BENCHMARKING

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ABSTRACTS

This article aims to develop an integral summary of the present status of the model ("philosophy") of benchmarking. It includes the presentation of different bencmarking definitions, different benchmarking processes, preconditions for benchmarkig, and finally, to propose an alternative benchmarking model, processes of how to accomplish continuous improvement would be performed.

INTRODUCTION

Nobody argues against the important of measurement However, according to Rolstadas (1995), measurement is a disputed and misused term. Some authors like Sink and Tuttle (1989) claim that we cannot manage what we cannot measure. Others may disagree with this *philosophy* due to the danger of choosing the wrong matrics.

The measures of performance that are universally used are those that record the sources and uses of finance. Companies are required to report financial key figures to authorities, shareholders, etc. This is why the financial figures are usually treated as the foundation for performance measurement Often the effort devoted to the short-term improvement of financial performance substantially exceeds that given to improvement of measures of performance that are non-financial. This is true, however, if there are no rapid changes in industrial environment

According to Sweeney (1993), performance reporting is undeniably needed to guide business decisions towards the achievement of the strategic plan for either the company or one of its functions. Development of an effective measurement system is a crucial task for every company exposed to tough competition (Rolstadas, 1995).

For this reason, the selection of the performance measures to be used is critical to successful business management The selection of the key performance indicators to be used also has a profound impact on organizational behavior (Bhat, 1995). Performance measures are therefore instruments designed to trigger the management of change.

This article aims to review basic concept and process of benchmarking. It includes the presentation of different benchmarking definitions, different benchmarking process, preconditions for benchmarking, and finally, to propose an alternative benchmarking model, processes of how to accomplish continuous improvement would be performed.

Definitions and Different Types of Banchmarking As the field has gained interest and has been expanded, a number of different definitions of benchmarking have emerged. According to Camp (1989), there are several bases on which to define benchmarking as an activity. Additionally, Camp (1989) cites the following definitions.

Formal Definition.

Benchmarking is the continues process of measuring products, services, and practices against the toughest competitors or those companies recognized as industry leaders. (David T. Kearns, chief executive officer, Xerox Corporation)

Webster's Definition.

It defines a benchmark as a surveyor's mark... of previously determined position and used as reference point... standard by which something can be measured or judged.

A Working Definition

Benchmarking is the search for industry best practices that lead to superior performance.

Furthermore, asdtedbyRolstadas (1995).

Benchmarking is the practice of being humble enough to admit that someone else is better at something, and being wise enough to learn how ta match even surpass them at it (APQC,1993).

A more operational definitions.

Benchmarking is the process of continuously measuring and comparing an organization against business leaders anywhere in the world to get information that will help the organization take action to improve its performance (APQC, 1993).

There are several consideration in those definitions requiring further description (Camp, 1989): (1) Continuous process. Benchmarking is a self-improvement and management process that must be continuous to be effective. It cannot be performed once and disregarded thereafter on the belief that the task is done. It must be a continuous process because industry practices constantly change. (2) Measuring. The term benchmarking implies measurement Measurement can be accomplished in two forms. The internal and external practices can be compared and a statement of significant differences can be documented. Benchmarking is not just an investigation of the matrics of the external business function, but an investigation to determine what practices are being used to ensure effectiveness and eventually superiority and which practices achieve the matrics. Benchmarking is not just a study of competition but a process of determining the effectiveness of industry leaders by measuring their results. (3) Product, services, and practices. Benchmarking can be applied to all faced of a business. It can be applied to the basic products and services. It can be applied to the processes that go into manufacturing those products. It can be applied to all process practices and methods that are in support of getting those products and services effectively to customers and. meeting their needs. Bencmarking goes the traditional competitive analysis to not only reveal what the industry best practices are, but to also obtain a dear understanding of how best practices are used. (4)

Companies renowned as industry leaders. Benchmarking should not be aimed solely at direct product competitors. In fact it could be a mistake to do so since they may have practices that are less than desirable. Benchmarking should be directed at those firms and business functions within firms that are recognized as be or as industry leaders. The company serving as a benchmark partner is not always obvious. Careful investigation is needed to determine which firms to seek as benchmarking partners and why. In the formal sense benchmarking is an ongoing investigation and learning experience that ensures that best industry practices are uncovered, analyzed, adopted, and implemented. It focuses on what best practices are available. It enures an understanding of how they are performed. And finally, it determines the worth of the practices or how well they are performed.

