# DESIGN OF A BALANCED SCORECARD FOR THE UNIVERSITY OF THE EAST RAMON MAGSAYSAY MEMORIAL MEDICAL CENTER LIBRARY

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#### **Abstract**

This study designed a Balanced Scorecard (BSC) for the University of the East Ramon Magsaysay Memorial Medical Center (UERMMMC) Library. This was done to address the need of this library to have a comprehensive and more specific metrics for library staff evaluation. Using the BSC Methodology formulated by Kaplan & Norton (1996), objectives, metrics and performance measures were identified as well as the agreement on metrics and performance measures, and setting of targets. The study revealed that the library has 20 metrics and performance measures that could be used to achieve their mission and vision. The librarians also agreed that the BSC Methodology would help them assess their library's performance.

*Keywords:* balance scorecard, performance measurement, University of the East Ramon Magsaysay Memorial Medical Center Library

#### Introduction

Measuring the performance of an organization has been part of the constant pursuit for improvement. Performance measurement is important not only for the organization to know if it is performing, but also to know how it can perform better (Asian Development Bank [ADB], 2007). Fortunately, a lot of performance measurement tools have been devised for organizations to implement.

In 1990, Norton contacted Kaplan for a sponsored multi-company study to come up with a new performance-measurement model that can be used by organizations. They needed a new measurement model as companies are shifting to compete in an information age coming from the industrial age. Kaplan and Norton cited giant companies such as General Motors, General Electric, DuPont and Matsushita that have elegant financial and physical performance evaluation methods, like Return-on-

Capital-Employed (ROCE) and yet, are still threatened to fail during the emergence of the information era.

It was no longer enough for companies to deploy the newest technology or produce the most number of goods in order to succeed. They also needed to manage their organizations' intangible assets such as customer relationship and satisfaction, knowledge of staff, and the culture of innovation (Kaplan & Norton, 1996). Thus, the Balanced Scorecard (BSC) was developed.

The BSC is both a measurement tool and a strategic management system. It is a measurement tool that quantifies organizational performance from four perspectives: financial, customers, internal business processes, and learning and growth. It identifies the desired outcome of an organization and its performance drivers for each of these perspectives, along with a cause-and-effect relationship.

It is also a strategic management system as companies used the BSC to align their short-term actions with their long-term goals. From just a performance measurement tool, Kaplan and Norton observed that the tool has evolved and became a company strategy. The BSC translated the mission and vision of companies into the operations from the upper management down to the front-liners of an organization.

Aside from being a performance measurement tool and strategic management tool, Niven (2003) mentioned that the BSC is also a good organizational communication tool. Members of the organization learn more about the organization's mission and vision through continuous feedback and discussion of their personal balance scorecards with their managers, and at the same time, management became aware of what works and what's not by looking at their employees' scorecard results.

The BSC indeed became popular among companies. It was Harvard Business Review's most important business development for the last 75 years in 1997, and in 2000, more than 50% of Fortune 1000 companies in North America were employing the BSC strategy (Calabro, 2001). It evolved from a measurement tool and a strategic management system to a globally recognized strategic management practice (ADB, 2007).

Though initially intended for profit organizations, the BSC, along with its benefits, attracted a lot of government and non-profit organizations. Niven (2003) mentioned that the non-profit organizations' needs for budget and resource allocation, and pressures for accountability demand a strategic management that is similar to what BSC offers.

Lloyd (2006) stated that the BSC is particularly applicable to libraries as it connects the organization's mission and vision to its core activities, such as library services and programs, through carefully defined metrics and consensus driven goals. The BSC considers several indicators and does not focus solely on library spending, informal customer feedback, number of patrons, circulation

numbers, and other statistics based on the libraries' physical attributes.

Reid (2010) discussed thoroughly how libraries, specifically academic libraries, can benefit from using the BSC. The funding problems that academic libraries face, together with the pressure of providing high quality service to its patrons, can be managed with the BSC's specific metrics. These metrics can guide the librarian on which task or service to focus on.

In the Philippine academic libraries setting, there are government agencies that perform library evaluation such as the Philippine Association of Academic and Research Librarians (PAARL), the Philippine Accrediting Association for Schools, Colleges and Universities (PAASCU), the Philippine Association of Colleges and Universities Commission on Accreditation (PACU-COA), and the minimum requirements for libraries set by the Commission on Higher Education (CHED). These agencies provide standards and serve as an external organization that measures library performance.

However, as pointed out by Obille (2007), the standards set by these agencies focused more on the inputs (e.g. statistics on physical collection, etc.) as opposed to measuring the outcomes of the organization. Such organization that follow these standards is the University of the East Ramon Magsaysay Memorial Medical Center Library or the UERMMMC Library.

