

Benchmarking Criteria and Adoption in Designing Business School's Performance Management System

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Abstract

This paper aims to present a principle to the business school institution that have slight familiarity in espousing benchmarking toward better performance. This is done since designing performance management system, especially in defining key indicators is essential in achieving improvement process and better service. One approach to assist institution -notwithstanding with some pitfalls in it- is benchmarking. Moreover given the fact that industry best practice may never be found as it also relate with organizational culture, the criteria to adopt benchmarking strategy become crucial. The study conducts through a series of descriptive study to top nine Indonesia's business schools. The research stages start with literature surveys of several published article in international journal related with benchmarking criteria and adoption that have been done by previous researchers. Followed by descriptive study through observation, interviews, document reviews, and filling out the questionnaire by the dean or vice dean of academic as well as the quality assurance administrator. By accomplishing analysis, it revealed four factors with internal factors as the most influential factors on benchmarking criteria and adoption, followed by functional; competitive factors; and the last is process, and along with factor analysis came up ten criteria for benchmark strategy implementation. By carrying out such research finding, it will be useful as a basis for decision maker in formulating the business school's strategy for enhancing the global competitiveness for the foreseeable future.

Keywords: Benchmarking Criteria; benchmarking adoption; PMS; business school

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1.0 INTRODUCTION

Performance management system (PMS) is the key to guide and test the results of the improvement process; however it does not indicate how a process should be improved. Moreover to measure the performance is not a simple and easy task, particularly in order to compete in the global industry as they adopt various PMS that best suit their undertakings (Hamid *et al.*, 2010). Furthermore designing performance indicator in both the private and the public sectors is difficult (Kouzman *et al.*, 1999) whereas selecting the right design concepts is a crucial decision (Ariff, 2008). One approach that can be used is benchmarking. This approach can be utilized for continuous improvement (Dattakumar, 2003); a quality enhancement for better service (Nassar, 2012); increase efficiency and productivity (Tucker *et al.* 1987); improving performance in various areas (Azis, 2011); to remain competitive and for learning new ideas (Balm, 1996); served as a strategic tool for performance assessment and continuous improvement in performance (Elmuti and Kathawala, 1997; Voss *et al.*, 1997); the way to create a sense of urgency (Lee, *et al.*, 2006); a process for self evaluation in higher education (Mackie 2000);

and even Dragolea and Cotirlea (2009) conclude benefits of benchmarking in for institution include: a) continuous improvements to achieve better performance into the organizational culture, b) improve knowledge on the performance of products and services, and c) assist in focusing resources to achieve the target.

On the other hand among those several advantages in using benchmarking as an improvement technique and tool many studies had pointed up some vulnerability if it is not done correctly. Maleyeff (2003) concluded improper approach in calculating the performance index and comparing non equal 'level of field' had to be avoided or else customer satisfaction might actually decline due to gaming and poor morale among employees. Davies and Kochhar (2002) pointed out the main factors of benchmarking failures, i.e. lack of use of benchmarking metrics, lack of implementation of best practices, no formal benchmarking strategy, checklist or definition, and no feedback results into business plan target. Other researcher Freytag and Hollensen (2001) highlighted ineffectiveness of benchmarking process namely that sometimes companies too focused on data rather than the actual process, lost focus on customer and employees, over-reliance on quantitative data,

perceived benchmarking as a one-time project and the narrow scope of companies studies.

Accordingly since there is involvement of high transactions costs and given the fact that industry best practice may never be found, only relative or local optimums are found as benchmarks (Kouzman *et al.* 1999). Although benchmarking can be described as a structured process, the structure is often developed by the development of a step by step process model, which provides a common language within organizations (Spendolini, 1992). Such process models for benchmarking have been proposed by various authors (Bateman, 1989; Camp, 1989; Codling, 1992; McNair and Leibfried, 1992; Shetty, 1993; Spendolini, 1992; Watson, 1993). However in the real world "ideal-type" definitions of benchmarking is needed and be modified. Consequently, benchmarking is a continuous, systematic process of measuring products, services and practices against organizations regarded to be superior with the aim of rectifying any performance gaps.

