BENCHMARKING – METHODS OF RAISING COMPANY EFFICIENCY BY LEARNING FROM THE BEST-IN-CLASS

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Introduction

An economic environment is characterized by strong competition, increasing uncertainty and discontinuity. Managers, owners and investors need to know the economic situation of the company. Incessant knowledge of the financial situation of their company allows them to take the right decisions when obtaining financial resources, in determining the optimal financial structure, in allocation of available funds, in the provision of trade credit, in the distribution of profits, etc. Understanding of the financial position is necessary both in relation to the past and for estimating and predicting future developments. Although forecasting at the time of crisis is very difficult. In today's highly competitive world, and rapidly changing global economy, every company has to know the economic situation of the company, but also its business environment and competitors, in order to promote and maintain its position in the market. Enterprises have to consider and in many cases adapt or implement a wide range of innovative management philosophies, approaches, tools and techniques. Among the improvement strategies and techniques such as Total Quality Management (TQM), Continuous Quality Improvement (CQI), and Business Process Reengineering (BPR), benchmarking has emerged as a useful, easily understood, and effective tool for remaining competitive.

1. Benchmarking

Benchmarking presents continuous, systematic monitoring and evaluation of how well and effectively the enterprise carry out the service or produce the product, as compared with enterprises which represents the best in their field. In case that the procedures are better elsewhere, the company is trying to apply them to themselves, so that its efficiency match to the competitors efficiency or even better is higher than the competitions efficiency. Benchmarking is the process of comparing the enterprise with its competitors besides that, benchmarking is also active in seeking

Fig. 1: Exploitation rate and overall user satisfaction with the benchmarking
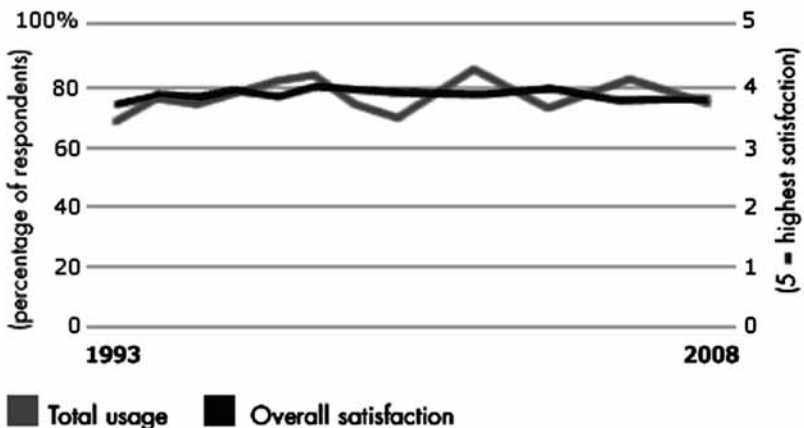
Source: Bain and Company. Benchmarking [online]. 2009 [cit. 2009-21-10]. Dostupné z WWW: <http://www.bain.com/management_tools/tools_Benchmarking.asp?groupcode=2>.

the best ideas, methods and approaches that are applicable to the enterprise and could contribute to increase its efficiency.

Benchmarking is a process of measurement, which may significantly contribute to achieve competitive advantage. The American Productivity and Quality Center defines benchmarking as: "The process of identifying, understanding, and adapting outstanding practices and processes from organization anywhere in the world to help your organization improve its performance." The simpler definition of benchmarking, which is widely accepted is: "The search for and implementation of best practices" [2].

Lately benchmarking is not only used in the private sector, but also in public administration. Closely as described in [6].

In the world benchmarking has become widely accepted and widely used business practices. In regular global surveys of 25 different "management tools", which have been carried out by the Bain & Company since 1993, benchmarking is doing very well. On the following picture a gray line shows an exploitation rate of benchmarking and the red line shows the total satisfaction of users [1].

1.1 Signification of benchmarking:

- is used as a tool to improve quality,
- is one of the basic techniques of detecting and evaluating information about the most dangerous competitors of the company,
- allows the company to identify strategic market opportunities, to develop competitive products,
- helps to understand the market, determine the market position of the company, based on comparison with competitors,
- strengthen the position of the company and outlines the possibilities of differentiation from other companies,
- is a tool of competitiveness [8].

1.2 Benefits of benchmarking:

Benchmarking has many benefits for enterprises. Due to comparison with competitors, enterprise may find strategic market opportunities, which allow them to increase quality of its products. That leads to meet better customer needs and wishes. The company can identify the operations

that should be improved and also detect strengths and weaknesses. Defining the strengths and weaknesses can be a springboard to set up a new business strategy for many companies. It initiates the process of improvement by setting more ambitious goals. As a result of learning from the best companies in the branch, benchmarking provides the way to improve operations and processes in the organization, higher customer satisfaction, cost savings and more effective work of managers and employees. It improves decision-making (based on better information). The benchmarking results, in its correct interpretation, lead the company to eliminate unnecessary business activities and focus on priorities. Benchmarking in consequence helps to increase business competitiveness.

