

Business Social Network (BSN): Does the Business Escape from Reality Impossible?



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Abstract The chapter aims to define and analyze the preconditions for attending to the global business social networks (BSNs) and to discover attitudes of business managers for participation in open-source business social networks (BSNs). The data for analysis are found by deep interview techniques within Bulgarian business managers. The analysis is based on descriptive analysis of the levels of the business social networking's acceptance and statistical analysis of its dependence by some business demographic characteristics, e.g., size of business, type of city, and levels of management structure. The chapter adopts the BSN model which is the key for business success in the next Web 5.0 Society not just for the developed countries but also for the developing ones. In this context, the results of the empirical analysis help to understand the business attitude of managers to attend social business networking, particularly in Bulgaria. Three main pillars of social networking inclusion, trust, community, and information, are discussed. Furthermore, the smaller business is less ready to share business information because of less trust of the other businesses as well as marginalizing their role in the community. Not surprisingly, the findings explain the low participation in business networks of Bulgarian businesses and gives the main point of further development of the business models for developing countries—particularly in Bulgaria.

Keywords Social business network · Business digitalization · Web 5.0 · Industry 4.0

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1 Introduction

As the new information and communications technology (ICT) has developed too fast and the digitalization of the business passed through Internet 1.0 to Internet 5.0, and the real business has grown from Industry 2.0 to Industry 4.0, where are the boundaries (limits) of the business digitalization? The key point of the answer is up to transfer of the big data between different companies and individuals.

The development of world web technologies is passed from Web 1.0 in 1996 to Web 4.0 in 2018 and Web 5.0 in 2020 (expected). According to Berners-Lee and Fischetti (1999), Patel (2013), Benito-Osorio et al. (2013), Kujur and Chhetri (2015), Sindhu and Chezian (2016), Zlateva (2014, 2015), and Naik and Shivalingaiah (2008), the evolution of Internet could be summarized:

- Web 1.0: It is “read-only web” that is found by a small number of writers creating Internet pages for a large number of readers. Web 1.0 technologies include core web protocols: HTML, HTTP, and URL.
- Web 2.0: It is “read-write web” that is found by enlarging the number of writers for the large number of readers. Web 2.0 technologies include weblogs (blogs), social bookmarking, wikis, podcasts, RSS feeds, and web APIs.
- Web 3.0: It is “read-write-execute web” that transforms the Internet into a *global database*. Web 3.0 technologies include non-browser applications, artificial intelligence technologies, the semantic web technologies, the geospatial web technologies, or the 3D web technologies.
- Web 4.0: It is “clever on reading web” that is based on usage of ultra-intelligent electronic machines. It is based on *Global business transparency*. Web 4.0 is the first step of migration from the physical (real) business to the online functionality business. The intelligent web is an assistant to virtual reality based on highly intelligent interactions between machines and humans.
- Web 5.0: It is “open, linked and intelligent web = emotional web” that is based on the establishment of business emotive systems through neurotechnologies allowing interaction and emotion exchange in real time on Internet. Web 5.0 technologies include Symbionet web, Smart Communicator (SC), 3D virtual world.

According to the development of web technologies, the business is in the stage of Web 4.0 that the artificial intelligence has already started. So, the business has to think about how to leave the real world.

A comparison between different stages of Web development is given in Fig. 1.

According to Fig. 1, social business networking is based on the Web 3.0 instruments as social networks, social media sharing, virtual businesses, and smart search engines and are developed by Web 4.0 instruments as smart databases, smart personal assistance, location-based intelligence, augmented reality, and 3D visualization. The future needs of SBNs are found in the establishment of collective intelligence techniques, artificial collective brain technologies, etc.

