

**CONDITIONS FOR BENCHMARKING
IMPLEMENTATION AND ITS USE IN ENTERPRISES
IN NORTH-EASTERN POLAND**

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Key words: benchmarking, management, enterprises.

Abstract

Determining the scope and extent of the use of benchmarking in the surveyed enterprises from the province of Warmia and Mazury was the main goal of this paper.

The surveys conducted showed that benchmarking is not used on a wide scale in Poland. This method was applied by only 17% of the enterprises surveyed. Those were mainly large enterprises in which the value of assets exceeds EUR 5 million. The high costs to the enterprises and labour input required for implementation, as well as maintaining the method in the enterprise were the main barriers to implementation of the method in enterprises.

**UWARUNKOWANIA WDROŻENIA I WYKORZYSTANIA BENCHMARKINGU
W PRZEDSIĘBIORSTWACH PÓŁNOCNO-WSCHODNIEJ POLSKI**

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Słowa kluczowe: benchmarking, management, enterprises.

Abstract

Głównym celem artykułu jest określenie, zakresu i stopnia wykorzystania benchmarkingu przez badane przedsiębiorstwa województwa warmińsko-mazurskiego.

W przeprowadzonych badaniach wykazano, że w Polsce benchmarking nie jest jeszcze wykorzystywany na dużą skalę. Metodę tę stosuje zaledwie 17% badanych firm. Są to przede wszystkim przedsiębiorstwa duże, których wartość aktywów przekracza 5 mln euro. Za główne bariery wdrożenia tej metody w przedsiębiorstwach uważa się wysokie koszty i nakłady pracy implementacji i utrzymania tej metody w przedsiębiorstwie.

Introduction

Identification and understanding the processes observed in other organisations which might be transferred to an enterprise is the essence of benchmarking. Different methodologies can serve identification of such processes such as, for example, the Universal Process Classification Framework developed by the Andersen company which identifies 13 business processes encompassing: understanding markets and customers, design of products and services, marketing, sales, management, human resources, information systems, finance and accounting or the Standard Processes Classification System developed by the American Productivity & Quality Centre, Inc. (International Benchmarking Clearinghouse) (ASKIM et al. 2007, pp. 297–320). This is a mechanism that is used increasingly commonly which may contribute to:

- an entity's operational performance improvement,
- analysis of strengths and weaknesses of individual processes,
- an increase in employee activity in entity management.

Numerous methods of benchmarking exist. The most frequently mentioned ones are:

- benchmarking to competitors involving searching for model organisations belonging to the same industry and then transferring and adapting new solutions to the activities to one's own entity;
- functional benchmarking involving analysis and comparison of own solutions with the solutions applied in enterprises from outside the industry;
- strategic benchmarking involving comparison of the visions, missions and strategies of other entities to identify the factors of their success;
- benchmarking of processes which analyse the cost effectiveness of the entity's activity;
- management methods benchmarking comparing the management methods applied, tools supporting that process, human resources management policy, motivational systems as well as the principles of medical materials, devices and equipment management methods.

Activities based on internal comparisons are the most common (WACŁAW 2003, p. 22). They, in most cases, encompass evaluation of organisational units in the area of quality and productivity.

In benchmarking, the shift from tasks defined rigidly in the budget towards comparative objectives which evolve with the changes in the environment of the entity takes place. According to this approach it was decided that instead of the tasks identified for performance in advance and defining what means and what level of funding are necessary for performance of those tasks, the managers should be given freedom in that area assuming that they know the continually changing market the best and how to win with competitors and assure the development of the enterprise.

Supporters of this method claim that it triggers the workers' ingeniousness, initiative in searching for new and better ideas as well as ways for improving the results achieved so far. The tasks of the employees in this case are focused on employing the current opportunities offered by the market for improvement of the enterprise position as compared to the competitors.

Consequently, the main objective of this paper is to determine which entities employ benchmarking the most often in the management process, which are the major reasons for implementing that system in those entities and what are the major barriers to effective implementation and utilisation of that system in the enterprises surveyed.

