

Relationship of Reverse Logistics and Marketing Communication in Czech Republic

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Abstract

Purpose of the article: The paper deals with question if the final customers are interested in reverse logistics in marketing campaigns, acceptable in the market of Czech Republic.

Methodology/methods: Paper is based on primary research, on which participated final consumers in Czech Republic through the questionnaire survey. Results of the paper are based on testing of dependence between individual variables by Pearson chi-square test.

Scientific aim: The aim of the article is to show relationship of marketing communication and reverse logistics, and their correlation.

Findings: Main result of research provide relationship between marketing communication tools and reverse activity. The research was aimed at random chosen group of 585 people in the Czech Republic. The result of the research can be used for the companies that operate in the Czech or Central European market.

Conclusions: The primary research provides possible approaches for companies in communication green services to final consumers. Limitation for this research because of the chosen sample. Own data for primary research was gained only in Czech Republic.

Keywords: reverse logistics activities, marketing communication tools, customers' perception, Czech Republic, marketing campaigns

JEL Classification: M31, M37, O14, Q56

Introduction

Economic recession prepares many opportunities for both of companies and customers, because each producer have to improve own production processes, technologies and equipment they use. As a support there is possible to apply model of supply chain. Supply chain has focused on production chain from point of view of logistics, especially on reverse logistics (Guide, Van Wassenhove, 2002) and waste reduction (Lapré *et al.*, 2000; Hornungová, Klímková, 2013) on the way to build competitive market advantage (Pagell, Wu, 2009; Corbett, Klassen, 2006; Dahlstrom, 2011).

Nowadays, there are many pressures on both of households and companies to produce less all kinds of wastes than during previous years. For the companies there are strict conditions for annual amount of waste, especially for industrial companies within “emission allowances”. Emissions from industrial production have become one of the biggest waste, which are day-to-day produced. From point of view of households is growing trend of reliability to nature and wide environment (Eurostat, 2015). In comparison of waste production it is obvious that industry is much bigger than households (see Table 1).

For customers there is important to have possibility of additional services in purchasing phase. They are looking for addition services such packaging taking-back, recycling, or re-change products. In regarding to competitive situation in the markets and their globalization status, each seller must remake own production processes, which bring requirements of logistics activities, especially for old products and packaging material. For final customers there is main problem within these activities in physical flow (Altuntas, Tuna, 2013; Holanda, Francisco, 2013).

According to Iannuzzi (2012) households usually purchase products within eco or green labels for fields as follow: (1) home cleaning, (2) laundry, (3) food and beverages, (4) paper products and (5) personal cosmetics products. Electronic devices usually have not green label, but these products have been bought according to actual life style.

1. Theoretical background

Logistics theory has become more significant in present day because there is necessary to link three corporate fields together. These fields are marketing activities, production management and corporate financing, where logistics provides required flows – such material and product, information and financial. Figure 1 shows that all logistics flows help to allocate every sources, which are important for effective processes (Pernica, 2005; Vincent, 2011).

Logistics has become process by which is distributed product from producer to final customer. From point of view of used material, this process started within raw material. That could be called as typical logistics chain (or supply chain) Main problem in logistics chains is, what to do with waste in production process, used packaging of new products and old products (Govindan *et al.*, 2015).

According to Ferrer, Whybark (2000) there is necessary to use garbage as the way of gaining material sources instead of their stocking or burning (impact on nature environment). Waste problems could be solved by reverse logistics (RL) which requires adequate skills, capabilities, market awareness, and staff with experiences (Giuntini, Gaudette 2003). Reverse logistics (RL) has become important part of marketing activities from logistic point of view. It is usually located in the end of whole marketing loop

Table 1. Total wastes in Czech Republic according to individual group in 2012 (in tones).

	Industry		Households	
mineral and solidified waste	12 390 223	62.14%	18 472	0.57%
equipment	4 349 589	21.82%	459 022	14.20%
mixed ordinary waste	1 268 104	6.36%	2 532 145	78.33%
chemical and medical waste	837 658	4.20%	5 509	0.17%
common sludge	795 819	3.99%	2 165	0.07%
animal and vegetal waste	229 517	1.15%	213 617	6.61%
recyclable waste	67 806	0.34%	1 712	0.05%
Total		100.00%		100.00%

Source: Eurostat, 2015.