# The University of the East Ramon Magsaysay Memorial Medical Center Library

The University of the East Ramon Magsaysay Memorial Medical Center (UERMMMC) Library was established in 1957—the same time that the University of the East College of Medicine was renamed as UERMMMC to honor the late president Ramon Magsaysay. Currently, they are serving more than 3000 clients from the colleges of Medicine, Nursing, Physical Therapy, the Graduate School, as well as doctors and staff from the hospital and research centers of UERMMMC. The library occupies the third floor of the medical center or JMC building. There are future plans of relocating the library to a new building, and it will occupy two floors as the UERMMMC will offer new courses, thus requiring the library to expand.

Mrs. Julie Noces Gasmen, the chief librarian of the UERMMMC Library, has been overseeing the library operations and management for more than seven years. In an interview with her on September 22, 2015, she mentioned that their organization consists of three licensed librarians, five library assistants, one clerk and two janitorial aides. She also mentioned that the library has three sections, which are the Technical Services Section, the A/V and Internet Section, and the Periodicals Section.

The Technical Services section handles the acquisition, cataloging and photocopying services of the library. The A/V and Internet Section handles the computer rentals and the multimedia collection of the library. The Periodicals section manages the periodicals and journals subscription of the library, both print and electronic.

The vision, mission and objectives of the UERMMMC Library are accessible through their website (http://uerm.edu.ph/library/history), which states the following:

#### Vision

UERM Memorial Medical Center will become a leading medical center library here in the Philippines and in Asia-Pacific region, providing the highest quality information service in the field of health sciences to all.

#### Mission and Objectives

The Library commits itself to the following:

- The provision of a strong and balanced collection relevant to the needs of clients in the health sciences within and outside the UERMMMC that is but locally and internationally recognized.
- The continuous improvement of physical facilities and the use of appropriate technology relevant to present and emerging information needs.
- The development and training of staff into full-fledge information professionals by providing an environment conducive to the practice of their profession and continuing education.
- The creation and maintenance of programs that will promote information literacy among the clients of the Library.
- The provision of health information to the local community.
- The pursuance of relevant information science research especially in the medical field.

According to Mrs. Gasmen, when she started as the chief librarian seven years ago, there was no form of evaluation employed in the library. She came up with a simple evaluation which she adapted from her previous institution. She used to evaluate her subordinates by enumerating their strengths and weaknesses until two years ago when the UERMMMC Human Resources (HR) Department released an evaluation form. The new HR-mandated form is used throughout the UERMMMC. It asks supervisors to evaluate their employees with respect to their attendance, quality of work, working relationship, and attitude towards work.

Mrs. Gasmen admitted that she encountered difficulties in the past using the HR-mandated evaluation form. She mentioned that the form does not cater to the needs of librarians, and thus, cannot measure the actual functionalities and responsibilities performed by her subordinates. She also experienced resistance from her subordinates when she presented to them her evaluation of their work, as the evaluation form is subjective from the observations of the supervisor.

Aside from the problems experienced by Mrs. Gasmen, the evaluation form also does not clearly gauge the performance of the library as a whole. It only focuses on the business process perspective and lacks the other three perspectives used in the BSC methodology.

#### **Designing the Balanced Scorecard**

As Kaplan and Norton (1996) mentioned, using one perspective of evaluating or measuring the performance of an organization is insufficient. A good indicator of overall organizational success would be a balance between financial and non-financial, between external (shareholders and customers) and internal (business process and learning and growth), and between objective (performances that can easily be measured such as attendance, number of tasks accomplished, etc.) and subjective (evaluations made with personal judgment such as supervisor rating, self-evaluation, etc.). The different factors and perspectives are seen in the following BSC (see Figure 1).

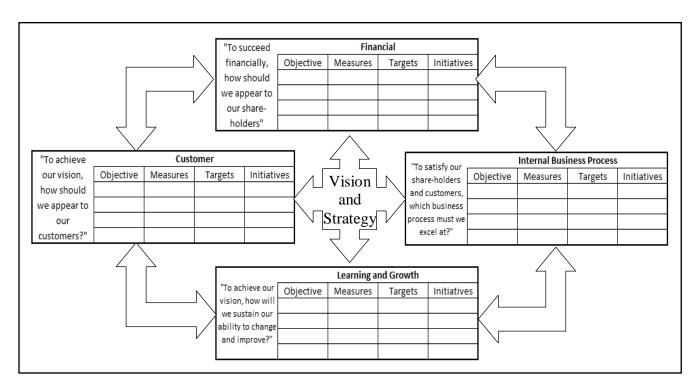


Figure 1. The balanced scorecard. Adapted from *The Balance Scorecard: Translating Strategy into Action* (p. 9), by R. S. Kaplan and D. P. Norton, 1996, Massachusetts: Harvard Business School Press.