2.0 BENCHMARKING CONCEPT AND THEORETICAL FRAMEWORK

There are many definitions of benchmarking, among others: is a process for measuring the company's performance against the best in its class, then use the analysis to meet and exceed the company (Pryor and Katz 1993); the search of best practices that lead to excellent performance well if those practices are applied (Partovi, 1994); a process of self-evaluation and self-improvement through the systematic and collaborative comparison of practice and performance with competitors in order to identify own strengths and weaknesses, and learn how to adapt and improve as condition change (Camp, 1989); or a systematic comparison of the processes and performance standards to create new or improve process (Ten-Have, 2003). Other definitions for benchmarking can be described as:

[...] a continuous analysis of strategies, functions, processes, products or services, performances, etc. compared within or between best-in-class organizations by obtaining information through appropriate data collection method, with the intention of assessing an organization's current standards and thereby carry out self-improvement by implementing changes to scale or exceed those standards (Anand and Kodali, 2008).

The concept development of benchmarking can be classified into five generations (Watson 1993; Denkena *et al.*, 2006; Martin, 2008; Anand and Kodali, 2008; Dragolea and Cotirlea 2009; Moriarty and Smallman 2009): 1) Reverse engineering (oriented products that include comparative characteristics, usability and performance of the product), 2) Competitive benchmarking (efficiency-oriented products), 3) process benchmarking (oriented business processes of the major goals of the analysis), 4) Strategic benchmarking (oriented fundamental changes by adapting successful strategies), and 5) Global benchmarking (oriented cultural differences as well as the strategic planning process). Williams (2008) mentioned that benchmarking can be categorized into two types: 1) internal and 2) external benchmarking.

Subsequently the theoretical framework was developed based on the objective of the study that is to identify the benchmarking criteria and adoption of the business school toward better performance. The instrument used was adopted from several previous studies from Wibisono (2006); Azis and Wibisono (2010a); Lee *et al.* (2006), and Kouzman *et al.* (1999). As an add-on and to enrich the framework for benchmarking strategy this study also take the guidelines taken from Elmuti

and Kathawala (1997). Subsequently for clearly discussion and to facilitate the discussion, the framework of this study is described as follow:

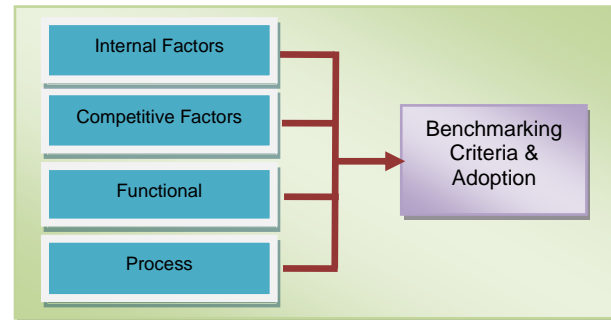


Figure 1 Theoretical framework of study

3.0 METHODOLOGY

The study conducts through a series of descriptive study to top nine Indonesia's business schools. Respondents (informants) are dean or vice dean of academic or the quality assurance administrator as they would have the knowledge and influence towards the benchmarking criteria and adoption. In addition research also carried out by studying a document. The study utilized qualitative survey with structured questionnaire to undertake new knowledge by employing the statistical methods as a validation process of results by having a structured questionnaire (see Azis and Wibisono, 2010b), as its capability in offering advantages which cannot be found in more quantitative research methodologies (Eisenhardt, 1989; Patton and Appelbaum, 2003). Moreover this study is a cross-sectional study in which data from various resources are gathered at a single point of time, meaning the primary data are collected, gathered and compiled specifically for the research at hand, and as the unit analysis of this study is school or faculty of business of the Indonesia's business schools which have an "A" accredited grade from Indonesia higher education national accreditation body (BAN-PT). Purposive convenience sampling is used as the sampling technique for this study to obtain a large number of completed questionnaires quickly and economically (Zikmund, 2003) and sent to targeted school of business informants through e-mail and did the personnel solicitation and seek their cooperation to complete the questionnaire. As mentioned by Sekaran (2006), sample sizes could be effective depending on the type of sampling design used and the research question investigated, although Eisenhardt (1989) critically suggests that, there is no ideal number of cases, but a number between 4 and 10 cases usually works well.

The benchmark criteria of the constructs studied were based on the literature review for those items which convened the description of the variables of interest. The scale relating to each construct's criterion, in turn, developed from item successfully used in previous studies, and followed by refining the criteria using standard tests of validity and reliability. Goodness and correctness of data were conducted by checking the range, the mean, standard deviation and the distribution of data to confirm how good the scales being used, existence of coding error or data entry error. Informants from each business school were asked to write down the current business school's benchmarking strategy to associate and have a right figure in comparing to the literature review criteria and they were asked to indicate the agreement, disagreement, or partially agreed to

the each criterion. For having a reliability and validity as well as eliminating the questions ambiguity the questionnaire is first sent to performance advisor or quality assurance expert. Content validity was tested based on previous literatures and pretest with a few related benchmarking experts to ensure that the variables to be measured are correct. Reliability was checked based on Cronbach's alpha. The Cronbach's alpha for all constructs are higher than a commonly used benchmark value of 0.7. It suggests that the all criteria in the constructs determine the same domain of the corresponding variables.

