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# BARRIERS TO SOCIAL MEDIA ADOPTION IN ROMANIAN CONSTRUCTION INDUSTRY

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Abstract: According to the latest Eurostat statistics, Romania ranks the 28th (last position) amongst all EU countries, in terms of using social media: only 9% of the Romanian enterprises are using two or more of the following channels: social networks, enterprise's blog or microblog, multimedia content sharing websites, wikibased knowledge-sharing tools. Social media is the least used in companies from the constructions industry: 34,7% of the companies in EU and 22,5% of the Romanian companies. In-depth interviews were conducted with managers at different construction sector view the rise of the Internet 2.0, what their level of social media understanding is and their perceptions of the benefits or drawbacks for their organization. The outcomes of this research show that reasons for avoiding the use of social media are nuanced and highly varied. A major finding points out that Romanian managers in the construction industry still consider the website as the central tool for communication with customers and the printed brochures for advertising their products and services. The lack of digital skills and the lack of personal use of social media are also indicators often mentioned during the interviews. The sample was limited to only one European country, Romania. Ideally, the study should be followed by new ones including more countries. Understanding why these Romanian companies are not using social media might be a starting point in understanding the similar situation in different European countries.

Keywords: social media; construction; digitalization; digital skills; Romania

#### **1. INTRODUCTION**

The spread of globalization and the impact this phenomenon has on the business environment determines companies to pay more attention to their external communication, especially in the online environment. Every big company has already integrated digital advertising elements into their corporate strategy.

Over the past years, the number of SMEs established across the European Union exceeded 25 million, which reinforces the role they play in economic growth, promoting innovation and lowering the unemployment rate through social integration. Therefore, regardless of the size of the business, it is crucial to have in place a digital transformation strategy to gain sustainable competitiveness and growth opportunities.

Most of the previous studies are focusing on how many European enterprises are integrating technology in their activities. However, there is less research focusing on why companies choose to implement digital communication strategies in industries that are known to be more conservative. The purpose of this study was to provide insights into the reasons why the Romanian companies in the field of constructions are considerably not using social media. Being less involved in the social media environment in both Romania and the European Union, the construction companies might have a relevant viewpoint on what should be changed to make the digitalization process more inclusive.

#### 2. THE USE OF SOCIAL MEDIA IN THE CONSTRUCTION INDUSTRY

The technological advancement and the use of the digital channels has impacted our lives in many ways. Studies throughout the past decade have proven the important role that digital promotion plays in the development of the company and during the acquisition process of new clients (Neubert, 2018; Brooksbank et al., 2003). Over the past years, there has been an effort in developing platforms and applications to make the Internet more accessible to end users and to adapt it to dayto-day activities. Hence, social media platforms like LinkedIn, Facebook, Twitter etc. started to develop. Researchers in this field are referring to social media as "the king of the Internet" due to the important role it plays in the world (Kumar and Devi, 2014).

The construction sector plays one of the most important roles in human society and it is a major component in today's economy. According to a document updated in 2019 by the European Construction Sector Observatory, the construction industry has 9% share of EU GDP and employs 18 million workers. This sector was estimated to develop through the digitalization and the use of commercial drones has been projected to create over 100.000 direct jobs by 2025. In Romania, the construction activity "was weak in 2017 and 2018, due to low public and private sector investments in construction projects, weak consumer and investor confidence and a reduction in fixed capital formation" (Globaldata, 2019). According to the study. the forecasts for Romanian same construction sector were positive in terms of infrastructure development and energy and utilities construction market.

As previously demonstrated, the construction industry is conservative, with "a low degree of innovation, and a low productivity" (Gjaltema, Vrijhoef & Laterveer, 2013). Some of the reasons why this happens were explored by researchers and they refer to the use of low-tech solutions and employment of low skilled workers. Similarly, there are researchers who argue that the challenge in brining innovation in the construction business circles is the conventional way of approaching day-to-day activities (Sidawi, 2012).

Different studies around the world have investigated best practices in construction companies (Plavina & Haase, 2013) and some of them highlighted the impact that social media has in building trust and boosting awareness even when talking about small businesses (Jones, Borgman & Ulusoy, 2015; Gilbert, 2011).

The potential rewards and risks associated with the use of social media in construction industry were researched by Azhar & Abeln (2014) in a quantitative analysis focused on the social media usage logs. They tracked 10 American constructions companies with social media presence and found out that most of the companies in the test group were using social media only as one-way communication tool for disseminating projects and company's news. The authors developed a second and third phase of the research for a better understanding of the impact of social media on recruitment, company branding, disseminating information and client networking. As the authors noted, the social media is far from becoming a mainstream communication tool in construction industry. The factors with a great impact are: security issues, privacy issues and the lack of understanding. In response to these finding, different groups started to educate the construction industry for an efficient use of social media platforms (DeVries, 2011).

