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# Web Presence, E-Government and E-Accessibility. Local Government Capability of Providing E-Government Services in Albania

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**Abstract:**

*The web presence of public administration institutions is considered as an important channel to ease communication between them and citizens or businesses. Moreover, this channel is considered an efficient and effective mean of providing public services. Therefore, the accessibility of the websites becomes an important issue to ensure the quality of the public services offered to citizens and businesses. Many studies are mainly focused on the web presence of the central government institutions; meanwhile local government is playing more and more an important role in the provision of public services.*

*The purpose of this paper is to evaluate the municipal and commune's websites, e-Government services sophistication level based on self-declaration, online survey and automated accessibility checking, using WAVE test tool. For this purpose 100 websites of local government units, including 65 municipalities and 35 communes of Shkodra and Lezha district were considered.*

*The analysis of results revealed there only 38% of the municipalities have web presence. In most of the cases LGU provide a rich content, but not well-structured and user-centric. For most of the e-services is reached the first level of sophistication and only a few municipalities the second level of sophistication. Also, some websites provide the possibility of e-participation through surveys on quality of*

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*the website. With regard to the accessibility, we found out that most of the municipality websites had up to 5 accessibility errors on their websites.*

**Key words:** Web presence, e-Government, e-Accessibility, LGU, WAVE test

## 1. Introduction and Theoretical Background

The United Nations Conference on Trade and Development and other development agencies have proposed that a close linkage exists between usage of ICT and macro-economic development, [1]. The key constituents of this linkage include contribution of the ICT sector to the GDP of the country through economic activity and trade; ICT usage by citizens which results in a more informed and connected society; ICT deployment by government for enabling efficient service delivery, improving transparency and effective monitoring; and businesses leveraging ICT to bring about changes to core business processes like supply chain logistics, thereby augmenting operational efficiencies.

In view of the increased focus on judicious spending of government finances, decreased availability of public sector funding for such programmes because of global financial crunch; and importance of delivery against such programmes, it is imperative that projects are properly planned, executed, controlled and closed so as to get the desired results in the desired timeframes, [2]. This is especially true for developing countries, which not only face an enhanced scarcity of funding as compared to developed countries but for whom e-government programmes assume increased importance due to the larger deficiencies in their internal operations as well as service levels provided to citizens, [3].

The web presence of public administration institutions is considered as an important channel to ease the communication between them and citizens or businesses. Moreover, this channel is considered an efficient and effective mean of providing public services. According to the eGovernment Benchmark 2012 study, almost half of EU citizens (46%) now go online to look for a job, use the public library, file a tax return, register a birth, apply for a passport or use other eGovernment services. 80% say online public services save them time, 76% like the flexibility and 62% say they save money, [4].

Therefore, the accessibility of the websites becomes an important issue to ensure the quality of the public services offered to citizens and businesses. Many studies are mainly focused on the web presence of the central government institutions; meanwhile local government is playing more and more an important role in the provision of public services. Also, improved eGovernment services at local and city levels attract greater use and increased trust, not least because of their greater relevance and closeness to daily life, [4]. That is why, in the 2013 edition of the eGovernment benchmark will have an increased focus on local service delivery, [4].

From one side, ICT is used in order to bridge the digital divide, but in some cases ICT raise a new risk for divide, such as people with no skills, sophisticated equipments or web design/accessibility. In some ICT literature there is a general agreement that the existence of a digital divide, i.e., the gap between those who have access to ICT ("have's") and those without access ("have not's"), is often associated with an impediment to the social, cultural and economic development of the individuals and groups, [5].

Lately there are some cases that describe new forms of digital divides that can affect a large range of individuals and groups, particularly those living in less-favored areas (geographical digital divide), vulnerable due to specific conditions including age (e-ageing), lack of IT skills (e-

competences), physical disabilities (e-accessibility) and cultural attitudes (cultural e-inclusion). Whilst the use of both social media and mobile becomes increasingly ubiquitous for personal or commercial activities, governments have tended to be slow in exploiting these new channels, [5].

