ARIV
International Journal of Business
Paper ID: AIJB11022020 Issue 1 Vol1 2020

Management Accounting Techniques for Educational Institutions

Dr. Rengarajan Veerasamy, Dr. Subrahmanian Muthuraman & Dr. Kabaly P. Subramanian
Faculty Members, Arab Open University, Sultanate of Oman

Abstract

Management accounting is perceived as accounting for organizations that aim at maximizing profits and minimizing costs. Management accounting is for all types of organizations that keep profit making as well providing services as their core objectives respectively. Cost of performing services can also be well estimated and calculated by organizations that are mainly into service businesses. In the same perspective, management accounting techniques can very well be applied and adopted in Educational Institutions as well. If adopted, management accounting would play a pivotal role in educational institutions in estimating the cost of performing various educational services like admitting a student into an educational program, cost of teaching a course, cost of performing various assessments for a student, cost of performing various other academic activities etc. Later, variances can be well computed in order to identify and formulate strategies to sustain the growth rate that educational institutions keep up in terms of students' intake. In the same manner, Balanced Scorecard will also be a much contributing tool for educational institutions through which standards in those four perspectives could be estimated and through which they can design and modify strategies accordingly. Cost calculation is so vital for educational institutions as the top management of these educational institutions must be aware of costs of performing various educational services in order to identify the most beneficial and cost effective way of performing such services, not for maximizing profit rather focusing on utilization of available resources most effectively and efficiently. Management accounting would play a major role in educational institutions in planning, organizing, controlling, evaluating and making decisions.

Key words: Management Accounting, Decision Making, Planning and Control,

Introduction

Management Accounting intends to provide maximum value for a business organization. CIMA (2015)[1] argues that good management accounting improves decision-making because it extracts value from information. Organizations try their best to add value to their offerings and through which shareholders value. Thus, management accounting is always taken as an accounting system maintained for providing maximum value for the organizations through improved decision making and effective cost control mechanisms. Management Accounting can also be well used in educational institutions in a manner that it would help them in achieving its mission, vision and goals most effectively and efficiently. Information analysis provides value-based information which improves decision-making process and in turn yields efficient utilization of resources.

Applicability of Management Accounting Techniques in Educational Services Management

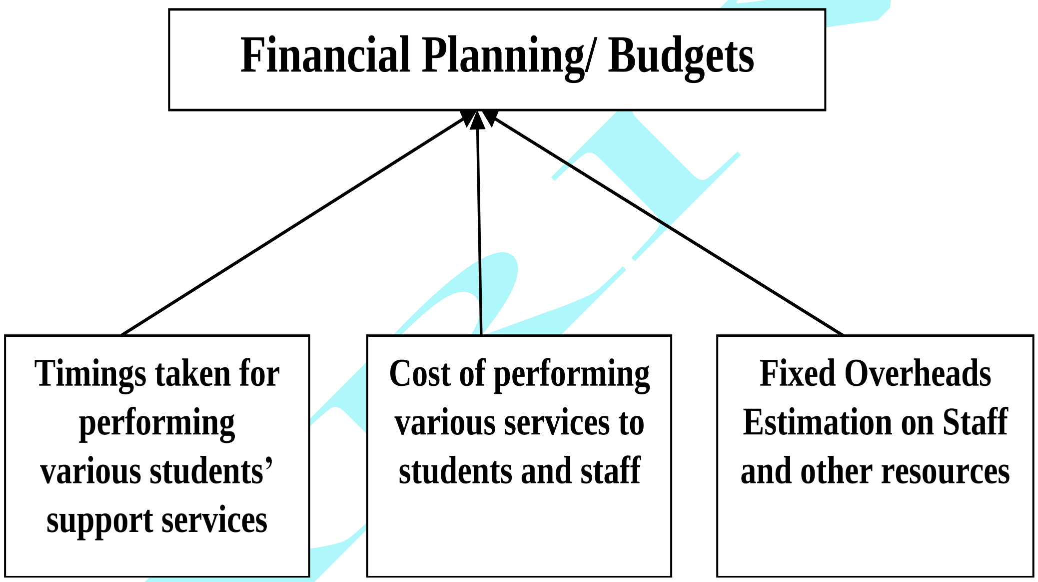
Management Accounting can well be used in evaluating the effectiveness of educational services in terms of costs and benefits. Educational institutions may adopt techniques such budgeting, variance analysis, cost estimation and control, Net Present Value etc. to move forward towards their goals. Organizations seek to achieve their vision in their long-run and based on which goals and objectives are set. Thus, standards are always there for any organization and achieving that needs good decisions, which is highly facilitated by management accounting techniques.

