Strategic 360 Degree Performance Appraisal Model as a Synergy for Strategic Education Planning in Premier HTIs in India

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Abstract:
Purpose: The accountability and social responsiveness of the technical educational institutions especially public funded premier Higher Technical Institutions (HTIs) has become a thrust area for constant vigil and control. The HTIs should act as a role model with their strengths/achievements in terms of quality education, research and development and innovation to motivate other technical Institutions in the country.

Design/methodology/approach: The paper will be predominantly conceptual, exploring the feasibility of Performance Appraisal System in Higher Technical Education in India based on the secondary data, which is supplemented with qualitative research tools such as structured questionnaires sent through electronic media.

Major Findings: An efficient strategic 360 degree feedback will be a continuous input to the strategic planning at the institutional level which in turn will reap more quality and accountability.

Key Conclusions: In order to withstand the ever increasing universal competition in education sector, there is an imperative need for a regular performance appraisal system combined with the Strategy.

Originality/Value: Identifying the weakness and removing the bottlenecks will pave the way for purified objective oriented workforce, which will be a stimulus to the effective strategic approach in a public funded Institutional set up.

Key words: Higher Technical Institutions, Strategic Planning, Premier Institutions, Central Government

Abbreviations:
LPG = Liberalisation, Privatisation and Globalisation
HTIs = Higher Technical Institutions
NIT = National Institute of Technology
IIT = Indian Institute of Technology
IISc = Indian Institute of Science
IIIT = Indian Institute of Information Technology
UNESCO = United Nations Educational, Scientific and Cultural Organization

I. Introduction:
The human capital plays a vital role in the economic growth and development of the country. Higher Technical Institutions (HTIs) are the most important source of educating skilled people, is an important way of forming rich human capital through providing high quality education [6]. Developed countries, in the current post-modern era, have in many cases already become “knowledge societies”, while developing countries are still struggling to cultivate the human potential needed for the growth of their ailing economies. It is generally accepted that the generation and dissemination of knowledge is an important facilitator of economic and social progress [8].

‘… We are living at a time when without good training and research at the higher level, no country can assure a degree of progress compatible with the needs and expectations of a society in which economic development is carried out with due consideration for the environment and is accompanied by the building of a ‘culture of peace’ based on democracy, tolerance and mutual respect, in short – sustainable human development’ [18][p13]

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Within the context of globalization and developments in technology, higher education is undergoing unprecedented changes. In addition to questions of access and equity, institutions of higher education are called upon to cut costs, improve quality and compete in an environment of cross-border educational provision. Academic administrators have to respond to these challenges and steer the course of their institutions to provide world class education and training to their students [19].

The focus of this paper lays on the issue as to how premier HTIs in India like IITs and NITs can implement a ‘Strategic 360 degree appraisal system’ into the annual performance review to assess the performance standards of the academic and administrative staff. The institutional framework of Higher Technical Institutions in India consists of Universities established by an Act of Parliament (Central Institutions) or of a State Legislature (State Universities), Deemed Universities (institutions which have been accorded the status of a University with authority to award their own degrees through Central Government notification), Institutes of National Importance (prestigious institutions awarded the said status by Parliament) like IITs, IISc. and NITs, Institutions established under the State Legislative Act and colleges affiliated to the University (Government, Aided and Un-aided). All are together in India, as at present there are 1668 Institutions with the total annual intake of 6,53,290 students. Laudng India's technical education system, US Secretary of State Hillary Clinton commented that the country is one of the best in this field, though it faces a challenge of providing adequate primary education to millions of children [12]. Some of India's higher education institutions are of world class quality. However, as per the UNESCO report, the majority of them suffer from problems of limited capacity, poor quality and relevance. Some of them also suffer from a lack of public funding. Similarly these Institutions face acute shortage of qualified teachers, and are unable to attract and retain qualified faculty. Ultimately this results in failure to create an impact in the Research & Development, technology percolation etc IITs are apex institutions for engineering education and research. These are governed by "The Indian Institutes of Technology Act, 1961" which has declared them as “institutions of national importance", and lays down their powers, duties, framework for governance etc. The main objective of IITs is to impart world – class education in engineering and technology; to conduct research in the relevant fields, and to further the advancement of learning and dissemination of knowledge. These Institutes are also contributing significantly to education and research in basic sciences and humanities.