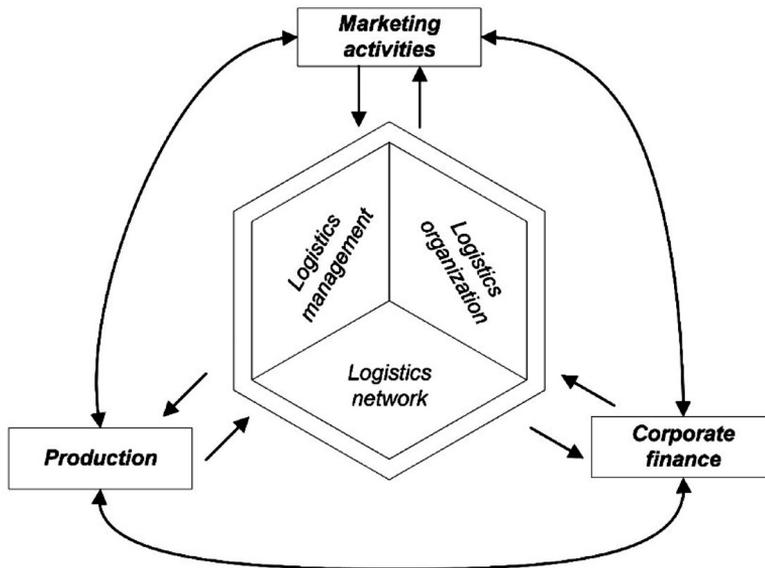


Figure 1. Logistics concept. Source: Pernica, 2005, p. 33.

where is after-sale phase defined. RL itself is difficult to describe because of applying individual activities in all phases. RL is process of moving products from place of typical usage for recapturing value or any other disposal (Genchev 2009; Daugherty *et al.*, 2005; Hazen *et al.*, 2014).

There is difficult to define exact list of RL activities. Abdullah, Yaakub (2014) mention main groups of activities which are considered in RL. These groups are: (1) product returns, (2) disposition, (3) green manufacturing, (4) recycle, (5) refurbishing, (6) landfill, (7) salvage, (8) remanufacturing. Similar groups of RL activities are described by Nikolaidis (2013). However, he defines only seven groups in different way: (1) landfilling, (2) recycling, (3) cannibalization, (4) remanufacturing, (5) refurbishing, (6) repairing, (7) direct reuse or resale. Appropriate connection of logistics and marketing should be crucial for company.

Klapalová, Škapa, Krčál (2012) define RL activities according to different reasons of their creation. These reasons depend on the characteristics of used materials. There are three positions:

1. Productive reverse flows consist wasters in production, overproduction or offshoots.
2. Distributive flows are in processes of transportation and manipulation inside and outside the companies.
3. As customers' flows there is possible to accept returned products in the end of life cycle or according to the contract, reclaimed products or products for repair.

Final consumers begin to look forward products with correct production such bio-production or green labelling (Tomek, Vávrová, 2011). According to requirements of green supply-chain management, Hervani *et al.* (2005) define as the most significant RL activities (1) reuse, (2) remanufacturing, (3) recycling. Green corporate activities (e.g. production, marketing) are very important from point of view of sustainability. Green marketing as part of RL is focused on bio-products, low operational costs and products of biodegradable waste (Holanda, Francisco, 2013; Dahlstrom, 2011).

By using information of technology development in marketing campaigns, sellers want to increase own income (especially for electronic products). These products have high influence of innovation cycle (Lebreton, Tuma, 2006; Hsueh, 2011; Khor *et al.*, 2016). Customers still require new products to replace old ones, and they are more interesting in alternative of landfilling. Almost all products need more natural re-sources and energy to make new ones. Electronic devices have become distinguished because of the low life cycle and non-friendly wastes (Gan *et al.*, 2015; Kochan *et al.*, 2016).

RL itself has become part of sustainable industrial marketing because of the necessity of destroying of packaging and the rest of used materials. Main problem could be how these materials would be collected from the customers to applying RL activities. Therefore, there are compare both economic and ecological aspects of possible processing (El Korchi, Miller, 2011; Lee, Lam, 2012).

