# The Application of Balanced Scorecard in the performance Evaluation of Newly Established Universities in Sri Lanka

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**Abstract:** The purpose of the study is to determine the ability of newly established universities (NEU's) to apply the Robert Kaplan and David Norton (1992) developed balanced scorecard (BSC) method for evaluation the overall performance. The research method of statistical analysis through a questionnaire distributed to all NEU's and to recognition by the importance of the implementing the BSC in assessing the overall performance. The study recommended that the BSC as a means to rationalize achieving universities objectives and creating highly performed academic and research centered organization.

**Keywords:** Balanced Scorecard (BSC); Performance Evaluation (PE); Newly Established Universities (NEU's).

### Introduction

#### Background of the Study

A new approach to performance evaluation was developed in the early 1990's by Drs. Robert Kaplan (Harvard Business School) and David Norton. They labeled this system was 'Balanced Scorecard'(BSC). Identified some of the issues of previous performance approaches, the BSC provides a comprehensive methodology as to what organizations should measure in order to 'Balance' the each organizational perspective. It assists in the process of selecting strategic objectives, the design of causality between those objectives, and the setting of the targets.

This study mainly connected that the BSC use as a performance evaluation of the Newly Established Universities (NEU's) based on the each perspective. The framework proposed was based on an extensive review of the literature pertaining to BSC and performance evaluation in the management faculties in NEU's in Sri Lankan. The framework is therefore able to elicit elements and factors relating to the use BSC to enhance performance evaluation process in management faculties in NEU's. The results of study conducted indicate that the factors posed in the questionnaire have content validity as they high alpha and therefore, well received. It manifests a strong reason to believe that the variables chosen for this study are appropriate.

#### Statement of the Problem

Many higher education institutions are tying to do stakeholders expectations. When attempting to implement their strategies, they give students only limited description of what they should do and why those tasks are important. Without clear and more detailed information, it's no wonder that many universities failed in executing their strategies.

The universities were mainly focused on the academic centered activities; such as teaching and learning process, academic and non academic development, student and other related party satisfactions and financial activities. Within the traditional evaluation techniques were concentrated only the financial related aspects and those were suitable for the profit making organizations. Also there were no good performances evaluation methods that can be applied the universities or faculties other than the financial tools. In this connection, the BSC model is the suitable model to evaluate faculties as well as universities performance evaluation including financial and non financial activities. In addition to BSC is a well recognized performance evaluation technique and it is proved that by applying this management technique, higher education institutions can improve its efficiency. Therefore, the research is aimed at performance evaluating in the Management Faculties in NEU's in Sri Lankan within the BSC environment. Accordingly, the research problem is defined as,

'How does the concept of Balanced Scorecard can use as a performance evaluation within the NEU's in Sri Lanka?

#### Significance of the Study

The BSC as a performance evaluation of the Management Faculties in NEU's in Sri Lanka in general is far from the past decade. Further, universities are increasingly, find it difficult to keep the all the stakeholders contented in an equitable manner. The unrest building up in any of the stakeholder's party in manifested in many foreign degrees, tough assessments, failure rate and selection limitations etc. Very little concern is give to the process of academic and non academic development is at a negligible level. Failure to adequately, address each perspective, in equal proportion may have lead to the mediocre level of performance. It is therefore; important to discover the performance evaluation in NEU's in Sri Lankan using BSC and it covered all perspectives interrelated with each other.

# **Objectives of the Study**

- i. To evaluate the relationship between Learning and Growth Perspective (LGP) with Internal Business Process Perspective (IBPP).
- To measure the relationship between Internal Business Process Perspective (IBPP) with Financial Perspective (FP).
- iii. To evaluate the relationship between Financial Perspective (FP) with Customer Perspective (CP).

## **Literature Review**

### Overview of the Organizational Performance

The BSC is a widely used method to diagnose and improve on an organization's performance. Developed by Robert Kaplan and David Norton in 1992 (Kaplan and Norton, 1992), the BSC methodology is a comprehensive approach that analyses an organization's overall performance. As a structure, the BSC consist an organization's objectives, measures, targets and initiatives within each perspective. Links are established between each perspective in the BSC to represent causal relationships.