The situation is similar worldwide, as a study conducted in Australia in 2014 revealed that 36% of the Australian businesses in construction field are not using social media to engage with their market. One interesting finding is that, even though 72% of the companies were aware that implementing a social media strategy is important, they didn't have the knowledge and expertise to create it and implement it (Trenchless International, 2014).

In the United Kingdom, Pauley (2014) argues that more than 50% of the companies have their website linked with social media channels in order to have a better perspective about their website traffic. However, the construction companies are not taking advantage for example of using WordPress, the easiest and most powerful blogging platform. As studies show, the most popular social media platforms implemented by companies in the construction industry are LinkedIn, Facebook and Twitter (Whiston Solutions, 2015). The key barriers identified by researchers in the UK include the age of the employees, the restricted Internet usage and the additional costs in developing and implementing a social media strategy. Also, their study reveals that some companies consider that social media channels benefit only big companies rather than small and medium-sized ones (Perrera, Victora and Brand, 2015).

# 3. THE USE OF SOCIAL MEDIA IN ROMANIAN COMPANIES

DESI (The Digital Economy and Society Index) is a composite index published yearly by the European Commission, from 2014 until present. It evaluates 5 dimensions (Connectivity, Human Capital, Use of Internet Services, Integration of Digital Technology and Digital Public Services) with different weight reflecting EU's digital policy priorities. Integration of Digital Technology is the dimension with a relatively high weight, 20%, and it captures the use of ICT (Information and communications technology) by the business sector. It has 2 sub-dimensions: Business digitalization and e-Commerce. The use of social media is an indicator for the first subdimension and the one that we are going to present in this chapter.

According to the latest DESI, Romania ranks the 28th (last position) amongst all EU countries, in terms of using social media.

The data published in DESI 2019 was collected between April and July 2019 and it used as a basis for sampling the Business Register updated in January 2019. In order to ensure representativeness, the Neyman allocation was used and the sample stratum was within each drawn without replacement. The sample size was 15.912 enterprises with an overall response rate of 97%.

The latest European reports evaluate the online presence of the companies and the results show that the most widely used categories of social media are: (a) social networks such as Facebook, LinkedIn and others (51%); (b) corporate blogs or microblogs (13%); (c) multimedia content-sharing websites such as YouTube, Instagram, Flickr, SlideShare, and others (21%); and (d) wiki-based knowledgesharing tools (5%). Amongst the EU enterprises using social networks, Malta ranks the 1<sup>st</sup> with 83% and Romania the last one with 32%. The use of corporate blogs or microblogs ranged between 33% in Ireland and 4% in Romania, Bulgaria and Hungary. The least popular network explored by the European research is the wiki-based knowledgesharing tools with the highest percentage in Austria (13%) and lowest in Iceland (1%).

Over time, from 2013 to 2019, the EU businesses using social media increased from 25% to 51%. In Romania, the percentage of companies using social networks almost doubled during this period, from 17% in 2013 to 32% in 2019. But only 9% of the Romanian enterprises are using two or more of the following channels: social networks, enterprise's blog or microblog, multimedia content sharing websites, wiki-based knowledge-sharing tools. Social media is the least used in companies from the construction industry: 34,7 % of the companies in EU and 22,5% of the Romanian companies.

This data is upheld by local studies that reveal the lack of knowledge and expertise of managers in building the digital business model (Valoria, 2018). As reflected in the study, the food & agriculture and construction industries are the least reached by digitalization in Romania.

#### 4. DESIGN OF RESEARCH

**4.1 Research question.** As proven in past studies, the use of social media network is low amongst construction companies in Romania and the EU. The research question of this study is therefore: "Why are the companies in the construction sector not using social networks and what are their barriers in implementing digital strategies?"

4.2 Research objectives and hypotheses. The aims of this study are twofold: (1) to better understand the reasons why companies in the construction field are not using social media to engage with their (potential) customers; (2) to reveal the managers' perspective about the digital presence of their companies. The hypothesis of this study is that Romanian managers from construction companies have low understanding of the social media networks and they fail to identify benefits of using them.