At the very heart of the BSC is the vision and strategy of the organization. All of the performance metrics are built upon the organization's vision and strategy. For each of the perspectives, objectives are being formulated based on the overall vision and strategy, followed by definition of measures and setting up of targets. The initiatives are the actions performed by management to achieve

the objectives.

Kaplan and Norton (1996) provided examples of generic measures for each perspective. These generic measures are the following:

- Financial: return on investment and economic value-added
- Customer: satisfaction, retention, market, and account share
- Internal: quality, response time, cost, and new product introductions
- Learning and growth: Employee satisfaction and information system availability (p. 44)

These examples are the common among for-profit organizations and maybe slightly modified according to the organization's vision and strategy. The number of performance metrics all-in-all should be around 15 to 25 (Kaplan & Norton, 1996).

## The Balanced Scorecard as Part of the Strategic Management System

Kaplan and Norton (1996) observed that the BSC, originally as a measurement tool, has evolved into an essential aspect of the strategic management system (see Figure 2).

The top management must start with translating the organization's vision and strategy into objectives for each perspective. It is important that a consensus is made with regard to the meaning of vision and strategy and if the objective is aligned with this meaning. The next step in the strategic management system is to disseminate the information throughout the organization. This can be done through official organization's publication or electronic publication, or any other means of official communication. Once all members of the organization are aware of the objectives and metrics, management will set targets to meet for a specified period of time. Once results for the metrics come in, and compared against the set target, feedback and learning through coaching is performed. The last step is necessary to evaluate if the metrics are aligned with the objectives, and if the set targets are realistic.

#### The Balanced Scorecard as a Communication Tool

Aside from mainly identifying and attempting to meet the targets, BSC can also be an effective tool to communicate the organization's mission and vision to its employees and all stakeholders. For example, Niven (2003) conducted a survey among the employees of an organization he was once involved with. On his survey, he asked if the employee is aware of the company mission and vision. Prior the implementation of the BSC for that particular organization, less than 50% of the employees are aware of the mission and vision. This percentage went up to 87% one year after the full implementation of the BSC.

In brief, the BSC which started as a measurement tool has proven to have other uses for organizations. As part of the Strategic Management System, the BSC can translate the vision of the organization into actions, and as a communication tool, the BSC can keep the whole organization focused towards their targets. The BSC as a measurement tool, as part of the Strategic Management

System, and as a communication tool were all considered in the design of the BSC for the UERMMMC Library.

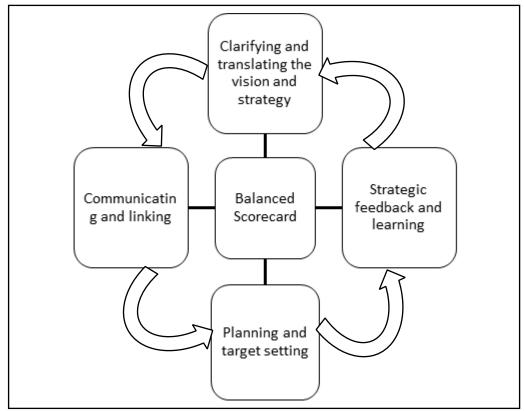


Figure 2. The balanced scorecard as strategic management system. Adapted from *The Balance Scorecard: Translating Strategy into Action* (p. 11), by R. S. Kaplan and D. P. Norton, 1996, Massachusetts: Harvard Business School Press.

#### Methodology

The step-by-step guide in designing the BSC is depicted in Figure 3.

The mission and vision of the organization was first reviewed and identified to start the BSC. This was done together with top management. After the mission and vision were clear, specific objectives were then identified.

The metrics and performance measures, along with its targets, were carefully selected to make sure that they are aligned with the objectives of the organization. A survey was used to validate the level of agreement of all employees of the UERMMC Library with respect to the metrics and performance measures.

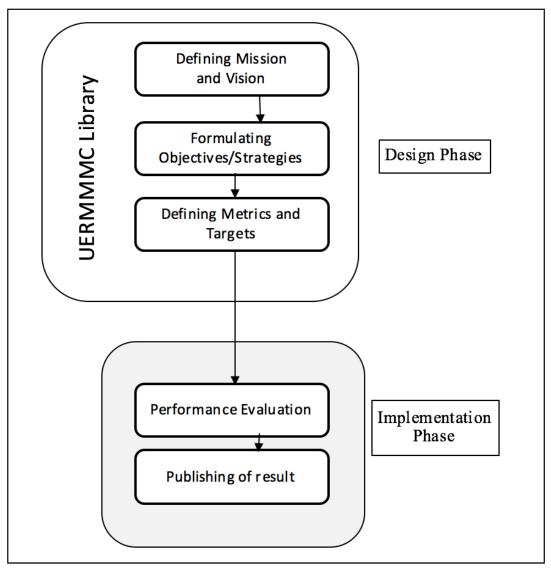


Figure 3. Step-by-step guide in designing the BSC based on the literature and framework.