### Performance evaluation in Higher Education institutions/ Universities

The concept of applying the BSC to a university is increasingly popular among researchers. There are many studies related to such application, including the uses of the BSC for university management (Stewart and Carpenter-Hubin, 2000; Lawrence and Sharma, 2002; Ruben, 1999), for academic departments (Chang and Chow, 1999), for university research (Pursglove and Simpson, 2000), for university teaching, and for internal service providers in a university (Pursglove, 2002). Not only is the concept of the BSC widely praised among academic researchers, but it is also being increasingly applied in universities. The BSC consist of four perspectives and these are interrelated.

The higher education sector is one area of the public sector where the introduction of the performance measurement (PM) poses dilemmas. Even though human resources are the most valuable asset of higher education institutions, many universities and colleges have established procedures and rules for the administration of personnel, however not for 'managing' their human resources. There are various reasons for the restricted presence of HRM in higher education institutions. Higher education institutions are being described as loosely coupled systems or organized anarchies with weak regulation and control mechanisms: indicators which predict low PM impact. On the other hand, the last decade we have seen a growing institutional autonomy and so higher education institutions are given more and more responsibility for managing their employees. Moreover, PM principles in higher education institutions encounter important implications for the management of these organizations and have certainly changed the internal management of the higher education institutions and the role and everyday existence of the academic manager in far-reaching ways.

#### The Balanced Scorecard:

#### The Customer Perspective (CP)

There is growing acceptance that University administration must understand and address the wants, needs and requirements. The perspectives of both customers who receive the services (students, faculty, staff, alumni, etc.), as well as the stakeholders who judge organizational effectiveness and have a direct impact or effect on organizational success or failure (legislators, donors, grant agencies, etc.). Identifying key customers and stakeholders and understanding their requirements is a first step in designing customer-focused measures.

#### The Internal Business Process Perspective (IBPP)

Internal operational measures focus inward into the internal workings of the university level quality of teaching, learning process, other facilities and management informations are key activities in to this. In their simplest form, these indicators cast productivity in terms of ratios of resources to outputs.

#### The Financial Perspective (FP)

Traditional financial indicators retain an important role in the University's BSC initiatives. These are measures, such as net operating ratio, facilities condition, research funding competitiveness and debt capacity. At the operational level, financial goals and measures focus on the cost/quality of service equation and on cost reduction or cost avoidance strategies within specific business areas and revenue generation goals.

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#### The Learning and Growth Perspective (LGP)

This category of the balanced scorecard addresses the organization's ability to sustain high performance levels over time. Here examine the more subjective factors that contribute to high performance, such as workplace climate, employee morale, skill alignment, professional development strategies, quality of planning, quality assurance and effective use of technology.

## Methodology

This study attempts to performance evaluations in the management faculties within NEU's in Sri Lanka. The population selected for this study of the Management Faculties in the NEU's in Sri Lanka. The questionnaires distributed to the Head of the departments of the management faculties in each university to study the BSC

(CP: Customer Perspective, IBPP: Internal Business Process Perspective, LGP: Learning, Growth Perspective and FP: Financial Perspective).

#### **Conceptual framework**



#### Hypothesis of the study

H1. Learning and Growth Perspective has a positive influence on the Internal Business Perspective.

H2. Internal Business Perspective has a positive influence on the Financial Perspective.

H3. Financial Perspective has a positive influence on the Customer Perspective.

#### Sample

This study is limited to NEU's and their Management Faculties (Rajarata University of Sri Lanka, Wayamba University of Sri Lanka and Sabaragamuwa University) out of Fifteen (15) universities, therefore generalization of the finding may have a limited value.

#### **Definition of measurements**

In order to measure the BSC perspectives for the departments of the management faculties in this study, statements formulated on a 5 point Likert scale were similarly evaluated with the SPSS statistical package.

