Use of Social Network Sites Depending on the Country of Origin of the Social Network Site User

Tom Sander
University of Ludwigshafen, Germany

Biruta Sloka
Faculty of Business, Management and Economics, University of Latvia

Abstract

Recent technological developments have determined that Social network sites (SNSs) are also marketplaces to exchange information between members e.g. to inform individuals about new products or to cooperate with each other. Such aspects of SNSs use are under the academic researchers' interest worldwide. The strategy to create a market in SNSs for different countries can be successful if companies have a deep understanding of SNSs. That needs the investigation if mechanism in SNSs and the use of SNSs is similar world-wide. The aim of the research is to investigate how people use SNSs and to analyze reasons to use SNSs, as well as analyze differences of SNSs use depending upon the respondent's country of origin. The tasks are to investigate similarities or differences in use of SNS in different countries and compare results of SNS use in Germany (GER), Latvia (LV), United Kingdom (UK) and Hungary (HU). The research methods applied are as follows: 1) theoretical studies in scientific publications and 2) analysis of survey data on SNS use in Germany, United Kingdom, Latvia and Hungary. For evaluations there was used evaluation scale 1 – 6 which corresponds to the evaluation grades in German schools. The data is analyzed with main indicators of descriptive statistics, Spearman correlation coefficient and partial least square calculations with WarpPLS to investigate difference in use of social network sites between the countries. The intensity of use of SNSs is a kind of investment in SNSs e.g. time to share information. That can be defined as social capital. The main result of the current research is that the local conditions influence the global tool SNSs.

KEYWORDS: social network sites; intercultural; social capital; use of social network sites.

Introduction

The use of SNS depends on the origin, gender and other demographic factors. This paper evaluates the differences in SNS use between SNS users in Germany, United Kingdom, Latvia and Hungary. The research question is to investigate how SNSs are used by individuals from different countries. The assumption is that the global SNSs are used by local individuals in different ways. The research investigates the behaviour of SNSs members from different countries. Such an approach has been used already with good results and findings. There are already differences between social networks and social capital in different countries evaluated (Beugelsdijk & Van Schaik, 2005). It is important for organizations to know more about the behaviour of individuals to use SNSs effectively and efficiently for the recruiting or marketing issues (Li & Bernoff, 2011; Pentland, 2014). The research at hand concentrates on private SNSs. The business and private SNSs have different purpose, and their members provide different information depending on the kind of network.

The importance of SNSs in the society and economy is increasing. The SNS can be used for many different issues, e.g. to cooperate with each other. The cooperation and use of SNSs creates values and benefits for individuals (M. Granovetter, 2005; Mayer, Müller, & Mayer, 2016). The operations and functions of SNSs provide many opportunities for their members. The different use of SNSs and innovation of the users creates new functionalities and advantages for SNSs members. The current research investigates SNSs to explore typical operations and functions. The answer of the research question is to compare and to explain the use of SNSs for different countries. That research is needed to provide solutions for organizations to use SNSs.

SNSs have many opportunities for members. They can maintain their friendship, communicate with each other or share information. All this is easily and quickly possible world-wide with SNSs. The SNS is used for local issues as well (Sherif, Hoffman, & Thomas, 2006; Bohn, Buchta, Hornik, & Mair, 2014; Haythornthwaite & Kendall, 2010). That is the interesting issue to compare results of responses in four different countries with different cultural background.

In general, social networks are used to exchange information and resources between individuals. SNSs are a kind of social networks. SNSs increase the opportunities to exchange or share information. The possible content is changing. Today it is possible to exchange a new kind of content in real time between members of SNSs e.g. videos, audio or text messages. This constitutes a new channel for networks to organize social networks and the chance to forward information quickly and easily to a large audience (Wilson, Gosling, & Graham, 2012). This benefits individuals. Those opportunities of SNSs influence the social capital theory. The social capital theory is changing under those new circumstances (Smith, 2008). The research explores the kind of investment in SNSs that influences the mechanism and operations at SNSs.

The arrangements of the daily private life are an important part of SNSs. SNSs provide the opportunity to communicate with each other and to share information (Teh, Huah, & Si, 2014). That support to structure and organize the daily life. The importance of SNSs for society is increasing and the number of members is growing.

The SNSs provide many opportunities for members. The users are very creative and use this global tool in different ways. The SNSs have different operations and functionalities which can be used differently by the user. The intensity of use depends on the situation and environment of the individuals; examples of these factors might include origin, demographic factors and cultural background (Pfeil, Arjan, & Zaphiris, 2009; Sander, Sloka, & Teh, 2016). The behaviour at SNSs and use of SNSs is different, e.g. to share private information depends on the privacy awareness.

The statement which is investigated conform the benefits for individuals to use SNSs. Under consideration is the use of SNSs e.g. "duration of membership", "time of use SNSs (in minutes per day)" and "number of contacts" depending on the respondent's country of origin. The research evaluates if there are factors which influence the use of SNSs. The special topic for this paper is to compare different countries on differences and mutuality. The research results could be useful for the society and organizations which can use this knowledge to operate SNSs successfully and suitable to reach their objectives.

The authors have discussed several aspects on use of SNS in the article "Differences in the exchange of contents of different countries in social network sites" (Sander, Sloka, & Puke, 2017). As it is difficult to present all information in one article for this important and large topic, and additional aim of this paper is to provide further exploration into the topics discussed in the aforementioned article. The additional data provides deeper insights and further information about SNSs to provide a more detailed overview and to improve the knowledge about differences between countries to use SNSs. The collaboration depends on the origin of the user and this paper provides further deeper analysis of new data for SNSs and insights in operations of SNSs use habits depending of country.

Theoretical Background

Social networks are an important part of society. That is the bond of the society. The relationships between individuals create the social network. The social networks are part of the community. Several aspects including trustfulness of SNSs are on research agenda of several scientists (Dai, et al., 2014) including problems of companies communications with their customers as well as communication via social networks on research conferences (Lee, Brusilovsky, 2014). SNSs are large social networks based on an online platform or software which is accessible via the internet (Boyd & Ellison, 2007). SNS provide additional chances and challenges on their use for new and innovative applications to increase efficiency of information exchange also in fields where some time ago mostly official channels were applied. The importance of SNS is increasing and influencing the daily life of individuals. The SNS creates ties between the individuals. The ties can be used to exchange and share information or resources (Hampton & Wellman, 2003). The relationships can be maintained and new relationships to individuals with interesting resources or information can be created. The exchange between the individuals without any borders is possible. The exchange is possible in real time, and the access to a large audience is readily available. SNSs offer different operations and functions that vary with the type of SNS. Two adequate examples are private and business SNSs. The difference between them is the purpose of the SNSs. Private SNSs has the purpose to exchange information about hobbies or to organize leisure time for example. Business SNSs have the task to create relationships with, e.g., customers or potential employees (Sander, Sloka, & Pauzuoliene, 2015). The current research concentrates on the use of private SNSs. The demographic differences of the users influence the use of SNSs. Research investigated differences on use of private SNSs between men and woman. That leads to the assumption that SNS members from Germany, Latvia, United Kingdom and Hungary use SNSs differently (Sander et al., 2017). Those demographic factors explain the use of SNSs.

