Usage of Balance Scorecard in Information Technology Industry

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Abstract

The Balanced Scorecard is a management tool that provides stakeholders with a comprehensive measure of how the organization is progressing towards the achievement of its strategic goals.

This management tool is being gainfully used for the last two decades across the strata of industry domains.

In the last decade the IT industry too has increasingly been using this management tool both for the development as well as the maintenance and service cycle. The BSC helps in tracking the achievement of the organisation goals at all levels. BSC interfaces with the relevant metrics programs of the organisation and collates the information creating a progress report or score. These scores are then published and communicated to all concerned executives and staff at all hierarchical levels within the organisation. These scores are indicators of achievement of strategic goals. BSC thus makes strategy implementation a continual process, by mobilizing necessary changes through executive leadership, in achieving strategic goals. In this paper we will outline how the IT industry has adopted and adapted the BSC concepts and structures to their own control and management systems.

Keywords: BSC Balanced Scorecard, KPI Key Performance Indicators, KBD Key Business Drivers, GDM Goal Decomposition Method, GQM Goal Question Measure

1. BALANCED SCORECARD: AN INTRODUCTION

Kaplan and Norton introduced the Balanced Scorecard as a way for companies to measure and report performance in a way that balanced:

- Multiple perspectives.
- Both leading and lagging indicators.
- Inward-facing measures, like productivity, and also outward-facing measures, like customer loyalty.

A balanced scorecard is, "a system of linked goals, measures, targets and initiatives which collectively describe the strategy of an organization and how the strategy can be achieved."

Goals are desired outcomes. The progress toward attaining a goal is gauged by one or more measures. As with perspectives, there are causal relationships between goals. In fact, the causal relationship is defined by dependencies among goals. So, it is critical to set measurable, strategically relevant, consistent, time bound goals. Strategic measures are the indicators of how a business is performing relative to its strategic goals. Thus the measures must be relevant to the goal and strategy and be placed in context of a target to be reached in an identified time frame.

The four perspective performance measures are linked as follows:

- What can we learn and improve upon so as to create more value [internal learning]
- How can we be more productive and effective in delivery? [internal processes]
- How can we satisfy and even delight our customers? [external marketplace]
- How can we improve upon our financial ratings? [internal and external shareholders]

Each perspective must have its own table of goals and measures with targets.

The balanced scorecard enables better decision making and problem solving abilities by providing an interrelated all round performance profile for the management.

The Balanced Scorecards are used for describing a strategy in modern organizations and for measuring the results of implementing that strategy.

Nowadays, opportunities for creating value are shifting from managing tangible assets to managing knowledge-based strategies that deploy an organization's intangible assets. Intangible assets have become the major sources for competitive advantage. This calls for tools that describe knowledge-based assets and the value-creating strategies that these assets make possible. Organizations need a new kind of management system, one designed to manage strategy, not tactics. For these companies, strategy implementation requires that all business units, support units and employees are aligned and linked to the strategy. Thus strategy implementation must become a continual and participative process.

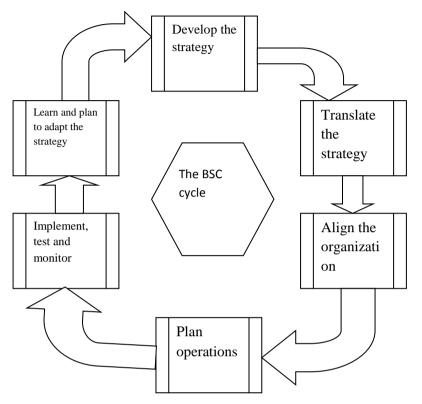
The Balanced Scorecard makes the difference, allowing focusing all organizational resources on a new strategy. This new BSC management system has three distinct dimensions:

- Allows the company to describe and communicate its strategy in a way that could be understood and acted on.
- Acts as a 'navigation' aide, such that all resources and activities in the organization are focused on and aligned towards the strategy.
- Provides the logic and architecture to establish new organization linkages across business units, shared services and teams.

Features of intangible assets:

- Improvements in intangible assets indirectly affect financial outcomes through chains of cause-and-effect relationships involving multiple stages.
- Value of intangible assets depends on organizational strategy and context.
- Value is potential as investments in intangible assets can only be indicative of any realizable value.
- Intangible assets have to be bundled to other assets, tangible or intangible for creating value.