## **Result and Discussion**

### **Reliability and Correlation**

An exploratory study to test the reliability of the instrument of the proposed BSC framework in NEU's was conducted. Table 1 displays the result that consists of the reliability values.

### Table 1 - Internal reliability of the Performance Indicators in Newly Established Universities

Performance Indicators Criterion	Reliability				
Customer Perspective	0.807				
Internal Business Process Perspective	0.732				
Learning and Growth Perspectives	0.712				
Financial Perspectives	0.710				

An exploratory study to test the reliability of the instrument of the proposed BSC framework in NEU's in Sri Lanka was conducted. This study was based on 11 departments of Management Faculties in NEU's. The internal consistency was measured using the Cronbach's alpha coefficient (Cronbach, 1990) to test separately all the items of each criterion. All factors reflect values greater than 0.7 which can be suggested as being adequate for testing the reliability of the criteria. The highest reliability ration showed CP (0.807). The FP (0.710) was the lowest reliability.

#### **Bivariate Analysis**

The Bivariate procedure computes the Pearson's correlation coefficient and it measure the linear association with two variables can be perfectly related under the conceptual framework. In addition to relationships between dimensions included each variable.

- First hypothesis in this study, the coefficient between LGP and the IBPP is r = 0.838 (p value <0.01) which means that the LGP has a significant positive influence on the IBPP (table 2). Therefore, hypothesis H1 is supported.</li>
- Second hypothesis in this study, the coefficient between IBPP and the FP is r = 0.727 (p value <0.01) which means that the IBPP has a significant positive influence on the FP (table 2). Therefore, hypothesis H2 is supported.
- Third hypothesis in this study, the coefficient between FP and the CP is r = 0.747 (p value <0.01) which means that the FP has a significant positive influence on the CP (table 2). Therefore, hypothesis H3 is supported.

# Table 2: Summary of the Correlation witheach perspective

Total Sample (n = 11)	СР	IBPP	LGP	FP
СР	1	0.661	0.794	0.747
IBPP	0.861	1	0.838	0.727
LGP	0.794	0.838	1	0.608
FP	0.747	0.727	0.608	1

### Table 3: Overall mean value in Customer, Financial, Internal Business Process and LGP in each university

Sri Lankan Universities	СР	IBPP	LGP	FP
Rajarata	3.2273	3.5288	3.5125	2.5500
Sabaragamuwa	3.3182	3.5897	3.6167	2.8222
Wayamba	3.5568	3.4904	3.3375	2.7667

In this research described the methodology is implemented for the data of three (03) Sri Lankan universities. As per table 3, final results of the universities assessment by the overall mean score compared with each perspective. The LGP measured the university quality assurance, quality of planning, quality of academic staff development and management staff development and teamwork. As per the overall judgment, the universities prioritize based research and innovative activities conduct to the society. This mean other than the profit making organizations universities should earn highest value in the given BSC perspective be a LGP not for the FP.

The University of Sabaragamuwa was scored highest mean value for the LGP (3.6167). This mean they give high priority to the university quality assurance, quality of planning, quality of academic staff development and management staff development and teamwork. The University of Wayamba is recorded highest mean value for CP (3.5568). Which mean they give high priority to the university quality of graduate, quality of service to the community, customer services and job satisfaction. The University of Rajarata is scored highest mean value for IBPP (3.5288). Which mean they give high priority to the university Quality of Teaching, Learning process and other facilities and Management information. As per overall mean values calculated by using SPSS statistics for three universities were recorded in between 2.51 to 3.90. According to the each dimension, the highest mean value represented by the management information, it was 3.90 (IBPP) and the lowest value in FP represented that the Revenue Focus it was 2.51. The highest mean value represented by the quality of planning, it was 3.61 (IBPP) and highest mean value represented by the customer service, it was 3.74 (CP).

## **Conclusion and Recommendation**

#### Conclusion

Heads of the each department under Management faculties surveyed, Indicated that they were reasonably positive about benefits of the BSC for the educations environment. It is an indication that it would be meaningful to include these goals and measure in the construction of an effective BSC for a

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performance evaluation in the management faculties in NEU's.

