

Výkonnost podniků z informačních a komunikačních aktivit v ekonomické a sociální oblasti

Performance of Enterprises from Information and Communication Activities in Economic and Social Area

Markéta Klímková, Jana Hornungová

Abstract:

Purpose of the article: The purpose of the article is to present some partial results from the specific research, which was focused on the area of business performance in the Czech Republic. These results are supported by theoretical foundation from economic and social performance of enterprises. The paper starts with these two terms "economic" and "social performance", then paper presents main typical indicators, which are used in mentioned areas.

Methodology/methods: First of all we used the documentary analysis based on secondary data. The main sources for this analysis were foreign journals and books. The research data were used from Czech Statistical Office, and from the research on which we were participated during the doctoral studies. On the basis of these data we will analyze the development of key economic and social indicators, which are monitored on a selected sample of companies.

Scientific aim: The main aim of this paper is to perform a thorough literature search, applied to the Czech area and finding, which indicators from these two areas are the most monitored. The aim is to find whether exist relationship between economic and social performance.

Findings: Performance plays an important role in management of enterprises. We can also say, that performance includes a lot of areas, but actually we are interested in the social and economic. In many cases, the performance is very crucial competitive advantage in the market. Due the performance monitoring the enterprises can find the Key Performance Indicators (KPI) – the set of measures focusing on critical areas of organizational performance.

Conclusions: Based on the paper will be notified of the need to monitor both economic and social indicators that could affect not only performance of the enterprise itself, but also on their activities within the competitiveness.

Keywords: business performance, social area, economic area, key performance indicators, Czech Republic

JEL Classification: M20

Introduction

The theme of this paper is the economic and social performance of enterprises. These two concepts are closely related, mainly because of the one important reason – one of the most important competitive factors today is the quality of human resources. Often, determining the appropriate non-financial indicators and performance management it is in this area underestimated by the companies. We can hear that many authors suggest that an enterprise's social capital is determined by the economic structure and the entrepreneurs' initiatives, and that social capital improves an enterprise's capacity to develop its business and thus enhances its economic efficiency. As we mentioned in the abstract of this paper, the performance is very crucial competitive advantage in the market and it should be in the interest of the enterprises monitor key metrics and factors referred in the economic and social performance.

But the problem can be, how mentioned Parmenter (2010), that many companies are working with the wrong measures, many of which are incorrectly termed key performance indicators (KPIs). Very few organizations really monitor their true KPIs. Because of this information we mention four types of performance measures, based Parmenter (2010):

- Key result indicators (KRIs) tell you how you have done in a perspective or critical success factor.
- 2. Result indicators (RIs) tell you what you have done
- 3. Performance indicators (PIs) tell you what to do.
- KPIs tell you what to do to increase performance dramatically.

Many performance measures are some mix of these stated four types.

As part of the main objective of this paper we analyzed secondary research data and information, which were processed by the Czech Statistical Office, and by the research on which we are participated. This research was focused on the performance evaluation of enterprises (in the area of economic, social and environmental performance) in the Czech Republic. For the processing of the data we used classical methods of scientific work – analysis, induction, deduction, comparison, mathematical and statistical methods. On the basis of these data we analyzed the development of key economic and social indicators. For the theoretical basis we obtained information's from the scientific articles and from the books, which are focused on these areas.

The areas on which we focused are information and communication activities (non-financial corporations and households). The reason for this decision is focus of dissertation thesis by one of the authors of this paper, so we have much information from this area.

The main aim of this article is to present the results of the Key Performance Indicators from the economic and social area. We start this paper with the basic theoretical information's from economic and social performance and from the measurement of its.

1. Economic Performance

The basic aim of the most enterprises is generally considered to maximize and increase the market value over a longer period of time. The economic performance of the company is a need to further analyze and evaluate. Especially for this purpose was created many different methods. In practice, the most common and most widely used method is to evaluate the financial and economic business performance through fundamental or technical analysis, which assesses the business just from an economic point of view based on a detailed study and analysis of financial statements (Fischer, 1992).

