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The Critical Success Factors of the Business Strategy in the Effectiveness of Management Accounting Information System Evidence in Indonesia

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Abstract: Survival in a competitive environment requires managers to identify and make sense of strategic issues as a prerequisite for business strategic change. As business environments or conditions change managers must make sure that Management Accounting Information System (MAIS) changes too. MAIS plays important role in many of decisions that managers make and can provide relevant data for guiding line personnel's strategic decisions. This study aimed to examine the effect of business strategy on management accounting information system. This study uses the descriptive and explanatory research methods. The population in this study is 60 colleges which are located in Bandung City, Indonesia. The number of samples is determined using Slovin formula based on probability sampling method. The number of samples which are used in this study is 37 universities In Bandung Indonesia. The data quality is tested by validity and reliability test. The statistical test which is used is Structural Equation Modelling (SEM) based on component or variance which is known as Partial Least Square (PLS) and the hypothesis test is by using SPSS 2.0 for Microsoft Windows. The study results show that business strategy have significant positive effect on the effectiveness of management accounting information systems at financial accounting division on higher education in Bandung City, Indonesia.

Key words: Business strategy, cost leadership, differentiation, effectiveness of management accounting information systems, user satisfaction and system usage, PLS

INTRODUCTION

The organization relies heavily on information system in order always be competitive (Rapina and Susanto, 2017). In a competitive environment, the role of managers is essential in identifying and understanding strategic issues as a prerequisite for strategic change. To survive in business competition organizations must be able to acquire interpret and control the flow of environmental information to see opportunities and threats that come from the company's external environment. In order to make sense of strategic issues, managers must relate the firm's strengths and weaknesses to specific opportunities and threats embedded in these issues. This requires information from the internal as well as the external environment (Marcus, 2008). Information has become an important resource formanaging the organization and needed for effective decision making (Fitriati and Susanto, 2017).

Managers in a company must be able to direct the organization to implement the strategy in achieving the objectives of the organization and should be able to ensure changes in the business environment followed by changes in information systems used by the company. Accounting Information System (AIS) plays important role in many of decisions that managers make and can provide relevant data for guiding line personnel's strategic decisions (Zahirul, 2003). Similiar to the statement, Fitrios (2017) stated accounting information system function to process data and to generate meaningful ans useful accounting information for various user.

Accounting information systems is a provider of reliable accounting information for various organizations (Romney and Steinbart, 2015). Accounting information system is built to meet the organization's goals in getting the accounting information which is required (Stair and George, 2012). Accounting information system is designed to convert financial data to produce financial information that can be used as a basis for decision making (Bodnar and Hoopwood, 2014). Accounting information systems that have been successfully, applied will produce quality accounting information (Carolina and Susanto, 2017).

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The accounting information quality which is generated in an organization will influence every decision that is taken by the managers or by the perpetrators of the organization (Susanto, 2015). Decision making ia a conscious process that is carried out by someone in determining choice of a wide range of alternative actions to achieve the goal of moving from the present into the future conditions better (Darma, 2017). The quality information is the accounting information which is useful in decision-making process (Gelinas and Dull, 2008). Adrian *et al.* (2009) states the accounting information quality is affected by the accounting information system that is used.

For the purpose of decision making accounting information systems can be classified into 2 parts, financial accounting information systems and management accounting information system (Boockholdt, 1999; Collin, 2001) argues management accounting information system guides the organization to succeed in a competitive business environment by improving customer satisfaction that is reflected in the availability of rapid response to customer demand, ensuring the delivery of 100% on time and reducing the time that is needed to develop and carry new products to market by identifying and reporting time that is spent on the activity that has added value and the activity that does not have added value. Management accounting information system produce information on these matters (Zahirul, 2003).

Boockholdt (1999) states management accounting information system is a sub-system of accounting information which performs the activities of recording, processing and communication of financial information in accordance with the user's selection of internal/manager of a company. According to Collin (2001) management accounting information system is an information system that conducts the activities to collect, classify, summarize and report the information that helps employees within an organization to make the process of decision-making, planning, controlling and measuring of performance. Laudon and Laudon (2014), stated management accounting information systems produce management accounting information which is used by managers to monitor the performance of organization (Marcus, 2008) and to make better decisions, so as to improve the implementation of business processes and services to consumers in an organization. According to Hansen *et al.* (2007) both accounting sub-systems have different purposes input nature and process type that are used in converting inputs into outputs. Financial accounting information system is intended to produce financial accounting information which is focused for external users of the company while management accounting information systems is to produce management accounting information which is focused for internal users such as managers, executives and employees in decision making.

