

THE EVALUATION OF WEBSITES OF POLISH CITIES IN THE CONTEXT OF THEIR USABILITY

Marcin Gębarowski
Rzeszow University of Technology, Poland
marcing@prz.edu.pl

Joanna Wiażewicz
Rzeszow University of Technology, Poland
joannaw@prz.edu.pl

Abstract:

The main thrust of the paper is related to the use of cities' websites by local authorities in communication with entities in their environment. The latest literature on the world wide web have been reviewed by the authors and on basis of this review the characteristics features of internet, which are relevant in marketing activities of cities were identified, as well as the determinants of designing useful and attractive website.

Empirical study included in the paper is based on multifaceted evaluation of the cities' websites in the context of their promotional role and communication functions. The evaluation comprised a questionnaire that aimed to answer whether the websites displayed a certain quality or not. Several different criteria were taken into account and they were divided into a few thematic areas: Information about a City with its Address and Telephone Number, Technical Aspects, Website Functionality and Interactivity, Media Relations, Communication with Citizens and Local Community, Communication with Tourists, Investor Information, Additional Elements. The research was conducted in January 2013 and included all the capitals of Polish provinces. The evaluated websites were then placed in an overall ranking that presented their attractiveness, and their positions depended on the score that they achieved during the evaluation.

The evaluation results served as a basis for conclusions that were presented in the final part of the paper. The highest score were gained by following cities: Gdańsk, Poznań and Szczecin, which marketing activity is perceived in Poland as very professional.

Keywords: internet communication, websites, Polish cities, territorial marketing.

1. INTRODUCTION

The global computer network is developing rapidly, providing additional communication channels, and therefore increasing its marketing activity potential. Contemporary organisations face various challenges, among which one can mention understanding the peculiarity of information exchange forms that are appearing, and knowledge of the principles which ensure efficient the utilisation of such forms in order to accomplish marketing goals. The Internet evolution has also important influence on the functioning of Polish cities and regions, which – in order to compete for diversified recipients of their offer (among them citizens, tourists, investors, students, skilled workers) - have to be very active in the internet communication field. Municipalities which are incorporated for local self-government can use wide range of online marketing tools such as different online ad formats or profiles in social media to promote themselves and attract clients, yet still the most significant role in communication process of municipalities with entities in their environment plays official website. Therefore, the aim of this paper is to present the results of multifaceted evaluation of the websites of all the capitals of Polish provinces (eighteen cities). The evaluation results served as a basis for conclusions on the most common mistakes in websites layout, usability and functionality.

2. DETERMINANTS OF CREATING WELL DESIGNED AND USABLE WEBSITE

Rules for proper planning and designing websites are described in detail in the relevant literature, particularly on the subject of e-marketing. However, there is lack of studies that relate to the specific features of municipalities' websites and various functions they are performing. These functions include, above all, providing useful information to diverse groups in the municipalities' environment, creating the image of city or region, promoting territorial products among tourists, investors or media and creating an unique communications platform between citizens and local authorities.

Providing that the websites are designed well, using them broadens possibilities for effective municipalities marketing activities. Among the most important advantages result from using Internet for place branding and place promotion are the following: designing a website is often less costly than advertising or buying media space, the Internet makes the place available for a variety of target audiences and it enables the place to constantly deliver a great quantity of updated information. Websites can be updated easily for low maintenance costs and using user-friendly software. Messages on websites can be changed frequently and it is easy to track the number of site visitors. Taking advantage of its two-way nature, the Internet encourages feedback in various forms, including online surveys and a direct "contact us" email. The web allows place decision makers to ask their target audience various questions and probe public opinion when choosing a new logo, symbol or slogan. In addition, many places have turned their websites into their central communication route with local residents, serving as a means to increase civil activism, involvement in the place's life and improving residents' image of the place (Avraham & Ketter, 2008, pp. 63-64).