1.3 Benchmarking approaches

There are two basic approaches to benchmarking: power and process benchmarking. At the beginning benchmarking was focused on the comparison of activities or processes mainly – i.e. the process benchmarking. Contrariwise power benchmarking, which was developed later, directly compares the results of organizations. Both types of benchmarking are very closely related. Comparison of results is important to identify activities that need improvement, and vice versa comparing activities and processes leads to improve business processes and contribute to improve the results [5].

Power benchmarking is based on data. It focuses on relative production rate by using the selected set of criteria. Basically it solves by the question of what results (such as performance, how many units of measure) the company achieve. Mainly there are parameters related to quality (including technical parameters) and productivity (production cost, price). This type of benchmarking is often carried out as a consortium (the study is performed by more organizations), with the participation of third parties - consultants. The great advantage of this type of benchmarking is that the enterprise does not have to find partners or other sources of information for comparison. In comparison with process benchmarking this type is relatively quick and unpretentious for personnel and financial resources. The Czech Benchmarking Index is the example of power benchmarking.

Process benchmarking measures the processes of its enterprise with the processes of the best companies in the sector. Process benchmarking looks for best practices in the implementation of individual processes, requires certain rules, demand visits of partners and proper preparation. The process model of benchmarking outlines the steps to be done in the project of benchmarking. There are three types of process approach to benchmarking [8].

- Internal benchmarking: compares similar activities, procedures or outputs in the various business units in one organization.
- External benchmarking: focuses on specific products, processes or methods used by direct competitors of the organization. It is usually conducted by an independent third party.
- Functional benchmarking: compares similar functions within the same branch or efficiency with the functions or efficiency of leading companies in the sector.

Literature suggests other types of benchmarking. For example, operational benchmarking, which focuses on a specific aspect, such as IT systems or strategic benchmarking, which compare strategies and general approaches of its enterprise with the best enterprises in the branch.

In practice, it may used with several types of benchmarking at same time. The benchmarking process may appear as follows: at first the power benchmarking is applied, next the process benchmarking is applied and ultimately strategies are compared [5].

1.4 Benchmarking cycle

Benchmarking is the continuous learning process. For effective implementation of benchmarking is necessary to respect the benchmarking cycle. To initiate such a cycle, management support is required, also an employee and part owners of the process involvement is needed. In order to get useful results from benchmarking it is absolutely necessary to keep a systematic approach. Over time, different methodologies were developed, so different sources describe the steps of benchmarking differently. The most important is the approach developed by four organizations which are extensively involved in benchmarking (Boeing, Digital Equipment, Motorola and Xerox). This approach establishes the general context for the creation of

Fig. 2: Benchmarking cycle
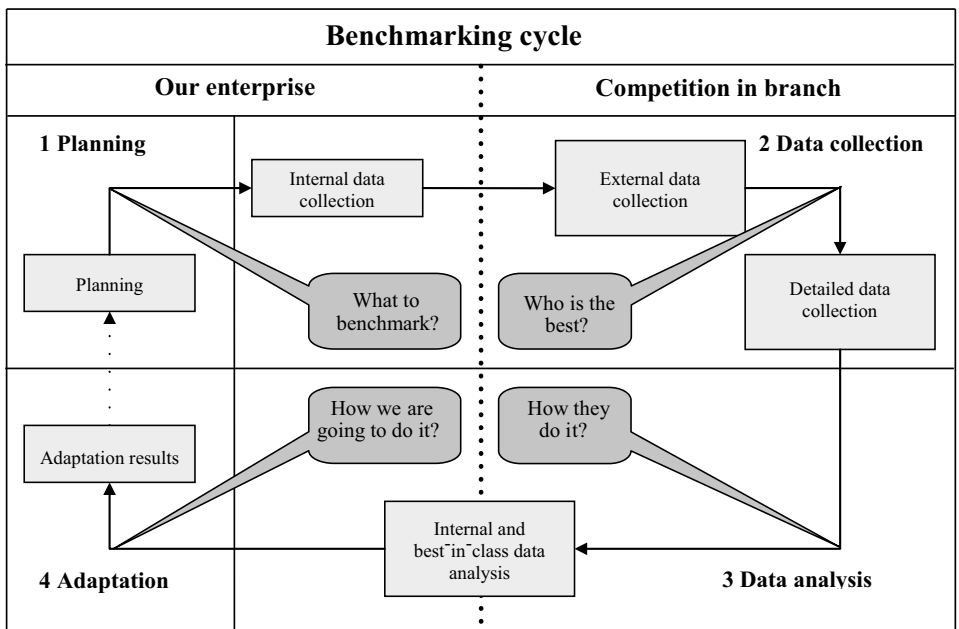
Source: own.

a process model, uses the four phases of benchmarking - planning, data collection, analysis and improvement through adaptation. By the number of stages this model resembles "Deming's cycle" PDCA (Plan - Do - Check - Act), because it stems from it. It is conformable with EFQM and IBC benchmarking activities (International Benchmarking Clearinghouse) and is also recommended by Czech Society for Quality. At application of benchmarking is besides of same procedure appropriate for the individual partners found agreement in the mutual approach in the form of so-called code of ethics defining the basic rules of communication, interaction and information. The truth is that benchmarking works with public data, but the partners exchange openly and with confidence a lot of information in the process that could in certain occurrences cause damage [9].