(i) Estimation and Setting Standards - Planning Process

Setting standards is an estimation process through which performance standards are well established. The purpose of performance standards is to communicate expectations to the operational level employees (IU,2020)[2]. Educational institutions bound to have mission, vision and goals and towards which they establish strategies and operational plans and work accordingly. Such estimation process and plans would help educational institutions a lot in improving their operational level performance as they provide an outline for the level of performance to be shown up on various operational level activities. Educational institutions should set standards both in financial and non-financial terms. Estimation of non-financial standards on various operational activities would help them a lot in estimating the cost of performing various educational services. At the same time, such standards become the guideline for the operational management and administration staff to plan their day to day operations more efficiently.

Following diagram illustrates how process estimation and setting standards would help them in estimating the costs of various educational services.

(a) Model of Financial Planning Process/Budgeting



Budgeting is one of the management accounting tools that educational institutions can adopt for estimating the financial requirements. Through which, it can set out certain operational standards or targets for which administration and operational management staff may be held responsible and accountable. This process implements management accounting tools budgeting and responsibility accounting. Through this process, administration departments could be regarded as time centre, which is responsible for delivering certain students support services within estimated time, thus contributing effectively for minimum utilization of resources. Operational standards can be set for various activities like

(a) Table showing Time Standards for the various Time Centres operating within the Operational Management of Educational Institutions

Students Support Services Centre	*Students' Academic Services through Academic Support services centre*	*Staff Support Services Centre*	*Standard Time*
Timing taken for performing a support service like providing a certificate, registering courses, processing admission application forms etc.	Timing Taken for providing guidance on academic writing	Time taken f for providing certain personal facilities to staff members.	
Timing taken for providing counselling and guidance	Timing taken for clarifying certain academic questions	Time taken for facilitating Staff with technical and academic services.	
Timing Responsibility – Assigned to………………			

Management accounting plays a pivotal role here in collecting this data, analysing and providing insight information to top management in order to plan their financial planning and operational planning through which budgets for various functions could be well estimated. Poindexter (1969)[3] argues that for effective planning, budgeting to be done beyond one academic year and it should start covering five years and ten years of time. Thus, budgeting proves to be one of the essential tools of educational institutions and with the help of which certain operational standards in terms of time and cost could be well established for an educational institution. Later, these standards can be an indicator for evaluation of actual performance and that comparison could be done through one of the management accounting tools variance analysis.

(ii) Responsibility Accounting

Responsibility accounting is also used in educational institutions through which time centres within operational level can be established. Accounting verse (2020)[4] presents that rresponsibility accounting involves gathering and reporting revenues and costs by areas of responsibility and it covers cost, revenue, profit and investment centres of an organization. Organization being an educational institution, wherein timing taken for performing various services contribute a lot in its effectiveness and resources utilization, thus, time centres can be established within the operational level of management.

(iii) Variance Analysis

Evaluation should always be part of continuous improvement process. Organizations keep growing if variances are observed, analyzed and actions are taken accordingly. Project management (2020)[5] This technique is used for determining the reasons and proportion of variation between the baseline/standards and actual performance and to have a control over an activity. Educational institutions need to have this variance analysis report annually and if required, within certain period, in order to observe the growth and challenges that this institution has been facing. Through budgeting process, as mentioned above, educational institutions can set operational standards in various perspectives such as from students' services, staff services, students' academic support services etc. The operational efficiency of having done these services must be examined, so that further improvements could be planned out through improved and modified operational plans.

