

**BENCHMARKING AS A FUNCTION OF COMPETITIVENESS
AND EFFICIENCY IN BUSINESS***Jovan Babović, Vuk Raičević, Marko Carić¹***Summary**

Benchmarking is a method of comparison between its 'own and the best possible organization that would contribute to the implementation of best practice solutions, new technologies, improvement of business processes and the quality of products, cost savings, increase of productivity, creativity, innovation and competitiveness on the market, and would lead to satisfying the needs and desires of consumers, as well as achieving efficiency in its 'own business.

However, the concept of benchmarking affects the creation of new ideas and lucrative solutions to improve the existing organization, process and competitive products of high quality. It is, without doubt, the easiest way of applying and achieving best practice leader for the maximization of profit in business.

There are several types of benchmarking, such as: the internal, external competitive, external functional, external generic, combined internal and external benchmarking. For a successful implementation of benchmarking, it is inevitable to choose a small number or a single leadership organization suitable for comparing and increasing of competitiveness and profitability in business.

Key words: *benchmarking, method of comparison, creativity, innovation, competitiveness, profit.*

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Introduction

Dynamic changes in business environment request adjusting of business activities of one particular organization in order to gaining success on the global market, all due to achieving the maximum profit. Making business in harsh terms of globalization demands the application of benchmarking, reengineering, partnership with both the suppliers and the consumers, and other modern managing activities (*Kotler, 2000*).

Benchmarking is used as a method of adjusting one organization to the dynamic changes in business through permanent measuring and comparison of its' results to the best results of other competitors, in order to achieve the same or maybe even create greater results of its' own. In this manner, it is essential to use the achievements, practice, solutions and ideas of leading organizations, and therefore to improve them creatively and implement in practice.

Comparison of their own activities are carried out with the best results and activities of other organizations in the same activities, with the best in the world regardless of the activity of the country, competitors that have the best products and results, companies with the best technical solutions and technology and best-defined business process.

The creative application of benchmarking into practice affects the rationalization of work processes, quality promotion and the range of products and services, increase of efficiency, expansion of business activities, the development of innovations, creativity, competitiveness and profitability in business.

The aim and method of research

The aim of the research is to investigate the concept, process and use of benchmarking in order to improve business efficiency by comparing the organization to the market leaders and best applying the practices to achieve competitiveness and profitability in business. Hereby, we shall consider the types of benchmarking, with whom the comparison will be done to, and also emphasize the positive effects of the practice. Benchmarking, as a method of management, has a new meaning in the business in order to evaluate the effectiveness of business of their own organization on the market, compared to the best organizations on both the domestic and international markets. Benchmarking is also a process of constant measurement, internal and external comparison to the leaders with the best practice, all due to gaining knowledge and creating conditions for improving their own solutions and results in business.

In this paper, we have used quantitative and qualitative methods and therefore conducted the studies based on our own research, original scientific research papers, studies and available literature on benchmarking.

Benchmarking as a managing-marketing activity

Concept, development, definition and objectives of benchmarking: Benchmarking has its roots in an English word “benchmark” which comes from a construction terminology, meaning leveling, leveling point, the standard measure of value-benchmark by which other values are measured and compared to. The original word in the English language has been identified as a new word “buzzword” which is used in theory and practice to describe a modern method of comparing its own business to the greatest organizations. Nevertheless, benchmarking is a standard for comparing, measuring and marking a reference point.

The application of identical methods is present with the ancient civilizations and nations in the distant past. Some authors point out that the concept of benchmarking was first used at the beginning of the 20th century.

A more intense use of this term was applied by Japan after the World War II when the experts studied and compared the business of the best organizations worldwide, as well as the best practice and results with their own, along with coming up with new solutions to apply in their organizations.

The modern concept of benchmarking was developed in the United States of America in the middle of the 20th century. At the beginning of 1960's, IBM was starting to use the internal benchmarking due to large differences in the business of lower organizational units. Therefore, it was estimated that the business processes in one part of the company more efficient than the other parts, while the task was to define the internal business standards and to apply the results to other parts of the company. Finally, the company had decided to reduce costs and improve the quality by accepting the world's best practices and thus achieving a significant competitive advantage in the global market.

Term “competitive benchmarking” was first launched in the 1982 in a company named “Xerox” during an employees' training in New York. Benchmarking was then characterized as “a possibility and the need for comparison not only to direct natural competitors, but also to any company no matter whether it is a competitor or not, or if it's big or small. The point is for a company's business practice to be compared to one of a leading or innovating companies' of a certain business function”.

