

EMPIRICAL STUDY OF ONLINE REPUTATION MANAGEMENT OF ENTITIES IN THE FIELD OF SUPPLY AND DEMAND CHAIN IN SLOVAKIA

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Abstract

The COVID-19 pandemic has contributed to the fact that the issue of courier, delivery and shipping companies, or the entire logistics chain associated with online shopping, is viewed in a completely different way than it was before the pandemic crisis. Under the pressure of circumstances, more and more small and medium-sized businesses are starting to sell online. In online markets, they are starting to open online stores and invest in their own websites and mobile applications, thus reinforcing the already existing multi-channel trend. During the COVID-19 pandemic, courier, delivery, and shipping companies saw a massive increase in demand, which is also related to the fact that the larger the number of courier, delivery and shipping companies operating in the country, the more the companies must share total revenues of the sector. The paper deals with the issue of sustainable development of the corporate reputation of courier, delivery, and shipping companies in Slovakia, specifically their corporate reputation in the context of the online environment. The research sample consists of all 23 companies, belonging to the courier, delivery, and shipping companies and at the same time operating on the Slovak market. Their selection is made based on alphabetical order compiled by the Slovak online magazine Retailmagazin in the second half of 2021. Online reputation and online reputation management contribute to the development of responsible and sustainable business growth in the Internet, whereby improving perceived image it is possible to value their intangible assets. The findings identified from the sentiment analysis provide an up-to-date and relevant view of the issue of sustainable corporate reputation and at the same time provide a knowledge base for continuous research into the impact of the pandemic on supply chain management, as well as an empirical basis for applying knowledge to business practice.

Keywords: Corporate reputation, reputation management, competitiveness, supply and demand chain management, Slovakia

1. INTRODUCTION

One of the most important elements for service companies is their reputation [1]. Corporate reputation is often referred to as an intangible asset that brings many benefits or advantages that can build a business and move it forward or destroy it altogether [2]. These intangible assets therefore need to be valued. In this valuation process, continuous monitoring of the company's reputation is important to quickly identify potential threats to the company [3]. The company's reputation enables companies to gain their competitive advantages leading to sustainable performance and is therefore their most valuable asset [4]. In today's digital age, there are a large number of threats to corporate reputation, which are now exacerbated by the development of the Internet and social media [5].

2. LITERATURE REVIEW

The exponential growth in the importance of corporate reputation in the food industry has led to innovations within each link in its supply chain [6]. In the production of products and the provision of services in the environment of national economies, the creation of added value is an important factor in the transport sector [7]. Progressive digitization and scientific and technological development in almost all areas of life have led to the development of a new type of digital customer who has specific requirements for suppliers of goods and services and also has specific expectations from them [8], but it is also important to be aware that not all customers are able to give up the traditional way of shopping or the traditional perception of products and services [9]. At present, customers expect the product to be feasible both in terms of location and time, and that their orders will also be completed on time [10]. The shorter the order processing time, the more satisfied the customer is. As a result, the customer is then more likely to consider further purchases in the future [11]. Because the cost of acquiring a new customer is much higher than the cost of retaining an existing customer, customer care is considered highly valued [12]. We include the accuracy and quality of deliveries among the basic criteria of customer service [13]. Courier companies should pay attention to providing the highest possible standards of customer service. In today's economic reality, the main source of competition is a satisfied customer [14]. As part of their efforts to constantly improve the quality of their services, courier companies try to adapt the scope of their activities to the needs of individual customers [15]. Current competition challenges and threats have been an impetus for courier operators to facilitate the customer service quality management process by introducing a wider range of services as well as diversifying their operations [16]. The ongoing COVID-19 pandemic has affected global courier companies in a variety of ways. Customers were forced to look for alternative courier service providers because reputable brands in the market faced the challenge of keeping up with demand, resulting in long delays as well as poor customer service [17]. Physical distancing, business blocking and other restrictive measures have had the effect of accelerating growing trends in e-commerce. As consumers faced these global constraints related to the COVID-19 pandemic, Internet users began to shop online more frequently and order basic goods [18]. The Internet environment is thus an ideal environment for our empirical research, which we will address in the next part of our presented study.

