



THE BALANCED SCORECARD ASSESSMENT FOR PUBLIC UNIVERSITY MANAGEMENT

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ABSTRACT

The objective of this study is to conduct an analysis of a public university utilising the Balanced Scorecard framework. The purpose of conducting this study is to evaluate the performance of the university using a strategic management framework that incorporates four key perspectives: Financial, Customer (Student), Internal Processes, and Learning and Growth. The methodology utilised include the collection of primary and secondary data from the public university. The study emphasises the significance of proficiently managing resources, achieving a balance between endowment performance and return on investment, and securing the institution's long-term sustainability within the Financial Perspective. The importance of attaining high levels of student satisfaction and retention rates is emphasised in the context of the Customer (Student) Perspective. The Internal Processes Perspective places significant emphasis on the necessity of maintaining a harmonious among several aspects, including curriculum development, faculty productivity, operational efficiency, and quality assurance. The Learning and Growth Perspective highlights the institution's dedication to achieving high academic standards, fostering adaptation, and promoting innovation. The implementation of strategic management practises, such as the balanced scorecard, within public universities has been found to have a positive impact on their overall academic performance and success.

KEYWORDS: Public University, Strategic Management, Balanced Scorecard

INTRODUCTION

Within the context of higher education, the necessity for appropriate managerial decisions holds utmost significance. The judgements in question play a crucial role in facilitating the efficient operation of academic institutions, as they determine their trajectory and provide guidance for their advancement. The decisions related to resource allocation and curriculum creation are of utmost importance in maintaining the efficient functioning and achievement of primary objectives of higher education institutions. The process of making managerial decisions does not occur in isolation, but rather involves a thorough and deliberate consideration of several issues. These factors are deliberately aligned with the objective of enhancing institutional performance across all dimensions. These factors pertain to the academic quality, student achievement, financial sustainability, and overall competitiveness of the institution within the dynamic and constantly changing higher education environment. In the context of this ever-changing environment, the ability to make well-informed judgements is crucial not only for mere survival but also for achieving optimal success (Reda, 2017).

The importance of performance measurement in higher education is unquestionably significant within the current educational environment. The aforementioned indicator plays a crucial role in enabling institutions to assess their efficacy and productivity in attaining their stated mission and objectives. Performance measurement at higher education institutions allows for the acquisition of useful insights pertaining to their strengths and weaknesses, hence facilitating informed decision-making and efficient resource allocation.

Within this particular setting, the evaluation of performance extends beyond the mere assessment of academic accomplishments. It entails a thorough assessment of various aspects of an institution, such as the calibre of instruction, the influence of research, the contentment of students, and the viability of financial resources. Through a comprehensive analysis of these diverse characteristics, institutions of higher education can identify specific areas that require enhancement and subsequently prioritise strategic activities accordingly. In order to prosper and achieve exceptional outcomes, institutions of higher education must consistently strive to augment their



performance. This process of improvement entails the formulation and execution of well delineated strategies and techniques. Strategies serve as the guiding principles that shape the overall direction, while tactics encompass the practical measures required to effectively implement these strategies. By integrating strategic and tactical approaches, educational institutions can develop a cohesive and efficient plan to enhance performance and successfully accomplish their educational objectives. The implementation of this dynamic strategy guarantees the continued adaptability and responsiveness of higher education to the changing demands of both students and society at large. In the contemporary context of higher education, the imperative to strive for excellence and engage in ongoing improvement has assumed heightened significance. Higher education institutions have a diverse array of problems, encompassing factors such as intensifying rivalry, the need for enhanced accountability, constrained resources, and evolving instructional paradigms. The significance of efficient performance monitoring and strategic management in this ever-changing context cannot be overemphasised (Hladchenko, 2015). The Balanced Scorecard (BSC) is recognised as a crucial instrument for higher education institutions.