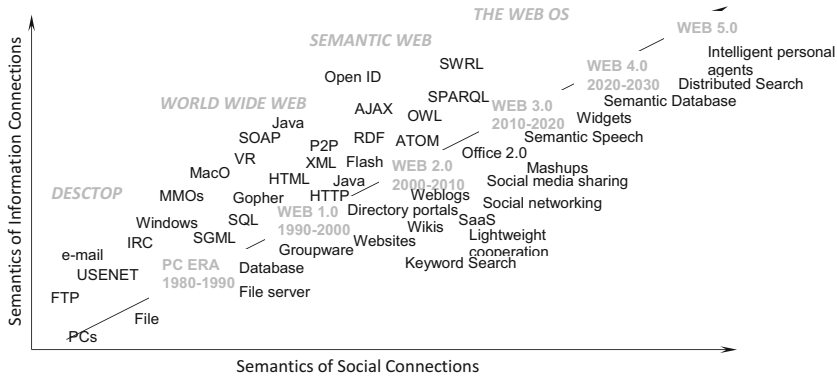


Fig. 1 Evolution of Web. (Source: Benito-Osorio et al. 2013)

Despite the overall development of different instruments that caused the establishment and development of global social business networking, the social business networks (SBNs) are already in the development stage on the engineers’ boards. The main question that is put in the core of the chapter is: Why the business does not attend to social business networks? Furthermore, what predictors stop the business managers to participate in the global business networks?

The limits of the literature are set by development of different instruments of web development and Internet instruments and techniques and/or development of social networking in the context of marketing instruments for sales improvement. As the core explanation of the networks is to combine the different network participants’ strengths for better added value of their common works, the business networking is developed in the literature as the private group of employees that use web instruments to improve their business goals. So, we found a gap between contemporary social business instruments, literature findings, and business practices based on the social networking techniques.

The following paragraphs summarize the common knowledge for social business networks (SBNs). As the behavioral approach is used the empirical analysis is based on the loop analysis between SBN attendance level and business demography independent factors. Not surprisingly, larger firms used much more Internet-based instruments and accept easily to share databases in win-win situations than the smaller businesses. Although the results are closer to some findings for the developed countries, the Bulgarian managers are less ready to accept business cooperation and sharing business information through SBNs.

To answer the main research questions, the chapter follows the structure: Section 2 gives an introduction to development of social networking: what causes the virtualization of business cooperation in the Web 4.0. Section 3 reviews business model of social business networking that will be applied in the study. Section 4 reveals methodological model applied in the study. Section 5 presents the empirical

results of the study, and Section 6 summarizes the main findings and suggestions for business model improvement.

2 Social Networks Development: Social Media, Social Network, Social Network Sites, Business Network

As the brief presentation of web evolution (see Fig. 1) shows, two major business changes are pushed up by Internet development: business cooperation and social networking (Web 3.0), smart personal assisting (Web 4.0), and collective technologies (Web 5.0). These technologies enforce two business changes:

- Establishment of artificial intelligence technologies in communications as well as B2C and B2B ones.
- Establishment of interactive communication (B2B and B2C) for maximization of collective decision attitude.

Both changes have to be based on further development of existing (traditional) social networks (TSN) (Web 2.0) to a business social networking (BSN) (Web 5.0) (see Sterev et al. 2018a, b).

In addition, the establishment of “social media” is connected to Internet evolution as it is explained as interactive dialogue that users use to share opinions, experiences, views, and any other kind of information among themselves. So, Kaplan and Michael (2010) define that “social media” is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0. Therefore, the social group behavior has been developed in social networking in Web 3.0 (see Fig. 1).

Collective behavior as a first step to collective intelligence (in Web 5.0) is found to be social behavior inside the company. As Krackhardt and Hanson (1993) stated the social network is an informal organization that has employees from across the company. This understanding of social networking as an organizational instrument to manage employees in the company is leading one from the mid-1960s to the 1980s (see O'Reilly 1988). With the establishment of Internet, social networking left the intra-organizational shape and it is defined as a virtual organization that uses electronic media for groups interactions without face-to-face communication. So, social network is a virtual group that is real group, but it is virtually co-located (Ahuja et al. 1997).

Furthermore, in 2000s the social network is further more developed and is defined as a social structure made up of individuals (or organizations), which are connected via Internet technologies by one or more specific types of interdependency, such as friendship, kinship, common interest, financial exchange, dislike, sexual relationships, or relationships of beliefs, knowledge, or prestige (see Kaplan and Michael 2010; Benkler 2006).