Methodology of studies

Utilisation of benchmarking in the practice of Polish enterprises was the subject of the studies. The study encompasses enterprises from the province of Warmia and Mazury. The sample consisted of 159 entities which agreed to complete the questionnaire¹. The survey questionnaire was completed by members of management boards, financial directors, chief accountants as well as controlling department managers or employees (where departments of that type had been established).

Statistical data analysis encompassing sample structure analysis according to the characteristics of the enterprises surveyed and analysis of interrelations of immeasurable characteristics were applied for processing the data obtained from the questionnaire-based survey.

Testing and evaluation of the significance of the correlations between selected characteristics was conducted by applying the χ^2 test. If the correlation between tested characteristics was found to be significant ($p \leq 0.05$), the values of the V Cramer coefficient were additionally presented in the tables while the distributions of the surveyed characteristics were presented in tabulations.

The survey covered enterprises from various segments and sectors of the national economy. The enterprises are diversified in their ownership structures, organisational-legal forms, type of business and financial results.

¹ The non-random sample selection format, the so-called sample of convenience, was applied (FRANKFORT-NACHMIAS, NACHMIAS, 2001, pp. 198–199).

Characteristics of the surveyed enterprises

The survey covered enterprises from various segments and sectors of the national economy. The enterprises are diversified in their ownership structures, organisational-legal forms, type of business and financial results. Enterprises participating in the survey represented various industries. Construction companies (19 entities) were the largest group. The furniture industry was represented by a similar number of entities (18 enterprises). Telecommunications and transport, as well as agriculture and forestry were represented by 8 entities each. They were followed by the banks and insurance institutions (6 entities), meat and poultry as well as the chemical industry (5 enterprises each). The other industries did not exceed 3% of the total number of enterprises surveyed.

Of the 159 enterprises surveyed, more than a half represented manufacturing, 27.7% were service enterprises while every fifth enterprise surveyed was a trade enterprise.

Table 1

Ownership structure of the enterprises surveyed

Enterprise ownership form	No	%
State-owned	27	17.0
Private without foreign capital	109	68.5
Private with under 50% foreign capital share	4	2.5
Private with over 50% foreign capital share	5	3.2
Private 100% foreign capital company	14	8.8
Total enterprises surveyed	159	100.0

Source: own work.

Enterprises without any share of foreign capital formed the most numerous group (68.5%). The share of enterprises with foreign capital was below 50% and those with a domination of foreign capital represented 5.7% of the sample population. Enterprises with entirely foreign capital did not exceed 9% of the entities surveyed.

Enterprises employing 51–100 employees (converted in full-time jobs) were the most numerous while enterprises employing 101 to 250 persons represented almost 20.1% of the population surveyed. The largest enterprises (employing more than 250 people) represented 21% of the total number of enterprises surveyed.

Table 2

Organisational-legal forms of enterprises surveyed

Legal form of the entity	No	%
Individual conducting a business activity	24	15.1
Partnership	14	8.8
State-owned enterprise	6	3.8
Cooperative	8	5.0
Limited liability company	75	47.2
Joint stock company	16	10.0
Other legal form	16	10.06
Total enterprises surveyed	159	100.0

Source: own work.

Limited liability companies (75 enterprises) and individuals conducting business activity (24 enterprises) dominated in the sample. Joint stock companies were represented by 16 entities. The survey also covered the other forms of companies (partnerships, registered partnerships and professional partnership), cooperatives, state-owned enterprises and state-controlled organisational units (Tab. 2).

An analysis of the financial data concerning the enterprises surveyed showed their diversification as concerns profitability, revenues and assets. Enterprises with profitability ranging between 0% and 5% were the most numerous (Tab. 3). Among the entities surveyed, 19 achieved profitability exceeding 20% while 4.4% of the companies surveyed showed negative profitability.

