ACTA ECONOMICA
Volume XII, No. 20 / February 2014
ISSN 1512-858X, e-ISSN 2232-738X

PRELIMINARY COMMUNICATION

UDC: 659.23:004.738.5
DOI: 10.7251/ACE1420009L
COBISS.RS-ID: 4132632

Vujica Lazović[1]

Prospects of developing countries in digital economy case study of Montenegro

Шансе земаља у развоју у условима дигиталне економије – примјер Црне Горе

Summary

Information technology has influenced business activities change to such extent that today we speak about new kind of economy, so called digital economy. Digital economy enforces new standards for doing business both on micro and macro, i.e. on global level. In this context, answering seemingly simple question regarding prospects of developing countries competitiveness in digital economy in comparison to traditional economy appears to be exceptionally interesting and even controversial in relation to classical economic theory. Cheap technology and rapid internet expansion offer new opportunity for developing countries to enter easily in global digital trends. In this regard, deliberate policy is required to foster development of infrastructure, education and entrepreneurship along with increasing use of information and communications technology. Through example of national internet domain .ME internationalization, thereinafter is illustration how in Montenegro we recognized and utilized that opportunity.

Key words: *Digital economy, developing countries, competitiveness, internet domain .ME, informatics education, broadband, entrepreneurship.*

[1] University of Montenegro, Faculty of Economics Podgorica, vujical@t-com.me

Резиме

Информациона технологија је утицала на промјену пословања до тог нивоа да се данас говори о новој врсти економије тзв. дигиталној економији. Дигитална економија намеће нове стандарде пословања како на микро тако и на макро, то јест на глобалном нивоу. У том контексту, одговор на наизглед једноставно питање које се односи на шансе земаља у развоју у погледу њихове конкурентности у условима дигиталне економије у односу на њихову конкурентност у условима традиционалне економије, може бити изузетно интересантним па и контраверзним у односу на класичну економску теорију. Јефтина технологија и брзо ширење интернета дају нову шансу земљама у развоју да се веома лако укључе у глобалне дигиталне токове. У том погледу, неопходна је промишљена политика која ће поред све веће употребе информационо-комуникационих технологија форсирати и развој инфраструктуре, образовања и предузетништва. На примјеру интернационализације националног интернет домена .ME слиједи приказ како је у Црној Гори та шанса препозната и искоришћена.

Кључне ријечи: *дигитална економија, земље у развоју, конкурентност, интернет домен .ME, информатичко образовање, широкопојасни приступ, предузетништво.*

Introduction

One of the questions that arises, when we take into consideration the special features of new economy and rapid expansion of information and communications technology even in the least developed parts of the world, is **whether prospects of developing countries are better in digital than in traditional economy with regards to competitiveness?** The answer is: YES. Traditional economy insisted on hierarchy, inherited positions, size and power, companies' capacities, natural resources, authorities, developed primary infrastructure etc. New, digital economy fosters idea, innovation, speed, knowledge, flexibility etc. (Kalim and Lodhi, 2004).

Substantial advantage and in the same time opportunity for developing countries is the fact that in digital economy **the access to market is easy**. Internet offers simple access to huge market, with negligible spending which is not the case in traditional economy (Lazović and Kovačević, 2010). Number of internet users is growing by 200 million annually and is forecast to reach over 3 billion by 2016 which represents approximately 50% of world population (The Boston Consulting Group, 2012). In the same time, competitiveness is enhanced by **low, almost**

minimum individual investment to start up business on internet. You need computer or smart device and comfortable internet connection. Is it really so?

To secure the aforementioned, quality information and communications infrastructure is required. Hence, in this regard priority of developing countries is to **develop broadband infrastructure** (Lazović, Rondović and Đuričković, 2010). In the same time, improvement of population information literacy should be focus of various education programs, i.e. introducing IT education from kindergarten to university. Certainly, technology and knowledge are crucial factors but only if combined with entrepreneurship. Therefore, recommendation to developing countries is to **force entrepreneurship** as main driving force of development (Lazović and Đuričković, 2011). For example, Montenegro is in the final phase of developing the model which considers introducing entrepreneurship as obligatory discipline both in primary and secondary education, and study programs of all profiles.

1. Living standard and information and communications technology

In the context of earlier elaboration, the question of economic and philosophical substance along with globalization challenge poses the following: **Does level of information and communication technology use directly correlates to population living standard?** The answer is: No. In fact, this is a paradox of information society and an opportunity for developing countries since level information and communication technology use is not directly, i.e. proportionally correlated to population living standard (Henry and Lucas, 1999).