#### Research Design

This study designed a Balanced Scorecard for the UERMMMC Library. It is both qualitative and quantitative in nature and used questionnaires and conducted interviews to gather data.

Open-ended questionnaires were given a week prior the follow-up interviews of the head of each section to define the objectives for each perspective. These objectives were examined and corresponding metrics and performance measures were carefully identified.

A survey in a checklist format was facilitated to all employees of the UERMMMC Library to validate the proposed metrics and performance measures, as well as to identify corresponding targets.

The survey was also used to get the perception of the library about the implementation of a BSC in the future.

# **Population**

The UERMMMC Library has three sections, which are the Technical Section, Periodicals Section and the A/V, Internet Section. According to Mrs. Gasmen, as of September 2015, there are nine employees across the three sections of the UERMMMC Library. The population used in this study is all library employees working full time throughout the different sections of the UERMMMC Library.

#### **Research Instruments**

This study used a structured questionnaire, conducted interviews among the heads of the sections of the UERMMMC Library, and used a survey form to all library employees.

The questionnaire is a four-page open-ended question type consisting of four parts and were administered among the heads of each section and the chief librarian. The first part of the questionnaire is made up of questions about the goals and objectives of the UERMMMC Library with respect to its users. The second part consists of questions focusing on internal business processes. The third part asks about the ideal qualities that a UERMMMC Library staff should possess, and other questions about employee learning and growth. The last part is about the financial perspective and how the library uses its resources.

Some of the questions were patterned from the BSC of the University of Virginia Library, which can be found on their website (http://www2.lib.virginia.edu/bsc/overview.html).

An interview with the heads of each section and the chief librarian was conducted after the questionnaires were answered. The interview was about the objectives that came up from the first questionnaires as well as review of the vision and objectives posted on their website.

The survey instrument used was a checklist type, facilitated to all employees of the UERMMMC Library. It consisted of five parts; the first four corresponds to the four perspectives of the BSC, and the last part was about the perception of the library in implementing a BSC in the future.

The contents of the survey were based on the questionnaires and the interviews. It asked the employees if they agree on a specific metric and performance measure for each objective. It was also used to set targets for the proposed metrics.

The last part of the survey asked the employees about the BSC itself and if it is applicable to

their organization.

#### **Data Collection**

The researcher received in July 2015 the permission from the chief librarian to conduct interviews and surveys. A small token was given to the heads of each section to encourage them to participate in answering the questionnaires and interviews as it took a part of their time from work.

Respondents for all the questionnaires were given one week to answer. The follow-up interview was conducted to verify the answers of the section heads and the chief librarian.

Lastly, the survey was conducted in September of 2015 when the Metrics and Performance Measures were defined. It was explained and given personally to each employee of the UERMMMC Library.

#### Analysis of Data

The qualitative data obtained from the first set of questionnaires and through the interviews were used to define the objectives. Performance Measures and Metrics were then carefully selected from the available literature, such as the University of Virginia Library BSC.

Descriptive statistics were used for the quantitative data that was obtained from the survey form to select the metrics and targets, and to obtain the perception towards the implementation of the BSC, respectively.

#### **Results and Analysis**

<u>Definition of the Organization's Objectives and Determination of the Metrics and Performance</u> Measures

The UERMMMC Library's objectives under each perspective were determined through a combination of interviews and questionnaires that were given to the upper management. These objectives served as the basis in the formulation of metrics and performance measures.

#### Customer Perspective

They also mentioned that users will be given a space to study along with the resources they need including print and non-print materials, and materials that are accessible offsite. In addition, the users can expect a strong and balanced collection both locally and internationally, relevant to their needs. Lastly, the users can expect that the library will continue to strive to meet their needs.

The UERMMMC Library mentioned specific objectives that they wish to accomplish to satisfy its users. One of the objectives is to offer a current and up-to-date collection of print and non-print materials supporting patient care, research and teaching needs of all library users. The library also

wishes to improve the physical and aesthetic quality of facilities. Moreover, the library desires to use appropriate technology relevant to present and emerging information needs.

The UERMMMC Library mentioned that the most important services for the users are Reference Service, Document Delivery System, and Referral to Other Libraries.

# Internal Business Process Perspective

When asked on the processes that the library should be best known for, the UERMMMC Library stated the following: Electronic Resources, Document Delivery Service, Book Loan, and others.

On the tasks performed by the staffs, the UERMMMC Library declared that they have a lot of tasks. These tasks include, but are not limited to, the following: assisting of students in the use of library resources; performing clerical duties related to the operation of the library; sorting of periodicals, newspapers, magazines and other items according to their classification and returning them to shelves, files, or other designated storage area; identifying journals and completing issues for binding; clipping and indexing of newspapers and articles; preparing statistics on borrowed journals, newspapers, magazines, vertical files; and submitting of monthly reports.

