

## **Implementing Balanced Scorecard in Higher Education Management**

*Case Study: Hasanuddin University of Indonesia*

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### **Abstract**

*In developing countries like Indonesia, it is common that the strategy at the top university level is less aligned with the departmental levels; despite departments are front liners in implementing mission to achieve the university vision. Such disharmony would potentially reduce the effectiveness of the programs implemented resulting in budget inefficiency. This paper is aimed to demonstrate on how the balanced scorecard (BSC) can be well implemented in Hasanuddin University. Some adaptations of the original BSC were explored to the specificities of the university. In addition, some distinctive performance measurement perspectives will also be developed by taking into consideration the specificities the university. Some alternations include the perspectives' architecture of both the balanced scorecard and strategy map as well as the other main concepts related with this methodology such as alignment, strategy focus, consensus, cause and effect relationships.*

**Key words:** strategy alignment, balanced scorecard perspectives, cause and effect relationships, strategy focus

### **1. Introduction**

The transformation of industrial era into the information age has changed the basis of competitive advantage from resource-based economy to a knowledge-based economy (Stewart, 1997). This change has placed the university in a central position to produce economic benefits. As the springs of knowledge and a place to produce knowledgeable beings, universities have a vital role in determining the welfare of the nation. Along this progress, people's demand for accountability of higher education is also becoming increasingly large. Entering the 1990s, the accountability of higher education becomes an increasingly important issue in the higher education management (Stewart and Hubin, 2001). As public-oriented institutions, universities have a multi-stakeholder meaning that higher education institution is required to accommodate and satisfy the needs and desires of all the stakeholders. These demands are actually not an easy task, especially for public university. Sometimes, the university efforts to fulfill the needs of a particular stakeholder focus are not in line with the other stakeholder perspectives.

The stakeholders of higher education institution consist of ranging from government, alumni, students, parents, students, faculty, staff, users, donors, and community (Ruben, 1999; Stewart and Hubin, 2001; Grayson, 2004; Umashankar and Dutta, 2007). Interests of stakeholders actually boil down to one common goal i.e. producing graduates who are able to bring benefit to the environment. However, each stakeholder has a different perspective; the emphasis need of each stakeholder is different. In paralel with this issue, the indicators of accountability assessment of higher education is expected to provide value to fulfill the interests of multiple stakeholders (Stewart and Hubin, 2001).

In general, the accountability of public universities in Indonesia is measured by two types of performance measurement. First, public university has an obligation to submit annual financial report to the government. The financial report describes whether the public resources utilized by the university has been in accordance with the university plan. The financial report is usually prepared at the university top management level. Second, all study programs have an obligatory to prepare accreditation documents submitted to national board of accreditation for higher education in order to be accredited nationally. In order to be legally approved, the accreditation rank of study program has to meet at least C from A-C scales.

This accreditation status illustrates the eligibility of the operational implementation of the study program with the minimum quality standards set by the government. The second type of the performance measurement is generally conducted by the respective study program. In principle, accountability means more than just the delegation of authority and obligation to report the activities done by the executive. Accountability is the result of the delegation of authority, which can be better understood if it is associated with market economy (Carmelli, 2004). In other words, the public resources utilized by the university management should not be measured from the output only, but the results achieved from the implementation of higher education missions. In reality, however, the situation is often different. Many universities have demonstrated a good performance at the university top management level, but having a weak performance at the departmental levels. The university good governance is supposed to produce a good quality index in both administration and implementation of higher education institution. This gap indicates a lack of harmony between what is done at the university top management level and at the departmental levels. Judging from this phenomenon, it is urgently required for the university to apply management strategies that could align all performances across the all levels of the organization.

## **2. Background**

Although the aggregate performance achieved by Hasanuddin University has shown a good performance index, but actually Hasanuddin University still could do better to further improve its accountability. By the time of strategy evaluation was carried out, it was realized that in general, the programs implemented at the departmental levels were mainly focused on their routine learning activities. A few non-routine activities were also conducted but only limited to the study programs who received competitive grants from government. This led to the emergence of the gap between strategies developed at the university level with its implementation at study program levels. While, in fact, the study program is the spearheading of the implementation of the university strategy in achieving the university vision.

