

## INTERNET ENABLED PUBLIC SERVICES AS A DRIVER OF ECONOMIC GROWTH-CASE STUDY ECROATIA 2006 -

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**Abstract:** *The Barcelona European Council called on the European Commission to draw up an eEurope Action Plan in order to widespread penetration of ICT, as powerful driver of growth and employment. Availability of modern on-line public services through e-Government, e-Learning, e-Health and e-Business is to be secured by the Action Plan. The eEurope 2005 is succeeding eEurope 2002 Action Plan which comprises four separate but interlinked tools: policy measures, exchange of good practices, monitoring and benchmarking and overall co-ordination of existing policies.*

*Croatia is candidate for accession to EU by 2009, which means that Croatian Government has to implement eEurope Action plan 2005 and Commission's new strategic framework, i2010 – European Information Society 2010.*

*In first part of the paper authors are presenting overall framework of eEurope Action Plan 2005 as well i2010 strategic framework. For the purposes of the paper, authors have conducted a research availability of on-line public services through government, e-Learning, e-Health and e-Business in Croatia 2006. The results of the survey has been benchmarked to the results of similar surveys in New Europe countries.*

**Keywords:** *Internet, public services, eEurope, growth, employment, eCroatia.*

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### 1. INTRODUCTION

There are number of theoretical papers and empirical researches which are suggesting that economic growth in USA at the end of 90-ties in large extent is result of massive investments coming from public and private sector in research and development of information-telecommunication technology (further: ICT). Widespread of usage of Internet and related ICT for commercial purposes in the middle of 90-ties, gave further impuls on global economic growth. New business models have been developed which used Internet not only as communication but also as marketing and sales channel. Lot of „dot.com“ companies has been established based on new Internet business models. After „dot.com hype“ at the beginning of 2000 and following market correction, Internet business models were successfully integrated with traditional business models successfully creating „One Economy“.

Economic growth in EU stood behind the growth in other global regions, especially economic growth in USA, India and China. The Barcelona European Council, recognizing the fact that European economy is not growing fast enough, in order to create new employment, has called on Commission to draw up an *eEurope* Action Plan. The Plan should be focused on „the widespread availability and use of broadband networks throughout the Union by 2005 and the development of Internet protocol Ipv6...and security of networks an information, *eGovernment*, *eLearning*, *eHealth* and *eBusiness*“. The action plan was supposed to succeed the *eEurope* 2002 action plan, which was part of Lisbon strategy. The principal goal of Lisbon strategy was to make European Union the most dynamic knowledge –based economy with improved economic growth and employment.

Major hypothesis in Lisbon strategy was that economic growth and employment will come from further development and penetration of ICT and Internet. Broadband technological development and multi-platform access to the Internet is offering significant economic and social opportunities. New services, applications and content would create productivity increase potential and create new markets. The growth will create new employment. On the other side, penetration of Internet will enable citizens more convenient access to information and improve communication, which will increase social cohesion and have impact on democracy. Development of broadband and service offerings is hanging on investments in infrastructure. Private investors will invest where the demand for services is already on the market. Action is needed to improve broadband infrastructure investment dynamics in order to increase availability of advanced services. *eEurope* 2005 action plan is addressing a number of measures; on the demand side action on *e-Government*, *e-Health*, *e-Learning* and *e-Business* is designed to foster the development of new services. Public authorities can use purchasing power to aggregate demand and provide crucial pull for new networks. On the supply side the actions on broadband and security should advance the roll-out of infrastructure.

Croatia is accession candidate. Croatian government is faced with challenge to design own action plan, following the *eEurope* 2005 in order to catch up with other EU Member States. In the first part of this paper major implications of *eEurope* 2005 will be presented. Croatian government established own agency, named *eCroatia Office*, in order to facilitate design and implementation of measures for stimulation of Internet enabled public services development. The Office performed two surveys on availability of public services by Internet. The results of 2006 survey is presented and analyzed in the second part of the paper.

Authors have conducted own surveys, desk research and case studies in order to test the hypothesis that Croatian Government is designing proper policies and measures in order to stimulate ICT infrastructure and Internet services penetration.