One unknown is the question of how to measure the economic performance. In connection with the introduction of performance measurement (Performance Measurement System) as the most common indicators of classification seems to divide the performance assessment approach using the "financial and non-financial indicators" as many matches of Czech, and foreign authors (Brancato, 1995; Pavelková, Knápková, 2009; Synek *et al.*, 2009). The basis is surely monitoring financial performance.

Financial indicators are monitored and registered by the enterprises, and subsequently provided to the Czech Statistical Office. By the Table 1 we can see selected indicators that are monitored by the enterprises from information and communication area during the years 2005–2010.

Many of these indicators are connected with the social area, especially with the social indicators, but most of them are connected with the other activities -e.g. with the marketing etc., where the financial indicators are parts of Supply Chain Operations Reference, of BM Index or indicator ROMI (Return on Marketing Investment) – that is alternative of indicator ROI. The use of financial indicators is therefore used in a wide range of business activities (Milichovský, Solčanský, Sychrová, 2011).

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Table 1. Selected Monitored Indicators (Information and Communication Activities, 2005–2010).

Indicator	Unit	Economic subjects, total					
		2005	2006	2007	2008	2009	2010
Enterprises (firms), total		29,376	29,891	31,811	33,760	36,182	35,866
Number of persons employed, total (headcount)	persons	92,750	97,680	102,899	110,964	112,393	113,902
of which:							
Average registered number of employees (headcount)	persons	76,292	80,229	84,936	91,448	91,449	92,202
Average registered number of employees – FTE	persons	75,249	78,782	83,290	89,668	89,562	90,065
Wages excl. Other personal expenses	CZK mil.	31,051	34,715	39,331	45,645	47,343	47,621
Average monthly gross wage per person (headcount)	CZK	33,917	36,058	38,589	41,595	43,141	43,040
Average monthly gross wage per person FTE	CZK	34,387	36,721	39,351	42,421	44,050	44,062
Sales, total	CZK mil.	298,375	318,533	338,926	352,699	348,256	340,350
Sales, total per employee	CZK thous.	3,217	3,261	3,294	3,179	3,099	2,988
Outputs, incl. Trade margin	CZK mil.	271,552	292,724	312,244	329,779	327,510	320,631
Production consumption	CZK mil.	146,031	153,993	164,705	170,974	174,382	171,341
Production consumption percentage in outputs	%	53,8	52,6	52,7	51,8	53,2	53,4
Value added	CZK mil.	125,521	138,731	147,539	158,805	153,127	149,290
Value added percentage in outputs	%	46.2	47.4	47.3	48.2	46.8	46.6
Value added per employed persons	CZK thous.	1,353	1,420	1,434	1,431	1,362	1,311

Source: Czech Statistical Office, 2012.

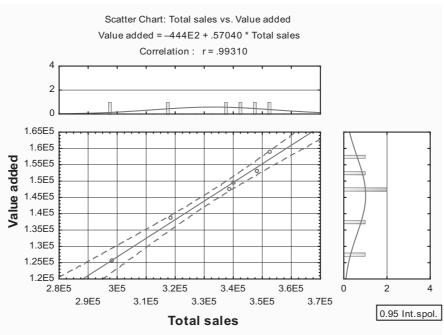


Figure 1. Correlation relationship between Total sales and Value addend. Source: Own processing based information's from the Czech Statistical Office, 2012.

As we can see in the Table 1, number of enterprises in the area of information and communication activities increases from year to year, only between years 2009–2010, there is small decline. From this table we can analyze some social indicators, but in this chapter we focus on financial factors – indicators.