3. MATERIALS AND METHODS

The main goal of the presented study is to provide an analytical view of the online reputation of courier, delivery, and shipping companies operating in the Slovak market, which is the basis of the initial research problem, and thus clarify how courier, delivery, and shipping companies are presented in the online environment. The research sample will consist of 23 courier, delivery, and shipping companies operating on the Slovak market according to the Slovak online magazine Retailmagazin.sk [19]. A simple sentiment analysis [20,21] will be chosen as the basic methodological tool for empirical analysis, which can be quantified according to sentiment, respectively, the polarity of the top ten search results of a particular entity in a Google search, the level of its online reputation. The subject's own name will be used as a search phrase, respectively, company name. Subsequently, the search results in each of the ten positions will be quantified based on the following key:

Table 1 Sentiment rating point scale

Sentiment/Position result	1	2	3	4	5	6	7	8	9	10
+										
Positive sentiment	20	19	18	17	16	15	14	13	12	11
x										
Company owned website	10	9	8	7	6	5	4	3	2	1
±										
Neutral sentiment	2	2	2	2	2	2	2	2	2	2
-										
Negative sentiment	-20	-19	-18	-17	-16	-15	-14	-13	-12	-11

Therefore, in order to minimize the adaptation, respectively, personalization of results, the mode of anonymous browsing during the search will be chosen, while only the results of the organic search will be quantified. Results marked as ads will not be considered. If there are more links to the test subject's own website within the search results, the second to n-th search results of this type will be attributed to neutral sentiment. The polarity of the result will be determined based on the data available from the search result link. The same procedure will be followed in the analysis of each of the evaluated entities, where a partial reputation indicator will be determined for each of the positions and in the next step the total value will be created from their sum. The aggregate value for each test subject will then be converted to a percentage. Each of the examined subjects will be able to reach the max. 155 points, which will be 100% in percentage terms, with one percent being 0.645 points. The ranking providing an overview of the mutual position of the tested subjects (SA score) will be compiled on the basis of the total percentage of online reputation.

4. RESULTS AND DISCUSSION

Based on the sentiment analysis, it was found that in the first positions in the search engine, the eighteen surveyed courier, delivery and delivery companies were the company's website. This fact can be caused by SEO optimization, which aims to optimize the company's website and thus achieve the first ranks in search. The second finding from the sentiment analysis is the neutrality of the contributions, which included a site such as Wikipedia, where no sentiment was recorded. The negativity of contributions can be justified by customers' dissatisfaction with the services provided by transport and logistics companies, whether it is, for example, communication and access of couriers when delivering shipments or misleading customers regarding the status and time of delivery of their shipments. Selected transport and logistics companies were subjected to a basic sentiment analysis. The following table shows the values of individual monitored indicators for each of the analyzed subjects as follows:

Table 2 Determination of sentiment results

Brand/Position result	1	2	3	4	5	6	7	8	9	10	Score SA (%)
Bistro.sk	10	2	18	2	16	2	2	13	2	2	44,52
Bolt Services SK s.r.o.	2	9	2	2	2	2	-14	2	2	2	7,1
Car Route s.r.o.	10	2	2	2	2	2	2	2	2	2	18,06
Cromwell a.s.	2	9	2	2	2	2	2	2	2	2	17,42
Cyklokuriér Švihaj Šuhaj s.r.o.	10	19	2	2	2	2	2	2	2	2	29,03
DHL Express (Slovakia), spol. s.r.o.	10	2	2	2	2	2	-14	2	2	2	7,74
DHL Parcel Slovensko spol. s.r.o.	10	2	2	2	2	2	2	2	2	2	18,06
Direct Parcel Distribution SK s.r.o.	10	2	2	2	2	2	2	2	2	2	18,06
DoDo Services Slovakia s.r.o.	2	9	2	2	2	2	2	2	2	2	17,42
Foodpanda	10	2	2	2	16	15	2	2	2	2	35,48
GEBRÜDER WEISS, s.r.o.	10	19	2	2	2	15	2	2	2	2	37,42
GLS General Logistics Systems Slovakia s.r.o.	10	2	2	-17	2	2	2	2	2	2	5,81
GO4, s.r.o.	10	2	18	2	2	2	2	2	2	2	28,39
IN TIME, s.r.o.	2	2	8	2	2	2	2	2	2	2	16,77
INSPEKTA SLOVAKIA, a.s.	10	2	2	2	2	2	2	2	-12	2	9,03
KOLOS s.r.o.	2	2	2	2	2	2	2	2	2	2	12,90
Packeta Slovakia s.r.o.	10	2	2	2	2	2	2	2	2	2	18,06
Red Post, s.r.o.	10	2	2	2	2	15	2	2	2	2	26,45
Slovak Parcel Service s.r.o.	10	2	2	2	-16	2	2	2	2	2	6,45