The social capital theory can be used to explain the operations of SNSs. The theory declares mechanism in social networks and can be transferred to SNSs (Ellison, Steinfield, & Lampe, 2007; Ellison, Vitak, Gray, & Lampe, 2014; Sander & Teh, 2014a). The structure of the social network is important for social capital. The access to an individual can have different levels of strength. The relationship determines the value, privacy or exclusivity of the information, for example. The tie in SNSs is differently from real social networks and can be more anonymous (Granovetter, 1973; Sander, 2012). Social capital is the investment in SNSs for example intensity of use of SNSs or sharing resources or information. The obligations for the information and resources are the social capital. The return for the obligations can be received. The exchange of information depend on the norm of the SNSs – those aspects are analysed by several researchers (Lin, 2001; Gabher & König, 2017). The opportunity to penalize wrong behaviour at SNSs is an important factor for the exchange of information and resources. The SNSs members expect obligations for their investment in SNSs. They have an advantage with their membership. That is the reason to be a member of the SNSs (Boyd & Ellison, 2007). The investment can be the time to use SNSs or the information which is provided. Cultural differences influence social capital. The norms and regulations of a society support a quick transfer of information with low transaction costs for example. This border is needed in communities and societies to organize the daily life easily. Hidden rules are not visible for a foreigner. The unknown rules and norms handicap foreigners' ability to exchange resources easily (Fussell, Harrison-Rexrode, Kennan, & Hazleton, 2006; Scott & Johnson, 2005; Beugelsdijk & Van Schaik, 2005). The knowledge about the rules and norms of the community reduce transaction cost, provide a peaceful environment and support individuals to exchange resources and information. That is an advantage for SNS members and explanation of the social capital theory.

The research used an online survey which has been distributed with support by University of Ludwigshafen (Germany), University of Latvia (Latvia) and OBUDA University (Hungary). The survey has different parts, and this paper presents results on evaluations included in two questions with analysis of different aspects. The first question is "What do you use private social network sites for?" with several given options and with the scale to evaluate the analysed statements. Evaluation scale is from one (for "always") to six (for "never"). The second question is "Why would you forward information on private SNSs?" with a scale from one ("for strongly agree") to six ("for strongly disagree"). The investigation of this paper is to identify differences in responses between respondents from different countries and the survey questions support for the evaluation of SNSs. The evaluation scale used in the survey corresponds grading system in schools in Germany. The participants from the United Kingdom participated in the survey in November / December 2016. The participants from Latvia received the link for the survey in May 2016. The German and Hungarian participants received the link in October and November 2015. The research uses only respondents who have answered the question regarding their represented country with Latvia, Germany, United Kingdom or Hungary.

The survey was organized in four countries by use of the same questionnaire. The answers from 73 Latvian, 93 German, 68 British and 124 Hungarian participants are used for the research. All participants speak German or English. The respondents are mainly young individuals under 40 years, with exception of the UK participants. The age distribution is explainable with the distribution of population of SNS users in analysed countries. Taking into account the analysed topics and population frame in the survey, the questionnaire was distributed mainly via universities. The respondents are experienced with private SNSs. Most of respondents grew up with the internet and currently use the internet on a daily basis. Among the representatives participating in the survey, gender distribution was: the respondents from Latvia were 76.7% women, Hungary had a distribution of respondents by 44.83% women, United Kingdom had 29.4% female respondents and 40.65% of the German respondents were women.

The first analysis is to compare median and mode to investigate the differences between the responses of respondents by different countries. The first descriptive statistical analysis is for the question "What do you use private social network sites for?" Evaluations by respondents from Germany and Hungary have only one statement with similar mode and median. All other statements between respondents from Germany and Hungary are evaluated differently. Evaluations by respondents from Germany and Latvia do not have any similar median. Evaluations by respondents from Hungary and Latvia have three statements with the same median and mode. Evaluations by respondents from United Kingdom have two similar median and modes with Hungary and one similar mode and median with Latvia. The comparison of results between evaluations by respondents from the western European country Germany and new European Member (EU) countries Latvia and Hungary is an indication that the region of Europe influences the use of SNSs. The two new EU member countries have more similarities in SNSs use with each other than with respondents from Germany or United Kingdom.

The evaluations by respondents for item "Organize groups e.g. sport groups, student groups etc." have the same median and mode for evaluations by respondents from Latvia, Hungary and the United Kingdom. That means this function is of interest and in use on the same level for those three countries. The descriptive statistics - a various image on the behaviour at private SNSs for different countries.

The presentation of information about themselves is evaluated differently by the participants depending on their represented country. The whole evaluation scale is used for evaluations for all analysed statements in all analysed countries. The most answers with positive tendency to "always" for analysed aspects have the Latvian participants. The tendency of German participants with a

median of five provides the information that German people use less SNSs to present themselves in private SNSs. The Hungarian participants, in their evaluation results, are between Latvia and Germany and they have a median of three of their evaluations. The results are clearer if the mode is compared between the different countries and support the tendency to "always". German individuals vote with 68.81% on the last three stages and respondents from Latvia have 61.6% on the first three stages of the evaluation scale.

The search for information is an opportunity in private SNSs. The participants from Latvia have the median 2 of their evaluations, which means they use SNSs very often to collect information. On the three first stages of the evaluation scale, representatives from Latvia have 65.3%. Respondents from Germany did not use SNSs to collect information. The median is 4 and on the last three stages has evaluations by respondents from Germany summarized 60.1%. The Hungarian participants have the median three and do not have a clear tendency of their evaluations on extreme sides, in the direction of "always" or "never".

Table 1

Main statistic indicators of descriptive statistics for respondent's evaluations on analyzed statements for the question "What do you use SNSs for?"

Statistic indicators	Present or share information about yourself	Search for information	Communicate with friends e.g. to chat, writing messages	For amusement or entertainment	Influence other individuals e.g. to take part in an event, to motivate somebody for a project or task	Maintain friendships	Organize groups e.g. sport or, student groups etc.
Germany (n = 92 – 93)							
Arithmetic Mean	4.29	4.01	3.16	3.07	4.55	3.42	3.90
Median	5	4	3	3	5	3	4
Mode	6	5	1 and 2	2	6	2	6
Standard Deviation	1.57	1.61	1.75	1.68	1.43	1.65	1.66
Range	5	5	5	5	5	5	5
Hungary (n = 116 – 118)							
Arithmetic Mean	3.84	2.99	1.96	3.10	3.71	2.69	3.28
Median	4	3	1	3	4	2	3
Mode	4	3	1	2	4	2	3
Standard Deviation	1.35	1.50	1.34	1.36	1.34	1.39	1.65
Range	5	5	5	5	5	5	5
Latvia (n = 72 – 73)							
Arithmetic Mean	3.08	2.58	1.82	2.36	3.58	2.66	3.26
Median	3	2	1	2	3	2	3
Mode	2	1	1	2	3	2	3
Standard Deviation	1.46	1.53	1.14	1.14	1.58	1.60	1.71
Range	5	5	4	5	5	5	5
United Kingdom (n = 67 – 68)							
Arithmetic Mean	3.34	3.53	2.29	3.06	3.84	2.46	3.63
Median	3	3	2	3	4	2	3
Mode	3	3	1	3	6	1	3
Standard Deviation	1.599	1.616	1.372	1.515	1.608	1.520	1.674
Range	5	5	5	5	5	5	5

Source: Calculated by Tom Sander, Evaluation scale 1-6, where 1 - always, 6 - never

The use of SNSs as a communication tool is positively rated by Latvian and Hungarian participants, with a median of one compared with the other countries. The Hungarian participants answered with 85.5% and Latvian participants with 90.4% on the first three stages on the evaluation scale. The German respondents have evaluated with values mainly forming a normal distribution for this item; this stands in contrast to the biased distribution toward "always" among the participants from Latvia, United Kingdom and Hungary. The result of the German participant evaluations for this item is with the median three. The use of private SNS to communicate has the second largest similarity in evaluations by respondents from different countries.

