Using Balance scorecard in Educational institutions

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ABSTRACT : *In Higher education, as in corporate world, there are time honored traditions relative to the measurement of excellence. Instead of emphasizing primarily on financial measures, higher education has historically depends on academic measures which fail to present a comprehensive image of the current status of a higher institution (HEI). Neither do they reflect some of the key success factors of a HEI, nor are they capable of capturing many of the dimensions of a HEI's mission, vision, or strategic directions. Balanced scorecard (BSC) as information based strategic management tool is capable of removing the limitation associated with the traditional measures for evaluating the current status of a HEI. The present Paper tries to examine the applicability of BSC as a performance measurement-cum-management system in academic institutions imparting higher education .The paper highlights some of the differences as well as similarities between BSC for Business and the BSC for education.*
Keywords *Balanced Scorecard (BSC), Higher Educational Institution (HEI), Performance Management System*

I. INTRODUCTION

There has been a reform in educational policy, as the educational market has become liberalized. The rapid expansion in university education has changed the educational sector. Traditionally these institutions have been controlled by the government and hence at times strategic management and its derivative tenets are not so visible in the initiation and operation of such institutions. Clearly, HEIs are now under pressure to change and to become more responsive to the external environment. To survive, they are thus forced into examining their operations from a decidedly business-like perspective, and are required to provide performance indicators- empirical evidence of their value-to state, alumni, prospective students and other external stake holders (Stewart, A.C. & Carpenter-Hubin, J. (2001). The HEIs are functioning under a buyer's market, a situation that puts institutions in a perpetual demand for students. Especially the "right kind" of students

Accordingly, the government plans to create such a market where these educational institutions can enter healthy competition, thereby improving their standard of performance. There is a need to establish a set of performance management tools to establish educational objectives and standards, and to increase the competitiveness of Higher education in a globalized environment. The key areas for decision-making may be regarding the autonomy being infused in the system particularly in the areas of selecting faculty and students, designing appropriate curriculum in commensuration with degrees having inherent flexibility to accommodate changes. In consonance to the above, effective decisions may be made for generation and allocation of adequate funds by the higher educational institutions (HEIs) with an added responsibility to remain accountable to the system (Joshi M.M., (1998).It is crucial at this juncture is to search for sophisticated management techniques that would not only measure the performance of such institutions but also recommend viable management standards for improving the prevailing academic system. The techniques should be such that mere deployment of them should bring out a perceptible difference in the campuses of various academic institutions (Michael. S. O. (2004). With this backdrop, the paper tries to assess the appropriateness of balanced Scorecard (BSC) as an effective measurement-cum-management system in the higher educational institutions under not-profit sector.

II. LITERATURE REVIEW

2.1Balanced scorecard (BSC)

The BSC enables business to transform its overall organizational strategy into effective management. The BSC is a performance measurement system (Kaplan and Norton, 2001a; Niven, 2002), a strategic management system (Kaplan and Norton, 1996a, b), and a communication tool (Kaplan and Norton, 1992; Niven, 2002). Apart from financial

Measurement, which is the essence of the BSC, it also emphasises: The role of the customer;. Internal processes; and. innovation and learning. It thus provides a complete range of PMIs to measure the achievement of strategic targets. The BSC has four measurement perspectives (Kaplan and Norton, 1996b2001a).These can be summarised as follows:
1) Financial perspective. This is a strategy for growth, profitability, and risk from the perspective of the shareholder.

2) Customer perspective. This is a strategy for creating value and differentiation from the perspective of the customer.
3) Internal process perspective. The strategic priorities for various business processes create customer and shareholder satisfaction.
4) Learning and growth perspective. The priority from this perspective is to create a climate that supports organizational change, innovation, and growth.

Introduction of the BSC in an educational institution requires faculty staff to work together. It begins with senior supervisors who are responsible for policy making and Execution in a top-to-bottom hierarchy. In the ultimate, the introduction of the BSC will create a cause-and-effect linkage involving feedback from staff members and communication among corresponding functions. Five basic principles are involved in the establishment of the BSC as part of the strategic core of an organization (Kaplan and Norton, 2001a, c):

(1) Translating the strategy to operational terms.
(2) Aligning the organization to the strategy.
(3) Making the strategy part of everyone everyday job.
(4) Making strategy a continuous process.
(5) Mobilizing change through leadership.

