

WEB TECHNOLOGIES IN PUBLIC ADMINISTRATION. A CASE STUDY

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ABSTRACT

Our research aims at sensitizing the leadership of the Cluj County Council to aspects of using web technologies in the public sector of the local administration. The results are presented in the form of a case study.

Implementing web technologies in the public sector generates a significant change in the communication with the constituency. Our research reveals several notable aspects relevant for better serving the constituents: allowing true dialogue, assisting in continuous service improvement, accelerating the response time to requests and unexpected events. The use of web technologies greatly reduces bureaucracy and ingeniously transforms public sector actions.

For the constituents, the main beneficiaries of the Cluj County Council activities, implementing web technologies will provide better service – personalized to suit their needs and expectations.

KEYWORDS: *web technologies, public sector*

Introduction

The *County Council* is county's public administration structure having the authority to coordinate the activity of communal and city councils in the delivery of public services of interest in the county.

Cluj County Council's intent is to implement an integrated computerized system meant to optimally manage and direct the county and the smart management by using web technologies as the county's administrators' tool to approach sustainable development strategies.

Web technologies applied to public administration represent a necessary goal in order to increase citizen access to information regarding the activity and the decisions of the administration, and also to decrease information processing time (Osimo, 2008).

The citizen body represents the main external stakeholder of the public administration. Currently this structure is not only involved in service provision but also influences the citizens' quality of life. Many of the current public employee tasks that needlessly consume their time can be eliminated by transferring them to a machine.

The goal of this study was to demonstrate the importance of developing a computerized system by applying web tools in public administration and by assessing the knowledge, understanding, and use of these tools by the management structure of Cluj County Council (CCC). The outcomes of immediate application of web technologies are to:

- improve CCC's communication network to respond to citizen's needs;
- reduce reaction time;
- support employees' continuing training and education.

By identifying the citizens' needs and by implementing a communication strategy to respond to these needs the organizational structure of the public institution will be increased, ensuring a continuous professional training and a message that achieves transparency.

With this approach, new demands from citizens or unexpected changes can be easily added to list of services that the public administration offers, without increasing bureaucracy.

Results

The study was developed using a questionnaire consisting of 21 items that was administered through an online survey service to 25 individuals who are working in high management structures of the public administration: 25 answers were received. Data management and statistical analysis was performed with Microsoft Office Excel.

In line with the goal and objectives of the study, it was the intent to first obtain a general characterization of web tools used by the employees of the CCC. (Fig. 1)

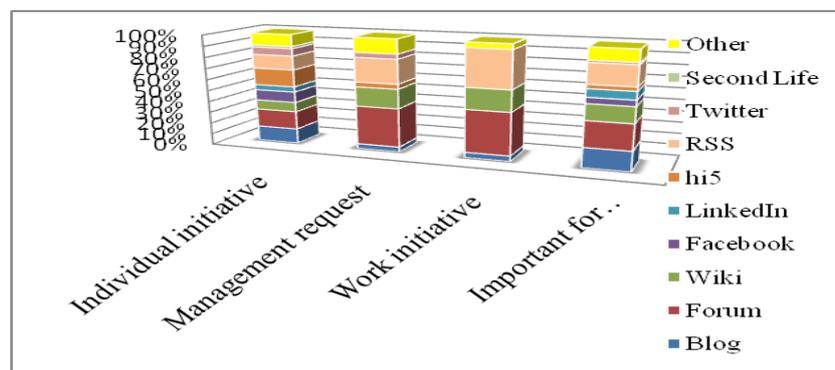


Figure 1 General characterization of web tools used by employees

To note is the fact that respondents use web tools both at work and at home and consider them important for their activities. Even though currently the reach to these technology is still somewhat timid and they are different from one individual to another in terms of domain and degree of applicability, the encouraging finding is that most people do not reject them.

The most frequently used are the forums (20-40%) or the blogs, by individual initiative (10-20%) or upon management's request. It is the upper level management that recommends mostly tools such as Wiki, RSS (30%), but they are also accessed by personal initiative.

The forum is the public employee's preferred tool with institutional support having the major role. Wiki-type technologies support sharing of knowledge and rapid feedback, these have positively influenced this tool's development.

The nature of the employment process in public administration along with personal interest in obtaining up to date information help the public employee discover the RSS technology.

Social networks continue to remain a public employee's private channel for interaction. The management does not actively encourage their use, although some respondents believe they are important in their activities.

In Figure 2 we present the level of web tool use.

