




# Promotion as a Tool of Smart Governance in Cities

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**Abstract.** The aim of the paper is to identify the promotion tools used as a part of smart governance in the city and verify its utilization in the cities of the Slovak Republic. The paper defines the tools of smart governance and its interconnections with the promotion tools of the cities based on the theoretical review. Subsequently, the defined tools are verified by the empirical research in 141 cities of the Slovak Republic. The research findings are supplemented by the examples of good practice in smart communication from the Slovak cities. Based on the discussion of the research results the strengths, weaknesses and challenges of promotion tools' utilization in smart governance are formulated.

**Keywords:** Smart governance · Promotion · Tools

## 1 Introduction

We live in a time when the communication is strongly influenced by modern technologies, such as laptops, tablets and smart phones. The vast majority of people also use these devices to browse the information on websites and share the ideas via social media. These changes in the communication reflects also the new tools of smart governance in cities. The focus is on regular and multi-channel communication with all relevant stakeholders including the virtual space.

The new forms of communication with stakeholders make easier to actively involve them into the local governance, access information and co-create local policy. In the paper, we focus on the promotion tools used as a part of smart governance in the city and verify its utilization in the cities of the Slovak Republic.

The paper is divided into three chapter. The theoretical part defines the promotion tools and its specifics as a part of smart governance. In part Material and methodology we explain how the research was done and which material was used. In the fourth chapter, we present the research results of realized empirical research on mapping the utilization of promotion tools in the Slovak cities, which is supplemented by the examples of best practices. To conclude the paper we summarizes the strengths, weaknesses and challenges of promotion tools' utilization in smart governance.

## 2 Smart Governance in Cities and Its Tools

The development of new technologies influences all spheres of society including public sector. The most evident is an impact at the lowest level of public administration, which is the closest to citizens, so it means in cities, towns and villages.

The transformation of public administration at local level in line with the technological progress, digitalization and “smartness” in decision making has resulted in a new phenomenon smart governance within the smart city ecosystem.

Based on the deep literature and research studies analysis one of the most complex definition provides Ruhlandt (2018, p. 10). He defines smart governance as “a processual interplay among a diverse set of stakeholders, equipped with different roles and responsibilities, organized in various external and internal structures and organization, driven and facilitated by technology and data, involving certain types of legislation, polices and exchange arrangements, for the purpose of achieving either substantive outputs for cities or procedural changes.”

Smart governance brings smart cities initiatives to citizens, supports their participation in transparent decision-making process including implementation, monitoring and evaluating these initiatives and strengths the collaboration of stakeholders in these activities by ICT (Albino et al. 2015; Misuraca et al. 2011; Baccarne et al. 2014; Scholl and Scholl 2017; Osella et al. 2016; Guendeuz et al. 2017).

Smart governance in cities includes management of:

- city infrastructure containing free access to information and presence of technologies. They are a key element of smart governance implementation. The government in smart city aims to harmonize management, governance and policy with other factors below to define and implement public policies based on sharing visions and strategies with the relevant stakeholders (Nam and Pardo 2011; Mellouli et al. 2014).
- the resources necessary for the development of smart cities (financial, material, technological, natural, human etc.) including performance assessment (Maheshwari and Janssen 2014; Nam and Pardo 2014).
- human assets and other immaterial capital (networks, intellectual capital, knowledge, data, etc.) (Lee and Lee 2014; Lombardi et al. 2011).

The importance of these factors as a core of smart governance was confirmed also by Castelnovo et al. (2015) and Pereira et al. (2018).

All activities within smart governance can be divided into two groups - participation in public policy processes (including informing) and involvement in improving services in the city (co-creation of smart city services). Participation of stakeholders increases openness, transparency, accountability of local authority and thus the quality of relations between stakeholders and local governments. Governments use and share data, information and knowledge to support evidence-based decision-making that enables governments to make more informed decisions and improve the effectiveness of public policies and programs. There can be used the traditional tools of participation as well as their innovative forms or new one (Castelnovo et al. 2015). Co-creation of smart city services can help increase the city’s competitiveness and citizens’ quality of life, through the use of ICT in city planning and management. Innovative services provide citizens

with information, knowledge and actions related to various aspects of their city life (Lee and Lee 2014).