PROCESSES OF BENCHMARKING

A number of books and articles have been published recently explaining the processes and stages of benchmarking. According to Partovi (1994), in addition to the Xerox pioneering ten-step benchmarking process (Camp, 1989), there is the Kaiser Associates, Inc. seven-step process (Hayes and Wheelwright, 1984), the Spendolini five-step process (Spendolini, 1992), the IBM five phase/fourteen-step process (Eyrich, 1991), Alcoa's six-step benchmarking (Bemowski, 1991). Exhibit 1 shows the different kinds of benchmarking processes and stages. While these approaches are organized differently, they all share a crucial stage at the beginning: determining which function to benchmark (Partovi, 1994).

According to Rolstadas (1995), to choose certain benchmarking processes one has to consider three main criteria:

(1) The process[1] impact on the company's critical success factors.

(2) The process' importance, with regard to the main functions of the company.

(3) Processes that are or influence spots in the company.

These criteria will help to ensure that the area chosen for benchmariing really is important, so that one avoids wasting precious resources on unimportant processes.

PRECONDITIONS FOR BENCHMARKING

Benchmarking is not a suitable tool in every company or every situation. In both cases, there are some conditions that should be satisfied

before one decides to benchmark (Andersen and Pettersen, 1994a, cited by Rolstadas, 1995). The company-related condition can be split into three categories:

1. Structural conditions, i.e., resources and abilities needed to cany out benchmarking should be present in the company. These are:
   - financial resources, among other costs, certainly to finance side visit;
   - time, to do all tasks necessary for a successful benchmarking study;
   - competencies, quite simply sufficient knowledge about benchmarking to be able to do it;
   - competitive abilities and potential for development
   - documentation of central processes.
2. Cultural conditions, i.e., the values and attitudes that forms the basis for effective use of the benchmarking principles must be present in the organization. These are:
   - international aspiration;
   - will to change
   - will to information sharing (both internally and externally);
   - management commitment;
   - participation of the employees.
3. Understanding of and consciousness about the company's business process, as business are the main unit of analysis in benchmarking study. The following dimensions should be present
   - process documentation, e.g., flow charts;

- an understanding of how the different business processes impact on competitiveness and critical success factors;
- performance measures for the business processes.

Exhibit 1. Different kinds of benchmarking processes

Xerox's 10-step benchmarking process

- Identify what is to be benchmarked
- Identify comparative companies
- Determine data collection method and collect data
- Project cunent perfoemance gap
- Communicate benchmark findings and gain acceptance
- Establish functional goals
- Develop action plans
- Implement specific actions and monitor progress
- Recalibrates benchmarks

Alcoa's 6-step benchmarking process

- Deciding what to benchmark
- Planning the benchmarking project
- Understanding your own performance
- Studying others
- Learning from the data
- Using the findings

Bhat 13-step benchmarking process

- Obtain top management commitment
- Form a to management committee
- Identify function to benchmark
- Train team members Identify the best-in-dass company
- Select key performance measures

- Collect data
- Set goals to achieve
- Discuss the findings
- Develop action plan
- Implement the plan
- Audit the implementation

A T&T12-step benchmarking process

- Determine who the clients are
- Advance the clients the literacy stage in the champion stage
- Test the environment
- Determine urgency
- Determine cope and type of benchmarking needed
- Select and prepare die team
- Overlay the benchmarking process onto the business planning process
- Develop the benchmarking plan
- Analyze the data
- Intefrate the recommended actions
- Test action
- Continue improvement

Partovi's 7 step benchmarking process

- Situation analysis
- Product feature analysis
- Process selection (determining what to benchmark)
- Form a benchmarking team
- Identify benchmarking partners
- Collecting and analysis of benchmarking information
- Implementation

The Cranfield Benchmarking Consortium

- Identify the process
- Scope process and team
- Map, understand, and analyze process
- Refine process, change the obvious
- Design benchmarking study
- Collect information
- Analyze study results
- Design and implement improved process

GENERIC BENCHMARKING PROCESS

Benchmarking is firmly based on *Sun Tzu'z1* urging to view and understand not only the internal company world, but more important to assess the external world constantly. Only coupled with the constant search for *dantotzu*, the"best of the best" methods and practices, innovatively applied to business processes, will a company revitalize itself. Figure 1 shows the generic benchmarking process (adapted from Camp, 1995). The generic benchmarking process makes several important points that will help early understanding of the process. *First* benchmarking can be divided into two parts, practices and matrics. The tendency is for managers to work to determine the matrics or quantitative targets in order to quickly internalize the realization, good or bad, that the organization will find from benchmarking against the external environment This is a visceral approach to getting the bad news over quickly.

