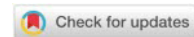


SOCIAL MEDIA AND AUDIT FIRMS: IS SOCIAL MEDIA PRESENCE CORRELATED WITH BETTER FINANCIAL RESULTS?

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Abstract: The omnipresence of social media has significantly influenced and shaped contemporary businesses. Online presence has become one of the main prerequisites for survival and success of companies in a dynamic and competitive environment. Digital presence and image of a company in online marketplace has become much more important than ever before. The aforementioned was especially pronounced during the COVID-19 pandemic when the period was marked by social distancing of people in their physical environment. Interestingly, social distancing ultimately led to the increased use of the Internet in conducting everyday personal and professional activities. The purpose of this paper is twofold. First purpose is to investigate social media presence of audit firms in Serbia. The second purpose is to analyze correlation between the financial performance of audit firms and their social media metrics during the COVID-19 pandemic. The contribution of this paper is to investigate to what extent Serbian audit firms use social networks for promoting their consulting and auditing services, with the purpose of attracting new clients. Results show that audit firms that belong to international networks are significantly more present on social media, while approximately 80% of domestic audit firms in Serbia are not present on the observed social media platforms: Facebook, Instagram, and LinkedIn. Regarding profitability, results show that there is a high statistically significant correlation between EBITDA and observed metrics of LinkedIn and Instagram social networks.

Keywords: digital marketing, social media, audit firms, financial performance, the COVID 19 pandemic.

Field: Social Sciences, and Humanities

1. INTRODUCTION

The conduct of contemporary businesses has been significantly transformed by the development of Internet based technologies. The increased implementation of such technologies in business has contributed to the improvement of numerous aspects of a company. The main improvements relate to rationalization of resources of a company such as cost savings, time compression, saving energy and labor, etc.

The spread of the COVID-19 pandemic in 2019 and 2020, had made a profound impact on global economies. Companies had to find ways to survive and continue with their development regardless the crisis they faced. Given the required social distancing and reduced mobility during the lockdown, a vast number of companies shifted their offline business to online. The capability of companies to quickly react and shift their business online became one of the prerequisites of their survival in the market. According to (Forbes, 2022), following the initial operational problems and challenges posed by the pandemic it is pointed out that world market organizations have focused their attention on the pandemic's effects on their business in the medium and long run. In 2020 numerous audit and consulting companies kept making predictions in their reports on the businesses that were likely to progress, fail, or stagnate.

According to EY Serbia (2020) businesses that were expected to make progress included e-commerce, telecommunications, information technologies, and pharmaceuticals. Businesses that were expected to stagnate included the food industry, agriculture, consulting, energy providers, public utility services, finance services, and real estate. Some of the businesses that were expected to regress and fail included tourism and hospitality, customer service, entertainment industry, retailing, and car industry. Companies that managed to quickly incorporate Internet based technologies in their business online were able to grow and succeed in the marketplace.

The significance of doing business online during the COVID-19 pandemic can be more closely observed from the aspect of customers, both final and industrial. Undergoing a lockdown encompassed stay-at-home orders, quarantines, and societal restrictions, which resulted in introducing shorter work hours, and working and running a business from home. All that affected change in both habits of individual and business customers. Individual customers changed the way they buy and use products and services,

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including those coming from audit and consulting firms.

Social networks are part of digital media and have become leading platforms for communication in digital marketing. They enable quick and easy communication and business exchange among companies, as well as among companies and their individual customers. Among the most popular social networks that have grown during past years. In past years Facebook, Instagram, Twitter, Youtube, Snapchat, and TikTok (We are social, Hootsuite, 2022) have become the most popular social networks, increasing their presence in both personal and professional communication.

This paper's contribution is to examine the extent to which Serbian audit firms use social networks for promoting their consulting and auditing services, with the purpose of attracting new clients.

The contribution of this paper is to investigate to what extent Serbian audit firms use social networks for promoting their consulting and auditing services, with the purpose of attracting new clients. Our assumption is that conducting such activities would correlate with their profitability.

Marketing concept was significantly changed with the introduction of the Internet in business and communication. In order to keep up with the growing digital audience, traditional media had to adapt to that big change (Milić, 2020). In the era of digital marketing dominance, companies are expected to accept and build their presence on social media. That would help them become more efficient in achieving their goals and help them build their image and credibility. In that sense, Internet marketing is a very important business concept and innovation which provides numerous benefits to both businesses and their customers (Šarac, Jevremović, & Radovanović, 2015, pp. 2).