Arguments confirming this position are as follows: mobile phone penetration rate in Montenegro is over 180% in many years: in 2008 it was 193%, 2009 – 197% and in 2010, 197% (EKIP, 2011) while living standard, i.e. GDP per capita is approximately 5.000 EUR. On the other hand, when compared to developed countries, mobile phone penetration for example in Denmark is 153% (Cullen International, 2013) and GDP per capita over 41.000 EUR, or in Netherlands where mobile phone penetration is 121% and GDP per capita over 35.000 EUR (The World Bank, 2013). This might be considered individual case instead of common rule for developing countries. However, the fact is that aforementioned level of information and communication technology use is much bigger than expected with regards to living standard of population.

What explains such paradox? **Are information and technology devices luxury or existential good?**

Pursuant to previous elaboration, it can be concluded that ICT devices increasingly gain existential features since they represent basic tool for function-

ing and communication (both private and business) in modern society (Lazović, 2004). Additionally, the question is whether mobile phone penetration represents good indicator that country has better perspectives regarding competitiveness in digital economy? It should not be neglected that mobile phone today is smart device and after introducing 3G generation it is in the same time mobile internet point in times of broadband mobile access.

Thereinafter figures refer to these issues in Montenegro. In accordance to last international report regarding these trends, penetration of mobile broadband access in Montenegro amounts 11,7% , higher than average in EU-27 which is 8,1% and is remarkably higher than in the region (Digital Agenda for Europe, 2010). This should be considered in context of technology and living trends which are, beside domination of smart devices and transfer to new generation of Wireless, illustrated by decrease of prices or elimination of roaming charges etc. (Lazović and Kovačević, 2011).

Is this, conditionally speaking paradox sufficient to confirm better competitiveness chance of developing countries in terms of digital economy? Indeed, other preconditions are required starting from product, i.e. the answer of what developing countries can offer to global digital market?

2. Original digital products as precondition for competitiveness

To valorize properly opportunity for improvement of competitiveness arising from digital economy, i.e. to increase level of e-readiness, a country needs to have original digital product (Christensen, 1997). What has been done in Montenegro in this regard? In this part of paper, the focus will be on national internet domain management and how with good approach, opportunities become reality. Overview of strategy for smart growth of DoMEn ltd Company as Agent for domain registration under the national internet domain of .ME, illustrates potential and opportunities which companies from developing countries can accomplish in digital economy (Johansson, Karlsson and Stough, 2006).

2.1. National ccTLD – Domain .ME

After gaining international subjectivity in 2006, Montenegro acquired right to receive international codes resources being awarded by certain international communities. International Organization for Standardization (ISO) approved unique two-letter code for Montenegro ".ME", and in September 2006 ISO 3166 Maintenance Agency announced that Montenegro has been awarded .ME as national top domain (ccTLD – country code Top Level Domain).

Since domain internet zone management as well as management of central servers systems which secure functioning of Domain Name Systems (DNS) is be-

ing performed through independent organization – Internet Corporation for Assigned Names and Numbers (ICANN), in 2007 it delegated to Montenegro .ME domain, and Montenegro gained right to use extension .ME in internet space and be recognized by it in global network.

National internet domain is the ground for recognition, organization and presentation of information on internet and one of the key factors for development of national identity in the world (Kurbalija, 2012). Montenegrin national domain space includes ccTLD, i.e. country code top level domain for Montenegro .ME and all sub-domains registered within national domain. In this regard, management and use of domain presents high degree of responsibility and respect of various interests of all involved parties in accordance to imperative international standards. At that point, Montenegrin Government, academic community and other subjects faced challenge: To provide opportunity to use this attractive domain by global internet community or to limit the right only for citizens and subject from Montenegro? The choice of first approach eventually proved to be fully justified.

Respecting the best practice from neighboring countries and countries with attractive national internet domain, ccTLD Manager, .ME domain Council and Technical Administrator defined criteria for selection of Agent for domain registration[2].