Management accounting information is used in all phases of management. The manager at the top level uses management accounting information to determine the organization's objectives, to compile policies and strategies which are needed to achieve those goals. Management at intermediate level uses management accounting information to perform the activities of planning organizing, putting, directing and controlling unit sales and production, so that, the company's business strategy can be realized well. Management at the bottom level using management accounting information to conduct the election activities which are most effective and efficient in carrying out the task of mid-level management as well as evaluating the results (Hansen *et al.*, 2007).

Management accounting information helps managers formulate strategy. Strategy describes how managers should seek and pursue opportunities in the marketplace. Companies can follow one of two broad strategies that weigh on the leadership strategy or the differentiation strategy that determines this strategy is an important part of what managers do. Strategic management accounting is a technique that use in. Strategic management accounting is a technique that organizations use in achieving competitive advantage achieving competitive advantage (Zahirul, 2003)

Application of business strategy must be customer oriented (customer satisfaction) by using value chain analisys (Porter, 1985). Value chain analisys is an activity related to a choice of functions that match the customer's desire for the product/service. Value chain analisys begins by identifying customer needs to satisfied customer needs. In practice value chain analisys can access through activities: market, product/service, product/service, product/service (marketing and distribution) and provide after sales service to product/service. Target costing is one of the introduction of market activities with the aim to know how much the market price that can be received by the customer in accordance with the target cost (Zahirul, 2003). Furthermore, another analysis that can be used is Activity Based Budgeting (ABB). Porter (1985) states Activity Based Budgets (ABBs) are organized on the basis of value-added activities and activities that can create customer satisfaction that is reliable.

Manager set objectives from plans to achieve the objectives, implement the plans and finally evaluate their progress towards accomplishing their objectives (Zahirul,

2003). Management accountants work closely with managers to achieve competitive advantage by determining: company costs, productivity or efficiency advantages relative to competitors or the premium price that companies can bail out relative to the cost of adding features that make their products or services different. Strategic cost management describes cost management that specifically, focuses on strategic issues (Hongren *et al*., 2015).

Literature review

Strategic management accounting: Strategic management accounting refers to the process of identifying, gathering, choosing and analysing accounting data for helping the management team to make strategic decisions and to assess organizational effectiveness strategic management accounting are a component of management accounting, customer profitability analisys can assist management accountants to identify and classify profitable customers and non-profitable customers. Profitable customers are customers who can generate revenue (Zahirul, 2003).

Strategic accounting management techniques (accounting management strategies) that can be used to create products/services sold to costumers is by Activity Based Management (ABM) and Activity Based Costing (ABC). ABM is an integrated approach where the focus of management attention on an activity that to improve the customer and the company's profit (Hansen *et al*., 2007) then recording and reporting techniques cost in ABM is done by ABC technique.

Building a product/service performed by TQM (Total Quality Management) technique which is a technique of continuous improvement in achieving competitiveness (Zahirul, 2003), TQM philosophy is to work diligently at a high level of responsibility without the cost to be incurred. In the built TQM product must be zero defect which means the product/service produced can achieve the level of zero defect, so that, the customer can be satisfied.

Product/service launching can be assisted using Just In Time (JIT) strategy management and Customer Profitability Analisys (CPA) techniques. According to Zahirul (2003), just in time has characteristics: eliminating activities that can not be added, zerro inventory (work zero), zero defect (product produced has zero defect tk), 100% service delivery of products/services on time. The last step of value chain analisys activity is after sales service which is a means of maximizing the fulfillment of customer satisfaction to improve customer. Implementation of business strategies that help companies to realize cost leadership strategy, differentation and focus in achieving competitive advantage.