The previous image (see Fig. 2) shows the benchmarking cycle. It displays the already mentioned four phases of benchmarking - planning, data collection, analysis and adaptation. These phases fade into one another. On the left side of the picture shows what is going on within the company where the benchmarking study proceeded. The right side shows the steps happening within the competitor's enterprise in the sector.

Finding appropriate answers to the questions "What to benchmark?" and "Who is the best?" are regarded as critical factors of success. Motive power of benchmarking is to find answers for the questions: "How they do it?" and "How we are going to do it?"

1st phase: Planning

The figure shows that the planning phase is purely running in their business. We are looking for the answer to the question "What subject benchmarking." The aim of this phase is to define the subject of benchmarking, on the basis of analysis and understanding of customer needs and processes taking place in the enterprise. We can put through benchmarking both-enterprise-wide or only a part. It is necessary to decide how deep the benchmarking is to be carried out. The organization, which plans to improve certain processes, already at the beginning of the process must define the objectives which in the case of benchmarking to achieve that clarity of purpose and scope of the benchmarking project. According to the particular objectives, enterprise has to identify the processes that will be implemented under the pro-

ject. Processes should be briefly described and should be evaluated whether they can really affect the set objectives. At this stage the team should be established for benchmarking and it is decided how benchmarking will be carried out. Successful shaping of the goals is one of the fundamental prerequisites of a successful project.

2nd phase: Data collection

The second phase of benchmarking is the collection of data, beginning in the enterprise. Benchmarking is based on a comparison with the best company in the sector. It is therefore necessary to collect data also from the competition. But you cannot compare to any business since each enterprise is specific. Enterprises differ as to what sector it operates. Distinguish between private, public, profit, nonprofit, municipal enterprises. Furthermore, companies differ from each other in their size, number of employees, production schedules, structure, business partners, financial markets, banks, etc. They are related to the identification of suitable partners for a benchmarking target is probably the most difficult aspect of benchmark studies. The key question is how to identify which individual enterprises should be given to the benchmarking. The primary tool to answer this question is secondary research. Several competitors are selected as benchmarking partners, then that company, which is best. For it is then carried out a detailed collection of information. Finding a suitable partner for benchmarking is very important. Finding a partner for benchmarking involves the systematic exploration of various sources of information, from written reports and personal experience achievable in the company to published reports and mass media. The best partner is searched by parameters that specify in advance the enterprise. Relations with benchmarking partners should be open to exchange of information. This is necessary to maintain harmony with the contacts that will enable benchmarking long-term cooperation. Seeking partners are the most difficult, because each is afraid to provide their own information to anyone else. For this reason, it is necessary to comply with the previously mentioned code of ethics for benchmarking.

3rd phase: Analysis

Data analysis are carried out at the own and competitive level, because companies analyze their own data with the data of a benchmarking

partner. In this phase is necessary to find an answer to the question "How they do it?" Then the enterprise is able to define "What are we going to do." At this phase data is processed, information is systematically sorted and organized. At the same time determine the extent of performance results and thus the potential for improvement. To increase the comparability of data between companies cooperating in the benchmarking, verification of input data should be carried out. Benchmarking analytical phase includes documentation of the report for benchmarking. The results of benchmarking are formulated as a new target for the company, which should be itemized in detail.

4th phase: Adaptation

The last step of benchmark study is an adaptation of the results. The purpose of benchmarking is not copying or emulation, but rather it is the implementation of changes needed to improve performance. Once the performance targets are set for the future, the next challenge is to ensure that the organization has committed to actually make the change. This requires continuous involvement of all stakeholders. Only if there is a genuine commitment to change things, it will achieve the full benefit of this method. Adaptation is an activity aimed at reducing disparities which are identified in the analysis phase and also conversion of possible improvement on tangible results. Measures must be implemented to realize the potential found within the executive structure of the organization. Therefore, the implementation plan is drawn up, including specific plans for each part of the company, which will cover the changes. The most important step is the own proper realization of new measures, therefore execution of the implementation plan [7].

