The methods of identification and analysis of key indicators affecting the place reputation in the modern information and communication space

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Abstract. In the modern world, reputation is the most important intangible asset of the region economy and a dynamic characteristic of its activity. On the one hand, it is a major competitive resource for establishing partnerships with stakeholders. On the other hand, it is a set of opportunities to realize the interests of various target groups as a guarantee for the total implementation of the territory potential.

The difficulty of building a holistic place image is related to the need to take into account a large number of indicators that are not always quantifiable. Only measurable parameters can be managed, so there is a need to create a relevant tool to assess the place reputation. In order to develop and manage an effective strategy, it is necessary not only to distinguish basic indicators, but also to analyze the reputation building mechanism as well as the factors influencing this process.

Three main factors form the global attitude to the territory: attractive environment, efficient management, and developed economy. However, the parameters to differentiate these groups vary when evaluating the reputation of countries and megacities. First of all, it concerns the information and communication space, where the work of mass media and social media is of maximum importance. Subjectifying the target groups’ attitude to their region, different types of media form the place image in the opinion of each member of a society. The article presents approaches that determine the crucial indexes that can affect the place reputation. So qualitative and quantitative methods of publications assessment allow us to understand the peculiarities in forming the ideological components of the place image in order to be able to monitor the building of a place reputation.
1. Introduction

The reputation of any object is what people think about it judging by their own experience or the experts’ opinion. It is absolutely true for the place reputation. The trust for any place is based on their reputation. The high level of trust simplifies external communications. It allows not only to attract a large number of tourists, but also to increase the investment. Besides, it helps to get the best professionals and opinion leaders. All these facts determine the importance of reputation in the modern world. It is a good reputation that becomes an absolute competitive resource for forging partnerships with a different target audience (stakeholder groups), thus acting as the most valuable intangible asset of the regional economy.

The papers issued by the leading foreign and Russian researchers are devoted to the various aspects of the interaction between the place reputation and its image formation. S. Bose, S. R. Kumar, B. Nguyen [1], O. Wagner, M. Peters [2], P. Foroudi, S. Gupta, P. Kitchen, M. M. Foroudi, B. Nguyen [3], F. Bell [4] prove clearly that the place brand image and its reputation are inseparably linked. In their quantitative study, E. Braun, J. Eshuis, E.-H. Klijn, S. Zenker substantiate the statement about the direct and indirect positive impact of a well-structured branding policy on the reputation [5]. According to N. Morgan, A. Pritchard, P. Pride, “a place with a positive reputation finds it easier to vie for attention, resources, people, jobs, and money; a positive place reputation builds place competitiveness and cements a place as somewhere worth visiting” [6]. Th. Metaxas demonstrated convincingly that regions engaged actively in place marketing and place branding process, easier to attract foreign direct investment [7].

Today the future of the place depends increasingly on the systematic work on their reputation. In view of the above, it can be argued that the local authorities need to pay due attention to the development of reputational management strategies.

There is a range of issues that needs to be focused on to be able to talk about an effective reputation strategy: the mechanism for building the reputation of a particular place and the factors that influence the process. The question how to monitor the upward or downward change in the reputation needs to be answered too.

2. Methods

In a large number of studies on the place branding and place reputation, tourists are considered as the main target audience [6], [8], [9], [10], [11], [12]. In some research works, residents also appear as objects [13], [14], [15]. The other groups of regional stakeholders are only mentioned at the best. Correspondingly, the factors of place attractiveness include only those ones that are perceived by tourists. Meanwhile, the complicacy of reputation management lies in a significant way in the fact that there are quite a lot of target audiences whose interests may conflict from time to time. For instance, the place that is attractive from a business viewpoint will not be the same one for inhabitants who may not accept the excessive business activities performed in their residence area [16]. S. Zenker, E. Braun, and S. Petersen performed an analysis that proved that «statement that brand complexity is valuable for place brands in general (including the destination brand), but that the place brand for residents needs even more complexity than a destination brand, while it remains valuable if both are integrative parts of an overall place brand» [13].

S. Zenker and E. Braun note «place branding could be understood as the family tree, with destination branding as one of the branches» [17]. According to A. S. Grunichev and M. R. Safiullin, «the region reputation, being a dynamic characteristic of the socio-economic structure of the region, characterizing the complex of opportunities and the potential for territorial use in terms of its competitive advantages for life, business, the implementation of society social preferences, is formed during a very long period of time and is broadcast on the basis of various sources of information» [18].
Therefore, when developing a reputational management strategy, it is necessary to respect all stakeholders’ interests, as well as regularly monitor and take into account those changes that have occurred recently in the mechanism of forming the place image in regional consumers’ minds.