From this Table 1 we can see, that important indicators from economic area (sales, outputs, production consumption, value added) from the year 2008 declining. This is not so positive fact, but this fact we can attributed to an increasing number of companies in this (selected) sector. It should be noted, that in the services to maintain their long-term best position information and communication activities only in the service sector show positive values of EVA - indicator which works with the value added. This information is presented by Ministry of Industry and Trade of Czech Republic. The indicator EVA is preferable to use it in financial perspective – it is possible to link the value aspect (to maximize long-term value of this indicator), maybe in finding generators of value (Pavelková, Knápková, Friedel, 2007).

The next part presented basic statistic – especially correlation between total sales and value added. These two factors, in our opinion, presented the economic view as well. As we can see in Figure 1, linear dependence of the two variables exists, so we can evaluate, that value added and total sales depend on each other.

Based this information's we can work with it during some others researches, because sales and value added we can consider like the most watched indicators from the economic area (in Information and Communication Activities).

2. Social Performance

For the definition of social performance we can use the definition that states Spirig (2006), which recognizes social performance as a "social impacts on stakeholders". Social impact is perceived as the result of social activities and conduct of business and the stakeholders can be considered as customers, employees, government bodies, media, suppliers, NGOs, etc. In general, the social performance can be identified as an area of human resources. Today, for more and more enterprises is one of the key success factors (competitiveness) the quality of human capital.

The social area has certain types of indicators that can be used to measure performance. The assessments of social performance are used mostly nonfinancial measures (so-called soft indicators). The social performance is needed to determine through which standards and approaches will be selected social indicators. To this end, it is possible to use standards such as CSR, ISO 26000, SA 8000, etc.

Many companies have implemented tools for measuring their performance in order to stay in business and come in contact with tough competition. It always depends on the focus of the company, which of the social indicators must be monitored and which is monitored only in the interest of its activities (Kocmanová, Hornungová, Klímková, 2010).

In the first part of the paper we mentioned, that the big competitive advantage is human capital. As the Tootell et al. (2009) stated – "since 1980s there has been an increasing emphasis on the importance of HR measurement". Organizations try to measure performance according the financial drivers but in the recent period top leaders attempted to find new performance indicators which would take the "wind from sail" to their rivals in the market (Gabčanová, 2012)

If we should be based on data from the Czech Statistical Office, the most watched social indicators in the area Information and Communication are: Number of persons employed and Value added per employed persons.

Activities are: Number of persons employed, of which: Average registered number of employees (headcount) and Average registered number of employees – FTE.

Some others social indicators are presented in the chapter, that is focused on the authors own research, which was aimed at those areas as well as economic and social indicators.

3. Key Performance Indicators

The performance indicators, while important, are not key to the business. They can help teams to align themselves with their organization's strategy. PIs are nonfinancial and complement the KPIs.

KPIs represent a set of measures focusing on those aspects of organizational performance that are the most critical for the current and future success of the company.

From analysis of Parmenter (2010) we can define 7 characteristics of KPIs:

- 1. Are nonfinancial measures (*e.g.*, not expressed in dollars, pounds, euros, crowns).
- 2. Are measured frequently (e.g., 24/7, daily or weekly).
- Are acted on by the CEO and senior management.

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- 4. Clearly indicate what action is required by staff.
- Are measures that tie responsibility down to a team.
- Have a significant impact (e.g., affect one or more of the critical success factors – CSFs and more than one BSC perspective).
- 7. They encourage appropriate action (*e.g.*, have been tested to ensure they have a positive impact on performance).

4. Empirical Research of the Economic and Social Indicators

The research of the authors was focused on economic and social indicators and on performance measurement

It was an empirical analysis of manufacturing establishments, section 10–30 (production), then section 32 (other manufacturing), 35 (electricity, gas, steam and air conditioning), 36 (collection, treatment and supply), 37 (activities related to waste water), 38 (collection, collection and disposal, treatment of waste for further use), 61 (telecommunications activities), 62 (work in information technology), 63 (information

activities). In terms of legal forms of business enterprises have been addressed a joint stock company, limited liability companies, cooperatives and state enterprises, and most were represented by a joint stock company (50%) and limited liability company (48%). In terms of company size research was aimed at large enterprises, i.e. those whose number of employees exceeds 250. Decisive was the owner of both domestic (41%) and foreign (59%).