The usefulness of this tool in the context of higher education stems from its capacity to offer a thorough and equitable assessment of an institution's performance via several lenses. As a result, it supports the process of making well-informed decisions and developing strategic plans. The holistic approach to performance evaluation makes the Balanced Scorecard a vital tool in higher education. Rather than only prioritising conventional academic indicators, it advocates for institutions to take into account a diverse array of elements. The aforementioned factors encompass financial stability, student satisfaction, internal procedures efficiency, and the professional growth of teachers and staff. The adoption of a holistic perspective allows institutions to find areas for change that could have been disregarded when using a limited viewpoint (Rošulj & Petrović, 2020).

Ensuring a strong coherence between the mission, strategic objectives, and daily operations is of utmost importance for institutions of higher education. The Balanced Scorecard offers a systematic framework for converting the mission of an organisation into concrete strategic objectives and subsequently monitoring the advancement made towards attaining those objectives. The aforementioned statement guarantees that the endeavours of the institution are aligned with its main objective. In a period characterised by constraints on available resources, the efficient allocation of resources becomes paramount importance. The utilisation of the Balanced Scorecard aids institutions in the optimisation of resource allocation through the provision of data-driven insights pertaining to the areas that necessitate either increased or decreased investment. This practise guarantees that valuable resources are allocated towards endeavours that provide the most substantial contributions to the institution's overall performance and long-term viability. Higher education institutions are increasingly confronted with the need to demonstrate accountability to a range of stakeholders, such as students, parents, accrediting authorities, and government agencies. The Balanced Scorecard promotes transparency through its systematic approach to evaluating and communicating performance across various dimensions. This level of transparency enables institutions to showcase their dedication to providing value and achieving their educational goals. Continuous improvement is an intrinsic component of higher education (Binden et al., 2014). The Balanced Scorecard facilitates the establishment of a culture that emphasises the importance of ongoing enhancement through the promotion of regular monitoring, feedback, and adaption. This enables institutions to gain insights from their achievements and obstacles, and then adapt their strategy and tactics.

Insufficient scholarly attention has been directed into the examination of higher education performance, specifically in the context of public universities, resulting in a notable deficit in knowledge. Public universities, despite their significant influence on the educational environment, have not garnered as much scholarly attention in academic research and studies. The lack of adequate representation is a significant obstacle to our comprehensive understanding of the distinct difficulties and possibilities encountered by these organisations. In order to bridge this existing knowledge gap, the present study aims to provide a thorough analysis of the application and consequences of the balanced scorecard framework within the specific context of public institutions. The selection of the balanced scorecard framework holds special significance within the higher education sector, because institutions encounter a multitude of complex difficulties. Through the utilisation of the balanced scorecard framework, valuable insights can be obtained regarding the manner in which public universities are effectively navigating the intricate challenges they face and adjusting their management strategies accordingly.

The significance of competent management in Higher Education Institutions (HEIs) cannot be overstated, as it plays a crucial role in guaranteeing their long-term viability and ongoing achievements. Higher education institutions (HEIs) serve a crucial and central role in the preparation of future professionals and the advancement of knowledge through research. Hence, it is crucial for these institutions to possess the capacity to flourish, adjust,



and prosper within a continuously shifting educational environment. The objective of this study is to investigate the potential impact of implementing a balanced scorecard framework on the management strategies of public universities.