The Internet revolution is a result of information technology's quick development which has a significant impact today. (Mirković, 2022) It is important to point out that social media offers a vast variety of functions and activities for communication and running business (Baltezarević, Milutinović, Baltezarević, & Baltezarević, 2020). According to Raquel Meyer and Gentry (2014) one of the biggest advantages social media offer to companies is getting directly in touch with their stakeholders. This characteristic of social media use is visible in contemporary marketplaces. Some of the significant advantages from social media are the opportunities for businesses to interact directly with investors, customers, suppliers, and other stakeholders and facilitate a worldwide dialogue between stakeholders. According to Aichner et al. (2021) the most important applications of social media include conducting business activities, communicating and socializing with friends and family members, job seeking and professional networking. The abovementioned speaks in favor of the positive influence of social media use on both companies and individuals.

When it comes to auditing, its purpose is to seek an opinion on the reliability of the financial statements of business entities. The most important part of audit report is opinion which auditor uses express his opinion whether financial statements accurately reflect financial position and results and changes in all significantly relevant items of assets, equity, and liabilities (Zekić, 2014). In audit firms social media use can be aimed at building brand awareness, promotion, knowledge sharing, recruitment, and socialization. (Lodhia, Stone, & Parker) There is an evidence that Big 4 audit firms use Facebook and Twitter more often than second-tier firms. (Exchenbrenner, Fui-Hoon Nah, & Telaprolu, 2015). While Big 4 firms use both Facebook and Twitter for knowledge sharing, second-tier firms use Facebook for recruitment and socializing, and Twitter for brand awareness and promotion.

When it comes to recruitment as one of the achievements of social media, research results show that only Big 4 firms could use social media solely as a recruitment channel while second-tier firms are in a need of traditional means of recruitment aside social media (Meilak, 2019). Although there is a clear benefit from using social media, research results show that audit firms usually do not have specified social media plan and most of the time social media is not prioritised (Dundra, 2017). Finally, a research on 63 South Korean firms and their communication with Facebook users on business pages showed that positive messages of followers are not significantly correlated with financial returns. However, negative post comments were proved to be associated with firms' performance (Chung, Animesh, Han, & Pinsonneault, 2020).

2.MATERIALS AND METHODS

For the purpose of this research, we collected data on audit firms that run their business in the Republic of Serbia. Audit Firms Register is accessible on the official web site of Chamber of Authorized Auditors (Komora ovlašćenih revizora, 2021). In our analysis we included all of 74 companies that were active in the period of our research. Audit firms' identification numbers were obtained from Audit Firms Register accessible on the official web site of Chamber of Authorized Auditors. Financial reports of the

audit firms were obtained from the official web site of the Business Registers Agency (BRA). Based on data we calculated selected financial indicators, mostly used in similar studies focused on profitability analysis. The financial indicators are as follows: Revenue Margin; Earnings before Interest, Taxes, Depreciation and Amortisation (EBITDA); EBITDA Margin; Gross Margin; Net Margin; Return on Assets; and Return on Equity.

We observed social network activity of audit firms in several categories. For the purpose of our study, we observed activity of audit firms in Serbia on three social networks – Facebook, Instagram i LinkedIn. These social networks were picked based on previous literature review, and the number of active social media users. According to a study (We are social, Hootsuite, 2022) Facebook and Instagram are among top five world most used social platforms. LinkedIn was chosen as a network with the purpose of connecting business users.

In order to make our results clearer for interpretation, we provide categories observed while analyzing each of the three social networks:

- Facebook – we analyzed if each audit firm had its Facebook page, number of page likes, and the number of individual posts released per month during the study period;
- Instagram – we analyzed if each audit firm had its Instagram profile, number of followers, and the number of individual posts released per month during the study period;
- LinkedIn – we analyzed if each audit firm had its LinkedIn profile, and if they had any activity regarding posts released during the study period. Because of the specific image of the contents displayed on this social network, we were not able to determine the precise number of individual posts per month. Thus, we decided to observe only the existence of activity of audit firms on this social network.

Regarding audit firms that are part of an international network of audit firms, authors included in analysis only social media profiles made for running business in the Republic of Serbia, and not those made for running business internationally.

One of research categories was also the analysis of whether each audit firm had its website. Out of 74 observed audit firms, only 11 companies did not have a web site (14.6%).

3.RESULTS AND DISCUSSIONS

Based on the abovementioned methodology, we conducted our research. The results showed that Facebook was the most popular social network among audit firms in Serbia, with 32% of the companies using it. Various studies and researches highlight that Facebook as the social network with the largest number of active users globally. (We are social, Hootsuite, 2022) LinkedIn was ranked second with 23%, while Instagram was the least popular with 16% of active audit firms.

It was noticed that the presence of audit firms on social networks was very low. Table 1 shows that only 8% (6 companies) had open accounts on all three social networks, while as much as app. 58% (43 companies) did not have created profiles on any of the observed social networks.