One can manage only something measurable, so it is linked to the need to create a relevant tool to measure the place reputation. The issues of management and place reputation assessment are discussed in the studies of both foreign and domestic scientists.

2.1. The analysis of factors affecting the place reputation

Nowadays the global leader in measuring and managing business reputation is the consulting company Reputation Institute that annually conducts research Country RepTrak® The World’s Most Reputable Countries and City RepTrak® The World’s Most Reputable Cities, which determine the reputation of the largest countries and cities. The Country RepTrak® rating includes 55 world's largest economies and is based on the surveys of 58,000 households. The City RepTrak® rating includes 56 world's leading cities with the highest GNP, rested upon the polls of 12,000 households.

The Reputation Institute dates back to 1997, when Charles Fombrun and Cees van Riel, the acknowledged experts in corporate communications, founded a consulting firm to develop effective mechanisms of corporate reputation management.

Initially, between 2000 and 2006, the Reputation Institute developed a so-called RepTrak® system for corporate reputation evaluation, which was adapted later to assess a place reputation. This system is based on the reputation dependence on the emotional bond that various stakeholder groups feel with regard to the territory. RepTrak® heartbeat measures the degree of admiration, trust, positive attitude, and overall assessment by stakeholders in a given area. This "pulse", which ranges from 0 to 100, allows you to estimate the overall reputation of the area and compare it with the others. At the same time, emotional aspects are also evaluated: whether the city is admired, trusted, respected, and how well a person feels in it. Besides, the territories with a good reputation are perceived positively in all three aspects.

Under the experts of the Reputation Institute, the global attitude to the territory is formed by three main factors: appealing environment, effective government and advanced economy. However, the parameters forming them vary when assessing the reputation of countries and cities.

In assessing a country's reputation, 17 parameters are used: advanced economy (high-quality products and services, well-known brands, contribution to global culture, technology, well-educated and reliable workforce, values education), appealing environment (beautiful country, enjoyable lifestyle, friendly and welcoming people), effective government (business environment, institutional environment, social and economic policies, international participation, safety, efficient use of public resources, ethical country).

The reputation of the city is rested upon 13 parameters divided into three groups: advanced economy (business environment, financially stable and future growth, well-respected products and services, headquarters of leading companies, technology), appealing environment (beautiful city, appealing experiences, well-known personalities), effective government (well-developed political and legal institutions; social, economic and environmental policies; adequate transport, communications and infrastructure; well-respected leaders; safety). The contribution of each group of factors to the reputation of the city is distributed as follows: effective government - 38%, appealing environment - 35.7%, advanced economy - 26.3%.

RepTrak® not only allows you to assess the mechanism of forming the reputation of a particular area in the stakeholders’ minds at a certain moment, but also to analyze the indicators that influence this process, as well as to track reputation changes in one direction or another. Recognizing the importance of economic stability, it should be noted that only 20% of the world's leading economies have entered the TOP-10 Country RepTrak®. None of the TOP-10 countries is among the top ten countries with the largest population. Only 20% of the countries from TOP-10 Country RepTrak® are also among the top ten largest ones in terms of their territory.
For example, the country reputation studies carried out between 2017 and 2018 showed that the importance of an appealing environment is growing steadily: 2017 - 7.9%, 2018 – 39.1%. A little less attention is paid to effective government (37.0% and 36.1%) and advanced economy (25.1% and 24.8%). In accordance with the 2018 *Country RepTrak* survey, the most important factors in shaping a state reputation are the friendliness of local residents, security, the beauty of the country, its attractiveness and existing lifestyle, ethical behavior, as well as participation in solving international problems.

One of its main conclusions is to determine the degree of the country's reputation influence on its economic development. Thus, the reputation level increase by one point (in the *RepTrak®* system) leads to the increase in the tourists' flow by 3.1% and exports by 1.7% to the market, where a positive change in attitude was recorded.

It is vital to note that many of the countries that are leaders in the field of reputation also have the best conditions for doing business and a high level of confidence in the local government.

In the survey dedicated to the reputation of the world's 56 leading cities with the highest GNP, carried out in March-April 2018, Moscow was ranked last. The capital was ranked 56th in the analysis of 12,000 studies and surveys conducted in the G8 countries.

In compliance with the *Reputation Institute*, Moscow scored only 51.3 points: it was overtaken by Cairo, Istanbul, Mexico City, and New Delhi. Despite this fact, the authors of the rating marked that Muscovites themselves appreciated the city living standard highly.

It should be noted that the city reputation is compromised by more than just financial income. The underlying feelings of geopolitical tension, nationalism, and social unrest contribute to the city perception.

In the rating, Number One is the city that is perceived positively under all these criteria. Thus, Tokyo, Sydney and Copenhagen got the first three places in the ranking. The capital of Japan scored 81.8 points for effective management, safety, and the highest level of respect for people [19].