METHOD

The study utilises the balanced scorecard as a comprehensive framework for assessing the several performance aspects of public universities. Within the context of performance evaluation, there is a tendency to adopt a limited perspective. However, the balanced scorecard offers a comprehensive methodology that takes into account multiple facets of an organization's activities. In order to provide a thorough evaluation, the collection of data for this study was conducted using a combination of document analysis and questionnaires. These two methods are crucial in presenting a detailed and multifaceted representation of university performance. The process of document analysis serves as the fundamental component of data acquisition. This entails a thorough scrutiny of university records, reports, and documents related to diverse facets of performance. The aforementioned resources encompass financial reports, strategy plans, academic accomplishment records, faculty publications, and other pertinent data. This approach facilitates the acquisition of past data, hence enabling a longitudinal analysis of performance patterns across the chosen public universities. After the acquisition of data, a rigorous procedure of data analysis was conducted. The data that was gathered, consisting of both quantitative and qualitative information, underwent thorough examination. The quantitative data, which encompassed financial numbers and survey responses, underwent a process of weighting and scoring in order to enable a comprehensive examination of performance across multiple dimensions. The study utilises qualitative data obtained through document analysis, open-ended survey questions, and content analysis in order to detect developing trends and get valuable insights.

Table 1. Indicator and Description of BSC

Perspective	Indicator	Description
Financial Perspective	Revenue Growth	Measure the growth in tuition fees, grants, donations, and other sources of revenue.
	Cost Management	Monitor and control operational costs, including faculty salaries, infrastructure expenses, and administrative overhead.
	Endowment Performance	Evaluate the performance of the institution's endowment fund and its contribution to financial sustainability.
	Return on Investment (ROI)	Assess the ROI for academic programs, research initiatives, and campus improvements.
Customer (student) perspective	Student Satisfaction	Conduct regular surveys to gauge student satisfaction with academic programs, services, and facilities.
	Retention Rate	Track the percentage of students who continue their education at the institution from one year to the next.
	Graduation Rate	Measure the percentage of students who complete their degree programs within the expected time frame.
	Employment Outcomes	Monitor the employment outcomes of graduates, including job placement rates and starting salaries.
Internal Processes Perspective	Curriculum Development	Evaluate the efficiency and effectiveness of the curriculum development and revision process.
	Faculty Productivity	Assess faculty teaching loads, research output, and involvement in institutional initiatives.
	Operational Efficiency	Analyze the efficiency of administrative processes, such as admissions, registration, and financial aid.
	Quality Assurance	Implement measures for quality control in teaching, research, and administrative processes.
Learning and Growth Perspective	Faculty Development	Track investments in faculty training, development, and research opportunities.
	Student Development	Monitor programs and initiatives that foster student personal and academic growth.
	Research and Innovation	Measure research output, patents, publications, and contributions to knowledge creation.
	Technology Infrastructure	Assess investments in technology infrastructure to support teaching, learning, and research



Table 1 presents the relevant description. The Balanced Scorecard (BSC) is a strategic management tool that provides a comprehensive framework for measuring organisational performance. It consists of a set of indicators and descriptions that enable organisations to assess their performance across multiple dimensions.

RESULT

The findings of this research provide a thorough evaluation of the implementation of the balanced scorecard framework in the specific setting of public colleges. By conducting a rigorous examination of diverse performance metrics, we get significant knowledge regarding the performance of these institutions across numerous dimensions. This study examines four primary dimensions, namely financial, customer (student), internal processes, and learning and growth, in order to conduct a comprehensive assessment of the performance of public universities.

Table 2. Financial Perspective

Indicator	Weight	Score	Total Score
Revenue Growth	0.25	4	1
Cost Management	0.25	4	1
Endowment Performance	0.25	5	1.25
Return on Investment (ROI)	0.25	3	0.75
Total	1	16	4.00

The findings presented in Table 2 provide significant insights within the Financial Perspective. Upon closer examination of the several elements encompassed within this particular viewpoint, it becomes apparent that the indication with the most significance is "endowment performance." This suggests that the university's administration of its endowment, which commonly encompasses investments and assets aimed at sustaining the institution's long-term financial viability, is exhibiting strong performance and yielding favourable outcomes. In contrast, it has been noticed that the indicator of "return on investment" exhibits the lowest value inside the Financial Perspective. This discovery implies that the university should consider enhancing its capacity to earn substantial returns from its investments or optimising the allocation of its financial resources in order to enhance its financial sustainability.