“Xerox” has, however, compared its' products to the ones of a Japanese organization called “Fuji-Xerox”. The focus was to determine how the Japanese manufacturer sells its' products on the market of photocopying equipment at a lower cost of production costs of “Xerox”.

Afterwards, “Xerox” bought the Japanese products, separated the appliances technically, discovered the way of production and measured the costs of every phase of production, while the costs of production, ways of servicing equipment and other aspects of business. This has resulted in the increase of economy, productivity and created innovation in manufacturing. “Xerox” has learned how to improve the quality of its' products, cut costs and prices of products” (Macura, P., 2010, pg. 11).

AIC (Agricultural Industrial Complex) „Sirijum“ in Sremska Kamenica applies the combination of discriminatory and comparative analysis, that is benchmarking. In order to improve the internal economy and to increase the profit, seventeen agricultural organizations have been ranked by the discriminatory method I of distance (Ivanović, B., 1963), according to:

- **conditions** (X1 – Equipment assets, X2 – Fixed assets per employee, X3 – Equipment of instrument, X4 – The functional ability of fixed assets, X5 – Working capital per employee, X6 – Working capital, X7 – Technical equipment, X8 – The qualifying ratio of employees, X9 – Total assets per employee, X10 – The profit, X11 – Total invested capital) and

- **results** (Y1 – Operating profit, Y2 – Profit per employee, Y3 – Net profit per employee, Y4 – Total expenditure per employee, Y5 – Costs of sales, Y6 – General liquidity, Y7 – Profit before interests and taxes, Y8 – Net profit margin, Y9 – Gross profit margin, Y10 – Return on assets, Y11 – Return on equity, Y12 – The financial indebtedness, Y13 – Trade receivables), and therefore established the general ranking.

Table 1. Rank organizations under the conditions and results of the general coefficient of rank

Organizations	Production conditions		Operating results		Rank coefficient	Rank according to Ker
	Value I distance	Rank	Value I distance	Rank	Ker	(Ker)
I	0,4979	5	0,6281	1	1,2614	1
II	0,1636	17	0,1999	7	1,2218	2
III	0,2842	13	0,2640	4	0,9289	3
IV	0,3845	8	0,3302	2	0,8587	4
V	0,2896	12	0,1918	8	0,6622	5
VI	0,4384	7	0,2543	5	0,5800	6
VII	0,5026	4	0,2807	3	0,5584	7
VIII	0,3660	9	0,1904	9	0,5202	8
IX	0,2837	14	0,1345	11	0,4740	9
X	0,3190	11	0,1403	10	0,4398	10
XI	0,3402	10	0,1300	12	0,3821	11
XII	0,6220	1	0,2143	6	0,3445	12
XIII	0,2834	15	0,0973	15	0,3433	13
XIV	0,1746	16	0,0379	17	0,2170	14
XV	0,5914	3	0,1236	13	0,2089	15
XVI	0,6083	2	0,1161	14	0,1908	16
XVII	0,4616	6	0,0951	16	0,1104	17

Source: Babović (2010). The application of discriminant analysis to assess business performance, Novi Sad.

The discriminatory method of distance I indicated the presence of significant reserves for improving internal economy in business through a better use of available resources. Organizations with the best conditions have achieved poorer results, whilst, on the other hand, organizations that had lower means of equipment, technical equipment, a lower, less engaged foreign capital have worked better and achieved higher economic results.

The comparative analysis has shown that adequate results in business cannot be achieved according to available conditions. There are certain differences concerning the income, growth rates, productivity, expenditures of materials, labor and resources per hectare found in organizations when compared to the best one. Also, standards in production technology have been defined in organizations with poor results, as the best organization, and have therefore been put in practice. All of this inevitably caused progress in the yields and cost savings, as well as a rapid increase of income, earnings and profits (*Babović, 1981, pg. 24, 2010, pg. 7*).

Stoner, et al. (1995, pg. 224) sees benchmarking as „a process of discovering the best product, production process and services and their use as standards to improve the company’s own products, processes and services“.