Table 3

Achieved profitability, revenues and value of assets in the enterprises surveyed

Profitability [%]	No	%	Revenues [EUR]	No	%	Assets [EUR]	No	%
Negative	7	4.4	up to 400,000	27	17.0	up to 800,000	32	20.1
0-5	57	35.8	400,000-800,000	18	11.3	800,000-1.5 mln	28	17.6
5.1-10	29	18.2	800,000-2.5 mln	23	14.4	1.5 mln-2.5 mln	18	11.3
10.1-20	33	20.8	2.5 mln-5 mln	34	21.4	2.5 mln-5 mln	23	14.5
Over 20	19	11.9	over 5 mln	51	32.1	over 5 mln	49	30.8
No response	14	8.9	no response	6	3.8	no response	9	5.7
Total enterprises	159	100.0	total enterprises	159	100.0	total enterprises	159	100.0

Source: own work.

In the volume of turnover, enterprises with revenues exceeding EUR 5 million were the most numerous (32.1%) (Tab. 3). Almost every fifth enterprise generated revenues ranging from EUR 2.5 to EUR 5 million. The

sample was dominated by enterprises possessing fixed and working assets exceeding EUR 5 million (30.8%). Enterprises with assets value not exceeding EUR 800,000 also formed a large group (20.1%).

Utilisation of benchmarking by enterprises surveyed – survey results

Only 27 of the enterprises surveyed declared using benchmarking, which represents 17% of the population analysed. A much smaller number, just 6 enterprises, were considering implementation of that method in the future. The definite majority of the enterprises surveyed, 115, representing 72% of the population surveyed, have never considered implementation of this cost management method (Fig. 1).

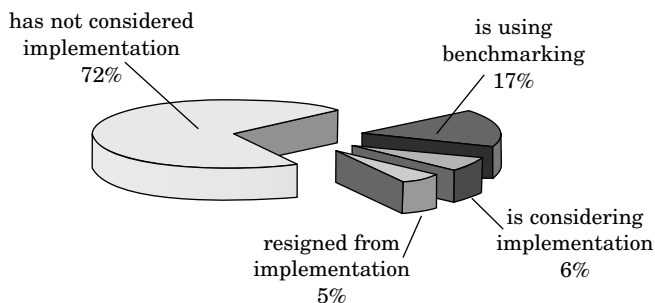


Figure 1. Evaluation of benchmarking used in the enterprises surveyed

Source: own work.

Appropriate hypotheses were formulated to check whether utilisation of benchmarking depended on characteristics of the enterprises surveyed and those hypotheses were verified by applying the chi-squared (χ^2) test to evaluate the stochastic independence on immeasurable characteristics. Where the results of statistical analysis indicated a correlation between the characteristics surveyed, the VCramer coefficient was applied to measure the strength of the correlation tested. The computation results are presented in table 4.

The analysis showed the existence of a statistical correlation of benchmarking utilisation with only one parameter – the assets value. The V-Cramer coefficient value of 0.244, however, indicates the weak strength of the above correlation. The extent of benchmarking utilisation depending on enterprise size measured by the value of assets is presented in table 5. It indicates that benchmarking is used mainly by entities whose value of assets exceeds

EUR 5 million. They form 30% of the companies with assets value exceeding EUR 5 million and 60% of all the entities applying benchmarking in their operations. This means that benchmarking is used mainly by large companies that generally possess financial and human resources allowing implementation of this method. Additionally, the fact should be considered that such enterprises are generally required to publish their financial statements, which also allows conducting a range of diversified comparative analyses.

Table 4
Utilisation of benchmarking depending on selected parameters of the enterprises surveyed

Item	Stochastic independence test		
	χ^2	<i>P</i>	<i>V</i>
Legal form	22.994	0.520	–
Employment	14.480	0.848	
Ownership structure	43.748	0.099	–
Profitability	15.507	0.215	
Value of revenues	17.954	0.117	
Value of assets	26.767	0.008	0.244

Source: own work.

Table 5
Utilisation of benchmarking depending on the value of assets in the enterprises surveyed

Assets value [mln EUR]	Benchmarking			
	utilises	considers	resigned	does not consider
Up to 0.8	2	1	3	26
0.8–1.5	2	4	2	20
1.5–2.5	1	0	2	15
2.5–5	5	1	1	16
Over 5	15	0	0	34

Source: own work.