Bussiness strategy: Business strategy is the plans, various alternative options/solutions and decisions that are used to guide a company in generating greater profits and achieving the success of a company (Kourdi, 2009). Furthermore, Campbell (2002) states business strategy is the basis for determining the company objectives and long-term goals, implementing the real action and sharing the resources which are required to implement the various objectives that must be accomplished. According to Palepu *et al*. (2000) business strategy is the way companies position themselves in the environment to achieve a competitive advantage.

The measurement of business strategy in this study adopts the concept of generic competitive strategies which are proposed by Porter (1985) that consists of cost leadership, differentiation and focus. Furthermore, the measurement model of business strategy is re-developed by Palepu *et al*. (2000) measure through the viewpoints: diversification, cost leadership and differentiation. Similarly, Romney and Stienbart (2006) measure business strategy through the viewpoints: product differentiation and low-cost strategy.

Next Langabeer and John (2000) measures the strategy through the viewpoint of overall competitive approach, market orientation and functional deployment. Similarly, O'Brien and Marakas (2014): describe cost leadership, differentiation innovation, growth and alliance are the dimensions of business strategy. Matis and Jackson (2003) measures business strategy through cost leadership and differentiation. Similarly, Aaker and Damien (2008) states business strategy can be measured through the product investment market, the customer value proposition, the assets and competencies and functional strategies and programmers. Furthermore, the concept is described as in Fig. 1.

Effectiveness of management accounting information systems: Effectiveness of information systems as stated by Nicolaou (2000) is a condition of users satisfaction on information systems or the perception of the system users to the desired information, the effectiveness of accounting information system can be expressed as the availability of appropriate information (right) with the desired one by many users. Furthermore, DeLone and

		Competitive advantage	
		Lower cost	Differentiation
Competitive scope	Broad target	Cost leadership	Differentiation
	Narrow target	Cost focus	Differentiation focus

Fig. 1: Three generic strategies

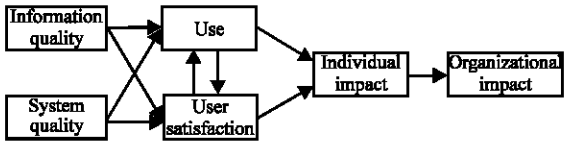

Fig. 2: Information systems success model of DeLone and McLean (1992)

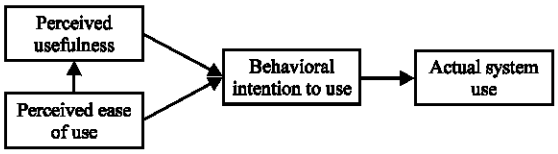

Fig. 3: Technology acceptance model

Ephraim (2003) states the success or effectiveness is how to criticize our understanding of the values and the effectiveness of management actions and investments in information systems. The system use, user satisfaction individual and organizational influence measure the effectiveness of the system.

Since, 1992 information system success model as proposed by DeLone and McLean (1992) has been widely used as the basis of a number of studies to assess the success/effectiveness of information systems implementation. The dimensions that are used in the model of DeLone and McLean (1992) to measure the effectiveness of accounting information systems are: system quality information quality, service quality, system use, user satisfaction and net benefits. Furthermore, Seddon (1997) developes a model of the effectiveness of information systems by using 5 dimensions: system quality information quality perception of the use level, user satisfaction and information systems use (Fig. 2).

Then the use of management accounting information system which is one of the dimensions in this study refers to Technology Acceptance Model (TAM) as proposed by Davis *et al.* (1989) and Vankatesh *et al.* (2003) that use behavioral intention to use (user behavior) as an indicator of the dimension of the system use (system use) are: perceived usefulness and perceived ease of use. Comparatively different from the statement, Duggan and Reichgelt (2006) measures the dimensions of the system use (system use) by using the following indicators: ease of use and usefulness (ease of use and useful) and goodness in use there is goodness of its use. Similarly, Barrier (2002) states for measuring dimensions of the system use (system use) which is used as indicator: Easyinusing (ease of use)easy to learn (ease of learning), flexible in using (flexibility in use), security (Fig. 3).