In 1997, the World Wide Web Consortium (W3C) launched the Web Accessibility Initiative (WAI) in order to improve the web accessibility for people with disabilities, [6]. The purpose of WAI is to develop strategies, guidelines and resources to support web accessibility. Web accessibility means that people with disabilities can perceive, under-stand, navigate, and interact with the web.

According to the ISO 25010 standard, accessibility is a sub characteristic of usability that includes disabilities related to age. It could be measured either as the extent to which a product could be used by people with disabilities or by the presence of product attributes supporting accessibility, [7].

WAI developed Web Content Accessibility Guidelines (WCAG) that provide with a set of recommendations for making the web con-tent more accessible to users with disabilities. In 1999, W3C published the first version of accessibility guidelines, WCAG 1.0, [8]. The second version was published in 2008, WCAG 2.0, and this is the reference recommended for use in accessibility policies, [9]. There are four key principles that underlie WCAG 2.0, perceivable, operable, understandable and robust.

Following the commitment to promote e-accessibility in Europe expressed by the Riga Ministerial Declaration in 2006, [10], several initiatives and documents were published that are supporting the policy of the European Commission on e-inclusion: "European i2010 initiative on e-Inclusion",[11], "To-wards an accessible information society", [12] and several studies regarding the measuring of web accessibility in Europe. This paper aims to analyze local government units (LGU) web presence, e-government services sophistication level, focusing

on 20 basic public services, defined by European Union, e-Accessibility of LGU websites, are used three main approaches: online survey of the LGU websites, a questionnaire sent to 100 municipalities and communes and wave test tool, which is used to analyze the websites accessibility compliance with WCAG 2.0 guidelines.

## 2. Research Methodology

In order to analyze LGU web presence, e-government services sophistication level and the e-Accessibility of their websites, are used three main approaches: online survey of the LGU websites, a questionnaire sent to 100 municipalities and communes and WAVE test tool [13], which is used to analyze the websites accessibility compliance with WCAG 2.0 guidelines. [9].

At the beginning of this year, National Agency on Information Society (NAIS) conducted a survey on web presence e-government experience and e-Accessibility in local governments. This was the third survey, the first one was made in 2011 and the second in 2012.

The aim of the survey was to know the current situation of the e-Government at municipality and commune's level, in order to identify the issues that impede the development of e-Government practices and will help to take enhancing measures for future improvements. The questionnaire is composed of two parts, Part A and Part B. LGU that have no websites at all are required to answer only Part A, while the other institutions both parts.

NAIS sent a questionnaire to 100 LGU, 65 municipalities and 35 communes of Shkodër and Lezha district. NAIS received the answer from:

– 77% of municipalities;
– 42% of communes.

In order to test the accessibility of the LGU websites, in compliance with WCAG 2.0 guidelines, WAVE test tool was used.

## 3. Results of the Study

### 3.1. General Status of Web Presence for LGUs

Based on the responses of the questionnaire we found out that only 68% of the municipalities had a website, while only few communes declare the presence of web pages. Comparing this result with the one of 2011 and 2012 survey, it can be said that the web presence of local governments was increased, but still the total number of local governments with web presence remain low.

Another important finding was with regard to the URL address of the local government units. In general, the majority of the websites are under *".gov.al"* domain and three of them are under *".al"* domain. Meanwhile, there are some web pages declared as local government official websites that are under other domains, such as:

- 5 under ".com";
- 2 under ".org";
- 1 under ".net";
- 1 under ".yahoo.com" (e-mail address);
- 1 under ".info".

Since LGU are government institutions and are the main source of official information for services offered at local level, it is important that the municipalities and communes should all have ".gov.al" domain.

Based on Prime Minister Order (PMO), No. 202, dated 16.12.2005 "On strengthening transparency, through the increase of the internet use and enhancing existing websites", ministries, institutions under PM or Council of Ministers, including prefectures, are obliged to have an official website, under ".gov.al" domain.