Websites can play a very important and significant role in the process of communication between city and entities in its environment, because city's website constitutes city's own media. A good example that exemplifies the possibilities given by using website by a city is comparing such city to an organisation that possesses its own, private TV channel. This organisation decides on types of programmes and their content, time for broadcasting, etc. and so does the city when it prepares a content for its website and designs it. There are no restrictions for cities in achieving desired goals of promotion through website but it is important to be aware of commitment to the website users and pay attention to the content. From one hand a city has unlimited control over content featured on website but on the other hand if there are any problems or lack of content, a city is perceived as responsible for it (Kaznowski, 2008, p. 39).

Good websites are carefully designed in terms of both form and function. Form means the way a site looks, ie the aesthetics, which includes layout, graphics, colour and typography. Function is interaction, integration, navigation and structure. Navigation and even the layout of each page require expert advice and careful attention. Navigation is a critical aspect, as it determines how users can move around a site using menus, hyperlinks and signposts or panels (Smith & Zook, 2011, p. 447). Apart from form and function, other factors that decide on city's website usability and attractiveness are high quality content and relatively frequently updates.

In the case of municipalities' websites visual elements on the site page play significant role because they can create an unique site style. An effective website design will have a style that is communicated through use of colour, images, typography and layout. This should support the way a territorial product is positioned or its brand (Chaffey et al., 2006, p. 325). For the cities one of the most important component of their websites is an interactive map of the city. This is because the majority of people focus their attention on visual components of a website first, such as images, maps, or charts, before they process any text. Interactive maps serve as a visual trigger. They create interest in non-visual information (Sweeney, 2008, p. 321).

The city website should be user-friendly, which means easy navigation across the different sections of the site page and design that enable users to find items that they need easily and quickly. This mainly means that websites should have a consistent interface throughout. The site should be structured and laid out in such a way to direct users across the page and in the same time a navigation bar should be visible and remain consistently on each of the section of the site. The home button can display city logo or a label and it should be located on every individual site page in order to enable users to return to home page from all of the subpages. From websites users point of view usability of navigation depends not only on intuitive structure of navigation bar. The website should also include all the various methods that someone can use to navigate. This includes defining a sitemap, which acts somewhat like the index of a book. When thinking of overall navigation structure as a table of contents, the sitemap is an index at-a-glance view of all the website content, just arranged thematically instead of alphabetically. Having on-site search is a goldmine, because you get to see the words visitors type to find content and you can use their search terms to expand or revise existing web content. Yet, a poorly working on-site search can do more harm than good by frustrating users. Sometimes the search engines built in to content management systems require a fair investment before they work well (Juon et al., 2012, p. 126).

The content of the city website should be, first of all, useful for users. It is vital to ensure that the content on the home page is readable and legible and navigation bar should be split into sections addressed to different groups (citizens, students, tourists, entrepreneurs, media). Every section designed for certain group should be present on individual subpages and the text must be kept short and to the point because in information search process most of internauts don't full read the text, but only "scan" pages. Moreover, the content (particularly news section) must be up-to-date. Providing current information is easier if a city implements CMS (Content Management System), the system that enables to build fully content-managed site. This system makes it very easy to add and update pages of additional content (Jefferson & Tanton, 2013, p. 117). Additionally, CMS allows for faster and easier management of website content and this function is very significant when a site updates its content quite frequently what leads to fast increase in information resources and difficulties in website management.

The frequency with which a site updates its content depends on two primary variables (Miletsky, 2010, p. 413):

- the ability of the site's managers to create new content quickly - content can be difficult, time-consuming, and potentially expensive to create; it can require talented writers and proofreaders for copy and professional photographers;
- the type of site in question – while updated information is a key method of bringing visitors back and increasing the frequency of visits, it would be unnecessary and cost prohibitive for all sites to maintain an aggressive content update schedule.

In big cities updating the website should take place every day, particularly in the section related to current news and events. In smaller cities and towns, where usually there are not so many new important facts to publish, website updating might happen every few days or even once a week. It needs to be stressed that text is not the only content on the sites that needs to be updated. Cities websites should follow the changes in the environment and adjust to them. Often this means that a site needs to be completely redeveloped every few years (Miletsky, 2010, p. 415).