Furthermore, Stair and George (2012) states the user satisfaction of information system depends on the quality of systems and information that can provide values/benefits to its users. The characteristicsof quality information system are: flexible, efficient, accessible and timely. Boockholdt (1999) said user satisfaction is the system provides information that correct and timely enough to satisfy the user's needs. Marcus (2008) uses four characteristics of quality information to gauge user satisfaction, they are: integration, flexibility, accessibility formalization and media richness. Likewise with Puspitawati (2016) and Susanto (2017) in his research proved that user satisfaction and system usage is the right concept to measure the effectiveness of accounting information system.

The influence of business strategy to the effectiveness of management accounting information systems: Zahirul (2003) argues that business strategy is generally present in all business units, divisions or product levels which refer to how an organization competes in any kind of activities and to achieve competitive advantages with its rivals. Similarly, according to Wheen *et al.* (2015) business strategy is an important factor to improve the position of competitive advantage in an organization by using industry which is specific on the right market segmentation.

McLeod and Schell (2007) states business strategy can lead accounting information system generates in management accounting information which is needed by managers at various levels of the organization in achieving competitive advantage. Influential business strategies to the effectiveness of management accounting information system will be reflected in the increase of company service to improve customer satisfaction by providing flexibility to the customers and business partners to be able to access information on products and services of the company directly through the web browsers that are provided by the company.

Then Marcus (2008) states that one of the company goals is to achieve competitive advantages. To survive in a competitive environment organization managers need to identify and understand the strategic issues as the requirements for changes in business strategy. To deal with the strategic issues organization must obtain interpret and control the flow of information from the company environment, so that, it is not surprised by these threats and even prepares for a wide range of possibilities that will happen. To understand strategic issues, managers must be able to connect the strengths and weaknesses of the company in getting the specific opportunities and threats which are embedded in these issues.It takes information from internal and external environment to anticipate the strategy issues in a

competitive business environment. Business strategy of an organization provide support to management accounting information systems in providing the information that is from internal and external environment of the organization to the managers who need them.

The research that has been conducted by Chong and Chong (1997), Gill (2004), Abernethy and Guthrie (1994) and Dong *et al*. (2008) has proved that business strategy is applied to an organization influence the effectiveness of management accounting information systems in meeting organizational goals to generate management accounting information which is used in strategic decision making process.Based on the literature review and the framework that have been previously stated, the hypothesis to be tested in this study is business strategy influences the effectiveness of management accounting information systems.

MATERIALS AND METHODS

Research methods, population and sample: This study uses the method of descriptive explanatory analysis to confirm the theory that has been previously described in the literature review and the framework. The population in this study is public and private universities in Bandung city region as much as 60 universities. A total of 37 samples were obtained by using simple random sampling technique that refers to the rule of tumbs (Hair *et al*., 2014) which were randomized with a random number table andmicro-soft excel tools.

Statistik analysis: This research uses Structural Equation Modeling (SEM) with partial least square approach to answer the research problems related to the influence of business strategy on the effectiveness of accounting information system. The model of structural equation modeling used the second order model approach where there are two stages of the relationship of the indicator in forming the variable that is from the indicator (manifest variable) to form the dimension then the dimension to form the variable. In this case, the dimensions of the variables and variables studied are latent variables (Hair *et al*., 2014). The steps partial least square method that is done in research as follows.

Design a structural model: The structural model (inner model) in this research consists of exogenous latent variable that is business strategy while endogen latent variable is management accounting information quality system, model equation can be written as Ghozali (2006):

$$\eta = \sum_i \beta_{ji}\eta_i + \sum \gamma jb\xi_b + \xi_j$$

where, βji and γjb are path coefficients connecting endogenous predictors and exogenous latent variables ξ ("ksi") and η ("eta") along the index ranges i and b and ξ j are the residual inner variables.

Design a measurement model: The measurement model (outer model) is the model that connects the latent construct with the manifest variable. The latent construct in this research is business strategy and effectiveness of management accounting information system. Manifest variable is the value of observation on the specific part of the questioned, both of the respondents who answered questions and observations made by researchers. These indicators are called manifest variables. The latent business strategy construct has 3 manifest variables and the quality of management accounting information system with 2 manifest variables.