## Recommendation

The effectiveness of the higher education sector can be defined generally by the degree to which the goals and objectives specified in higher education policies, plans, projects and programs are achieved to the satisfaction of the stakeholders. The ultimate objective of improving higher education effectiveness is the overall improvement in specifically the nation's human capital and generally, in national development while making the most efficient use of resources.

For application in the public universities, in order to improve the effectiveness of service delivery system for improved graduate employability rate, initiatives should be promoted to ensure that graduate gets jobs when they completed their studies in the universities. The literature has highlighted that the most important strategic goals for an institution of higher education are academic excellence, service excellence, managerial enrolment growth, strategic partnership, organizational development, and cost effectiveness and balance budget. The achieving particular goals each universities should identify their program and procedures are needed to develop to meet these requirements.

Also recommended that support from the Quality Assurance and Accreditation Council relating to the latest published web report on university evaluation, this was included grades earned by the each faculty under Sri Lankan universities. As per my study the BSC perspectives are interrelated with the most of the components with QAA (table 4) evaluation criteria (Sri Lanka universities with eight components established by QAA council). As per table 5, given bellow the grade earned in the QAA activities in management faculties represented under NEU's. Items 1, 5 and 7 are mainly concentrating to academic excellence and development.

Further recommended that universities should take action to upgrade B and C grades to good grade (A), because these are the most important activities in the higher educational institute development.

# Table 4 – Relationship between QAActivities and BSC perspectives

Quality Assurance Activity	<b>BSC Perspective</b>
Curriculum Design, Content	LGP
and Review	
Teaching, Learning and	IBPP
Assessment Methods	
Quality of Students, Including	СР
Student's Performance and	
Progression	
Extent of Student's Feedback	СР
(Qualitative and Quantitative)	
Postgraduate Studies	LGP
Peer Evaluation	СР
Skills Development	LGP
Academic Guidance and	СР
Counseling	

#### Limitations of the study

- All higher educational institutes (31) were not taken in to consideration. This study is limited to newly established universities (03) and there management faculties therefore generalization of the finding may have a limited value.
- 2) Regarding the questionnaire draft design, because this is the first research that uses the BSC method to analysis the performance evaluation in universities, the variables in the questionnaire might be incomplete or insufficient. Therefore, future researches should use a larger sample size in order to collect more diversified and in-depth opinions for future amendments and to make the questionnaires rating more efficient.
- Most of the employees (department head) disclosed the facts and information under busy in their work conditions.

## **Further Research**

Future research consist of the university or other similar institution there were several functions and operations, in addition to there were many supporting services which included in the process, such as library, student services, establishment unit, maintenance, medical centers, physical education, computer center., English language unit, carries guidance, cultural center, examination unit, audit branch, postal unit, payment branch, supply branch, each faculty functions ,other than the registrar and vice chancellor office activities. In the hierarchy on university, academic as well as nonacademic activities were occurred. These were covered all university activities, in future there will be a approach to conducted research on each faculty level as well as corporate level to evaluate the performance in university.

# Table 5 – Quality Assurance Grades in Newly Established Universities

Name of the University	1	2	3	4	5	6	7	8
/ Areas in QA								
University of Rajarata								
Accountancy and Finance	В	А	А	А	В	А	В	В
Business Management	А	А	А	Α	B	А	А	А
Tourism and Hospitality Management	A	A	В	A	В	А	В	В
Sabaragamuwa University of Sri Lanka								
Accountancy and Finance	Α	А	А	В	В	В	В	С
Business Management	Α	А	А	А	С	В	В	А
Tourism Management	Α	А	А	В	B	С	А	В
University of Wayamba								
Accountancy and Business Finance	B	А	А	В	В	С	С	В
Banking and Finance	B	В	А	В	В	С	С	В
Business Management	В	В	В	В	B	С	В	С
Insurance and Valuation	В	В	В	B	B	С	B	А

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