To sum up, among the most important and significant factors that determine attractiveness and usability of city website are: high quality content (it should meet needs and expectations of diverse groups of internauts), site structured and laid out in user-friendly way, consistent navigation, readable and legible text, high functionality and interactivity and attractive interfaces that is linked to website aesthetics. All these factors were included in the evaluation of websites of the capitals of Polish

provinces. The methodology of the research and findings are presented in the further parts of this paper.

3. METHODOLOGY

The research on evaluation of cities' websites was conducted in January 2013 and included all the capitals of Polish provinces. There are sixteen provinces in Poland however, in two of them two cities share duties of capital city (Bydgoszcz and Toruń in Kujawsko-Pomorskie province and Gorzów Wielkopolski with Zielona Góra in Lubuskie province). Consequently, in the research there were analysed eighteen websites of the following cities: Białystok (www.bialystok.pl), Bydgoszcz (www.bydgoszcz.pl), Gdańsk (www.gdansk.pl), Gorzów Wlkp. (www.gorzow.pl), Katowice (www.katowice.eu), Kielce (www.um.kielce.pl), Kraków (www.krakow.pl), Lublin (www.lublin.eu), Łódź (www.uml.lodz.pl), Olsztyn (www.olsztyn.eu), Opole (www.opole.pl), Poznań (www.poznan.pl), Rzeszów (www.rzeszow.pl), Szczecin (www.szczecin.pl), Toruń (www.torun.pl), Warszawa (www.um.warszawa.pl), Wrocław (www.wroclaw.pl), Zielona Góra (www.zielona-gora.pl). The evaluation comprised a questionnaire that aimed to answer whether the websites displayed a certain quality or not. In order to conduct a comprehensive evaluation of websites, several different criteria were taken into account and divided into following groups:

- 1) Group A was described as "Information about a City with its Address and Telephone Number". The aspects of cities' websites which were evaluated in this thematic area included information about a city council (contact details including e-mail that should be placed on the home page and easy to find), a structure of the office, telephone numbers and e-mail addresses to departments, working hours), information about city authorities - their names and contact details, accurate information about the president of the city - name, e-mail and schedule. Moreover, general information about the city, such as its history, tradition and culture, strategy of development and prizes, awards, participation in contests were taken into account.
- 2) Group B related to "Technical Aspects of the Website", such as intuitive domain names (in Poland it means »nameofthecity.pl«), contact to the webmaster, privacy policy and accessibility help.
- 3) In group C "Website Functionality and Interactivity" were evaluated. This thematic area consisted of fourteen important aspects such as: ask the president? - the possibility of asking the city authority direct questions through a special form, "contact us" form, e-mail address to the city council with a domain name that corresponds with the city's domain, online office, print possibility, easy to navigate (for example through clear and easy menu and "home" button), site map, English version, other language version(s), search engine for the website content, up-to-date information, RSS feeds and tag clouds.
- 4) Group D referred to "Media Relations" and content of this section was evaluated in three aspects: if there is any section addressed to the media, contact to a spokesman and the news, press releases and photos for the media.
- 5) Group E was called "Communication with Citizens and Local Community" and within this thematic area the emphasis in evaluation was on the information important for the citizens of the city, for example social care and health, education and learning, jobs and careers, libraries, public transport, news, photo gallery, newsletter, FAQ, any ways of receiving feedback from website users (opinion surveys, chat rooms, guest book, have your say etc.). Moreover, any signs of city authorities' activity on the website (for example answering on queries or publishing blog about community and city life).
- 6) In group F - "Communication with tourists" all information relevant from the tourists' and city visitors' point of view were evaluated. Among them there were: location of the city, tourist attractions, calendar of events, accomodation information, additional interactive options (for example virtual tour in museums and other places), places to go, important information relevant for tourist (transport, services), contact to tourist information. Moreover, language versions and easy to find section for tourist also scored.
- 7) Group H – "Investor Relations" scored when there was a separate section for investors on the home page, at least two language versions of the website, information about tenders, investments in the city, strategic investors, investment incentives, contact for investors and business directory, additional relevant information, for example reasons for investing in the city, institutions supporting business development, recommendation from entrepreneurs.
- 8) Group I was described as "Additional Elements" and included all extra options offered by the cities' websites, such as: website statistics, webcams in the city, virtual tour around the city,

social media links, mobile version of the website for portable devices, information about visual identification system, forecasts, e-cards, "tell a friend about us" option, etc.