Table 3. Customer (Student) Perspective

Indicator	Weight	Score	Total Score
Student Satisfaction	0.25	5	1.25
Retention Rate	0.25	5	1.25
Graduation Rate	0.25	4	1
Employment Outcomes	0.25	3	0.75
Total	1	17	4.25

Table 3 provides valuable data pertaining to the university's performance in areas relevant to its students, namely from the perspective of the customer (student). The variables examined in this perspective have shown that "student satisfaction" and "retention rate" have garnered the most noteworthy ratings.

Table 4. Internal Processes Perspective

Indicator	Weight	Score	Total Score
Curriculum Development	0.25	4	1
Faculty Productivity	0.25	4	1
Operational Efficiency	0.25	4	1
Quality Assurance	0.25	4	1
Total	1	15	4.00

Table 4 presents an analysis of the Internal Processes Perspective, which offers a distinct perspective on the operational efficiency and effectiveness of the university. The salient remark is that all indicators inside this perspective have been assigned equal values. The equitable value assigned to all indicators suggests that the

university is providing equal attention and significance to diverse facets of its internal activities. This strategy, which maintains a sense of equilibrium, implies that the institution acknowledges the interconnectedness of these components in attaining operational excellence.

Table 5. Learning and Growth Perspective

Indicator	Weight	Score	Total Score
Faculty Development	0.25	4	1
Student Development	0.25	3	0.75
Research and Innovation	0.25	4	1
Technology Infrastructure	0.25	4	1
Total	1	15	3.75

Table 5, which pertains to the Learning and Growth Perspective, presents a noteworthy conclusion that underscores a particular domain necessitating attention within the broader strategic framework of the university. The word "student development" encompasses the multifaceted process of growth, advancement, and comprehensive development experienced by students throughout their tenure at the university. The concept of student development involves various facets, such as academic attainment, the cultivation of critical thinking abilities, personal and social growth, the acquisition of leadership aptitudes, and the development of flexibility. The statement underscores the university's responsibility in fostering persons with a comprehensive skill set, encompassing not only academic excellence but also readiness to confront the various obstacles and prospects that lie ahead in their personal and professional endeavours.