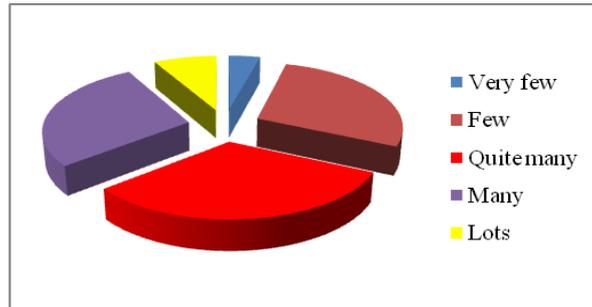


Figure 2 Level of web tool use by public employees

As reflected in the respondents' answers, they are used by a large number of employees, which means they are perceived as useful for their activities and with beneficial effects on the communication process.

A classification of the categories of employees, as shown in Figure 3, contains Managers, IT Specialists and Others, with unsurprisingly the IT Specialists being the largest category.

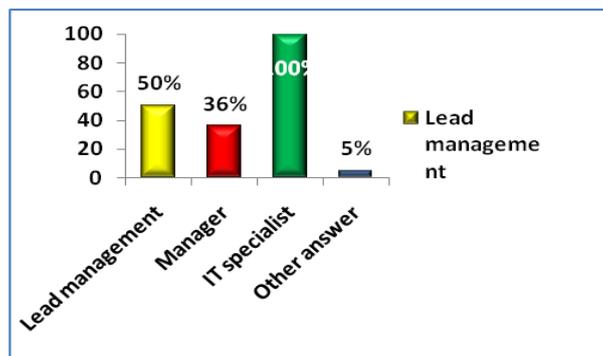


Figure 3 Categories of employees using web tools

Web tools are largely used by all categories, but the graph shows 100% of the IT Specialists using the web technologies at work, whereas the highest level management and the managers embrace these tools only in 50%, and 36% respectively, of all responses.

Considering that the above referenced 50% is represented by those having decision power to implement and use these technologies, we are half-way toward our goal. But as long as managers continue to ignore the information system as the foundation for decisions, the process of computerization of activities will continue to be delayed. IT Specialists and other professionals already familiar with these concepts have the leading role in drawing management's attention to them (Musser J., O'Reilly T, 2006).

Web technologies are used in several categories of activities (Fig. 4): internal information exchange, collaboration, socialization, and work on projects.

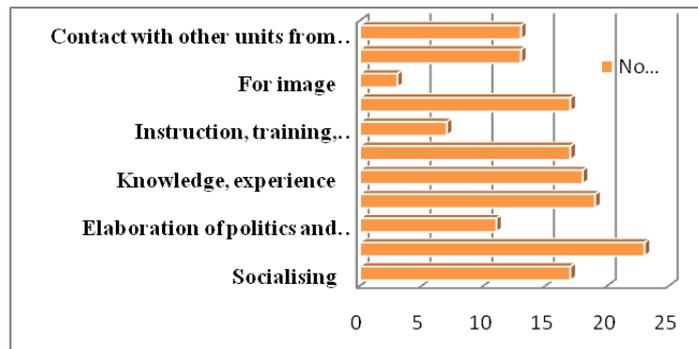


Figure 4 Areas where web tools are used

These support communication during external relations (50%) and for rapid exchange of information, knowledge, and experience between departments or employees within the same institution (50-88%).

Web tools appear to be less favored in education, training, and development (28%), or in the development of policies and procedures (44%), but are used preferentially in socialization (70%) and when working on projects (70%).

An important feature of these technologies, worth noting, is that their use to create a brand for the institution's image and message delivery is neither understood, nor applied.

Collaboration with similar institutions and with subordinated structures is done through web tools. Their simple use is appreciated in conjunction with reducing response time.

Another aspect of interest in the study was to examine the barriers to the use of web tools (Fig. 5).

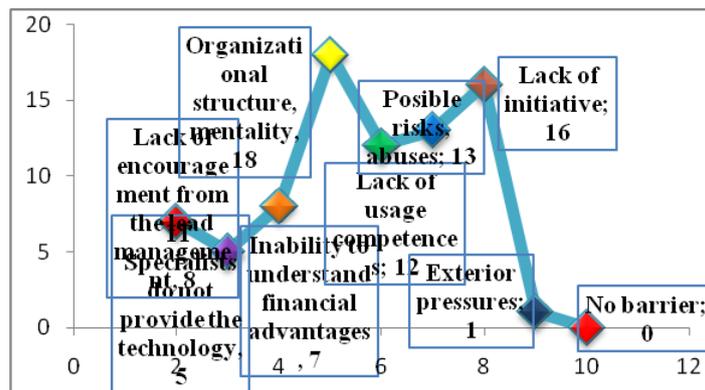


Figure 5 Barriers to extensive use of web technologies

It is imperative that the management encourages the use of web technologies (40%), and that protection is in place to prevent negative consequences or abuse (65%) due to their misuse, which will eventually impact the normal functions of the institution. Another barrier is the lack of knowledge of their use (60% of respondents), which implies increased efforts to overcome it.