Tabela 1. Social media presence of Serbian audit firms

Social networks	All	Big 4	International	Domestic
All three	6 (8.1%)	2	3	0
Two out of three	10 (13.51%)	1	8	1
One out of three	15 (20.27%)	1	5	9
None	43 (58.1%)	0	3	41
Total	74 (100%)	4	19	51

Source: Authors' Data

Contrary to expectations, only KPMG and PWC of all Big 4 audit firms had created profiles for conducting their business in Serbia on all three social networks. Surprisingly, the remaining 4 firms with profiles on all networks belong to international network of audit firms. None of the observed domestic audit firms had profiles on all three social networks, while most of them (80%) did not have social media presence on observed networks.

In contrary to social media results, analysis whether observed entities had company websites

showed different results. As much as 85% of observed audit firms had ongoing websites. It can be assumed that audit firms in Serbia have not yet recognized the significance and potentials of social networks for their existence and building their business position.

We supported our research with the analysis of social media posts. For observed audit firms that had created accounts on Facebook and Instagram, we pulled up the total number of posts per month, for the period 2019/2020. In the case of LinkedIn, visibility limitations prevented us from getting the exact date of the post. Therefore, we observed only the presence of activity of companies during 2019 and 2020. The percentage of posts increased from the year 2019 to 2020, with 22% with Facebook, and 63 % with Instagram. One of the possible explanations for such an increase in number of posts in 2020, can be the shift from offline to online business due to the restrictions introduced with the COVID-19 pandemic.

Results of descriptive statistics of observed variables show that the average number of Facebook followers was approximately 64,771 while Instagram had on average 465 followers. LinkedIn average number of users was 919 with 5,948 of users as the highest number. When it comes to financial indicators, results indicate that the average Net Margin of observed firms was 5.75% while Gross Margin equals 6.05%. It can be concluded that audit firms in Serbia on average achieve extraordinary results having in mind that median value of average Net Margin of companies from other industries is close to 1% (Mizdraković, et al., 2020).

Following table shows results of correlation analysis between collected social media data and calculated financial indicators. It can be noticed that there is a statistically significant and very strong correlation between the values of EBITDA and number of LinkedIn users.

Table 2. Pearson's Correlation results of association of social media metrics and financial indicators of selected audit firms

	LinkedIn users	Facebook Profile	Facebook Likes	Facebook Followers	Instagram Profile	Instagram Followers	Revenue Margin	EBITDA	EBITDA Margin	Gross Margin	Net Margin	ROA	ROE
LinkedIn Profile	.450**	.445**	-.063	-.062	.283*	.341**	-.051	.426**	.003	.022	-.006	.042	.042
	.000	.000	.597	.597	.015	0.003	.665	.000	.977	.852	.959	.724	.724
LinkedIn Users		.346**	-.026	-.026	.488**	.784**	-.013	.863**	-.018	-.013	.009	.011	.011
		.003	.828	.829	.000	.000	.916	.000	.882	.916	.938	.927	.927
Facebook Profile			.170	.171	.478**	.453**	.080	.346**	.066	.084	.086	.088	.088
			.146	.146	.000	.000	.500	.003	.579	.476	.468	.457	.457
Facebook Likes				1.000**	.268*	.450**	.036	-.184	-.055	-.009	.006	.054	.054
				.000	.021	.000	.761	.116	.639	.942	.956	.648	.648
Facebook Followers					.268*	.450**	.036	-.184	-.055	-.009	.006	.054	.054
					.021	.000	.761	.116	.639	.942	.956	.648	.648
Instagram Profile						.743**	.069	.338**	.073	.085	.075	.051	.051
						.000	.560	.003	.535	.473	.527	.668	.668
Instagram Followers							-.021	.546**	-.046	-.016	.005	.020	.020
							.856	.000	.699	.895	.965	.867	.867

Source: Authors' calculations

Additionally, there are other quite strong positive correlations between observed profitability ratios and certain social media indicators, however they are not statistically significant.

4.CONCLUSIONS

The use and benefits of information technologies and social media in contemporary business is evident. However, social media presence of audit firms in the Republic of Serbia has not been, to our knowledge, documented so far. Research results that included all audit firms that operate in the Republic of Serbia, presented in this paper, suggest that domestic audit firms are yet to fully realize potential of social media presence. We found that every fifth domestic firm has a profile on one or two observed social media platforms, none of them have profiles on all three. On the other hand, almost 90% of firms that belong to international networks (including Big 4) have profile on at least one of the observed social networks, and five of them on all three (Facebook, Instagram, LinkedIn). Obviously, international firms have recognized positive impacts of social media on brand awareness, sociality, employee and client recruitment, and knowledge sharing. Previously mentioned ultimately lead to better financial results,

which has been proved by positive and very strong statistically significant correlation between EBITDA of observed social media metrics. Future research might be focused on the purpose of posts that audit firms place on social media platforms, as well as the nature of comments of users and audit firms' business returns.