BSC cycle for institutionalizing strategy



The Balanced Scorecard provides a new framework to describe a strategy by linking intangible and tangible assets in value-creating activities.

2. BALANCED SCORECARD AS A MANAGEMENT TOOL WITH MULTIPLE PERSPECTIVES AND MEASURES

BSC enables the organisation to have a systems based approach for senior management. This approach encourages leadership growth and adoption of continual change management for improvement. BSC allows for iterative cyclic evolution of systems. BSC is to be reviewed regularly to enable analysis and feedback, based on data based information that aids operational decision-making. Analysis involves examining leading indicators that are evaluated to confirm accuracy of assumptions made in the earlier cycle. Thus BSC is a "living document" that requires regular revision of goals, measures and initiatives enabling answers to be found for questions as in:

- How are we doing?
- Are we measuring the right things?
- What initiatives do we need to get us where we want to go?

• Have our organizational goals changed?

The systems deployed must have performance indicators that are amenable to metric analysis and feedback scores, enabling iterative continual improvement and organization growth.

Care must be taken that the design of the systems allows the integration of systems strategy with organisation culture. BSC systems approach thus enables a cycle of management leadership in thinking and planning and execution and performance monitoring.

It is important to balance lagging indicators—which includes most financial measures—with leading indicators—areas where good performance will lead to improved results in the future.

It is also important to balance internal measures, such as cost reduction, incident occurrence rates, and training programs, with external measures like market share, supplier performance, and customer satisfaction.

BSC can be used to focus the operations on the achievement of strategic goals. This can be done by breaking down the strategic goals into goals for operations that will roll up to achieve the strategic goals.

A performance measurement management system, then, is a closed loop system that embodies situational analysis of information, corrective actions, and result evaluation.

A fundamental premise of BSC is that perspectives and measures at all levels are linked based on governing business rules. This brings in a strategic focus on management controls.

The four perspectives are linked in a simplistic and logical manner, as follows:

High levels of competency of employees ensure that the processes will be executed efficiently and correctly. A continual cycle of process improvement leads to better quality of delivery, timeliness of delivery and reduced costs of delivery. Continual improvements in delivery to customers lead to greater degree of customer satisfaction. Satisfied customers lead to growth in sales and consequent profitability.

Strategy mapping is a visual way to make explicit an organization's perspectives, goals, and the relationships between them. Mapping the strategic relationships serves as a way to evaluate goals to make sure they are consistent and comprehensively coupled, thus enabling in implementing the strategy. In this fashion BSC for each perspective and each hierarchical level can be cascaded through an organization, and each level's map can be viewed for alignment with the overall strategy map.

The strategy matrix is another useful visualization and summarization tool. It displays goals, measures, targets, and initiatives in one table. The strategy matrix will reflect a strategic theme, so one matrix is prepared for each theme.

The matrix will display the four facets by row and each row will display by column the following: goal, measure, target and an action plan to achieve the goal(s).

BSC has adopted four perspectives of governance management. They are as follows:

Perspective of Finance:

- Improved bottom line
- Increase in shareholder value
- Greater return on investments and capital deployed
- Focus on profitability and economic value gained
- Focus on sources of funds, utilization of funds and budgets
- Ratio of Sales stocks VS Production costs
- Effective risk management for healthy financial ratios
- Improve on cost structures
- Increase capital asset productive utilization

Perspective of Customer:

- Delivery on time
- Complete and correct (defect free) delivery
- Greater value for money of customer
- Lengthy [age of]relationship bond
- Strong [greater trust] relationship bond
- Higher satisfaction level of customer for performance and reliability
- More referrals from customer and consequent trade growth
- Increase in the addition of new customers
- Increase in new directions for market share growth
- Satisfactory customer complaint rectification tracking
- Lessening of customer complaints by frequency and intensity

Perspective of internal systems:

• Higher levels of efficiency of operations

- Higher effectiveness of system delivery
- Lesser non-productive efforts
- Increase in timeliness of delivery
- Compliance with SLA requirements
- Controlled change management
- Clearer and correct requirement statements for development and management
- More effective communications between management and employees
- More effective communications between management and customers and suppliers
- Effective risk management strategy
- Increased usage of advanced technology
- More information, based on data based facts, produced
- Better design of product and service for conformance to requirements
- Focus on continual process design and efficacy improvement