2.2. Strategy for smart growth of Agent for domain registration – DoMEn Ltd Company and positioning of national ccTLD domain .ME on global market

Project of .ME domain valorization has been implemented through public-private partnership, upon international tender. The winner on the tender was consortium made by world renowned companies GoDaddy and Aflias Limited, together with local company ME-net. Pursuant to tender requirements, Consortium founded limited liability Company DoMEn seated in Podgorica which operates in accordance to Montenegrin laws. Consequent to that, in February 2008 DoMEn Ltd Company and Government of Montenegro signed the Contract

[2] For the purpose of qaulity management of .ME domain, Government of Montenegro in cooperation with ICANN appointed ccTLD Manager, established .ME domain Council and elected Technical Administrator (University of Montenegro – Centre for Information System). Defined criteria for election of Agent for domain registration were divided into two groups: a) quality of financial offer and b) reference of Agent for domain registration. Bidder, i.e. GoDaddy, Aflias Limited and ME-net, was first ranked by Decision about Bid Evaluation, in front of eNOM Inc and Verisign Sarl. In that way it was elected as Agent for .ME domain registration. On of the conditions was that company has to be seated in Montenegro and operate in partnership with Government of Montenegro.

about Agent for .ME domain registration[3] and becomes legal entity authorized for domain registration and other services related use of national .Me domain. Contract about Agent for domain .ME registration, stipulates financial and other relation between the Agent and founders, corporate guarantor and Government of Montenegro. It aims maximum valorization of effects related to national .ME domain use, being top domain in global system hierarchy in accordance to business code consisted in ISO 3166-1 standard for Montenegro. Significant share of income accomplished by domain restoration is revenue of State Budget and is allocated for development of information society.

First registration was made on March 24, 2008, when on DNS level, registered and removed were all state domains from reserved list which at that moment were visible under cg.yu domain. Thereupon, during following five years results of this approach were more than impressive: total number of registered domains on December 1, 2013 amounts 740.704, while average number of registrations on monthly level is 22.000 domains. According to Alexa (The Web Information Company), leading global tool for web sites ranking, among first 1.000.000 web sites, 2.974 has .ME extension (Alexa, 2013). Distribution channels comprise 170 of accredited registries doMEn Ltd is cooperating with and which along with sales network represent .ME domain to end user. Despite activities of other registries, GoDaddy holds 50% of all registered domains.

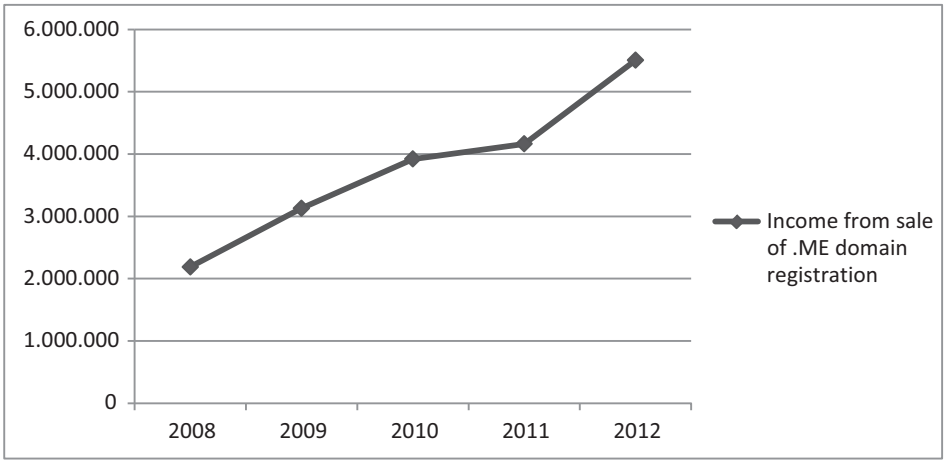
Complying with global trends in modern business around the world, DoMEn Ltd outsourced many business activities, i.e. entrusted them to enterprises specialized for certain fields. Outsourcing included: (a) registry management system and financial transaction which was outsourced from founder Afilias; (b) web hosting, including protection system, which was outsourced from another founder – GoDaddy and (c) complete web development which was outsourced from third founder ME-net.

2.2.1. Policy of registration of national ccTLD

Contract about Agent for .ME domain registration defined that domain registration can be performed in two ways – through auction and non-auction. Pursuant to the Contract, Government of Montenegro receives 70% of total income that Agent for Registration realizes by sale of Premium and Reserved domains through auction and 33% of total income from sale of names through regular registration.

[3] Originally, the Contract about Agent for .ME domain registration was concluded for five years period and in 2013 was renewed for 10 years, i.e. by 2023.