2.2 Non-profit organizations on BSC implementation

The BSC has been widely used in manufacturing organizations, service organizations, on-profit organizations, and governmental organizations with excellent effects (Kaplan and Norton, 2001b). Kaplan and Norton (2001a) have pointed out that financial measurement alone does not reflect the organizational mission of governmental and non-profit organizations; rather the mission of government or non-profit organization should be placed at top of the BSC in measuring whether such an organization has been successful. This can also help to keep the long-term mission of organization clear and precise. Hence, the greatest difference between businesses and non-profit organizations lies in the achievement of the mission. To do this, both the financial perspective and the customer perspective must be used to enhance the perspectives of internal processes and learning and growth. Although financial performance is not the main target of most governmental and non-profit organizations, the original sequence of the BSC perspectives can be rearranged with the customer perspective moving to the top(Kaplan and Norton, 2001b) (Figure 1). The BSC can thus be adjusted according to the individual circumstances of any case. Indeed, some organizations focus on their key strategies to set up another perspective (Kaplan and Norton, 2001a). For example, some public sector organizations institute a social responsibility perspective or a cultural

Perspective. With respect to the implementation of the BSC in non-profit organizations, Kaplan and Norton (2001a) reported that United Way of Southeastern New England (UWSENE) was the first non-profit organization to introduce BSC. In doing so, UWSENE focused on the financial and customer perspectives treating donors as target customers'. According to Kaplan and Norton (2001b), non-profit organizations tend to Structure their BSC with mission as the top perspective, followed by the customer perspective, the internal process perspective, the learning and growth perspective, and finally the financial perspective. However, Lawrence and Sharma (2002) have pointed out that the BSC constructed by a corporate university, the DXL University, was based entirely on a BSC that had mission and strategic targets on the top, followed by the financial perspective, and then other concepts. Wilson et al. (2003) observed that the BSC established by the Canada National department of British Columbia Buildings
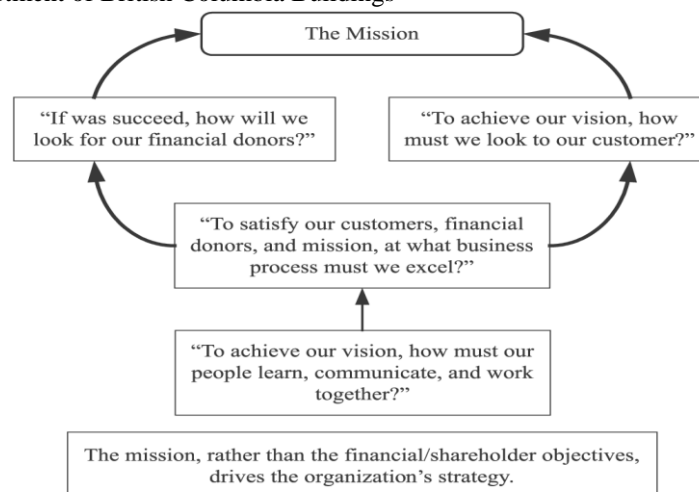
Source: Kaplan and Norton (2001a)

Features of HEIs and the prevailing system performance Management

An institution of higher education is a community dedicated to the pursuit and dissemination of knowledge, to the study and clarification of values, and to the advancement of the society it serves. These institutions inherit unique which distinguish them from other business entities. Thus, the implementation of performance management systems, as applicable to the business houses, becomes difficult for them. By nature, HEIs are not amenable to the constraints required of sound management and cost control because of the following factors(Granof, M.H., Platt, D.E., and Vaysman, I.(2001):

1) Mnay of the academic managers (faculty members) are "free spirits" who has chosen academic careers so as to escape the authoritarian governance structures that are typical in business organizations. Viewing their scholarly efforts as having intrinsic, rather than monetary value, they are often apprehensive of practices that hold them accountable for measurable outcomes. Usually they take no notice of any linkages between the costs and benefits of their activities.

2) Academic administrations usually lack authority of conventionally accorded business mangers. In contrast to most businesses, key decisions regarding cost are made by faculty and administrators representing the lower echelons of the hierarchy, rather than the upper ones. Examples includes decisions relating to:

- Courses offerings
- Numbers of sections of a course to be scheduled,
- New programs, such as Ph.D. or Masters's programs, either within a specific discipline or across disciplines,
- Faculty research projects, and
- Teaching load reductions for administrative and research assignments

3) These decisions are often made with only a passing nod to cost implications with considerable attention given on how the new activities will affect faculty and staff workloads Even if costs are taken intoaccount, they are short term and incremental in nature.

