SUSTAINABILITY-RELATED COMMUNICATION AND ITS INFLUENCE ON COMPETITIVENESS OF COMPANIES IN THE CHEMICAL INDUSTRY

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Summary: Interests of companies in sustainability-related communication have risen considerably in recent years. This can be seen not only in the content of corporate annual reports, but also in the number of papers published in scientific journals. This paper focuses on the current state of sustainability-related reporting in chemical industry companies registered in the Association of Chemical Industry in the Czech Republic. It deals with the form and the content of reporting, the importance of different stakeholders in this process as well as benefits of sustainability-related communication and its impacts on competitiveness of the company.

Keywords: sustainability-related reporting, competitiveness, chemical industry

1. Introduction

Social responsible company represents a complex concept which is interconnected with all company's actions and activities and its implementation in practice needs critical analysis of its principles and procedures together with communication with relevant stakeholders (Pätäri et al. 2014). The implementation of the concept is connected with several significant opportunities for improvement. Realized studies confirmed positive impacts on company's reputation, reducing of operating costs, lowering of risks, positive impact on involvement of employees in company's actions and activities and on business productivity (Aguinis & Glavas 2012). The concept of social responsibility is connected also with lower costs of capital (El Ghoul et al. 2011) and with higher attractiveness of a company as a preferred employer, which is closely connected with quality of human resources and human capital (Greening & Turban 2000). Studies and researched made also point out that the concept is important in the cases of negative or extraordinary events, when a good reputation of a company may help to lower negative impacts of such events (Godfrey, Merrill & Hansen 2009). The sustainable performance is connected also with customer satisfaction (Lev, Petrovits & Radhakrishnan 2010). The paper therefore focuses on current way of sustainability-related communication of companies in the chemical industry in the Czech Republic and discusses the relation between sustainability-related communication of a company and its competitiveness with respect to the specifics of the chemical industry.

2. Material and methods

The paper is supported by the analysis of secondary and primary data sources. The content analysis of secondary sources was used to compile theoretical background of the paper. The

primary data were collected by questionnaire survey in 2014 in organisations which were in that time part of the Association of Chemical Industry in the Czech Republic (87 members were contacted; only companies were contacted, excluding high schools and universities). The main aim of the research was to identify the importance of sustainable business to maintain competitiveness of organisations which are members of Association of Chemical Industry in the Czech Republic. The research also focused on the determination of the current state of sustainability-related communication in chemical companies and on the importance of this communication for their competitiveness. To determine the primary information, electronic inquiring was used. The questionnaire was completed by 40 organisations across size categories; the overall return of the questionnaire was 46%. The statistical tools used for the data analysis were chosen based on the type of the question (descriptive statistics, and contingency tables, absolute and relative frequency and correlation analysis).

3. Results of research and discussion

This section of the paper firstly focuses on the characteristics of current use of sustainability-related communication and secondly, attention is paid to its importance for competitiveness of companies in the chemical industry, as it is perceived by respondents.

In the area of sustainability-related reporting, the stakeholder considered by respondents to be the most relevant are local authorities (see table 1). The major stakeholders with which it is necessary to communicate include owners and customers. The least significant stakeholder perceived by respondents are non-governmental organizations focusing on environmental protection (15% of respondents ticked off these organizations as entirely unimportant stakeholder) and competitors.

Table 1: Importance of individual stakeholders

Stakeholders Relative frequencies MOD AVG STD									
Stakeholders	Relative frequencies					MOD	AVG	210	
	1	2	3	4	5				
Employee	6%	9%	23%	44%	18%	4	3.59	1.08	
Customers	3%	6%	19%	41%	31%	4	3.91	1.03	
Suppliers	3%	9%	33%	46%	9%	4	3.48	0.91	
Competitors	6%	28%	38%	28%	0%	3	2.88	0.91	
Owners	6%	9%	12%	33%	40%	5	3.91	1.21	
Creditors	12%	18%	9%	49%	12%	4	3.30	1.26	
Insurance companies	9%	12%	9%	33%	37%	5	3.76	1.32	
Local authorities	6%	3%	13%	39%	39%	-	4.03	1.10	
Media	12%	9%	30%	40%	9%	4	3.24	1.15	
NGO	15%	21%	31%	27%	6%	3	2.88	1.17	
Local community	6%	15%	6%	55%	18%	4	3.64	1.14	
General public	6%	9%	27%	40%	18%	4	3.55	1.09	

Note: 1 = no consequence; 5 = of great importance; MOD = modus; AVG = average; STD = standard deviation

Source: Authors

97% of companies issue periodic reports that include environmental information or information on corporate sustainability. In terms of form, companies use various report types (some companies issue more report types):

- 57% of respondents make available to the stakeholders their environmental policy as well as quality policy and occupational health and safety policy.