The Web 3.0 development allows us to define “social network sites”—a web-based service that allows users to share information within articulated list of other users and to view or comment on shared information by them or by their list of connections (Boyd and Ellison 2008). The “social network sites” have been developed to “social media channels” in IoT (Internet of Things) and as Smith (2017) worked out some of the business benefits of social media channels are leveraging social advertising, boosting brand awareness, increasing inbound marketing, and increasing conversion rates to sales.

On the other hand, business network is “sets of firms that are integrated neither completely nor barely at all” (Granovetter 1995, pp. 96–97). The business networks are important for development of international entrepreneurship (Rauch 2001) and innovations (Swan and Scarbrough 2005). Not surprisingly, the business network is defined (Granovetter 1973, 1995) as “a set of actors who know each other’s relevant characteristics or can learn them through referral” (cited by Rauch 2001, p. 119), and its definition is enlarged as “a group of agents that pursue repeated, enduring exchange relations with one another” (Podolny and Page 1998). Furthermore, Jones et al. (1997, p. 914) define that business networks are “persistent and structured set of autonomous firms (as well as nonprofit agencies) engaged in creating goods or services based on implicit and open-ended contracts.” Thus, the evolutionary business social network (BSN) is a simultaneous random group of firms and users that allow inter-group relationships (e.g., a user sharing a document, a group discussing, business data) that are defined by the business requirements.

3 Conceptual Model of Social Business Networks

The future of business development is connected to transforming the (traditional) business networks to business social networks. This is connected to digitalization of business processes as much as it is possible and to make the process results open-source ones. So, decision of problem of BSN establishment is an answer to the problem of escape from real to online virtual business.

The virtualization of the real business faces three problems:

First of all, it is about the **information**. In the data ocean, to find out needed information is not an easy task. Furthermore, “many information-gathering tasks are better handled by finding a referral to a human expert rather than by simply interacting with online information sources” (Kautz et al. 1997, p. 27). So, the main requirement for business social networks is to locate appropriate experts (individual or business) for helping in information search and its evaluation. The information problem decision is about encouraging contributions and feedback from everyone participating in the social network. The information feedback bridges the gap between business and its individual or business partners, including delivery and exchange of ideas at the real time online conversation.

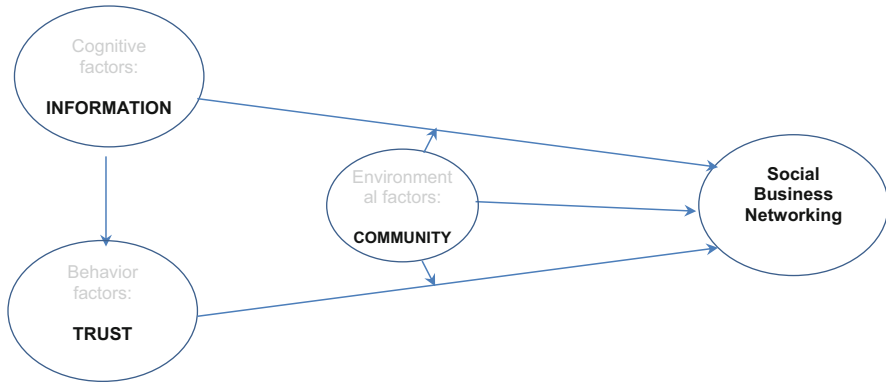


Fig. 2 Three factors of business social networking motivation. (Source: Own contribution and modification from Park, Sung, and Im 2017)

The second problem is about **trust**. According to Schneider et al. (2000a, b), social interactions are built around trust. They defined two instruments: personal opinion value, individual opinion; and community reputation value, summarized opinions of all individuals. Trust is created through honesty, transparency, and authenticity. One fake information could break the trust reputation.