4) The financial reporting practices of HEIs are as per 'Fund Accounting System' which basically identifies the procedures for compliance rather than providing inputs for managerial decision making. HEIs are tuned to this procedures as they receive funds from multiple sources for restricted and specific utilization purposes.

5) Accordingly, the budgets prepared by the HEIs are as per the 'Fund Accounting system' which are never associated with any strategic plan. The HEIs spend considerable time and resources for adopting a complex budgeting process, which in real sense, is incapable of endorsing a sound management and control system.

6) The financial reporting system of large HEIs usually produce a number of periodic compliance reports; most do not make sense to their intended users. In facts, the budgets and related financial documents are mostly understood by relatively few HEIs managers, dealing with finance related activities, but not only senior academic officials.

7) Academic institutions lack well defined objectives as well as measurable outcomes. With respect to their main "products" – teaching, research and service – quality is the only parameter, which is highly subjective in nature and is difficult to quantify. Thus, small classesare not necessarily less cost-effective than large and alsomay not be qualitatively superior.

The traditional budgeting process guides the planning and measurement process in almost all academic institutions. Basically, the budget process forces the institutions to look back in time, at past directives, workloads, staffing level, students enrolment and various academic programs undertaken during a particular period. This information of the past year functions like a base for budgets to be prepared for the future years. Academic institutional plans focus primarily on financial operations, budgets, faculty resource allocations and funding strategies, taking into account the variables indentified above, for effective performance management. However, allowing budget process to drive performance measures does not consider the critical out-side perspectives of customers and stakeholders as well as the dimensions of performance that are meaningful to them, viz. time, cost and quality of service. It is difficult to establish linkage between individual performance objectives and performance appraisal processes to institutional act and the possibility of forging a tie between these two is a distant possibility (Hafner, K.A.(1998).

Traditional models like existing budgeting process performances of HEIs put certain restrictions on the movement of academic managers beyond the boundaries of the units or departments they need to manage within the institute. They are also incapable of directing the management function by justifying budgetary expenditures, documenting progress towards established objectives, identifying areas of both strength and weakness, providing an on-going assessment of the current organizational climate, and driving organizational improvement for HEIs. Quoting Ruben (1999) in this regard: "To some extent, as with business, higher education indicators have tended to be primarily historical, limited in predictive power, often incapable of

alerting institutions to changes in time to respond, and have not giving adequate consideration to important but difficult to quantify dimensions."

Academic managers in various HEIs now acknowledge that they can benefit substantially from various innovative business practices through comprehensive performance architecture, which would enable them to:

. Focus on the future

. Set strategic goals and performance objectives; and

. Track progress over time in achieving these goals through a meaningful set of performance metrics.

Thet realize that in a buyer market, they need to constantly upgrade their products and services through innovation to remain competitive in the long run. For this, they need to develop a good measurement cum-management system which will enable them to link performance measures with vision and strategies of the institutions. They understand that internal efficiency, customer satisfactions through products and services quality, and productivity are fundamental factors to success; and in order to retain the success in thelong run, HEIs should have the ability to attract and retain motivated employees (Hafner, K.A. (1998).

Comparison of Expected Measures for Education and Business

Education	Business
1. Student learning results Results should be based on a variety of assessment methods, should reflect the organization's overall mission and improvement objectives, and together should represent holistic appraisals of student learning.	1. Customer-focused results Customer satisfaction measurements about specific product and service features, delivery, relationships, and transactions that bear upon the customers' future actions
2.Student-and-stakeholder-focused results Student and stakeholder satisfaction measurements about specific educational program and service features, delivery, interactions, and transactions that bear upon student development and learning and the students' and stakeholders' future actions	2. Product and service results Key measures or indicators of product and service performance that are important to the customers
3. Budgetary, financial, and market results Instructional and general administration expenditures per student, tuition and fee levels, cost per academic credit, resources redirected to education from other areas, scholarship growth	3. Financial and market results Return on investment, asset use, operating margins, profitability, liquidity, value added per employee
4. Faculty and staff results Innovation and suggestion rates; courses or educational programs completed; learning; on-the-job performance improvements; cross training rates; collaboration and teamwork; knowledge- and skill-sharing across work functions, units, and locations; employee well-being, satisfaction, and dissatisfaction	4. Human resource results Innovation and suggestion rates; courses completed; learning; on-the job performance improvements; cross training rates; measures and indicators of work system performance and effectiveness; collaboration and teamwork; knowledge- and skill-sharing across work functions, units, and locations; employee well-being, satisfaction, and dissatisfaction
5. Organizational effectiveness results, including key internal operations performance measures Capacity to improve student performance, student development, education climate, indicators of responsiveness to student or stakeholder needs, supplier and partner performance, key measures or indicators of accomplishment of organizational strategy and action plans	5.Organizational effectiveness results, including key internal operations performance measures Productivity, cycle time, supplier and partner performance, key measures or indicators of accomplishment of organizational strategy and action plans
6. Governance and social responsibility Results Fiscal accountability, both internal and external; measures or indicators of ethical behavior and of stakeholder trust in the governance of the organization; regulatory and legal compliance; organizational citizenship	6. Governance and social responsibility Results Fiscal accountability, both internal and external; measures or indicators of ethical behavior and of stakeholder trust in the governance of the organization; regulatory and legal compliance; organizational citizenship