- 55% of respondents incorporate the information on approach to environmental protection and social aspects of business activities in the annual financial report (the obligation to issue an annual financial report is laid down by the Act No. 563/1991 Coll., on Accounting). In the opinion of the respondents, such information is paid adequate attention in the report.
- 55% of respondents are involved in the Responsible Care (RC) initiative and thus have a system of communication in matters of health, safety and environmental protection with the stakeholders created.
- 32% of respondents release separate corporate environmental reports.
- Only 1 company informs on corporate sustainability in a separate report (sustainability report).

Of great importance to the creation of the system of communication and its effective operation are, in particular, information needs of stakeholders. 52% of respondents confirmed to monitor information needs; 71% of them regularly (repeatedly) monitor information needs and adapt the disclosed data to those needs. 48% of the entire studied set, however, do not monitor the information needs of stakeholders. Based on this, we can deduce that these companies only fulfil reporting obligations ensuing from the law or from the involvement in voluntary initiatives or they produce one-way communication without the knowledge of the information needs of relevant stakeholders.

According to the respondents, attention within the framework of reporting should be primarily paid to information on corporate economic (financial) performance and environmental performance. The results show that the reports are primarily focused on the issues of economic performance; companies use for communication mainly annual financial reports, where information on environmental performance and social aspects of the business is only complementary. In the case of reports issued in connection with the involvement in the RC initiative or separate environmental reports the companies act in accordance with the recommendations under the RC initiative or they have their own report structure created. The main communication channel is company websites, on which reports are made available to users. 30% of respondents also release reports in printed form. The most common frequency of publication of reports is once a year. RC reports and separate environmental reports are issued by companies on the basis of company management decision (i.e. obligation comes from involvement in voluntary initiatives); only 5 respondents confirmed that the company started to publish reports based on the requirements of external stakeholders (local authorities). These voluntary reports are intended primarily for employees, owners, local authorities and the public (near the company).

75% of respondents have confirmed that a properly established system for communication with external stakeholders on the issues of corporate sustainability enhances the credibility of the company and consider sustainability-related reports to be an adequate form of this communication.

The aim of this section is also to discuss the relation between sustainability-related communication of a company and its competitiveness with regard to the specifics of the chemical industry. The research was mainly focused on the importance of sustainable business and its impact on company's competitiveness. For the construction of the research all factors of competitiveness defined by Porter (1985) and Malik (2005) was used. The outputs of the research are shown in tables 2 and 3.

Table 2: Importance of factors for competitiveness of companies in chemical industry

N=40	AVG	MOD	MED	MAX	MIN
Supply chain management	3.80	4	4	5	1
Innovation	4.15	4	4	5	1
Productivity	4.08	4	4	5	1
Differentiation	3.83	4	4	5	1
Reputation	4.44	5	5	5	3
Employer attractively	3.74	4	4	5	1
Market-position	3.64	4	4	5	1
Communication	3.72	4	4	5	1
Customer value	4.15	4	4	5	1
Willingness to pay	3.62	4	4	5	1
Payment procedures (liquidity)	3.62	5	4	5	1
Profit	4.21	5	4	5	1

Note: 1 = no consequence; 5 = of great importance; MOD = modus; AVG = average

Source: Hyršlová, Vnoučková & Hájek (2015)

Table 3: Importance of sustainability-related communication for company's competitiveness

Factors of competitiveness	Relati	Relative frequencies					AVG	STD
	1	2	3	4	5			
Supply chain management	11%	11%	39%	25%	14%	3	3.21	1.17
Innovation	7%	17%	38%	35%	3%	3	3.10	0.98
Productivity	11%	15%	44%	19%	11%	3	3.04	1.13
Differentiation	3%	3%	38%	38%	18%	-	3.62	0.94
Reputation	0%	3%	10%	38%	49%	5	4.31	0.81
Employer attractively	7%	3%	21%	45%	24%	4	3.76	1.09
Market-position	14%	21%	44%	21%	0%	3	2.72	0.96
Communication	3%	0%	14%	45%	38%	4	4.14	0.92
Costumer value	7%	0%	50%	39%	4%	3	3.32	0.86
Profit	7%	14%	39%	29%	11%	3	3.21	1.07