Harington, H.Y. & Harington, J.S. (1996, pg. 15) defines benchmarking as a constant process of identification, comprehension and adjustment to products, services, equipment and actions of organizations with the best practice, aimed at improving their own business. The process includes: comparison of the organization and its parts with the best, not limited to the same activity or same country; comparison of products and other activities of organizations with activities of other organizations of the same kind in order to define the best; comparison of products and services of organizations with products and services of leading competitors; comparison of technical solutions of organizations in order to choose the best equipment for specific applications; application of best defined business process; planning of future development directions as well as active adapting to new trends and consumers’ satisfaction and surpassing expectations.

Kotler, P. (1994) says „benchmarking is the skill of determining how and why some individuals or organizations do business better than others” (*Macura, P. 2010, pg. 12*).

Drucker (2003, pg. 83) considers benchmarking to be one of the latest tools to obtain information on productivity. He also believes that all organizations can do everything equally. Equalizing the quality according to the leader in the industry is an essential condition for competitiveness.

The American Center for Productivity and Quality considers benchmarking to be a “systematic and constant process of measuring and comparing business processes of one organization to business processes of a leader on the world’s market in order to gain information that will help the organization take action to improve their performance”. (*Cvetković, K., Arsić, Lj., 2010, pg. 80*).

Application of benchmarking

In modern business, the existence and development of organizations are initially influenced by the external environment. The internal economy is important due to increase of productivity, economy and profitability. In the aspect of international and marketing and competitiveness, organizations are dealt with issues of how to retain and the existing and win new markets. By introducing benchmarking, orgnaizations determine the objectives in accordance with the needs and demands of consumers or costumers. These organizations therefore monitor their own results, as well as accomplishments of other competitors, compare them, and so they percieve their position, strengths and weaknesses in relation to the competition. Also, it becomes obvious where to intervene, whereas new business ideas and solutions to improve their own competitiveness are created as well.

In order to make an organization the best one, it is necessary for it to know itself, its' strengths and weaknesses, to comprehend the way the leading companies conduct their business on the market it wants to gain success, too, and to use the best available procedures, to constantly improve them and never stop upgrading their own business (Jovanović, B., Kilibarda, M., 2009, pg. 6).

Table 2. Application of benchmarking process

Strategic planning	Defining short nad long term goals
Anticipation	Anticipation of upcoming business trends
New ideas	Functional learning and thinking
Comparison of products and processes	Comparison with competitors or organizations with best practices
Defining objectives	Defining business objectives based on the best organization

Source: Modified by Jovanović, B., Kilibarda, M., (2009). Benchmarking analysis of logistics services, Belgrade.

Haringtoton (1996, pg. 5) points out that the success of an organization lies in the possession of relevant measuring indicators of business, understanding how well the organization can perform the same activities better, understanding why others work better than it, identifying any differences between it and other organizations and taking quick and operational actions for its' prevalence.

Application of benchmarking contributes to comprehension of critical processes, studies and motivation, learning from other competitors' business, creating business systems, showing organizations how to manage business and adapt to changes, directing towards the demands and needs of consumers and the market itself, a better and more quality decision-making, making organizations become aware of their

strengths and weaknesses, motivating employees to accept and introduce innovations in the enterprise, increase of the economic efficiency and profitability of the business (Ćorović, B., 2008, pg. 3).

Types of benchmarking

According to the nature and ways of comparison, there are several basic types of benchmarking in theory: *internal, external competitive, external functional, external generic, combined internal and external benchmarking*. The focus of benchmarking research is the part of the organization that the process of benchmarking is applied to in order to improve it. However, these major focuses are: products, services, methods and business processes. The aim of the comparison is to identify and define the best practices and examples that would be transferred, adjusted and improved in the organization.

The internal benchmarking refers to comparison within the organization, among its' units. It also provides an internal business analysis and improvement in accordance to the best unit that is productive, efficient and profitable. Based on the internal benchmarking, it is easy to determine the standards within an organization, according to the best unit, sector or department. When internal benchmarking is applied, all necessary data and low costs are available.

The external competitive benchmarking is based on a comparison of activities of the organization with direct competitive organizations due to obtaining all the relevant data on the business of the competitors. This type of benchmarking is used to position a company's own range of products, services and business itself, according to other competitors. The issue of getting reliable data is slowly conducted and it takes means of research to gain an objective insight into the processes and business of the competitors. In this manner, the secondary data is used, as well as data from the environment and the results of marketing research. Along with this, competitive products are bought, and a complex analysis is then being conducted in order to determine the competitor's advantages in the quality of its' products and services.