The third step: building a path diagram: The flow diagram illustrates the relationship between constructs with straight-lined arrows showing the direct causal relationship of a construct to another construct. Exogenous constructs, known as independent variables. Exogenous constructs are constructs directed by a line with one end of the arrow. The complete structural model can be seen in Fig. 4.

Estimation: The basis used for in-etimation is resampling with Bootestrapping developed by Geisser and Stone (Ghozali, 2006). The first stage of the estimate produces a weight estimate, the second stage generates estimates for the inner model and outer model, the third stage generates estimation means and location parameters (constants).

Goodness of fit: The measurement model (Outer model) is evaluated with convergent validity and discriminant validity.

Convergent validity is judged by correlation between item score/component score and construct score calculated by PLS. Size used is if the correlation between the score item/component score with the construct score of more than 0.7 is said to be high and if the number is between 0.5-0.6 is enough (Ghozali, 2006). Discrimint validity see how the validity of the construct which is formed compared with other constructs.

Average Variance Extracted (AVE) value which is recommended must be >0.5. Furthermore, the evaluation of measurement model (outer model) can also, be seen from the Composite Reliability (CR) value where the composite reliability value is expected to be >0.70. Furthermore, in structural model matching test there are two commonly used measure that is R^2 value and t

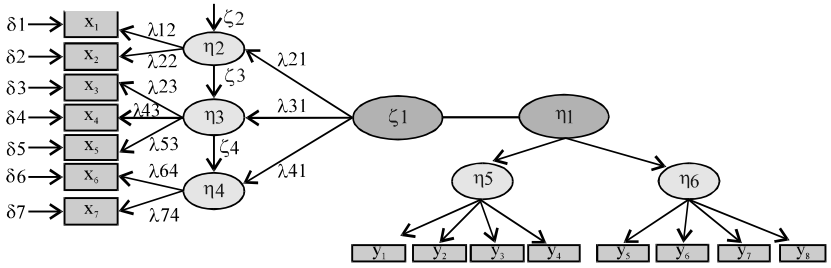

Fig. 4: Full measurement model

statistic value. R^2 for the dependent construct indicates the magnitude of the influence/precision of the independent construct in affecting the dependent construct. The greater the value of R^2 means the better the resulting model. Then, the large tatistic value of t (>1.96) also indicates that the resulting model is getting better.

Hypothesis testing: After the model as a whole and partially tested and obtained a model fit with the data, then in the next stage performed hypothesis testing by Bootstrap resampling method. The Bootstrap resampling method is to construct pseudo data by using information from the original data while keeping in mind the properties of the original data, so that, the shadow data will have characteristics that are as close to the original data as possible.

RESULTS AND DISCUSSION

Structural model specifications: Structural model describe the relation latent variables based on substantive theory. In this study, structural model (inner model) is used to test the following hypothesis: "Influential business strategy influences the effectiveness of accounting information systems". Thus, in this study the above specifications can be written as follows:

$$\eta 1 = +0.427\xi 1+0.435$$

Where:

$\eta 1$ = Effectiveness of accounting information system variable
γ = Path coefficients among latent variables
$\xi 1$ = Business strategy variable
ζ = Measurement error

Measurement model testing

Measurement model business strategy: There are three manifest variables that make up business strategy variables, they are market orientation, competititve advantage and customer and value proposition. For each variable we get factor weight in forming business strategy variable as Table 1.

Table 1: Measurement model of business strategy (ξ_1)

Manifest variables	Loading factor	Measurement models	T_{count}
Market orientation (η_2)	0.889	$X_{21} = 0.889\ X_2+0.210$	22.611
Competititve advantage (η_3)	0.873	$X_{22} = 0.873\ X_2+0.238$	27.064
Customer and value proposition (η_4)	0.876	$X_{23} = 0.876\ X_2+0.233$	31.021

Table 2: Measurement model of the indicators to the dimensions on business strategy