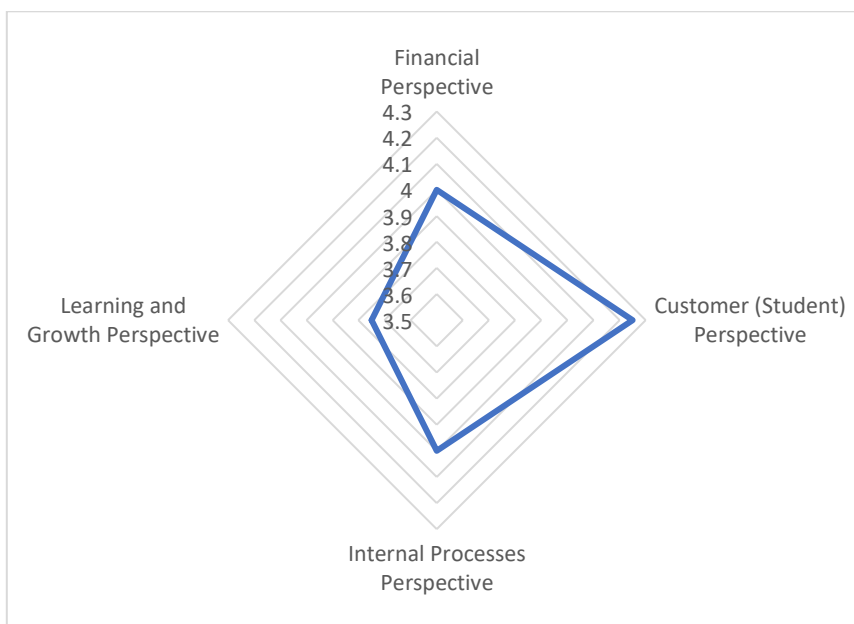


Figure 1. Balanced Scorecard Result

The existing implementation of the Balanced Scorecard framework may exhibit some areas that necessitate enhancement depicted in Figure 1. The aforementioned acknowledgment may arise due to a range of factors, including shifts in organisational objectives, developing industry norms, or developments in methodology for measuring performance. The Learning and Growth Perspective, as outlined in the Balanced Scorecard framework, centres on the organization's capacity to enhance its human capital and foster a climate of ongoing learning and advancement. The indicators encompass several aspects pertaining to staff training, skill enhancement, innovation, and knowledge management.



DISCUSSION

The analysis of the data shown in Table 2 indicates that public universities have a notable level of endowment performance within the financial perspective. However, they seem to fall behind in terms of return on investment. The aforementioned disparity highlights the significance of tackling financial management practises inside these establishments. Public colleges frequently depend significantly on endowments to sustain their operational activities, finance scholarships, and execute strategic endeavours. A resilient endowment has the potential to function as a financial safeguard, particularly in times of economic recession or when government financing falls short. This enables universities to uphold their dedication to delivering high-quality education and engaging in innovative research endeavours. However, the sheer accumulation of a substantial endowment is insufficient. It is of equal importance to ensure that these resources are allocated in a manner that maximises effectiveness and efficiency, resulting in a positive return on investment. The lower return on investment found can be ascribed to a range of causes, including conservative investment techniques, limited financial competence, or an excessively risk-averse approach (Martono et al., 2020). In order to address this disparity, it is imperative for universities to place emphasis on enhancing their investment management strategies, broadening the range of their portfolios, and actively pursuing avenues for increased returns while exercising appropriate risk management.

The scope of addressing financial management practises encompasses more than just investment methods. This entails the implementation of a complete framework for financial planning, budgetary control, and strategic resource allocation. Public universities must also take into account the importance of openness and accountability in their financial operations, as these elements are crucial in establishing confidence with funders, stakeholders, and the wider community. Public universities can achieve financial stability and secure a sustainable future by properly optimising both their endowment performance and return on investment. This approach allows them to continue fulfilling their instructional and research goals efficiently. The disparity between the strong performance of endowments and the comparatively lower return on investment in public universities has prompted a significant discourse over the financial viability of these establishments. Endowments are frequently established through philanthropic donations, with donors typically anticipating that their contributions would be prudently managed to yield long-term benefits for the institution and its stakeholders. Although possessing a significant endowment might provide a feeling of stability, depending exclusively on this asset can be precarious, especially if the investment yield is below its maximum potential. In order to effectively tackle this challenge, it is imperative for public institutions to actively participate in a strategic discourse pertaining to their financial management practises. One potential methodology is evaluating the existing investing techniques that are already implemented. Transparency and accountability are crucial elements that contribute to the effective financial administration of public colleges. The act of disclosing financial information to various stakeholders, including as funders, faculty members, students, and the general public, fosters a sense of trust and instills confidence in the institution. Promoting transparency regarding the obstacles encountered and the corresponding approaches to resolving them helps cultivate an environment conducive to receiving assistance and fostering cooperation.

The findings shown in Table 3 provide insight into the perspective of customers (students) on the educational institution. These results depict a combination of positive aspects and areas that require enhancement. The data reveals a significant degree of student satisfaction, indicating that the institution is effectively cultivating a favourable learning environment and fulfilling the expectations of its student population. There is a strong correlation between high levels of student satisfaction and a range of good consequences, such as heightened levels of student involvement, enhanced rates of student retention, and a more favourable perception of the institution. A high retention rate serves as a favourable signal, as it signifies the institution's efficacy in maintaining its enrolled students, a critical factor for both the academic advancement of the students and the financial stability of the institution. A high retention rate indicates that students perceive value in their educational experiences and are driven to persist in their academic pursuits (Prihandono et al., 2023). In order to bridge this discrepancy, educational institutions may contemplate the adoption of various approaches, including enhancing the efficacy of career counselling services, cultivating alliances with prominent figures in the industry to facilitate internships and job placements, and consistently assessing and revising their curriculum to conform to the evolving needs of the labour market. By implementing this approach, educational institutions have the potential to enhance the career prospects of their students, so augmenting their institutional reputation and overall value proposition to their student.