As way of making competitiveness, companies must focus on long-time period from marketing perspective. Complex manufacturing process need to be innovated in various ways – improving or changing technology of production, changing used material and others. They need to do production strategy in cooperation marketing strategy (O’Leary-Kelly, Flores, 2002). Present trend for consumer products is Eco-friendly categorization, what means, that the products are dissoluble in nature by common ways. Perception of marketing campaigns includes many differences, especially from demographic point of view.

The reason for this difference could come out mainly from demographic variables (Toppinen *et al.*, 2013): (1) female consumers are more interested in both expressive and functional aspects than males; (2) people with higher income pay more attention to functionalities, ease of use, and quality; (3) people with higher education put less significance to symbolic aspects in purchasing. One of the most important perspectives is gender on which many campaigns focus on (Costa *et al.*, 2001; Rahmani, Lavasani, 2012; He, Wong, 2011; Ambrozová, Pokorný, 2012). All demographic factors impact corporate marketing activities, mainly in connection with launching new products, for which have become defined basic market segments with possible high income.

Using alternative ways of marketing communication, experiential marketing is part of corporate marketing strategy. Smilansky (2009) defined experiential marketing as “a process of identifying, satisfying customer needs and aspirations, profitably, by engaging them through two-way communications that bring brand personalities to life and add value to the target audience”. The author added that experiential marketing is an integrated methodology and its marketing campaign is built around one big idea involving two-way communication between the target audience and the brand, therefore creates its core, a live brand experience (Smilansky, 2009).

Internet age gives to marketing communication new way of using to distribute opinions, comments, discussion and other interaction included in blogs and forums. Expected progress is based on development of online channels to have influence on consumers purchase decisions (O’Reilly, Marx, 2011; Procter, Richards, 2002; Ahuja *et al.*, 2007).

Campaigns within implemented experiential campaigns, illustrate interesting crispening in the communication field. The main goal of these marketing campaigns is to increase customer awareness and interest about product and brands. Campaigns

which are created with principles of guerrilla marketing, must be diversified between sharp practice to collecting information own marketing communication (Roy, Chattopadhyay, 2009; Milne, Bahl, Rohm, 2008).

Schmitt (1999) and Alkilani, Ling, Abzakh (2013) propose the concept of strategic experiential modules that aims to help the marketers to create alternative types of customer experiences. The experiential modules managed by the experiential marketing include: sensory experiences (sense); affective experiences (feel); creative cognitive experiences (think); physical experiences, behaviours and lifestyles (act) and social-identity experiences that result from relating to a reference group or culture (relate). Schmitt (1999) and Smilansky (2009) add that the purpose of experiential marketing is to create holistically integrated experiences that possess, at the same time, sense, feel, think, act and relate qualities. Lee, Hsiao, Yang (2011) mention that experiential marketing can be related to the customer satisfaction.

2. Methodology

The main aim of this paper is to identify level of influence of reverse logistics’ activities in connection with marketing communication in Czech business environment. Main hypothesis is that there is dependence between in marketing communication activities and their performance in connection with reverse logistics. Reverse logistics has becomes very important part for decision making process of purchasing.

Sample was created by 1266 consumers that were chosen in random way. There were returned questionnaires from 585 respondents (effectiveness was 46,21%). Own research survey has been executed during 2015.

To process the results of the questionnaire survey were used basic types of descriptive statistics on the selected data set. The data were processed by using the statistical program IBM SPSS Statistics 22, which was subsequently analysed the dependency between the two nominal variables by means of contingency tables and Pearson’s chi-squared test.

3. Results

Analysis of descriptive statistics show according to responses provided by respondents that customers are looking mainly for product care such warranty

and packaging care. Based on the analysis of descriptive statistical characteristics of the sample (Mean, Median, and Values of Variability), conclusions will be presented merely as an explorative result limited by the resultant reliability. The conclusions provide characteristics of the limitations of research and its potential further direction.

