The Effect of Balanced Scorecard on the Private College Performance (Case Study at the University of WR Supratman Surabaya)

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ABSTRACT

One important factor that is used to assess the success of private college is performance. Private colleges continue their efforts to prepare and fine-tune their business strategies in order to survive in the world of education and even become a winner in the competition. Measurement of performance becomes a very important thing. Balanced Scorecard has goal and measurement that is not only a combination of financial and non-financial measurement, but is the result of a top-down process based on the mission and strategy of a private college. The purpose of this study is to determine the effect of Balanced Scorecard model toward performance of future private colleges. The independent variable in this study is the Balanced Scorecard that consists of customer perspective, financial perspective, internal business process perspective and the perspective of process of growth and learning, while the dependent variable is the performance of the private college (Y). The sample in this study is 100 people covering over half of the students (IV and above) who are active students at the University of WR Supratman Surabaya. Method of data processing is using multiple linear regression with SPSS. The result of Discussion can be concluded that (1) Balanced scorecard model simultaneously effects on the performance of future private colleges significantly, which is characterized by the significant value of F arithmetic amounted to 0.000 (0.000 <0.05), and (2) Balanced scorecard model partially influences to the performance of the future private colleges significantly, which is marked with significant value of t calculate of customer perspective amounted 0.014 (0.014 <0.05), the customer’s financial perspective for 0.035 (0.035 <0.05), internal business process perspective of 0.002 (0.002 < 0.05) and the perspective of growth and learning process of 0.000 (0.000 <0.05)

Keyword: Balanced Scorecard, and private college performance

INTRODUCTION

Draft of Law on Education Legal Entity (BHP), which mandates that management education is essentially non-profit, however management is done in corporative way like a business entity. Educational institutions are required to run a transparent management as a form of accountability to education stakeholders. Therefore the institutions become an organization associated with the various interests of educational users. Consequently, educational institutions must be independent and able to take advantage of educational resources effectively. The utilization of these resources needs to be continuously evaluated and there should be an assessment of the outcomes of education as a form of accountability.

Balance scorecard as a management system has a strategic relationship with the financial and non-financial instruments in four keys of an organization, and it is becoming a really good mean. Thus the measurement of private colleges’ performance is not only focused on one
perspective only, but also on other perspectives that support the growth of private colleges. Private colleges are not likely to survive in the long term. Therefore private colleges can implement the measurement of performance with Balanced Scorecard. The performance of private colleges as a form of management responsibility can be measured by using balanced scorecard perspectives that include the customer perspective, then the financial perspective, internal process perspective and learning and growth perspective.

Based on the above background, the problem in this research is "How the balanced scorecard model can be used as a performance measurement of future private colleges ". The hypothesis in this study is (1) a balanced scorecard model simultaneously and partially effect on the performance of the future private colleges significantly ". The purpose of this study is to determine and discuss how the balanced scorecard model can be used as a performance measurement model of future private colleges. These results are published as a national journal or teaching materials in the field of management particularly.

The results of the study can be used as material which provides a reference for private colleges in assessing their performance, so as to measure the ability in accounting its management.

LITERATURE REVIEW

Balanced Scorecard
The Balanced Scorecard rapidly developed in recognition of its potential and emerged as a new strategic management system (Butler et al, 1997 in Abdalkrim, 2014). Binden, Mziu, and Suhaimi (2014) The Balanced Scorecard is used as a measurement tool in order to measure an organization’s performance in both public and private sectors to achieve the key business strategies and objectives. Lin, Yu, and Zhang (2014) in Shukria and Ramlia (2015) The Balanced Scorecard is formally defined as a multidimensional approach to measure the management performance through examining relationship between the organizational strategies and operational performances. Customer is to emphasize and take advantage of market segmentation or intrinsic sources to distinguish the difference between competitors (Wu, Lin et al. 2011 in Ahmad and Soon, 2015). The scorecard can help to focus this strategic vision so managers to select a limited number of critical indicators within each of the four perspectives (Ali, 2007; Kaplan and Norton, 1993 in Al-Hosaini and Sofian; 2015). Rigby (2011) in Elola, Tejedor, Pastor Tejedor (2016) The balanced Scorecard is an advanced model of strategic orientation of organizations and it is also use 54 per cent of the 1,230 global firms.