On the technologies, equipment, or process certifications that the library wishes to obtain in the future, the UERMMMC Library listed the following: Resource Description and Access (RDA)-ready library information system, Touchsmart personal computer for the online public access catalog, radio frequency identification (RFID) technology, and security gate.

#### Employee Learning and Growth Perspective

When asked on the ideal qualities that a UERMMMC Library staff must possess, the results are the following: 1) the staff must be able to communicate well with colleagues and library users; 2) the staff must have a sound knowledge in computers and Information and Communications Technology (ICT) tools; 3) the staff must be service-oriented.

On employee training and development, the UERMMMC Library stated that most of them have attended trainings and seminars in the past. Some of them are RDA workshops, Medical and Health Librarians Association of the Philippines (MAHLAP) annual congresses, conferences on medical librarianship, and others.

On factors that keep the staff satisfied with their job, the UERMMMC Library mentioned that they have good inter-relationships with co-workers and superiors, they enjoy the compensation and benefits provided by the organization, and they have learned to love their work.

## Financial Perspective

The UERMMMC Library is receiving enough financial support to acquire library materials.

They mentioned that they were able to procure new and updated editions of books. Although, it was mentioned that funding for physical facilities is limited.

The common expenditures of the UERMMMC Library are for journal subscriptions, book acquisitions, and database subscriptions.

As perceived by the management, the library is efficient in using its funds and resources. This can be seen on the purchased library materials that were based on their budget.

#### Objectives, Metrics, and Performance Measures

The answers from the initial questionnaires, and the current UERMMMC Library Objectives found on the website were presented to the upper management during follow-up interview. During the interview, each objective was discussed and a final list of objectives per perspective was selected. The list of objectives is shown in Table 1.

Table 1

Final List of UERMMMC Library Objectives per Perspective

Objectives
A. Customer Perspective
A1. To provide up-to-date materials, both print and non-print, including online
resources
A2. To provide a comfortable and aesthetically appealing space for user's
studying purposes
A3. To provide a well-balanced Collection
A4. To provide health information to the community
A5. To improve existing programs that promote information literacy
B. Internal Business Process Perspective
B1. To improve Library Services
B2. To improve the technological facilities of the Library
C. Employee Growth and Satisfaction Perspective
C1. To improve ICT skills of librarians and library staffs
C2. To establish communication networks between the staff and the supervisor
D. Financial Perspective
D1. To prepare a budget plan for the Library
D2.To prepare Library Expenditure reports

The University of Virginia Library published a dictionary of Metrics and Performance Measures. This dictionary was used as a reference to look for Metrics and Performance Measures that can be used for the Balanced Scorecard of the UERMMMC Library. The list of the Metrics and Performance Measures per Objective is listed on Table 2.

Table 2

Objectives, Metrics, and Performance Measures

Objective	Metrics	Performance Measures
A. Customer Perspective		
A1. To provide up-to-date materials, both print and	A1-1. Renewed Database Subscription On Time	No. of Renewed/No. of Subscription * 100
non-print, including online resources	A1-2. Acquiring of latest edition of materials	Conducts Survey
A2. To provide a comfortable and aesthetically appealing space for user's studying purposes	A2-1. Client Satisfaction in Terms of Library Space	Conducts Survey
A2 T	A3-1. Client Satisfaction in Terms of Library Collection	Conducts Survey
A3. To provide a well-balanced Collection	A3-2. Collection Compliance with Medical Libraries Standard	Academic Libraries Standard
A4. To provide health information to the	A4-1. Extension Services for the Community	No. of programs/ services over target *100
community	A4-2. Feedback from Participants	Evaluation of Participants

Objective	Metrics	Performance Measures
A5. To improve existing	A5-1. Quality of the Programs	Conducts Survey
programs that promote information literacy	A5-2. Feedback from participants	Evaluation of Participants
B. Internal Business Process	Perspective	
	B1-1. Quality of Library Service	Compliance
B1. To improve Library Services	B1-2. Timeliness of Library Service	Response Time
	B1-3. Quantity of Library Service	No. of Accomplished Task/No. of Task Assigned * 100
B2. To improve the technological facilities of	B2-1. Assessment of Library Information System	No. of Usage of Library Information System / No. of Expected * 100
the Library	B2-2. Acquisition of new technology	No. of acquired technology/no. of Planned * 100
C. Employee Growth and Sa	tisfaction Perspective	
C1. To improve ICT skills of librarians and library	C1-1. No. of ICT Trainings/Seminars attended	No. of Trainings or Seminars attended / No. of Targets *100
staffs	C1-2. Assessment of ICT Skills	Evaluation of ICT Skill
C2. To establish communication networks	C2-1. Coaching Sessions	No. of Coaching Sessions / No. of Planned * 100
between the staff and the supervisor	ween the staff and the	