Curriculum alignment represents an additional crucial element. It is imperative for institutions to consistently evaluate and modify their programmes in order to effectively address the dynamic requirements of industries and employers. By incorporating real-world experiences, practical skills, and professional development into the



curriculum, educators can enhance students' readiness for the challenges they will encounter in their respective fields. Furthermore, it is imperative to prioritise the continuous monitoring and assessment of student results. This process includes monitoring the professional paths, rates of employment, and income levels of graduates, enabling institutions to identify areas for enhancement and make informed decisions based on data to improve employment outcomes.

Table 4 presents a complete analysis of the Internal Processes Perspective in the context of an educational institution. It elucidates the four fundamental elements that constitute this perspective, namely Curriculum Development, Faculty Productivity, Operational Efficiency, and Quality Assurance. Significantly, the balanced scorecard assigns equal emphasis to these components, highlighting their cumulative significance in the overall performance and sustainability of the institution. The development of curriculum has a crucial role in influencing the educational experience provided by the institution. Academic programme management involves the strategic planning and implementation of educational courses, the alignment of academic programmes with industrial demands, and the integration of novel pedagogical approaches and technological advancements in teaching. An educational establishment that demonstrates exceptional proficiency in this particular area has a greater capacity to effectively address the changing needs of both students and employers, thereby guaranteeing that its graduates possess the necessary skills and knowledge to successfully navigate the complexities of the contemporary labour market (Camilleri, 2021).

Faculty productivity is a vital component inside the internal processes perspective. The efficacy of faculty members is crucial to the overall educational institution, as it directly influences the calibre of instruction imparted. The measure of high faculty production encompasses not just the volume of research and teaching contributions, but also the calibre of instruction, guidance, and interaction with students (Anwar, 2022). Proficient faculty members have the ability to motivate and enable students, so making a substantial contribution to their intellectual and personal development. The attainment of operational efficiency is of utmost importance in ensuring the seamless operation of an institution. The concept involves the allocation of resources, the implementation of administrative processes, and the management of costs. The prioritisation of operational efficiency within the institution enables the optimisation of available resources in order to effectively uphold its primary objective of providing education. Efficient operations not only serve to minimise wastage, but also facilitate the allocation of resources towards the improvement of the educational experience and the provision of support for faculty and student requirements (Lin et al., 2016).

Quality assurance plays a crucial role in maintaining the cohesion and integration of the other three components. The implementation of this process guarantees that the institution's endeavours in curriculum creation, faculty productivity, and operational efficiency are congruent with set standards and optimal methodologies. Quality assurance systems play a crucial role in upholding the integrity of an institution, showcasing its dedication to achieving excellence, and establishing a foundation for ongoing enhancements. The choice to allocate equal weightage to the four components in the balanced scorecard is indicative of an integrated approach to organisational management. It is recognised that the attainment of excellence in education cannot be accomplished by favouring one aspect while neglecting others. Alternatively, it is imperative to achieve a state of harmonious equilibrium, wherein each constituent part serves to strengthen and complement the others. An educational establishment that demonstrates proficiency in the production of curriculum but fails to prioritise operational efficiency may encounter difficulties in allocating resources for its many programmes. In a similar vein, it is imperative to establish a harmonious relationship between faculty production and quality assurance mechanisms in order to uphold the elevated benchmarks of teaching and research.