If a city website displayed a certain quality, it was given one point for such quality, but if not, it scored 0. If the evaluated quality was placed on the Public Information Bulletin¹ instead of the official city website, it did not score any points. When the evaluation was complete, points in every thematic area were summed up and the evaluated websites of the capitals of Polish provinces were placed in an overall ranking that presented their attractiveness, and their positions depended on the score that they achieved during the evaluation. The highest score – that the website could gain – was 73 points.

4. WEBSITES AS AN IMPORTANT WAY OF COMMUNICATION BETWEEN POLISH CITIES AND CITIZENS, MEDIA, TOURISTS AND INVESTORS – RESULTS OF THE RESEARCH

As the result of the research, the evaluated websites of eighteen cities received points in every thematic area (table 1). Moreover, the scores in particular groups were summed up and presented in overall ranking reflecting the total number of points given to the websites of capitals of Polish provinces during evaluation.

Table 1: The number of points gathered in evaluation by websites of capitals of Polish provinces.

Cities	Groups of criteria								Total sums
	A	B	C	D	E	F	G	H	
Maximum number of points	11	4	14	3	13	10	9	9	73
Białystok	9	4	10	1	6	8	4	3	45
Bydgoszcz	10	4	10	2	5	9	8	6	54
Gdańsk	11	4	10	3	9	10	8	6	61
Gorzów Wlkp.	7	4	9	1	3	8	7	2	41
Katowice	8	3	9	0	7	9	6	4	46
Kielce	8	2	8	3	5	8	6	4	44
Kraków	5	4	12	2	8	10	8	6	55
Lublin	7	3	10	2	8	10	8	6	54
Łódź	8	2	8	3	5	8	8	1	43
Olsztyn	8	3	12	0	5	10	8	7	53
Opole	8	3	11	1	5	9	8	3	48
Poznań	10	4	11	3	9	10	8	4	59
Rzeszów	8	4	10	0	5	7	5	4	43
Szczecin	10	4	9	3	9	9	9	5	58
Toruń	7	3	7	3	5	8	6	5	44
Warszawa	8	3	11	3	7	8	7	3	50
Wrocław	7	3	12	3	5	10	9	6	55
Zielona Góra	9	3	9	0	10	9	9	4	53
Average points in each section	8,2	3,3	9,9	1,8	6,4	8,9	7,3	4,4	50,2

Source: Own study.

The evaluation of websites of the capitals of Polish provinces revealed strong and weak aspects of communication between cities and diverse entities in their environment. In the A group "Information about a City with its Address and Telephone Number" the highest number of points received Gdańsk website. Only one point less scored websites of three other cities: Bydgoszcz, Poznań and Szczecin. The most often provided information by the cities was contact details to the city Hall (on the home page or hidden under "contact" button) and information about history and culture of the city. On the contrary, websites content rarely included president of the city's schedule (often called as calendar of president's duties), only two websites displayed detailed schedule of president's activities: Gdańsk and Szczecin. Moreover, few presidents wrote on their blogs or via Twitter about their activities, events

¹ Public Information Bulletin is a website that every self-territorial unit such as city, commune or province in Poland is obliged to have and deliver public information through it.

in which they participated, etc., but in the research in this case the website did not score. The most surprising outcome from the evaluation of this section was that on six websites it was really difficult to find official e-mail to the office. Not only it wasn't available on the home page (and it was required during research because communication via e-mail nowadays is becoming very important and more convenient than through telephone for growing number of people), but in some cases it was difficult to find the address in general or to decide which e-mail is the main one.

The evaluation of "Technical Aspects of the Website" fared well, nearly half out of the evaluated websites gained the maximum number of points. On four websites information regarding privacy policy was missing, but what is more disappointing, as many as five websites did not have an intuitive domain name (including the capital of Poland – Warsaw). Under the intuitive addresses there were both commercial pages and pages with content related to the city but created by private organisations or institutions.