Results of survey indicate that participants' use of private SNS for amusement or entertainment has, for all four countries, a tendency to "always".Survey respondents have indicated that they use private SNS to be entertained. Evaluations of survey respondents by German and Hungarian participants have the median three and two of the evaluations. The Latvian participants have a median and mode of two of their evaluations. Hungarian participants voted with 62.6%, German participants have 66.1% on the first three stages of the evaluation scale and Latvian individuals have 84% on the first three stages of the evaluation scale. That means the majority of Latvian respondents use private SNS for amusement or entertainment.

The chance to use SNSs to influence other individuals has mainly a tendency to never (according the evaluations and taking into account the evaluation scale). German respondents have a median five and mode six of their evaluations. The German respondents have selected 70.5% on the last three stages of the evaluation scale, which indicates a clear tendency not to use SNSs to influence another person. The Hungarian participants have median and mode of four of their evaluations. The users of private SNSs from Latvia have mainly agreed with the statement with their evaluations with a median and mode of three. This is a tendency and provides the information that people from Latvia mainly use private SNSs to influence other SNSs member compared between the three other countries included in analysis.

The largest similarities in evaluations of respondents have the evaluations on "use of private SNSs to maintain friendship". The median of two are for evaluations by respondents from Latvia, United Kingdom and Hungary and mode two are for evaluations by respondents from Latvia, Germany and Hungary – this strongly suggests that this is the main factor to use SNSs. The respondents from United Kingdom have evaluated four items with mode and median three. There is not a strong tendency but the general tendency for evaluations by respondents is to always.

The two statements which are more positively rated by respondents are "communicate with friends" and "maintain friendship" with evaluations by respondents with median two and mode one. The result for the evaluations by respondents from United Kingdom provides the result that the SNS is more used as a communication tool and to organize social connections compared with the other functionalities of SNSs. The maintenance of relationships is an important factor for the social capital. The tie is the value of the SNS for the SNS member and has to be maintained as well as possible. That is an indicator for the social capital theory (Ellison, et al 2014). The creation of the network is important for the user of private SNSs and there are only small differences in the results between the four countries. That means Latvian, British and Hungarian individuals more often use private SNSs to organize groups than German individuals. The results of the analysis in detail are presented in Table 1.

The differences in evaluations of respondents and mutuality are already visible with the analysis of indicators of central tendency or location and provide first insight in the operations and use of SNSs. The benefits of SNSs are presented in the results and provide several aspects of reasons why people use SNSs. This explains the reason to use SNS as a tool for daily needs or desires. This information can be used by companies to reach the target audience and to transfer information quickly and easily with a successful and desired result to individuals.

The descriptive statistics provide a first tendency and overview about the results for the question "Why would you forward information on private social network sites?". Although in all analysed countries the whole evaluation scale is covered for all explored statements, the tendency of the median results of the German and British respondent evaluations are obviously more extreme to full agreement and full disagreement than the results of the respondents from Latvia and Hungary. The evaluations of Latvian and Hungarian respondents have a tendency to the middle of the scale. The evaluations by British respondents have two times a median of three, three times a median of four, and one time a median of two and five. German respondents tend to strongly disagree for median, two times median 4, once 5 and once 6. The results for the respondent evaluations by mode are similar compared with the results of the respondent evaluations by median. Evaluations of Hungarian respondents have five times for the analysed statements the median three, one time the median two and one median of four. The evaluations by Latvian respondents have three times the median three, two times the median two and one time the median four. That is the first indication that there are differences and similarities between the countries.

Statistic indicators	I collected positive experience with forwarding information	My information is visible for a large audience	I expect obligations in future for my information	My friends on private SNSs are nice and I would like to do them a favor	I have an advantage with the transfer of information	Somebody else has an advantage with forwarding the information	It is possible to inform people worldwide in a fast and easy way
Germany (n = 91 – 92)							
Arithmetic Mean	3.98	3.25	5.38	3.73	4.42	3.88	2.65
Median	4	3	6	3	5	4	2
Mode	4	1	6	3	6	6	1
Standard Deviation	1.49	1.85	1.13	1.56	1.55	1.69	1.66
Range	5	5	5	5	5	5	5
Latvia (n=72 – 73)							
Arithmetic Mean	3.29	3.05	3.75	2.75	3.38	3.07	2.03
Median	3	3	4	2,5	3	3	2
Mode	3	1	3	1 and 2	4	3	1
Standard Deviation	1.33	1.73	1.51	1.52	1.38	1.43	1.23
Range	5	5	5	5	5	5	5
Hungary (n=115 – 117)							
Arithmetic Mean	3.43	3.67	3.43	3.29	3.28	3.26	2.64
Median	3	4	3	3	3	3	2
Mode	3	2	3	3	3	3	2
Standard Deviation	1.34	1.45	1.30	1.41	1.28	1.27	1.40
Range	5	5	5	5	5	5	5
UK (n=65 – 66)							
Arithmetic Mean	3.56	3.77	4.65	3.26	4.00	3.92	2.70
Median	3	4	5	3	4	4	2
Mode	3	2	6	3	3	3	1
Standard Deviation	1.337	1.606	1.363	1.281	1.468	1.429	1.569
Range	5	5	5	5	5	5	5

Source: Calculated by Tom Sander, evaluation scale 1 – 6, where 1 - strongly agree; 6 - strongly disagree

The main reason to use private SNSs is the opportunity to inform people worldwide in a quick and easy way. Evaluations by Latvian and German respondents have a median of two and mode of one. This confirms that the transfer of information is a reason to use SNSs which corresponds also to other research results conducted already some time ago (Adamic, 2001). The evaluations by Hungarian respondents have a median and mode of two. Evaluations of respondents from all countries have mode and median of one or two for this item compared with all other items is that the item with the strongest tendency in evaluations by respondents to full agreement in the evaluation scale.

The evaluations by respondents for items "I collected positive experience with forwarding information" and "Somebody else has an advantage with forwarding the information" have the median and mode of three for evaluations by Latvian and Hungarian individuals. They are more positive in their evaluations than the evaluations by German participants with mode and median of four for the item "I collected positive experience with forwarding the information" and the mode of four and median of six for the item "Somebody else has an advantage with forwarding the information". That means there is a difference in the results of analysis by indicators of descriptive statistics between evaluations by respondents from Germany and United Kingdom as a western country and evaluations by respondents from Latvia and Hungary as new EU member countries.