Graph 1.
5 years growth trend of income from sale of.ME domain registration[4]



DoMEn Ltd Company is exposed to no credit risk that debtors will not be able to fully and in due time repay liabilities since registries pay in advance the amounts related to purchased services of domain registration. Agent for domain registration, upon their estimation, applies different stimuli and rebate, as promotion instruments aimed at increase of registration number. Furthermore, Redemption Grace Period (RDP Period) is 3 to 45 days; regardless it is registration or renewal. Purpose of RGP period for re-registration (restore) is to provide additional time after domain name deletion when registry can cancel deletion or "renew" name of globally significant domain in case of deleting by mistake.

2.2.2. Categories of Buyers and Promotion

Although .ME domain is being promoted as personal domain, approximately 42,9% (P. Lešić, personal communications, November 10, 2013) of all domains has been registered by companies understanding the potential of .ME domain for development of certain product or service on internet. This figure implies diversity of domain use. Putting no bans and allowing registration on global level, provided to companies from all over the world an opportunity to register. Advantage of .ME domain is the fact it is already recognized and renowned TLD and registries have confidence that sale will increase due to .ME domain.

[4] Agent for registration accomplished financial effects in the amount of 24.401.366 EUR for 2008 – 2013 period out of which 20.555.501 EUR from regular registration and 3.845.865 EUR from Premium and Reserved names registration. On the basis of guaranteed Budget revenue 13.200.000 EUR has been paid by April 1, 2013.

DoMEn Ltd has active role in promotion of national ccTLD – .ME domain by direct addressing of users. Such promotion is primarily educational where presentation of successful .ME domain use sets the ground for new content on domain. Important part of performance on the market is participation of Registry in domain promotion. Being aware of this, DoMEn Company participates in conferences, closely cooperates with registries and co-finances certain registries and maintains its position in the market.

From the very beginning, company invests remarkable sources in promotion and plans to retain the trend in future. Growth of number of .ME domain registrations depends on promotion and distribution programs (first of all short-term "test" discounts). DoMEn Company invested significant sources in banners, social networks communication, blogs, joint promotion with registrars, media statements, sponsorship etc.

Development program for assigning domain from Premium and Reserved list, based on individual offers, .ME registry is looking for partners – creative, successful companies, investors, entrepreneurs and social communities to change parts of .ME world. Through this project, Premium domain can be assigned beside auction. After three years of .ME domain promotion, development program became one of the substantial tools through which names were assigned to internet giants such as **WordPress, Facebook, The New York Times, Google, Yahoo** etc. All these companies use domains for online (internet) and offline (press, billboards) marketing. Marketing effect of these assignments aimed at promotion of .ME domain is immeasurable in comparison to short-term financial effect provisioned through lump sum for assigning of these domains. Cooperation and direct communication with internet giants fosters improvement of quality of content on .ME domain, as precondition for growth and survival of extension on global level.[5]

2.2.3. Positioning of national ccTLD – domain .ME on global market

To illustrate appropriately positioning of ccTLD – .ME domain on global market, thereinafter are tables and graphs presenting number of created domains, growth of registration in percents, number of registration on December 31 of 2008, 2009, 2010, 2011 and 2012, as well as percentage of renewed registrations for same periods.

[5] Results of this cooperation are series of popular addresses with .me extension: fb**.me**, wp**.me**, google**.me**, call**.me**, blog**.me**, about**.me**, music**.me**, me**.me**, upisi**.me**, go**.me**, near**.me**, king**.me**, group**.me**, news**.me**, vk**.me**, ti**.me**, yb**.me**, connect**.me**, dress**.me**, with**.me**, lend**.me**, via**.me**, v**.me**, under**.me**, karma**.me**, thisis**.me**, read**.me**, d**.me**.