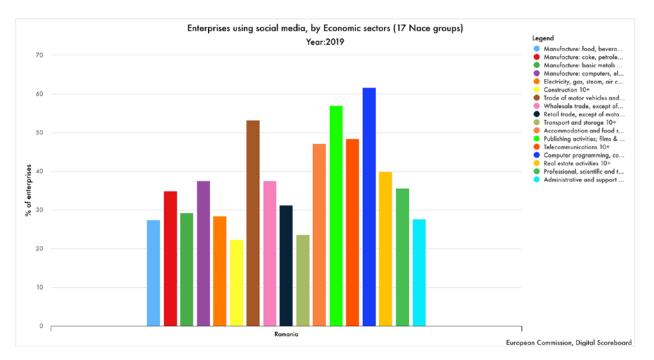


Fig. 1 The use of social media networks in Romania, by Economic sectors, European Commission

**4.3 Methodology.** In-depth interviews were conducted with managers employed by different construction companies in order to investigate digital and social media adoption. This research addresses how Romanian managers in the construction sector view the rise of the Internet 2.0, what is their level of social media understanding and what are their perceptions of the benefits or drawbacks for their organization. Semi-structured interviews were conducted with 9 managers and the answers were explored using qualitative content analysis.

Each interview lasted between 30 and 40 minutes and it was taped with the explicit permission of the participants. All interviews were transcribed and an English translation of the original transcript was made. Before all the documents were exported in Atlas.ti, they were cleaned by repeated words ("yes, yes"), or utterances ("uhm", "ihm"). After being edited, cleaned and prepared, the text documents were imported in Atlas.ti for coding and analysis.

All 9 managers were recruited from urban companies from construction sector from all major cities in Romania. The inclusion criteria were: middle or top management of a SMEs in construction field. The companies are based in 4 different cities in Romania: Bucharest, Cluj-Napoca, Constan and Iași. They develop activities in fields such as real estate, civil engineering and infrastructure. From a total of nine participants, one was female and eight were male.

# **5. RESULTS**

**5.1 Data analysis.** Data were analyzed using the Atlas.ti program. The main coding categories are included in the following themes: a) Current digital strategy of the company; b) Perceived benefits of using social networks in businesses; c) Perceived risks and barrier of using social media in businesses; d) Perceived advantages and disadvantages of using social media in construction industry. The coding families made the process easier by being based on the interview's questions.

**5.2 Results.** From all nine companies investigated, only one had a website. Four of them had social media profiles (only Facebook). A number of participants had clear difficulties in identifying or naming the social media channels used by their company: "I remember we had something, but I am not sure if it is still active", "I think we have a Facebook page, we should have". Only one of the participants was aware of a social

media or digital advertising strategy in place for the next period.

The analysis of the codes for the second theme revealed perceptions of individuals with low social media usage. In general, the interviewees do not associate social media with higher sales or customer reach. From their personal experience, participants tended to value social media networks only for entertainment or fun after work, but most of them could not identify any role of the digital advertisements in their own spending patterns. A favorable attitude towards implementing digital strategies was captured when talking about receiving any kind of external support: "Yes, if we could get any funds to learn how to do it, maybe we'd try", "we considered trying to find an intern for marketing activities".

The third theme analyzed exposed a nuanced and highly varied number of reasons for avoiding the use of social media in the business environment. Some of the Romanian managers in the construction industry still consider the website as the central tool for communication with customers and the printed brochures for advertising products and services in a productive manner. As typical professionals in this field, the participants consider themselves to be conservative and this leads to less drive to implement new technologies: "Our industry is focused on practical activities, not online ones. We don't find important or critical the use of Internet", "We don't look or find projects online."

Most of the participants lack expertise and knowledge for creating and implementing a digital strategy. They admit not being familiar with digital tools and measurements: "I would try, but I have no time to learn and to do it.", "No one has time to take care of pictures, texts and is not something very natural for any of us here." The lack of digital skills and the lack of personal use of social media are the two most often mentioned indicators during the interviews.

The fourth theme evaluated the perception of the advantages and disadvantages of using social media in the construction companies. Most of the interviewees consider that an online presence would be useful in order to promote the company's services:

The advantage of promoting the whole range of services is the cross-selling. Using multiple messages and channels would provide us a better visibility amongst the potential clients.

Also interesting is that the majority of the respondents consider that in their industry the best advertising strategy is word-of-mouth and recommendation so it will take more time until when the construction sector will take digital communication into account at a larger scale.

### 5. CONCLUSIONS & ACKNOWLEDGMENT

The results of this study are consistent with other findings in this field. The sample analyzed consist of different professionals in SMEs with a large variety of activities in the construction field: civil engineering, infrastructure, real estate management etc. Although some of the participants can understand and support the implementation of a social media strategy, this study reveals the lack of understanding and knowledge in the field of digital communication.

The sample was limited to only one European country, Romania. Ideally, the study should be followed by new ones including more countries. Understanding why these Romanian companies are not using social media might be a starting point in understanding the similar situation in different European countries.

**6.1 Limitations.** The present study has an explanatory purpose and it only tries to identify several new hypotheses for new studies. With a low number of participants, the results cannot be generalized and still require further investigation. The sample is neither random, nor fully representative for the whole small and medium enterprises in the construction field. The sample was deliberately formed of managers and professionals in the industry from big cities. Also, the sample contains more male than female participants.

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