## **2. *EEUROPE* 2005 ACTION PLAN**

Two major groups of measures and policies are called in action plan *eEurope* 2005 which should improve adoption and penetration of broadband and Internet technologies in public and private sector within EU. On the one hand, a set of measures is aiming to:

- a. stimulate services based on broadband and Internet technology,
- b. stimulate development of Internet applications; and
- c. stimulate of content creation.

The services, application and content creation should cover both public services and e-business. On the other hand the Action Plan is addressing policies which should improve investments in broadband infrastructure and standardise Internet security. According to eEurope action plan, EU member states would until 2010 have:

- a. advanced Internet enabled public services:
  - i. *e-Government, e-City*;
  - ii. *e-Learning services*;
- b. *e-Health* on line services.
- c. dynamic *e-Business* environment

Major barrier in most of member states is underdeveloped broadband infrastructure. Comparing to other global regions EU stood behind in liberalization and development of broadband and ICT, especially if EU will be compared to US and Japan. Infrastructure investments were been to long subject to political economy, which resulted in high access prices and lower penetration rate. Implementation of eEurope 2005 policy measures at national and European level should ensure achievement of following major goals:

- a. adaptation of national legislative in order to avoid that legislation does not unnecessarily hamper new services;
- b. to strengthen competition and interoperability;
- c. to improve access to a variety of networks; and
- d. to demonstrate political leadership.

Action plan is calling public authorities in EU to act with focused measures and policies in the areas in which an added value could be achieved. Some targeted goals are:

- connecting public administrations, schools and healthcare to broadband;
- interactive public services, accessible for all and offered on multiple platforms (multiple channels)
- provide health services by Internet;
- removal of obstacles to the deployment of broadband networks;
- review of legislation affecting e-business;
- creation of a Cyber Security Task Force.

Action plan is facilitating exchange of good practices. Policy measures are monitored by benchmarking of the progress made. Action plan is an invitation to the private sector to cooperate with Commission and Member States to realise eEurope objectives. If successful, the plan will have significant impact on growth and productivity, employment and social cohesion in Europe.

### **3. IMPLICATION OF *EEUROPE 2005* FOR CROATIA**

There is critical level of consensus within Croatian polity in the respect of EU accession till the end of this decade. Croatian economy will be within 3-5 years will formally join European integrated economy which is, according eEurope2005 action plan

and iEurope 2010 strategic vision is restructuring towards, knowledge based economy in which ITC and Internet as growth and employment drivers are playing very important role. Major issue for Croatian policy makers is to catch up developments of European action plan. The hypothesis is that Croatian government is already implementing eEurope strategic framework. Using analytical tools developed in EU and performing own empirical research, authors tested the hypothesis.

### *3.1. THEORY-TECHNOLOGY TRENDS*

Penetration of ICT and Internet related technology was very dynamic in the last couple of years. Technological progress, especially development of broadband, the third generation of wireless technology, and very dynamic growth in number of covered wireline, cable and Internet services, driven further diffusion of Internet enabled public services. Researches in this area are indicating the technology trends and new expectations regarding Internet services and e-business.

European Commission published at the end of 2005 regular e-Business Report on the status and trends in ICT and Internet. According to the Report [2,p 9], following trends could be identified:

- Further migration towards broadband can be noticed in ICT development; in 2005 almost one third of Internet users accepted broadband;
- Development of e-commerce applications is continuing; in 2005 even 19% of businesses have implemented e-procurement applications, more than 17% implemented Internet marketing and sales applications;
- Diffusion of RFID shipment tracking technology within supply chain management can be expected;
- E-invoicing and standardisation in this segment of Internet enabled public services can improve adoption of online public services both by citizens and between the businesses;
- Corporations, but public sector as well, will be focused in the future on the implementation of e-CRM, Internet enabled applications for the support of client relationship management business processes.

It is believed that recognizable trends in penetration and adoption of Internet services could be a result of eEurope action plan implementation.