III. IMPLEMENTING BALANCED SCORECARD IN HEIS

While differences exist between HEIs and corporate houses in their areas of functioning, both need to be efficient, effective and accountable. Academic institutions, like business, must be competitive in order to continue to appeal to their target audience. Since BSC has been successful in providing business executives with complex information about the firm's performance in a timely manner, it is assumed that it is capable of providing a successful strategic plan for a HEI (Vaughn L.D. & gates, L.C (2001)).

The logic of building a scorecard for an academic institution may be identified as follows: Customers (student) requirements impel the way one academic institution responds with higher-educational services to market opportunities. Accordingly, the vision, mission, and values of the institution are identified and they jointly shape the culture of the concerned unit. Then a set of strategic goals are developed, which outline expected performance of the said unit. Once this is done, strategies for the different academic departments under the said academic institution are to be developed to congregate customer and stake holder's needs and accomplish the desired goal. Strategies should be made up of building blocks that can be mapped and measured with performance measures and developed of new initiatives which will bestow with additional information to successfully meet challenges and test strategy assumptions for a higher educational institution.

At its core, the BSC is a performance measurement system and it is also not a one time activity. It comprises of two basic phases i.e. building the scorecard and its implementation. It is an on-going process that begins with the first phase of designing the scorecard by taking into consideration the short-term and long-term strategies of the organization and then deciding what business processes are critical to achieving these goals in the second phase of implementation.

IV. STRATEGIC MAP FOR HEI

The BSC strategy map will develop three overarching and complementary strategic themes:
1. Teaching themes – selection and retention of faculty who are focused on teaching excellence to gain an increased market share of the educational market
2. Research themes – identification of college faculty as dedicated research colleagues desiring to be champions in their chosen field.
3. Outreach themes – use of college faculty to support regional education and other intellectual support.

The BSC strategy map for the college (Figure 2) uses a generic architecture to describe each strategy. In this way, each measure is rooted in a chain of cause-and-effect logic that connects the desired outcomes from the strategy with the drivers that will lead to the strategic outcomes. The strategy map illustrates how intangible assets are transformed into tangible customer and financial outcomes
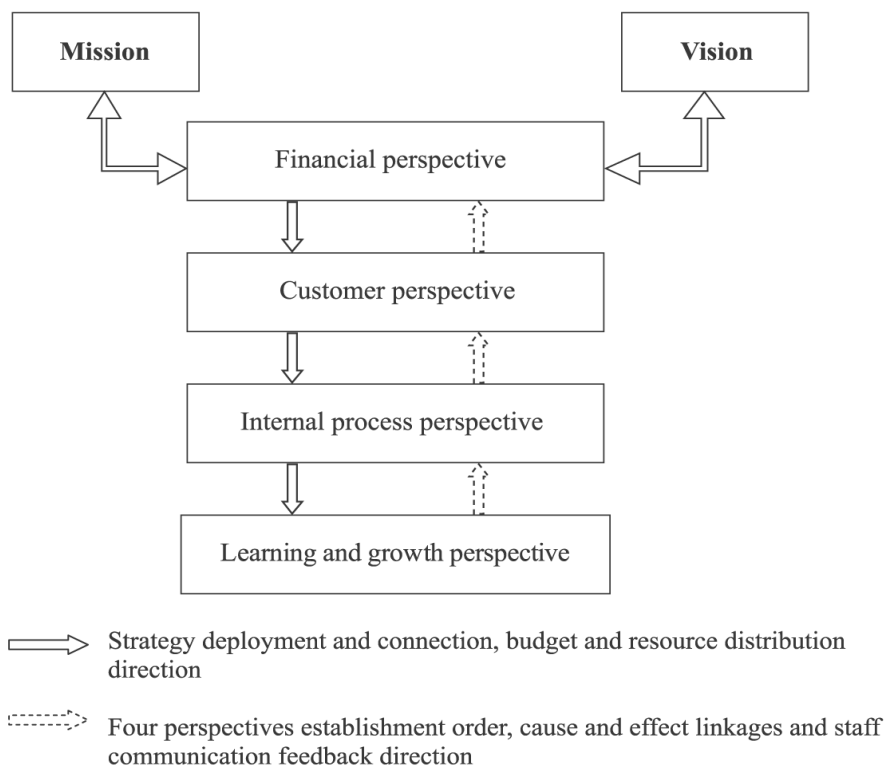
V. DEVELOPMENT OF SCORECARD