Variance reports may be prepared by educational institutions in order to reveal the operational efficiency of operational level management. The reports can be prepared as given below:

(b) Table showing an example of a Variance Report of Administration and Operational Level Management of an Educational Institution

	Academic Year: *Level of Management: Operational Management*								
Activity	*Admission*			*Administration*			*Students Support Services*		
	Standard	*Actual*	*Variance*	*Standard*	*Actual*	*Variance*	*Standard*	*Actual*	*Variance*
Students Admission Process ***(Average time)***									
Students Request for a certificate ***(Average time)***									
Students request for a facility ***(Average time)***									
Comment on the overall performance									

The above table can be filled In by Administration/operational level management to evaluate the operational efficiency of operational level management of an educational institution. This analysis would help in assessing the level of performance of each of the processes being delivered at the operational level of an educational institution. This would constantly provide a basis for the top management in assessing the costs of performing various academic and academic support services to students and staff and to the public at large. Variance analysis provides an insight into the various operational activities, thus studying about the value additions of these activities would become easier. Secondly, variance analysis helps in identifying the challenges that an educational institution is facing in delivering certain types of tasks that demand greater devotion of time by the staff. The challenges that are associated with using such variances reports are many. To mention a few, variances must be observed very closely by the top management since the type of services provided cannot be standardized. Secondly, organizations will have to have a system of recording the actual time taken for performing various activities. Aruomoaghe et. al (2013) argues that variance analysis allows cost control and performance evaluation by comparing actual to budgets and through which cost control could be made easier and meeting the standards.

The overall performance of an educational institution can also be evaluated through such variance analysis. In that case, educational institution will have to take up all other standards and targets and compare with the actuals to get the real insight. The variables that could be taken for comparison and for finding variances include number of students admitted, number of students left the institution, number of students graduated, number of inactive students, number of students getting campus placements etc. Variance analysis can also be used to evaluate the financial performance of an educational institution to analyse the effectiveness being employed in managing the financial affairs. Such variance analysis would reveal the issues and challenges of an educational institution in a more detailed manner, so further plans and strategies for further improvements could be very well formulated.

(iv) Decision Making through NPV Technique

Educational institutions make investments on fixed assets quite often. They need various technologies for their delivery of teaching and non-teaching services effectively. Such investments are usually need based. Educational institutions make plans and prepare budget accordingly and proceed with committing funds on such investments. Since investments are made on need of the hour, usually a simple comparison of costs and benefits are usually done by educational institutions for making such decisions. Gallo (2014)[7] argues that "NPV is a method of calculating return on investment, or ROI, for a project or expenditure". People make decisions after knowing the money that they can make from the investment, translated into today's worth of a currency. Thus, in making such long-term investment decisions, educational institutions must stress on calculating

Net Present value of net benefits and accordingly decisions can be made. This analysis would highlight the top management of educational institutions about the value of money been spent on various fixed assets and return that are expected to be there from such investments in present value terms. This would stress top management of educational institutions to go in for investments that yield higher benefits (i.e. higher NPV) so their long -term investments would go hand in hand with their long-term goals.

Table showing the format of Evaluation of Long-term Investments made by an Educational Institution in an academic year

Type of Long-Term Investment (Asset to be purchased)	*Cash Outlay (Cost of an investment)*	*Future Benefits (in $)*	*NPV ($)*	*Decision made (Accept/Reject)*

An annual evaluation of investments made by an educational institution would reveal the cost outlays made by them in an academic year and the decisions made on such investments. Such analysis would help them to focus on planning about the long-term investments appropriately which would include timing, cost of such investments and benefits to be earned from investments. Educational institutions would be able to align their long-term investments according to the long-term goals they have if they analyze their long-term investments and make decisions accordingly.

(v) Fixed Cost Analysis

Educational institutions have more fixed overheads than variable costs. They are into providing educational services through use of manpower and technologies, their fixed costs are higher than their variable costs. Educational institutions should be carefully analysing their fixed costs in order to have an adequate and appropriate plan and control of such costs. One of the major costs of educational institutions is Academic and Non-Academic Staff salaries and Rental (if any) on the resources utilized like buildings, technology, software purchased, facilities used, subscriptions paid for gaining access to a software or facility. Educational institutions should be planning well about its fixed cost and making sure that these costs do not exceed their limit they have made before. Such a careful analysis will help educational institutions to plan out their fixed cost commitments well in advance and this would help them avoid having this as a surprise later. Unplanned fixed costs would bring a big impact on their cash inflows, which would rather make inverse impact on their performance. Thomson (1984)[8] points out that most managers, particularly those in capital-intensive industries, are not paying good amount of attention to the way increasing capital requirements affect their ability to compete in the long run. This is clear that organizations will have pay good amount of care and attention on fixed costs so that their stakeholders value is maintained at constant growing rate.