Slovenská pošta, a.s.	10	2	2	2	2	2	2	2	2	-11	9,68
Tatra Billing, a.s.	10	2	2	2	2	2	2	2	2	2	18,06
TNT Express Worldwide spol. s.r.o.	10	2	2	2	2	2	2	2	2	-11	9,68
Wolt Slovensko s.r.o.	10	2	-18	17	16	2	2	13	2	2	30,97

After determining the sentiment of each of the ten search engine results for each of the courier, delivery and shipping companies, the evaluation points were determined based on the sentiment rating point scale from **Table 1**. **Table 2** shows the final score. According to the sum of points, it is possible to determine the order of courier, delivery, and shipping companies: 1. Bistro.sk, 2. GEBRÜDER WEISS, s.r.o., 3. Foodpanda, 4. Wolt Slovensko s.r.o., 5. Cyklokuriér Švihaj Šuhaj s.r.o., 6. GO4, s.r.o., 7. Red Post, s.r.o., 8. Car Route s.r.o. together with DHL Parcel Slovensko spol. s.r.o., Direct Parcel Distribution SK s.r.o., Packeta Slovakia s.r.o. and Tatra Billing, a.s. with the same score, 9. Cromwell a.s. and DoDo Services Slovakia s.r.o. with the equal final number of points, 10. IN TIME, s.r.o., 11. KOLOS s.r.o., 12. Slovenská pošta, a.s. together with TNT Express Worldwide spol. Ltd. with the equal final number of points, 13. INSPEKTA SLOVAKIA, a.s., 14. DHL Express (Slovakia), spol. s.r.o., 15. Bolt Services SK s.r.o., 16. Slovak Parcel Service s.r.o. and 17. GLS General Logistics Systems Slovakia s.r.o ..

5. CONCLUSION

If an Internet user looking for information about a particular company does not encounter positive indicators of its reputation, this may ultimately affect its perception of the company as a whole. These are mainly potential customers who have no personal experience with the company so far, and those who form their opinions only based on information obtained from the online environment. Courier, delivery, and shipping companies should seek to limit negative publicity and work on their positive publicity by improving it, which can be achieved through an active online communication policy, such as disseminating positive information about the company through social networks or large reputable online newspaper. The best way to remove negative or neutral publicity from the top ten search results is to replace negative publicity with a well-thought-out marketing communication policy implemented in an online environment. The most effective model of comprehensive online reputation management is the focus on the dominant determinants of reputation, i.e., Google search results and active profile management on social networks, as confirmed by Sasko [22], who argues that active use of online reputation management tools can significantly facilitate businesses. communication with the public, to assist in obtaining and evaluating feedback from the public and in accelerating the implementation of measures related to crisis marketing communication.

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REFERENCES

- [1] ANGELINE, M., SAFITRI, Y., WIBOWO, D. Public Relations' Awareness of Corporate Reputation in Service Companies. *PERTANIKA JOURNAL OF SOCIAL SCIENCE AND HUMANITIES*. 2018, vol. 26, pp. 253-262.
- [2] BARUAH, L., PANDA, N. M. Measuring corporate reputation: a comprehensive model with enhanced objectivity. *ASIA-PACIFIC JOURNAL OF BUSINESS ADMINISTRATION*. 2020, vol. 12, no. 2, pp. 139-161.