The individual responses on dependency of reverse logistics and marketing communication are recorded in pivot table (see Table 2). Pivot table itself provides information, which activity of RL is the most influenced in which marketing communication

tool. Due the aim of the paper, an analysis of dependency of variables was carried out only between performance in marketing field and reverse logistics activities. In order to establish the dependency test, statistical testing using Pearson chi-square test was used.

For purpose of the paper there is necessary to design, what kind of marketing communication tool has impact on customer perception. According to IT development, it is obvious that the most important communication group has become experiential marketing communication.

Table 2. Pivot table of reverse logistics activities with promotion message and marketing communication tools.

		Reverse logistics activities in purchasing						Total
		Recycling	Forwarding to sellers	Other purposes	Municipal waste	Disposal by self help	Other	
Promotion message vs product care		146	38	121	227	26	27	585
Promotion message vs package care		152	68	159	107	56	32	584
Experiential marketing communication	Events at the point of sale	48	6	48	48	6	5	161
	Street Marketing	36	5	7	12	6	8	74
	Viral marketing	18	5	7	54	5	6	95
	Events based on play-fullness	36	12	60	90	6	6	210
	Guerrilla marketing	5	6	5	18	6	5	45

Source: own work.

Table 3. Pearson's test of relationships between individual variables (within impact of promotion message).

	Package care		Product care	
	Value	Asymp. Sig. (2-sided)	Value	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.310	0.362	22.069	0.229
Likelihood Ratio	17.232	0.305	14.830	0.674
Linear-by-Linear Association	0.295	0.587	0.122	0.727
Nominal by Nominal / Contingency Coefficient	0.401		0.456	

Source: own work.

Table 4. Pearson's test of relationships between individual variables (within experiential marketing).

	Package care		Product care	
	Value	Asymp. Sig. (2-sided)	Value	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.254	0.041	15.709	0.898
Likelihood Ratio	34.017	0.026	19.643	0.717
Linear-by-Linear Association	3.138	0.077	1.870	0.171
Nominal by Nominal / Contingency Coefficient	0.524		0.397	

Source: own work.

According to theoretical background there were designed questions in questionnaire survey. All RL activities are used for both of products and packaging. From point of view of marketing communication campaigns there were chosen these kinds, which have become topical because of the increasing internet tools.

During a further analysis, an analysis of dependency of variables was carried out – influences of RL activities within experiential marketing campaigns and impact of promotion message. In order to establish the dependency test, statistical testing using chi-square test was used.

The results of the dependency test are provided in Table 3 and Table 4 which examines the dependency between reverse logistics and marketing communication. The results of the dependency examination in individual variable categories are depicted in the following results of Pearson's chi-square test.

Maintaining the % reliability of the tests, there were compared the established values with 0.05 level, which represents a 5% reliability level. There was gained only one value, which suits designed limit – dependency between package care and experiential marketing. The established value of alpha was $\alpha=0.041$ (less than 0.05), which brings the conclusion that an alternative hypothesis applies – there is a dependency between for the variables experiential marketing and product care.

The rest relations (promotion message and package care; promotion message and product care; experiential marketing and product care) reach values over minimal limits. Therefore, there are not explicit result that there are dependency between them.

4. Discussion

Observed results showed that there is a relationship between experiential marketing and product care. Subsequently, the degree of such dependency was examined. To that end, the intensity of dependency determined by means of contingency coefficient as per formula (1) was used.

$$C_p = \sqrt{\frac{\chi_p^2}{\chi_p^2 + n}}, \quad (1)$$

where:

C_p is contingency coefficient,
 n represents number of cases,
 \bar{v} equals the average variance,
 χ_p^2 is Pearson's chi square test.

The intensity of dependency ranges between $<0; 1>$. That means that the higher the absolute

value, the greater the intensity of dependency. The value 0.524 means that the intensity inclines to be rather strong.

Respondents used scale from 0 as the lowest to 10 as the highest value. Final customers are mostly influenced throughout the sales promotion as representative of traditional communication tools (mean 6,36). From experiential communication tools there could be marked advergaming campaigns such the best one (accepted in 40% of cases). Second communication tool has become events in place of purpose (accepted in 30,6% of cases). Advergaming has become kind of marketing tool, which transfer message to customer and trying to change his/her behaviour (Mráček, Mucha, 2011).