One of the main goals of balanced scorecard is to create a participation and communication of the vision and strategic objectives of a company. If the concept is not applied as it should be, then the people in the organization will probably have a wrong perception that the balanced scorecard is a controller for themselves, not for company that is attempting to make progress to achieve the goals that have been set.

Many executives look balanced scorecard as an initiative to improve the performance measurement system not as something that is made to make fundamental changes in the way the company manages its business. So many managers are interested only in the conceptual appeal of the balanced scorecard, whereas conceptual appeal is not an enough reason to start this program. When construction is begun, every senior executive must identify and agree on the main objectives of the project implementation.

Performance of Private Colleges
Pourreisa, Ahmadgourabi, and Efteghar (2013) in Al-Hayaly and Alnajjar (2016) Balanced performance card represents a system for measuring performance based on evaluating the
organization development and growth, and enhancing its abilities with the goal to improve the customers satisfaction and the organizational effectiveness and efficacy. Niven (2008) in Pietrzak, Paliszkiewicz and Klepacki (2015) Balanced Scorecard is used in government agencies, universities, and non-profit organizations. The company's performance is usually focused on the group task, rather than the group matter subject internally. It can be concluded that the college performance is the result achieved by college in a given period under review from the important perspectives which are financial, customer, internal business, learning and growth as a result of the implementation strategy of the college in order to realize its vision.

The company's performance is usually focused on the task group, rather than on group matter subject internally. Kaplan and Norton (2002) in Awadallah and Allam (2015) aspects that are measured in the balanced scorecard include:

1) **Performance metrics - financial**
Excellence in the financial sector is expected to guarantee the welfare of the university resources, the effectiveness of the use of funds and the continuity of the educational process. Through excellence in finance, a university can realize the other three perspectives: customer, internal processes, and learning and innovation.

2) **Customer Perspective**
Students as consumers, learners and as an investor for the future have a role to determine the sustainability of a lecture. As consumers, students are entitled for quality service and education. As investors, students are entitled for future benefits on teaching and education they got. The success to realize students’ hope is an indicator of lecture success that is the existence of a system that works dynamically to produce graduates with effective placement, ensure the quality of instructional and academic activities support and establish good relations between the University and the student trustee.

3) **The internal process perspective**
Just as in business entity, universities also need to identify the most important process manifested in educational services appropriate to customer expectations. Central to the process is based on university efforts to provide assurance on the quality of Teaching and Learning and the quality of the supporting devices of Teaching and Learning. In the implementation, the service that has been designed is then conducted with effective cost.

4) **Learning and Growth Perspective**
To operate the internal processes in order to produce services that have value for students, the university requires productive and committed personnel. Productivity is determined by the competence of personnel and the availability of infrastructure required to run the internal processes. The commitment of personnel is determined by the quality of working environment built at the university. It is realized through communication, appreciation and support of the university for individuals of the highest positions up to the bottom.

**RESEARCH METHODS**

**Research Stages**
This study is begun by analyzing the perception of the management of lecture implementation performance at the University of WR Supratman that exists today. The analysis is conducted using the method of participant observation, questionnaires, and interviews and processed
with statistical program SPSS. The research location is at University of WR Supratman Surabaya which is located at Jalan Arief Rahman Hakim No. 14 Surabaya.

**ANALYSIS MODEL**

![Image of analysis model with hypotheses H2, H3, H4, H5, and college performance Y]

**Figure 1. Analisys Model**

**Data Analysis Technique**
The data were analyzed using multiple linear regression assisted by SPSS software version 23. The steps undertaken to analyze the research data are as follow:

1. **Validity Test**
   According to Ghozali (2011: 52), the validity test is used to measure whether a questionnaire is legitimate or invalid. Validity test is done by calculating the level of significance of bivariate correlation of respective indicator scores with a construct total score. An question indicator is stated to be valid if the level of analysis of the correlation value is less than 5% (sig <0.05).