Discussion and Conclusion

Information is wealth and considered as one of the highest contributing resources. Information management is the key for any organization, both profit making and non-profit making to achieve success. Organizations thrive for success through various strategies and operational activities that are carefully planned and implemented. On the way of maximizing its benefits, they are bound to make to crucial decisions and evaluate processes keeping further progress as one of the objectives. So, decision making becomes the most important functions of an organization. Connell (2006)[9] presents that organizations “face with the imperfectability of decision making and management theorists have sought various ways to achieve, if not optimal outcomes, at least acceptable ones.”. Organizations need to have adequate amount of information, so that acceptable decisions could be very well made.

Decision making needs the support of data analysis and information reporting, so that decisions can be appropriately made. Management Accounting is the accounting system that provides data and information in a more analytical manner, so decision- making could be made simple. Management accounting is widely used by profit seeking organizations as they seek to maximize shareholders wealth through value being created in various phases of management. Management Accounting helps organization in obtaining, analysing data and presenting the information in a more valuable manner so discharging managerial functions becoming effective and efficient.

Management accounting can very well be used by educational institutions as well in order to become more competitive in the industry. Though, educational institutions are not profit seeking, but efficient utilization of its resources is one of their goals. To be more effective and efficient in its operations, accurate data collection, analysis and reporting are mandatory for educational institutions. Data analysis becomes crucial for educational institutions, so performance evaluation and decision-making processes are becoming easier. Yau (2004) presents that that "management accounting is an effective tool for using accounting data and other information to manage the organization to achieve its objectives in the most efficient way". Management Accounting thrown various techniques for analysis and making good decisions. All of them are very effective in producing results for the organizations. Management accounting plays a major role in that aspect and it provides huge amount of benefits to educational intuitions to make them remain competitive and contributing to the society. Thus, investing on having a management accounting information system is a worthwhile investment for educational institutions and this should be spared out since this is very crucial and highly beneficial investment.

References

Accounting verse (2020), What is Responsibility Accounting? An article available at https://www.accountingverse.com/managerial-accounting/responsibility-accounting/what-is-responsibility-accounting.html, (accessed on 06.02. 2020

Aruomoaghe et. al (2013), Application of Variance Analysis for Performance Evaluation: A Cost/Benefit Approach, Research Journal of Finance and Accounting, Vol.4, No.13, 2013,*)*

CIMA (2015), Global Management Accounting Principles, CIMA Publication, UK.

Connell (2006), A Brief History of Decision Making, Harvard Business Review, January Issue, an article available at *https://hbr.org/2006/01/a-brief-history-of-decision-making*, (accessed on 06.02.2020)

Gallo (2014), A Refresher on Net Present Value, Harvard Business Review, November Issue, available on *https://hbr.org/2014/11/a-refresher-on-net-present-value*, (accessed on 06.02.2020)

IU (2020), Performance Management, Define Performance Standards for Each Duty, available on *https://hr.iu.edu/training/performance_management/define.htm*, (accessed on 06.02.2020)

Poindexter (1969), Planning-Programming-Budgeting Systems for Education, The *High School Journal*, Vol. 52, No. 4, Evaluation of the Educational System pp. 206-217), USA

Project Management (2020), Variance Analysis, An article available at https://www.projectmanagement.com/wikis/345511/Variance-Analysis, (accessed on 06.02.2020)

Thomson (1984), Strategies for Staying Cost Competitive, Harvard Business Review, January issue, available on *https://hbr.org/1984/01/strategies-for-staying-cost-competitive*, (accessed on 06.02.2020)

Yau (2004), *Management Accounting in Education: stakeholder perceptions in Singapore*, A PhD thesis submitted to University of Leicester, UK