OPPORTUNITIES AND CHALLENGES OF SOCIAL MEDIA USE IN MUNICIPALITIES IN LATVIA

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Abstract. The use of different kind of social media by local governments has gained relevance in recent years, however, along with many opportunities and successes, the use of social media by local governments has many challenges, barriers and issues which are not enough researched and discussed in academic research.

Purpose of the study is to analyse benefits and challenges of social media use in municipalities in Latvia. Research methods used in preparation of the paper: recent scientific publication studies, analysis of social media of municipalities of Latvia, survey on social media use in municipalities in Latvia realized on April 2021. For data analysis there were used indicators of descriptive statistics: indicators of central tendency or location (arithmetic mean, mode, median, quartiles), indicators of variability (variance, standard deviation, standard error of mean), cross – tabulations, statistical tests of hypotheses and analysis of variance (ANOVA).

The results show that most municipalities generally have positive views of their social media use but the real application of social media is not consistent in each municipality. Although majority of municipalities use at least two social media, the study found important challenges in terms of reginal development, digital skills, appropriate employees and social media content.

Keywords: *digital skills, Facebook, municipalities, social media, social networks.*
JEL code: O33; R11: M31

Introduction

Social media use in municipalities has expanded around the world on the basis of development of internet and technology. Although each social network offers substantial benefits and opportunities to municipalities, research of social media use in municipalities in Latvia remains scant. Municipalities needs to be more open and transparent about its activities and social networking can help in evolving more inclusive governing model where municipality not only spread awareness of its activities and plans, but also engage in a communication with citizens. However, along with many positive impacts, limited attention has been directed towards number of challenges of social network use in the public sector.

But in Latvia – where are hundred and nine teen (119) municipalities) in 6 regions where there are large regional differences between those regions and municipalities, social media is a tool that improves communication with the population, promotes the involvement of the population in decision-making and makes the activities of local governments more transparent. However, along with many positive impacts, limited attention has been directed towards number of challenges of social network use in the public sector.

The aim of the research is to analyse benefits and challenges of social media use in municipalities in Latvia.

The tasks of the study:
1) to review theoretical background of social media use in municipalities;
2) to review existing research of income differences in the regions in EU;
3) to analyse problems of social media use in municipalities of Latvia.

Research methods used in preparation of the paper: recent scientific publication studies, analysis of social media of municipalities of Latvia, survey on social media use in municipalities in Latvia realized on April 2021. For data analysis there were used indicators of descriptive statistics: indicators of central tendency or location (arithmetic mean, mode, median, quartiles), indicators of variability (variance, standard deviation, standard error of mean), cross – tabulations, statistical tests of hypotheses and analysis of variance (ANOVA).

Literature Review

Social media is a powerful tool for public organizations and governments as well. Use of social media open up un increase citizen engagement, increase transparency (Bonson, et.al., 2017), facilitate communication and interaction and increase accountability (Nica, et.al., 2014). Usually municipalities create social media accounts, but do not use them to the full potential. The main reasons of creation of social media accounts in municipalities in Sweden is promoting municipality, provide citizens with fast and easily accessible information, increase democracy and build extensive network (Norstrom, Hattinger, 2016).

Majority of scientific articles analyse content and benefits of Facebook use in municipalities, for example, study in Slovakia (Mital, Jozef, 2020) revealed that majority of regional cities use their *Facebook* page mostly to share informational posts about past and future events and there is a lack of posts that ask citizen participation. In case of Romania, all of the main municipalities have Facebook page, but content varies depending of the municipality, for example, Constanta post more tourism information, but Oradea share strong digitalization initiatives (Teiu, 2020). Study in Portugal indicated that use of Facebook increases visibility of newly elected officials, foster the political engagement of apathetic voters and underlines the link between municipalities' commitment to transparency and the use of social media (Silva, et. al., 2019). By popularity Facebook is the dominant social network in municipalities in USA and the content posted on Facebook and Twitter is very similar, and most often it is information about events, what mean that most municipalities tend to post one-way content in their social networks, which is also easier and more understandable form of content, but at the same time less engaging and does not form a dialogue with the municipality (Graham, Avery, 2013). Social media are highly regarded as a beneficial communication tool for local governments (Graham, 2014), but many cities of US are still in the initial information and communication stage of social media usage, which is clearly reflected in their policies (Manoharan, 2017). Public authorities of the world's largest cities prefer Facebook, Twitter and Youtube, followed by Google, LinkedIn, Instagram (Mainka, et.al., 2015).