2. **Reliability Test**
   According to Ghozali (2011: 53) reliability is a mean to measure a questionnaire which is an indicator of variables or constructs. SPSS provides the facility to measure the reliability of the Cronbach alpha statistical test. A construct or variable said to be reliable if the Cronbach alpha value is above 0.6.

3. **Determine The Equation Model**
   According Sugiyono (2014: 191), multiple linear regression analysis aims to measure the influence of independent variables. Multiple linear regression is to show an independent relationship with two or more other independent variables.
   
   \[
   Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e
   \]
   
   **Information:**
   
   \(Y = \) college performance
   \(\beta_0 = \) constant
   \(\beta_{1,2,3,4} = \) constant of independent variable
   \(X_1 = \) customer perspective
   \(X_2 = \) financial Perspective
   \(X_3 = \) internal process perspective
   \(X_4 = \) learning and growth perspective
   \(e = \) error term
4. **Classical Assumption Test**

Classic assumption test aims to determine whether the regression model shows a significant and representative association. The classical assumption used are (Ghozali, 2011: 105): Normality Test, Autocorrelation Test, Heterocedastity Test and Multicolinearity Test.

5. **Hypothesis testing**

is done by using multiple linear regression to test the effect of independent variables on the dependent variable using the T test and F test. T test is used to determine whether the independent variable partially has a significant influence on the dependent variable, while the F test is used to test whether an independent variable simultaneously effects significantly on the dependent variable (Sugiyono, 2014: 192).

**RESULTS AND DISCUSSION**

**Research Result**

Based on the results of questionnaires which were returned to the researchers counted 100 of 110 respondents (10 respondents did not return), then the stages of research as below are done. From the data, it is shown that the majority of respondents were female, ie 58.0% while men is amounted to 42.0%.

**Validity Test**

Validity test is conducted on 100 respondents selected. Validity Test uses SPSS 23 for Windows which is able to present the values of the data entered based on the results of the questionnaire answers. Validity value is obtained on the significant value that is when the significant value is less than 0.05 then it said to be valid, as shown in Table 2 below.

| Instrument | Customer Perspective (X1) | Financial Perspective (X2) | Internal Process Perspective (X3) | Growth and Learning Perspective (X4) | College Performance (Y1) |
|------------|---------------------------|-----------------------------|----------------------------------|------------------------------------|--------------------------|
| X1.1       | 0.854                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X1.2       | 0.895                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X2.1       | 0.879                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X2.2       | 0.853                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X2.3       | 0.852                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X3.1       | 0.848                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X3.2       | 0.894                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X4.1       | 0.954                     |                              |                                  |                                    | 0.000                    | Valid                   |
| X4.2       | 0.951                     |                              |                                  |                                    | 0.000                    | Valid                   |
| Y1.1       | 0.954                     |                              |                                  |                                    | 0.000                    | Valid                   |
| Y1.2       | 0.951                     |                              |                                  |                                    | 0.000                    | Valid                   |

As shown in Table 1, two items that measure the customer perspective, three items that measure the financial perspectives, two items that measure the internal process perspective, two items that measure learning and growth perspective and two items that measure the performance of college have Pearson Correlation with the total scores where significant value are less than 0.05. Thus, it can be concluded that its are valid.
Reliability Test
Reliability level of an instrument can be seen in the value of Cronbach alpha. Instrument can be said to be reliable if it has a high Cronbach alpha value bigger than 0.6, which means reliable. In other words, an instrument can be said to be reliable if it has a high Cronbach alpha value greater than 0.6. Table 2 shows a summary of reliability testing of variables.