4.0 FINDING AND DISCUSSION

This section firstly describes the business schools profiles and characteristics. The data were initially gathered by descriptive methods and be verified its relationship using Chi-square test. From nine business schools from several provinces in Indonesia, which constituted 37.5 percent of the response rate there was 55.6 percent are state-owned university and the rest and private schools. Among the respondents, 77.8 percent of the schools have adopted benchmarking technique, and can be classified as a new adopters (57.1%) that implemented benchmarking techniques for not more than five years and (43,1%) are the school with implemented it more longer time history of benchmarking adoption. Respondents were analyzed against the four independent variables as proposed by the framework and discriminant analysis has been utilized as a mean in enabling them to be classified and determining which of factors would contribute to benchmarking adoption. The result is shown on Table 1.

Table 1 Discriminant loading factors

Factor	Discriminant loading	Ranking
Internal factors	0.863	1
Functional factors	0.671	2
Competitive	0.412	3
Process	0.368	4

Table 1 indicates the result from discriminant analysis, it shows that internal factors was the most influential factor on benchmarking adoption, followed by functional factors, competitive factors, and the last is process factors. This study has shown that internal factors, competitive factors, functional, and process are the four discriminating factors for benchmarking adoption. Hence, this information can be recognized to endorse the approval and accomplishment of benchmarking. From institution point of view, attention should be given to internal factors such as lecturer and staff participation and quality assurance department should play a proactive role in adopting benchmarking as a strategic tool as well.

Subsequently, the Person Chi-square test is utilized to verify the relationship of several schools characteristics against the benchmarking adopter and non-adopter, and it tested six characteristics as the reason of adoption of benchmarking process, namely process critical factor, performance, significant opportunities for process improvement, the people awareness, a key person commitment, stakeholder's engagement. The score of Person Chi-square test with $df=1$ in Table 2 showed entire six characteristics has a significant relationship since the p-value of the characteristics is less than 0.05.

Table 2 Characteristic relationship

Characteristic	Pearson Chi-square	P-value
Process critical factor	5.412	0.020
Performance	10.828	0.001
Opportunities for improvement	6.635	0.010
The people awareness	5.024	0.025
Key person commitment	7.879	0.005
A stakeholder's engagement	6.959	0.008

Following its significance, benchmarking process in business school should be adopted if the following circumstances arise (Wibisono, 2006). Those are the processes are critical factors of the school/faculty; the school's performance is uncompetitive, opportunities for process improvement, awareness of the faculty to the processes which lead to performance, commitment in making changes, and stakeholders' engagement in benchmarking team. Meanwhile, benchmarking process does not need to be adopted if following situations arise, such as business schools does not have a specific process to be targeted as the critical factor, schools do not know the performance to be competed with competitors, lack of information of consequences for the customer in doing a benchmarking process, does not have sufficient information and calculation for doing benchmarking process, a resistance, and the benchmarking process does not supported by member of schools. These circumstances are summarized on Table 3.

Table 3 Adoption of benchmarking process

Benchmarking should be done if:	Benchmarking should not be done if:
The process which will be benchmarked is the critical	There is no specific process to be targeted.
The analysis which has been done indicates that the performance of the school/faculty is uncompetitive.	The school/faculty management does not know the performance against to competitors.
There are significant opportunities for process improvement from benchmarks that will be done.	School/faculty does not know what the consequences for the customer on the benchmarking process that will be done.
The people at the school/faculty aware to the processes that occur in the school/faculty and find out exactly the current performance.	The school process uncharted and the calculations of school's performance is unknown and not established yet.
The responsible person for the process to be improved is having a commitment to make a change even if it is a radical change.	There is a very strong organizational resistance against to process changes.
The stakeholders are willing to engage in benchmarking team.	There are only several people who want to do the benchmarking process.