Table 1.
Positive Growth Trend in registrations of domain .ME

	Number of creates	Growth	Portfolio size at EOY	Renewal rate
Total 2008	184.046	n/a	182.232	n/a
Total 2009	168.521	89,07%	344.555	n/a
Total 2010	219.915	25,79%	433.428	54,58%
Tatal 2011	290.300	35,25%	586.213	62,01%
Total 2012	268.369	14,06%	668.613	66,00%
1Jan-30Nov13	256.072	10,78%	740.704	76,20%

Graph 2.
Positive Growth Trend in registration of domain .ME

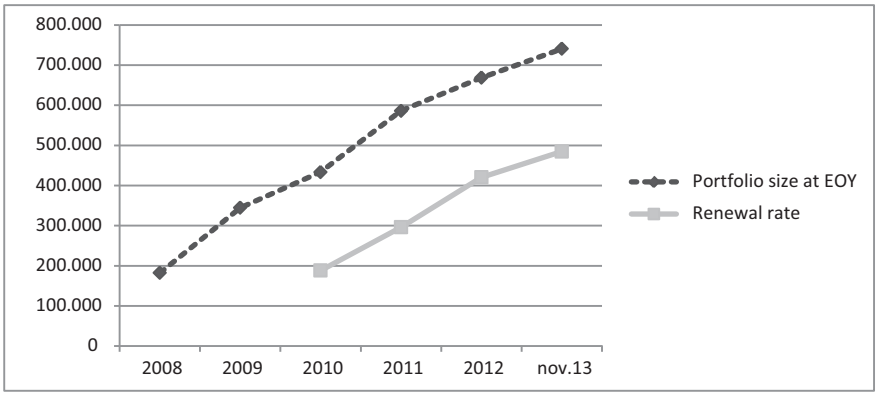


Table 2.
ccTLD – domain .ME registration in 15 states, percentage

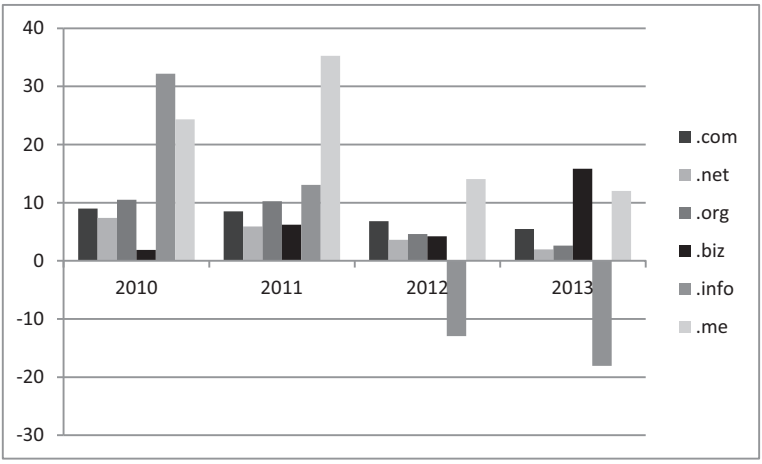
Country	.ME domain
United State of America	53,36%
United Kingdom of Great Britain and Northern Ireland	7,48%
Japan	5,84%
China	3,82%
Canada	3,58%
France	2,80%
Germany	2,07%
Russian Federation	1,86%
Australia	1,66%
Netherlands	1,33%
India	1,17%
Korea	1,07%
Spain	0,74%
Sweden	0,72%
Montenegro	0,69%

Table 3.
Comparison of.ME extension growth to leading TLDs on global level

	.com	.net	.org	.biz	.info	.mobi	.asia	.tel	.ie	.eu	.me
2010	8,98%	7,37%	10,51%	1,86%	32,16%	2,88%	-15,66%	4,89%	12,89%	5,93%	24,34%
2011	8,50%	5,89%	10,23%	6,20%	13,08%	5,03%	7,27%	25,07%	12,86%	5,45%	35,27%
2012	6,83%	3,62%	4,63%	4,22%	-12,95 %	2,17%	93,61%	-22,91%	4,16%	5,36%	14,08%
≈ 2013	≈ 5,47%	≈ 1,95%	≈ 2,61%	≈ 15,84%	≈ -18,06%	≈ 13,99%	≈ 33,96	≈ -13,27%	≈ 3,16%	≈ -0,35%	≈ 12,03%

Enclosed is graphic illustration of growth trend of.ME domain and 5 leading TLDs on global level in domain industry. Data used are for years 2010, 2011 and 2012 and Q1 2013, Q2 2013, Q3 2013, X 2013 and XI 2013.

Graph 3.
Growth trend of .ME domain and 5 leading TLDs on global level



October records total growth in ccTLD industry in average of 0,40%, while .ME domain in the same period records growth by 0,80%. The expected average growth of ccTLD in 2013 is 5,3%, implying that .ME extension with average 12,3% accomplished doubled growth than average in the industry is (CENTR, 2013).