Some research analyses also Instagram and Twitter revealing that both photos and videos facilitate communication between the municipality and the public (Hofmann, et.al., 2015). Study about Instagram use in municipalities in Spain showed that in the region of Andalusia, which has 29 municipalities, Instagram accounts are maintained by 17 municipalities, and found that municipalities with high debts do not maintain or actively use Instagram. (Perea, Bonson, Bednrova, 2021). While study about Twitter use in municipalities in Netherlands revealed that municipalities which use *Twitter* for a longer time make more advanced use of its functions (Faber, et.al., 2020).

Social media as a tool of citizen engagement is widely researched topic in several countries, for example, findings from Italian municipalities (Bonson, et.al.; 2019) show that similar to other social media, Twitter is widely used in Andalusian municipalities, because it helps to promote the municipality with very low costs or no costs at all, however there is no significant relationship between population of the municipality and its citizens' engagement and there is a significant negative relationship between *Twitter* audience and engagement and between activity and engagement. *Haro-de-Rosario* et.al. also indicate that higher levels of citizen engagement are achieved with Facebook, not Twitter (Haro-de-Rosario, et.al., 2018). It is important to choose social media instrument and its managerial integration depending on the purpose, because

Youtube, for example, is used to support public communication while Facebook to favour public participation (Agostino, 2013). Majority of audience of the Western European municipalities' official *Facebook* page is high, but citizen engagement is very low (Bonson, et.al., 2017). However, *Roengtam* indicate that although social media use can apply through various formats, they can generally only facilitate communication activities and there are no apparent activities to promote engagement and interaction (Roengtam, 2020).

Several researches are devoted to social media use in municipalities by age, education and income level, for example, municipalities with a higher presence of people at the age from 20 to 65 and municipalities with a higher presence of people with higher education use their social media more for interaction (Faber, et.al., 2020) and the lower the income level of the population, the more actively municipalities use social networks (Guillamon, et.al., 2016).

Several researches are devoted to social media use in municipalities during Covid-19 pandemic, where findings from Wuhan, China indicate that social media can provide a venue for the government to not only tackle the information overload, but also mitigate the friction among levels of government (Li, et.al., 2020). Findings from Portugal (Padeiro, et.al., 2021) show that there are factors which lead some municipalities to communicate more actively than other on social media, as well as financial autonomy of the municipality is the main predictor of e-disclosure. However, more effective disclosure can be reached by establishing communication strategies for public health crisis, making financial resources available for these strategies and reducing digital divide.

Methodology

To analyze views of municipalities in Latvia on different aspects of use of digital marketing it was conducted survey of municipalities representatives. The survey questionnaire was sent out and collected from April 20 to April 29. The questionnaire was created using survey tool *QuestionPro* and sent to 119 municipalities of Latvia on *Facebook* or to the e-mail if the municipality did not have a Facebook account. The results of the survey were analyzed using SPSS. For data analysis there were used indicators of descriptive statistics: indicators of central tendency or location (arithmetic mean, mode, median, quartiles), indicators of variability (variance, standard deviation, standard error of mean), cross – tabulations, statistical tests of hypotheses and analysis of variance (ANOVA).

A total of 87 responses by respondents included in the sample were received; demographic profile of the sample is shown in Table 1.

Table 1

Demographic profile of the sample of the survey

		N	Percent
Position	Public Relation specialist	49	57.0
	Editor	3	3.5
	Project Manager	3	3.5
	Head of Development	2	2.3
	Youth specialist	2	2.3
	Other	27	31.4
Region	Rīga region	1	100,0
	Pierīga region	16	55,2
	Kurzeme district	14	70,0
	Latgale district	14	66,7
	Vidzeme district	19	73,1
	Zemgale district	21	95,5
Education	Basic education or lower	0	0
	Secondary education	2	2
	Vocational education	3	3.5
	Bachelor's degree	45	52.3
	Master's degree	36	41.9
	Doctor	0	0

Source: author's calculations, based on survey "Social media use in municipalities" in 2021, n=87

Municipalities form all regions of Latvia participated in the survey, but most were from Zemgale and Vidzeme region, but the least from Pierīga and Latgale region.