Objective	Metrics	Performance Measures
D. Financial Perspective		
D1. To prepare a budget plan for the Library	D1-1. Budget Plan	Timeliness of Budget Plan
D2. To prepare Library Expenditure reports	D2-1. Expenditure Reports	Timeliness of Expenditure Report

#### Agreements on the Metrics and Setting of Targets

A second survey was facilitated to all the employees of the UERMMMC Library. On this survey, they were asked whether they Strongly Agree, Agree, Disagree, or Strongly Disagree on a particular Metric and Performance Measure and whether it is aligned with the corresponding objective. They were also asked to provide target for each metric.

For metrics that they disagree on, they were asked to provide metrics that they think is applicable to the corresponding objective.

# Customer Perspective

As presented in Table 3, all employees agreed that timely renewal of Database Subscription and acquiring of latest edition of materials are appropriate metrics in attaining the objective of providing the users up-to-date materials, both print and non-print, including online resources. All of them also agreed that client satisfaction in terms of library collection and collection compliance with Medical Libraries Standard are metrics best suited in achieving a well-balanced collection.

It was also shown in Table 3 that majority of the employees agreed that client satisfaction in terms of library space is the appropriate metric in achieving a comfortable and aesthetically appealing space for user's studying purposes; that extension services for the community and feedback from participants are key metrics in achieving the objective of providing the community with health information; and that the quality of the programs and feedback from participants are metrics needed to improve existing programs that promote information literacy.

Based on the targets set in Table 3, Client Satisfaction in Terms of Library Space is the metric with the highest target in Customer Perspective, which is 92%. The Extension Services for the Community has a low target of 63%.

#### Internal Business Process Perspective

As presented in Table 4, all of the employees agreed that the quality, quantity and timeliness of

library services are metrics needed to improve the library services of the UERMMMC Library. Moreover, the metrics for assessment of Library Information System and acquisition of new technology are best suited in achieving the objective of improving the technological facilities of the library.

Based on the targets set in Table 4, the quality of library services is the metric with the highest target in Internal Business Process Perspective which is 94%. This can be attributed to their high regard of providing accurate and updated information to their clients such as doctors, medical practitioners and students.

Table 3

Agreements and Targets for Customer Perspective Metrics

Objective	Metrics	SA	A	D	SD	Target
A1. To provide up-to-date materials, both print and non-print, including online resources	A1-1. Renewed Database Subscription on Time	4	5	0	0	89%
	A1-2. Acquiring of latest edition of materials	7	2	0	0	91%
A2. To provide a comfortable and aesthetically appealing space for user's studying purposes	A2-1. Client Satisfaction in Terms of Library Space	3	2	4	0	92%
A3. To provide a well-	A3-1. Client Satisfaction in Terms of Library Collection	3	5	0	0	91%
balanced Collection	A3-2. Collection Compliance with Medical Libraries Standard	1	7	0	0	91%

Table 3 (cont.)

Objective	Metrics	SA	A	D	SD	Target
A4. To provide health information to the	A4-1. Extension Services for the Community	1	4	3	1	63%
community	A4-2. Feedback from Participants	1	4	3	1	72%
A5. To improve existing	A5-1. Quality of the Programs	1	4	3	1	69%
programs that promote information literacy	A5-2. Feedback from participants	1	4	3	1	76%

*Note*. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree.

Table 4

Agreements and Targets for Internal Business Process Perspective Metrics

Objective	Metrics	SA	A	D	SD	Target
B1. To improve Library Services	B1-1. Quality of Library Service	7	2	0	0	94%
	B1-2. Timeliness of Library Service	7	2	0	0	92%
	B1-3. Quantity of Library Service	6	3	0	0	93%
B2. To improve the technological facilities of the Library	B2-1. Assessment of Library Information System	4	5	0	0	92%
the Library	B2-2. Acquisition of new technology	2	7	0	0	90%

*Note*. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree.

## Employee Growth and Satisfaction Perspective

As presented in Table 5, all of the employees agreed that the number of ICT trainings and seminars attended and the assessment of ICT skills are metrics needed to improve the ICT skills of librarians and library staffs of the UERMMMC Library.

Seven out of nine employees agreed that coaching sessions and mentoring are metrics needed to better establish communication networks between the staff and the supervisor.

Based on the targets set in Table 5, mentoring is the metric with the highest target in Employee Growth and Satisfaction Perspective which is 90%. The assessment of ICT skills has a low regard but with achievable target of 87%.