In general, the performance measurement at university level is dominated by normative academic performances since the performance indicators are developed by the government and is applicable to all higher education institutions in Indonesia. As a result, such homogeneity in performance measurement has lead to difficulty in assessing the strategy developed by Hasanuddin University since the results will be biased. Most of the achievement of the strategic goals cannot be measured because the performance measurement system has not focused on the strategy. The university performance is basically the accumulation of performance achieved by study programs and other units within the university. But in fact, the study programs have not obvious performance indicators and targets that are inline with the university strategic goals.

In most cases, the heads of the study program even do not yet understand how they should contribute to the achievement of the strategy at the university level since they only focus on their routine academic activities. This fact indicates that strategic planing developed at the university level cannot be translated into work plans of each unit within the university. In addition, the strategic planning has either not served as a communication tool and motivation for the heads of the study program regarding their role, function, and target, as well as on how they should do to achieve the strategic objectives of the university. As a result, there has been unconformity performances between university level and study program levels that may also give impact to the unoptimal accountability of the university organization measured by the effectiveness and efficiency of resource utilization. Therefore, Hasanuddin University requires a performance management tool enabling to translate organizational strategy into implementation strategies at departmental levels and be able to harmonize strategies among units within university as well as between university level and separtmental levels. One of proven approaches that able to address those needs is balanced scorecard developed by Kaplan and Norton (2006).

## **3. Balanced Scorecard as a Strategic Planning Tool in Higher Education Management**

Balanced scorecard is a concept introduced by Kaplan and Norton in the article entitled "The Balanced Scorecard Measures That Drive Performance", published in Harvard Business Review, in 1992 (Kaplan and Norton, 1992). The concept is the proceedings of the research conducted on a series of companies in the U.S. in order to develop a model of performance measurement that is relevant to today's shifting competitive basis. The original idea stems from the need for performance measurement models are not only focused on financial indicators, but also on non-financial indicators such as intellectual property. Balanced scorecard is a performance measurement model that allows executives to view the organization from multiple perspectives simultaneously, namely: learning and growth perspective, internal process perspective, customer perspective and financial perspective.

During its development, Kaplan and Norton recognize that performance measurement should start from the organization's strategy. In their article "putting the balanced scorecard to work", they further explained the importance of linking between business benchmark and strategy. Effective measurement must be an integral part of the management strategy within the organization. Thus, the balanced scorecard can serve as a management system to direct the various aspects that need improvement so that it is effective to encourage the process of change within the organization (Kaplan and Norton, 1993).

The implementation and benefit of a balanced scorecard has caused its definition seems too narrow than its function. Kaplan and Norton define the balanced scorecard as....."*a set of measures that gives top managers a fast but comprehensive view of the business...include financial measures that tell result of action already taken...complements the financial measures with operational measures on customer satisfaction, internal processes, and the organization's innovation and improvement activities-operational measures that are drivers of future financial performance*". From this understanding it is apparent that the balanced scorecard is a management system that includes the measurement and control to view the organization from four perspectives, namely financial, customer, internal process and learning and growth. These four perspectives are intertwined in a causal relationship in which a financial perspective is considered as a result indicator driven by other three operational indicators. This system allows the organization to focus its strategic initiatives and investments on those aspects that are important triggers for achieving strategic goals.