The central use of ICT-based participation tools in public policy as well in creation of city services is confirmed by many authors (inter alia Díaz-Díaz and Pérez-González 2016; Pereira et al. 2017; Kleinhans et al. 2015; Castelnovo et al. 2015; Khan et al. 2015; Navarro-Galera et al. 2016). These tools increase stakeholders' ability to participate in governance, in all phases of public policy, including public service delivery processes at various stages of preparation such as planning, decision-making, implementation and evaluation. It can help decision-makers make better decisions that meet the needs of the population. It leads to the concept of participatory government, which is strongly linked to a governance model that promotes communication, interaction, cooperation, participation in governance and direct democratization (Pereira et al. 2017) The Internet and ICT have enabled citizens to reduce the gap or even connect with political elites and thus influence policy-making, especially today, when traditional participation is in decline. The local governments have become to be aware of the value of the opportunities given by ICTs (Nam and Pardo 2014).

However, to use ICTs for the purposes below it is necessary to publish and share transparently all data and information about the local municipality (e.g. their strategical, financial, legislative documents, statistics etc.). The link between transparency and smart cities lies in both technology and also in information that is truly transparent and digitized, making it easier to find and use. Different categories of transparency allow citizens to use government data to create new and useful applications that focus on to citizens, solve their problems and thus improve life in the city. Thus, digital information can help address the goals of a smart city for a more informed and participatory citizen (Chourabi et al. 2012).

Based on the study of literature and research studies (inter alia Macintosh 2005; Castelnovo et al. 2015; Estevez and Janowski 2013; Chourabi et al. 2012; Wijnhoven et al. 2015; Gil-Garcia et al. 2015; Johannessen and Berntzen 2018) to the modern forms of e-participation and e-democracy belong electronic e-voting, e-petition, e-referendum, e-panel, discussion forums and chatting rooms, electronic community, electronic civil boards. To support the decision-making process very efficient tools are electronic advisory elections, simulation of decision making, quick polls and surveys. To the tools that strongly influence the activity of stakeholders to participate belong various forms of promotion tools and communication channels (websites, social media, PR, blogs, etc.) as well as mobile applications and various digital platforms, which are the subject of our deeper study in the paper.

Even though, the internet and modern ICT bring new opportunities for local municipalities, the challenge is a lack of knowledge and skills of citizens or other stakeholders as their users. That is why it is necessary to combine the traditional and modern tools of smart governance, to increase awareness and develop the skills of stakeholders to become an equal partner in relationship with local government.

## 2.1 Modern Forms of Promotion in Smart Governance

Nowadays, new modern forms of promotion play an important role in increasing citizen involvement and support the development of new governance models (Jaeger 2003;

Stamati et al. 2015). To the most progressive and more and more frequently used tools belong websites, discussion forums, blogs, social media, mobile applications, influencers activities, various kinds of events (real or virtual), etc. Implementation of these tools in practice has several positive effects, such as improving cooperation and communication between government and citizens, empowering citizens, transparency and openness of government, and final co-governance with all relevant stakeholders (Stamati et al. 2015; Linders 2012; Jaeger 2003). They can be key drivers of new strategies for managing public consultation and interaction in public policy-making.

From the theoretical point of view these tools that use local municipalities as a part of marketing activities are also a part of smart governance tools. Promotion mix used by cities informs about the products or other activities of the cities and in synergy with other marketing tools it influences the behavior of target groups to perceive them positively, to buy or to consummate the product. The communication should also provide feedback and the ability to correct the errors. Feedback is a source of impulses and the basis of collective learning (Ježek et al. 2007). Active utilization of internet in the promotion of cities strengthens its role also as a part of smart governance tools. It allows the global coverage, low distribution costs and interactivity, thanks to which consumers have the opportunity to react retrospectively to the city's suggestions, plans or strategies as a part of local policy.

The summary of promotion tools used by the cities including these ones which are based on modern ICTs and internet presents Table 1.

**Table 1.** Tools of promotion by Vaňová et al. (2017).

Tool	Aims	Forms
Public relations	Increasing trust, changing attitudes and behavior, persuading of subjects, building an image	Direct (interpersonal communication, meetings, informal meetings, publications), indirect (media, events, annual reports, sponsorship, lobbying, information services, bulletins, etc.)
Advertising	Present and promote the city's product (s) through the media for fee	Communication channels (internet, printed materials, multimedia), promotional materials (leaflets, brochures, maps, calendars, postcards, publications, posters, tourist guides, videos, banners, etc.)
Sales promotion	Support the goals of the communication mix with short-term incentives aimed at activating of will to buy or sell	Price benefits for entrepreneurs, participation in exhibitions and fairs, presentations to journalists, removal of bureaucratic barriers, etc.
Persona communication	To offer the area to potential visitors, residents, investors, entrepreneurs, etc. through a verbal presentation	Creating and maintaining personal relationships, formal or informal presentation, sales contracts, personal friendships, etc.