The main reason for this research was to answer the question: which economic and social indicators are monitored. Especially for this paper, we analyzed companies from Information and Communication Activities.

By questionnaire survey was obtained 90 samples, of which only 11 were from area of Information and Communication Activities. The empirical research are selected and presented only the most important data from the economic and social performance.

The first part of the research is focused on social indicators. As we can see in the Figure 2, the most monitored indicators are Spending to Education and Training, than Law Enforcement and Regulations with Products, Number of Employees and Total Number and MITA Turnover of Staff.

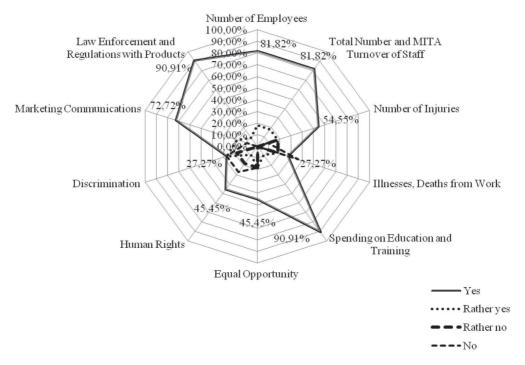


Figure 2. Monitored social indicators. Source: Own processing.

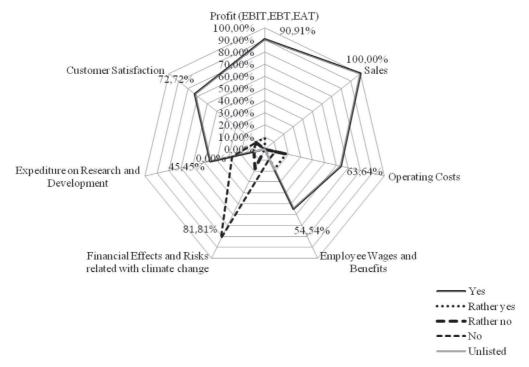


Figure 3. Monitored economic indicators. Source: Own processing.

An interesting finding in the case of social indicators is that it has become the most watched indicator Spending on Education and Training but in this sector, it can be expected that in Information and Communication Activities must be constantly insert a large amount of money to new equipment, which very often go through an innovative process that ensures continuous improvement of performance. With new innovations devices are often connected just training that is needed to complete in order and employees in the company, because they must be familiar with the innovations in this area too.

Indicators like the Number of Employees and Number of Injuries are mostly monitored because of the legislation or other directives, but issues around employees are also closely monitored and analyzed, as well as the information may be specific impulse, leading to an improvement in the company (*e.g.* increased turnover or questions related to safety and health at work).

As one of the indicators we term marketing communications, in the following text we brief some explanation. Indicator "Marketing communication" is one part of the marketing mix (4P). It is the part that is totally focused on communication, through which can be a wide area, including customers learn about the company, product, services, etc. Accor-

ding Jakubíková (2008) is a marketing communication component of corporate communication, which focuses on stimulating sales, which must be consistent with the objectives of corporate communication in order to create a single image. Vysekalová and Mikeš (2007) consider the concept of marketing communication of all relevant communication with the market. Among them the basic tools, such as advertising, sales promotion, public relations (PR), direct marketing, sponsorship and new media, but also personal selling and packaging (Mráček, 2012).

Other special types of indicator are human rights. Human rights are more than just workers' rights against discrimination in the workplace are a key requirement of international conventions and laws and guidelines dealing with social issues.

Difference in treatment between an individual, which occurs when unfairly burdened when he denied the benefits deserved it or not treated fairly considered harassment ("harassment"), which is defined as a series of clearly or potentially unwanted notes or activities aimed towards an individual or group.