Note: 1 = no consequence; 5 = of great importance; MOD = modus; AVG = average; STD = standard

deviation Source: Authors

The most important factor of competitiveness is according to the answers of respondents positively reputation of a company. Other important factors are ability of company to generate profit, innovation activities, ability to create customer value and productivity. The results confirmed relation between competitiveness of a company and its reputation. Scientific sources pay attention to the relation between company's behaviour in compliance with law, reputation and corporate sustainability, which may be meaningful to gain corresponding social status and competitive advantage in conditions of current competitive environment (Czinkota, Kaufmann & Basile 2014). Positive impact of social responsibility approach on reputation mentions for example study by Beckmann (2007).

Sustainability-related communication may affect the competitiveness of the company. It contributes positively to the reputation and is an important part of the corporate communication towards external stakeholders. The respondents perceive also a positive effect on the attractiveness of the company as an employer. On the contrary, the respondents do not perceive the contribution of communication for the area of acquiring new customers or markets.

4. Conclusion

The companies are aware of the fact that within the framework of external sustainability-related communication there should be satisfied information needs of relevant stakeholders. The most relevant stakeholders are local authorities; a significant role is also played by owners and customers. The results of the research show, however, that almost half of respondents do not monitor the information needs of stakeholders. Companies use mainly periodic reports. Sustainability-related information is most often included in annual reports. Sustainability-related information forms only supplementary information; they are not integrated in economic performance. Some companies use environmental reports; the reports include primarily information on environmental aspects without a link to the economic performance of the company. Businesses perceive the importance of communication for the reputation of the company and its positive effect on the attractiveness of the company as an employer and, under the current conditions, they produce mostly one-way communication, which is primarily focused on the economic performance. If the information on the environmental aspects or on the area of occupational health and safety is reported, it is part of separate reports not integrated in corporate economic performance.

References

- 1. Aguinis H., Glavas A. (2012): What We Know and Don't Know About Corporate Social Responsibility: A Review and Research Agenda, "*Journal of Management*", 38, p. 932-968.
- 2. Beckmann S.C. (2007): Consumers and Corporate Social Responsibility: Matching the Unmatchable?, "Australasian Marketing Journal", 15(1), p. 27-36.
- 3. Czinkota M., Kaufmann H.R., Basile G. (2014): The Relationship Between Legitimacy, Reputation, Sustainability and Branding for Companies and their Supply Chains, "*Industrial Marketing Management*", 43(1), p. 91-101.
- 4. El Ghoul S., Guedhami O., Kwok C.C.Y., Mishra D.R. (2011): Does Corporate Social Responsibility Affect the Cost of Capital?, "*Journal of Banking & Finance*", 35(9), p. 2388-2406.
- 5. Godfrey P.C., Merrill G.B., Hansen J.M. (2009): The Relationship Between Corporate Social Responsibility and Shareholder Value: An Empirical Test of the Risk Management Hypothesis, "Strategic Management Journal", 30(4), p. 425-445.
- 6. Greening D.W., Turban D.B. (2000): Corporate Social Performance as a Competitive Advantage in Attracting a Quality Workforce, "*Bus. Soc.*", 39(3), p. 254-280.
- 7. Hyršlová J., Vnoučková L., Hájek M. (2015): Koncepce udržitelného rozvoje a konkurenceschopnost podniků chemického průmyslu, "*Chemické listy*", 109(4), p. 319-326.
- 8. Lev B., Petrovits C., Radhakrishnan S. (2010): Is Doing Good Good for You? How Corporate Charitable Contributions Enhance Revenue Growth, "*Strategic Management Journal*", 31(2), p. 182-200.
- 9. Malik F. (2005): *Manager Magazin*. Available from: http://www.manager-magazin.de/koepfe/artikel/0,2828,336518,00.html
- 10. Pätäri S., Arminen H., Tuppura A., Jantunen A. (2014): Competitive and Responsible? The Relationship Between Corporate Social and Financial Performance in the Energy Sector, "Renewable and Sustainable Energy Reviews", 37, p. 142-154.
- 11. Porter M.E. (1985): Competitive Advantage. Creating and Sustaining Superior Performance, Free Press, New York.