The third problem is about **community**. It is important to know how business community and business social members are connecting to the social community of the business. Aston and Hu (2014) analyze community detection algorithms for discovering communities in networks. They found that there is no fixed order or form to network structures, as they arise randomly. In addition, business networks include millions of individuals and businesses and billions of connections between them continually changing their structure.

The contemporary business is very careful about ownership of the information. Any single information that could harm the sells' and profits' opportunities has to be limited and restricted. That is why general managers are more suspicious of the business social networks. In addition, trust is required for networking. Small and medium business are more open to networking, but they do not have enough resources to evolve their web techniques. That is why the motivation of BSNs' establishment is not directly dependent on the digitalization of the company. In summary, modifying Park, Sung, and Im (2017), the building of BSN motivation could be done by managing trust, community, and information (Fig. 2).

Accordingly, finding out the stage of digitalization of the real business and the reason for the limited "escape" from the real business needs three types of questions:

- The usage of instruments of digital business: e-mailing (Web 1.0), web pages, and social networking (Facebook activity: Web 2.0), intelligent web search (Web 3.0), or AI in web (Web 4.0).

- The information that could be transferred by BSNs: corporate public information (CSR, market prices, market volume, etc.) or/and corporate private information (new technologies, technology excellence, etc.)
- The probability measured by attitudes and motivation to establish a BSN in the future.
- The main hypothesis is: highest level of digitalization of the business follows “reality escape” and business virtualization through further development of the BSNs.

4 Data and Research Model

4.1 Research Model

The model of business behavior to use the social business networks is close to the behavior research methodology outlined for the individual behavior. In its basics, the “black box” model is given as a simplifying model that explains the relation between system inputs and outputs (Zhang 2010) (Fig. 3).

The business behavior research has become popular in the business theory in the 1970s when Mintzberg set its role model theory and later Triandis presented behavioral framework (see Ikart 2005). In addition, the black box model is based on Ajzen and Fishbein model (Fig. 4) for predicting business behavior based on attitudes and beliefs (Southey 2011).

The main strengths of the model that are used by previous studies of the computer-based management are that the model addresses explicit social, cultural,



Fig. 3 Black box model for business digitalization. (Source: Own presentation)

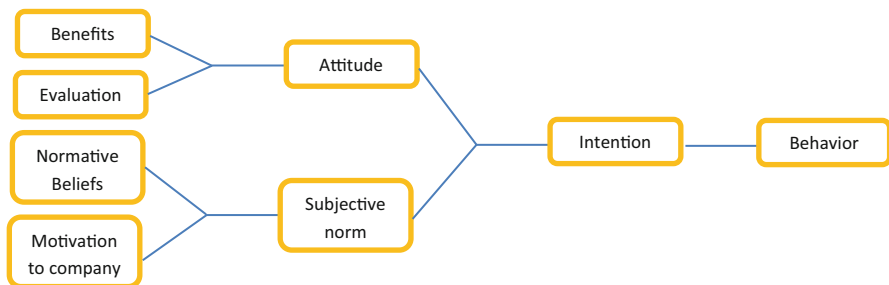


Fig. 4 Theory of reasoned actions of Ajzen and Fishbein. (Source: Southey 2011)

and organizational factors that could explain the adoption and usage of information technologies for managerial purposes (Ikart 2005). For the purpose of the research, some of the variables of the given models could be set by the Triandis (1979) model:

- **Facility conditions:** objective variable that outlines the geographical environment. They support managerial decision making by organizational environmental facilitating, for example, the type of the city of doing business.
- **Social conditions:** subjective variable that occurs in social culture. The social conditions measure the expected behavior by a group of similar businesses, for example, the type of industry.
- **Habits condition:** situation-behavioral variable that explains the computer-based learning model. Mainly habits refer to past experience and nature of individuals' response, for example, the size of the business.

Motivation of the company influences the business behavioral intention to apply social business networking for business purposes. The motivation could be explained as the subjective probabilities and individual beliefs that application of the SBNs will increase the business success. The division of the business motivations is needed:

- Probability of accepting BSNs, for example, 5 scale evaluation of the business probability
- Degree of individual beliefs for BSN's success, for example, 5-scale evaluation of the beliefs of success of SBNs usage.