Table 5

Agreements and Targets for Employee Growth and Satisfaction Perspective Metrics

Objective	Metrics	SA	A	D	SD	Target
C1. To improve ICT skills of librarians and	C1-1. Number of ICT Trainings/Seminars attended	7	2	0	0	88%
library staffs	C1-2. Assessment of ICT Skills	7	2	0	0	87%
C2. To establish communication	C2-1. Coaching Sessions	2	5	2	0	88%
networks between the staff and the supervisor	C2-2. Mentoring	2	5	2	0	90%

*Note.* SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree.

#### Financial Perspective

As presented in Table 6, all of the employees agreed that budget plan and expenditures are metrics needed to prepare budget plans and expenditure reports for the UERMMMC Library.

Based on the targets set in Table 6, creation of budget plan is the metric with the highest target in Financial Perspective which is 89%. The creation of expenditure reports has a lower target of 88%.

Table 6

Agreements and Targets for Financial Perspective Metrics

Objective	Metrics	SA	A	D	SD	Target
D1. To prepare a budget plan for the Library	D1-1. Budget Plan	3	6	0	0	89%
D2.To prepare Library Expenditure reports	D2-1. Expenditure Reports	3	6	0	0	88%

*Note.* SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree.

## <u>Definition of Performance Measures</u>

Definitions of performance measures were presented to the employees to facilitate better understanding of the survey. The components of each performance measures such as numerators, denominators and others were explained. The complete list of definitions for each performance measures is shown on Table 7.

Table 7

Definition of Performance Measures

Metrics	Performance Measures	Numerator	Denominator	Remarks
A1-1. Renewed Database Subscription on Time	No. of Renewed/No. of Subscription * 100	Number of renewed subscriptions for a semester	Total number of subscriptions for a semester	Subscriptions with perpetual licenses will be counted as renewed
A1-2. Acquiring of latest edition of materials	Conducts Survey	Number of students who responded with an answer of 4 or 5	Number of student participants	Survey question: How often do you get the latest edition of the book that you are borrowing?  1 - Never; 2 - Seldom; 3 - Sometimes; 4 - Often; 5 - Always

Metrics	Performance Measures	Numerator	Denominator	Remarks
A2-1. Client Satisfaction in Terms of Library Space	Conducts Survey	Number of clients who responded with an answer of 4 or 5	Number of respondents	Survey question: How satisfied are you with the overall library space? 1 - Very Dissatisfied; 2 - Dissatisfied; 3 - Neither; 4 - Satisfied; 5 - Very Satisfied
A3-1. Client Satisfaction in Terms of Library Collection	Conducts Survey	Number of clients who responded with an answer of 4 or 5	Number of participants	Survey question: How satisfied are you with the overall library collection? 1 - Very Dissatisfied; 2 - Dissatisfied; 3 - Neither; 4 - Satisfied; 5 - Very Satisfied
A3-2. Collection Compliance with Medical Libraries Standard	Academic Libraries Standard	N/A	N/A	A level of accreditation that is applicable for the library, e.g. PAASCU Level III = 100%, PAASCU Level II = 90%, PAASCU Level I = 80%, etc.

Metrics	Performance Measures	Numerator	Denominator	Remarks
A4-1. Extension Services for the Community	No. of programs/services over target *100	Number of programs or services conducted for the community during a semester	Total number of programs or services planned for the community during a semester	-
A4-2. Feedback from Participants	Evaluation of Participants	Sum of scores of participants on activity evaluation	Number of participants	-
A5-1. Quality of the Programs	Conducts Survey	Number of clients who responded with an answer of 4 or 5	Number of respondents	Survey question: How satisfied are you with the overall quality of the programs? 1 – Very Dissatisfied; 2 – Dissatisfied; 3 – Neither; 4 – Satisfied; 5 – Very Satisfied
A5-2. Feedback from participants	Evaluation of Participants	Sum of scores of participants on activity evaluation	No. of participants	-
B1-1. Quality of Library Service	Compliance	N/A	N/A	A score given by an Internal Quality Assurance
B1-2. Timeliness of Library Service	Response Time	N/A	N/A	A scale formulated by upper management e.g. On-time = 100%; 1 day after = 80%; 2 days after = 70%, etc.

