Newsletter - *Calibrated for Creative Communications*

Vol. 6, no. 2, Summer 2008

Made in the Shade

A few years ago some were earnest in suggesting that the Baltics need to be taught how to organize IT related conferences. Paradoxically, at about the same time Estonian engineers were engaged in break-through activities, which changed the communication habits of the World. These activities resulted in Skype, which is in the focus of this issue.

Other stories include:

- A survey by AICA on ECDL certificate holders and the added value of qualification
- Information Society Day 2008 in Poland
- A study conducted by the EC Institute for Prospective Technological Studies in Seville on market rigidities and their effect on ICT investments in several EU countries, Japan and the US.

Looking forward, along with the WCC'08 in Milano, a defining activity in IT STAR's program is the 3rd IT STAR Workshop on National Information Society Experiences on 8 November in Budapest .

There is more in this issue so take it easy! Make yourself comfortable under the umbrella and enjoy!

Take the Journey,

Plamen Nedkov

Contents:

Letters to the Editor:

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Advisory Board

New Members

Angel Alvarez (Spain) is Associate Professor of Computer Science at the Technical University of Madrid and the University's Associate Vice-Rector for International Relations. During a period of eight years he was the Spanish representative to the IFIP General Assembly.

John Vincent Atanasoff II (USA) is son of John Vincent Atanasoff (JVA), named the inventor of the first automatic electronic digital computer (*see en.wikipedia.org/wiki/John_Atanasoff*).

John Atanasoff II managed companies involved in designing computer-controlled equipment, computer graphics and software for medical device applications, including Oxberry, which designed the equipment for Terminator II. He is currently CEO of MedEfficiency Inc. and is spearheading an initiative in memory of JVA, in cooperation with the Office of the President of Bulgaria and IEEE CS. ■

Joke of the Issue

A Real Story

In October 2007 IT STAR met in Timisoara. Prof. Vasile Baltac, ATIC President, briefed the participants on the 1st university-developed computer in Romania "MECIPT 1" (see Vol.5. no.4 Winter 2007/08 issue of the NL).

There was the following amusing story to it. An audit was carried out after the completion of this project. The Auditor was sniffing around and counting all components. Vasile tried to convince him that there were more than 2000 electronic tubes and tens of thousands of passive components, wires and soldering points that cannot be counted in a reasonable time. The Auditor gave Vasile his first lesson in accounting, "You are a young engineer, never believe until you count yourself".

The Auditor started counting the lamps, it was easy as they were all on the front panel, but after an hour or so counting resistors and capacitors he gave up saying, "Do you think these are all the components?"

Vasile replied, "Yes, because if one component was missing the computer would not function" and demonstrated this by shutting off the computer, taking out a critical resistor in the tact generator. After putting it back the computer started again.

The Auditor gave up counting saying, "Most probably they are all in place" and signed all audit documents without further questions. He was impressed and pointing at the memory-drum inquired, "Atomics?" Vasile's reply was "Magnetics!" ■

EDITORIAL POLICY

This Newsletter aims to maintain a world-class standard in providing timely, accurate and interesting material on ICT and Information Society activities from the perspectives of Central, Eastern and Southern Europe (CESE) within a global context. It strives to facilitate the information and communication flow within the region and internationally by supporting a recognized platform and networking media and thus promoting and improving the visibility and activities of the IT STAR Association.

The entities and stakeholders whose interests this newspaper is addressing are

- IT STAR's member societies and members;
- ICT professionals, practitioners and institutions across the broad range of activities related to ICTs in government, business, academia and the public sector in general;
- International organizations.

Special arrangements for the production and circulation of the Newsletter can be negotiated.

The newsletter is circulated to the leading CESE ICT societies and professionals, as well as to other societies and IT professionals internationally. Everyone interested in CESE developments and working in the ICT field is welcome to contribute with original material. Proposals for articles and material for the Newsletter should be sent two months before the publication date to editor@starbus.org. ■

Inspiring Brands

The following article narrates the story of an idea that originated in Estonia and through international cooperation has developed into a famous brand and a household name.

Skype was founded in August 2003 and is headquartered in Luxembourg with offices in Europe, United States and Asia. It was acquired by eBay Inc. in October 2005.