(continued)

**Table 1.** (continued)

Tool	Aims	Forms
Events	Increase customer and media interest in the city	Social (balls), cultural (concerts, theaters), sports (tournaments), corporate (company days), historical (festivities), gastronomic (food preparation), business (exhibitions), educational (conferences), information (open days) and other events
Virtual communication	Communicate with customers with precise targeting	Blog, banner, text links, e-mail, chat, audiovisual communication, social networks
Direct mail	Address a precisely defined target segment	Telephone, post office, internet, e-mail, teleshopping
Word-of-mouth	Exchange information with a direct link to the territory and its products	Communication between persons
Buzz communication	Make a buzz	Interesting, unusual and often controversial topics that would have the potential to cause excitement between consumers and the media
Virtual communication	Achieve exponential growth of product awareness by non-managed dissemination of information among people on the internet	A message (in the form of an image, animation, video) with promotional content that attracts so much attention from consumers that they send it and spread it
Guerilla	Rise an attention	A surprising, original and unconventional campaign with a low budget
Product placement	Promote the city intentionally and for fee	Placing the territory in a positive context in an audiovisual work
Mobil communication	Communicate fast with the customers	Phone calls, SMS messages, applications

For the empirical research in the Slovak cities we selected following modern tools of promotion, that belong also to the tools of smart governance in cities:

**Social networks** – they consist of the community of users, people or organizations that have something in common. For instance, it can be real friendship, kinship, employment, hobby, interests, or a particular social problem. Such users are interconnected and share information. Communication takes place on the Internet with the access from a computer or a mobile phone. Today, the most popular international social networks include Facebook, Twitter, YouTube, Instagram, Linked In, etc.

Social networks provide a lot of opportunities for interaction with citizens through plug-in applications, groups and fanpages. Each social network is specific and has its specific users. Social media give the users a chance to share their ideas, contents and relationships online. The user can create, comment and post their own content and share

it with the others. The users' posts can have the form of a text, a video, animation, images, photos, etc. The concept of social networking creates vast possibilities for presentation. Creative and interactive communication brings the product, place or brand to attention. On the other hand, customers can attach videos, photos or comments to their profiles. They can also have discussions managed and possibly entered by the discussion group administrators. In this way information is spread to people who would probably not get it otherwise.

**Chat and audio-visual communication** - The Internet is used for visual and voice communication, so it enables arranging video conferences, discussion forums, IP telephoning, instant messaging (ICQ, g-talk, skype). All these technology options make communication faster and allow better cooperation between various entities. The great advantage is a quick immediate response. Chat allows electronic communication between the Internet users in real time, or on-line discussions with several users at the same time.

**Blog** is a form of Internet communication, that allows publication of promotional texts, attaching audio files available to a greater number of stakeholders— we can speak of millions –practically free of charge.

**Mobile communication** includes various formats and principles of use of mobile marketing communication through text messaging or applications. The advantage of mobile marketing communication is a possibility of accurate targeting of a campaign (information about the consumer's identity, behaviour, personal preferences and geographic location), the ability of mediate direct interaction between the advertiser and recipient, high operability in real time, simple and quick updating, high user comfort, low cost, large scale use and, last but not least, simple measurability (Vaňová et al. 2017).

**Websites and website promotion** are a part of internet marketing. There are different synonyms of the term used in literature, e.g. on-line marketing or web marketing. Website is a collection of texts, multimedia components, images, etc., arranged in a document which is placed on a web server and made available via the internet (Stuchlík and Dvořáček 2000). The purpose of a website is to build a brand, to provide information about products and activities for all interest groups. They also provide a selling advertising space, products and services over the Internet (Janouch 2010). To the form of selling advertising space belong banners, that are linked to something exceptional on the homepage. **Banners** can be static, animated or interactive. A specific form of banner is a button. It is usually placed in the upper part of the website and is used for promotion of other web servers. To make the banner successful, it needs to have an attractive headline and provide a simple and quick approach to the message. The other possibility is an **I-Candy** - graphic type of internet advertising. It takes the form of an animation or game. They are smiling and sometimes a bit cheeky icons and banners that expand when clicked on them. A new website will be launched with interesting graphics and impressive music. **Intermercial** is a graphic type of advertising on website, in a size of the entire screen. It is an intrusive animated advertisement that appears in the content of individual websites, while acting as a television spot. But unlike a TV spot, intermercial allows, after playing, a visit to the corresponding website. **Subvert** is an advertisement accessible on the Internet. If the user clicks on the ad, they will see about 20 s of images and audio about the product/brand/activity being promoted, and then automatically return to the website they started on. The last possibility is a **screensaver**,