Benchmarking should be approach on the basis of investigating industry practices first The matrics that quantify the effect of the practices can be obtained or synthesized later. The reverse is not always possible, and it could mislead or defeat the purpose of benchmarking.

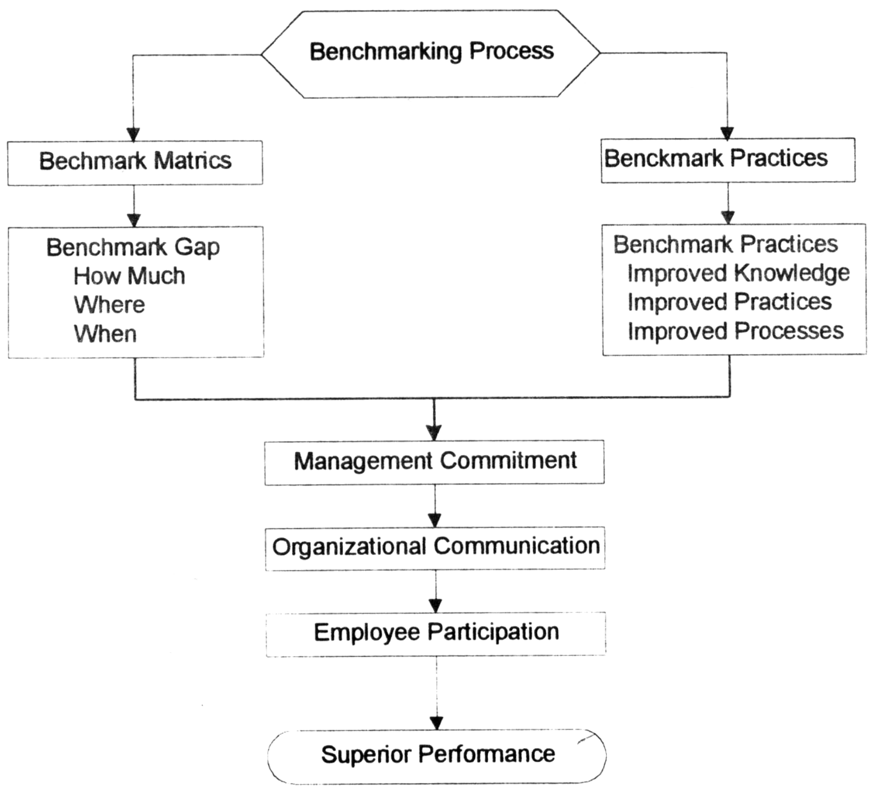
The final point is that the benchmarking process and the benchmarking findings must be understood by the organization to obtain commitment to take action to change. Essential to benchmarking process are both carefully designed communications to the organization and concerted management support These are critical to such a radical new-way of doing business as benchmarking. The findings need to be implemented. The sum of these major actions is what leads to superior performance.

In addition to benchmarking process, Camp (1989) introduced the basic philosophical step of benchmarking that are fundamental to success. There are:

Know the operation. We need to assess the strengths and weakness of the internal operation. That assessment must be based on the understanding that competitors will analyze our operation also to capitalize on the weaknesses they uncover. If the we do not know the operation's strengths and weaknesses we will not be able to defend ourselves. We will not know which operations to stress in the marketplace and which will require strengthening.

- *Know the industry leaders or competitors.* In a similar fashion we will only be prepared to differentiate our capabilities in the marketplace if we know the strength and weaknesses of the competition. More importantly, it will become dear that only the comparison to and understanding of the best practices of industry or functional leaders will ensure superiority.
- *Incorporate the best* Learn from industry leaders and competition. If they are strong in given areas, uncover why they are and how they got that way. Find those best practices wherever they exist and do not hesitate to copy or modify and incorporate them in our own operation.
- *Gain superiority.* If careful investigations of best practices have been performed, and if the best of those best practices have been installed, then we will have capitalized on existing strengths, brought weaknesses to match the marketplace, and gone beyond to incorporate the best of the best This position is clearly a position of superiority.