On the basis of comparing the data of the reputation rating research for 2014-2018, it was discovered that the role of effective city management had increased, as it was the city government that was responsible for creating an attractive urban environment. Supporting the activities of the territorial administration is extremely important for its further development. The high level of trust contributes to the increase in the volume of investment in the region economy. Citizens are much more willing to pay taxes and meet the requirements of the regulatory bodies if they are confident that the authorities are really committed to improving residents' well-being. The level of citizens' trust in the leadership is affected significantly not only by the level of economic development, but also by political upheavals and high-profile events, including corruption scandals [20].

Besides, the attractiveness of the urban environment is not only the beauty and conveniences of the city, but also safety for residents and tourists. In modern conditions, to have well-known attractions or bright events is no longer enough for the successful development of the region. For the first time in 7 years, it had been brought out that the safety factor prevailed over the beauty of the region in assessing the key attributes of the city's reputation. Moreover, the contribution of the three most important characteristics to the reputation of the city is 32.7% distributed as follows: safe environment for residents and tourists - 12.2%, the beauty of the city - 11.9%, the respected city government - 8.6%.

Noteworthy is also the fact that, for the first time in 2018, countries in the Top 10 *Country RepTrak®* (2018) have communicated a unique story through integrated communications channels earn a strong score on aspects of media and social network attributes. By contrast average countries are weak on the merits media and social network attributes and over 60% of respondents are on the fence if they have seen any positive communication regarding the country [19].

The importance of social media as a channel of communication has been proven by M. Andehn, A. Kazeminia, and A. Lucarelli, where the authors argued in favour of the need for the active interaction between managers who are responsible for regional branding and stakeholders through social networks [21].
2.2. The methodology of media and social media texts analysis as a way to identify indicators affecting the place reputation

When studying the background information of the place, it is necessary to take into account the factors that form a certain territory image. Media texts act as the translator of these parameters [22].

One of the most important features of modern media texts is its fixation on complicated semiotic forms. It leads to the emergence of composite, visual-verbal, polycode, creolized structures, i.e. the text in a broad sense. It should be emphasized that, in this study, the text is conceived as any conceptually coherent, deliberately created sequence of signs [23], [24]. In other words, the text is considered as a polycode construction, which includes texts in the classical sense, video, and images.

Fig. 1 presents the quantitative characteristics of the reports on the Russian Federation regions in mass media and social media. The publications for the last 5 years (2014-2018) were analyzed. A group of news texts (26 mass media and their profiles in social networks, 20 blogs) served as the sample. The continuous sampling method was employed when selecting the material. In this study, the message attitude broadcasted by social media and mass media was more important than the number of texts.

![Figure 1. Reports on the Russian regions in mass media and social media](image)

However, message attitude per se does not reflect factors such as safe environment for residents and tourists, the beauty of the city, and the respect for the municipal government [25]. Table 1 shows the indicators of audience communicational involvement without the semantic assessment of social media messages.

| The City of the Russian Federation | The Number of messages | Audience | Engagement | Positive | Neutral | Negative |
|-----------------------------------|------------------------|----------|------------|----------|---------|----------|
| Saint-Petersburg                  | 3404                   | 53338467 | 6282       | 351      | 2516    | 537      |
| Moscow                            | 1136                   | 57195438 | 3111       | 55       | 894     | 187      |

Table 1. The factors distribution under the regional belonging
While conducting the research on mass media texts, we have brought to light some lexical-grammar, stylistic and linguistic-statistical specific features. They are associated with the possibility of the free choice of lexical units and with employing different types of lexicon in mass media to describe the processes taking place in the society. Socio-demographic indexes are crucial for the scientific work. The most active users of 25-39 years old are 38.6% of active users exploiting news feeds in mass media and social media. The second largest segment of content consumers is the one of 40 - 60 years old, that is 26.3%. Users under 18 years old (9.8%), over 60 years old (12.0%) and users of 18 - 24 years old (13.3%) are more or less equally active.

The main purpose of the study was to examine qualitative indicators of region reputation rather than the quantitative ones.

The research methodology consists of building alphabetical-frequency dictionaries of word usage and of registering the following quantitative characteristics:
- the absolute frequency of the word usage (how many times a certain sequence of letters from one space character to another one is found in the sample);
- relative frequency (the absolute frequency of word-form to the total number of the word usage ratio);
- accumulated relative frequency (what part of the text is occupied with the given number of word-forms from the beginning of the list).

In the dictionary, word-forms are arranged in the descending order of absolute frequencies. It allows to see the position of frequently used words and to identify frequency spectrum groups that determine a certain text filling.