2.3. Social Responsibility and contribution to development of ICT society in Montenegro

DoMEn Ltd is growing into one of the most significant points for generating and development of information entrepreneurship in Montenegro. Furthermore, it is recognized in the context of social responsibility. The company invested re-

markable funds in socially responsible projects and initiatives by donations and sponsorship of project in diversified segments of Montenegrin society:

- Active participation and finance of activities related to Olympic Team in Programming, in cooperation with Faculty of Natural Sciences and Mathematics and Examination Centre;
- Financing of Knowledge Olympiad organized by Faculty of Natural Sciences and Mathematics;
- Organization of regional conference in English language WebFest.ME/ Spark.ME;
- Major sponsorship and support to social group "digitalizuj.me";
- Sponsorship of students organizations;
- Donations to sport clubs;
- Donations to NGOs;
- Support to Computing Centre of University of Montenegro;
- One-off assistance to individuals in unenviable circumstances.

Active policy on popularization of national ccTLD – .ME domain impacts promotion of Montenegro in the world since millions of users daily meet with different content placed through .ME domain. This implies the worldwide success of national ccTLD influences perception and awareness about possible success of local products on global market.

DoMEn Ltd Company is extraordinary example how to properly valorize opportunities given by digital economy. This is confirmed by following data: .ME domain accomplished the highest percentage growth in Europe when compared to other ccTLD; .ME domain is among 10 most often requested TLD registration, and is more popular than .org domain. The aforementioned implies the following conclusion: through strategy of smart growth extraordinary success was accomplished and .ME domain became the best export brand of Montenegro.

3. Role of State in improving the level of digital competitiveness

When we consider challenges and chances of developing countries, the reasonable question is: Which role Government or state should have in development of information society i.e. stimulating the perspectives for improvement of competitiveness in digital economy?

First of all, the Government should propose **regulatory infrastructure.** This primarily refers to set of laws treating this field such as: E-commerce law, Information security law, Digital signature law, Electronic communication law, Intellectual right protection law etc. Using the experience of developed countries, developing countries mostly adopted these laws and it can be assumed that regulatory infrastructure is not barrier for developing countries. In addition to laws,

inevitable is adoption of bylaws as instruments and mechanisms for creating eligible climate for information society development.

Furthermore, the state is responsible for development of **institutional infrastructure** for fostering of information society development and establishing environment for business development on digital economy platforms. This is above all institutional promotion by policy makers like state bodies, ministry and administrative bodies with involvement of academic society, i.e. university and NGO as well. Governments of developing countries, as Montenegro, which establish special ministry for information society send clear message that they recognize challenges and opportunities which governments face in modern economy. Role of regulators and operators in regard of institutional mosaic is also unavoidable.

Finally, there is no serious e-readiness without proper investment into infrastructure, namely technology which provides **broadband** (Matula, 2010). Here appears certain dilemma: whether state itself, provided that it has resources as best solution, should invest into development of infrastructure or by economic policy measures motivate operators to invest? Experiences vary, but regardless model, it is necessary to have developed infrastructure. This is for many reasons crucial weakness in the prospects of developing countries to participate more seriously in global competitiveness in digital economy.

Earlier in this paper the role of increase of information education has been emphasized not only because of improvement of information literacy but stimulation of specialized information education (IT engineering) as precondition for e-business. Finally, the state by its own example demonstrates readiness to participate in digital society. That is why it is required to stimulate **e-government**. E-portals and services modernize administration and certainly provide more efficient, cheaper and faster procedures with maximum transparency. Degree of internet penetration is no longer obstacle for developing countries to insist on communication with citizens and economic entities on platforms for e-portals and services.

Conclusion

Analysis presented in this paper (with special focus on Montenegro) intended to indicate that developing countries through smart policy have better perspectives to increase their competitiveness in digital economy, than they had in traditional economy. This is due to both, unstoppable process of price decrease, new technologies and internet expansion, and specifics and challenges related to new, digital economy which rules and legitimacy of functioning cannot be fully embraced by instruments of heretofore valid economic analysis.

Therefore, there are numerous arguments supporting the approach that developing countries in first decades of XXI centuries have additional opportunity to overcome inherited economic backwardness. Undoubtedly, this is supported by paradox of information society that degree of information and communications technology use is not in direct, i.e. proportional correlation with living standard of population.

The aforementioned leads to conclusion that information and communications technology in modern society, present good of existential feature rather than luxury. Since opportunities for competitiveness improvement and overall development in XXI century are closely connected to education, innovation and entrepreneurship, these should be the goals of predominant economic and even political orientation of developing countries.