In their book published in 1996 entitled "The Balanced Scorecard: Translating Strategy into Action", Kaplan and Norton explained the importance of the organization having a performance measurement system that can motivate employees to implement the strategy of their business units. Therefore it is necessary to translate its vision, mission and strategy into appropriate performance indicators to communicate its goals and targets to each employee. According to them, these performance indicators are a model of a holistic strategy that allows all employees to understand how they can contribute to the success of the organization's strategic goals. Each indicator needs to be linked to one another in a causal relationship. Although without linkage the performance of each employee and department can still be optimized, but it won't contribute to the achievement of the organization's strategic objectives. Halachmi (2002, 2005) has the same idea that is consistent with Kaplan and Norton (1996). According to Halachmi, an appropriate performance measurement system will be very effective as a way to improve the performance. Halachmi (2005) further explained that something that cannot be measured it will not be understood. If it cannot be understood, then it will not be controlled; and if it cannot be controlled, it will not be developed. Therefore, the organization's strategic goals and measures should be identified and linked appropriately. Thus, the performance indicators can serve as a performance management system, not merely just performance measurement. This concept is still consistent with the fulfillment of the three principles of balanced scorecard performance measurement system that enables organization system performance connecting to the strategy (Kaplan and Norton; 1996).

The first principle is a causal relationship among performance indicators. According to Kaplan and Norton (1996), the strategy is a set of hypotheses that can be expressed in the form of if-then. Therefore, organizational performance measurement system should be able to explain a series of success stories. The model will enable strategies to be animated and criticized before, during, and after its implementation. Change initiative will be easily done because the causal relationship among performance indicators can be explained and examined in detail.

The second principle of balanced scorecard is that the organization's performance indicators need to be combined between the lag and lead indicators. The former reflects the organization's strategic goals, while the later indicates the uniqueness of the strategy used by the organization. The understanding of the lead performance indicators will allow precise control and development to achieve the strategic objectives of the organization.

The third principle, all performance measures must be linked to the outcomes. The organizational achievement measured by lead indicators could not be considered as the success of organization since such achievement is not the ultimate objective. Even the effectiveness of lead indicators is measured by lag indicators. In essence, the third principle of the balanced scorecard described that the effective use of the balanced scorecard as a performance management tool started from the proper identification of the performance measures in accordance with the characteristics and organizational strategy. This conclusion is in consistent with the study conducted by Wisniewski and Olafson (2004).

According to them, the four perspectives developed by Kaplan and Norton (1992, 1993) are designed for profit organization that emphasizes on the achievement of financial performance indicators alone. According to the logical framework described by Kaplan and Norton, competent staff will produce good internal processes and accordingly good internal processes will satisfy consumers; and subsequently satisfied consumers will increase revenue. This logical framework explains that the ultimate goal of the organization lies in the maximization of financial measures as can be seen in figure 1. In contrast, public organizations put more emphasis on effectiveness and efficiency as a form of accountability. The consumer perspective will be the final goal, or at least one of the ultimate goal of a public organization. This difference implies a logical hierarchy of the four balanced scorecard perspectives as shown in figure 2.

This logical hierarchy is also consistent with Lawrie and Cobbold (2004) stating that the failure of the implementation of the balanced scorecard of some organizations are due to the generalization perspectives and performance measures developed by Kaplan and Norton (1992) at an organization that has a different characteristics. Nevertheless, the various strategies developed by either profit or and public organizations has placed the learning and growth perspective as an important lead indicators. Such perspective is considered important to drive the organizational change for improvement.

#### ***4. The Design of Balanced Scorecard Application at Hasanuddin University***

Based on the analysis of the management practices implemented at Hasanuddin University, the analysis result showed the need for the development of two things. First, the Hasanuddin University needs to align the strategy at each unit in order to effectively and efficiently contribute optimally to the achievement of the strategic objectives of Hasanuddin University. Second, Hasanuddin University needs develop a strategic map in accordance with the characteristics and objective conditions faced by Hasanuddin University. The development of those issues would be very precise through the application of balanced scorecard in the university strategic plan. As a government-owned institution, the mission of Hasanuddin University is to enlarge access and equity of high quality of higher education quality, competitive, and relevant to the nations needs. Therefore more appropriate hierarchical model to be developed by Hasanuddin University is shown in figure 2 b that is adopted from Wisniewski and Cobbold (2004). The model puts the financial perspective as a resource to support the internal processes. The assumption taken is that the university funding becomes the responsibility of the government.