The external functional benchmarking involves the comparison of products, services and business processes with the same activities of the leading organizations worldwide, no matter what kind of business they conduct and whether they belong to the same activity or not. The aim of the comparison is to create and determine an ideal business of extremely high quality. The competition score is based on the quality and availability of products, quality of technical assistance and the support and quality of the marketing staff.

External generic benchmarking includes a variety of activities which, when compared, lead to discovering the similarities among many business processes. Nevertheless, this type of benchmarking stands for a comparison of the total level of various industrial and service activities. In this way, many innovative processes, such as business culture, communication, code of conduct and other similar actions used by numerous efficient

business systems are revealed. This sort of benchmarking is suitable for successful organizations capable of competing with the leading companies worldwide.

The combined internal and external benchmarking is used when organizations begin their business with the internal, and finish it by using the external benchmarking. However, this sort of benchmarking, without doubt, provides the best results. Here, many parts of one organization are compared to numerous parts of other organization. It is mainly used for finding the best products, manufacturing processes, along with their use as standards for improvement. Needless to point out, all organizations are free to combine these processes according to their needs and preferences.

The strategic benchmarking suggests seeking the successful strategy already created and defined by the leading companies. This type of benchmarking directs the organization towards achieving successful results with the available resources by comparing its' activities with other organizations and their strategies. In addition to this, it is used when it is necessary to align strategies that have become inadequate due to the changes in technology and the consumers' demands, and it should also be applied to processes that are relevant to fruitful operation of the organization.

Benchmarking process

The benchmarking process can be observed through different phases which are basically steps towards their realization. Benchmarking is a synthesized structured process that requires knowledge of its' own organization's business, partners and participants, competitors, market leaders and the use of the best practice. The fact that is common for all processes is that they are based on planning, collecting information, comparative analysis and application of solutions and innovations that lead to improving business.

The benchmarking process consists of several phases. According to *Thompson (2008)*, benchmarking has four phases: *planning, collecting information, analysis* and *application* (Cvetković, K., Arsić, Lj., 2010, pg. 82).

When it comes to *planning* based on research, it is essential to carry out an analysis of the organization's business in order to define sections for benchmarking to be applied to. Both internal and external analysis is a solid base for evaluation of competitiveness, as well as the organization's advantages and disadvantages. It is crucial to create a working team and make a plan for implementation of certain actions with timelines for each activity. Thus, a selection of the best organizations based on their size, market position and trust that can be treated as benchmark is made.

In the phase that considers *collecting data* on the selected organizations, it is important to conduct a survey and an exchange of information on the products, features and strategies. Also, the research needs to be focused on resolving the issues. When it comes to the exchange of information, it is essential to follow the ethical principles.

As far as the *analysis* of the selected organizations is concerned, all data is being handled together with the creation of a final report, as well as a selection of benchmark partners. Also, marketing research is therefore conducted, along with the quantitative comparison of a company's business with other organizations and the defining of ultimate goals of the research and the level of performance that are to be achieved. This leads to determining the differences or gaps that exist at the beginning of the research.

When we talk about the *application*, the organization performs changes, information and knowledge of the practice, and therefore monitor the goals' achievement. Also, the development of the organization at the beginning and at the end of the process is being illustrated, too.

Harrington (1996, pg.94), on the other hand, divides benchmarking into five phases: *planning, analysis, intergation, action* and *maturity*. The *first phase* defines the object of benchmarking, collection of data and the activities that need to be compared. The *second phase* performs the analysis that would determine the gap between its' own organization and the competitors, and establish new standards and trends. The *third phase* of the integration represents the communication that would result in accepting standards, new practices and defining operational goals that need to be changed. Throughout the *fourth phase*, new plans for action, implemenation, promotion and re-establishment due to the dynamic changes are being created. In the maturity stage, the best processes are being strengthened and transferred into business processes, all leading to a creation of new market leaders (*Cvetković, K., Arsić, Lj., 2010, pg. 82*).

Benchmarking includes innovation and creativity along with the imitation. Hereby, innovations are used to eliminate the existing standards and to promote business activities and strategies. However, external generic benchmarking, which is vital for improvement and application of innovations and significant improvement in business, is going to be used more and more in the future.

Atkison (1999, pg. 629), however, suggests five benchmarking processes, which are: *internal study and comparative analysis, developing the long-term commitment to the benchmark project and splicing with the team, identification of a benchmarking parntner, methods of collecting and sharing information* and *taking actions for competition*.

Due to a better comprehension of benhcmarking processes, some of the synthetic steps towards its' realization according to Harrington are being illustrated.

