

## WEB SITE – ONE OF THE KEY TOOLS OF CRM SYSTEM IN LOCAL GOVERNMENT UNITS

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### ABSTRACT

*In this paper, on the basis of primary research and the example of Istria County in Republic of Croatia, the authors propose a conceptual model of optimizing the content of webpages in local government units - cities and municipalities. The authors emphasize the thesis that the web site is one of the key "points of contact", and therefore much more than just a marketing tool, between public sector institutions and their customers - citizens. Therefore, the principles of creating their contents are specific. Web sites should primarily provide its customers with an overview of relevant information on the principles of transparency, clarity and ease of use. They should be attractive designed and offer the possibility of interactive communication. Web pages should be more than the tools for providing "user friendly" principle – they should encourage users to visits web site more frequently and provide relevant and usefull content which is easy to access. Therefore, the authors propose a model that should serve as a basis for creating a CRM system in local governments, in which the user (in this case a citizen) is in focus. Certainly it will help to include more actively the entities of local self-government in the construction of inclusive, sustainable and smart economy and society, as a primary priorities of the European Strategy 2020. In this process, the interactive digital marketing should play one of the key roll.*

**KEYWORDS:** public sector, cities and municipalities, CRM system in public sector, digital marketing in the public sector, Europe 2020th, Istria County.

## 1 INTRODUCTION

In recent years, the World Wide Web (WWW) has become incredibly popular in homes and offices alike. Consumers need to search for relevant information to help solve purchasing problems on various Web sites. Although there is no question that great numbers of WWW users will continue using search engines for information retrieval, consumers still hesitate before making a final decision, often because only rough and limited information about the products is made available. Consequently, consumers need the help of data mining in order to help them make informed decisions [France et al., 2002].

Web page has become one of the key factors for attracting attention of potential customers and for building up their loyalty. Therefore, it must be informative, visually attractive, should provide relevant information and have regularly updated entertaining content. During the process of building it up, there should be payed attention on each of these previously mentioned factors. It is extremely important that by web site potential customer can get all necessary information about products that has been interested, because limited information can have negative impact on perception of product quality and thus the quality of the website. The content must be regularly updated so the customers can have access to the newest information about new discounts, products and other relevant information at any time of the day. In today's world characterized by high competition, it has become very hard to get noticed. Due to that reason, web page must have quality visual identity which will be in line with the company's visual identity. It should be transparent, simple to use and must have interesting content tailored according to visitor preferences. Also, technically important items such as clear and simple links, fast loading, navigation, clearly designated categories and subcategories must not be forgotten [Ljevaja, 2015].

After the web page has been created, decorated and filled in with all necessary information, it must be optimized for search engines that has actually become the hardest part in process of building it up. The result of inappropriately optimized web page has been reflected through very low number of visitors and weak position on the search engines. Generally, high position on the search engines guarantees high number of visitors what is one of the key reasons why highly ranked web pages on the search engines became so successful. In a manner to provide long-term positioning of the company in the minds of the customers, continuous investment in the web site has been required. Efficient web site facilitates access to the basic information about company and its products to the existing and potential customers while represents powerful tool of contemporary marketing system [Ljevaja, 2015].

The aim of this paper is to determine the purpose of building-up the web site and how does it serves as e-CRM key tool in the system of public administration. Authors are of opinion how e-CRM is a key tool for establishment customer-oriented system in the public management in which client-citizen has been settled in the center of interest according to the principles of the

“new public management”- one of the key principals of contemporary public management. In doing so, the citizen – user of information and services – has been no longer seen as a user, but as a partner of public administration by which set up of CRM system becomes of the significant importance.

The existing scientific literature deals much more with CRM models of companies, unlike CRM in the system of public management, at least in Croatia, about which has not been written a lot.

This paper goes in these direction, moreover due to strategic document – Strategy of Public Administration Development for the period from 2015.-2010., introduced by Croatian Parliament in 2015. which clearly emphasizes how principles of the public management should be guided by smart, inclusive and sustainable development of society and economy according to Europe 2020 strategy.