Data analysis revealed that person in charge of social networks in 49 municipalities of Latvia is public relation specialist, in 3 municipalities they were editors and project managers, in 2 municipalities – head of development and youth specialists, but in 27 municipalities representatives of other position like customer service specialist, communication specialist, tourism manager, website administrator etc.

Most respondents of the survey were public relation specialists who worked in the municipalities also as social media administrators.

Majority of respondents – 81 person - have higher education, respectively, 45 of them bachelor's degree, but 36 – master's degree. Two respondents have secondary education, but 3 respondents – vocational education. Overall, responsive rate of the survey is very high as 72% of municipalities filled in the survey.

Research results and discussion

Table 2

Main statistical indicators of responses of municipal representatives on the use of information sources for municipal communication with the population in Latvia in 2021

Statistical indicators		E-mail	Website	Newspaper	Announcements at the poster board	Mobile apps	Radio	Social media	TV
N	Valid	86	86	86	86	86	86	86	86
	Missing	0	0	0	0	0	0	0	0
Mean		7,70	9,52	8,99	7,43	2,45	4,07	9,40	5,07
Std. Error of Mean		0,301	0,105	0,209	0,229	0,302	0,303	0,163	0,284
Median		9	10	10	8	1	3	10	5
Mode		10	10	10	10	1	1	10	1; 3: 5: 6: 7
Std. Deviation		2,808	0,975	1,950	2,133	2,815	2,828	1,521	2,654
Range		9	5	9	8	9	9	9	9
Minimum		1	5	1	2	1	1	1	1
Maximum		10	10	10	10	10	10	10	10

Source: author's construction based on survey "Social media use in municipalities" in 2021, n=87, evaluation scale 1- 10, where 1- used seldom; 10 – used very often

Evaluating information sources from 1 to 10 after using them to provide information to inhabitants about the municipality's activities and events, the highest average rating was for municipality's website, followed by social networks, which was also expected, as both sources are widely used and popular today. The legislation in Latvia stipulates that each municipality must have a website, but the use of social networks is not stipulated at all. The next most frequently used source of information for a municipality with inhabitants is a municipal or county newspaper. Although there is a lot of talks in Latvia about the decline and even disappearance of magazines and printed press in the future, at the municipal level this is one of the most effective sources of information, which is important for both the municipality and the population. E-mail and announcements at the poster board were in a similar position, but the least frequently used sources of information are television, radio and municipal mobile application, which was also expected, because, firstly, radio and television as an information channel are most often used to advertise large events and occur relatively infrequently for most of municipalities. But municipal mobile applications would probably also be a frequently used source of information if more mobile applications were available to municipalities. Currently, only a few municipalities (of 119) have such opportunity.

Table 3

Number of social networks used in municipalities in Latvia, 2021

Number of social networks used by municipalities	Number of municipalities
Do not use any social network	13
Use 1 social network	18
Use 2 social networks	24
Use 3 social networks	27
Use 4 social networks	37

Source: author's construction based on survey "Social media use in municipalities" in 2021, n=87, evaluation scale 1- 10, where 1- used seldom; 10 – used very often