In addition, the study helps us to distinguish the dynamic parameters of a surveyed lexical group, that is a characteristic set of means for a writer (vocabulary, phraseology, visual and expressive means) as well as the peculiarities of their use for the expression of thoughts. In this connection, we can talk about a special voice pattern of each media, their language implementation, including the creation of an image of a certain territory.

3. Results
Having analyzed a sufficient number of media texts (over 500 media publications and social media texts), we have uncovered the following regularities.

The 2014-2015 publications are characterized by the maximum presence of negative connotations and aggressive attitude in word forms. The word-forms such as Russia (1560), Kadyrov (absolute frequency - 1526), and the United States (absolute frequency - 1503) have an equal frequency. The frequency dictionaries of different texts: Delovoy Peterburg, Lenta.ru, LIFE NEWS and RIA Novosti, have a various attitude to the same facts. For example, in the frequency dictionaries of RIA Novosti and Lenta.ru, the words nationalism, extremism, occupation are in higher positions (i.e. they refer to frequent notions). Compared to LIFE NEWS, Delovoy Peterburg is more tolerant, which is probably due to its publication specifics.

The publications of 2015-2016 were more neutral, but there was an obvious increase in the interest to local and regional events: region (absolute frequency - 1432), independence (absolute frequency - 1429), this city (absolute frequency - 1428).

In 2016-2017, media and social media materials were focused on active mentioning of word-forms such as elections (absolute frequency - 1685), Putin (absolute frequency - 1623), power (absolute frequency - 1612), which was probably connected to the run-up to Russia’s presidential elections. The years of 2017-2018 are marked with strengthening sophisms and increasing the level of fascinatio in messages. The means and methods of fascinatio help a listener to perceive information and weaken the "filters of distrust" in communication. The combination of these means is the fascinatio communication strategy, which, in its turn, is a pragmatic and conscious process. The abundance of syllogisms makes it possible to change the attitude towards the region. There are many examples of it. For instance, an excerpt from the speech delivered by Bo Andersson, President of AutoVAZ LLC, for the XXIV International Exhibition "The World of the Car": "St. Petersburg is the head and the soul of Russia. It is very important to be successful. If we do not succeed in St. Petersburg, we will not succeed in Russia". This conclusion is a syllogism. Message (or known proposition) 1: "St. Petersburg is the head and soul of Russia". Message 2: "We will not succeed in St. Petersburg". Conclusion: “We will not succeed in Russia”. In this case, the "sophistic trick" is to spread what is inherent in St. Petersburg to the whole Russia. Thus, this sophism is a "mistake of what is said without limitation". Aristotle attributed it to "refutation not from the manners of speech". Sophism is aimed at showing the importance of the city (hence its residents) for the company.

If 5 years ago the media system tried to be present in the information field, due to the number of certain territory references; in recent years the quality of region reputation indicators has become more urgent.

4. Discussions

Place reputation is a complex concept that plays a major role in the fields of social and computer sciences as well as economics. There is a number of issues that presents a semantic web technology. It is essential to represent a reputation object model in order to achieve the reputation interoperability and portability between different domains [26], [27], [28].

There is a range of fundamental tools in online services, especially with the advent of Online Social Networks. In this case, users generate huge amounts of contents and they can be quickly overloaded by useless information. At the same time, social media represent an important source of information to characterize contents and users’ interests.

The significance of conducted research lies in a number of circumstances related both to purely linguistic aspects (from this viewpoint, the composition of a dictionary devoted to individual typological groups of media sublanguage is of inherent value as a means of learning its functional, stylistic and linguistic features) and to the social and linguistic ones. In other words, it is an attempt to get an idea of how the media systems shape the agenda and attitude to specific territories.

The identification of key indicators that affect the place attractiveness for different stakeholder groups can be suggested as an area for further research.
5. Conclusions
Summarizing the above mentioned, we can state that the reputation of the city, country, and locality is currently the most important resource that can provide a sustainable competitive advantage of a certain territory. The opinion about the place has been formed by different stakeholder groups for a long time, as a result of personal experience of interaction, which is based on the comfort of living, security, social protection, the ease of doing business rating, the respect of the authority, and etc.

Today the most important source of information on the place reputation is the system of ratings. Undoubtedly, the rating position indicates the positive/negative place reputation. While rating for the comparison and assessment of the different places reputation, one of the main issues is the definition of those indexes that will be used for such estimation. As a rule, the set of these characteristics and methods of ratings are determined by expert organizations that have received the public recognition.

The approach of the article is based on the analysis of texts from mass media and social media. Its goal is to determine the indexes affecting the place reputation formation. It allows to distinguish the main trends in the work on better reputation, which will require the more thorough shaping of the news agenda. The development of the methodology for the comprehensive system of the place reputation monitoring in the context of the interaction with all groups of stakeholders, in turn, will contribute to strengthening the competitiveness of the territory.

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