On the example of local governments (cities and municipalities) in the Istria County, the authors present the results of research - testing the quality of websites of local governments according to the models 2QCV3Q and WebQual. Also, authors formed unique model for building up and evaluation of web page quality in the local governments based on two models by taking into account specifics of the public sector and citizens as users of information/service in public sector which are equal partners in communication process in relation „citizen-public sector“.

## **2 WEB PAGE AS A PRECONDITION OF CONTEMPORARY MARKETING SYSTEM**

The Internet has proven to be extremely useful for business purposes and is almost impossible to imagine of doing business without using Internet services. The web page has become an important marketing tool and is the main carrier of marketing activities on the Internet. Most of the companies, but also local governments and other economic and non-economic entities have their own Web pages. Khavaja and Bokhari [2010] point out how company's web page is a key tool for communication and customer attraction. It represents an interface which allows Internet users to search for information or purchase products and services.

Došen et al. [2003] have been dealing with local state authorities web-pages while they pointed out how web pages are usual communication channel whose function is based on interaction with local authorities and the use of complex data sources such as databases. Communication and image building through official websites of state bodies leads to reduction of the costs, enables communication with remote destinations regardless of the time zone and provides ability to communicate by multimedia content (text, image, audio and video recording). Web page plays a key role in creating the link between users and companies. Clients become more

educated and informed than previous years, which means that companies today must deal with consumer preferences that have become more complexed.

### 2.1. „WEB PAGE QUALITY“ CONCEPT

Prerequisite of each company which wants to be competitive is to possess quality web page. Definitely, it is a task which requires a lot of effort, time, and investment. Huge number of people, before purchasing on the Internet or making a decision will first checkup company's web page whose service they need. Also, from the company's aspects, it is very important to analyze web pages of the competing firms during the process of building it up in a manner to find out their omissions. Also, local governments should be aware of these and specific other principles. In over bureaucratized system of public management, web page largely provides and facilitates users fast access to the relevant information, simplicity of research, transparency in managing public budget and realization of public policies. Therefore, long-term communication between citizens and the holders of public authorities has been encouraged.

Poddar et al. [2009] define quality of the web page as total perceived quality from the customer point of view while it acts like an intermediary between companies and customer intent of purchase. Translated to the public management system, it can be concluded that web-pages of the local governments, besides meeting the standard - official and legal obligations and transparency of information systems, need to be truly adapted to its customers - the broadest range of different types of citizens.

In the wider context, this research and its results are focused on additional development of competences of local and regional officials and employees in politics and the economy in general. Besides scientific contribution, authors want to contribute for the wider involvement of citizens in decision-making process about important public affairs. The dominant goals in the development of society can brought some critical changes – on the level of individual person to the change of whole society, which gets extra meaning in the context of the *knowledge and inclusive* society in which access to the relevant information plays a key role.

## 3 CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

CRM is a specific form of customer relationship management through more efficient and detailed analysis of customer information by using information technology. The importance of CRM has been recognized since 1990s while it does not exist unique definition of this system. For example, Mihajlinović [2015] defines CRM like:

- Strategic system of managing and understanding of the customer needs in a manner to acquire and retain customers.

- Strategic use of information, processes, technology and people for managing with the customer relationships.
- Company's strategy for effective management of customized goods and services to customers and to the extension of the duration of customer loyalty.

There are 48 different definitions of CRM, but all of them have 5 similar categories: strategy, processes, philosophy, ability and technology [Basar et al., 2011]. CRM is not activity which has been limited only on the marketing department. Moreover, CRM includes sustainable and integrated development in the culture and process of organization.

### **3.1. e-CRM**

According to the literature, there is a growing importance of the electronic system for the customer relationship while differences between CRM and e-CRM are extremely significant. e-CRM represents setting up a culture that is oriented towards customer, whose strategy has been created for enhancing profitability and retaining of the customers, and leads to the achievement of mutual benefit provided by information technology [Rababah et al., 2011]. Milović [2011] defines e-CRM first of all as methodology and business strategy which is customer-oriented, and only after that as a software and Internet support for organizations whose aim is to effectively manage with the sales. Author emphasizes how e-CRM covers interaction with potential and existing customers, in which customers are in the „hurt” of business more than the products. For that reason, e-CRM should not be considered as a technology but as a new business approach which is oriented towards customer and provides competitive advantage.