### *3.2. POLITICAL ECONOMY OF INTERNET IN CROATIA*

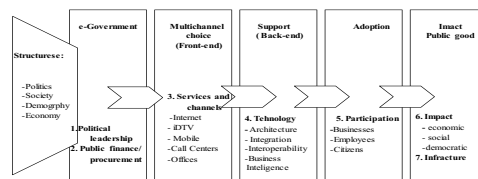
Privatisation of HT-Hrvatske telekomunikacije d.d (further: Croatian Telecom), major telecommunication and Internet services provider in Croatia, which held the state monopoly until the end of 2004, didn't lead to real market liberalization. Croatian Telecom as incumbent took control over the backbone, but local loop infrastructure as well. New service providers were not enough funded to develop own infrastructure. Croatian Telecom continued with monopolistic business model in 2005. and 2006. Croatian government, which still controls 49% of common shares in Croatian Telecom, has not encouraged other utility companies, such as Croatian Electricity or Croatian Railways, the public companies which developed own broadband infrastructure, to offer the services on the market. Result of the policy is that „old player is still controlling the game in town“.

Croatian Telecom began with investments in broadband infrastructure in 2004, starting with the offerings in 2005 without any stronger competitor on the market. Without real competition, broadband services prices are still remaining on the highest level in Europe.

This is obviously one of major barriers for stronger penetration and adoption of broadband services.

### 3.3. INTEGRATED E-GOVERNMENT HOLISTIC CONCEPT

European Commission's Enterprise & Industry Directorate is monitoring developments in the implementation of eEurope 2005 action plan on EU level and in Member States. Survey and monitoring methodology has been developed by consulting firm Capgemini S.A, which has the mandate to conduct the benchmarking measurements. A holistic approach is developed for the measurement purposes.



Source: Capgemini S.A.

**Figure 1.** Integrated e-government measurement model

E-government policy impact holistic model is integrated approach of monitoring and measurement on penetration, adoption and impact of Internet enabled public services in major structures, such as:

- Politics and democracy;
- Social relationships;
- Economy; and
- Demographics.

The governments are accomplishing political leadership role through implementation of integrated e-government concept, creation of optimistic environment and public call for investments in offerings of Internet services to private sector. Governmental role is not reduced only to the political goals, but with public investments in ICT infrastructure and Internet services is driving the market. Enabling public finance and public procurement by Internet, governments are not only reducing own expenditures, but improving transparency and democratic development as well.

Political economy of Internet is playing very important role in transition economies, such as Croatian economy is. Public authorities are responsible for creation of stimulating environment through higher investments and development of telecommunication infrastructure, liberalisation of access services and regulatory affairs. Market liberalisation should lead to access services price decrease and faster adoption of Internet. Further to investments in basic infrastructure by public sector, development of multi-channel platform is enabling penetration and driving the market on the „front-end“. Within holistic model development in diffusion of broadband and penetration of „front-end“ services has been measured. Because of needed heavy fundings in this segment, government is showing own commitment through development of infrastructure, policy measures and offering of online public services.

Without development of Internet technology and application for support of processes on the „back-end“, integration and consulting services, penetration of e-government and e-business could not be possible. Improvements and government policies on the „back-end“ of e-government have been measured through integrated approach as well.

Implementation of e-government should bring new public value through social, democratic and economic impacts.

### **3.4. STATUS OF E-GOVERNMENT IN CROATIA MEASURED WITH HOLISTIC APPROACH**

Croatian government recognized importance of Internet in public services. Establishment of eCroatia Office, which has role to streamline and monitor penetration of online public services in Croatia, Government made a very first step in implementation of eEurope action plan. It is the question remaining how far is Government really designing and implementing eEurope strategic framework for economic growth and employment.

Governmental eCroatia Office performed two surveys on level of penetration of online public services, the first one in 2004 and the second one early in 2006. Authors of this paper conducted own empirical research in order to test to which extent e-government integrated framework has been implemented in Croatia.

#### **3.4.1. Internet enabled public services survey**

For the purposes of online public services surveys, eCroatia Office defined 12 public services which are Croatian authorities are offering both to citizens and 8 public services offered to businesses.