Manifest variables	Loading factor	Measurement models	T_{count}
Dimension market orientation			
Networking design strategy (X_1)	0.9270	$X_{211} = 0.9270\ X_{21}+0.141$	29.9155
Marketing strategy(X_2)	0.9169	$X_{212} = 0.9169\ X_{21}+0.159$	36.7845
Dimension competitive advantage			
Product diversification (X_3)	0.8223	$X_{221} = 0.8223\ X_{22}+0.324$	15.3186
Low cost strategy/ cost leadership (X_4)	0.7686	$X_{222} = 0.7686\ X_{22}+0.409$	08.0460
Differentiation(X_5)	0.7518	$X_{223} = 0.7518\ X_{22}+0.435$	10.1669.
Customer and value proposition			
Global connections and prestige(X_6)	0.9135	$X_{231} = 0.9135\ X_{23}+0.165$	25.8541
Excellent on an important product or service(X_7)	0.9159	$X_{232} = 0.9159\ X_{23}+0.161$	28.7940

Calculation results of loading factors value for the four manifest variable from latent variable of business strategy which ranges from 0.8-0.9 is already above the average for laoding factor of 0.6, so, it can be said that the calculation result of the outer models value or correlations between the construct with the variables (loading factor) is none eliminated from the model. In other words, the dimensions of market orientation, competitives advantage and customer and value propositionhave been appropriately used as measurement model of business strategy variable which is used in this study (Table 2).

Then it can be also concluded the 7 indicators which are used are appropriate to represent the dimensions of the measurement model on business strategy variables that are used in this study (Value of t_{count} is more than 1.96). Based on calculation of loading factor and t-statistical indicators of business strategy that have positive and significant relationship in determining business strategy, it means the indicators used have appropriately represent the dimensions in measurement model of business strategy variable used in this study.

Table 3: Measurement model of management accounting information systems (η_1)

Manifest variables	Loading factors	Measurement models	T_{count}
User satisfaction (η_5)	0.916	$Y_1 = 0.916\ Y+0.162$	49.807
System usage (η_6)	0.942	$Y_2 = 0.942\ Y+0.112$	65.868

Table 4: Measurement model of the indicators to the dimensions on MAIS

Manifest variables	Loading factors	Measurement models	T_{count}
Dimension user satisfaction (η_5)			
Flexible (Y_1)	0.7679	$Y_{11} = 0.7679\ Y_1+0.410$	13.1839
Accesible (Y_2)	0.7707	$Y_{12} = 0.7707\ Y_1+0.406$	11.5414
Efficient (Y_3)	0.7990	$Y_{13} = 0.7990\ Y_1+0.362$	14.3516
Provides correct and timely information (Y_4)	0.7008	$Y_{14} = 0.7008Y_1+0.509$	12.3391
Dimension system usage (η_6)			
Security (Y_5)	0.8422	$Y_{21} = 0.8422Y_2+0.291$	17.9928
Proccessing integrity (Y_6)	0.8164	$Y_{22} = 0.8164Y_2+0.333$	14.6540
Availability (Y_7)	0.7895	$Y_{23} = 0.7895Y_2+0.377$	10.5291
Ease to use and usefullness (Y_8)	0.7545	$Y_{24} = 0.7545Y_2+0.431$	11.2357

Measurement model of management accounting information systems: There are 2 manifest variables that make up the effectiveness of accounting information system variables are user satisfaction and system usage. For each variable we get the factor weight in forming system usage variables as follows Table 3.

Loading factors value for the two manifest variable of effectiveness of accounting information systems latent variables ranges between 0.9-1 is already above average for loading factor of 0.6, so that, the dimensions of user satisfaction and system usage has been appropriately used as the effectiveness of accounting information system measurement model variable (Table 4).

Furthermore, indicators which are used were appropriate to represent the dimensions of the effectiveness of management accounting information systems measurement model (Values of t_{count} is more than 1.96).

Discriminant validity and composite reliability: If it has good construct, the AVE is above 0.50. The results of discriminant validity showed the construct already meets the minimum value of good construct for AVE is more than 0.5 business strategy latent variable (10) which is formed by 3 manifest variables has a value of Composite Reliability (C-R) of 0.9015, This means that business strategies latent variable has consistently high. The effectiveness of management accounting information systems latent variable (Y) which is formed by two manifest variables has a value of Composite Reliability (C-R) of 0.8974. This means that the effectiveness of managment accounting information systems latent variables have consistently high.