From factor analysis as a mean to address the problem of analyzing the structure of the interrelationships among a large number of variables by defining a set of common underlying dimensions, known as factors (Hair *et al.*, 1998), this research found out four criteria are correlated very strong, and, from the interview came up are ten criteria in doing internal or external benchmarking to run a benchmark strategy in order to succeed in accordance with the plan. Internally benchmarking should (1) have regular activity to compare following year performance with previous one, it recommended by most of the respondent (77.8%), and the rest only do part of it; (2) do a competitive activity among faculty member (such as dissemination/scholarly conventions). This criterion is used to view the activity of the human resources availability, especially the lecturers; it is associated with the progressive development of the school, a total of 66.7% of school held a competition for teachers, both within the internal and external; (3) presence a competitive activity among study programs to get the development funding. Based on these criteria can be seen the activity in managing and developing institutions. A total of 77.7% of schools noted there is a competitive activity between study programs; (4) conduct a competition among the lecturers to obtain school research funding, whereas funds are disbursed as the incentives in improving the quality of human resources, although it is provided limitedly, thus requiring a high competitive level among faculty. However, from the results of the study only 55.6% of the school has the level of competition among lecturers, others do not have it; (5) routine implement the institution competition at least once a year, and a total of 66.7% school organizes this competitive arena.

Subsequently, external benchmarking for business school should (6) be based on regular visit to other school, at least once a year. From the respondent this activity is carried out by almost all schools (88.9%) for the development aim and better performance; (7) exhibit a significant change for the following year after a comparative study carried out. Although 77.8% of school clearly mention about it, but there is a lack of doing it, some school just do it for the knowing what the other school do, not for improvement objective; (8) have a evaluation procedure to compare among schools, and the study showed only 66.7% had an evaluation procedure, while the rest do not have; (9) invite other institution to do such competition from several other institution, only 66.7% conducting this kind of competitive activity, due to the lack of readiness of school in the implementation of external activities; and (10) do a faculty exchange nationally or internationally, 44.4% of the schools have this program and it is still limited to large scale school who have substantial funds or an assistance funding from the government.

Accordingly, benchmarking is done to identify competitive targets which render the weak points of benchmarking organization visible and to establish means of improvement. Sketchily, the basic idea behind benchmarking is not to find out "by how much others are doing better but, rather, how they make it to do better in certain areas" (Horvath and Herter, 1992:5) and the success of benchmarking depends on employees understanding the results (and the consequences) of the benchmarking exercise and that they will need to participate in determining and implementing necessary organizational change. Possible new performance targets have to be set and actions plans made. In measurement practice, there are four factors of benchmarking are known so far, namely (a) Internal: the measurement and comparison of performance between processes or products within the organization itself; (b) competitive: the measurement and comparison of performance that focuses on products or services; (c) Functional: the

measurement and comparison of performance that focuses on generic functions; and (d) Process: the measurement and comparison of performance that focuses on processes that equivalent to competitors.

On the other hand the fact that most organization develops their benchmarking analysis in subsequent stages shows the complexity and what is important for the introduction of benchmarking is that this instrument needs to be permanently used by staff (Walleck *et al.*, 1991). Furthermore different type of organization also has its own method of benchmarking, and this raises its own difficulties to be implemented. For example Pierre and Delisle (2006) proposed a knowledge-based diagnostic expert system for benchmarking performance, while other uses another approach. However, there are several aspects that should be considered. These considerations will lead to the performance of business schools. Those aspects are: knowing the customers need, creation of effective goal, effort to be competitive, performance measurement, and institution practices (Wibisono, 2006). The comparison of business schools whose adopt benchmarking or not is summarized on Table 4.

Table 3 Comparison aspect with or without benchmarking

Aspects	Without Benchmarking	With Benchmarking
Identifying of the consumers needs	<ul style="list-style-type: none"> Based on historical records Acting on the basis of perception 	<ul style="list-style-type: none"> Based on actual market conditions Acting on the basis of an objective evaluation
The creation of effective goal	<ul style="list-style-type: none"> Lack of information from the outside Reactive Behind in competition 	<ul style="list-style-type: none"> Credible, based on customer needs Proactive Industry leadership
The effort to be competitive	<ul style="list-style-type: none"> Focus on the internal side Evolutionary change Low commitment 	<ul style="list-style-type: none"> Understand competitors Revolutionary ideas with proven performance Commitment
Performance measurement	<ul style="list-style-type: none"> Pilot project Strengths and weaknesses that are not understood 	<ul style="list-style-type: none"> Resolve the real problem Results of performance known as the best in its class
Institution practice	<ul style="list-style-type: none"> Does not refer to best practice Only a few solutions Sustainable development 	<ul style="list-style-type: none"> Proactive search for change Lots of choices Breakthroughs

Aspects mentioned on Table 4 bring out two major issues that make benchmarking process becoming a way to increase performance. Those two major issues namely the need of appropriate indicators and to get the data needed for the analytical part of the benchmarking process, as noted from Kouzmin *et al.* (1999):

[...] One major issue is the need to decide on appropriate indicators to be used in the benchmarking process. Financial indicators rarely exist within public agencies.