2. System Analysis of the Czech construction

All enterprises are affected by specifics of the sector, in which they operate. Enterprise

M-SILNICE a.s., which has been subjected to benchmarking, acts in the construction branch. With regards to this sector it is one of the most important factors that highly affect each company, it is appropriate to characterize the sector.

Building industries in the Czech Republic are among the major national economic industries, to a large extent, it can be regarded as one of the pillars of national economy. It has a national and regional character, is mainly nationally self-sustaining and as an industry it is highly diversified. It is different from other branches by several specific characteristics: mobility of place of businesses, the length of the production cycle, individuality of construction works, long lifetime of construction work, the demand for labor mobility, sensitivity to economic cycles in the economy. Building industries indicates the development of the entire economy, especially in the longer term. Construction output is one of the economic status indicators of the whole state. Its intensity is considered to be the lead indicator of the development of GDP, which advance GDP by about half a year.

The Czech construction industry went through a breakthrough season. From 2000 to 2007 construction grew annual rate of 6.7 % on average. Total construction output increased, although in many months of the year 2008 there was a decline. The annual growth rate was only 0.6 %. The year 2008 was the last year of growth in the construction industry. The prediction of some analysts, who said that building branch would grow even in the year 2009, has not been confirmed. In 2009, there is a significant decrease in the volume of work in building industry as well as in other areas. The main reason is the current economic crisis. The decrease in construction output figures are confirmed by figures published in the Czech Statistical Office, as well as by actual figures of companies operating in this sector. "Czech Construction Qualitative Study 2009", prepared by the CEEC Research consultancy KPMG Czech Republic shows that enterprises in the construction sector in the near future does not expect the growth.

The decline in the building branch has important implications. Long-term trends in construction output show that any economic crisis is being felt mainly in the construction industry. It is important the investments are not mainly affected. Keeping a lid on investment brings an immediate reflection of the country's economy because construction has a high multiplier effect: the construction industry has an impact both on the demand for the products of other industries as well as subsequent maintenance services of building works. This demonstrates the significant dependence of a large number of manufacturing industries and services in the development of construction output. Investment in construction rose more

than threefold growth in output across the economy. With that is associated an employment growth and a significant contribution to the state budget.

The last year of significant increase in the building branch was the **year 2007**. There was a rise in building construction and a decline in civil engineering and repair. There were carried out construction work for 510,984 million. Decisive corporate base of building branch were companies with 20 or more employees, which carried out construction work for 350,840 million CZK that was 5.8 % more than in 2006. The construction output increased as a whole by 6.7 %. The fastest growing construction output was in large enterprises which have from 250 to 499 employees, year on year by 13.7 %. Small size enterprises increased their output by 8.9 % against 2006 and mid-size enterprises by 6.7 %. Most of the production was made by enterprises with preponderant activities in building and civil engineering. The volume of their production remained at around 2007.

The total construction output increased by 0.6 % in the **year 2008**. Overall construction output dipped year on year, although growth has significantly slowed in comparison to the year 2007. There were carried out construction works for 536,570 million CZK. The growth was mainly contributed by civil engineering. On the contrary, production of building construction was lower year on year. Development of construction output was different in each month. While in the first and third quarter was recorded an increase by about 4 %, in the second and especially in the last quarter of 2008 construction output fell.

In the **year 2009** the dimension of construction work was at the level of 2008. Most of the production was realized by enterprises whose prevalent activities are in building and civil engineering. The volume of their production remained at around the same level as 2007. The ratio between new construction, repair and maintenance is significantly changed in 2009. In 2008 repairs formed around 15 % of the total construction work. It is expected that in 2009 repairs will increase up to 35 % of

the total construction work. Great help in this year should be mainly state contracts. The expected decline of house-building should be compensated by state investments mainly in infrastructure. The results of the Czech Statistical Office shows that although output in the construction industry overall is declining, in some months was achieved annual growth. In the first half of the year 2009 construction output decreased at constant prices by 4.8 %. Whereas in civil engineering, where the enterprise

M-Silnice a.s. operates, were a decline in production by 11.7 %. In contrast, in civil engineering is achieved annual growth of 16.4 % [3].

3. Application of Benchmarking

Benchmarking method was applied to the enterprise M-Silnice a.s, which is operating in the road and bridge construction market. The subject of benchmarking is a corporate management of the enterprise. It was an external benchmarking that was performed. After selecting the object the benchmarking partner was found. In order to minimize the discrepancies between the M-Silnice a.s and other companies, whether technical, geographic or property, the selection of companies was limited to only those companies that are similar to M-Silnice, the companies who deal mainly with the construction of roads – that are active in building construction. M-Silnice a.s. biggest competitors are SKANSKA DS a.s. EUROVIA CS a.s., COLAS CZ a.s. and STRABAG a.s. The leading companies in this field are clearly enterprises Skanska DS a.s. and EUROVIA a.s. These two companies were subjected to Grünwald's test of creditworthiness. The partner for benchmarking was selected on the basis of creditworthiness of individual companies. Compared were enterprises Skanska DS a.s. and CS EUROVIA a.s. The best enterprise in the building construction field has been selected by using the Grünwald's index of creditworthiness. Data are from 2007. This index is calculated according to the formula:

$$IB = \frac{1}{6} * \left(\frac{\frac{EAT}{Equity}}{u´\,(1 - tax\ rate)} + \frac{\frac{EBIT}{Assets}}{u´} + \frac{\frac{Short\ term\ claim + Cash\ and\ cash\ equivalents}{Short\ term\ debt}}{1,2} + \frac{\frac{Receivables - Short\ term\ debt}{Stock}}{0,7} + \right.$$

$$\left. + \frac{\frac{EAT + depreciation}{Forein\ capital - Reserves}}{0,3} + \frac{\frac{EBIT}{Interest\ expences}}{2,5} \right) \tag{1}$$

$$u' = \frac{\text{interest expense}}{\text{bank loans}} \qquad (2)$$

Interpretation of the calculated values:

IB > 2   formed health,
1 < IB < 1,9   good health,
0,5 < IB < 0,9   poorer health,
IB < 0,5   sick. [4]

Indicators were selected primarily based on financial analysis and some other related indicators. The financial indicators were applied to measure liquidity (current ratio, liquidity ratio, immediate ratio), indicators of activity (bound on total assets, turnover time inventory, receivables turnover time), indicators of profitability (return on equity, return on total capital, return on

Tab. 1: Index of creditworthiness by Grünwald

Grunwald's index of creditworthiness	1. item	2. item	3. item	4. item	5. item	6. item	IB total
M-SILNICE a.s.	0.522	0.286	0.780	0.525	0.418	4.222	1.125
SKANSKA DS a.s.	0.001	0.000	0.955	7.266	0.458	10. 269	3.158
EUROVIA CS a.s.	0.000	0.000	1.138	8.970	0.647	86.878	16.272

Source: own calculation.

The result of the creditworthiness index by Grünwald is that the most successful enterprise is EUROVIA CS a.s., because it reaches the highest values. If we include the calculated results in Grünwald's scale, the Eurovia CS a.s. belongs to enterprises with formed health. Also Skanska DS a.s. belong to this group. Enterprise M-Silnice a.s. belongs to enterprises with good health. As The enterprise EUROVIA CS a.s. was selected as a benchmarking partner.

Then the selection of appropriate indicators for benchmarking followed. Selection of parameters places high demands on creative thinking and analytical skills of the person who is selecting them. In the process of analysis it is needed to determine the details to realize the differences, understand the context and identify comparable factors.

sales, profit margins), debt indicators (rate of total debt, debt ratio) and operating indicators (wage productivity). In addition to financial indicators it was appropriate to apply further related indicators: value added, net income per employee, number of employees on managing worker and personnel costs per employee.

The next step was to find a performance difference against the peak of performance. The result of Grünwald's creditworthiness index shows that the M-Silnice a.s. has the scope for increasing efficiency. The enterprise M-Silnice a.s. was compared with the EUROVIA CS a.s. in benchmarking study. There was founded more results by benchmarking analysis. a complete picture of the economic situation of the M-Silnice a.s. benchmarking analysis was supplemented by comparing

Tab. 2: Overview of indicators applied to the M-Silnice enterprise a.s. (Part 1)

INDICATOR	YEAR				VALUATION
Current ratio	2004	2005	2006	2007	Development of indicators of liquidity is worrisome. None of the indicators of liquidity is below the reference value. It is due to the fact that the enterprise had a very high outcome of short-term liabilities. The prime objective of M-Silnice a.s. has to be increasing these values.
M-SILNICE a.s.	1.06	0.62	1.08	1.04	
EUROVIA CS a.s.	1.33	1.36	1.29	1.43	
Quick ratio	2004	2005	2006	2007	
M-SILNICE a.s.	0.96	0.51	0.93	0.94	
EUROVIA CS a.s.	1.31	1.30	1.22	1.37	
Immediate ratio	2004	2005	2006	2007	
M-SILNICE a.s.	0.17	0.04	0.03	0.30	
EUROVIA CS a.s.	0.72	0.47	0.36	0.45	

Tab. 2: Overview of indicators applied to the M-Silnice enterprise a.s. (Part 2)