Numerous works on benchmarking indicate that the method is also being increasingly employed by service organisations such as health care entities and entities providing educational services (ASKIM et al. 2007, pp. 297–320; McDONNELL, JONEM 2010, LENT 2010, LANGFORD 2010).

Numerous reasons for the interest in this cost management method have been indicated. The studies conducted indicated that entities declaring benchmarking utilisation indicated increased competition (74% of entities utilising benchmarking), head office requirements (44% of the entities) and aiming at reduction of costs and financial results improvement (41% of the entities) as the major reasons for implementation of the system (Tab. 6).

Table 6

Factors determining benchmarking implementation according to enterprises surveyed

Factors determining benchmarking implementation	No	%
Head office requirements	12	44
Increased competition	20	74
Lack of information allowing efficient decision-making	3	11
Dissatisfaction with the current methods	8	30
Change in the management information needs	8	30
Organisational structure change	3	11
Management change	3	11
Strategy change	4	15
Implementation of new technologies	5	19
Willingness to reduce costs and improve results	11	41
Willingness to win new sales markets	9	33
Aiming at control improvement	6	22
Change-supportive atmosphere among employees	3	11
Availability of financial resources	3	11
Availability of human resources	2	7

Source: own work.

In analysing the barriers to benchmarking implementation, it should be noted that entities considering implementation of this cost management method in the future and those which declared the application of this method were already afraid the most of the high labour input involved in implementation and maintenance of the ABC system in the enterprise and the high costs of system implementation and maintenance in the enterprise (41%) of entities. Not many fewer enterprises (38%) indicated that a lack of support from the management was the main barrier to implementation of the system (Tab. 7).

Analysis of benchmarking implementation in other entities has also revealed that the system is implemented frequently in those areas where obtaining data for comparison is easy and not necessarily where it would be recommended from the perspective of efficient management (MCDONNELL, JONES 2010).

Enterprises that have not considered benchmarking implementation at all or resigned from such implementation (122 entities) see satisfaction with the currently-applied cost management methods applied in their organisations (75% of enterprises that do not apply and do not consider implementation of the method) and insufficient knowledge of the method among employees (57%) as the major reasons for the existing situation (Tab. 8). More than a half of the entities surveyed also indicated a lack of management support, high costs of

implementation and maintenance of the method and other priorities existing in the organisation, such as, e.g. implementation of the quality management system, as the reasons for resigning from implementation of this management method.

Table 7
Barriers to benchmarking implementation according to the enterprises surveyed

Barriers to benchmarking implementation	No	%
Lack of management (management board, head office etc.) Support	14	38
High ABC method implementation and maintenance costs	15	41
High labour input on ABC method implementation and maintenance	15	41
Other priorities (e.g. Implementation of iso, erp, etc.)	9	24
Insufficient knowledge of the ABC method among employees	10	27
Difficulties with model design (e.g. Choice of activities)	9	24
Enterprise computer resources status	6	16
Lack of IT solutions	8	22

Source: own work.

Table 8
Reasons for resignation from benchmarking implementation according to the enterprises surveyed

Reasons of resignation from benchmarking implementation	No	%
Satisfaction with current methods	91	75
Lack of management (management board, headquarters etc.) Support	65	53
High method implementation and maintenance costs	64	52
High work input on method implementation and maintenance	58	48
Other priorities (e.g. Implementation of iso, erp, etc.)	62	51
Insufficient knowledge of the method among employees	69	57
Difficulties with model design	45	37
Enterprise computer resource status	34	28
Lack of IT solutions	25	20

Source: own work.

Conclusion

Utilisation of benchmarking in Poland, as well as knowledge of the methodology of applying this management tool, are increasing every year, although a formalised procedure for comparing ourselves to those that are better is still under-appreciated by many managers. The reasons for that situation include problems with databases and a suspicion that the effects and benefits of benchmarking may exceed the labour input for its implementation.

The studies conducted showed that benchmarking is not yet widely used in Poland. The method is being applied by only 17% of the organisations surveyed. Those are mainly large organisations with assets exceeding EUR 5 million. The high costs and labour input related to implementation and maintenance of this method in the enterprise are considered the main barriers to its implementation.

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