The results of the research shows that there are 13 municipalities which do not use any social media at all - and one of the reasons revealed in the survey was that smaller municipalities do not have an employee who can take care of it. There are 18 municipalities which use one (1) social network and this network was Facebook. But what is more important – majority or 88 municipalities in Latvia use two or more social networks.
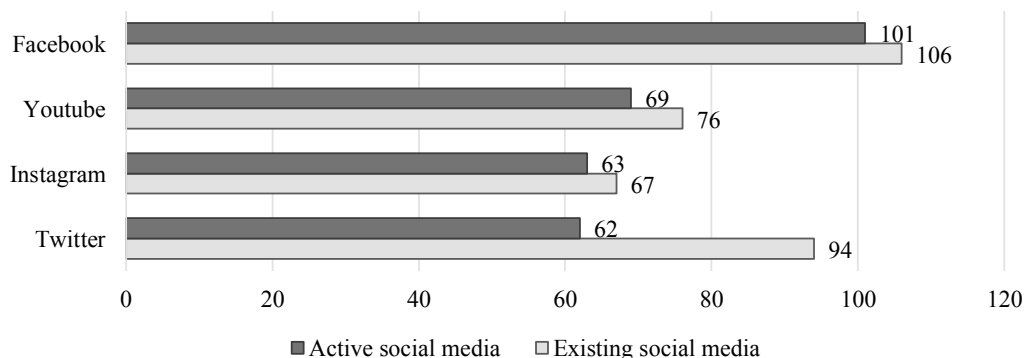
Source: author's construction based on survey "Social media use in municipalities" in 2021, n=87, evaluation scale 1- 10, where 1- used seldom; 10 – used very often

Fig. 1. **Use of social media in municipalities in Latvia, 2021**

According to data not all municipalities registered in social networks, actually keep them active. It became clear that 106 municipalities were found on the social network Facebook, but 5 of them do not carry out any activity. The biggest difference between active and inactive accounts were in case of Twitter use.

Main statistical indicators on evaluations of differences in means of evaluations on factors influencing creation of accounts for social networks by importance of financial support needs

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Number of inhabitants in municipality	Between Groups	43,414	5	8,683	0,816	0,542
	Within Groups	862,310	81	10,646		
	Total	905,724	86			
Average income in municipality	Between Groups	40,324	5	8,065	1,130	0,351
	Within Groups	577,952	81	7,135		
	Total	618,276	86			
Digital skills of inhabitants	Between Groups	28,236	5	5,647	1,174	0,329
	Within Groups	389,764	81	4,812		
	Total	418,000	86			
Level of debts in municipalities	Between Groups	3,218	5	0,644	0,172	0,972
	Within Groups	303,012	81	3,741		
	Total	306,230	86			
Age of inhabitants	Between Groups	39,940	5	7,988	1,171	0,330
	Within Groups	552,336	81	6,819		
	Total	592,276	86			
Location of municipality	Between Groups	42,015	5	8,403	0,819	0,540
	Within Groups	830,882	81	10,258		
	Total	872,897	86			

Source: author's calculation based on survey "Social media use in municipalities" in 2021, n=87, evaluation scale 1- 10, where 1- is not influenced; 10 – has big influence

Analysis of ANOVA indicates that there are no statistically significant differences in arithmetic means of the evaluations by needs of financial support for inhabitants by municipality representatives.
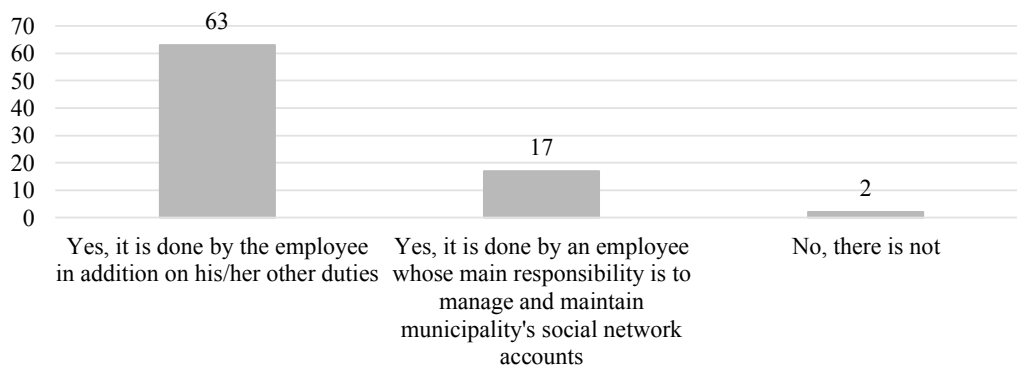
Source: author's construction based on survey "Social media use in municipalities" in 2021, n=87, evaluation scale 1- 10, where 1- used seldom; 10 – used very often