Perspective of organisation strengths:

- Increase in employee competency levels
- Improved infrastructural and environmental support services
- Greater levels of employee satisfaction
- Higher lengths of retention of valuable employees
- Employees keen to learn for growth
- Contingency and succession plans made and deployed
- Greater technology and infrastructure support to employees
- Availability of databases and network infrastructure
- Employee mentoring for improvement in individual and team performance
- Focus on improvement of intra team communication skills and knowledge sharing
- Focus on development of leadership skills
- Integrating culture into and with individual employee behavior pattern

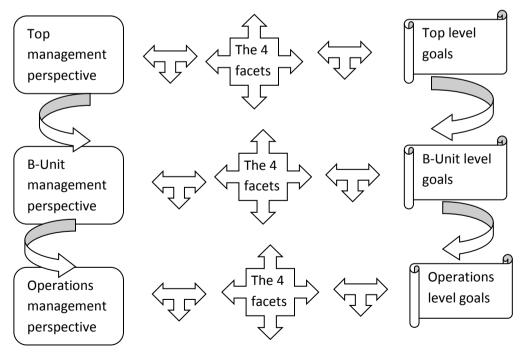
These aspects of the four facets act as Key Performance Indicators [KPI] of Key Business Drivers [KBD]

BSC enables targets to be set for all measures in all the perspectives at all the levels. The target setting exercise is based on empirical data or current data, whatever is available. The targets will need to roll up from project team or assignment team levels to organisation wide targets set for such measures. Strategic thinking drives tactical planning for conversion of goals to actionable plans .The target setting has to be backed up with the knowledge, tools, and means to achieve that target.

BSC serves the purpose of tracking and monitoring the achievement of strategic goals. These goals at the highest level are broken down to goals at the field operation levels and BSC helps to track and monitor and report on all the goals at all the levels. This allows the employees at all levels to be aligned with the organisation strategy and be involved in achieving strategic goals at the highest levels.

The Diagram and explanatory Map and Table below are indicative of perspective wise breakdown of strategic goals from organisation level at the top down to Business Unit level and further down to individual project or assignment level. The breakdown is achieved using GDM

Strategy Map: Diagrammatic representation of perspective wise breakdown of goals as per management hierarchy



Customer goals	Finance goals	Internal Systems goals	Employees goals	Hierarchical level
Satisfaction with delivery	Competitive pricing	Productivity	Minimal Cost of Resources	1[Organisation]
Defect free delivery	Minimal bench strength	Reduced Effort budgets	Minimal Recruitment costs	2 [Business Unit]
Timely delivery	Increased Competency	Regular Schedule monitoring	Minimal Retaining costs	2
Complete test coverage at each phase	Sufficient Skill training	Full Activity costing	Minimal rework costs	2
Low Defect density @ phase	JIT resource usage	Activity planning	Regular Individual mentoring	3 [Project or Assignment]
SLA correctly implemented	SLA terms met first time	Effective change control	High level of team cohesive working	3
Required Peer review conducted	Necessary Domain knowhow	Minimal non- billable activity	Work environment satisfaction	3
Algorithm design testing done	Effective requirements management	Periodic Technology upgrades	Increased level of team bonding	3
Satisfactory delivery acceptance	Planned and managed release	Timeliness of delivery	Managed process interfacing operations	3

Strategy Matrix: Table of top down perspective wise breakdown of goals

Once the goals are defined, then using GQM, we can establish measures for each goal. Once measures are defined then targets can be set for each measure. It is the responsibility of management to determine how the organization will achieve its goals. Measures are used to determine the effectiveness of strategic initiatives.

Now for each perspective level BSC will trigger an iterative cyclic plan of action [see BSC cycle above]

Measures and target values chosen must be seen to relevant and practical. Measures must be easy to collect and the targets set should be achievable from the view of the operations groups. Measurement data must be available, accessible and current. Communication regarding the BSC must be in a format that makes it simple to follow and understand whilst also being relevant and timely. BSC can be used manage the organisation operations. Analysis and feedback based on the BSC reports acts as a learning board so as to enable the organisation to fine tune the governing business rules and policies, as required. This will enable the people to understand what we have been doing, what we are achieving and how we can now perform better and achieve more.