1. Customer perspective – including students, faculty, staff, alumni, parents, and corporations

Objectives	Measures
Students/parents Highly valued program Quality academic advising Flexible course scheduling Quality instruction Effective student placemen	External rankings in press, percentage of enrolment out of applications Student evaluation of advising Student satisfaction survey Alumni evaluation, graduating student survey Accreditation, recruiter evaluation, professional exam-passing rate Percent of students with job offer at graduation No. of companies recruiting on campus, average starting salaries
Faculty/staff Growth opportunities Learning opportunities	Salary growth over period of time Courses or educational programs completed Knowledge and skill sharing across work functions, units and locations Employee wellbeing
Alumni Knowledge updation with	Alumni feedback

passage of time Knowledge reinforcement	Alumni satisfaction survey
Corporate Hiring quality students Knowledge extension i.e. research, consultancy, training, continuing education related linkages	Number of students hired Number of job offers per student Average salaries offered Number of people benefiting from training programs conducted by institution Grants/endowments garnered from industry
Society Good citizenship	Numbers of alumni in public service, community service, NGOs Philanthropic record of alumni, faculty, staff Legally clean record of alumni, faculty, staff

2. Internal business perspective: student/stakeholder focus

| Objectives	Measures
To achieve continuous improvement of services, facilities and resources to improve new product and service development	Meeting service standards, response time to customer; service facilities to staff, Number of new products and services introduced i.e. new courses, syllabi, programs and curriculum changes
Quality assurance	Distribution of grades awarded, exit exam or student competency evaluation
Internship program	Number of internships available, number of companies available, student evaluation
Cost efficiency	Faculty-to-student ratio, educational expenses per Student
Unique or specialized curriculum	Number of faculty in specialized area, number of schools offering the same program

3. Innovation and learning perspective: faculty and staff, organizational effectiveness, social responsibility

Objectives	Measures
Faculty professional growth	Number of faculty presentations at conferences; number of faculty presentations; number of seminars attended, travel budget for conference attendance
Staff motivation and development	Percent of budget spent on staff development; staff satisfaction index in staff survey; number of cross-trained or multi-skilled staff
Incorporating technology into teaching	Number of courses incorporating new technology
Innovation in teaching	Number of teaching workshops attended by faculty, number of teaching innovation projects
Curriculum innovation	Number of curriculum revisions in last five years; number of new courses offered in last five years
Partnering with corporations for campus recruitment	Number of firms involved; number of joint activities
Resource management	Number of campus partnerships; entrepreneurial initiatives; trends in energy use

4. Financial perspective

Objectives	Measures
Prosper	Annual grants; amount of permanent endowment
Succeed	Enrolment trend
Grow	Enhancement in student intake
Survive	Level of student enrolment; funding per student
Maximize asset utilization	More efficient and effective use of facilities, space, services, systems and resources as measured by various usage studies and statistics