Fig. 2. **Does your municipality have an employee who is responsible for maintaining social network accounts of municipality?**

According to survey important problem revealed - there is no social media specialist in municipalities in Latvia. Public relation specialists of municipalities are responsible for social media. For 63 municipalities social media duties are additional duties, while for 17 municipalities these were the main duties, but for 2 municipalities there were no such employee. Difficulties encountered in municipalities are showed in figure 3.
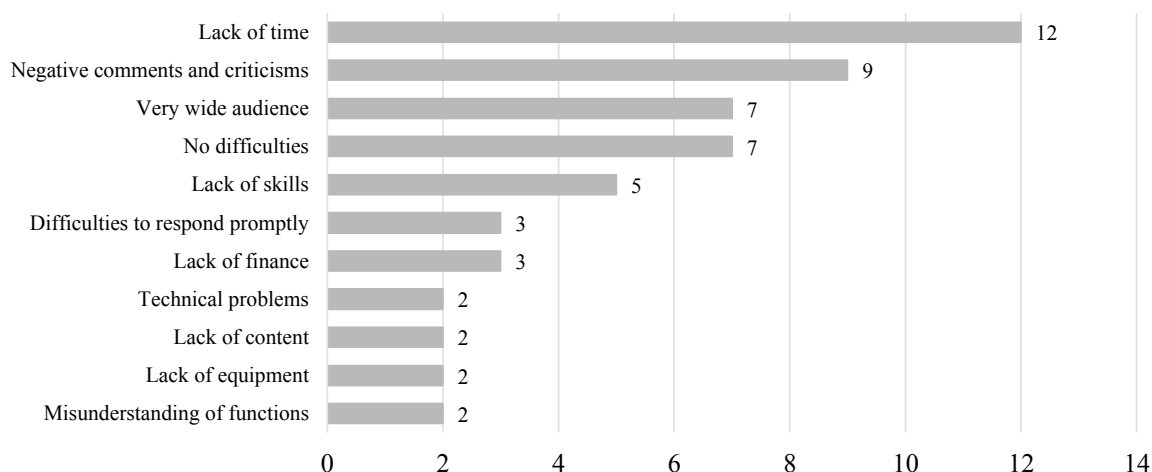
Source: author's construction based on survey "Social media use in municipalities" in 2021, n=87, evaluation scale 1- 10, where 1- used seldom; 10

Fig. 3. **What difficulties has your municipality encountered in creating and maintaining social network accounts?**

Majority of municipalities face several difficulties encountered in creating and maintaining social network accounts. For 12 municipalities the biggest difficulty is lack of time. This comes together with the fact explained previously – that public relation specialist is responsible for social network accounts while doing public relation activities.9 municipalities has difficulties to cope with negative comments and criticisms. While 7 municipalities point out difficulties to cover all of the audience which is very wide. Also 7 municipalities do not face any difficulties. But other types of difficulties are lack of skills, lack of finance, lack of equipment, also lack of content due to covid, as well as technical problems and misunderstanding of functions.

Conclusions, proposals, recommendations

1. Information of inhabitants in municipalities on different aspects of life in municipality is becoming more and more important with development of different possibilities by providing information: webpages, social networks, as well as keeping traditional way of information – newspapers of municipality
2. Different countries have their traditional ways of communication with inhabitants but information technologies take more and more important role in information in municipalities
3. Municipalities which have not devoted attention to importance in providing of information on social networks have to change their traditions and pay more attention on information availability of different municipality aspects in social networks
4. There are important challenges in terms of social network administration as lack of employees and lack of appropriate skills in Latvia
5. However, it is not easy in Latvia, because there is a lack of employees in smaller municipalities. One of the proposals is for The Ministry of Environmental Protection and Regional Development to determine the position and qualification of a new employee in local governments - a social network specialist, in order to facilitate the daily life of public relations specialists and improve the activity of local governments in social networks, as well as social network content. As well it is necessary to establish a regulation on the use of social networks in local governments in the same way as for websites in order to reduce regional differences and introduce equal rules for all municipalities, regardless of their size or popularity.

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Acknowledgement