Structural model testing and hypothesis testing: The effectiveness of accounting information systems (Y) which is influenced by the business strategy (X) shows a value of 18.23% (0.427×0.427×100%). These results show that 18.23% the effectiveness of management accounting information systems variable is influenced by business strategy variables. The results of hypothesis testing shows that the path coefficient of 0.427 with value of t_{count} is 2.032. The value of t-statistic is greater than $t_{critical}$ (1.960) which means that business strategy influences the effectiveness of management accounting information systems.

Business strategy is an internal response to environmental stress that determines the direction and approach which are used by company to move forward/develop (Langabeer and John, 2000). In modern times, there is interdependence which grows between company information systems with business strategy of a company (Laudon and Jane, 2012). Furthermore, Gottschalk (2006) states business strategy is the most extensive pattern/spread in making decisions of resource allocation and other decisions that are more specific which influences the information systems and information technology. This opinion was reinforced by the statement that is proposed by Ward and Peppard (2002) who argue that in order to a system of information systems can be effective, the new top approach is necessary for business strategy to be able to manage information systems.

Based on the study results it is revealed that the ineffective management accounting information system in university due to non-optimal business strategies that are run by company, this is shown by the results of respondents who indicate that in terms of cost leadership indicators, they show appreciable results. This condition indicates company has not been able to execute the cost leadership strategy well which means that tuition fees for students are deemed to be quite expensive, so that, respondents would choose universities that charge tuition fees which are cheaper, it means that the cost product and the selling price factors are still the major factor that must be taken into account when company will market its products/services. Then, it can be explained why the users have not satisfied to the effectiveness of accounting information system which is provided by company for the applications of management accounting information system that are not flexible, not easyto access, could not produce the financial reports that were inaccurate and not timely and inefficient.

Next that it can also, cause the management accounting information system which is not effectively used for the application of management accounting information system that is not safe to use, not well integrated, not ready to use and difficult to use by the user.

Based on empirical evidence which is obtained the results of business strategy influences the effectiveness of management accounting information system at 18.23%, the remaining 81.77% is influenced by other factors that are not examined in this study. Then, based on the hypothesis testing results, it indicates t_{count}value is 2.032 greater than t-value (1.960) which means that the hypothesis is accepted, it can be declared "Business strategy significantly influences the effectiveness of management accounting information systems. This is in line with the research that is conducted by Chong and Chong (1997), Gill (2004), Abernethy and Guthrie (1994) and Dong *et al*. (2008) the previous experts that: the organizational structure significantly influences the effectiveness of management accounting information systems. This study result is also in line with the theory that has been declared by Ward and Peppard (2002), Romney and Steinbart (2006), Laudon and Jane (2012) and Gottschalk (2006).

CONCLUSION

Business strategy influences the effectiveness of management accounting information systems. The ineffectiveness implementation of accounting information systems at universities in Bandung city because there is still the management accounting information system that is not integrated, not safeto use, not easy to use, difficult to access inefficient inflexible and unable to produce information that is relevant and timely. Then it can also be shown which universities in Bandung city that have not been able to implement price advantage strategies well.

RECOMMENDATIONS

Practical aspects (troubleshooting): To anticipate the re-emergence of the same problems which are associated with accounting information systems that is less effectively implemented, the universities in Bandung city are recommended in order to improve user satisfaction (user satisfaction) and the use of accounting information systems (system usage) by improving the business strategy of company to do by providing academic and non-academic services online to students for 24 h. Online 24 h academic and non-academic services is one of the characteristics of the accounting information system application that integrates well, available anytime, anywhere, easy to access and easy to use, according to the needs and flexible.

Theoretical aspects (science development): Suggestions that can be submitted related to the development of science that can be used as a reference for further researchers who expect to get the same results/ conclusions (replicability), to increase confidence in the research that has been done and to improve the usefulness of the study results to be widely accepted (generalizability) can done in the following manner: the further researchers are expected to add the research sample in order to obtain more optimal research results.

The further researchers use the different units/ locations research which areused in this study thus strengthening the support for the theories linkage which have been put forward by previous experts.

The further researchers are expected to conduct research using different statistic test equipment to the one which is used in this study in order to test a theoretical model that is used whether it will produce the same influence when it is tested using different statistical testing techniques.

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