**Table 1.** Public Services in Croatia

<b>Citizens</b>	<b>Businesses</b>
Income Tax Declaration	Social Contribution for Employees
Job Center Services	Corporate Tax
Social Security Benefits	VAT
Personal Documents	Registration of a New Company
Car Registration	Dana Submission to the Statistics
Building Permissions	Custom Declaration
Declaration to the Police	Environment-related Permissions
Public Libraries	Public Procurement
Birth and Marriage Certificates	
Enrollment in Higher Education	
Announcement of Moving	
Health-related Services	

Source : eCroatia 2006

For the measurement purposes it has been defined the identical four stage assesment methodology which was used in eEurope monitoring surveys:

**Stage 0 - No available information:** The information necessary to start the procedure to obtain this public service is not available on-line;

**Stage 1 - Information:** The information necessary to start the procedure to obtain this public service is available on-line;

**Stage 2 - One-way Interaction:** The publicly assesable website offers the possibility to obtain in a non-electronic way (by downloading forms) the form to start the procedure to obtain this service;

**Stage 3 – Two-way Interaction:** The publicly assesable website offers the possibility of an electronic intake with an electronic form to start the procedure to obtain this service;

**Stage 4 – Full electronic case handling:** The publicly assesable website offers the possibility to completely treat this public service via the website,including decision and delivery;

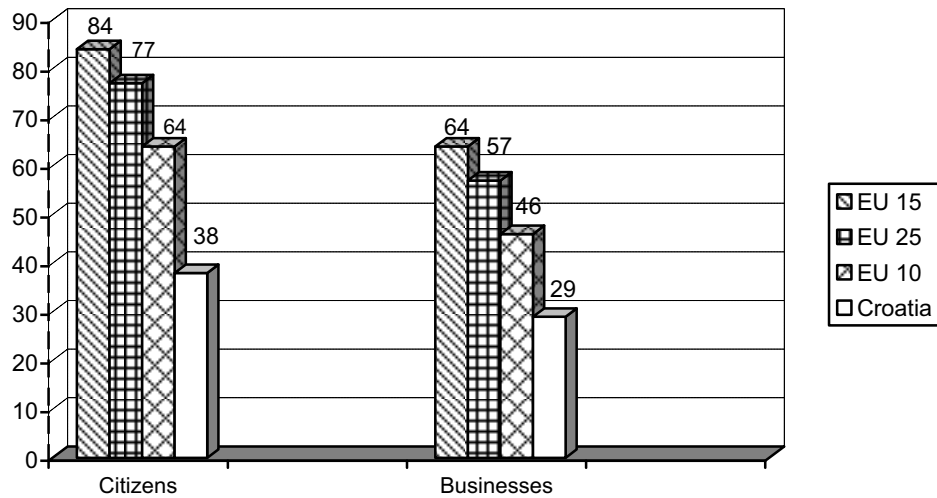
The research which has been conducted in 2006 encompassed all Croatian counties and City of Zagreb. The results have been braked down in two major categories and in four clusters. Below table is presenting the results of the survey conducted in February2006:

**Table 2.** Results of public services on-line availability survey

<b>Public Service</b>	<b>Availability in %</b>	<b>Public Service</b>	<b>Availability in %</b>
<b>1. Income generating services</b>	<b>47,69</b>	<b>3. Returns and transfers</b>	<b>32,95</b>
- Corporate Tax	50,00	- Health-related Services	35,00
- VAT	50,00	- Job center Services	22,22
- Income Tax	50,00	- Public Libraries	53,15
- Custom Declaration	75,00	- Public Procurement	26,85
-Social Security for Employees	13,46	- Social Benefits	27,55
<b>2. Registration</b>	<b>36,32</b>	<b>4. Permits and licences</b>	<b>35,64</b>
- Car Registration	19,64	- Personal Documents	37,78
- Data Submission to Statistics	44,44	- Environmental-rel. Services	40,91
- New Comapany Registration	31,67	- Enrollment to Higehr Edu.	29,63
-Announcement of Moving	24,64	- Building permit	34,26
-Birth&Marriage Certificates	61,23		

Source: eCroatia 2006

In parallel to this empirical reserach a benchmarking study has has been developed in order to establish monitoring tool which is suggested by eEurope action plan



Source : eCroatia 2006

**Figure 2.** Public services online availability benchmarking

Empirical research on the public services online availability in Croatia 2006 has indicated that: a) 38% of public services to citizens and 29% public services to business sector are Internet enabled. In comparison to the survey from 2004, which suggested that only 3% of public services to citizens and 5% services to business were available by Internet, there is substantial progress.