Here are the impressive facts reflecting the current (Q1 2008) status:

- *In Q1 2008, Skype added 33 million users – ending the quarter with more than 309 million users, representing an increase of 58% from a year ago.*
- *Skype's 309 million registered users have made more than 100 billion minutes worth of free Skype-to-Skype calls.*
- *Skype is available in over 28 languages and is used in almost every country around the world.*
- *30% of Skype's users use Skype for business purposes, 28% of Skype-to-Skype calls include video.*
- *Skype's popularity is being fueled by an active ecosystem that includes 8,000 developers and over 50 partners. Today, there are more than 190 Skype Certified hardware products. In the Gallery, there are over 130 software Extras for Windows, Mac and Linux users.*
- *Skype for Windows Mobile has been downloaded more than 7 million times.*
- *Skype software is extremely secure, sustainable, and scalable. At peak times, there are over 12 million concurrent users and over 250,000 simultaneous calls. There are more than 100,000 information queries on the network each second.*
- *Sitting idle, Skype uses around one megabyte of traffic/bandwidth per day. When in voice call mode, it will use somewhere between 8-20 kilobytes per second.*
- *In Q1 2008, Skype posted total revenue of $126 million, an increase of 61 percent versus the same period one year ago, while delivering the fifth consecutive quarter of profitability.*
- *In Q1 2008, Skype-to-Skype minutes were up 30 percent versus last year, at 14.2 billion, and SkypeOut minutes increased 33 percent versus last year, at 1.7 billion.*

The Newsletter is grateful to Saulius Maskeliunas from LIKS-Lithuania and to Tuuli Sokmann from Hill & Knowlton for their help on the article.

The Editor

Skype - A Baltic Success Story

*Based on: Credit Suisse Worldwide, Andreas Thomann. September 2006.**
Edited and supplemented by: Skype Technologies Ltd, Tallinn, and the IT STAR NL, May 2008

With over 250 000 simultaneous calls at peak time and 309 million registered users in all the countries in the world - after 4,5 years in business - Skype stands as one of the fastest-growing Internet companies ever, volume-wise.

Who invented such a disruptive solution? Although more than 300 million people across the globe are communicating with Skype, only few of them know that the software was developed in Estonia. And most of the ideas for Skype still come from approximately 250 engineers working at the development center in Tallinn.

Skype was programmed by four software engineers from Estonia - Ahti Heinla, Priit Kasesalu, Jaan Tallinn and Toivo Annus who became something akin to popular heroes.

Toivo Annus,

Ahti Heinla

Priit Kasesalu

Jaan Tallinn

The founding engineers of Skype [source - http://www.asi.ee]

They have repeatedly brought this small country into the international headlines, thereby strengthening their homeland's reputation as an up-and-coming IT tiger. Their first successful coup took place in 2001 with the launch of the software Kazaa, from which the largest internet exchange site for pictures, songs and videos developed. In August 2003, the original four pioneers scored their next hit – a software called Skype that allows users to make free phone calls over the internet. Today, the software lets you do much more than just Skype-to-Skype calls.

As still today, expectations in the beginning of Skype were high, especially as the company founders, Swedish-born Niklas Zennström and Janus Friis from Denmark, had previously founded Kazaa.

The two founders in their mid-thirties played their part in nurturing the audience's expectations. Janus Friis said:

"We hope that one day, instead of saying 'I'll call you', people will say 'I'll skype you'". These high-sounding words were followed by just as impressive growth rates. After only one month, a million people had already downloaded the software, and half a year later this had grown to six million users. However, Skype is based on a technology called Voice over IP, which had already been available on the market for around ten years. Voice over IP (or VoIP for short) converts the speaker's voice into digital data packages which are sent over the internet. The pioneering feature of Skype, however, was the so-called peer-to-peer principle whereby the service is not processed via a central server or a provider's lines, but via the PC and the user's lines.

The new technology opened up an extremely cost-effective business model with almost complete elimination of expensive infrastructure investments. At the same time, it paved the way for the unprecedented spread of Skype. For 2008 first quarter there are 309 million Skype customers, making it the fastest growing internet community ever. This development is even more staggering in view of the fact that Skype does not implement traditional marketing. For its basic function - free phone calls around the globe -of course, it does not need it. Skype's high voice quality is another reason for its success, as is its easy handling which requires no more than a PC with broadband, headphones and a microphone. And since Skype has also started to facilitate calls to the standard fixed and mobile networks thanks to the Skype Out function, launched High Quality Video Calls, developed lots of useful extras and moved from PC to wide variety of different Skype-supported devices, more and more users have been switching completely to internet telephony.

Parallel to its expansion, the value of the company has also increased. Only two years after it was founded, Skype was taken over by the American online auction house eBay for the handsome sum of $2.5 billion. In Q1 2008, Skype posted total revenue of $126 million, an increase of 61 percent versus the same period one year ago, while delivering the fifth consecutive quarter of profitability. John Donahoe, President and CEO of eBay said in April 2008: “Skype’s a great business with a great purpose — enabling the world’s conversations. With a new president, our plan for Skype is to focus on providing the best possible user experience and continuing the incredible growth momentum we’ve enjoyed with Skype for the past four years.”