[...] another problem is to get the data needed for the analytical part of the benchmarking process. This is easier when comparisons are made "across-the border" since

companies more readily release information they would not, normally, give to direct competitors.

Another major issue for benchmarking in performance evaluation is the issue of reporting performance with a single number. The use of multiple benchmarks for performance analysis makes it necessary to use some kind of average. The search for the best of the class, the definition of good indicators and data collection turn out to be critical elements of the benchmarking process. It is striking that only large companies can afford to develop their own benchmarking. Other companies rely on previously developed programs (for example by participating in quality awards) or, at least, investing in external counseling by participating in benchmarking training workshops (Kouzmin *et al.*, 1999). However those issues convey a method of performance improvement through benchmark obviously take some several questions to be responded and that typically includes measurement and comparison of performance against: (a) how did the comparison process, (b) which side is better, (c) why others are better than us, and (d) what action needs to be improved. In other words this seeks to find out the meaning of who is the very best, who sets the standard, and what that standard is in doing a benchmarking process.

Following the result, the entire lecturer and staff in business school should be consistent in adopting this framework. They should clearly define the principles or essence of the subject, by knowing the nature of the subject, such as territory, culture, subject knowledge, skill, and teaching and learning as well. It can be accomplished if one business school has a standard, that describe clearly what are going to achieve, where do we want to go, and also the comparison of how much that we can afford some point of target. Subsequently the several categories should be fulfilled, namely: leadership, information analysis, strategic quality planning, human resources development and management, managing process quality, and customer focus and satisfaction (Jackson, 2001).

5.0 CONCLUSION

Benchmarking is driven by a need to learn in order to understand, improve, change and innovate; it is also done to identify competitive targets which render the weak points of institution, as it would do better in certain areas (Horvath and Herter, 1992:5). Several circumstances should be noted for the success in its implementation, namely process critical factor, performance, significant opportunities for process improvement, the people awareness, a key person commitment, stakeholder's engagement. There are four factors of benchmarking criteria and adoption: internal as the measurement and comparison of performance between processes or products within the organization itself, functional as the measurement and comparison of performance that focuses on generic functions, competitive as the measurement and comparison of performance that focuses on products or services; and process as the measurement and comparison of performance that focuses on processes that equivalent to competitors.

The research also found out four criteria in doing internal or external benchmarking, as also supported by Elmuti and Kathawala (1997). Internally benchmarking should: have a regular activity to compare following year performance with previous one, do a competitive activity among faculty member, presence a competitive activity among study programs to get the development funding, conduct a competition among the lecturers to obtain school research funding, routine implement the institution competition at least once a year. While externally

benchmarking should be based on regular visit to other school, exhibit a significant change for the following year after a comparative study carried out, have a evaluation procedure to compare among schools, invite other institution to do such competition from several other institution, and do a faculty exchange nationally or internationally.

Despite the difficulty in adoption, several categories should be fulfilled (Jackson, 2001), and should be permanently used by staff (Walleck *et al.*, 1991), benchmarking process can be done by having a commitment to self-determined improvement from entire internal factors, knowing the competitive environment, having a professional or functional model, and doing the right process that are found on research. To some extent the way in which business school's quality is defined will become a bearing on the way the benchmarking activity is framed, that's why the context is also important for implementing ten criteria that came up from study. It could be done by several main steps (1) measuring the performance of the best performing critical variables, 2) determining how the performance levels achieved and 3) the use of information for the development and implementation of improvement plans. This practice framework treats benchmarking as a process of action and active learning, by doing a dynamic forum or discussion group that involved people who are committed to the process of improvement.

To add it up, by implementing such finding from this research, it will be useful as a basis for decision maker in formulating the business school's benchmarking strategy for the foreseeable future. However the research agenda must undertake the character of the system in respect to institutional control and also appending much more insight for strategy formulation criteria. The findings of this study have shown that there is a relationship between business school performance and benchmarking adoption. Therefore, it is recommended to extend the framework to a more distinguished environment and the scope of the study can be extended as well. In order to design performance management systems benchmarking based, it also should be considered the global information i.e. organizational information, financial, market information, and product –related information as well.

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