There is support from IT Specialists (25%) and increasing knowledge becomes a very important objective. Another barrier is individual lack of initiative (80%) that may result from indolence, no interest in novelty and resistance to change.

Web tools 2.0 allow their users not only to produce content but also to share it, thus increasing interaction. This communication becomes bidirectional and improves mutual understanding. Figure 6 shows how most employees use web tools to interact with friends, relatives (84%), coworkers (92%), but also with subordinated institutions or those outside of CCC (70%). Tools are less used or not considered useful in interactions with mass media (20%), general public (28%) or management (36%).

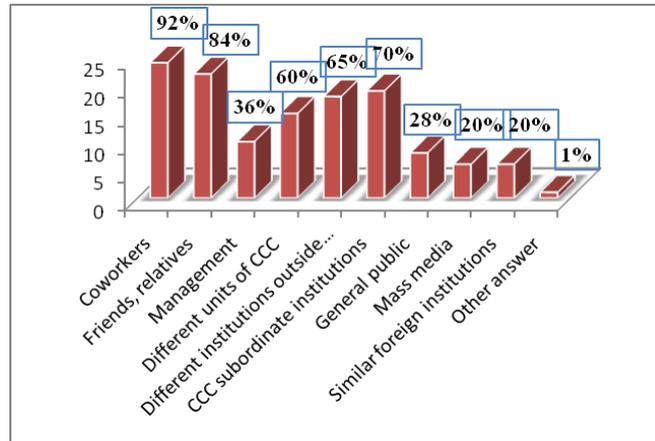


Figure 6 Interactions of web technologies

Of utmost importance in this study was to assess the effects produced by the use of web tools (Fig.7).

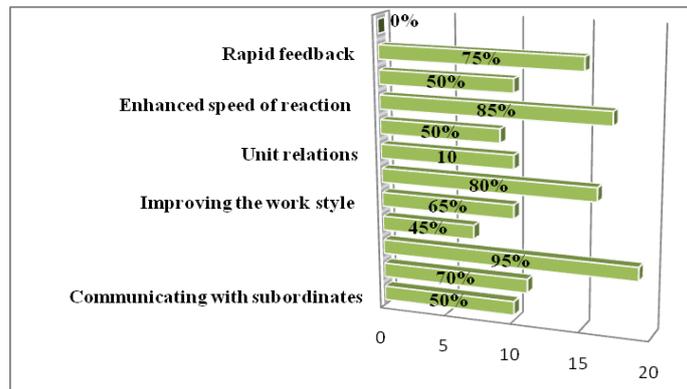


Figure 7 Web technologies utilization effects until present day

A conclusion from Figure 7 is that web tools, as perceived by users, have beneficial effects through increased communication among collaborators (95%), enhanced speed of reaction (85%), rapid feedback (75%), and improved employee relations. Although smaller, the use of web technologies has produced beneficial effects in other domains of communication as well. It is important to emphasize the positive effect these technologies have on reducing bureaucracy (50%) and on improving the work style (50%).

In consequence, we consider that reforming communication in such a way it also incorporates web tools is essential; the costs involved in this process would be insignificant.

Conclusions on the use of web tools in CCC

Web technologies bring support in clarity and rapid reaction and exclude invoking lack of time or documents lost as excuses. Web technologies remodel the way of thinking, eliminate bureaucracy, laziness and indifference and facilitate transition to a new quality employee. Those employees who now hide themselves behind their desks or delay accomplishment of tasks by moving papers around will disappear.

Implementing web technologies in the public sector represents a revolution in communication, with the ultimate goal of „serving the citizen”.

Starting from an analysis of the present situation of CCC regarding the use of web tools, the specifics of the activity, the needs and characteristic barriers, and by placing them into the international experience context (Levy A., Lovegrove N., 2009) we have identified some possible methods to increase the share of web technologies implementation in CCC. For these technologies to become a part of day to day life in the work environment there is need for an organizational culture and mentality reform.

The results of this research will be brought to CCS’s attention in order to be used when developing the CCC’s general strategy.

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