The results of responses by respondents for the item "my information is visible for a large audience" have the median three and mode one for Latvian and German respondents. The results for the evaluations by Hungarian respondents have median four and mode two. The other case is – evaluations for item "my friends on private SNSs are nice and I would like to do a favour" has the median and mode three for German and Hungarian responses. The median for evaluations by Latvian respondents is 2.5 and mode is one and two. It means that they are the most often made evaluations by respondents. This provides an indication that the result cannot generalize differences between new EU countries, United Kingdom and Germany. The differences between the median of the countries is very small and the mode compared between Hungarian and German with Latvia's responses has a gap. Latvia's respondents' replies tend to more strongly agree in comparison with Hungarian and German respondents. The origin of the individuals is an important factor. That can explain the differences in evaluations by respondents between the countries.

The results of evaluations for the items "I expect obligations in future for my information" and "I have an advantage with the transfer of information" have only small similarities in the results for the evaluations by respondents from different countries. That means that those two items present the largest difference between the evaluations by respondents from different countries but evaluations by respondents from Latvia and Hungary are more similar compared with evaluations by respondents from Germany. Evaluations by respondents from Germany have the strong tendency for both items to strongly disagree e.g., the result for evaluation with six (strongly disagree) by respondents from Germany for "I expect obligations in future for my information" is 66.3%. The comparison between the countries provides the result that there are clear differences between the countries for those two items. The results in detail are presented in table 2 as it was mentioned before.

The influence of the investment in SNSs on behaviour is tested with a Spearman correlation analysis. The Spearman correlation analysis is selected to analyse the correlation coefficient between the ranks in statements and ranks on use of SNSs. The collected data have mainly an ordinal scale that requires a Spearman correlation analysis. The investment is "time to use SNSs per day", "duration of membership" and "number of contacts". Former research findings that this factor describes and explains the use and operations of SNSs are accounted for here. The factors are measurable and constitute a kind of investment in SNSs (Williams, 2007; Burdine et al., 1999; Healy, 2002). The time is the investment in the private SNSs and an indicator of the involvement of individuals in private

Correlation between investment in and use of SNSs

SNSs (Tronca, 2011). The duration of membership has two significant correlation coefficients for the respondents from Latvia. The two items are "present or share information about yourself" and "maintain friendship". The history and knowledge about networks influence the behaviour of Latvian individuals negative to present or share information about them self or to maintain their friendship. The results of the calculation are presented in Table 3. The interesting point is that only the participants from Latvia are influenced by the duration of membership. All other countries do not have a significant correlation for this item. The history is an important factor for the trust in a social network and the result can be that people in Latvia reduce their trust depending on the duration of membership in SNS. This phenomenon appears only for "membership in years". The "use in minutes per day" and "number of contacts" influences more than one country.

The number of contacts is an indicator about the density of the network and importance of the network for private SNS member (Burt, 2000). The surprising result is that all values for the correlation coefficient are negative. That means people with many contacts use the private SNSs differently compared with member who have only a few friends. The number of contacts is the only variable with a significant correlation coefficient for Hungarian respondents.

Table 3

Results of significant Spearman correlation coefficients for "membership in years" and the statements for the question "What do you use private social network sites for?" (Included only statistically significant results)

	Present or share information about yourself	Maintain friendships
Country	LV	LV
Spearman Correlation Coefficient	–0.319	–0.262
Sig. (2-tailed)	0.008	0.031

Source: Calculated by Tom Sander based on survey data, n=68

The item to communicate with friends has a small negative correlation with Hungarian and German respondents. The preference to share information about himself/herself has a small significant negative correlation for Latvian and German individuals. That means this item is negatively correlated with number of contacts and history of membership from the Latvian respondents. The item "for amusement or entertainment" and "organize groups" has a negative statistically significant correlation with reasonable significance level for German individuals. The results in detail are presented in Table 4. Regarding comparing the differences in evaluations of respondents between the countries, it is clear that the use of SNS measured "number of contacts" has more influence on the behaviour of German user.

Table 4

Results of significant Spearman correlation coefficients between the statements and "number of contacts" for the question "What do you use private social network sites for?"

	Communicate with friends e.g. to chat, writing messages		Present or share information about yourself		For amusement or entertainment	Organize groups e.g. sport or student groups etc.
Country	HU	GER	LV	GER	GER	GER
Spearman Correlation Coefficient	–0.25	–0.31	–0.35	–0.25	–0.25	–0.38
Sig. (2-tailed)	0.007	0.01	0.003	0.03	0.03	0.00

Source: Calculated by Tom Sander based on survey data, HU: n = 110, LV; n = 68; GER: n = 75

The "time of use of SNSs (in minutes per day)" has the most items with a significant correlation coefficient and all countries are influenced. That means the influence on the items is mainly explainable with the time per day which is invested in the network. All items with significant Spearman correlation coefficients are negative. The use of SNSs by UK participants is two times influenced by "time of use of SNSs (in minutes per day) and the German individuals are six items influenced by "time of use of SNSs (in minutes per day). All other countries do not have a statistical relevant result to use SNSs influenced by "time of use of SNSs (in minutes per day)". The Latvian respondents' use of SNSs is influenced three times by "time of use of SNSs (in minutes per day)". The factor "time of use of SNSs (in minutes per day)" is the only factor with a significant Spearman correlation coefficient for the use of SNSs by UK respondents on a statistical relevant level compared with the factors "number of contacts" and "duration of membership"..

Evaluations by respondents from Germany and Latvia have three times the same statements with a significant Spearman correlation coefficient. The statement "search for information" has the Spearman correlation coefficient of -0.42 for respondents from Latvia and -0.43 for respondents from Germany. The second statement is "communicate with a friend" has the Spearman correlation coefficient -0.36 for Latvian respondents and -0.39 for German respondents. The results of evaluations by respondents for these two statements are very similar.

The social factor "use in minutes per day" has a similar influence for German and Latvian respondents. The third item which is the only one with three countries (Germany, Latvia and United Kingdom) is "influence other individuals" with Spearman correlation coefficient -0.33 for Latvian, -0.427 for British and -0.22 for German respondents. The gap between these two correlation coefficients is more than for the before mentioned two Spearman correlation coefficients. This is an indication that there are similarities in the use of SNSs between German and Latvian respondents under consideration of the use of SNSs. The results in detail are presented in Table 5.

Country	Search for information		Communicate with friends e.g. to chat, writing messages		Influence other individuals e.g. to take part in an event, to motivate somebody for a project or task			Present or share infor-mation about yourself	For amusement or entertainment		Organize groups e.g. sport groups, student groups etc.	Main-tain friend-ships
	LV	GER	LV	GER	LV	GER	UK	GER	GER	UK	GER	GER
Spearman Correlation Coefficient	-0.42	-0.43	-0.36	-0.39	-0.33	-0.22	-0.427	-0.41	-0.49	-0.345	-0.36	-0.46
Sig. (2-tailed)	0.00	0.00	0.002	0.00	0.004	0.04	0.00	0.00	0.00	0.004	0.00	0.00

Table 5

Results of significant Spearman correlation coefficients between the analyzed statements and "use in minutes per day" for the question "What do you use private social network sites for?"