Table 5 presents a thorough overview of the Learning and Growth Perspective as it pertains to the educational institution. This perspective encompasses four essential elements, namely Faculty Development, Student Development, Research and Innovation, and Technology Infrastructure. These various components jointly contribute to the institution's capacity to adapt, innovate, and expand, eventually influencing its long-term performance and competitiveness. Faculty development is an essential component of every educational institution. It involves continuous professional development, training, and assistance provided to faculty members in order to keep them updated on contemporary pedagogical trends, research methodologies, and effective teaching strategies. A faculty that is empowered and possesses comprehensive training has the capacity to deliver a superior educational experience to students, thereby cultivating a favourable atmosphere for learning and making a significant contribution to the institution's overall academic prowess.



The concept of student development embodies the institution's dedication to fostering the holistic development of its students, encompassing both their personal and professional growth. This encompasses a wide range of resources and opportunities, such as academic assistance, extracurricular engagements, mentorship initiatives, guidance on career paths, and avenues for cultivating leadership skills. An educational establishment that demonstrates exceptional proficiency in student development surpasses the mere dissemination of knowledge, as it equips students with the necessary skills and competencies to thrive in their academic endeavours and prospective professional trajectories. Research and innovation play crucial roles for universities that aspire to maintain their position as leaders in the generation and dissemination of information (Pramono et al., 2023). A strong research culture fosters an environment in which faculty members and students are motivated to participate in innovative research endeavours, thereby making significant contributions to academic progress and effectively tackling practical issues. In addition to benefiting the institution, innovation also has a positive impact on the larger community through the promotion of entrepreneurship, developments in technology, and the development of solutions to address social challenges.

The technology infrastructure serves as the fundamental framework supporting contemporary educational institutions. Educational technology covers the tangible components, such as hardware and software, as well as intangible digital resources, which collectively enable the processes of teaching, learning, and research. The establishment of a robust technology infrastructure is crucial in order to guarantee uninterrupted access to information, online courses, research tools, and administrative systems. The aforementioned statement asserts that the use of this particular system aids in the advancement of the institution's overarching objectives by optimising operational effectiveness and broadening the scope of educational opportunities (Khotimah et al., 2022). The observation that there is a need for additional improvement in public university performance in order to enhance student development is a significant finding. This statement underscores the need of not solely focusing on academic achievement, but also recognising the value of comprehensive student support. The process of promoting student development entails the customization of programmes and services to effectively cater to the academic, social, and career-oriented requirements of students. Potential strategies for enhancing student support services may encompass the augmentation of mentorship initiatives, broadening the scope of extracurricular offerings, and fortifying the provision of career counselling resources.

CONCLUSION

The balanced scorecard offers a complete framework for assessing the performance of an educational institution from multiple viewpoints. Every viewpoint provides distinct observations of the institution's positive attributes, areas for enhancement, and overall efficacy. The financial perspective places significant emphasis on the crucial role of effective financial management inside the organisation. Although a good endowment performance is indicative of long-term sustainability, it is crucial to also consider a favourable return on investment as a complementary factor. The careful management of these elements is essential in order to guarantee the efficient allocation and investment of resources in support of the organization's overarching objectives. The presence of high levels of student satisfaction and retention rates can be indicative of a favourable learning environment and active student involvement. Nevertheless, the necessity for enhancement in employment results highlights the significance of providing students with the necessary skills and resources to facilitate effective transitions into their professional endeavours. The Internal Processes Perspective emphasises the importance of several aspects such as curriculum development, faculty productivity, operational efficiency, and quality assurance. The harmonious functioning of these components is crucial for ensuring the effectiveness of the institution. Maintaining high educational standards and operational efficiency necessitates the adoption of a well-rounded approach that places equal importance on all of these components. The Learning and Growth Perspective incorporates various aspects including teacher growth, student development, research and innovation, and technology infrastructure. This highlights the institution's dedication to maintaining high academic standards and being responsive to changing circumstances. The significance of enhancing student development underscores the necessity of comprehensive assistance for students, encompassing not just academic excellence but also personal and professional growth.

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