From point of view of individual RL activities final customers produce mainly municipal waste instead of reusing or recycling (43,53% of all RL activities). Recycling process has been reached second place within (28,24%).

5. Conclusions

Because of the source rarity there is necessary to find another material source. From point of view of new materials there exist only two ways: (1) developing new materials, or (2) reusing. Reusing of wasted material or old products has become important field in each production company. Present final consumers change own minds and focus on recycling and reusing activities (Holanda, Francisco, 2013).

It is obvious that main problem is to refer about RL to final consumers and offer to them the possibility for returning of products, wastes or packages. Therefore, tools of marketing communication represent key corporate field to realize. Key aim of each company is to move own customers to highest customer's levels (partner, advocate) because of the biggest added value. There is growing trend of customers, which are interested in RL activities. Another reason for this trend could be increasing amount of garbage, produced by households and of course by companies, within higher significance in product/service offer (Ferrer, Whybark, 2000).

If customers could purchase new product with additional service of reverse activities, they would like to be satisfied. Therefore, they look forward these reverse activities. Unfortunately, companies have to insert to own offer these services (Hazen *et al.*, 2014; Bellingkrodt, Wallenburg, 2015).

The main objective of the article is to identify connection between RL activity and marketing communication tools with relevant impact on customer's

decision making process. This connection was found between experiential marketing tools and package care with the data, gained from primary research. According the results of Pearson's chi-square test, there is conclusion that exist dependence between experiential marketing and package care (value

0,041). Intensity of this dependence is 0,524 which mean that the intensity inclines to be medium. Consumers' perception of realized marketing campaigns should be impacted by gender, possible location, individual habits and social and mental fields (Barkley, Gabriel, 2007; Pavlova, 2009).