3. DEPLOYMENT OF BSC IN IT: FEATURES, MEASURES AND CONTROLS

Like any other management initiative, introduction of BSC to the organisation must be accorded a status of a priority project. As in any other project, there must be a 'live' project management plan, encompassing a detailed schedule. The project plan must detail all perspectives at all levels. The measures, targets and monitoring and control action plan must be outlined in detail for all perspectives at all levels. Care must be taken that are no intra-perspective and time bound conflicts in the measures and controls defined. Measurement and controls must be prioritized so that critical measures are not missed. Measures must be agreed upon by operational personnel and must be seen as a means to achieving strategic goal. Measurement exercise must be cost effective. Budgets and cost structures must be defined for the management control activities using the BSC. Communication to all personnel associated with the plan at all levels must be sufficient as to outline the roles and responsibilities for each individual person. Communications must also include periodic reporting on achievements, both recent and to-date. Communications must be made in an easy-tofollow manner such that employees at the lower levels must fully comprehend. This helps to keep the personnel focused and motivated. Feedback also keeps the BSC as a 'live' management tool that can be adjusted and tuned to be more useful and more informative.

The BSC project core team must be competent and be responsible for creating the strategy map, the associated goals and the relevant scorecard. The project team members must be trained to works with other employees to develop measures supporting strategic goals. This avoids having differences and issues from cropping up during implementation. The project team management must coordinate closely with the top leadership to plan and implement the Balanced Scorecard. The decision on how to implement the BSC must be made by the core project team. BSC can be implemented by one of the two popular routes; as pilot project or on a full scale big bang approach. Depending on the nature of the IT business and the organisation culture one of these two routes can be chosen.

BSC will thus be seen as a management tool that tells us how we have performed and what we have achieved and how much have we contributed towards the achievement of the organisation corporate level goals and eventual vision. Thus a majority of the organisation workforce can be involved from designing to performing and scoring as per the BSC framework. This will enable enthusiastic participation from people of all functions in an organisation in adopting BSC as an integrated part of their regular work-life. People will be willing and wanting to work with and help the top management adopt BSC and make the adoption successful and the utility as an essential part of governing. The workforce must be extensively trained and be well informed about the entire mission of adopting BSC as a management tool for achieving organisation goals. All functions of the organisation must participate in this process of adoption of BSC through their representatives.

BSC can be gainfully used to highlight the contribution of indirect and support functions so that the staff within those functions can realize how valuable they are to the organisation in achieving the top level goals. This will also help justifying the budgets and expenses of these functions.

Goals chosen can be both short term and long term where short term would typically mean between 6 or 8 quarters and long term could mean between 20 or 28 quarters. Organisations must define the period for short, mid and long terms. Depending on the period for the goals defined, the periodicity of BSC reporting can be decided. Consequently, depending on the periodicity of BSC reporting, the periodicity of measurement collection and collation can be decided. This will also depend on the nature of the measure itself. The methods chosen for measurement collection must be practical, easy-to-use and cost effective. The measurements can make use of existing sources of data for extraction, whenever feasible. The greater the degree of automation of the measurement methods the higher is the reliability of the measurement data. Responsibilities must be fixed for the collection of measurement data.

4. CRITICAL SUCCESS FACTORS

Organizations use the Balanced Scorecard to focus on strategy formulation, implementation and measurement. This allows them to iteratively evaluate and revise to achieve total success in strategy deployment. Implementing this approach is a significant cultural challenge. The key success factors in creating the strategy focused organization are as follows:

- **Mobilize change through executive leadership.** Consistent executive leadership, involvement, active sponsorship, and support are critical to maintaining momentum through the challenges that organizations inevitably encounter.
- Make strategy a continual process. Effective visual and written educative communication regarding the strategy initiative explaining the drivers, measures

and outcomes expected. Build-in feedback loops so that strategy is periodically reviewed and updated whenever required thus enabling a focus on continual strategy review. Tools for reporting and analysis should be deployed to enable analysis of the factors influencing the measures. Facilitate collection, collation and processing of measurement data. A continual display of measurements on the effectiveness is to be made throughout the organization.