Benchmarking study is showing, on the other hand, that within New Europe member states (EU 10) public services to citizens are available in 64% of cases. Services which are offered to businesses have availability of 46%. Public services in Estonia are 80% available on line, which makes this country the most advanced economy within New Europe in respect of Internet penetration in public sector. Within EU 15 Member States, Sweden has 88% availability, Ireland 87%, United Kingdom 85% and Finland 84% both for citizens and businesses.

Croatia can be compared with Lithuania, Poland and Slovakia, new member states in which public services are available on line in less than 40% of cases. Slovenia, very successful newcomer into EU with which Croatia because of common political history is often compared, has 60% availability. Related high availability of Internet enabled services in public revenue cluster of services (47,69%) suggest that Croatian government recognizes this as priority.

Penetration of Internet in education sector is one of major goals in eEurope 2005. Services offered by high education organizations in Croatia are available by 29,63% which indicates that the Government has neither designed nor implemented policies in this for the penetration of Internet in this extremely important sector of public services.

Low availability of online public procurement services (24,64%) can indicate certain transparency deficit which has democracy implication.

Analysis of results of survey on public services online availability in Croatia 2006, can be summarized as follows:



- a. public sector in Croatia is offering much more services by Internet in 2006 than in 2004; in this respect Croatia is catching up New Europe member states;
- b. the Government is focused on Internet penetration in public revenues cluster of services, but education ( eLearnig) is still staying behind.

### **3.4.2. e-Government status in Croatia 2006**

Online public services availability measurments which has been performed by eCroatia Office in 2004 and 2006 is indicating certain progress, but benchmaring is suggesting that Croatia is following eEurope framework with great delay. Internet enabling public services is representing only one componet of eEurope strategic plan. Authors tested the hypotesis that Croatian government is implementing own e-Government action plan. Using the holistic approach, authors performed reasearch in order to check the status of implementation of eCroatia framework in addition to online public services availability. Empirical survey was conducted in May and June 2006. Measurment encompassed following:

- a. measurement of the progress in implementation of eEurope strategic framework in Republic of Croatia as future EU Member State;
- b. measurement of ICT penetration level and relevance for public and business sector;
- c. testing of hypotesis if Croatian government, with designed policies, is stimulating and encouraging penetration of ICT and implementing e-government integrated concept;

#### *3.4.2.1. Methodology*

Identical four moduls methodology, which has been suggested by the Commission is used in this survey.

**Table 3.** Survey approach

	<b>Module 1</b>	<b>Module 2</b>	<b>Module 3</b>	<b>Module 4</b>
<b>Process</b>	Public sector analysis	Business sector analysis	Public value	Results interpretation
<b>Methodology</b>	Policy analysis, analysis of front- and back end structures	Empirical reasearch on ICT penetration and relevance ; sample 100 largest Croatian enterprises measured by turnover in 2005	Public value evaluation	

Source: European Commission, adaptation by authors

#### *3.4.2.2. e-Government policies*

Implementation of e-government integrated concept and relevance for society structures was analysed within the first survey module. The government policies, which should improve and stimulate implementation of e-government strategic framework ,were cut into three segments, as follows:

- e-Government
- e-Health
- e-Learning

Following assesment grades have been used:

- Grade 1 - there is no designed government policies
- Grade 2 - there are partial policies
- Grade 3 - there is non- integrated e-governmant policy
- Grade 4 - there are integrated e-government policy

**Table 4.** e-Government policies survey results

<b>Segment</b>	<b>Grade</b>
1. e- Government	2
1.1. Public finance	2
1.2. Public pocurement	2
2. e-Health	2
3. e-Learning	2
4. Polititical leadership	2

Policy analysis results are suggesting following conclusions:

- Croatian government partially implemented some strategic directions of e-government concept integrated in eEurope 2005 set of political measures;
- there is no integrated e-government approach which could be estimated as eEurope action plan implementation;
- Croatian government is not achieving no substantial progress in e-Health and e-Learning implementation;
- Croatian government is not achieving any major progress in political leadership which is crucial component in integrated eEurope strategic framework.