Attitudes toward usage of SBNs is measured by 3-point differential scale. It explains BSN users' assessment of the benefits of the social business networking.

Business behavior to SBNs focuses on the result of social business networking acceptance. It could be explained within the level of business digitalization: the usage of instruments of digital business:

- e-mailing (Web 1.0)
- Web pages and social networking (Facebook activity: Web 2.0)
- Intelligent web search (Web 3.0)
- Artificial intelligence (AI) in web (Web 4.0)

The simple black box model could be presented as a linear model of dependence between dependent and independent variables (Formula 1).

$$F_i^B = \alpha.F_i^A + \beta.F_i^M = c_1.FC_i + c_2.SC_i + c_3.HC_i + \varepsilon \quad (\text{Formula 1})$$

where F_i denotes the function of BSN behavior results (F^B), BSN attitude (F^A), and BSN motivation (F^M).

Facility conditions (FC), social conditions (SC), and habit conditions (HC) expressed the independent variables as the functions of BSN behavior, attitude, and motivations.

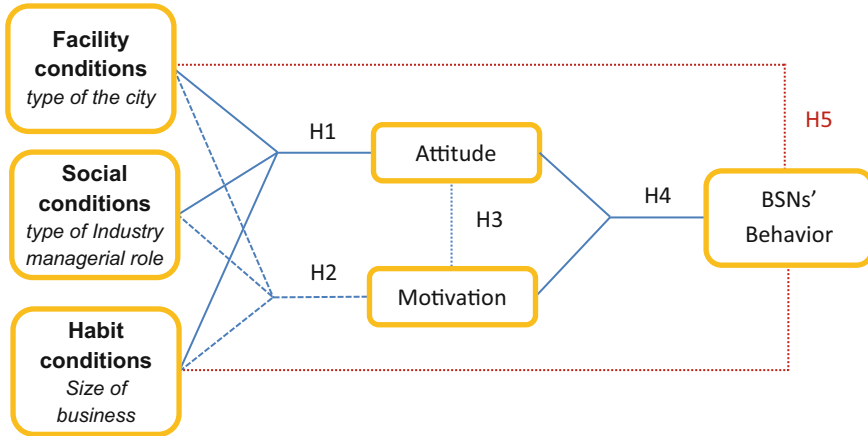


Fig. 5 Research model and hypothesis. (Source: Own presentation)

The researched model on hypothesis could be presented in Fig. 5 that is based on the Fishbein’s theory of reasoned actions.

Accordingly, the main 5 hypotheses are set:

H1 : Business environmental characteristics that affected the usage of information technologies in business management (size of business, type of industry, and type of city) will have positive effect on the attitudes to business social networking.

H2 : Business environmental characteristics that affected the usage of information technologies in business management (size of business, type of industry, and type of city) will have positive effect on the motivation to business social networking.

H3 : Business attitudes and business motivation to business social networking are interconnected.

H4 : Business attitudes and business motivation to business social networking will have positive effect on BSN’s behavior.

H5 : Business environmental characteristics that affected the usage of information technologies in business management (size of business, type of industry, and type of city) will have positive effect on the attitudes to BSN’s behavior.

As the defined variables of SBNS’ behavior research are defined as category values, the research hypothesis will be checked by **analysis of variance (ANOVA tests)**. The ANOVA methodology is used to analyze the behavioral differences between defined business environmental and behavioral variables.

In addition, the **optimal scaling (CARTREG) analysis** is used as an example of multivariate category data analysis for quantitative values of given qualitative scales. In the optimal scaling the linear regression function is tested as given in Formula 1.

4.2 Research Data and Business Profile

The used data cover real attitudes, motivation, and reaction of 108 Bulgarian managers for business presence in the data transfer and/or social networking. The research is done in May 2018 with the techniques of deep interview with managers. The sample is stratified randomly by the list of established business in Bulgaria. The stratified sample of researched business is done according to the industry type and city type. The profile of the respondents (a 100% of response rate) is given in Table 1.