Source: Calculated by Tom Sander based on survey data, LV: n = 68; GER: n = 75; UK n = 58

The "time to use SNS (in minutes per day)" is another social factor to explore SNSs. The time to invest in SNSs is a kind of social capital (Sander and Teh, 2014; Paldam, 2000). The "time of use of SNSs (in minutes per day)" has the largest number of significant correlation coefficient to explain the behaviour of individuals at SNSs. There does not exist any item which is influenced by "time of use of SNSs (in minutes per day)", "number of contacts" and "membership in years" by the country. The correlation coefficient presents the result that it does not exist a general rule

that a factor, country or item influence each other on a statistic relevant level. Only "present or share information about yourself" is for respondents from Germany and Latvia influenced from two factors with a significant correlation coefficient. The item "communicate with friends" is influenced by two factors for respondents from Germany and Latvia. The German individuals are mainly influenced by the analysed factors and have the highest number of significant Spearman correlation coefficients. The amount of factors with a relevant statistically significant Spearman correlation varied between the countries. For respondents from Latvia there were the most factors and Hungary had only one factor with a statistically significant Spearman correlation coefficient. The results present the information that the use of SNSs influences the items depending on the respondent's country of origin. Those results are indicators that there are differences in the use of SNSs to receive benefits from SNSs use.

Comparing social capital indicators and motivators to forward information

The first result for the factor "number of contacts" has only significant correlations for evaluations by respondents from Hungary, United Kingdom and Latvia. A significant correlation does not exist for evaluations by respondents from Germany. There is not any statement which is influenced by the number of contacts for evaluations by respondents from Latvia and Hungary, the statements influence only one country separate. The evaluations by respondents from United Kingdom has "My information is visible for a large audience" and "It is possible to inform people worldwide in a fast and easy way" as statistically relevant results. The item "It is possible to inform people worldwide in a fast and easy way" is the only item for the factor "number of contacts" with statistical relevant results for evaluations by respondents from Hungary and the United Kingdom. That means the number of contacts do not have conformity between evaluations by respondents from Latvia and Hungary. The evaluations by respondents from Hungary have three evaluated statements which are influenced by the number of contacts, evaluations by respondents from United Kingdom has two evaluated statements and evaluations by respondents from Latvia has only one evaluated statement which is influenced by the number of contacts. That means the number of contacts is obviously a more important factor for Hungarian individuals compared with Latvian, United Kingdom and German respondents. The results of the significant correlation coefficient are all with negative sign. The results in detail are presented in Table 6. The analysed statement "duration of membership in years" is important only for German respondents. Latvian, British and Hungarian respondents are not influenced by "the duration of membership". The factor has only significant correlation coefficient with the statement "I have an advantage with the transfer of information".

Table 6

Spearman correlation (included only statistically significant results) between "number of contacts" and analyzed items for the question "Why would you forward information on private social network sites?"

	I expect obligations in future for my information	I have an advantage with the transfer of information	It is possible to inform people worldwide in a fast and easy way	My information is visible for a large audience	My friends on private SNSs are nice and I would like to do them a favor
Country	HU	HU	HU	UK	UK	LV
Spearman Correlation Coefficient	-0.197	-0.209	-0.257	-0.317	-0.276	-0.277
Sig. (2-tailed)	0.039	0.029	0.007	0.015	0.036	0.022

Source: Calculated by Tom Sander based on survey data, HU: n = 110; LV: n = 68; UK: n = 58

This statement is the only statement which is influenced by all three analysed factors of social capital. It is significantly correlated with "number of contacts" in SNS and respondents from Germany. Other significant correlation coefficients with German respondents is the "time of use SNS per day". That means this item is the only one that is mentioned in relation to all three analysed factors for two different countries.

	I have an advantage with the transfer of information
Spearman Correlation Coefficient	-0.301
Sig. (2-tailed)	0.008

Source: Calculated by Tom Sander based on survey data, GER: n = 77

The last analysed factor is the "time of SNS use (in minutes per day)". This factor has the most influence on the statements evaluated by respondents regarding the reason to use private SNS to exchange and share information. The analysed factor influences evaluations by respondents on the reason to use SNSs for respondents from Germany, Latvia and United Kingdom. The reason of use of SNS "I collected positive experience with forwarding information" has a statistical relevant correlation coefficient for respondent evaluations from Germany, United Kingdom and Latvia. In total there are five analysed items which are influenced by the "time of use of SNSs (in minutes per day)".

The largest influence on German, British and Latvian respondents has the factor "time of use SNSs (in minutes per day)" with three factors for German respondents, two factors for British participants and four factors for Latvian respondents. The evaluations by Hungarian respondents do not have any significant correlation coefficient for this factor. They have three statements influenced by the factor "number of contacts". All significant correlation coefficients for those factors are negative and results are included in Table 8.

	I collected positive experience with forwarding information			My friends on private SNSs are nice and I would like to do them a favor		My information is visible for a large audience		I have an advantage with the transfer of information	Somebody else has an advantage with forwarding the information
Country	LV	GER	UK	LV	GER	GER	UK	LV	LV
Spearman Correlation Coefficient	-0.40	-0.37	-0.255	-0.260	-0.39	-0.281	-0.348	-0.258	-0.323
Sig. (2-tailed)	0.00	0.00	0.039	0.026	0.000	0.006	0.004	0.028	0.005

Source: Calculated by Tom Sander based on survey data GER: n = 77; LV: n = 68; UK: n = 58

The statistically significant Spearman correlation coefficients with reasonable significance level are all negative. That means that the investment of time and number of contacts influence the intensity to use private SNSs. The Spearman correlation analysis provides the general result that individuals in different countries differ in their use of SNSs. The use of SNSs is influenced by the invested time to use SNS and efforts to maintain relationships e.g. to provide resources or information to other members. There are many reasons to use SNSs, but the investigated reasons have all a negative significant correlation coefficient.

Analysis of the difference between countries with *WarpPLS*

The data is tested with the software WarpPLS to investigate the influence of the use of SNSs on the kind of information which is shared and exchanged on private SNSs. The indicators for the use of SNSs are duration of membership, number of contacts and time to use SNSs per day. The first analysed question is "Why would you forward information on private social network sites?". The indicators are "I collected positive experience with forwarding information", "my information is visible for a large audience", "my friends on private SNSs are nice and I would like to do them a favour", "I have an advantage with the transfer of information", "somebody else has an advantage with forwarding the information" and "it is possible to inform people worldwide in a fast and easy way". The model is created as recommended by Kock (Kock, 2013) to estimate the relationship between the use of SNSs and the shared information content (Kock, 2011; Kock, 2010).

Figure 1

Estimation of the influence of "Use of SNSs" on "Share and exchange of content" at SNSs to investigate the differences between countries in the use of SNSs for the question, "What do you use private social network sites for?"; Source: Authors construction
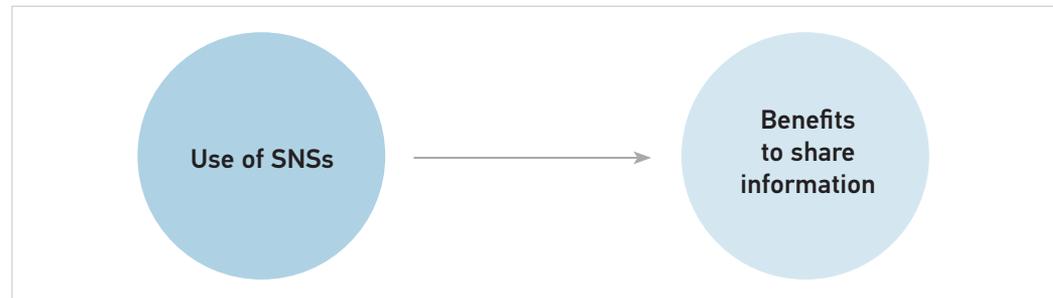
The average full collinearity variance inflation factor (VIF) should be ideally <=3 and all countries fulfil the requirement. The Tenhaus GoF has different ranks. The lowest level with small is >= 0.1, medium >= 0.25 and large >= 0.36. The Tenhaus GoF for Germany and Latvia is small the United Kingdom is on a medium level and for Hungary below small. The result for all countries for Sympson´s paradox ratio (SPR), R-squared contribution ratio (RSCR) and Statistical suppression ratio (SSR) fulfil the requirements and have the value one. Latvia has NLBCDR of 0.5 that is not ideal because the value should be above of 0.7 to be acceptable. In general, the statist values are weak, but the results once again present a difference between the nations. The results are presented in Table 9.