- Make strategy everyone's job. Transformation of strategic goals to operational goals in operational terms so that strategy implementation occurs at all levels of an organization. The transform can be aided and done through education and awareness and by cascading the scorecard through the organization hierarchy, so that business units, functions and teams or even individuals can form and work through their own scorecards. Guide employees to take prompt and correct actions in situations where and when required. Gauge the effectiveness of corrective actions through the performance measurement management systems
- Align the organisation to the strategy. This means evaluating and revising, if required, current organisational structures, lines of reporting, policies and processes to ensure that they are consistent with the strategy.
- **Translate the strategy into operational terms.** Enabling analytic tools of metrics that accurately reflect a business situation regarding directed achievements. Tools like the strategy maps, cascaded scorecards, and strategy grids are used to integrate strategy with the operational tasks. This ensures that tasks are done in ways that support the strategies.

5. LIMITATIONS OF BALANCED SCORECARD

Managers today are acting in such a complex environment that setting right goals and in tracking and monitoring the achievement of these goals, using as optimal and as strategy-focused a measurement system as possible, is absolutely vital to ensure the sustainability and development of any organisation.

The performance improvement process is a critical component of the strategic planning process. The success of the balanced scorecard or a similar device will depend on the clear identification of non-financial and financial variables and their accurate and objective measurement and linking the performance to rewards and penalties.

The balanced scorecard is a system of combining financial and non-financial measures of performance in one single scorecard. The main aim of the BSC is enhancing performance and translating strategy into action of the organisation without consideration of the interlinked and networked business environment.

The evidence is a greater number of organizations implementing the BSC have either failed to achieve their intended objectives or encountered serious problems during implementation. A professional survey indicates that BSC initiatives achieve only around 50% success in terms of higher return on asset and higher return on equity while a majority of the organisations that had started with a BSC initiative had major implementation problems to surmount.

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The concept of the BSC is essentially a list of metrics, which makes implementation difficult and frustrating. The initial step of implementing the BSC is expressing a strategy as measurable goals. However, populating the BSC with goals does not mean transforming strategy into goals.

So despite its well-publicized successes, the majority of organizations that adopt a scorecard fail to reap the rewards they expect.

In researching these disappointments, some contributing factors to the failure of BSC can be categorized as follows:

• Top down

Many practical examples have demonstrated that the top-down approach used by Balanced Scorecard methodology is not ideal for several reasons. The top-down design of the BSC is a conceptual limitation since it puts the success or failure of the BSC squarely on senior management. Top down approach of breaking down the strategic goals creates problems at the lower level as the local problems are given lower priority and as such the workforce is left fending off problems on two major fronts, one imposed and one existent. This can be de-motivating at the least. It could be a better idea to bottom-up following the value chain build up.

This design further demonstrates the BSC perceives firms have bureaucratic leadership, hierarchical structures and clearly delineated job responsibilities as the norm, which is not the case.

• CSF/KPI

Critical success factors are the key to finding KPIs. KPIs should be limited in number. The KPIs indicate that the primary role of performance measures is to assist managers to focus on the critical success factors. The BSC initiative perceives the primary role of performance measures is to monitor and to evaluate the performance of applied strategies. The BSC initiative conceptualizes all KPIs as performance indicators making them too numerous to be effective in bettering performance as it is difficult to implement that degree of measurement.

The challenge is to identify the most fundamental CSFs. The problem is compounded because of the requirements of multiple stakeholders including government and society. The entire organization should be involved in identifying CSFs. The

organization must assign priorities to the stakeholders' requirements and rate them in terms of their impact. Translate CSFs into measurable objectives (metrics). The identified objectives will not lead the organizations anywhere unless the CSFs are converted into good measures or metrics. Link strategic planning, balanced scorecard, and budgeting process.

• Rigidity

A significant contributor to the problems faced by implementers of BSC can be traced to the rigidity of the BSC framework. BSC conceptually has been observed to display rigidity as a performance measurement tool as it forces managers to put success indicators into one of the four categories.