The business demography analysis shows that observations are almost equally distributed by the size of enterprise and the industry. Nevertheless, we expect a different attitude and motivation of the business to participate in BSNs besides their demography profile. This seems to be clear that the smaller is the business, the bigger is resource limitation, including additional resources for web instruments. In addition, the service business, including trade, is more digital oriented and the possibilities of BSNs could be more feasible for them. Not surprisingly, the companies from biggest cities fulfill 85% of the observations. The specialist as well as the Internet possibilities increases with the size of the city of the main business.

Digitalization of the business (levels of Web x.0 evolution) as it was set as a result of SBNS' behavior. Distribution of the answers for usage of Internet instruments gives the picture of the digitalization of Bulgarian business (Table 2).

Data analysis shows that the number of companies that uses different instruments and Internet techniques from different evolutionary stages from Web 1.0 to Web 4.0 decreases. The highest number of companies use simple techniques, including e-mails, as almost 100% declare to use it. But on the second level they are reduced to 72% of companies and at the third and fourth level less than 49%. The share of the business distribution according to their digitalization is summarized in Fig. 6.

Table 1 Profile of the respondents

BSNs' variables	Scales of variable set	Percentage (%)
Size of the business	Micro (less 10 empl.)	29.36
	Small (10–49 empl.)	22.94
	Medium (50–249 empl.)	22.02
	Big (over 250 empl.)	25.69
Industry	Agriculture	8.26
	Processing	22.02
	Buildings	9.17
	Trade	32.11
	Services	28.44
City size	Capital (Sofia)	44.04
	Big city	40.37
	Small city	11.93
	Village	3.67

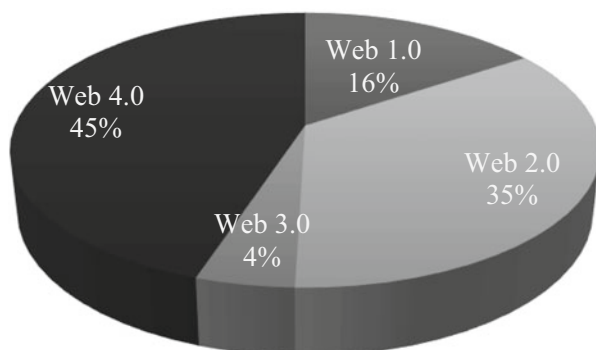
Source: Own calculations

Table 2 Profile of the respondents

BSNs' behavior scale	Dichotomy scale to BSN behavior	Percentage (%)
Internet page	Yes	72
	No	28
Social networking	Yes	36
	No	65
2D or 3D product visualization	Yes	3
	No	97
Internet (A) Intelligence	Yes	62
	No	38

Source: Own calculations

Fig. 6 Shares of digitalization of the Bulgarian business. (Source: Own calculations)

**Table 3** Attitude and motivation to BSN participation (Web 5.0)

BSNs' behavioral intermediates	Scale of BSNs' behavioral intermediates	Percentage (%)
BSNs' attitude	positive	66
	negative	12
	n.a. ^a	22
BSNs' motivation	yes	19
	may be yes	34
	may be no	12
	no	12
	n.a. ^a	22

Source: Own calculations

^an.a.—no answer

Attitude and motivation to go up to BSN Web 5.0 establishment are explained by the users' assessment of the benefits of the social business networking (attitudes) and probability of accepting BSNs (motivation).

The distribution of the answers is given in Table 3.

As less than 45% use modern web instruments to develop their business, it is expected that almost 34% of observations have negative attitude to business social networks' inclusion.

When the question is directly appointed, as well as we expect, the motivation to participate in BSNs reduces to less than 20%. This final result is in continuation of the status quo research, as the highest expected number of web-active companies in BSNs is 45% (see Table 2).

5 Findings

Data analysis covers ANOVA and CARTREG analysis of the given set of 6 variables and 5 sub-hypotheses.

First of all, the main research question is: Whether there is statistical correlation between SBNs' behavior (dependent variable) and environmental independent variables: facility conditions, social conditions, and habit conditions.