Table 2. Reliability Test Value of Variable Instruments for Customer Perspective (X1), Financial Perspective (X2), Internal Process Perspective (X3), Growth and Learning Perspective (X4) and College Performance (Y1)

| Variable          | Coefficient of Alpha Variation | Alpha Cronbach | Description |
|-------------------|--------------------------------|----------------|-------------|
| X1                | 0,689                          | 0,600          | Reliable    |
| X2                | 0,825                          | 0,600          | Reliable    |
| X3                | 0,678                          | 0,600          | Reliable    |
| X4                | 0,896                          | 0,600          | Reliable    |
| Y1                | 0,616                          | 0,600          | Reliable    |

Based on Table 2 above, it is shown that the Cronbach alpha is respectively 0.689; 0.825; 0.678; 0.896 and 0.616 which are positive and more than 0.6 which means that they meet the criteria to be considered reliable, because the data are said to be reliable if the alpha of the of reliability statistic results are greater than 0.6.

Results of Multiple Linear Regression Analysis
Based on calculations by the supporting tool SPSS version 23, the obtained results are shown below.

Table 3. Results of Multiple Linear Regression Analysis

| Variable                           | Regression Coefficient | t count | Significant |
|------------------------------------|------------------------|---------|-------------|
| Constant                           | 0,031                  | 0,090   | 0,928       |
| Customer perspective (X1)          | 0,210                  | 2,500   | 0,014       |
| Financial perspective (X2)         | 0,114                  | 2,141   | 0,035       |
| Internal process perspective (X3)  | 0,264                  | 3,126   | 0,002       |
| Learning and growth perspective (X4) | 0,432              | 5,282   | 0,000       |

According to Table 3, it is obtained that the multiple linear regression equation has a positive value of the correlation coefficient, so it can be interpreted that the relationship between independent variable and the dependent variable forms a positive linear line. This means that any increase in the independent variable will be followed by an increase in the dependent variable.

The Value of Determination Coefficient (R square)

Table 4. Correlation Coefficient and Multiple Determination

| Model | R       | R Square |
|-------|---------|----------|
| 1     | 0,822a  | 0,676    |

This coefficient analysis is used to measure the independent variables change contribution of customer perspective (X1), financial perspective (X2), internal process perspective (X3), learning and growth perspective (X4) and college performance (Y) amounted to 0.822 or 82.2
Therefore $0 \leq R \leq 1$, this indicates that the customer perspective (X1), the financial perspective (X2), internal process perspective (X3), learning and growth perspective (X4) have a very strong and positive relationship with the performance of members.

The coefficient of multiple determination (R square) shown in Table 5 for 0.676 or 67.6% shows that the variable changes contribution of the customer perspective (X1), the financial perspective (X2), internal process perspective (X3), learning and growth perspective (X4) simultaneously to college performance changes variable (Y) is 67.6% while the rest 32.4% are influenced by other factors outside the four independent variables were investigated by researchers.

**Hypothesis Testing**

1. **Partial Hypothesis Testing (t test)**

Then based on t count value results contained in Table 3, results of the hypothesis are obtained as follows:

- a. The coefficient value of customer perspective (X1), obtained that significance value of t count is 0.014 so that the significant value of the t count variable of customer perspective (X1) is smaller than the value of alpha (0.014 < 0.05). This shows that in partial the perspective of the customer (X1) affects significantly the performance of the college (Y1).

- b. The coefficient value of the financial perspective (X2), obtained that significance value of t count is 0.035 so that the significant value of the t count variable of coaching motivation (X2) is smaller than the value of alpha (0.035 < 0.05). This shows that in partial the financial perspective variable effects significantly on college performance (Y1).

- c. The coefficient value of the internal process perspective (X3), obtained that significance value of t count is 0.002 so that significance value of t count of fostering variable for internal process perspective (X3) is smaller than the value of alpha (0.002 < 0.05). This shows that in partial internal processes perspective has a significant effect on the performance of college (Y1).

- d. The coefficient value of learning and growth perspective (X4), obtained that significance value of t count is 0.000 so that the significant value of t count of learning and growth perspective variable (X4) is smaller than the value of alpha (0.000 < 0.05). This shows that in partial growth and learning perspective has a significant effect on the performance of college (Y1).