Table 9

Results for WarpPLS for Germany, Hungary, Latvia and United Kingdom, APC, ARS, AARS, AFVIF, Tenenhaus GoF and NLBCDR to analyze the differences between the countries

|	Average path coefficient (APC)	Average R-squared (ARS)	Average adjusted R-Squared (AARS)	Average full collinearity VIF (AFVIF)	Tenenhaus GoF	Nonlinear bivariate causality direction ratio (NLBCDR)
GER	0.167, P=0.024	0.028, P=0.197	0.017, P=0.217	1.002	0.135	0.5
HU	0.096, P=0.076	0.009, P=0.231	0.000, P=0.250	1.004	0.070	0.5
LV	0.175, P=0.030	0.031, P=0.198	0.017, P=0.221	1.002	0.115	1
UK	0.211, P=0.017	0.044, P=0.178	0.030, P=0.201	1.000	0.172	0.5

Source: Source calculated by Tom Sander

The results confirm the differences in the evaluations of the explored statements between the countries and provide an indication how the use of SNSs influences the behaviour to share information via SNSs. The results explain a relationship between use of SNSs and benefits to share information. This indication would be of interest for future research. The influence on the use of SNSs and to share or exchange of information depends on the culture. United Kingdom has the largest R-squared with 0.132 and highest path coefficient with 0.363. Hungary has the lowest

ARS with 0.009 and APC of 0.096. Latvia has the second largest APC with 0.203 and ARS of 0.041. Germany comes in at third place with APC 0.148 and ARS 0.022.

The second analysed question is "What do you use SNSs for?". The indicators are "present or share information about yourself"; "Search for information"; "Communicate with friends"; "For amusement or entertainment"; "Influence other individuals"; "Maintain friendship" and "Organize groups"
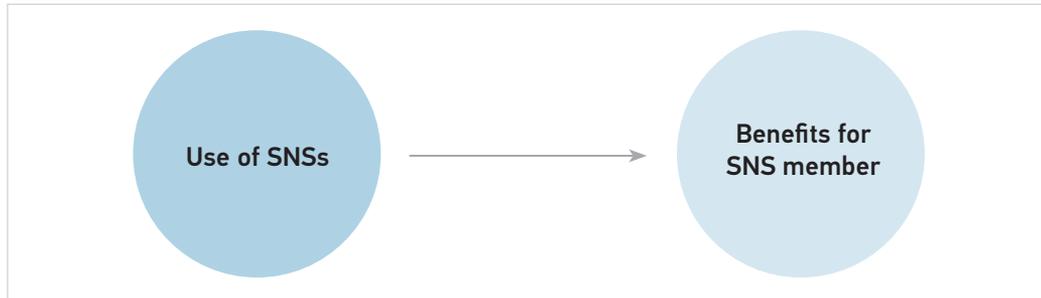
Figure 2

Estimation of the influence of "Use of SNSs" on "Share and exchange of content" at SNSs to investigate the differences between countries in the use of SNSs for the question "Why would you forward information on private social network sites?"; Source Authors construction

All countries fulfil the VIF requirements. The Tenhaus GoF for Germany (0.121) and Latvia (0.131) is small, the UK (0.435) is on a medium level and for Hungary (0.093) below small. The result for all countries for Sympson´s paradox ratio (SPR), R-squared contribution ratio (RSCR) and Statistical suppression ratio (SSR) fulfil the requirements and have the value one. Latvia and Germany have NLBCDR of 0.5. This is not ideal, since the value should be above 0.7 to be acceptable. In general, the statistic values are weak, but the results once again present a difference between the countries of respondents. The results are presented in Table 10.

	Average path coefficient (APC)	Average R-squared (ARS)	Average adjusted R-Squared (AARS)	Average full collinearity VIF (AFVIF)	Tenen-haus GoF	Nonlinear bivariate causality direction ratio (NLBCDR)
GER	0.159 (P=0.028)	0.025 (P=0.201)	0.015 (P=0.222)	1.002	0.121	0.5
HU	0.151 (P=0.026)	0.023 (P=0.203)	0.014 (P=0.222)	1	0.093	1
LV	0.205 (P=0.016)	0.042 (P=0.179)	0.029 (P=0.201)	1.001	0.131	0.5
UK	0.603 (P<0.001)	0.397 (P<0.001)	0.388 (P<0.001)	1.007	0.435	1

Table 10

Results for WarpPLS for Germany, Hungary, Latvia and United Kingdom, APC, ARS, AARS, AFVIF, Tenenhaus GoF and NLBCDR to analyze the differences between the countries

Source: Calculation by Tom Sander

The results confirm the differences of responses between the countries. The influence on the benefits of SNSs depends on the respondent's country of origin. United Kingdom has the largest AARS with 0.388 and highest path coefficient with 0.603. The lowest AARS has Hungary with 0.014 and APC of 0.151. Latvia has the second largest APC with 0.205 and ARS of 0.029. Germany is on the third place with APC 0.159 and ARS 0.015. In general, presents the data the result that the use of SNS influences the benefits of the user.

The research presents differences and similarities between European countries to use private SNSs. The statement is tested with different methods and present differences and similarities between countries.

The first question analysed is "What do you use private social network sites for?". There are more similarities between respondents from Latvia and Hungary compared with similarities with re-

Discussion of the results

spondents from Germany. The results of SNS use in new EU countries are more similar in their results. However, all countries have differences and the use of SNSs depends on the location of the user. This is a strong result of the research and confirms former research. Respondents from Germany seem to be more reserved towards the usage of SNSs overall. People in Hungary and especially in Latvia are more willing to use SNSs for different kind of communication and search. It might imply that information transfer via SNSs for companies could be more successful in the United Kingdom, Latvia and Hungary, rather than in Germany.

The SNSs are mainly used to maintain friendship. All responses by respondents from four countries have a positive tendency to use SNSs to maintain their relationships and to use private SNSs to get in contact with their friends. Organizations, when choosing SNSs as communication tool to convey their advertising messages must take into account that too frequent or too aggressive advertising may create negative effect. Advertising messages should not be disturbing when users are communicating with friends and other members. In addition, the extent to which SNS creators allow daily advertising must be taken into consideration, particularly with respect to the preference of SNS users. SNSs might start losing their members as a result of excessive advertisement.

WarpPLS support the result that there are differences between the evaluations by respondents from different countries. The use of SNSs has different influence on the benefits of SNSs. But the results are weak and, for Hungary, the result does not fulfil the GoF. That has to be considered with the interpretation of the results.