which is a type of poster advertising on the computer. The screen saver is used by most computer users and is therefore a potential place for advertising.

### 3 Material and Methodology

The paper deals with the actual topic of smart governance tools and role of communication in them. The aim of the paper is to identify the promotion tools used as a part of smart governance in the city and verify its utilization in the cities of the Slovak Republic.

For the definition of smart governance tools and promotion tools we use the method of literature review of foreign and domestic scientific papers and books. It helps us to categorize the tools and identify mutual penetrations of both tools categories (promotion x smart governance). The defined tools we verified by the empirical research in all 141 cities of the Slovak Republic during 1. 4. – 25. 6. 2020. We collected data on used promotion tools from the cities websites, published official reports by the cities and profiles on social networks. We use the method of observation, analysis, comparison, synthesis and deduction.

The research sample consists of 141 cities of the Slovak Republic within 7 size categories (Table 2) from 1000 inhabitants to more as 100 000 inhabitants.

**Table 2.** Number of the Slovak cities by the size categories by Slovak Statistical Office (2019)

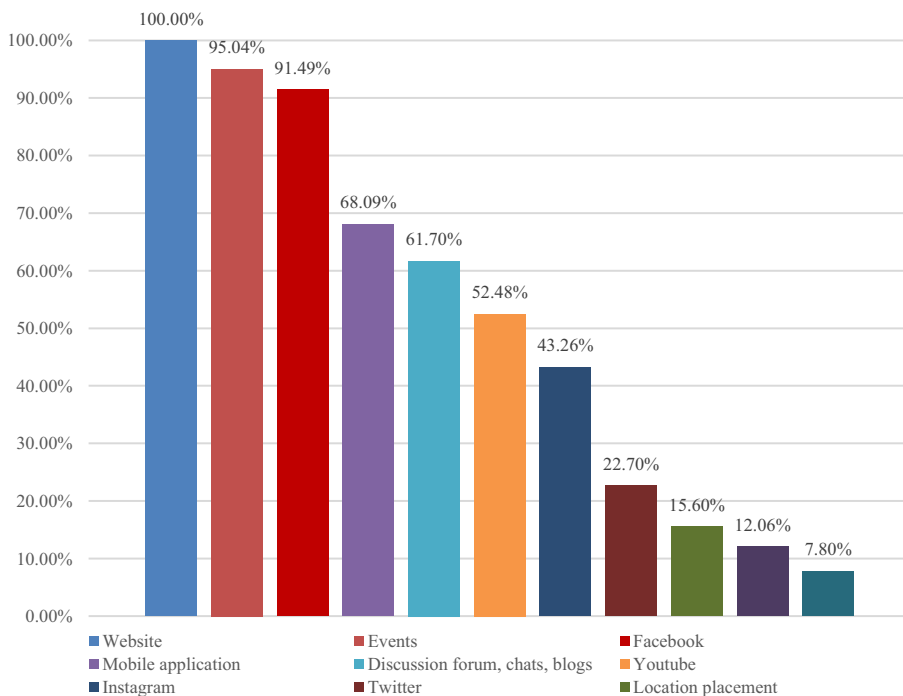
Size categories of the cities	Number of cities	Share of the cities
100000+	2	1,42%
50000–99999	8	5,67%
20000–49999	29	20,57%
10000–19999	33	23,40%
5000–9999	45	31,91%
2000–4999	22	15,60%
1000–1999	2	1,42%
Total	141	100,00%

The research findings on mapping the utilization of promotion tools in the Slovak cities are supplemented by the examples of best practices in the Slovak cities. To conclude the paper we summarize the strengths, weaknesses and challenges of promotion tools' utilization in smart governance.