Figure 1. Generic Benchmarking Process



AN ALTERNATIVE *PROCESS* OF BENCHMARKING MODEL

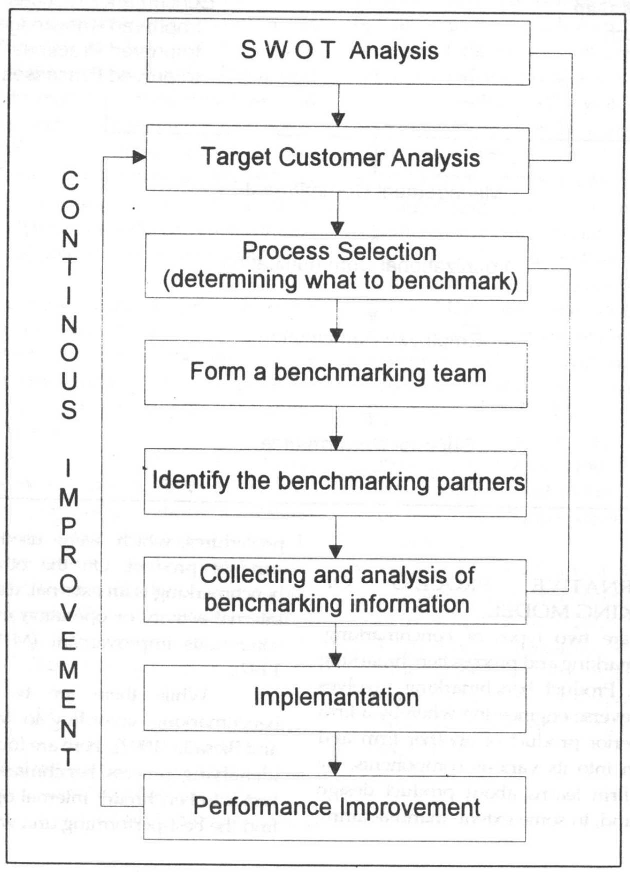
There are two types of benchmarking: product benchmarking and process benchmarking (Partovi, 1994). Product benchmarking involves the process of reverse engineering whereby a firm acquires a superior product of another firm and breaks it down into its various components. By doing so, the firm learns about product design characteristics and, to some extent, manufacturing

procedures which were used to develop the superior product On the other hand, process benchmarking is an external, directed focus on an internal activity or operation in order to achieve continuous improvement (McNair & Leibfried, 1992).

While there are two basic types of benchmarking, according to Mittelstaedt (1992) and Biesada (1992), here are four different ways of identifying process benchmarking partners. The first is to benchmark internal operations, that is to find the best-performing unit within the company. The second is to benchmark competitors. The third is called best-in-dass benchmarking. And finally, strategic benchmarking.

Figure 2 shows an alterative process of benchmarking model . It identifies how a company should position its product in relation to its competitors, as well as suggests what needs to be done to the processes or function to support those competitive advantages (Biesada, 1992; Walled, et al., 1991, and Vaziri, 1992). In addition to the steps required for benchmarking process, benchmarking starts with two additional stages: SWOT analysis and target customers analysis. These stages are then followed by other typical stages of benchmarking.

Figure 2. An Alternative Framework Benchmarking



The SWOT analysis consist of two parts: external and internal analysis. The external analysis addresses the common characteristics of important market segments: what dimensions can be used to segment the market how important various segments are, and how well these needs are being served by competitors (Lambertus, 1995).

The internal analysis identifies the strengths and weaknesses of internal operations and resources of the firm in terms of the value to the organization (Carey, 1994). Based on these analyses, the customers whom the firm is most interested in serving will be identified.

The second stage deals with target market and product features. Here, the target customers' wants are investigated and defines. These customers wants are then translated into operational product design and manufacturing performance objectives in terms of cost, quality, flexibility, and delivery. The output of the product feature analysis is a specification of desirable performance objectives to be met by the value chain - the linking of activities across the organization. According to Cohen and Lee (1985), the resulting set of objectives expressed in terms of cost, quality, flexibility, and delivery is often refened to as the manufacturing mission statement It would then remain for the process selection phase to determine hoe well different processes (activities) might contribute to accomplishment of these improvement targets.

The process selection is directed at the detailed step because it bridges strategic analysis and best-in-class benchmarking. Once this analysis is complete, and the specific process for benchmarking has been identified, then one can look for the practices which lead to excellence in that process. The ultimate goal of benchmaring is to focus on the most important activity of the value chain in order to meet customer expectations.

Once the activity has been selected a team is formed. It is composed mainly of individual who are in mat particular activity. Then the best-in-class operations among companies from various industries are identified. And once partners accept the proposal, several sites are visited. After collecting and analysis benchmarking information, the firm start to implement the new standard of performance measurement These processes are continuous based on continuous improvement principle.

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