Bound on total assets	2004	2005	2006	2007	
M-SILNICE a.s.	0.65	0.68	0.60	0.63	Activity indicators are assessed positively. Bound of total assets reaches similar values as is diameter construction. Values are lower than 1, which means that the enterprise is capable of its existing assets to generate additional value. Positively is evaluated the stock turnover period. M-Silnice a.s. achieved in comparing with competitors substantial savings. Receivables turnover time is much better than diameter construction and also better than EUROVIA CS a.s.
EUROVIA CS a.s.	0.93	1.02	1.05	1.24	
Diameter Construction	0.63	0.61	X	X	
Turnover time inventory	2004	2005	2006	2007	
M-SILNICE a.s.	9.54	10.27	11.86	11.81	
EUROVIA CS a.s.	11.96	10.54	11.93	15.70	
Diameter Construction	24.79	23.53	X	X	
Receivables turnover time	2004	2005	2006	2007	
M-SILNICE a.s.	59.99	69.03	71.01	73.44	
EUROVIA CS a.s.	117.49	142.73	178.94	218.42	
Diameter Construction	191.06	200.28	X	X	
ROE	2004	2005	2006	2007	
M-SILNICE a.s.	18.5 %	13.3 %	15.1 %	14.3 %	Profitability indicators are assessed not very positively. Enterprise M-Silnice a.s. should focus on increasing profitability, as in all profitability calculated indicators it has lower values than enterprise EUROVIA CS a.s. The goal of the enterprise M-Silnice a.s. has to be to achieve the same the same values of these indicators as a reaches the company EUROVIA CS a.s.
EUROVIA CS a.s.	19.9 %	18.9 %	29.9 %	18.8 %	
Diameter Construction	14.7 %	15.3 %	X	X	
ROA	2004	2005	2006	2007	
M-SILNICE a.s.	8.6 %	9.6 %	9.3 %	8.8 %	
EUROVIA CS a.s.	10.5 %	9.7 %	13.1 %	12.1 %	
Diameter Construction	7.3 %	7.3 %	X	X	
ROS	2004	2005	2006	2007	
M-SILNICE a.s.	5.6 %	6.5 %	5.6 %	5.5 %	
EUROVIA CS a.s.	4.9 %	5.0 %	6.9 %	7.5 %	
Diameter Construction	4.2 %	4.3 %	X	X	
PMOS	2004	2005	2006	2007	
M-SILNICE a.s.	3.5 %	3.6 %	3.9 %	3.8 %	
EUROVIA CS a.s.	4.1 %	3.5 %	5.5 %	5.6 %	
Diameter Construction	2.9 %	3.0 %	X	X	
Rate of total debt	2004	2005	2006	2007	
M-SILNICE a.s.	63 %	57 %	57 %	59 %	Indicators of indebtedness can be assessed as positive. Coefficients of debt were being reduced, which is good. The rate of total debt is the lowest in M-Silnice a.s., which is particularly pleasing to the lender.
EUROVIA CS a.s.	65 %	63 %	67 %	67 %	
Diameter Construction	67 %	67 %	X	X	
Debt ratio	2004	2005	2006	2007	
M-SILNICE a.s.	1.67	1.35	0.57	0.58	
EUROVIA CS a.s.	1.85	1.65	2.04	1.99	
Diameter Construction	1.78	1.92	X	X	

Tab. 2: Overview of indicators applied to the M-Silnice enterprise a.s. (Part 3)

Wage productivity	2004	2005	2006	2007	
M-SILNICE a.s.	1.85	1.63	2.13	2.07	Other related indicators refer to the detriment of M-Silnice a.s. Net income per employee is much lower than the enterprise EUROVIA CS. It reached almost 2 x lower labor productivity than the sectors average. It is possible that the enterprise M-Silnice a.s. has higher demands on human capital that is usual in the field. It can cause excessive labor costs. The indicators of personnel costs for the staff the enterprise M-Silnice a.s. pay its employees half of the money comparing to the enterprise EUROVIA CS a.s. Therefore there is not appropriate to increase productivity by reducing wages. Wage productivity is also linked with the production work. This problem is related to indicator of the average number of workers for management worker. Effective is to have this indicator minimized. Here, however, we can doubt the data comparison.
EUROVIA CS a.s.	2.77	2.81	2.72	2.92	
Diameter Construction	3.02	3.14	X	X	
Personnel costs per employee (in thousands)	2004	2005	2006	2007	
M-SILNICE a.s.	333.94	344.84	372.30	409.57	
EUROVIA CS a.s.	443.30	499.57	556.57	590.65	
Cost of revenues	2004	2005	2006	2007	
M-SILNICE a.s.	0.96	0.98	0.96	0.96	
EUROVIA CS a.s.	0.97	0.98	0.97	0.95	
Diameter Construction	0.96	0.94	X	X	
Number of employees on managing worker	2004	2005	2006	2007	
M-SILNICE a.s.	38.06	38.94	37.19	18.69	
EUROVIA CS a.s.	X	11.95	10.62	11.30	
Value added (in thousands)	2004	2005	2006	2007	
M-SILNICE a.s.	385.16	359.42	353.62	353.93	
EUROVIA CS a.s.	2,352.5	2,483.5	2,520.2	2,563.4	
Diameter Construction	56,806	64,647	X	X	
Net income per employee (in thousands)	2004	2005	2006	2007	
M-SILNICE a.s.	103.77	86.55	117.83	137.68	
EUROVIA CS a.s.	198.94	218.57	380.05	407.03	

Source: own.

the average values in the construction industry. The comparison period were the years 2004 to 2007, while the average date of the construction field was available only until 2005. Benchmarking is not just information about the performance or cost. Collected data must be converted into information and on the basis of information provided then to make conclusions. Given the broad range of data and the limited size of this article the following table is the most important conclusions resulting from the calculated values [7].