References

- Abdullah, N. H. N., Yaakub, S. (2014). Reverse Logistics: Pressure for Adoption and the Impact on Firm's Performance. *International Journal of Business and Society*, 15(1), pp. 151–170.
- Ahuja, R. D., Michels, T. A., Walker, M. M., Weissbuch, M. (2007). Teen perceptions of disclosure in buzz marketing. *Journal of Consumer Marketing*, 24(3), pp. 151–159. DOI: 10.1108/07363760710746157.
- Alkilani, K., Ling, K. C., Abzakh, A. A. (2013). The Impact of Experiential Marketing and Customer Satisfaction on Customer Commitment in the World of Social Networks. *Asian Social Science*, 9(1), pp. 262–270. DOI: 10.5539/ass.v9n1p262.
- Altuntas, C., Tuna, O. (2013). Greening Logistics Centers: The Evolution of Industrial Buying Criteria Towards Green. *The Asian Journal of Shipping and Logistics*, 29(1), pp. 59–80.
- Ambrozová, E., Pokorný, V. (2012). Ke změnám v myšlení lidí v lidských systémech z hlediska managementu. *Scientia & Societas*, 8(3), pp. 139–152.
- Barkley, C. L., Gabriel, K. I. (2007). Sex Differences in Cue Perception in a Visual Scene: Investigation of Cue Type. *Behav Neuroscience*, 121(2), pp. 291–330.
- Bellingkrodt, S., Wallenburg, C. M. (2015). The role of customer relations for innovativeness and customer satisfaction. *The International Journal of Logistics Management*, 26(2), pp. 254–274. DOI: 10.1108/IJLM-06-2012-0038.
- Corbett, C., Klassen, R. (2006). Extending the horizons: environmental excellence as key to improving operations. *Manufacturing and Service Operations Management*, 8(1), pp. 5–22.
- Costa, P. J., Terracciano, A., McCrae, R. R. (2001). Gender Differences Personality Traits Across Cultures: Robust and Surprising Findings. *Journal of Personality and Social Psychology*, 81(2), pp. 322–331. DOI: 10.1037/0022-3514.81.2.322.
- Dahlstrom, R. (2011). *Green marketing management*. Mason: South-Western Cengage Learning, 235 p.
- Daugherty, P. J., Richey, R. G., Genchev, S. E., Chen, H. (2005). Reverse logistics: Superior Performance Through Focused Commitments to Information Technology. *Transportation Research Part E*, 41, pp. 77–92. DOI: 10.1016/j.tre.2004.04.002.
- El Korchi, A., Miller, D. (2011). Designing a Sustainable Reverse Logistics Channel: The 18 Generic Structures Framework. *Journal of Cleaner Production*, 19(6–7), pp. 588–597. DOI: 10.1016/j.jclepro.2010.11.013.
- Eurostat. (2015). *Generation of waste – Czech Republic*. Retrieved from: <http://appsso.eurostat.ec.europa.eu/nui/show.do>.
- Ferrer, G., Whybark, C. D. (2000). From Garbage to Goods: Successful Remanufacturing Systems and Skills. *Business Horizons*, 43(6), pp. 55–64.
- Gan, S. S., Pujawan, I. N., Suparno, Widodo, B. (2015). Pricing Decision Model for New and Remanufactured Short-life Cycle Products with Time-dependent Demand. *Operation Research Perspectives*, 2, pp. 1–12. DOI: 10.1016/j.orp.2014.11.001.
- Genchev, S. E. (2009). Reverse Logistics Program Design: A Company Study. *Business Horizons*, 52(3), pp. 139–148. DOI: 10.1016/j.bushor.2008.09.005.
- Giuntini, R., Gaudette, K. (2003). Remanufacturing: The Next Great Opportunity for Boosting US Productivity. *Business Horizons*, 46(6), pp. 41–48. DOI: 10.1016/S0007-6813(03)00087-9.
- Govindan, K., Soleiman, H., Kannan, D. (2015). Reverse Logistics and Closed-Loop Supply Chain: A Comprehensive Review to Explore the Future. *European Journal of Operational Research*, 240(3), pp. 603–626. DOI: 10.1016/j.ejor.2014.07.012.
- Guide, V., Van Wassenhove, L. N. (2002). The reverse supply chain. *Harvard Business Review*, 80(2), pp. 25–26.
- Hazen, B. T., Huscroft, J., Hall, D. J., Hanna, J. B. (2014). Reverse logistics information system success and the effect of motivation. *International Journal of Physical Distribution & Logistics Management*, 44(3), pp. 201–220. DOI: 10.1108/IJPDLM-11-2012-0329.
- He, W.-J., Wong, W.-C. (2011). Gender Differences in Creative Thinking Revisited: Findings from Analysis of Variability. *Personality and Individual Differences*, 51(7), pp. 807–811. DOI: 10.1016/j.paid.2011.06.027.
- Hervani, A. A., Helms, M. M., Sarkis, J. (2005). Performance Measurement for Green Supply Chain Management. *Benchmarking: An International Journal*, 12(4), pp. 330–353. DOI: 10.1108/14635770510609015.
- Holanda, L. C. M., Francisco, A. C. (2013). Consumer's Perception of the Products Made with