In reality, however, the objective conditions faced by the university is not as simply as the model and will be less precise to be solved by the model. The structure of the university revenue consisted of not only from the government, but also from tuition fees and grants. The funding source from government follows the performance-based budgeting, meaning that the amount of government funding granted heavily depend on the university planning and its performance achievement. Thus, the financial perspective will not be appropriately placed in the position of the organization's resources, rather as a result of process and customer performances as shown in figure 2.a. This condition has positioned the university as an institution owned by the government which has the mission-oriented public interest, but it should be managed using profit organization approach. Based on that fact, the university has developed a strategy map as illustrated in figure 3. The university strategy map was adopted from a balanced scorecard model developed by Kaplan and Norton (1992, 1993) while the logical hierarchy model was derived from Wisniewski and Cobbold (2004).

The attribute of each perspective refers to the logical hierarchy model commonly used in the development strategy i.e., inputs, processes, outputs, and outcomes. Each perspective has several strategic themes which are measured from the two indicators. Strategic themes and performance indicators developed at each perspective are aligned to the university strategic plan. The adaptation of the four balanced scorecard perspectives developed by Kaplan and Norton (1992, 1993) was based on the consideration that the management of Hasanuddin University has to adopt appropriate ways carried out by profit organization to improve its competitiveness. In overall, the university top leader could monitor and control the 17 strategic themes to develop university. The strategic themes of the input perspectives consist of facilities, staff professionalism, and systems and policies and procedures and organizational structure. The development of input perspective has further improved the process perspective. The strategic themes of process perspective consist of academic atmosphere, good university governance, university social responsibility, teaching and learning, and research. A good performance on the process perspective has delivered value for multiple stakeholders consisting of students, users, community, and partners. The strategic themes of output perspective is manifestation of value delivered to multi stakeholder.

Value presented to students is learning quality; value for graduates is competence relevancy; value for society is accessibility to learn, and value for partners is the mutual benefit. Consumer satisfaction has improved the performance of output strategic themes measured by financial indicators. The strategic themes of result perspective is funding from government, community, and grants or aids. The output achievements allow the university to obtain a bigger budget allocation from government as well as grants or aids. The better performance achieved by the university at output perspective, the greater the public animo to enter the university or cooperate with the university. This will increase the amount of university income earned from society.

Furthermore, the increase of university revenue will be used to further develop the input perspective that will multiply the performance results achieved by the university. With this strategy map, the university can translate its vision, mission, and strategies into the operational strategy to be implemented at the departmental levels within the university. The strategy map will also allow the alignment between the units within the university. The units will no longer develop its strategy partially, but comprehending that they must move forward in a portfolio plan in accordance with the strategic road map at the university level. Each unit has to understand its targets and on how they could contribute to the achievement of the university strategic objectives. The application of strategic planning is significantly streamline the budget effectiveness since the implementation of strategies within the university is holistic and integrated. The logical consequence of this implementation is the increased university accountability to both government and public.

### 5. Conclusion

Balanced scorecard is a performance management system that appropriately can be used to improve the accountability of higher education institution. This approach can help universities to translate the vision, mission and strategy into a series of performance indicators that can drive change towards better improvement. However, universities still need to visualize precisely the strategy map according to its own characteristics and strategy. Each university needs to identify specific key success factors in order to be leading in accordance with its vision. In the implementation of the strategy, universities often encounter obstacles that generally come from the employee. Such barriers include resistance to change, lack of commitment, or the fear of accountability pressures. Mapping strategy using the balanced scorecard concept can focus the university strategy to remove such barriers to success. Hasanuddin University, in particular, has obtained benefit from the utilization of the balanced scorecard to resolve problems encountered during managing the institution.