### **3.4.3. Internet infrastructure survey**

Within integrated measurement model it is very important to test the infrastructure development status on the front-end and the back-end. If and when the public sector will be able to offer public services to the citizens and businesses to full extent, intefrace channels with service users can be certain bottleneck. Infrastructure and front-end development insvestments could not only rely on private investors but the Government should either invest within fiscal capacity or to set the policies and measures which could encourage private investors.

### 3.4.3.1 Front-end

Without developed broadband infrastructure but the front-end (multi)channels, e-government can not be successfully implemented. Authors conducted a survey on infrastructure and access services supply side for following services:

- Broadband services
- Interactive digital TV services (iDTV)
- Cable Internet and TV
- Wireless access (UMTS)
- Public Internet corners

Competitiveness of Internet channels on the front end is one of key factors for diffusion and penetration of Internet services. For measurement and assessment purposes therefore has been used a standard four grade competitiveness measurement framework:

- Grade 1 -there is no service provider on the market
- Grade 2- service is offering only one provider
- Grade 3- service is offering not more than 3 providers -- semi-competitive market
- Grade 4- service is offering more than 3 providers -- competitive market

The survey results are exhibited in following table:

**Table 5.** Internet channels competitiveness survey results

<b>Channel</b>	<b>Grade</b>
1. Broadband	2
2. iDTV	1
3. Cable Internet and TV	3
4. Wireless access (UMTS)	2
5. Public Internet corner	1
<b>6. Front-end average grade</b>	<b>1,8</b>

Croatian Telecom has developed own broadband infrastructure, which other service providers are using as well. This is close to monopolistic situation and the result is that access services prices are still extremely high. Slightly better situation is on cable access services. Overall situation on the Internet access services in Croatia can be described as early stage of market liberalization.

### 3.4.3.2 Back-end

Integrated measurement model is suggesting to check market situation on the back-end. Penetration of Internet services, beside the Internet infrastructure, is depending on the offerings of applications which are enabling Internet services and e-business. This segment of integrated e-government implementation approach is very important in respect of economic growth and new employment. New companies which are developing Internet

enabled business models, application vendors, consulting companies and service providers are creating new market dynamic. Market competitiveness on the back-end has been checked with empirical survey, in following market segments:

- Busienss nad technology consulting services;
- ICT and Internet technology integration services;
- Applications development and standard solution services providers;

For the measurment has been used four grade framework, as follows:

- Grade 1-there is no service provider;
- Grade 2-there is only one service provider;
- Grade 3-there are less than 3 service provider --semi-competitive market
- Grade 4- there are more than 3 service providers -- competitive market

The survey results are exhibited in following table:

**Table 6: Back-end services market competitiveness survey results**

<b>Services</b>	<b>Grade</b>
1. Busienss nad technology consulting services;	4
2. ICT and Internet technology integration services;	4
3. Application development and standard solutions implementation services providers	4
<b>4. Back-end everage grade</b>	<b>4</b>

The survey is indicating a competitive market situation on the back-end.

#### **3.4.4. Penetration of ICT and e-business in business sector**

Major goal in eEurope 205 action plan is to push economic growth and new employment through faster penetration of ICT and Internet enabled services in public and business sector. The survey which has been conducted by eCroatia Office in 2006 on availability of public online services is indicating not fast enough penetration of Internet in public sector. Authors conducted empirical research on penetration of ICT and Internet in business sector in Croatia on the sample of 100 largest domestic companies measured by turnover in 2005. In this survey has been used the methodology which has been used in similar empirical surveys within *eBusiness Watch* surveys sponsored by the Commission. The sample of 100 largest businesses in Croatia has been clustered by industries, as follows:

- Food & Beverage
- Textile industry
- Publishing and media
- Pharma industry
- Machinery

- Civil engineering and building materials
- Turism
- Telecommunications and IT services

The survey has been conducted in May and June 2006. Penetration and relevance of Internet for the sample of largest Croatian businesses has been surveyed through penetration and relevance in following segments:

- Adoption of *broadband* ;
- Adoption of ICT for inovation and R&D;
- ERP/SCM systems implementation and Internet integration;
- Online procurement;
- Internet sales and marketing

Penetration, adoption and overall relevance has been measured by following grades:

- Grade 1-low relevance, penetration in 0% - 24% of surveyed companies
- Grade 2-verage relevance, penetration in 25%-50% surveyed comapnies
- Grade 3-above everage relevance, penetration in 51%-75% surveyed comapnies
- Grade 4- high relevance penetarton in 76%-100% companies

The survey results are exhibited in following table:

**Table 7.** The relevance of ICT and e-business in 9 Croatian business sectors

<b>Sector</b>	<b>Adoption of broadband</b>	<b>ICT for inovation</b>	<b>ERP/ SCM</b>	<b>Internet procurement</b>	<b>Internet marketing</b>	<b>Overall relevance</b>
Food & Beverage	1	1	2	1	1	1
Textile industry	1	1	1	1	1	1
Pharma industry	3	4	4	3	2	3
Pubisihng and media	3	4	2	2	3	3
Machinery	1	1	1	1	1	1
Cicil engineerig / build. Materials	1	1	1	1	1	1
Turism	2	2	1	2	3	2
Financial srvides industry	4	3	1	1	3	2
Telecommunica tions/ IT services	4	4	4	3	3	4

Relevance of ICT and e-business within Croatian business sector is very low within traditional sectors. Companies in financial services industry, telecommunications and IT services industry are recognizing high relevance of ICT and e-business. Companies in these business sectors, which has been suggested by some other empirical researches, are the most powerful drivers of economic growth in Croatia.

#### **4. CONCLUSION**

Penetration of ICT and Internet technology in Croatian public and business sector is still very low. Analysis of the empirical surveys conducted by eCroatia Office and surveys conducted by authors of this paper are leading to the following conclusions:

- i. Penetration of ICT and Internet in Croatian public and private sector as of June 2006 is not catching up EU Member States, which are implementing eEurope 2005 action plan; in that respect Croatia can be compared with Poland and Lithuania, Member States with the lowest penetration of ICT and Internet in public and business sector;
- ii. In spite of substantial improvements in the last 2-3 years, availability of Internet enabled public services in Croatia is still below EU 25 average; only 38% of public services are online available;
- iii. Croatian government has neither designed own action plan, which should follow eEurope 2005 strategic framework, nor is not performing political leadership with Internet enabled public services;
- iv. Relatively low relevance of ICT and e-business in Croatian business sector, excluding financial services industry and telco/IT services industry, is indicating that this sector is not recognizing ICT and Internet as growth drivers as well;
- v. Government policies and political economy of telecommunication services industry in Croatia is one of major barriers in further penetration and adoption of broadband and Internet; as result of privatization and market regulation policies instead of faster liberalization and access services price decrease, private monopoly has replaced state monopoly and control over the infrastructure.

Having in mind EU accession ambitions, which are driving Croatian government in foreign policy, current and future Croatian governments should develop eCroatia 2010 action plan. Following major policy impacts could be summarized as follows:

- i. In order to improve competitiveness on the Internet infrastructure market, new set of policies and measures should be designed and implemented;
- ii. Promote the competitiveness on the ICT market by removing of legislative barriers;
- iii. Improve political leadership through faster penetration of Internet enabled public services;
- iv. Develop and promote Internet standardisation;
- v. Promote stimulative climate for ICT innovation in private sector;
- vi. Promote and provide incentives for adoption of ICT and Internet in SMEs sector.

If economic growth and employment is one of major political goals for Croatian government, which should be, relevance of ICT and Internet penetration in public and private sector should be focal point in the future.

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