Table 3. The steps in the benchmarking process

Planning	-Identification of what needs to be benchmarked -Identification of a company that is to be compared to -Identification of methods for collecting data
Analysis	-Identification of gaps in the existing performances -Designing new future performances
Integration	-Revealing the benchmarking findings and providing acceptance -Setting up functional goals
Action	-Developing plans of action -Implementation of specific actions and monitoring of their improvement -Re-evaluation of benchmarking
Maturity	Achieved positions of leadership, practices that are fully integrated into processes

Source: Todorović, J. et all (2000). Strategic Management, Belgrade.

Benchmarking has significant advantages in application compared to conventional methods, given that it is based on the use of experiences and results of the best organizations and defining their own standards that are achieved in successful organizations. Therefore, reasons why some organizations are more successful than others are also determined. The usage of this method helps coming up with the best solutions to contribute to successful business.

According to numerous authors, application of benchmarking leads to: permanent improvement of business processes and the business itself, improving the quality of products and services, achieving competitiveness on the market, increasing creativity, eliminating bad performances, costs savings, better comprehension of competitors, new systems of handling, increasing productivity per operations, identification of objective demands and increasing the satisfaction of consumers, application of solutions of best practices by using the modern technologies, products and superior performances, setting up new business goals and increasing of economic efficiency and profitability.

On the other hand, the disadvantages of benchmarking come out as a result of: miscomprehension of process, objective and the technique of benchmarking application, disrespect of processes and conditions of the environment, collection of relevant information of other organizations, difficulties in identification of the best practice, a complex, expensive and often impossible collecting of information, bad choice of benchmark objects and activities which they are to be applied to, choice of a benchmark organization to be compared to, selection and comparability of certain performances, properly planned time and costs of the research, integrated support to benchmarking from the whole organization. For successful implementation of benchmarking, it is necessary to select a small number or just one single leadership organization suitable for comparison and improvement of business.

Conclusion

Benchmarking stands for a management method used to explore the best practices procedures of the world's leading organizations and to apply and improve the processes, products and best practices in their own organization in order to increase competitiveness and profitability of the business. Application of benchmarking allows the comparison of their own activities with the activities and best results of other organizations of the same activity, with the leading organizations worldwide, regardless of the activity and the country, with competitors that have products and results of the highest quality, technical solutions and technology in production, as well as the best-defined business process.

Benchmarking is a modern method of comparing their own with the best organization; it also contributes to the implementation of the best practice solutions and new technologies, improvement of business processes and quality of products, increasing efficiency and productivity, creativity, innovation and competitiveness on the market, along with satisfying the needs and demands of costumers and achieving efficiency and profitability in business.

According to the nature and ways of comparison, there are several basic types of benchmarking in theory: internal, external competitive, external functional, external generic, combined internal and external benchmarking. The basic phases of benchmarking are: planning, collecting information, analysis and application. For a successful use of benchmarking and overcoming the weaknesses in its' application, it is essential to choose a small number of organizations or a single leadership organization suitable for comparison and achieving competitiveness and profitability of the business.

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BENČMARKING U FUNKCIJI KONKURENTNOSTI I EFIKASNOSTI U POSLOVANJU

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Rezime

Benčmarking je metod poređenja sopstvene s najboljom organizacijom koji doprinosi primeni rešenja najbolje prakse, novih tehnologija, unapređenju poslovnih procesa, poboljšanju kvaliteta proizvoda, uštedi u troškovima, povećanju produktivnosti, kreativnosti, inovativnosti i konkurentnosti na tržištu uz zadovoljenje potreba i želja potrošača i ostvarivanje efikasnosti u poslovanju. Koncept benčmarkinga utiče na stvaranje novih ideja i kreativnih rešenja za poboljšanje postojeće oranizacije, procesa i kvalitetnih konkurentskih proizvoda. On je najjednostavniji način primene i postizanja prakse najboljih lidera za maksimizaciju profita u biznisu. Postoji interni, eksterni konkurentski, eksterni funkcionalni, eksterni generički, kombinovani interni i eksterni benčmarking. Radi uspešnog sprovođenja benčmarkinga potrebno je odabrati manji broj ili samo jednu leadersku organizaciju pogodnu za poređenje i postizanje konkurentnosti i profitabilnosti u poslovanju.

Ključne reči: *benčmarking, metod poređenja, kreativnost, inovativnost, konkurentnost, profit*

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