In the C group "Website Functionality and Interactivity" none of the websites received the highest number of points. The best result (twelve points) scored three cities: Kraków, Olsztyn and Wrocław. Only one website included an option „Ask a president”, it was the website of Gorzów Wielkopolski, where the users (particularly citizens of the city) had a possibility to send a question to the president or to comment current issues. Moreover, only five cities gave an opportunity to the internauts to send an e-mail through the special form placed on their website. The disadvantage of a few cities websites was lack of language versions (if there was an option "Translate" through *Google*, the website did not get any points) five cities did not have any language versions, following three had only English version. The rest of the cities websites offered at least two language versions, but there were some examples of cities that had a few language versions, among them Kraków – the city that is a very famous destination for tourist and offered seven language versions of its website.

The evaluation of "Media relations" section included only three aspects, among them the most important from journalists and other representatives of media point of view is easy way to find contact to the city spokesman. There were four websites without any section for media or information dedicated to them. Eight websites gained all three points, but it is worth highlighting that content on their pages differ. Two interesting examples are Toruń and Poznań. On the website of first mentioned city media relations section was full of useful information, such as "comments, press releases, open letters, statements, answers to official queries, etc.". On Poznań website the city spokesman had his own subpage with "Diary of the president" and links to social media on the menu. The diary contained detailed information about president activities and also statements prepared by spokesman in the name of city authorities. The city is also very active in social media, the profile on *Facebook* had both the city and the spokesman, moreover, they were also present on *Twitter*.

On the subpages addressed to citizens of the city and local community cities placed the most frequently the following elements: news, useful addresses related to public institutions in the region, photo gallery (for example presenting events that took place in the city), information about education, social care and health, public transport, data on labour market and job vacancies. The significant disadvantage of most of evaluated websites were lack of tools helping to receive feedback from internauts, such as short questions, surveys, chat rooms, guest book. These solutions usually increase interactivity of the website but the research revealed that nearly half of the evaluated websites (eight out of eighteen) did not have any interactive option for internauts. The surveys were on seven websites and in most cases they concerned the satisfaction from the city Hall services (for example Gdańsk, Toruń, Szczecin). A good example of active guest book was on Katowice website. Citizens of the city wrote a lot of queries addressed to city authorities, opinions and remarks on city life, development of the city or plans of investments. Unfortunately, it was really difficult to find any answers or comments from the city Hall. Other options for internauts to write comments or opinions were displayed on Warszawa website (but only in the section described as "public consultation"). On the Szczecin website back chat with office representatives and city authorities were available and on Krakow page a chat with president of the city was placed. Moreover, presidents of three cities: Kraków, Olsztyn and Opole are bloggers and they post entries on various issues and the president of Poznań is very active on *Twitter*. Only two cities made their websites available to citizens through the section of "Services" and "Commerce" – internauts can advert their services or inform about business they have, these were Lublin and Zielona Góra.

Tourists section gained the best results in general, six of evaluated websites received maximum number of points (ten). The others were placed between seven and nine points and they lost points only due to lack of language versions and additional interactive options. But in general all cities had really good score, the average number of points for this section was 8,9 points. Among cities which offered interesting interactive options were Wrocław (multimedia fountain) and Kraków (virtual panorama of the city). Additionally, it is worth mentioning that five cities have QR codes that might be a useful option for visitors.

Investor Relations section is one of the most important for many cities in Poland because they intend to attract investments to the city, including foreign investors. In the research three cities got highest score (Szczecin, Wrocław and Zielona Góra), but others also provided some relevant information for investors (particularly investments offers). Significant disadvantage of a few websites was to provide this information under different links and in few sections instead of creating separate section for investors. Even some websites with section for investors contained some additional important information in other sections. It caused chaos on the website and made it really difficult to browse. On the contrary, some of the cities (for example Katowice) had very professional separate websites created for investors and link or the button displayed on the city website directed users to the new page.