Verification of sub-hypothesis *H5* that the digitalization of the business depends on the demography variables of the companies is done by the **optimal scaling (CARTREG) analysis** by using ANOVA analysis method.

Main results of analysis are shown in the following:

- There was a significant main effect for treatment, $F(6, 108) = 4.46$, $p = 0.00$.
- The dependent SBNs' behavior variable is strongly correlated to the environmental SBNs' independent variables as $r(108) = 0.32$, $F(2, 108) = 12.77$, $p < 0.01$ for the habit conditions (type of business) and $r(108) = -0.241$, $F(2, 108) = 4.03$, $0.05 < p < 0.01$ for the facility conditions (type of city). The SBNs' behavior variable is insufficiently correlated to social conditions (managerial position) variable as $r(108) = 0.16$, $F(2,108) = 1.78$, $p > 0.1$.

So, figures show that there is significant dependence ($\alpha = 0.000$) between digitalization level (BSN's behavior result) and major business demography factors as size of business ($\alpha = 0.000$) and size of city for business activity ($\alpha < 0.05$).

As **H5 sub-hypothesis is proved**, the interesting result is that the dependence of the digitalization and size of city is **NEGATIVE ($\beta = -0.241$)**. Our deep interview analysis shows that the companies from big cities (including capital) have more real opportunities for development as the companies of small cities and villages have to do more of their hard work via Internet techniques and technologies.

Second, as **H5 is proved**, the check of **H1** and **H2** is needed.

Verification of sub-hypothesis *H1* that the SBNs and attitudes depend on the demography variables of the companies and *H2* that SBNs and motivation depend on the demography variables of the companies is done by the **optimal scaling (CARTREG) analysis** by using ANOVA analysis method.

Main results of analysis are shown in the following:

- There was a no significant main effect for treatment for the SBNs' attitude as $F(5, 108) = 1.24, p = 0.295 < 0.1$.
- The dependent SBNs' attitude variable is not correlated to the environmental SBNs' independent variables as $r(108) = -0.17, F(2, 108) = 2.14, 05 < p = 0.122 < 0.1$ for the habit conditions (type of business), social conditions (managerial position) variable as $r(108) = 0.15, F(1,108) = 0.00, p = 0.928$, and the facility conditions (type of city) as $r(108) = -0.18, F(2,108) = 1.60, p = 0.208 > 0.1$.
- There was a significant main effect for treatment for the SBNs' motivation as $F(8, 108) = 3.30, p = 0.002 < 0.01$.
- The dependent SBNs' motivation variable is strongly correlated to the environmental SBNs' independent variables as $r(108) = -0.25, F(4, 108) = 3.37, 05 < p = 0.013 < 0.01$ for the habit conditions (type of business) and social conditions (managerial position) variable as $r(108) = -0.34, F(2,108) = 14.39, p = 0.000$. The facility conditions (type of city) are insufficiently correlated to social conditions (managerial position) variable as $r(108) = -0.12, F(2,108) = 0.66, p = 0.52 > 0.1$.

So, as figures show, H1 is not confirmed as H2 is. Thus, there is significant dependence ($\alpha = 0.002 < 0.01$) between BSN motivation and major business demography factors as size of business ($\alpha < 0.05$) and managerial position ($\alpha = 0.000$). As the sub-hypothesis is proved, the interesting result is that the dependence of the BSN motivation is **NEGATIVE** for all predictors: size of business ($\beta = -0.253$), city type ($\beta = -0.123$), and managerial position ($\beta = -0.343$). So, bigger business in bigger cities leads to less motivation to establish BSN. In addition, marketing responsible managers are more motivated to organize a Web 5.0 Internet technique in the company. Both results are reasonable as social network (real based) is more sufficient in small companies and small villages, so the business is more open to socialization of the business.

As well, BSN is a future Internet development technique, so marketing-oriented managers are more "happy" to participate than the general managers of production managers.