### 4 Exploitation of Modern Promotion Tools in Slovak Cities

There are no doubts about the important role of communication within the implementation of smart governance in cities. From the marketing point of view, the communication is a core of city promotion. The tools of city promotion are strongly influenced by the

development of new technologies. Referring to the theoretical framework of the paper we researched in the Slovak city the implementation of following tools: social networks (Facebook, Twitter, Instagram, Youtube, etc.); websites; mobile application; location placement; events; discussion forum, chats; digital advertisement. The exploitation of these tools by all Slovak cities presents Fig. 1.

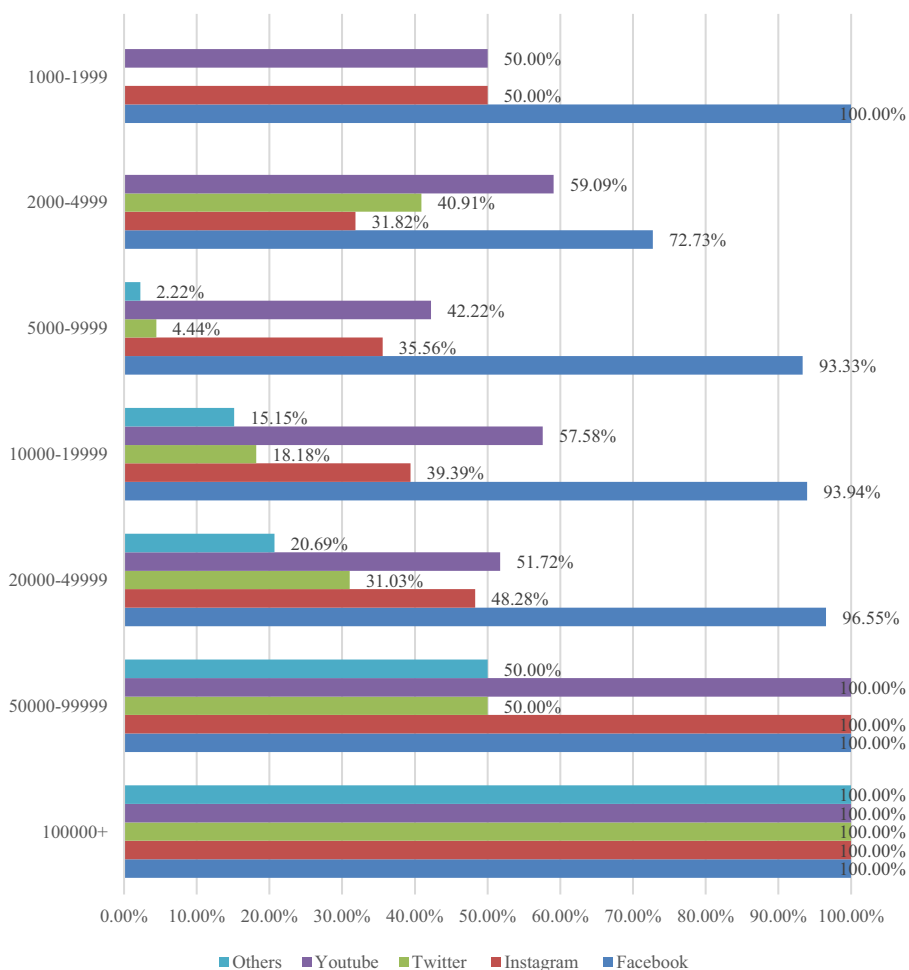


**Fig. 1.** Modern forms of promotion implemented in Slovak cities. Source: own research

The Fig. 1 shows that the most used tools is a website. All Slovak cities have their own website presented the city, its services and government. The second most used tool is an organisation of event (95.04%; 134 cities). The highest share of Facebook exploitation in cities confirms the fact that the Facebook is the most used social network in Slovakia. More than 50% of cities use also mobile application, discussion forums, chats and blogs as well as Youtube. To the least exploited tools belongs digital advertisement and location placement.

The detailed analysis of social networks exploitation is illustrated in Fig. 2. It presents the utilization of the social networks by size categories of the cities.

All bigger cities (with inhabitants more than 50 000) use for promotion Facebook, Instagram, Youtube. Both biggest cities – Bratislava (capital city) and Košice use also Twitter, LinkedIn and Tumblr. Bratislava has even two profiles on Facebook and Instagram, one oriented on the citizens of Bratislava, the second one is oriented on tourists. The higher number of followers is indicated in case of tourism profile of the city.