Another issue, with regard to the URL address of the official websites, is the domain standardization. We found out that even the domains under *".gov.al"* are not standardized. For the official websites domain, different structures of the URL addresses are used, such as:

- www.shkodra.gov.al;
- www.bashkiasarande.gov.al;
- www.polican.gov.al;
- www.bashkia-berat.gov.al, etc.

In general, the information has two languages, Albanian and English, but not all the information is available on both languages.

## 3.2. Reasons Why Municipalities and Communes Don't Have a Website

Based on the responses of the questionnaire we found out that the main reason why municipalities and communes don't have a web presence is the lack of the financial sources, 12 LGUs determined it as the main reason for not having a website. Some of the other reasons are stated below:

- lack of IT staff (9 answers);
- high maintenance costs for web page (4 answers);
- technical reason (2 answers);
- lack of Internet connection (4 answers);
- poor quality of Internet connection  (1 answer);
- lack of premises required for server room (1 answer);
- absence of contract with ISP (1 answer).

As we can see, all the above mentioned reasons can be grouped in three categories, one related to financial resources, lack of technical staff and missing technical infrastructure. In order to overcome the 2nd and 3rd category reason, undertaking a reform for the collocation of the LGU websites, could be a good initiative to reduce infrastructure and technical maintenance cost. Based on Council of Ministers Decision No.248, dated 27.4.2007 "On the establishment of National Agency on

Information Society", Article 3/n, through the use of the Government Datacenter, NAIS can offer the Cloud Infrastructure for a number of services, including, website and portal hosting.

### 3.3. *Level of Sophistication of e-Government, Self-Declaration*

In order to evaluate the quality of the services offered in the LGU websites, in the part B of the questionnaire were included many questions that were related to: providing general information on the services offered by LGU, ability to download application forms or to apply online for a service.

Based on the LGU responses, we can summarize the e-Government services sophistication level, as below:

  – In majority of responses of the municipalities, it is declared that the first level of sophistication for e-government services, which has to do with the provision of only information related to the offered services;
  – In some cases, municipalities offer services at the 2nd level of sophistication;
  – For some web pages e-Participation and interactive communication mechanism with community are developed;
  – With regard to the update frequency of the published information, the responses stated that the information was updated daily, weekly or monthly, depending on the activities of the local government;
  – All of LGU declared that they have published a contact point in web pages.

In few cases, we saw some contradiction in the given responses, due to the lack of knowledge and information on e-government services and processes, but these cases were very isolated.

Based on the PMO No. 202/2005, mentioned above, the minimum criteria are set with regard to the layout and the

required information published to the central government institutions. Therefore, there are defined 18 minimum elements for the website content, starting with Republic of Albania Emblem and Official Institution Name and focusing mainly on the information related to the services offered to citizens, businesses and other government institutions or employees. Similar requirements and specifications can be defined for the LGU, especially in order to define the minimum information required for the services offered at local level. The public services offered at local level, are defined by Law No. 8652, dated 31.07.2000 "On the organization and functioning of Local Government".

### 3.4. Online Survey of Local Governments Web Pages

Beside the questionnaire send to 100 local governments units, we made an online survey on web pages. Local authorities in Albania are organized as below:

- Prefectures 12;
- Districts, 36;
- Municipalities, 65;
- Communes, 310.

Based on the survey of the web presence, 38% of the municipalities have web presence, from which 11 out of 25 are also region's center.

Table 1 - **Municipalities web presence, based on their role**

| LGU Authorities | Total No. | Have Web Presence | Don't Have Web Presence |
|---|---|---|---|
| Municipality (M) | 65 | 25 | 40 |
| M/Region Center | 12 | 11 | 1 |
| M/District Center | 36 | 19 | 17 |
| M/District Center, but not Region Center | 24 | 8 | 16 |
| Other Municipalities | 29 | 6 | 23 |

With regard to the municipality and commune's websites that have a web presence, we mainly focused on the level of

sophistication of e-Government services and e-Accessibility standards. In order to define the e-Government Service Sophistication level, CAPGEMINI methodology is used, [14].