The last section evaluated in the research refers to all additional elements that do not affect website usability but they might increase they attractiveness for some internauts, build positive image in the environment, engage internauts and let them share web content with friends. Moreover some websites have mobile version that enables to browse website on the portable devices, there are also information about the weather in the city, some of them have profiles in social networking services and increasing number of cities have an interactive option called "virtual tour around the city". In the evaluation website of Olsztyn received the highest result, seven points. Only one city had no profile in social networking services, others were present on the following services: *Facebook*, *Nk.pl*, *Twitter*, *Google+*, *You Tube*, *Blip.pl*, *Pinterest*, *Vimeo*. Eleven cities offered virtual tour and among other attractions were: e-cards, „share with a friend” option, mobile guides for the city, wallpapers, screensavers or sending text message through website.

In general, the best result (after summing up all points) achieved Gdańsk website. It was sixty-one points what accounts for 84% of all points possible to received. In four evaluated thematic areas the city scored the maximum number of points (general information about the city, technical aspects of website, media relations and communication with tourists). It was the only city that awarded maximum points in four sections. The second place in overall ranking took Poznań (59 points) and the third – Szczecin (58 points). Each of these two sites in three categories received maximum points and the differences between three the best websites are slight. The worst ranked Polish cities websites were Gorzów Wielkopolski with 41 points (56% of overall result). Slightly better results achieved websites of Rzeszow and Łódź (43 points), Kielce and Toruń (44 points).

5. CONCLUSIONS

Nowadays Internet is developing rapidly and it plays growing role in marketing activity of places (cities, towns or regions), that have to face fierce competition for limited resources, such as potential inhabitants, tourists, students, skilled workers or investors. One of the most important channels of promotional communication for cities are websites. It is important to follow some guidelines that help to build an usable website. The Internet is what is termed a pull rather than push medium – the Internet user has to find one's website among the thousands of place-related sites available. The communication features of the site are, therefore, vital to its success (Middleton et al., 2009, p. 262). A good solution for building good website is to stand in the position of its potential user, because any well designed and useful page should most of all meet internauts information needs. These expectations should be connect with functions that organisations websites are supposed to carry out (Kaznowski, 2008, p. 38).

Findings of the research conducted by the authors of the paper showed that the average number of points received by all evaluated websites equaled 50 points, what accounts for 68% of maximum score. On this basis the websites of Polish capitals of provinces should be regarded – as good. However, there are many detailed aspects which should be improved in the case of each of the

evaluated websites, so that the analyzed cities in Poland could use them more effectively in communication with different groups in their environment.

REFERENCE LIST

1. Avraham, E. & Ketter, E. (2008). *Media Strategies for Marketing Places in Crisis. Improving the Image of Cities, Countries and Tourist Destinations*. Oxford, UK: Elsevier.
2. Chaffey, D. & Chadwick, F.E. & Mayer, R. & Johnston, K. (2006). *Internet Marketing. Strategy, Implementation and Practice*. Harlow, UK: Pearson Education Limited.
3. Jefferson, S. & Tanton, S. (2013). *Valuable Content Marketing. How to Make Quality Content the Key to Your Business Success*, London, UK: Kogan Page Limited.
4. Juon, C. & Greiling, D. & Buerkle, C. (2012). *Internet Marketing. Start to Finish: Drive Measurable, Repeatable Online Sales with Search Marketing, Usability, CRM, and Analytics*. Indianapolis, USA: Que Publishing.
5. Kaznowski, D. (2008), *Nowy marketing*. Warszawa, Poland: VFP Communications.
6. Middleton, V.T.C. & Fyall, A. & Morgan, M. & Ranchhod, A. (2009). *Marketing in Travel and Tourism*. Oxford, UK: Elsevier.
7. Miletsky, J.I. (2010). *Principles of Internet Marketing. New Tools and Methods for Web Developers*. Boston, USA: Course Technology, Cengage Learning.
8. Smith, P.R. & Zook, Z. (2011). *Marketing Communications. Integrating Offline and Online with Social Media*. London, UK: Kogan Page Limited.
9. Sweeney, S.C.A. (2008). *101 Ways to Promote Your Tourism Web Site*. Gulf Breeze, USA: Maximum Press.