Whilst working on the BSC initiative it has been noticed that there is a considerable gap between concept and practical implementation leading to implementation failures. This in itself can be indirectly but largely contributed to the lack of training and knowledge and understanding of the BSC framework. A scorecard is only effective if it is clearly understood throughout an organization. Without effective communication throughout the organization, a balanced scorecard will not spur lasting change and performance improvement. Compounding the lack of understanding is the dynamic nature of the business marketplace that results in rapidly changing strategic goals. The result is an increased level of uncertainty about the usefulness of defined key indicators. If this flexibility is not maintained then because of the BSC initiative we could land up with a static organisation.

• Cause and effect

The proponents of the balanced scorecard tacitly assume that it aligns with strategy leading to better communication and motivation which causes better performance. It is also questionable whether the causal interrelations between the classical perspectives of learning and growth, processes and client finances also exist in all the circumstances.

A loyal satisfied customer with high expectations and low monetary value can quickly become a non-profitable customer. Thus it is not necessary that a satisfied customer will generate ever increasing monetary value. Similarly a high degree of efficiency at process level does not guarantee a satisfied customer. In addition, the BSC is becoming increasingly deficient since one-way linear cause-and-effect relationships are insufficient to describe the complex nature of today's business. A list of financial and non-financial measures does not make a scorecard.

A cause-effect relation is expected between financial and non-financial variables. Normally, there should be a positive relationship between the financial success and the achievement of non-financial goals.

Overload

At times organizations can find themselves managing multiple initiatives with some areas of conflict between the initiatives. The overlap and duplication must be quickly eliminated. BSC team members frequently complain that they are forced to shift focus from their normal tasks in order to help implement BSC resulting in poor productivity. Similarly there is no explicit involvement and engagement with the operational staff in its definition of goals and measures. So while the internal process and learning and growth performance metrics does involve employees, it is more in the form of a diktat and thus remains largely unsupported. In practice, the BSC focus is on resources achieving its strategic goals leading to underutilization of organizations' potential beyond the targets of the BSC. This is at the cost of ignoring all other operational goals.

A major limitation in the practice of the BSC is the complexity and resource intensive nature of its implementation. For many small and medium sized enterprises, there may not be a sufficient amount of personnel available to devote to the BSC initiative on a full time basis. Implementing the BSC requires an organization to gather new data, which could create work overload for some departments. It could potentially lead to employee resistance and cynicism as well as to managerial resistance due to increased availability of information with the potential to upset the current power balance. This can hamper the progress of the effort to establish BSC across the organisation.

• **Resource motivation**

It is generally a good idea to tie compensation to the Balanced Scorecard. However this must only be done when the BSC has taken its final shape after multiple iterative revisions. Accountability and high visibility are needed to help drive change. This means that each BSC initiative must have an owner who can be held accountable for performance. Along with ownership and accountability, employees must also have the authority, responsibility and tools necessary to impact performance of relevant measures. Resources including funds must be made available to achieve success.

• Other perspectives

BSC does not consider actors related to the rapidly changing external environment and other stakeholders and agencies related to the business. Neither does it consider the factors related to the market place and competitors.

The balanced scorecard will have to consider the requirements of all stakeholders which at times will conflict. It does not need to restrict to four perspectives; more may be added. The social responsibility and environmental concerns are two possible candidates. It is recognized that the BSC requires the facility to be able to add on an

additional perspective that caters to indicators from the external environment, external stakeholders such as suppliers and legal or control agencies and relevant indicators from competitors.

On most BSC projects, it has been found that the interests of suppliers and other stakeholders are ignored leaving BSC in jeopardy of being abandoned because of multiple serious complaints from the mid-level management.

Further, there is the danger of an organization neglecting success indicators that do not fall into any of the four categories. Vendor rating is a measure that is critical to the success of the supply chain but is largely ignored by BSC. The four categories also have mangers who only take interest in what they want to measure for success of strategic goal achievement. They ignore changes in the other perspectives of the business. This could result in the organisation not achieving those important but non-strategic goals that are not part of the BSC definition and thus not growing to its full potential.

• Inter-organisation cooperative innovation

In today's business eco-system, firms collaborate within their networks to improve their own performance. BSC hampers inter-organizational innovation. It perceives an organization has hierarchical structures, clearly delineated job responsibilities and one way linear cause-and-effect relationships. This only promotes closed innovation.

In fact, in the present knowledge economy increased mobility of knowledge workers, advancement in information and communication technology, and improved accessibility to venture capital places a greater emphasis on the open nature of innovation.