The countries are mainly different, and organizations cannot use a global strategy in general for a local market. The results explain that the countries have different preferences to use SNSs. The private SNSs can be used for different purposes e.g. for marketing campaigns, but the campaign has to be customized for the country to be successful. The acceptance and use of SNSs is fractional explainable with the social factors. The results of the significant correlation coefficients between the different social factors e.g. social status and countries have a variance. That means the influence on the use of SNSs depends on the social status and origin differently. Individual's anticipation of the benefit of SNSs is influenced by the respondent's country of origin.

There are different variants between the countries but there is not visible structure to summarize different countries in one group. This would require further research and more countries involved. To generalize the results, the research in further countries is needed to investigate deeper the similarities and differences between the regions to provide more accurate advice to social science, companies and other stakeholders. The initial result is that the origin influences the use of private SNSs. The social factors have different consequences depending on the countries. The social capital influences the use of SNSs differently. Organizations need more knowledge about SNSs to be more successful. Further research is needed that organizations can use private SNSs as a global tool to generate more business or the use of SNSs as a marketplace.

The second evaluated question is "Why would you forward information on private social network sites?". The main reason for all respondents independent from their country of origin is that SNSs provide the opportunity to transfer information quickly and easily with the tendency in evaluations of respondents to strongly agree. The respondents for all countries have this item evaluated on median one or two. The reason to have an advantage or to get obligations is not as important for German respondents compared with the other items. They rated those two items with the tendency of their evaluations to strongly disagree compared with respondents from Latvia and Hungary.

The influence of the investment in private SNSs is various. The factor "time of SNS use (in minutes per day)", "number of contacts" and "duration of membership" has a different level of influence on

the statements. The factor significant correlation coefficient depends on the country. That means there does not exist a kind of investment in social capital that general influence the motivation to share or exchange information. The countries are influenced by different factors. Some of the items are not influenced by the factors of social capital. Only the statement "I have an advantage with the transfer of information" is influenced by all three factors, use of SNSs in minutes per day, duration of membership and number of contacts, but the significant correlation coefficient is only valid for two different countries. The result is that the influence of social factors only partially depending on the country affects the motivation to use SNSs for sharing and exchanging information. An effectual universal social capital factor for all countries and statements does not exist. The research requires for further investigations more factors which influence the use of SNSs.

The result of the research is important for organizations. The knowledge about motivation to forward information at private SNSs can be used by organizations. The organizations need this knowledge in order to motivate their employees to forward information about open positions, for example. Furthermore, we see here how the use of SNSs influence the motivation of SNSs member to forward information. The influencer of the motivation depends on the location and is different between the countries. The activities to influence the motivation to forward information via SNSs are different. Organizations need a local strategy for countries because the results present large differences between the countries. Although SNSs are certainly global tools, companies must employ effective local strategies to make best use of them. Marketing departments and communication theories have to take into consideration the results of the statistical results presented here to optimize the transfer of information in private SNSs worldwide. For example - to concentrate on leisure time and entertainment related content for private SNSs. This kind of content is accepted by respondents from all countries. Another point is that the awareness of having the advantage of the ability to quickly and efficiently forward information is not recognized on the same level by all countries. That means the motivation to transfer information depends on the advantage which is perceived for the transfer. The advantage can be the access to information and to receive support of other SNSs member. This advantage influences the behaviour of SNSs users.

The borders in private SNSs still exist, and the private SNS needs a local customized strategy that organizations are successful in the use of SNSs. SNSs providers have to be aware that the motivation to use their product to forward information depends on the user's origin. The research explains that there are differences and similarities between the countries which have to be considered.

The use of SNSs as a communication tool is mainly accepted by British, German and Hungarian SNSs member. Latvian individuals do not have the same positive tendency in their evaluations than the evaluations by respondents from other analysed countries. People from Latvia, UK and Hungary use SNSs more intensively to search information than German respondents. There is the same situation with the opportunity to present themselves in private SNSs. For this item, is the tendency stronger than for the statement before. The results of evaluations by respondents for both statements are similar with their results. That is important to know for companies, because the use of SNSs as a tool to share and exchange information is needed to transfer content between the individuals. That can influence the communication strategy of the marketing department for example. The use of the private SNSs for entertainment and amusement is very important and a typical behaviour of SNSs user. The results for all countries are very next. That means all four groups use private SNSs for their leisure time. They use SNSs to be entertained. That can be important information for companies which produce entertainment software for private SNSs for example. The private SNSs can be used cross border as a platform to distribute the software. The respondents of all four countries have agreed that SNSs are a good place for entertainment and amusement on a similar level. The result has to be

Conclusion and recommendations

under consideration that the results are not significant tested and needs further research. The use of private SNSs to influence each other has a completely different result. Respondents from Germany do not use private SNSs to influence each other. The Latvian respondents have the highest tendency to use SNSs to influence each other and the Hungarian and UK respondents evaluations are between the evaluations by respondents from Germany and Latvia.

The investments of time in private SNSs have differences between the countries. Hungarian respondent's use of private SNSs measured with number of contacts influences only the communication. The number of contacts has a weak significant correlation coefficient with the use of SNSs to communicate. All other social factors to use private SNSs and statements regarding the use of private SNSs do not have a significant correlation coefficient. In comparison, Latvia´s statements are influenced by all social factors. The social factors explain a kind of social capital. The Latvian individual's social capital influences most often the use of SNSs. Germany´s statements are influenced by the social factor use in minutes per day and number of contacts. The duration of membership does not have a significant correlation with the statements. The largest number of significant correlations has Germany. The behaviour of German individuals can be mainly predicted with the social factors compared with Latvia and Hungary. The social factor "use SNS in minutes per day" has very similar correlation coefficients between the statements "search for information" and "communicate with friends" for Germany and Latvia. This is very interesting and important to know that the influence is similar for the two analysed statements.

The limitation of the research is the number of countries as well as small sample in each country. To generalize the result more deeply does it needs more countries and more respondents in each country. Furthermore, the gender distribution of the Latvian sample must be taken into consideration, and that the questionnaire has been available in more languages. The next step for the research is to increase the number of countries to evaluate the use of private SNSs for further topics e.g. employment issues deeper.

References

Adamic, L. A. (2001). The Small World Web. Proceedings of the Third European Conference, ECDL'99, 443-452. https://doi.org/10.1007/3-540-48155-9_27

Beugelsdijk, S. & Van Schaik, T. (2005). Differences in social capital between 54 Western European regions. Regional Studies, 39(8), 1053-1064. https://doi.org/10.1080/00343400500328040

Bohn, A., Buchta, C., Hornik, K. & Mair, P. (2014). Making friends and communicating on Facebook: Implications for the access to social capital. Social Networks, 37(1), 29-41. https://doi.org/10.1016/j.socnet.2013.11.003

Boyd, D. M. & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication, 13(1), 210-230. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Burdine, J. N., Felix, M. R., Wallerstein, N., Abel, A. L., Wiltraut, C. J., Musselman, Y. J. & Stidley, C. (1999). Measurement of social capital. Annals Of The New York Academy Of Sciences, 896, 393-395. https://doi.org/10.1111/j.1749-6632.1999.tb08151.x

Burt, R. S. (2000). The network structure of social capital. Research in Organizational Behavior, 22, 345-423. https://doi.org/10.1016/S0191-3085(00)22009-1