2. **Simultaneously Hypothesis Testing (F Test)**

F test is intended to prove the effect of variable of customer perspective (X1), financial perspective (X2), internal process perspective (X3), learning and growth perspective (X4), simultaneously on the performance of college (Y1).

From the calculation results, obtained significance value of F count is 0,000, which means that the value is smaller than $\alpha$ value of 0.05 (0.000 < 0.05), based on the above test the hypothesis can be accepted. This means that a customer perspective (X1), financial perspective (X2), internal process perspective (X3), learning and growth perspective (X4), together (simultaneously) significantly affects the performance of the college (Y1).

**DISCUSSION**

Research discussion is based on the data results of analysis methods that have been used. Based on statistical tests on multiple linear regression equation, the first hypothesis "Customer perspective significantly effects on the performance of college" is proven. This is due to the
significance of the customer perspective value of 0.014 less than 0.05. Additionally supported by the opinion of Yuwono et al. (2006: 31-43) that success to achieve students expectations, students investor are entitled for future benefits on teaching and education they got. The success to bring hope of college students come true is an indicator of study success, namely the existence of a system that works dynamically to produce graduates with effective placement, ensure the quality of instructional and support academic activities and establish good relations between the University and the student trustee.

Based on statistical tests on multiple linear regression equation, then the second hypothesis "Financial Perspective significantly effects on the performance of college" is proven. This is due to the significance of the customer perspective value of 0.035 less than 0.05. Additionally supported by the opinion from Kaplan and Norton (2002) in Awadallah and Allam (2015) that excellence in finance is expected to guarantee the welfare of the university resources, the effectiveness of the use of funds and the continuity of the educational process. Through excellence in finance, a university can realize the other three perspectives: customer, internal processes, and learning and innovation

Based on statistical tests on multiple linear regression equation, then the third hypothesis "internal process perspective significantly effects on the performance of college" is proven. This is due to the significant value of 0.002 internal process perspective is smaller than 0.05. Additionally supported by the opinion of Kaplan and Norton (2002) in Awadallah and Allam (2015) that the most important processes are based on the university to provide assurance on the quality of Teaching and Learning and the quality of the Teaching and Learning supporting devices. In the implementation, the service that has been designed is then conducted with effective cost.

Based on statistical tests on multiple linear regression equation, then the fourth hypothesis "learning and growth perspective significantly effects on the performance of college" is proven. This is due to the significance of the value of learning and growth perspective is 0,000 less than 0.05. Additionally supported by the opinion of Kaplan and Norton (2002) in Awadallah and Allam (2015) that productivity is determined by the competence of personnel and the availability of infrastructure required to run the internal processes. The commitment of personnel is determined by the quality of the working environment that was built at the university. It is realized through communication, appreciation and support of the university for individuals of the highest office until the bottom.

CONCLUSIONS AND SUGGESTION

Conclusion

Based on the analysis and discussion above, it can be concluded as follows:

1. The customer perspective (X1), financial perspective (X2), internal process perspective (X3), learning and growth perspective (X4), simultaneously effect significantly on the performance of college (Y1). This is due to the significant value of F count is 0,000, which means that the value is smaller than α value of 0.05 (0.000 < 0.05).

2. The customer perspective significant effect on the college performance is proven. This is due to the significance of the customer perspective value of 0.014 less than 0.05.

3. Financial Perspective significant effect on the college performance is proven. This is due to the significance of the customer perspective value of 0.035 less than 0.05.

4. The internal process perspective significantly effect on the college performance is proven. This is due to the significant value of 0.002 internal process perspective is smaller than 0.05.
5. The learning and growth perspective significant effect on the performance of college "is proven. This is due to the significance of the value of learning and growth perspective is 0,000 less than 0.05.

**Suggestion**

Based on the conclusion, there are some suggestions as follows:

1. Number of research samples should be supplemented by involving all students both semesters to the late semester.
2. Need for classification of each faculty so that it will obtain very specific results which one truly has a good performance among all faculty in the University of WR Supratman Surabaya.

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