- Recycled Components: Case Study from the Course of Administration of the Faculty of Campina Grande – FAC. *Espacios*, 34(10), pp. 1–9.
- Hornungová, J., Klímková, M. (2013). The Relationship of Environmental and Economic Performance. *Scientia & Societas*, 9(4), pp. 207–217. ISSN 1801-7118.
- Hsueh, Ch.-F. (2011). An Inventory Control Model with Consideration of Remanufacturing and Product Life Cycle. *International Journal of Production Economics*, 133(2), pp. 645–652.
- Iannuzzi, A. (2012). *Greener products: The making and marketing of sustainable brands*. Boca Raton: CRC Press, 193 p.
- Khor, S. K., Udin, Z. M., Ramayah, T., Hazen, B. T. (2016). Reverse logistics in Malaysia: The contingent role of institutional pressure. *International Journal of Production Economics*, 175, pp. 96–108. DOI: 10.1016/j.ijpe.2016.01.020.
- Klapalová, A., Škapa, R., Krčál, M. (2012). *Specifikace řízení zpětných toků*. Brno: Masarykova univerzita, 132 p.
- Kochan, C. G., Pourreza, S., Tran, H., Prybutok, V. R. (2016). Determinants and logistics of e-waste recycling. *The International Journal of Logistics Management*, 27(1), pp. 52–70. DOI: 10.1108/IJLM-02-2014-0021.
- Lapré, M. A., Mukherjee, A. S. Van Wassenhove, L. N. (2000). Behind the learning curve: linking learning activities to waste reduction. *Management Science*, 46(5), pp. 597–611.
- Lebreton, B., Tuma, A. (2006). A Quantitative Approach to Assessing the Profitability of Car and Truck Tire Remanufacturing. *International Journal of Production Economics*, 104(2), pp. 639–652. DOI: 10.1016/j.ijpe.2004.11.010.
- Lee, C. K. M., Lam, J. S. L. (2012). Managing Reverse Logistics to Enhance Sustainability of Industrial Marketing. *Industrial Marketing Management*, 41(4), pp. 589–598. DOI: 10.1016/j.indmarman.2012.04.006.
- Lee, M. S., Hsiao, H. D., Yang, M. F. (2011). The study of the relationships among experiential marketing, service quality, customer satisfaction and customer loyalty. *The International Journal of Organizational Innovation*, 3(2), pp. 353–379.
- Milne, G. R., Bahl, S., Rohm, A. (2008). Toward a framework for assessing covert marketing practices. *Journal of Public Policy & Marketing*, 27(1), pp. 57–62. DOI: 10.1509/jppm.27.1.57.
- Mráček, P. Mucha, M. (2011). Advergaming: Application of knowledge in the process of the competitive advantage improvement. *Trendy ekonomiky a managementu*, 5(8), pp. 139–147.
- Nikolaidis, Y. (2013). *Quality management in Reverse Logistics: A Broad Look on Quality Issues and Their Interaction with Closed-Loop Supply Chain*. London: Springer.
- O’Leary-Kelly, S. W., Flores, B. E. (2002). The integration of manufacturing and marketing/ sales decisions: Impact on organizational performance. *Journal of Operational Management*, 20, pp. 221–240.
- O’Reilly, K., Marx, S. (2011). How young, technical consumers assess online WOM credibility. *Qualitative Market Research: An International Journal*, 14(4), pp. 330–359. DOI: 10.1108/13522751111163191.
- Pagell, M., Wu, Z. (2009). Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. *Journal of Supply Chain Management*, 45(2), pp. 37–56.
- Pavlova, M. (2009). Perception and Understanding of Intentions and Actions: Does Gender Matter? *Neuroscience Letters*, 449(2), pp. 133–136. DOI: 10.1016/j.neulet.2008.10.102.
- Pernica, P. (2005). *Logistika: Supply Chain Management*. Praha: Radix.
- Procter, J., Richards, M. (2002). Word-of-mouth marketing: beyond pester power. *Young Consumers: Insight and Ideas for Responsible Marketers*, 3(3), pp. 3–11. DOI: 10.1108/17473610210813484.
- Rahmani, S., Lavasani, M. G. (2012). Gender Differences in Five Factor Model of Personality and Sensation Seeking. *Procedia – Social and Behavioral Sciences*, 46, pp. 2906–2911. DOI: 10.1016/j.sbspro.2012.05.587.
- Roy, A., Chattopadhyay, S. P. (2009). Stealth marketing as a strategy. *Business Horizons*, 52(1), pp. 69–79. DOI: 10.1016/j.bushor.2009.09.004.
- Schmitt, B. (1999). *Experiential Marketing: How to Get Customers to Sense, Feel, Think, Act, Relate to Your Company and Brands*. New York: The Free Press.
- Smilansky, S. (2009). *Experiential marketing: A practical guide to interactive brand experiences*. 1st ed. London: Kogan Page.
- Toppinen, A., Toivonen, R., Valkeapää, A., Rämö, A.-K. (2013). Consumer Perceptions of Environmental and Social Sustainability of Wood Products in the Finnish Market. *Scandinavian Journal of Forest Research*, 28(8), pp. 775–783. DOI: 10.1080/02827581.2013.824021.
- Tomek, G., Vávrová, V. (2011). *Marketing: Od myšlenky k realizaci*. 3rd ed. Praha: Professional Publishing.
- Vincent, T. (2011). Multicriteria models for just-in-time scheduling. *International Journal of Production Research*, 49(11), pp. 3191–3209. DOI: 10.1080/00207541003733783.

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