• Summation

Thus it would appear that there could be two distinct sources of failures in the implementation of BSC. They would be design and process failings.

A poorly designed Balanced Scorecard may lead to its failure in an organisation. A poor design includes:

- Too few measures in each perspective, leading to failure to obtain a balance between leading and lagging indicators or financial and non-financial indicators.
- Too many indicators without identifying the critical few: in this case, the organisation will lose focus and be unable to find linkage between indicators.
- Failure of measures selected to depict the organization's strategy. This happens when an organisation tries to input all its Key Performance Indicators (KPIs) into each perspective without screening to select only those measures

linked to its strategy. This means the organization's strategy is not translated into action and it thus does not obtain any benefit from the Balanced Scorecard.

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• Introducing the Balanced Scorecard only for compensation.

Process failures are also common causes of failure of the Balanced Scorecard and include:

- Lack of senior management commitment
- Too few individuals involved
- Accountability for keeping the scorecard only with senior management
- Overly long development and implementation cycles
- Treating the Balanced Scorecard as a one-time measurement project
- Not hiring or hiring inexperienced consultants

6. APPLICATION OF BSC IN INDUSTRY AND ACADEMICS.

Balance Scorecard is a powerful tool in the current research world. (Both for Qualitative and Quantitative research) With the usage of BSC, business goals are drilled into delivery goals, delivery goals into vertical goals, vertical goals into account goals and account goals into project goals. In the corporate world, different KPIs, for these goals are defined by various stakeholders. Each KPI has a target and threshold. Different tiers (Top, Vertical, Account, Project) have to perform within the target and threshold.

KPIs from all the four quadrants are compiled together and are tracked at various levels. Tracking KPIs for a particular tier is linked with KPIs of corresponding top and bottom tier. Thus, the roll-up and roll-down across various tiers is possible due to the outcomes of the BSC. That is how, the oscillating model for KPI tracking is built across the industry.

7. CONCLUSION

Thus the cyclic process of BSC adoption for strategic deployment, analysis, learning and adapting strategic policies and governing rules is a valuable tool for the organization. With the usage of Balance scorecard it is empirically proved that the balance scorecard can be advantageously used to:

- Balance financial and non-financial measures
- Balance short and long-term measures

- Balance performance drivers (leading indicators) with outcome measures (lagging indicators)
- Bring about a strategic focus and organizational operations alignment with strategy.
- Improve quality with fewer resources
- Eliminate non-value added efforts
- Align strategy to customer priorities and expectations
- Continually improve process performance
- Increase accountability

It is a recommended and proven management tool that can be easily and gainfully adopted and deployed by the IT industry sector.

Balanced Scorecards should not just become a collection of financial and nonfinancial measures. The best Balanced Scorecard reflects the strategy of the organization. A good test for that is if you can understand the strategy by looking only at the scorecard. Many organizations, especially those that create constituent/ stakeholder scorecards or KPI scorecards, fail this test.

Strategy scorecards, along with their graphical presentation on strategy maps provide a logical and comprehensive way to describe strategy. They communicate clearly the organization's desired outcomes and its hypothesis about how these outcomes can be achieved. They enable all organizational units and employees to understand the strategy and identify how they can contribute by becoming aligned to the strategy.

BSC appears to be more suitable to establish for organisations that have achieved a degree of stability in the marketplace and are financially stable. BSC is not designed to address crisis matters nor can it directly help in the growth of an organisation in the initial stages.

In addition to increased workloads, slightly more than half the companies implementing the BSC have no idea about how to identify success factors, developing key performance indicators and cause-and-effect relationships because the BSC does not provide a template nor explicitly define the process.

It would require a great degree of training and spread of knowledge amongst the BSC project team to make it a success and this itself can become a major hurdle for small to medium enterprises as the required level of focus on the BSC initiative can be missing.

Therefore it is necessary to consider that certain aspects of the generic models used in BSC may have to be tailored in order to suit better to specific requirements of a particular organisation.

The external constituents of the company, and particularly, the current and prospective shareholders, may take time to absorb the improvements led by the internal process changes. They may wait to see the consistency and permanency of the changes and improvements.

Nonetheless with the Balanced Scorecard that tells the story of a strategy, we have a reliable foundation for the design of a management system to create Strategy-focused Organizations.

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