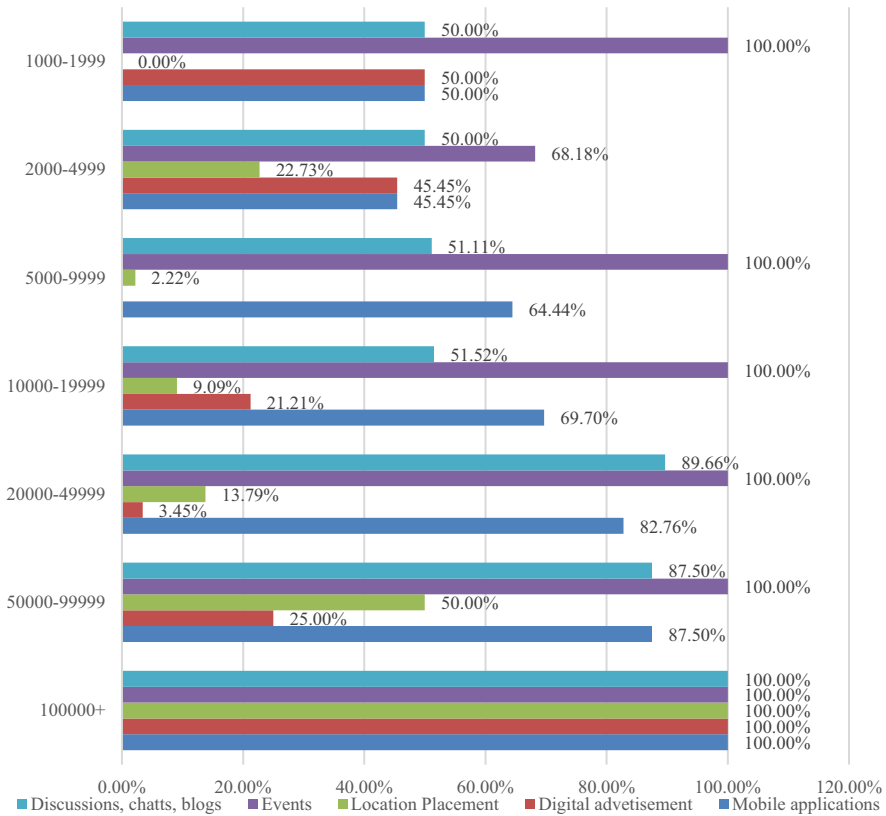


**Fig. 2.** Exploitation of the social networks by Slovak cities regarding the size category. Source: own research

The most used social network in cities of all sized categories is Facebook (more than 90% of cities in each size category except cities with 2000 – 4999 inhabitants). More than 50% of cities in each size category use also channels on Youtube except cities with 5000 – 9999 inhabitants. Twitter and Instagram are not so popular networks in cities from 1000 to 49 999 inhabitants (Instagram - from 31,82% to 50%; Twitter – from 0 to 40,91%). To the other exploited social networks by small number of cities belong Pinterest, LinkedIn, Tumblr, Gmail, Yahoo.

The implementation of other modern forms of promotion in cities by size categories presents Fig. 3.

The second most used tool, almost in all cities beside the size category 2000 – 4999 inhabitants, is an organization of events. Still more and more cities has also own mobile application for various purposes – for citizens, tourists, for parking, for buying travel



**Fig. 3.** Exploitation of the other forms of promotion by Slovak cities and the size category. Source: own research

tickets etc. The share of cities with the mobile application is lower in smaller cities – from 45,45% till 69,70% in cities to 19 999 inhabitants. Only cca ½ of these cities uses also discussion forums, chats and blogs. In bigger cities (from 20 000 inhabitants) are these forms of promotion used more frequently (cca 90% of cities). Digital advertisement and location placement are the least used forms of promotion.

The characterization of the current state of art in utilization of promotion tools as a part of smart governance in the Slovak republic we supplemented by some best practices from the Slovak cities.

One of the pioneers in building smart city is Trnava, the site of the Trnava region. In 2020 the city launched the project Trnava smart city. In the first stage of the project the core activity is a integrated platform in a form of mobile application and website smart.trnava.sk that provide the current reports on weather, air quality, noise levels, traffic situation, filling of large-capacity semi-underground containers in the city and also on the activities of the municipality. The application will be developed, and new functionalities will be added. The total expected costs of the project will be €116,000.