According to CAPGEMINI, introduced in the e-Government Benchmark Report of 2007, are defined 5 level of e-Government Services Sophistication: information, one way interaction, two way interaction, transaction and personalization, [14].

The results of the online survey are summarized and given below:

- The majority of the municipalities and communes provide public services, at the 1st level of sophistication, which is to provide information on the public services that are offered by the LGU.
- Few of them provide service at 2nd level of sophistication. Municipalities, such as Tiranë and Durrës, have published on their websites electronic versions (.pdf or word format) of the application form related to the service of obtaining building permits that can be downloaded by businesses;
- Some websites publish daily activities, but that are mainly related to the major activities, meetings and visits;
- Some websites have published contact point persons and details for contacts;
- In general, there is no standardized procedure for public services;
- Almost all websites have provided a detailed information on tax duties but there is less information related to other local government services;
- In general, websites are built not using a user-centric approach;
- Some LGU have integrated in their websites application/request forms, feedback or complaints;

- – In general, websites are implemented in two languages, Albanian and English or Albanian and Italian, but the second language content is not as rich as the Albanian language;
- – Mainly the LGU websites provide general information on the municipality and commune and the region, but the information on the services is limited.

For the district of Shkoder and Lezha, there is an increase of the web presence for some of the communes. There are some evidences of One-Stop-Shop Services. In the municipality of Lezha it is provided a digital library of all the legal acts. Most of the websites are focused to provide information to tourist and visitors of the commune and not the citizens of the commune. Not providing updated information is a common problem for most of the LGU websites.

As stated above, there is need to define an overall regulation that will apply to all the websites of the local government units, including municipalities and communes. Moreover, including e-Government Service Provision at Local Government level in the National Strategy on Decentralization would enable a smooth transition of this process and to increase use and trust.


### 3.5. E-Accessibility and WAVE Test

The last survey on e-Accessibility standards was based on "WAVE test" tool. What it can be said is that the websites established lately has less e-Accessibility errors. Therefore, some of the newly implemented websites have up to 3 e-Accessibility errors.

The previous evaluation test, realized on 2012, on the web accessibility for municipalities, gave these results:
- – Only one website  with zero errors;
- – 9 websites with up to 5 errors;
- – 2 websites have 6-10 errors;
- – 4 websites have 11-20 errors;

–   2 websites have 21-30 errors;
–   2 websites have over 30 errors.

The majority of e-accessibility errors were related with missing of alternative text, or missing links, etc. One common problem in web pages is not providing updated information or providing information without notice for the publishing date.

## 4.  Conclusion and Recommendation

Based on the survey of the web presence, 38% of the municipalities have web presence, from which 11 out of 25 are also region center. In general, the information has two languages, Albanian and English, but not all the information is available on both languages. The content of the websites neither is nor structured either user-centric.

Based on the PMO No. 202/2005, are set the minimum criteria with regard to the layout and the required information published to the central government institutions. Similar requirements and specifications should be defined for the LGU, especially in order to define the minimum information required for the services offered at local level. Moreover, including e-Government Service Provision at Local Government level in the National Strategy on Decentralization would enable a smooth transition of this process and to increase use and trust.

Considering the 5-Level e-Government sophistication level, it resulted that most of the websites provides only general information on the services, first level of sophistication and only a few municipalities offer the possibility to download forms that are needed to apply for the services, thus enabling second level of sophistication.

Also, awareness is needed in some areas, such as:
–   being conscious of the importance of e-government in local authorities;
–   improving the web accessibility and applying international standards for e-accessibility;

– conducting continuous evaluation process and monitoring of e-government is needed;
– conducting analysis of errors, making improvements and then evaluation again;
– exchanging good practices will help the process of providing e-Government services at local level.


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