- [3] POLLAK, F., DORCAK, P., MARKOVIC, P. Corporate Reputation of Family-Owned Businesses: Parent Companies vs. Their Brands. *INFORMATION*. 2021, vol. 12, no. 2. Available from: <https://doi.org/10.3390/info12020089>.
- [4] GHUSLAN, M. I., JAFFAR, R., SALEH, N.M., YAACOB, M. H. Corporate Governance and Corporate Reputation: The Role of Environmental and Social Reporting Quality. *SUSTAINABILITY*. 2021, vol. 13, no. 18. Available from: <https://doi.org/10.3390/su131810452>.
- [5] SZWAJCA, D. Dilemmas of Reputation Risk Management: Theoretical Study. *CORPORATE REPUTATION REVIEW*. 2018, vol. 21, no. 4, pp. 165-178.
- [6] BALAKRISHNAN, J., FOROUDI, P. Does Corporate Reputation Matter? Role of Social Media in Consumer Intention to Purchase Innovative Food Product. *CORPORATE REPUTATION REVIEW*. 2020, vol. 23, no. 3, pp. 181-200.
- [7] KOSTIUK, Y., KOHUTOVA, V., STRAKOVA, J., KOLEDA, N. Added value in the transport sector at the time before COVID-19 pandemic: A comparison of the EU countries. *ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES*. 2021, vol. 9, no. 2, pp. 303-315.
- [8] SZWAJCA, D. Digital Customer As A Creator Of The Reputation Of Modern Companies. *FOUNDATIONS OF MANAGEMENT*. 2019, vol. 11, no. 1, pp. 255-266.
- [9] STEFKO, R., DORCAK, P., POLLAK, F. Shopping on the internet from the point of view of customers. *POLISH JOURNAL OF MANAGEMENT STUDIES*. 2011, vol. 4, pp. 214-222.
- [10] SHAH, P. Managing customer reactions to brand deletion in B2B and B2C contexts. *JOURNAL OF RETAILING AND CONSUMER SERVICES*. 2020, vol. 57. Available from: <https://doi.org/10.1016/j.jretconser.2020.102223>.
- [11] NADEEM, W., KHANI, A. H., SCHULTZ, C. D., ADAM, N. A., ATTAR, R. W., HAJLI, N. How social presence drives commitment and loyalty with online brand communities? The role of social commerce trust. *JOURNAL OF RETAILING AND CONSUMER SERVICES*. 2020, vol. 55, 102136.
- [12] SONG, P., ZHENG, C., ZHANG, C., YU, X. Data analytics and firm performance: An empirical study in an online B2C platform. *INFORMATION & MANAGEMENT*. 2018, vol. 55, no. 5, pp. 633-642.
- [13] LIANG, C. C., LIANG, W. Y., TSENG, T. L. Evaluation of intelligent agents in consumer-to-business e-Commerce. *COMPUTER STANDARDS & INTERFACES*. 2019, vol. 65, pp. 122-131.
- [14] MARCYSIAK, A. Customer service quality management on the courier services market. *ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES*. 2021, vol. 9, no. 1, pp. 190-203.
- [15] LOU, Y., FENG, L., HE, S., HE, Z., ZHAO, X. Logistics service outsourcing choices in a retailer-led supply chain. *TRANSPORTATION RESEARCH PART E-LOGISTICS AND TRANSPORTATION REVIEW*. 2020, vol. 141, Available from: <https://doi.org/10.1016/j.tre.2020.101944>.
- [16] LIU, Y., FOSCHT, T., EISINGERICH, A. B., TSAI, H. T. Strategic management of product and brand extensions: Extending corporate brands in B2B vs. B2C markets. *INDUSTRIAL MARKETING MANAGEMENT*. 2018, vol. 71, pp. 147-159.
- [17] SAKAS, D. P., KAMPEROS, I. D. G., REKLITIS, P. Estimating Risk Perception Effects on Courier Companies' Online Customer Behavior during a Crisis, Using Crowdsourced Data. *SUSTAINABILITY*. 2021, vol. 13, no. 22, Available from: <https://doi.org/10.3390/su132212725>.
- [18] GULC, A. Multi-stakeholder perspective of courier service quality in B2C e-commerce. *PLOS ONE*. 2021, vol. 16, no. 5. Available from: <https://doi.org/10.1371/journal.pone.0251728>.
- [19] TURZO, J. *Aké kuriérske spoločnosti pôsobia na Slovensku?* [online]. 2021 [viewed: 2021-10-07]. Available from: <https://www.retailmagazin.sk/logistika/preprava/5797-ake-kurieske-spolocnosti-posobia-na-slovensku>.
- [20] POLLÁK, F. *On-line reputačný manažment v podmienkach stredoeurópskeho virtuálneho trhu*. Prešov: Bookman, 2015.
- [21] POLLAK, F., DORCAK, P., MARKOVIC, P. Corporate Reputation of Family-Owned Businesses: Parent Companies vs. Their Brands. *INFORMATION*. 2021, vol. 12, no. 2. Available from: <https://doi.org/10.3390/info12020089>.
- [22] SASKO, J. *Dbáte na hodnotu svojej značky? Online reputačný manažment*. [online]. 2014 [viewed: 2014-06-09]. Available from: <https://www.podnikajte.sk/marketing/online-reputacny-manazment>.