The second sub-hypothesis that the attitudes and motivation for BSNs' participation depend on the level of digitalization is verified by bivariate correlation analysis.

Next, sub-hypothesis H3 that the SBNs' attitudes and SBNs' motivation depend on each other is checked by correlation analysis. The main results are summarized as follows:

- The given two variables were strongly correlated by parametric correlation as $r(108) = 0.342, p = 0.000$.
- The given two variables were strongly correlated by non-parametric correlation as $r(108) = 0.369, p = 0.000$

The results CONFIRM H3 that the positive is the SBNs' attitude the highest is SBNs' motivation for using social networking. Mainly the managers that are

negative to the social networks are also negative to the inclusion of the social business networks.

Finally, the verification of sub-hypothesis *H4* that the digitalization of the business depends on SBNs' attitudes and SBNs' motivation variables is done by the **correlation analysis** and **optimal scaling (CARTREG) analysis** by using ANOVA analysis method.

- The given dependent (business digitalization) and independent (SBNs' attitude) variables were strongly correlated by parametric correlation as $r(108) = -0.206$, $p = 0.03 < 0.05$ and by non-parametric correlation as $r(108) = -0.212$, $p = 0.03 < 0.05$.
- The given dependent (business digitalization) and independent (SBNs' motivation) variables were not strongly correlated by parametric correlation as $r(108) = -0.127$, $p = 0.19 > 0.1$ and by non-parametric correlation as $r(108) = -0.167$, $p = 0.08 < 0.05$.
- There was a significant main effect for treatment for the SBNs' behavior by SBNs' motivation and SBNs' attitudes as $F(1, 108) = 15.15$, $p = 0.000 < 0.01$.
- The dependent SBNs' behavior (business digitalization) variable is not strongly correlated to the SBNs' independent variables as $r(108) = -0.175$, $F(1, 108) = 2.317$, $p = 0.131 > 0.1$ for the SBNs' attitude variable and as $r(108) = -0.285$, $F(1,108) = 1.204$, $p = 0.275 > 0.1$ for the SBNs' motivation variable.

Figures show that the motivation for BSNs' inclusion as well as attitude depends on the used Internet techniques and on the digitalization of the business. Nevertheless, they found that relation and the real dependence are not so clear or/and so strong ($\beta < 0.399$). The explanation is that BSNs are similar to traditional social networks. This result is found by testing the dependence ratio of the BSN's instruments (strength of inclusion) to the digitalization of the business, and there is no single dependence with a significant correlation coefficient.

6 Conclusions

Even though the business social networking was set as marketing problem back in 1971, the real boom of the research papers has started in 2003 and more than 1500 papers in the field are published annually in different areas: from business management and marketing to social sciences and computer sciences. The final understanding is that the business social networks is an expression of the collective intelligence as a Web 5.0 instrument, where a lot of independent individuals and companies will lead to business excellence. So, BSN is an evolutionary technique of (traditional) social networking that helps to spread out the information about the business in a random chain model.

The main problem is how to transfer the qualitative results (e.g., number of likes in social networks) to quantitative metrics (e.g., business profit) in order to explain

the business motivation for BSNs' establishment. The problem decision is based on the establishment business trust in the community as well as increasing business believe to the community's possibilities for developing the business. So, the attitude and motivation of BSN participation will increase with the shared contact points between company and community (e.g., CRS, product development, added values, and additional services).

The Bulgarian managers are too skeptic for the benefits of BSN (because of lack of trust or unwillingness to share information neither be a part of information community) as many of them are set out of the networks: no e-mails, no corporate pages, and no network profiles. So, the main limit of development of BSN is the quality of the information (data) the business is ready to transfer via open social networks. Not surprisingly, as bigger business operates in bigger cities, there is less motivation to establish BSN. In addition, marketing responsible managers are more motivated to organize a Web 5.0 Internet technique in the company.

Finally, the decision for the problem with the BSN acceptance could be solved by governmental support to IT business to propose adequate Web 5.0 instruments that are based on the major predictors: to be trusted, to be information exchange oriented, and to be community inclusion oriented.

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