty in balancing the various types of measures at different levels of the company.
The balanced scorecard developed by Kaplan and Norton says that it should have the proper mix of lag and lead indicators. It refers only the target and managing point and there is no point on how to achieve the target. Also, there is no policy deployment process in which the performance of the individual is measured. It is necessary to have a policy deployment model with performance measuring system to achieve the prescribed target.

Through this research work a model has been developed to deploy both the target and major measure, since the previously available approach deploy either the target or the means. Also, the performance measurement system has been integrated with the policy deployment process in order to achieve the prescribed target.