To foster competitiveness of national economy in world of digital economy, it is expected that governments of developing countries will focus on development of not only physical but also normative and institutional IT infrastructure. Its commitment to these issues is best demonstrated through development of e-government services. Not addressing these issues in proper manner by policy generators, would result in failing to utilize this "historical chance". In addition to illustration of mentioned phenomena, analysis and statement, this paper intention is to provoke future consideration on this topic.

Literature

Agency for Electronic Communication and Postal Services – EKIP, Montenegro. (2011). *Survey of use of information and communication technologies in Montenegro.* Report. http://www.ekip.me/download/Istrazivanje%20ICT.pdf (Date of access: November 15, 2013)

Alexa – The Web Information Company. (2013). Top sites report: *The top 1.000.000 sites on the web.* http://www.alexa.com/topsites/global;0 (Date of access: November 21, 2013)

Christensen, C. (1997). *The Innovator's dilemma.* Harvard Business School Press, Boston.

Council of European National Top Level Domain Registries – CENTR. *Monthly Stat Report: OCTOBER 2013.* http://www.centr.org/system/files/share/stats_201310.pdf (Date of access: November 10, 2013)

Cullen international. (2013). *Enlargement countries monitoring*. Reports. http://www.cullen-international.com/menu/regulatory-intelligence/sectors/telecommunications/telecom-regulation-europe/telecoms-regulation-europe/ (Date of access: November 15, 2013)

European Commission. *Digital Agenda for Europe – A Europe 2020 Initiative.* (2010). https://ec.europa.eu/digital-agenda/digital-agenda-europe (Date of access: October 10, 2013)

Henry, C. and Lucas, JR. (1999). *Information Technology and the productivity paradox, Assessing the value of investing in IT.* Oxford University Press, New York.

Johansson, B, Karlsson, C. and Stough, R. (2006*). Entrepreneurship, Clusters and Policy in the Emerging Digital Economy.* Springer. http://link.springer.com/chapter/10.1007/3-540-34488-8_1#page-2 (Date of access: October 25, 2013)

Kalim, R. and Lodhi, S. (2004). *Digital Economy - Prospects For Developing Countries,* Ideas III 61-73. The ICFAI Journal of Applied Economics – Institute of Chartered Financial Analysts of India, ICFAI Press.

Kurbalija, J. (2012). *An Introduction to Internet Governance.* DiploFoundation. http://issuu.com/diplo/docs/ig_2012# (Date of access: October 15, 2013)

Lazović, V, Rondović B. and Đuričković T. (2010). *Sociological and Economic Aspects of the Implementation of eGovernment Solutions in Montenegro.* Proceedings of the 6th European Conference on Management, Leadership and Governance, Wroclaw, Poland. ISBN: 978-1-906638-81-8.

Lazović, V. (2004). *Does Information Economics Need New Economic Analysis?* International Journal "Enterpreneurial Economics Vol. IV*"*. The University of Montenegro, Faculty of Economics in Podgorica.

Lazović, V. and Đuričković, T. (2011). *Democracy in the Electronic Government Era – Challenges and Opportunities for Development in Montenegro.* Proceedings of MIPRO 2011/DE, Opatija, Croatia, ISBN 978-953-233-064-9, ISSN 1847-3938.

Lazović, V. and Kovačević D. (2011). *Changes in the Understanding and Management of Value Chain in the Information Era.* Proceedings of MIPRO 2011/DE, Opatija, Croatia. ISBN 978-953-233-064-9, ISSN 1847-3938.

Lazović, V. and Kovačević, D. (2010). *Internet and its fundamental impact on functioning of the new (information) economy.* Proceedings of 6th International Conference of ASECU. The University of Montenegro, Faculty of Economics in Podgorica.

Matula, S. (2010). *Digital economies, SMEs and E-Readiness*. Business Science Reference, New York.

The Boston Consulting Group. (2012). The Connected World, The Internet Economy in the G-20. Reports. https://www.bcgperspectives.com/content/articles/financial_institutions_management_two_speed_economy_global_asset_management_2012/ (Date of access: October 15, 2013)

The World Bank. *GDP per capita.* Reports. (2009-2013). http://data.worldbank.org/indicator/NY.GDP.PCAP.CD (Date of access: November 15, 2013)