The second example is a Smart City - Chatbot A.I. preparing for city Trenčín based on elements of artificial intelligence. Smart City - A.I. chatbot is a computer program that simulates a normal conversation between people. It can communicate with several inhabitants at once in real time and in large volumes. It can adapt and personalize communication according to the context of conversation, behavior or preferences of the population. The essence of the chatbot will be interactive personalized communication between Trenčín and residents on the main topics of the city such as news, invitations to cultural events, changes in the organization of transport, notifications of repairs, comments on the official board and information from the city council. Citizens will be able to choose the information they prefer to receive via “chat” in the Messenger application as well as in a web chat. Implementation costs are estimated at €65,000.

The last example presents a mobile application SOM. It operates currently in more than 21 towns in Slovakia. It is the first platform in which residents will find all important city services in one place. Anyone who downloads an application of its city on the mobile phone will get up-to-date information about what’s happening in the city. The application is available for Android and iOS devices for free. Inhabitants can find online newspapers and important phone numbers that can be dialed directly from the application, neighborhood exchange etc. Basically, the application is developed as a complex platform for communication online in one device - the web, social networks, online newspapers, notifications, the official board, reporting problems, the neighborhood exchange, but also bus departures and arrivals. The application is used by the cities of all size categories including the city districts of Bratislava, the sites of regions as Nitra, Žilina, Trnava, small cities as Trstená, Žiar nad Hronom, Moldava nad Bodvou, Lučenec and villages Zavar, Veľké Kostolany and others.

The research results show that the implementation of new modern promotion tools in Slovak cities is developing. It copies the global trends in marketing of cities as well as in smart governance. It includes the necessity to deliver information via own website of the city; to create an open and friendly environment also in virtual space by communication via social networks, blogs, chats or discussion forums. The importance of these new promotion tools was confirmed by more research studies (inter alia The American Advanced Learning Institute 2015; Castelnovo et al. 2015; Gil-Garcia et al. 2015; Johannessen and Berntzen 2018; Tran 2019). The great benefits of this communication include saving funds, active involvement of stakeholders, and usefulness in crisis situation and in building trust with the public, space for the test links and improving the local services based on the citizen’s experience; authenticity and transparency.

There are still various possibilities to improve this area what declares the pioneer examples of best practice from the Slovak cities. The tools should be more combined to achieve the integrated and multichannel led communication. The utilization of mobile applications in local governance as well as in delivering local services should be strengthened. The orientation of the mobile application content is currently oriented more on travel guides, parking or selling travel tickets, but the offer of services should be gradually broaden and integrated also with various form of participative planning, budgeting or delivering the wider offer of public services.

The strength of the modern promotion in Slovak cities is an organization of various kinds of events in cities. They include the traditional ones (fair trades, market of local craft works or local food), sport, cultural, informative events etc.

To the less used tools belong forms of digital advertisement and location placement. It can be caused also by orientation of local municipalities on interactive forms of communication, what is also confirmed by the content of smart governance tools. That is why it is difficult to identify it as strength or weakness. Because of the restrictions in public sector there is not possibility to use the potential of these forms fully, but only in accustomed form (e.g. not as a paid advertisement by some identified sponsor on the city website).

The implementation of modern tools of promotion and smart governance face with the global challenges as continual and fast development of new technologies and techniques, the increasing interests of stakeholders to participate online and offline instead of personal contact and to be informed permanently. In case of Slovakia also by the challenges at the national level as weak awareness about the importance of smart city concept and its part - smart governance, the difficulty to gain the financial support for smart cities strategies implementation caused by the bureaucracy, length of the public procurement process and other restrictions given by law, and at the local level inadequate skills of the responsible employees in the cities and their resistance to changes as well as misunderstanding of benefits of these tools for both sides of communication.

## 5 Conclusion

The implementation of new trends in local governance and policy is an essential precondition to be competitive among cities at the national and international level. The new forms of promotion which are gradually involve into the original agenda of the cities can be seen as a good starting point to implement smart governance approach. The aim of the paper was to identify the promotion tools used as a part of smart governance in the city and verify its utilization in the cities of the Slovak Republic. We oriented on the researching of following tools: social networks (Facebook, Twitter, Instagram, Youtube, etc.); websites; mobile application; location placement; events; discussion forum, chats; digital advertisement. The Slovak cities use the majority of investigated tools but there is still please to develop the old promotion tools as well as to introduce the new ones or even better these ones that are verified by the practice in foreign cities (Berlin, Vienna, Amsterdam, Stockholm, Oulu, Tallinn) as the beneficial ones.

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