The second part of the paper is area of economic indicators. We mainly specify the indicators that companies are labeled to a greater extent as observed (GRI, 2006).

Based the results from the Figure 3 we can answer the question – which economic indicators are monitored. Companies from the Information and Communication Activities monitored indicator Sales in 100% cases. This fact it is possible to substantiate from the dates by Czech Statistical Office, because total sales we can see in the Table 1 as a one of the monitored economic indicator. Most companies then also claimed Profit (EBIT, EBT, EAT), Customer Satisfaction and Operating Costs.

The customer satisfaction can be rightly regarded as a financial indicator, whose value can be measured and expressed by the company's profit or the revenue growth. This factor is therefore very significant with regard to the financial company's results. With the customer satisfaction is also related to his loyalty, which is one of the things that companies in their corporate objectives to achieve. The indicator of customer satisfaction provides the feedback to the company.

As we indicated at the beginning of this paper, businesses in this field of services, such as one, creating a positive value added, but this indicator is not mentioned. This may be a stimulus for further research

In connection with the above mentioned indicators we would like to note the term performance. Currently the performance plays an important role in management of enterprises. Author Kuin (1968) presents, the performance is about setting goals and allocating resources. Good performance is characterized by not only high efficiency but also balance objectives controlled, high-quality results. You may not be expressed in numbers, so it is necessary to detect and identify other acceptable standards.

Due the performance monitoring the enterprises can find the Key Performance Indicators, also known as KPI or Key Success Indicators (KSI), which help an organization define and measure progress toward organizational goals. Currently, one of the main aims of each company is to achieve economic profits and competitiveness. Based this paper we can assume, that for the area Information and Communication Activities, and for the large companies we can consider like the KPIs sales and number of employees.

5. Discussion

The paper is focused on economic and social indicators in the area of Information and Communication Activities. Some limitation of the paper is size of the sample of companies. In the research we built

on the information's from the project: Construction of Methods for Multifactor Assessment of Company Complex Performance in Selected Sectors. The project includes data from 90 companies, but only 11 (12.22%) are from the mentioned area. We can say that with a larger sample we could receive another, possibly different data. Some impulse could be the data from the Table 1 – the number of the companies (from this area). On the other hand we must present, that our sample was only large enterprises, i.e. those whose number of employees exceeds 250.

In this article, we could make a comparison with the data from the Czech Statistical Office and with our research. During the processing of the paper we found some similar or identical data from the economic and social indicators, so we can mention that typical social indicator is Number of Employees and from the economic sector it is indicator Sales. During the other research we can examine the relationship of these two variables using a variety of statistical indicators.

Conclusions

Paper is focused to the area of economic and social indicators. The main purpose of the paper was to obtain, verify and present relevant information from this part, especially present the most monitored indicators from the Information and Communication Activities.

The first part of the paper presents some information's by the Czech Statistical Office that are focused on indicators, monitored by the followed companies during the years 2005–2010. There we can see the increase number of the companies, but decreasing the amount of sales. From the Table 1 we can also see some social indicators.

Then paper has introduced chosen results from the project No. P403/11/2085, named Construction of Methods for Multifactorial Assessment of Company Complex Performance in Selected Sectors funded by the Grant Agency of the Czech Republic. There were presented some basic statistical data. The main reason for this paper was to answer the question: which economic and social indicators are monitored, this information's are presented in the special chapter. Limitation of the research was small sample of the companies and maybe the size of the companies, because we worked with the large companies, whose number of employees exceeds 250.

Based these information, there is some space for further investigation, using other statistical methods or extending the research sample.

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References

Bauer, K. (2004). The power of metrics – KPIs: Not all metrics are created equal. *DM Review*, 14(12), 1–3.

Brancato, C. K. (1995). New performance measures – a research report. In: *The Conference Board*, New York. Report number 1118-95-RR.