On the recommendation of Engineering Personnel Committee (EPC) set up by the Planning Commission in 1955, eight Regional Engineering Colleges (RECs) (two in each regions - east, west, north & south) were set up in early sixties as joint and co-operative ventures of the Central and State Governments concerned with a view to providing the required technical manpower for the industrial projects being contemplated during the Second Five-Year Plan (1956-61). These institutes were registered as autonomous bodies under the Society Registration Act 1860 and affiliated to the State Universities in their respective regions. Gradually Seventeen Regional Engineering Colleges (RECs) were established in various States as a joint and co-operative enterprise of the Central and the State Governments concerned. Each REC was to function as an all-India institution admitting students and recruiting faculty from all parts of the country. The main aim of setting up these RECs was to create the required technical manpower by providing undergraduate education and training in different branches of engineering & technology. Further, the RECs were also envisaged to function as pace setters and to provide academic leadership to the technical institutions in their respective regions. In 2003, the Seventeen erstwhile Regional Engineering Colleges (RECs) were rechristened as National Institute of Technology (NITs) and taken over as fully funded institutes of the Central Government and granted deemed university status. In addition, Central Government has also taken over three other Institutes namely Bihar Engineering Colleges, Patna, Government Engineering College, Raipur and Tripura Engineering Colleges, Agartala, and converted them into National Institute of Technology (NITs) on 28th January 2004, 1st December, 2005 and 1st April, 2006 respectively. Thus the total number of NITs has gone up to 20. These institutes are expected to be at par with other national level technical institutes and be able to fulfill the demand of high quality undergraduate and postgraduate level of education in engineering and technology. An Act, namely the National Institute of Technology Act, 2007 has since been enacted by Parliament so as to provide a common statutory framework for all NIT. Ten new NITs are also proposed to be set up during XI Plan.

As a part of the tenth Five year Plan (2002–2007), the Central Government of India outlined an expenditure of 65.6% of its total education budget of Rs. 438250 million, or (Rs. 287500 million) on elementary education; 9.9% (Rs. 43250 million) on secondary education; 2.9% (Rs. 12500 million) on adult education; 9.5% (Rs. 41765 million) on higher education; 10.7% (Rs. 47000 million) on technical education; and the remaining 1.4% (Rs. 6235 million) on miscellaneous education schemes[10]. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), India has the lowest public expenditure on higher education per student in the world [15]. Despite an expected 150 per cent increase in Central spending on higher education in 2007-08 (at Rs 6,354 crore over Rs 2,550.50 crore (Rs 25.51 billion this year), the fact remains that India will continue to lag behind, compared to its Asian counterparts. At the moment, public spending on higher education per student in India stands at $400 (Rs 18,000) and this is expected to improve to around $1,000 (Rs 45,000). Previously released United Nations Educational Scientific and Cultural Organization
(UNESCO) data had showed that at $400, India had the lowest public expenditure on higher education per student among developing and developed countries in comparison, the United States spends $9,629, the United Kingdom $8502 and Japan $4830, on higher education per student. Even among the BRIC (Brazil, Russia, India and China) countries, India is at the bottom of the pyramid. While China, Russia and Brazil spend $2,728, $1,024 and $3,986 respectively on higher education per student, in the developing country Malaysia’s expenditure under the same head is quite high at $11,790.

‘An increase in allocations will obviously translate into an increase in the public spending per student. But this may not benefit students. An increased spend could mean the government is hiring more teachers and faculty, but if these teachers do not turn up in colleges, then the entire effort goes wasted,’ Bibek Debroy [1], an economist said.

Thus it is evident that the country is making every effort to support higher education and technical education in particular. This is clearly visible as the considerable share of resources earmarked for education is pooled to the premier Institutions, which is the country consider it as prestigious Institutions. The IITs and NITs, even after completing fifty years of its existence, when the Government called for 54% increase in intake, these institutions were not able to take up this challenge and finally spread over to a period of three years with extra support. The non existence of long term goals and improper applications of the resources might be the main hurdles in the sustainable growth. In nutshell the Institutions should have proper strategic planning and periodic evaluations to assess and redefine the directions.

Since 1990s, accountability in higher education has become a challenging issue for higher education [17]. The translation is highly demanding as stakeholders for a university which includes faculty, staff, administration, students, parent’s, alumni employers and the community calls for accountability of these institutions where major chunk of public money is invested for its development.

The concept of 360 degree appraisal envisages raising individual and team performance levels, but caution is needed to initiate, develop and implement a Strategic 360 Degree Performance Appraisal System. This tool encourages staff to develop at all levels and the argument put forth is that as the employees grow in skills and competencies, the organization will thus too and this will be its edge it has to outperform to the needs.