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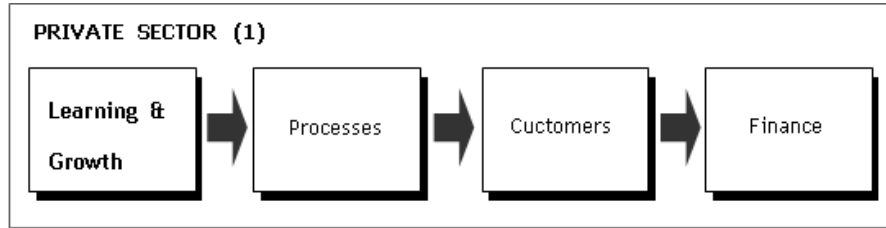


Figure 1. The logical hierarchy model of profit organization (Wisniewski and Olafson, 2004)

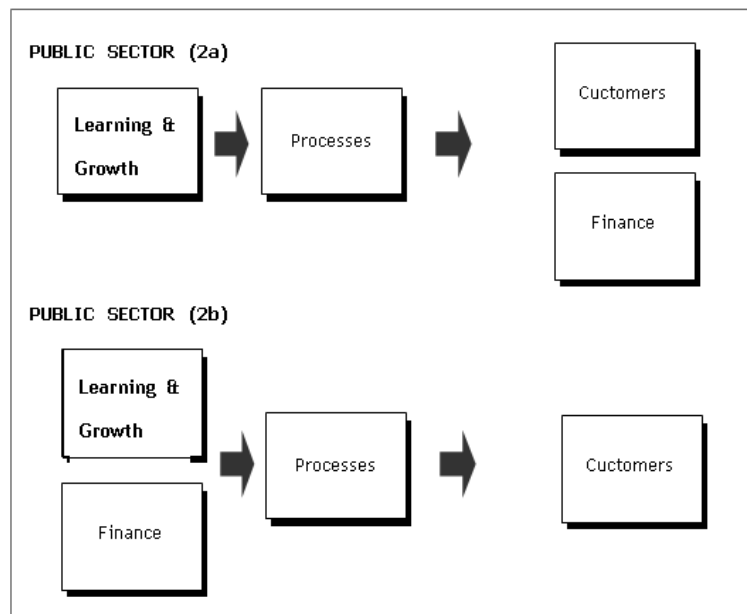


Figure 2. The logical hierarchy model for public sector organization (Wisniewski and Olafson, 2004)

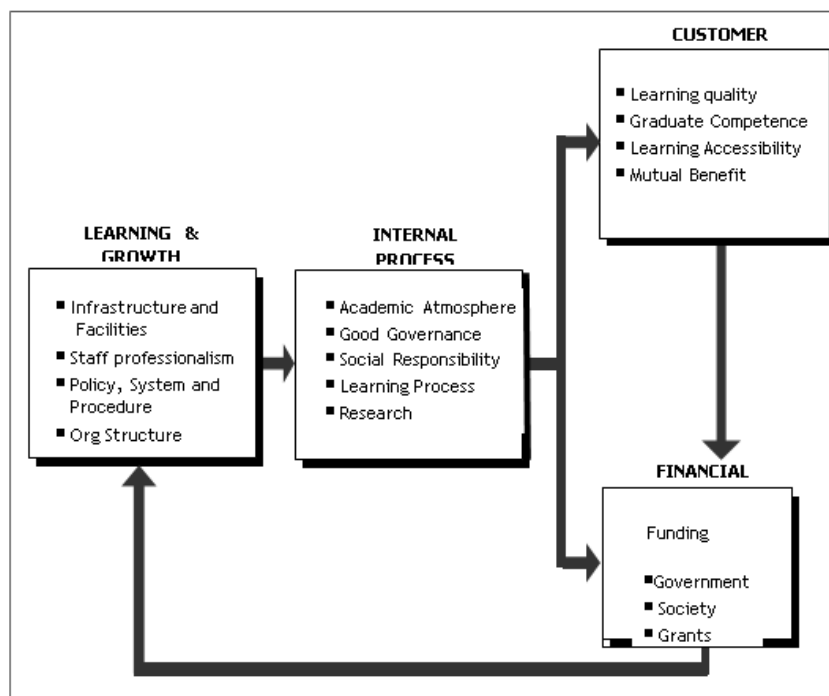


Figure 3. The strategy map of Hasanuddin University