Český statistický úřad (2012). *Vybrané finanční ukazatele – roční*. [cit.2012-07-16] Retrieved from http://www.czso.cz/csu/redakce.nsf/i/dicvfu_cr_cz_nace

Fitz-Enz, J. (2009). The ROI of human capital: measuring the economic value of employee performance. Nex York: Amacon.

Gabčanová, I. (2012). Human Resources Key Performance Indicators. *Journal of Competitiveness*, 4(1), 117–128.

GRI (2006) *Definice indikátorů lidská práva (HR)*. [cit.2012-11-16] Retrieved from https://www.globalreporting.org/resourcelibrary/Czech-G3-Human-Rights-Indicator-Protocols.pdf

Halachmi, A. (2005). Performance measurement in only one way of managing performance. In *International Journal of productivity and Performance Management*, 54(7), 502–516.

Hřebíček, J., Soukopová, Štencl, M., J., Trenz, O. (2011). Integration of economic, environmental, social and corporate governance performance and reporting in enterprises. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, LIX(7), 157–166.

Jakubíková, D. (2008). *Strategický marketing: Strategie a trendy*. Praha: Grada Publishing, a.s.

Kocmanová, A., Hornungová, J., Klímková, M., (2010). Sustainability: The Integration Environmental, Social and Economic Performance of Company (in Czech). Brno: CERM, Akademické nakladatelství, s. r. o.

Kocmanová, A., Dočekalová, M. (2012). Construction of the economic indicators of performance in relation to

environmental, social and corporate governance (ESG) factors. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, LX(4), 195–205.

Kocmanová, A., Dočekalová, M. (2011). Corporate sustainability: environmental, social, economic and corporate performance. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 2011(7), 203–209.

Kuin, P. (1968) Management Performance in Business and Public Administration. *Academy Of Management Journal*, 1(4), 371–377.

Mráček, P. (2012). Nové přístupy v marketingové komunikaci v segmentu outdoorového oblečení. Dizertační práce. Brno: VUT v Brně, Fakulta podnikatelská.

Milichovský F., Solčanský M., Sychrová L. (2011). Přístupy k měření efektivnosti marketingových činností. *Trendy ekonomiky a management*, 8(5), 131–138.

Pavelková, D., Knápková, A. (2009). Výkonnost podniku z pohledu finančního manažera. Praha: Linde.

Pavelková, D., Knápková, A., Friedel L. (2007). Využití moderních konceptů řízení výkonnosti pro měření vlivu vyspělých výrobních technologií na výkonnost podniku. *Trendy ekonomiky a managementu*, 1(1), 91–97.

Parmenter, D. (2008). Klíčové ukazatele výkonnosti: rozvíjení, implementování a využívání vítězných klíčových ukazatelů výkonnosti (KPI). Praha: Česká společnost pro jakost, XV, 242 p.

Spirig, K. (2006). Social Performance and Competitiveness, A Socio-Competitive Framework, in Schaltegger, S. and Wagner, M. (Eds.): *Managingthe Business Case for Sustainability*. Sheffield: Greenleaf Publishing, 82–106. Synek, M., Kopkáně, H., Kubálková, M. (2009) *Manažerské výpočty a ekonomická analýza*. Praha: C. H. Beck.

Vysekalová, J., Mikeš, J. (2007). *Reklama: Jak udělat reklamu*. Praha: Grada Publishing, a.s.

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Ing. Markéta Klímková

Vysoké učení technické v Brně Fakulta podnikatelská, Ústav ekonomiky Kolejní 2906/4, 612 00 Brno e-mail: Klimkova@fbm.vutbr.cz

Ing. Jana Hornungová
Vysoké učení technické v Brně
Fakulta podnikatelská, Ústav ekonomiky
Kolejní 2906/4, 612 00 Brno
e-mail: Hornungova@fbm.vutbr.cz