DEVELOPMENT OF E-BUSINESS IN CROATIA

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DIGITAL POWER

Digital power represents organizational form of government which integrates patterns and mutual dependence of the state, companies, users and public institutions by using computer technology.

Digital power gives us the possibility to offer traditional services to citizens in a new, digitalized manner and that is actually its goal: to use new technologies in order to provide a simple, better approach to government and administrative information and their services. By doing so the authorities enable people to get involved more easily in the activities of democratic institutions and the process of government in general.

Public business transactions are now being handled on-line, usually on-line.

Apart from using term digital power digital domination is being used. Digital domination is used as a synonym in a larger sense explaining the role and position of government authority and officials on power as well as their relationship towards the citizens while on the other hand digital power talks about the performance of special officials who implement this concept in reality.

Digital power includes a wide range of appropriate methods, procedures and technologies suitable for e-business and offering services as well as communication with citizens, business partners and other governmental institutions.

Presence and implementation of digital power is possible as a result of:

- Comprehensiveness of the Web
- Progressive increase of web users
- The need to cut costs in government institutions
- Increased expectations of the public
Built up tensions and dissatisfaction with the work of government offices
Need to offer the service 24/7

Implementation of digital power has obvious advantages, this type of management enables office to stay open 24/7 and in this way it helps public to get the information, increases efficiency and satisfaction, productivity at the same time it integrates the services between the government, company, users and public institutions by using information technology to communicate.

To take advantage of all these benefits it is important to overcome the obstacles of its implementation which may occur due to insufficient funding, incomplete planning, insufficient co-operation of participants in these projects, inadequate cultural change and training of participants, unsuitable supervision policy, lack of management staff and civil support and still a small number of users.

By overcoming obstacles digital power makes integration of procedures possible, economical development and e-democracy and, taking a step toward the e-society.

E-BUSINESS STANDARDS IN THE WORLD

Basis of the communication and information transfer protection as a foundation of e-business development, the development of e-organizations which we can consider from the aspect of both world and European standard setting organizations as the most important:

WORLD STNDARD SETTING ORGANIZATIONS ARE:
- ISO, International Organization for Standardization (http://www.iso.org/)
- ITU, International Telecommunications Union (http://www.iso.org/)
- ANSI, American National Standards Institute (http://wwwansi.org/)
- IETF, The Internet Engineering Task Force (http://www.ietf.org/)
- IEEE, Institute of Electrical and Electronic Engineers (http://www.ieee.org/)
- RSA, Security (http://www.rsasecurity.com/)
- W3C, World Wide Web Consortium (http://www.w3.org/)

In EU the standards have been adjusted according to standards defined by the EU standard setting organizations.

The most important EUROPEAN STANDARD SETTING ORGANIZATIONS are:
- CEN, The European Committee for Standardization (http://www.cenorm.be/)
- CENELEC, European Committee for Electro technical Standardization (http://www.cenelec.org/)
- ETSI, European Telecommunications Standard Institute (http://www.etsi.org/)
Development of EU legislation is founded on accurately defined legal acts according to years, even since 1993, is trying to carefully examine every legal aspect of this e-business process to help legally define and protect the relationship of all partners involved in e-business within EU.
Creating a safe legally determined and balanced environment for further development of e-business and information society has lately been expanding to the area of computer crime, the question of paying tax, consumer protection and authority.
Legal regulation of these questions in most countries has just begun or is still in progress.

**STANDARDS AND PROTOCOLS OF E-BUSINESS IN CROATIA**

For the unobstructed development of e-commerce in Republic of Croatia, both world and European standards need to be accepted as national ones.
State office for Metrology represents the national standard setting organization responsible for creating and maintaining the infrastructure in order to develop national consensus in the process of standard preparation.

In the area of e-business, there are three different groups of standards, and those are set for:
- network communication
- structuring and transferring messages
- standards of e-business security

There are many technical standards in the area of e-business security which the participants of e-business need to be aware of and meet their criteria.
Participants in information exchange have to use the same standards so the e-commerce process might develop free from any disturbance.
These are the most important:

**ISO/IEC (standard setting establishment) standard 9798 defines**
- Identification of all on line participants
- Digital signature techniques
- Cryptography (algorithms)

**NIST** defines algorithms used for enciphering documents
- DES (Data Encryption Standard)
- DSA (Data Signature Algorithm)

**ANSI norm**
- x 9.17 – key management
- x 9.30 – Public key encryption

**ITU (International Telecommunication Union)**
**Norms**
- x – 509 – structure of a certificate
- x – 500 – e-directory
Participants of the e-business process should follow these algorithms of public key system:

**Algorithms for public key calculation**
- DH (Diffie – Hellman)
- RSA (Rivest–Shamir–Aldeman)
- DSA (Digital Signature Algorithm)

**Algorithms for developing a document summary**
- MD5 (Message Digest 5)
- SHA (Secure Hash Algorithm)

**Algorithms for development of digital signature**
- RSA – development of digital signature and Encryption
- DSA – algorithms for creating digital signature

Regulatory standards of e-business in Croatia are reduced to IT development strategy, laws and books of regulations:

- Development strategy of the Republic of Croatia – IT technology, Croatian Parliament passed 25th January 2002
- The National report on implementing Information and communication technology strategy “Croatia in 21st century” from 2000 till 2003
- Internal structure Regulation of central governmental office Act for E-Croatia
- Customization of The legal regulations is in progress

**IMPLEMENTATION SERVICES PROVIDERS OF E-BUSINESS IN CROATIA**

Financial Agency deals with the process of issuing digital certificates (advanced digital certificates).
Terms for founding and operation of autographic and certificate issuing institutions are determined by the Law on Digital Signature (NN 10/02) and relevant books of regulations.
According to the Law on Digital Signature, it is possible to use the service of issuing certificates from both Croatian and foreign autographic and certificate issuing institutions.
In this chart autographic and certificate issuing institutions are listed:

<table>
<thead>
<tr>
<th>Institution Name</th>
<th>Website</th>
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<tbody>
<tr>
<td>Ahence, Varaždin</td>
<td><a href="http://www.ahence.hr">http://www.ahence.hr</a></td>
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<tr>
<td>Allnet Group, Zagreb</td>
<td><a href="http://www.allnet.hr">http://www.allnet.hr</a></td>
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<tr>
<td>AQA, zagreb</td>
<td><a href="http://www.aqa.hr">http://www.aqa.hr</a></td>
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<td>ATR, zagreb</td>
<td><a href="http://www.atr.hr">http://www.atr.hr</a></td>
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<td>B4B, Zagreb</td>
<td><a href="http://www.b4b.hr">http://www.b4b.hr</a></td>
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<td>Bitcom, Zagreb</td>
<td><a href="http://www.bitcom.hr">http://www.bitcom.hr</a></td>
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<td>CLE, zagreb</td>
<td><a href="http://www.cle.hr">http://www.cle.hr</a></td>
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<td>Citrus, zagreb</td>
<td><a href="http://www.citra.hr">http://www.citra.hr</a></td>
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<tr>
<td>Conpetech, Zagreb</td>
<td><a href="http://www.conpetech.hr">http://www.conpetech.hr</a></td>
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<tr>
<td>Conitel, Dubrovnik</td>
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<tr>
<td>Easel - Split, Split</td>
<td><a href="http://www.easelm.hr">http://www.easelm.hr</a></td>
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<tr>
<td>Ericsson Nikola T kindt, Zagreb</td>
<td><a href="http://www.ericsson.com.hr">http://www.ericsson.com.hr</a></td>
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<td>Globnet, Zagreb</td>
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<td>IBM Hrvatska Zagreb</td>
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<tr>
<td>Intel - projekt, Zagreb</td>
<td><a href="http://www.intel.hr">http://www.intel.hr</a></td>
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<td>INL, Zagreb</td>
<td><a href="http://www.inl.hr">http://www.inl.hr</a></td>
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<tr>
<td>Informatika I.T.S., Zagreb</td>
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<td>Maje, Zagreb</td>
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<td>MTS Gregor, Zagreb</td>
<td><a href="http://www.mts.hr">http://www.mts.hr</a></td>
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<tr>
<td>Metalink, Rijeka</td>
<td><a href="http://www.metalink.hr">http://www.metalink.hr</a></td>
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<tr>
<td>Nova tehnologija, Zagreb</td>
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<td>4 MATE, Zagreb</td>
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<td>PMPM, Zagreb</td>
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<tr>
<td>SAP Hrvatska Zagreb</td>
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<tr>
<td>TIS, Zagreb</td>
<td><a href="http://www.tis.hr">http://www.tis.hr</a></td>
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</table>

Internet service providers (ISP) in Croatia are:

- EuroproNET - [http://www.europronet.hr/](http://www.europronet.hr/)
- GlobalNet – [http://www.globalnet.hr/](http://www.globalnet.hr/)
- Croatian academic and research network (CARNet) - [http://www.carnet.hr/](http://www.carnet.hr/)
- Croatian Telecom – [http://www.htnet.hr/](http://www.htnet.hr/)
- Iskon – [http://www.iskon.hr/](http://www.iskon.hr/)
- Net for you – [http://www.net4u.hr/](http://www.net4u.hr/)
- VIPNet – [http://www.vipnet.hr/](http://www.vipnet.hr/)
- Vodatel - [http://www.vodatel.hr/](http://www.vodatel.hr/)
THE FUTURE OF E-BUSINESS