Notwithstanding, the field of Human Resource Management has evolved and many empirical and theoretical studies have advocated the need to “people first” as valuable resources for business success, and can be the source of sustainable competitive advantage of the firm [13]. The discipline has added strategic to the human resource management subject implying by connecting Human Resource Management practices, with business strategy, a link is derived, where both disciplines support and derive satisfaction that furthers the essential driving force for achieving the overall success of the business [3].

II. Review on recent literatures:

The 360 degree appraisal gathers data from a variety of sources to accurately depict performance information and is a useful tool in identifying employee strengths and weaknesses [4]. If the 360 degree appraisal is undertaken with its proper ground work and in clear perspective it will work as a powerful tool for the performance management system.

The 360 degree appraisal project team, using input from various sources has to evolve measures for evaluating results. The team chose to measure factors that included the extent to which work output was complete, accurate, and punctual, and, when appropriate, the quantity of work outputs. Measures of results were specific to individuals’ roles and responsibilities.

360-degree feedback, also known as multi-rater feedback, peer appraisal or 360 degree appraisal, is designed to get around this. You’re rated on your performance by people who know something about you and your work.

You complete your own self-assessment which is compared against feedback from your colleagues. Direct reports, peers, managers, customers or clients, in fact anybody whose opinion you respect and who is familiar with you and your work can be included in the feedback process. This multi-source approach can give real insight into how different groups see you as a person.

Several studies (Hazucha et al., 1993[5]; London & Wohlers, 1991[7]; Walker & Smither, 1999[20]) indicate that the use of 360-degree feedback helps people improve performance. In a 5-year Walker and Smither (1999)[20] study, no improvement in overall ratings was found between the first and second year, but higher scores were noted between third, fourth and fifth years. A study by Reilly et al. (1996)[14] found that performance increased between the first and second administrations, and sustained this improvement two years later. Additional studies show that 360 feedback may be predictive of future performance (Maylett & Riboldi, 2007[9]). Some authors maintain that 360 processes are much too complex to make blanket generalizations about their effectiveness (Bracken, Timmreck, Fleenor, & Summers, 2001b[2]; Smither, London, & Reilly, 2005[16]). Smither et al. (2005) [16] suggest, ‘We therefore think that it is time for researchers and practitioners to ask, ‘Under what conditions and for whom is multisource feedback likely to be beneficial?’(rather than asking ‘Does multisource feedback work?’) (p. 60)
Their meta-analysis of 24 longitudinal studies looks at individual and organizational moderators that point to many potential determinants of behavior change, including positive feedback orientation, positive reactions to feedback, goal setting, and taking action.

III. Rationale for the study
While we are accountable for the efficient allocation of funds, we may be hesitant to include such lofty mission or we can influence the outcomes. However, it is only through measurement that you are able to claim any real difference in the lives or circumstances of your constituents. Of course, we won’t achieve our mission overnight, and in fact may see only periodic movement. This is precisely why the other perspectives of the 360 degree performance appraisal. Monitoring the performance and learning from the results in the customer, internal process, employee learning and growth, and financial perspectives will provide us necessary feedback within the short to medium term.

The globalization of business has finally embraced by the higher education sector, in which education is seen as a service that could be marketed worldwide. Universities and other institutions of higher education have to compete each other in order to attract high quality students and academic staff at an international level. Hence competition is no longer limited within national borders. As education and training become a global business sector, education marketing is developing its stands more akin to consumer goods marketing. In a market where students are considered customers. Universities have to increase their strategies to maintain and enhance their competitiveness. They need to develop a competitive advantage based on a set of unique characteristics. If managed strategically, the Institutions can develop its own competitive edge over competitors as well as to meet the futuristic demands. As a result a growing number of Universities have started developing and implementing Strategic Planning process for the growth and expansion.

Strategic planning has to be accompanied by proper evaluation of the strategies implemented. Feedback and appraisals constitute weighing the effectiveness of the strategies being implemented so that refinement and re-determination of the directions can be made. A 360 degree multi rater feedback from faculty, students, parents, stakeholders etc. will surely throw light on the functional efficiency of the academic system.

IV. Methodology
The overall aim of the study was to devise and implement a strategic appraisal system to assess the efficiency, accountability, Human Resources strength and on social responsiveness. An explorative study on secondary data available in the public domain supplemented with qualitative research tools such as structured questionnaires sent through electronic media was made on the major perspective of an academic system in typical University set up, on following three major perspectives:

(a) Organisational Development Perspective: Strength of courses, Research Programmes, Curriculum flexibility, Faculty strength, faculty turnover, staff development etc.
(b) Stake Holder Perspective: Student’s performance, quality on course delivery, attention on students from ethnic minorities, international students, widening participation etc.
(c) Community Development Perspective: Community services, social developments, etc.