Therefore, putting customer in the center of business is the basis for e-CRM system. In today's world, products are created and adapted according to customer requirements while each company which wants to survive on the market must establish e-CRM system.

In the context of the relationship between local governments and citizens as users and even more partners, e-CRM becomes key tool but also a basic philosophy for achieving customer-oriented principle in public management systems.

## **4 NEW PUBLIC MANAGEMENT**

Public management and public administration concepts have been defined by place and time of appearance. New Public Management (NPM) is common name for a series of public sector reforms carried out during the last twenty years in the most OECD (Organization for Economic Co-operation and Development), developing and transition countries [Perko-Šeparović, 2006].

Ružić et al. [2014] state how new public management represents endeavor for introducing most of the values and technics of the private sector in the public sector in a manner to become more efficient, competitive and finally results oriented.

Efficiency, effectiveness and cost-effective approach are the initial basic orientations of public administration while new public management appears as a new paradigm of public management which imposes economic values and techniques of private sector.

#### 4.1. NEW PUBLIC MANAGEMENT IN CROATIA

The most obvious evidence of political will in conducting the concept of the new public management in Republic of Croatia represents document „Public Administration Development Strategy from 2015. to 2020.“ which has been adopted by the Croatian Parliament on June 12th 2015.

Public Administration Development Strategy from 2015. to 2020 (NN 70/15) is a comprehensive document which provides the framework for the development of public administration and is focused on improving the administrative capacity and better organization of public administration. The Strategy states that public administration is one of the key strategic areas, while the modernization of public administration and the provision of fast and reliable public services are essential components of stimulating entrepreneurial environment and a prerequisite for ensuring higher standards of living for all citizens. Contemporary public administration must reflect the harmonization of the Croatian legal system with the European, as well as the acceptance of European administrative standards.

Public administration reform in the Republic of Croatia should provide effective law enforcement and create a transparent, customer-oriented, efficient, professional, effective and efficient public administration. Such public administration is an integral part of an effective business environment, the lever of social and economic development and stronghold of the democratic process. Since the scope of public bodies covers almost all segments of society, without proper public administration that would be able to implement the decisions of the authorities, society stagnates or regresses and generates dissatisfaction of users, economic activity slows down and the consequences are reflected in all areas of society. Also, it should be emphasized how time frame making, and to some extent the content of this strategy, has been linked with the fulfillment of the preconditions for the use of EU funds for the period 2014th-2020th, thematic objective, 11 - Strengthening the institutional capacity of public authorities, stakeholders and efficient public administration.

The strategy aims to harmonize the development of public administration with the objectives of Europe 2020, the strategy of the European Union which aims to support the development of smart, sustainable and inclusive economy by 2020. Obviously, this strategy has an

extraordinary potential, but there is a risk whether started reform measures will continue in the case of a government change while only continuous reform guarantees the achievement of the set goals.

## 5 THE RESULTS OF THE PRIMARY RESEARCH AND DEVELOPMENT OF A MODEL

There are a lot of different models which have been used for web page quality assessment and one of them is 2QCV3Q model originally designed by Mich et al. [2003]. This model includes all key components of which web page has been formed and is an ideal platform for further analysis. Their theoretical sheme has been shown in table 1, from which we can see that it uses seven dimensions that actually Ciceron stated in his work "De inventione" (Discovery). By using this model, evaluation and design of the web page can be observed as a series of answers to the questions like: who, what, why, where, when, and how.

Mich et al. [2003] as traditional techniques for the collection of certain data emphasize interviews, questionnaires, meetings, brainstorming, observing the working environment, sampling from existing business documents, etc. Authors state how 2QCV3Q model provides useful guidelines in a manner to support all of these techniques and can be used for structuring and conducting the interviews, for designing the questionnaire, analysis of competitor web pages and for easier orientation in reading of various forms and business reports.