Development of indicators of liquidity is worrisome. None of the indicators of liquidity is below the reference value. It is due to the fact that the enterprise had a very high outcome of short-term liabilities. The prime objective of M-Silnice a.s. has to be increasing these values.

The last phase of benchmarking is an adaptation of the results. Whether the enterprise M-Silnice a.s. holds recommendation is possible to verify by the information, which is contained in financial statements for 2008. The Annual Enterprise of M-Silnice a.s. shows that in 2008 were achieved the highest sales in the companies history at 2.35 billion CZK. Total companies revenues were nearly 2.5 billion CZK. Compared to 2007 they were rising by 15 %. There was a significant increase in the added value of 353,932 thousand CZK in 2007 to 454,034

Tab. 3: The risks that may occur during benchmarking cycle (Part 1)

Phase	Steps	Risks in each step of benchmarking
Planning	defining the subject of benchmarking	improper setting of the course
	defining depth of ben-chmarking	insufficient or too extensive study
	defining objectives	unclear purpose and scope of the project
		inability to influence the objectives
Data collection	collection of own data	obtaining of inaccurate data, as a result of incorrect accounting
	data collection of the com-peting enterprises	obtaining false data due to incorrectly maintained accounts
	finding a partner benchmar-king partner	finding a wrong partner as a result of i lack of competition survey
		Find an improper partner due to not respecting the conditions in which enterprises operate
		finding a wrong partner because of inappropriate application of methods to find
		a wrong evaluation criteria for finding a partner
	contact with a partner to ensure their consent and cooperation	lack of persuasiveness in establishing contacts
		potential partner's unwillingness to cooperate
	gathering detailed data from benchmarking partner	data are not obtained in the required range
		inability to obtain certain data
	aggregate data about the partner from other sources	obtaining false information as a result of the inappropriate informati-on sources selection
		intellectual property is violated in the process of data collection
Analysis	converting data to infor-mation	incorrect transfer due to lack of staff qualifications
		obtaining unnecessary or vice versa inadequate information be-cause of poor choice of data
	sorting, organizing and monitoring the information and data	not a good comparability of data due to inconsistencies in the accounts of various countries or inconsistent methodologies for calculating indicators
	removal of irregular factors (if any)	distortions result in the case that irregular factors are not removed
	detection performance difference with proven best practices	miscalculation due to lack of qualifications of staff
	discretion of the causes of the results	definition of wrong causes on the basis of inadequate analysis of the situation
	identification of processes which can improve	identification of the relatively unimportant processes
	formulation of new goals	defining too ambitious objectives which cannot be achieved
		defining deficiently ambitious objectives which will not tend to required results
	create a plan for changes	the plan is not overseen thoroughly

Tab. 3: The risks that may occur during benchmarking cycle (Part 2)

Phase	Steps	Risks in each step of benchmarking
Adaptation	creating a Plan	plan will not be implemented – the effect of benchmarking will not be filled
		lack of stakeholder involvement
		unwillingness of employees to cooperate because they were not adequately explained the benefits of change
	implementation of measures to improve	lack of control over implementation of identified actions
	connecting the new plans with the normal business plan	inability to link these plans

Source: own.

thousand CZK 2008. Which means that added value increased more than 20 %.

The primary aim of the enterprise M-Silnice a.s., established on the basis of the results of benchmarking, was to increase the value of liquidity. The enterprise's annual report shows that liquidity has improved. The most important indicator of liquidity, standard liquidity, increased from 1.0369 in 2007 to 1.2516 in 2008. Although below the recommended values of 1.5 to 2, however, these values are below for the enterprise EUROVIA CS a.s. well and therefore cannot be taken as dogma. Ready liquidity reached in 2008 the value of 1.0708; in 2007 it reached the value of 0.9364. The recommended value prompt liquidity is around 1, which presents a balance between short-term receivables and short-term liabilities. Indicators value below 1 indicates a risk of insolvency, exceeding the value of the indicator is ineffective as tying assets in cash and receivables, which do not increase their value. Immediate liquidity is the most accurate indicator of liquidity. It measures the ability to pay current liabilities at this moment. It is based on the narrowest concept of liquid assets and is the strictest. Considered acceptable is usually worth around 0.2. Immediate liquidity has improved from value 0.3045, which was reached in 2007 to the value 0.2022. It can be therefore said that the development of indicators of liquidity in 2008 was for the enterprise very positive.