A study was conducted in two IITs and two NITs with structured questionnaire on each of the three perspectives separately and circulated among the faculty, students, administrators, stakeholders etc.

The questionnaires were administered electronically to a major spectrum of categories mentioned above and around 80 percentage responses were received.

V. Findings and Analysis
All the data obtained were codified, tabulated and analyzed in detail various Statistical analysis methods. On such analysis the following findings were observed:

Around 80% of the students felt that the performance appraisals made were mainly on teaching effectiveness made by the sample institutions are not regularly updated scientifically. Almost all Administrative and Academic Staff (95%) described that they were assessed as a routine governmental measure. The outputs of these assessments were never codified and no corrective or improvement measures were made.

The stakeholders such as students, parents and society in total, bestow greater expectation on these Institutions. While in academic front these institutions were able to cope up with the expectations, these institutions still lag in meeting the increased need of the society which is normally coupled with the ever increasing population.

Another bottleneck being faced by these institutions is the lack of qualified, trained faculty members while the student strength is in an increasing trend. This has resulted in deterioration in the faculty student ratio standards in professional education. The minimum entry qualification for the faculty members in these institutions are Doctoral degree. These institutions are not able to attract faculty members with excellent caliber on account of the governmental control exercised on their pay packets that can be offered to them. Career development perspectives based on the feedback and performance are at a lower side compared to the quality demanded from them and beyond comparison with the industry.
Tight academic schedule on faculty members leave lesser time for research and career development activities. Similarly faculty participation in community development activities is very low, which in turn cause this institution becoming non-sensitive to the issues of the societies. Many of the faculty members were entrusted with administrative functions which in turn will result on their concentration on course delivery. The administrative functions can be better handled by an experienced qualified administration team and the cost burden can be reduced to a maximum extent. Absence of experience in many instances made the faculty members as ineffective administrators which caused loss of morale in the work culture. Special attention is required for the categories of students who were admitted through reservation in these institutions as there may be variance in IQ level in the total class strength. Dedicated services of faculty members are exclusively required for such activities.

Lack of Management education and awareness of latest management techniques among the administrators make the total system into a conventional model. Either the total educational administration should be entrusted to a qualified management team or the faculty members entrusted with administrative functions should be given specialized training on educational administration. These premier Institutions should give more emphasis on quality Under Graduates, Masters and Doctorates level programmes to lead the technological revolution. At present around 900-1000 Doctorates are produced in the country per annum in Engineering & Technology. With the minimum requirement of Doctoral degree for the faculty positions for quality education, based on the present intake the requirement of faculty is 1,87,660. More than this the number of Doctoral Degree holders from these Institutions pooled back to the faculty domain is also very low. This finally result a great vacuum on qualified faculty for technical institutions. Commercialization of the research findings in the industry or its application in the society is considerably low. This is mainly because of lack of Industry Institute tie ups on research activities and non concentration on the real problems of the Society.

VI. Limitations:
The results from 360-degree feedback are often used by the person receiving the feedback to plan their training and development. Results are also used by some organizations in making administrative decisions, such as pay or promotion. When this is the case, the 360 assessment is for evaluation purposes, and is sometimes called a "360-degree review." However, there is a great deal of controversy as to whether 360-degree feedback should be used exclusively for development purposes, or should be used for appraisal purposes as well (Waldman et al., 1998[21]). There is also controversy regarding whether 360-degree feedback improves employee performance, and it has even been suggested that it may decrease shareholder value (Pfau & Kay, 2002[11]).

VII. Conclusion
To conclude, the efficiency level, accountability and social responsiveness of Indian HTIs has to be augmented to a greater extent. Strategic Planning effectively implemented by a qualified, dedicated team of experts in the institutional administration set up is the need of the hour. An efficient implementation of Strategic 360 degree feedback will be a continuous input to the assessment of the institutional level performance and associated corrective measures.

References
[3] Donald Pak (2009); Implement strategic 360 Degree Appraisal for a University; Global Business and Management; Vol,1 No 2 pp 60-69
[12] Press Trust of India, Washington (2009); Hailry Lauds India’s technical education; 19 August; pp.2
[15] Shabana Hussain (2007); Higher education spending: India at the bottom of BRIC; Business Standard; February 05, 2007, pp 1