Table 1. 2QCV3Q model

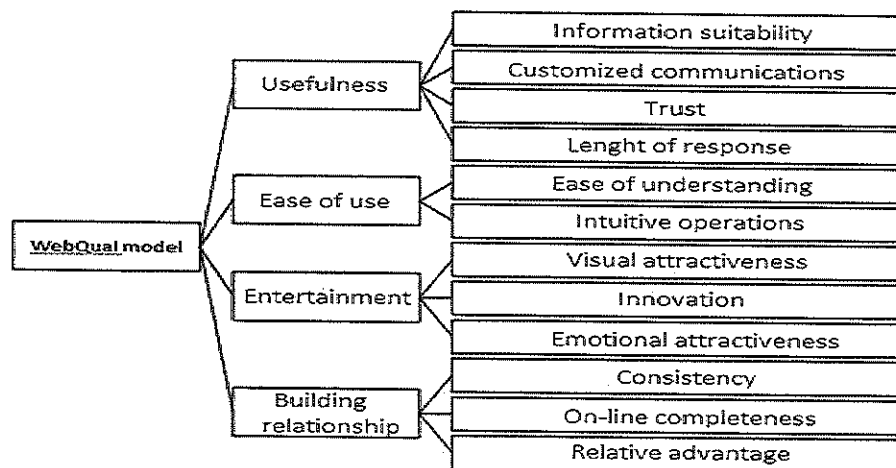
QUIS? (Who?)	Identity
QUID? (What?)	Content
CUR? (Why?)	Services
UBI? (Why?)	Location
Quando? (When?)	Maintenance
Quomodo? (How?)	Usability
Quibus axilliis? (On what way?)	Feasibility

Source: Mich et al. [2003]

Despite the great need to know how the perception of the customers about the website affects their behavior, particularly how this perception affects the intention to purchase or repurchase, there is no unique instrument by which it could be measured. Loiacano et al. [ 2007] developed

WebQual instrument for the web page quality assessment while they used Technology Acceptance Model (TAM) as a theoretical basis. WebQual comprises 12 dimensions as seen in figure 6. This model shows strong measure of validity for the web pages of organizations. Twelve dimensions of this model are sorted within four categories: usefulness, easy to use, entertainment and building up relationships.

Figure 1. WebQual model



Source: Loiacano et al. [2007]

Previously described models are mostly used for assessing the quality of a web page in tourism, education, service sector and business in general. Considering that the object of this paper are web pages of the local governments in Istria County, authors made their own web page quality assesment model for the local government, and they call it *LGQWeb* (Local Government Quality Web). *LGQWeb* model has been emerged as the repercussions of existing models and has been enriched with the peculiarities of content and quality that are expected to have local government websites. Indicators by which the authors evaluated the quality of websites of local governments in Istria County have been given in table 2.

Table 2. List of *LGQWeb* indicators for web page quality assessment of local governments in Istria County

LGWeb indicators	
1.	Identity
2.	Content and service
3.	Location
4.	Maintenance
5.	Fast and right information
6.	Update
7.	Transparency
8.	Innovation



9.	Building customer relationships
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Source: Made by authors according to 2QCV3Q, WebQual model and own observations.

*LGQWeb* model consists of defined indicators for assessment of each web sites that have been compared by the grades from 1 to 5:

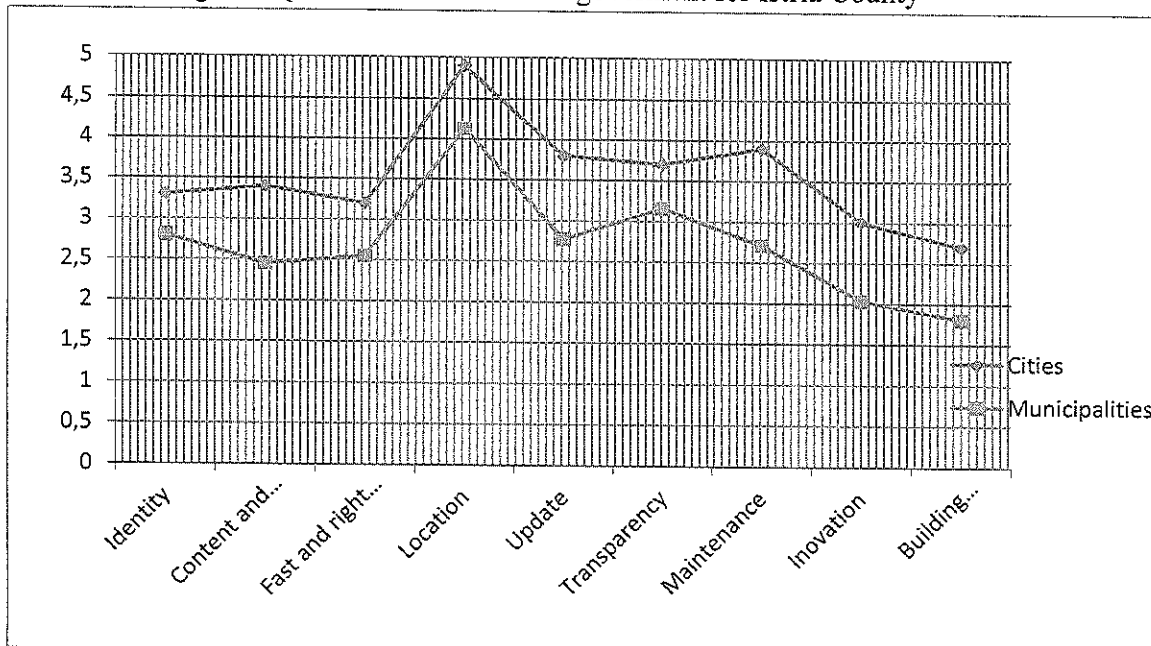
- 1- Insufficient quality
- 2- Satisfying quality
- 3- Good quality
- 4- Very good quality
- 5- Excellent quality

After assessment of all indicators, grades are added together and we get final indicator of the web page quality – *LGQWeb indicator*. Therefore, web page has been classified in four categories:

1. till 15 points – BAD
2. from 16 to 24 – GOOD
3. from 25 to 30 – VERY GOOD
4. from 31 to 45 – EXCELLENT

On the basis of conducted research and analizis of *LGQWeb* indicators for all local government web pages (10 cities and 31 municipality) in Istria County, authors made graph which shows average *LGQWeb* indicators which have been separated on cities and municipalities.

Graph 1. Average *LGQWeb* indicator in local government for Istria County



Source: made by authors

By the analysis of the research results and assessed LGQWeb indicators for the local municipality web pages, authors find out following:

- cities have on average more quality web pages with regard to municipalities;
- wealthier local governments do not have more quality web pages but more active local government do have as compared to less active;
- the largest differences occur in „maintain“ indicator which points out how cities (due to better financial possibilities) and wealthier municipalities regularly maintain and update their web sites;
- web pages of cities have been the worst assessed for indicators like *building relationships, innovation and usefulness*, and the best for location and accessibility, maintenance and update;
- municipality web sites have been the worst assessed for indicators like *building relationships, innovation, content and services*, and the best for *location, accessibility, transparency and identity*.

## 6 CONCLUDING REMARKS

Customer Relationship Management has been well discussed in the literature as a holistic concept which maintains and optimizes relationships between companies and consumers. Recent studies show rising interest about the application of CRM in the public sector domain. Paper deals with correlation between CRM system and web page quality for the public sector institutions, on the example of local government – cities and municipalities in Istria County, starting from the thesis that the website is one of the most important "contact point " between public sector institutions and their users - citizens, and therefore one of the most important segments of the CRM system.

To deliver superior quality of service, managers should first understand how customers perceive and evaluate online customer service. Due to specifics of the public sector, we can conclude how quality web site criterias are also specific. Therefore, authors generated its own model of quality criteria web sites for the public sector institutions, so called LGQWeb.

This kind of issue has become more relevant due to the New Public Management (NPM) whose one of the main characteristics is interaction with the user, easy acces to information, services and transparency via web pages.

Further research should be focused on further development of web page quality assessment models and optimizing CRM system, both in public management and beyond. In the context of local government, it is about application of marketing principles and setting up users in the center of public institution interest, what contributes to the development of their innovation. Therefore, scientific contribution of this paper is to encourage further discussion and research

about competitiveness between local government units like private sector does while digital marketing and digital commerce play a key role.

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