The increase is positive in labor productivity indicators. Wage Productivity increased in 2008 to the value of 2.49 compared with 2007, amounted to 2.07. Profit per employee increased in 2008, from 137.69 (which was in the year 2007) to 181.533. It is certainly a positive change but to the results of EUROVIA CS a.s. it is still far away. We could say the organization has committed actually to change and attained the benefits of this method. Reducing the gap between two companies pursued.

4. Risk in the Application of Benchmarking

On the basis of both theory and also practical application of benchmarking the knowledge can be summarized and also identified the risk which may occur in stages and steps of benchmarking. These risks may jeopardize the successful use of benchmarking.

The following report shows the risks that may occur during benchmarking cycle (see Tab. 3).

Enterprises should prevent these risks. They have to define the steps leading to their elimination. Below are listed the measures to the risks that occur most frequently in the benchmarking process.

4.1 Overview of the Most Common Risks That May Arise in the Application of Benchmarking and the Proposed Measures for Their Elimination

Risk in the first phase of benchmarking cycle is to define the inappropriate **subject**, which will be subjected to benchmarking examination. **Me-**

asures: Subject for benchmarking is defined on the basis of analysis, understanding customer needs and processes taking place in the organization.

Another risk in the planning stage is the **lack of depth benchmarking. Measures:** If the company is not confident what part of business activities and to what depth it should be subjected to benchmarking, it is appropriate to start at a general level. Proceed to more detailed levels, through we find areas to be improved

- comparability of time: financial parameters of the business can be compared if they come from the same period and are obtained for the same length of time,
- legislation comparability: a comparison of companies operating in different countries is complicated by the fact that each country has different arrangements for accounting,
- branch comparability: compare companies operating in the same field,
- geographic comparability: The success of the enterprise depends greatly on the position of the market on which the company operates.

Another major risk is the **inappropriate application of the methods** for selecting the best benchmarking partner. **Measures**: Pay attention to the selection method of the basis of the benchmarking partner selected. Assess the suitability of the method due to the particular company and its requirements.

Risk is also an **inappropriate choice of indicators** and their comparability with the consequence that an enterprise does not receive relevant answers. **Measures**: To consider what factors will bring us answers to questions that we seek. Collecting should be equipped with analytical skills and creative thinking. It may happen that there would be an indicator about which the value of different enterprises cannot be compared. In case of enterprises M-Silnice a.s. and EUROVIA CS a.s. it is not possible to compare the indicator "number of employees for managing worker". Probably there is a disagreement about who is managing worker. i assumed it will be a master builder in the construction sector, but in the case of an M-Silnice that has not been proved.

Conclusion

It was verified that even today, it is difficult and often impossible to predict the future development of enterprises, benchmarking is a very effective tool of company economic management. In time of crisis, it best shows the most stable companies in the market. These are companies that are able to succeed in today's market, retain their status, but mainly companies which are able to improve despite the unfavorable economic situation.

It is very important for company M-Silnice a.s., as well as for other companies, to monitor constantly their competitors, because it is one of the basic conditions of increasing their efficiency and market share. Various rolling steps of this method were formulated, based on the benchmarking process of the company M-Silnice a.s. Subsequently the risks that may occur during application of benchmarking were assigned. The most important risks that may occur in the benchmarking include the measures that have the character of recommendations for management.

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ABSTRACT

BENCHMARKING – METHODS OF RAISING COMPANY EFFICIENCY BY LEARNING FROM THE BEST-IN-CLASS

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The contribution is focused on one of the methods of assessing business performance - benchmarking and its application in one of the companies operating in the construction sector. Benchmarking has been for a longer time one of the phenomena, what contemporary modern management is consistently engaged to. Competitive comparing is nothing new, but benchmarking has brought scientific principles to this area, developed a reliable methodology and enabled a wide comparability. Benchmarking is a continuous process of measuring systems, processes and products within the company and comparing them with competitors or other companies that are successful in same field. It is very important for all companies to constantly monitor their competitors, because it is one of the basic conditions of increasing their efficiency and market share. The aim of such comparing is to adopt the new practices and procedures and in particular to obtain information which leads to improve business performance.

The article describes both the theory of benchmarking as well as its practical approach. Accomplishment of examined method and its practical application is the formulation of the phased steps that are part of the four basic phases in business practices of benchmarking. Subsequently the paper identifies risks that may threaten the successful implementation of benchmarking. There are set out measures to be followed to maintain the reliability of benchmarking for the most significant risks in the paper. These measures have the character of recommendations for management employees. Identification of the risks and proposition solution which leads to their elimination is the most important contribution of this article.

Key Words: benchmarking, methods of assessing business, building society, M-SILNICE a.s.

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