REFERENCES

- Aichner, T., Grünfelder, M., Maurer, O., & Jegeni, D. (2021). Twenty-Five Years of Social Media: A Review of Social Media Applications and Definitions from 1994 to 2019. *Cyberpsychology, Behavior, and Social Networking*, 215-222.
- Baltezarević, B., Milutinović, O., Baltezarević, R., & Baltezarević, V. (2020). Digital storage and online mediated memory. *International Review*, 34-41.
- Chung, S., Animesh, A., Han, K., & Pinsonneault, A. (2020). Financial Returns to Firms' Communication Actions on Firm-Initiated Social Media: Evidence from Facebook Business Pages. *Information Systems Research*, 31(1). doi:<https://doi.org/10.1287/isre.2019.0884>
- Dundra, R. (2017). Accounting firms' use of social media platforms. Retrieved from University of KwaZulu-Natal: <https://researchspace.ukzn.ac.za/handle/10413/18099>
- Exchenbrenner, B., Fui-Hoon Nah, F., & Telaprolu, V. (2015). Efficacy of Social Media Utilization by Public Accounting Firms: Findings and Directions for Future Research. *Journal of Information Systems*, 29(2), pp. 5-21.
- EY Srbija. (2020). EY C19 Response. Izazovi primene IFRS 9, IFRS 13 i povezane bankarske regulative u domenu upravljanja rizicima u uslovima Covid19. EY Srbija.
- Facebook. (2021, September 03). Retrieved from Facebook: <https://about.facebook.com/>
- Forbes. (2022, February 02). Strategic Thinking In A Crisis. Retrieved from <https://www.forbes.com/sites/alliancembs/2020/05/28/strategic-thinking-in-a-crisis/?sh=2d39c7096be5>
- Komora ovlašćenih revizora. (2021, August 30). Retrieved from Komora ovlašćenih revizora: https://www.kor.rs/registri_preduzeca.asp
- Lodhia, S., Stone, G., & Parker, L. (n.d.). Strategising for social media: a public accounting practice perspective.
- Meilak, C. (2019). The effect of social media on the recruitment process in Maltese audit firms. Retrieved from L Universita Malta: <https://www.um.edu.mt/library/oar/handle/123456789/50218>
- Mijić, K., Milan, P., & Rupić, B. (2013). Istraživanje performansi sektora za pružanje revizorskih usluga u Republici Srbiji. *Ekonomski pogledi*, 101-114.
- Milić, N. (2020). Društvene mreže kao segment digitalnog marketinga u bankarstvu. *Trendovi u poslovanju*, 57-69.
- Mirković, D. (2022). THE IMPACT OF INSTAGRAM IN THE PROCESS OF IMPROVING ENGLISH VOCABULARY AT “C” LEVELS. *SCIENCE International Journal*, 1(1), 21–26. <https://doi.org/10.35120/sciencej010121d>
- Mizdraković, V., Stanić, N., Mitić, V., Obradović, A., Kljajić, M., Obradović, M., & Stanišić, N. (2020). Empirical data on financial and audit reports of Serbian business entities. *FINIZ Conference*, (str. 193 - 198).
- Raquel Meyer, A., & Gentry, J. K. (2014). Using social media to report financial results. *Business Horizons*, 161-167.
- Statista. (2021, september 03). Forecast of the number of LinkedIn users in the World from 2017 to 2025. Retrieved from Statista: <https://www.statista.com/forecasts/1147197/linkedin-users-in-the-world>
- Statista. (2021, September 03). Number of Instagram users worldwide from 2016 to 2023. Retrieved from Statista: <https://www.statista.com/statistics/183585/instagram-number-of-global-users/>
- Statista. (2021, September 03). Number of monthly active Facebook users worldwide as of 2nd quarter 2021. Retrieved from Statista: <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>
- Tajvidi, R., & Karami, A. (2017). The effect of social media on firm performance. *Computers in Human Behavior*.
- We are social, Hootsuite. (2022). Digital 2022. Retrieved from <https://wearesocial.com/uk/blog/2022/01/digital-2022-another-year-of-bumper-growth-2/>
- Zekić, M. (2015). Kontrola i revizije u javnom sektoru. *Akcionarstvo*, 23-33
- Živković, R. (2014). Ponašanje potrošača. Belgrade: Singidunum University.