Figure 1 proposes a schematic model of BSC for institutions of higher education in India, based on the model designed by Kaplan and Norton (2001).Kaplan and Norton (1996a) say that companies are using scorecard to: Clarify and update vision and strategic direction; communicate strategic objectives and measures throughout the organization;. Align department and individual goals with the organization's vision and strategy: Link strategic objectives to long term targets and annual budgets;. Identify and align strategic initiatives;. Conduct periodic performance reviews to learn about and improve strategy; and . Obtain feedback to learn about and improve strategy. All the above benefits are relevant in the context of the institutions of higher learning in India. As Pandey (2005), indicates – "a good aspect of BSC is that it is a simple, systematic, easy-to-understand approach for performance measurement, review and evaluation. It is also a convenient mechanism to communicate strategy and strategic objectives to all levels of management". According to Kaplan and Norton (2001) the Figure 1.
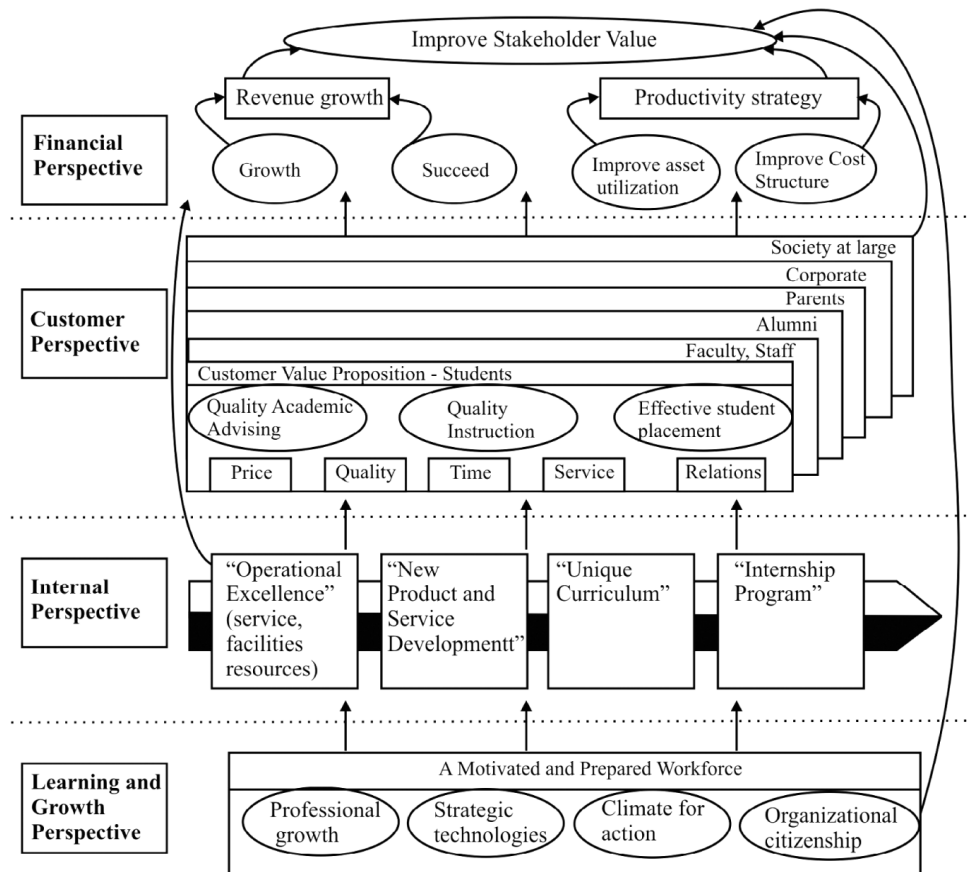
Source: Based on Kaplan and Norton (2001)

Most important potential benefit is that BSC aligns with strategy leading to better communication and motivation which causes better performance. Considering the linkages in service management profit chain (Heskett et al., 1994 cited in Kaplan and Norton, 2001) we can say that the potential benefits can be :Investments in faculty and staff training lead to improvements in service quality; better service quality leads to higher customer (stakeholder) satisfaction; higher customer satisfaction leads to increased customer loyalty; and increased customer loyalty generates positive word of mouth, increased grants/revenues and surpluses that can be ploughed into the system for further growth and development.

With growing popularity for Indian Engineers and graduates in job employment abroad (Chhaparia, 2006), India has to build world-class quality into higher education. In fact, a critical test of a scorecard's success is its transparency: from the 15-20 scorecard measures, an observer is able to see through the organizations corporate strategy (Kaplan and Norton, 1993). Thus if Higher education institutions apply the BSC to their organization they will be able to position their students and programs positively in the minds of the international audience.

VI. CONCLUSION

This study found that both BSC and other management systems must be supported by senior supervisors and the outcome of implementation is promising and successful. By emphasizing missions and visions, schools can learn from business and pay more attention to educational costs and benefits in implementing performance management.

This can increase educational quality and create advantages in terms of national competitiveness. The implementation of a strategy requires active contributions by everyone in the organization. Each member of the college needs to understand this strategy and, beyond that, to conduct day-to-day business in ways that contribute to the success of the strategy. Communication and education are key factors in realizing these initiatives. But in its turn, a successful BSC can furnish feedback to each member of the college that can begin a virtuous cycle that can foster individual growth and the improvement of organizational performance.

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