Metrics	Performance Measures	Numerator	Denominator	Remarks
B1-3. Quantity of Library Service	No. of Accomplished Task/ No. of Task Assigned * 100	Number of accomplished tasks for a semester	Number of tasks assigned for a semester	-
B2-1. Assessment of Library Information System	No. of Usage of Library Information System / No. of Expected * 100	Number of Usage of Library Information System for a semester	Number of Expected Users for a semester	-
B2-2. Acquisition of new technology	No. of acquired technology/ No. of Planned * 100	Number of acquired technology for a semester	Number of planned acquisitions for a semester	-
C1-1. No. of ICT Trainings/Seminars attended	No. of Trainings or Seminars attended / No. of Targets *100	Number of trainings or seminars attended for a semester	Number of targets for a semester	-
C1-2. Assessment of ICT Skills	Evaluation of ICT Skill	Sum of scores of participants on activity evaluation	Number of participants	-
C2-1. Coaching Sessions	No. of Coaching Sessions / No. of Planned * 100	Number of coaching sessions for a semester	Number of planned coaching sessions for a semester	-
C2-2. Mentoring	No. of Hours of Mentoring Sessions / Planned * 100	Number of hours of mentoring for a semester	Number of planned hours of mentoring for a semester	-

Metrics	Performance Measures	Numerator	Denominator	Remarks
D1-1. Budget Plan	Timeliness of Budget Plan	N/A	N/A	A scale formulated by upper management e.g. On-time = 100%; 1 day after = 80%; 2 days after = 70%, etc.
D2-1. Expenditure Reports	Timeliness of Expenditure Report	N/A	N/A	A scale formulated by upper management e.g. On-time = 100%; 1 day after = 80%; 2 days after = 70%, etc.

#### **Definition of Performance Measures**

From Figure 2, Kaplan and Norton (1996) presented a framework that can be employed by libraries when implementing a BSC. Based on what has transpired during the interview with the upper management of the UERMMMC Library, together with the framework, the following are action plans that can be taken to implement the BSC.

#### Clarifying and Translating the Vision and Strategy

The objectives presented in Table 1 serves as the clarified and translated vision and strategy of the UERMMMC Library. These objectives can be reviewed every two to three years, depending on the organization's need.

# Communicating and Linking

The UERMMMC Library must make the clarified and translated vision and strategy visible to every stakeholder. A good strategy is to publish the vison and objectives to the website. It can also be added to the employee manual of library staffs and should always be discussed during on-boarding of new hires.

# Planning and Target Setting

Planning and setting of targets should be done before the start of classes because the primary

operations of the library involve servicing the students. This implies that planning and target setting should be done during school breaks or at least a week before classes begin.

This activity involves discussion of each metric and performance measures. It is desirable that all library staffs are involved for the proper setting of targets. Team buildings and Strategic Planning are good venues for this activity.

# Strategic Feedback and Learning

After a successful implementation of a BSC, strategic feedback and learning is a must. The scores generated for each metric should be compared with the targets. Discrepancies on actual scores and targets should create discussions on whether targets are achievable or not and whether additional efforts must be done.

This activity can be performed during end of the semester or during employee appraisals.

# Perception on the Balanced Scorecard

As presented in Table 8, all employees agreed that the metrics presented are in line with the Library's Mission and Vision. All employees also agreed that the metrics will help them assess the performance of the library as a whole. All in all, the employees agreed that the BSC can be used to measure the UERMMMC Library's Performance.

Table 8

Perception on the Balanced Scorecard

The Balanced Scorecard	SD	A	D	SD
These metrics are in line with the Library's Mission and Vision.	5	4	0	0
These metrics will help me assess the Organizational Performance of the Library.	4	5	0	0
Overall, the Balanced Scorecard can be used to measure the UERMMMC Library's Performance?	2	7	0	0

*Note*. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree.

#### Conclusion

There are 20 Metrics and Performance Measures needed to achieve the objectives of the UERMMMC Library. Of these Metrics and Performance Measures, nine belongs to the Customer

Perspective, five is under the Internal Business Process Perspective, four belongs to the Employee Growth and Satisfaction Perspective, and two belongs to the Financial Perspective. A complete list of the objectives, metrics and performance measures is shown in Table 2.

The UERMMMC Library must also integrate their activities with the Balanced Scorecard as Strategic Management System framework of Norton and Kaplan. This framework involves clarifying and translating the vision and strategy, communicating and linking, planning and target setting, and strategic feedback and learning.

Overall, the UERMMMC Library agreed that the Balanced Scorecard can be used to measure their organization's performance. Moreover, they agreed that the metrics in the designed balanced scorecard of the study are aligned with their vision and mission and will help them assess the library's performance.

After coming up with a BSC for the UERMMMC Library, this study recommends that the UERMMMC Library should look at the implementation of the metrics and performance measures so that the set targets will be compared to actual scores. Also, they should take into account using the BSC in the yearly appraisal of their staffs aside from the UERMMMC HR-mandated form. Another one is that the UERMMMC Library should consider reviewing their objectives to make sure that all of their activities are aligned with the organization's ultimate goal. Otherwise, they must develop activities that must satisfy all of the objectives including their commitment in providing medical information to the outside community.

Lastly, a future study should be conducted to determine a standardized BSC across academic libraries. A standardized BSC will help in the comparison of performances of different academic libraries.

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