The abilities of a modern managers to foresee future trends and movements on the market as well as needs of their clients and customers’ expectations as well as applying new technologies are to determine their own and their company’s success. In the past century new dramatic changes in communication and both mass and media in general have occurred. A telephone was invented about 100 years ago and has become the irreplaceable part of today’s everyday life. These sorts of changes have been developing very quickly nowadays because we use computers. It is impossible to foresee what the future holds for us. The old models of doing business and process that have been developed as a basis on the improvements made to previous patterns can no longer supply for the needs of the market. Today we need to approach customers’ individually, networking within the company, powerful development of Internet and e-business, which has let us to this situation when it is required to adapt to trends in business or fail. Companies that do business in developed markets have been relocating their focus in management from managing the company to managing the chain of offer. Increasing number of small companies has become competitive by forming a network of companies and virtual organizations which use the internet to cooperate and create a good relationship with their customers. As anticipated the increased number of internet service users can illustrate the fact that using internet has become very serious and business oriented. Also, there is the need to adjust to the model and create digital architecture of a company which would then adequately endorse e-business. The emphasis is on the focus of e-business which uses full potential of the internet and maximizes the delivered value for buyers. Europe has realized the potential of digital economy and is trying to catch up with the USA because according to estimation is running late a year or two. To reach that it has to cut the prices of its internet service in order to attract a big number of users which can then help the development of e-business. The dynamics of further development and the process of entering European households are not unique and we are yet to see the direction and pace of the development of widespread digital infrastructure. Personal computer in this form will definitely not function in ten years time but will definitely make the essential part of different products and services. The assumption that the simplicity of a products usage will be increased and that by doing so will reach less educated and informed consumers. Integration and simplicity will help information technology and their application in business. In tomorrow’s society, communication will be much faster and interactive, and society as well as its members will have the chance to be proactive, having the direct access to information and the possibility to interpret it independently. Within the next decades e-business will transform into a necessary and integral part of handling business and no company will be able to imagine doing their business, and no man their everyday life.
7. SUMMARY

The development of information technology and the speed of information exchange it makes possible have determined considerable changes in the development of international trade. The system which was built for classical trade and cash can not meet the demands of today’s on-line transactions. In order to make the system function it is necessary to recognize e-mails and digital signature, and the main means of providing security and confidentiality are the method of digital signature and encoding. Globalization and informatization introduction process which have set the network of wealth, technology and power are transforming our world. This new, digital era and the informational economics area are the main causes of this on-line/network business which brings the fundamental change which by redefining business strategies and reengineering business demands and transfers from traditional to e-business. Successful organizations as a demand have set creating knowledge, inventiveness and efficient information processing, adjusting to not so stable global economy situation, necessary flexibility and adaptability of resources at the speed of goal alternation which happens as a result of fast cultural, technological and institutional changes. Informatics, telecommunications, medicine, biotechnology advanced expert systems and intelligent neural networks have brought progress and many changes in the way people work and live and have because of that reflected on the way we work, communicate, organize and govern. Just having internet as a media whose availability, decentralization, independence and separate infrastructure we can put into use has led to expansion of business cooperation and exchange of information on a global level.

A new, more interactive way of communication has been established and it knows nothing of space or time limitation which again creates new forms of communication and doing business and their broader implementation into everyday work in many different areas. Also, a new form of handling business has been created, e-business, which does not exclude other, more traditional ways, on the contrary it just enriches and advances. Very often the term e-business is used as a synonym for electronic transaction of data or buying on-line. Such identification is simply wrong not just because of the time e-business was created but because this is a much broader term which not only expresses the transfer of information or money transactions but also a range of other activities within an organization and amongst them. E-business is a modern form of organizing business which indicates an intensive application of informatics and especially internet service technology. The areas of e-business application are extremely broad and rely both on public and private sector, to the application of different informatics and communications technologies. E-business represents a new category both in Croatia and worldwide. It is necessary to emphasize some negative consequences of this security needs development in e-business. In the process of addressing these shortcomings a new science has developed- cryptography. The dangers of internet service misuse or abuse as the infrastructure which enables individuals to accomplish their goals while harming others are manifested in the form of information war and cyber terrorism. Securing and maintaining this data link technology development in a way that consequences of this development do not have a negative effect on worldwide approved human values is the information society’s goal.
REFERENCES:

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3. Ford, M. Utvrđivanje identiteta i "Elektronska trgovina".