Ellison, N. B., Steinfield, C. & Lampe, C. (2007). The benefits of facebook "friends:" Social capital and college students'use of online social network sites. Journal of Computer Mediated Communication, 12, 1143-1168. https://doi.org/10.1111/j.1083-6101.2007.00367.x

Ellison, N. B., Vitak, J., Gray, R. & Lampe, C. (2014). Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes. Journal of Computer-Mediated Communication, 19(4), 855-870. https://doi.org/10.1111/jcc4.12078

Fussell, H., Harrison-Rexrode, J., Kennan, W. R. & Hazleton, V. (2006). The relationship between social capital, transaction costs, and organizational out-

comes: A case study. Corporate Communications: An International Journal, 11(2), 148-161. https://doi.org/10.1108/13563280610661688

Gabher, G. & König, J. (2017). Performing Network Theory? Reflexive Relationship Management on Social Network Sites. (B. Hollstein & E. Al, Eds.) (Springer). Heidelberg. https://doi.org/10.1007/978-3-319-50386-8_8

Granovetter, M. (2005). The impact of social structure on economic outcomes. The Journal of Economic Perspectives, 19(1), 33-50. https://doi.org/10.1257/0895330053147958

Granovetter, M. S. (1973). The strength of weak ties. American Journal of Sociology, 78(6), 1360-1380. https://doi.org/10.1086/225469

Hampton, K. & Wellman, B. (2003). Neighboring in Netville: How the Internet supports community and social capital in a wired suburb. City & Community, 2(4), 277-311. https://doi.org/10.1046/j.1535-6841.2003.00057.x

Harzing, A.-W. Reiche, B. S. & Pudelko, M. (2013). Challenges in international survey research : a review with illustrations and suggested solutions for best practice. European Journal of International Management, 7(1), 112-134. https://doi.org/10.1504/EJIM.2013.052090

Haythornthwaite, C. & Kendall, L. (2010). Internet and Community. American Behavioral Scientist, 53(8), 1083-1094. https://doi.org/10.1177/0002764209356242

Healy, T. (2002). The measurement of social capital at international level (Vol. 2). Dublin.

Kock, N. (2010). Using WarpPLS in E-collaboration Studies: An Overview of Five Main Analysis Steps. International Journal of E-Collaboration, 6(4), 1-11. https://doi.org/10.4018/jec.2010100101

Kock, N. (2011). Using WarpPLS in e-collaboration Studies: Mediating Effects, Control and Second Order Variables, and Algorithm Choices. International Journal of E-Collaboration, 7(3), 1-13. https://doi.org/10.4018/jec.2011070101

Kock, N. (2013). Using WarpPls in E-Collaboration Studies: What if I have Only One Group and One Condition? International Journal of E-Collaboration, 9(3), 1-12. https://doi.org/10.4018/jec.2013070101

Li, C. & Bernoff, J. (2011). Groundswell, winning in a world transformed by social technologies. Bos-ton: Harvard Business Review Press. https://doi.org/10.1108/sd.2010.05626hae.002

Lin, N. (2001). Building a network theory of social capital. In N. Lin, K. Cook, & R. Burt (Eds.), Social capital theory and research (pp. 3-30). New Jersey. https://doi.org/10.4324/9781315129457-1

Mayer, V., Müller, P. P. & Mayer, C. (2016). Digital Natives & Digital Economy - passt das? Binz - Zürich.

Paldam, M. (2000). Social Capital: One or Many? Definition and Measurement. Journal of Economic Surveys, 14(5), 629-653. https://doi.org/10.1111/1467-6419.00127

Pentland. (2014). Social Physics. New York, New York, USA: Penguin Books.

Pfeil, U., Arjan, R. & Zaphiris, P. (2009). Age differences in online social networking - A study of user profiles and the social capital divide among teenagers and older users in MySpace. Computers in Human Behavior, 25(3), 643-654. https://doi.org/10.1016/j.chb.2008.08.015

Sander, T. (2012). Social Media from the Perspective of both Strong and Weak ties and the Implications for Recruiting. International Journal of Arts & Scienes, 5(1), 121-133.

Sander, T., Sloka, B. & Pauzuoliene, J. (2015). The Difference of Social Network Sites Explained with the Employment Seeking Process. Regional Formation and Development Studies, 3(17), 145-153. https://doi.org/10.15181/rfds.v16i3.1128

Sander, T., Sloka, B. & Puke, I. (2017). Differences in the exchange of contents of different countries in social network sites. International Journal of E-Colaboration (IJeC), 13(2), 1-17. https://doi.org/10.4018/IJeC.2017040104

Sander, T., Sloka, B. & Teh, P. L. (2016). Gender Difference in the use of Social Network Sites. In Project Management Development - Practice and Perspectives (pp. 324-332). Riga.

Sander, T. & Teh, P. L. (2014a). A Concept to Measure Social Capital in Social Network Sites. International Journal of Future Computer and Communication, 3(2). https://doi.org/10.7763/IJFCC.2014.V3.278

Sander, T., & Teh, P. L. (2014b). Determining the Indicators of Social Capital Theory to Social Network Sites. In 3rd Inenatinal Conference on User Science and Engineering. Shah Alam, Malaysia. https://doi.org/10.1109/IUSER.2014.7002714

Scott, J. K. & Johnson, T. G. (2005). Bowling alone but online together: Social capital in e-communities. Journal of the Community Development Society, 36(1), 2-18. https://doi.org/10.1080/15575330509489868

Sherif, K., Hoffman, J. & Thomas, B. (2006). Can technology build organizational social capital? The case of a global IT consulting firm. Information & Management, 43(7), 795-804. https://doi.org/10.1016/j.im.2006.07.001

Smith, M. (2008). Social capital in online communities. Proceedings of the 2nd PhD Workshop on Information, 17-23. https://doi.org/10.1145/1458550.1458554

Teh, P., Huah, L. P. & Si, Y. (2014). The Intention to share and ReSharedd among the Young Adults towars a Posting at Social Netwoking Sites. In Á. Rocha, A. M. Correia, F. B. Tan, & K. A. Stroetmann (Eds.), New Perspectives in Information Systems and Technologies, Volume 1 (Vol. 275, pp. 13-21). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-05951-8_2

Tronca, L. (2011). How define and measure social capital: The power of the network approach. Revista de Cercetare Si Interventie Sociala, 35, 128-148.

Williams, D. (2007). The impact of time online: social capital and cyberbalkanization. Cyberpsychology & Behavior: The Impact of the Internet. Multimedia and Virtual Reality on Behavior and Society, 10(3), 398-406. https://doi.org/10.1089/cpb.2006.9939

Wilson, R. E., Gosling, S. D. & Graham, L. T. (2012). A Review of Facebook Research in the Social Sciences. Perspectives on Psychological Science, 7(3), 203-220. https://doi.org/10.1177/1745691612442904

About the authors

TOM SANDER

University of Ludwigshafen

Address
Ernst Boehe Str. 4. 67059
Ludwigshafen Germany
E-mail: tom.sander@hotmail.de

BIRUTA SLOKA

Dr. oec., prof.
University of Latvia

Fields of interests
Public administration, social inclusion,
data analysis

Address
Raiņa blvd. 19, Rīga, LV-1586
+371 29244966
E-mail: biruta.sloka@lu.lv