Nevertheless, Skype remains strongly rooted in its technological homeland Estonia, as the company runs its main development center in Tallinn, where around 300 out of a total workforce of 500 is employed. “What Skype has shown the world is that you can take a great idea, with few resources, and conquer the world. “Skype remains an international star but at the same time a typical representative of native IT innovation,” Sten Tamkivi, Head of eCommerce and General Manager of Skype Estonia, said. He stressed that the Estonian IT industry has repeatedly stood out by achieving a global effect with limited resources - small companies can hold their own against heavyweight corporations only by deploying unconventional ideas. For example, in the case of Skype this means letting others assist in the development of its own product. "We may have only 300 engineers, but there are another thousands of people out there working on solutions for Skype. It is thanks to this community of developers that hundreds of Skype-compatible applications have arisen – from simple voice mail to a CRM solution for companies." By 2008, there is an ecosystem that includes 8,000 developers worldwide.

Skype achieves a similar leverage effect by means of a widespread cooperation network with hardware manufacturers, including some of the global market leaders. "Developers wishing to integrate Skype into their hardware send us a sample. If the product meets our standards then it may bear the Skype brand."

The growing community of creative hardware designers has given rise to an increase in the rate of innovation. With SkypeOut and with the 2008 launched global subscriptions it is possible to call landlines and mobiles at home and abroad. No longer bound to the computer, Skype conversations can also be had on a broad range of cordless handsets, mobile devices and other Skype certified hardware. With SkypeFind, it is easy for Skype users to list and recommend their favorite local businesses to the rest of the community. And the list of notable innovations of Skype could be continued.

While Skype is well on the way toward shaking the traditional telecoms industry to its foundations, the world awaits the next IT coup from Estonia. Sten Tamkivi has no fear of the domestic IT industry running out of ideas. "There will continue to be people in future who succeed in achieving incredibly great things with astoundingly few resources.”

However, the big challenge is a shortage of software specialists in Estonia. Together with offices in Prague and Stockholm, Skype currently employs 300 software personnel, said Sten Tamkivi. He'd like to add 100 people this year, which would put Skype at its size limit in the small country. "It has gotten harder over the years to find people," he said. "What's more complicated for us is that we're hiring the top people with three to five years' experience, and this pool is most in demand." Management has responded by importing personnel from the rest of Europe, as well as temporary staff from Taiwan and Japan. Currently, 60 employees of the Tallinn office are from outside Estonia, Tamkivi said to EE Times**.

In mid-2003, the four founding engineers at Skype Technologies established a company Ambient Sound Investments (ASI) for the purpose of holding a minority stake in Skype. At the end of 2005 Ambient sold this stake to eBay Inc. and now continues as a private investment vehicle for its four partners - Skype founding engineers. ASI funds promising international technology companies. Companies from Eastern Europe engaged in high-tech development are of priority for the holding. The freshest news on investments of ASI from May 2008 declare that the holding has invested in the Hong Kong based 3D social networking company Frenzoo.

From the Skype period, the four engineers have got the strong reputation, international contacts, great experience of engineering and of course, money to invest. "The purpose is not to earn more and more money, but to enhance technology all over the world, " said Ahti Heinla to Eesti Ekspress***. "Self-confidentially, we like to think that we are able to estimate technology companies better than anyone else," added Toivo Annus.

So, the founding engineers of Skype continue to develop companies that have potential to change the world in the future. Let's look forward for the results. ■

Sources:
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A Survey by AICA on ECDL Certificate Holders: the Added Value of Qualification

by Fulvia Sala
Responsible for projects and research at AICA

1. Introduction

The offer of innovative technology and investments in new digital services and products could prove unrewarding if this is not accompanied by adequate progress in individual competences through initiatives to empower users of Information Technology.

Improvement of competences should primarily concern the **individual as a citizen;** new technologies in fact tend to influence the social context through deep modifications in the habits and conventions of individuals and communities.

The development of computer skills must also concern **individuals as workers**. Today, half of the population in industrialised countries uses a PC to carry out their daily professional activities. Nevertheless, according to numerous sources, businesses on average dedicate little attention to training their employees in using information technology. In fact, various Eurostat [1] data shows: only 30% of employees – in EU25 – had some form of training directly through employer's initiatives; the majority learned on the job (64% learning by doing) or with help from colleagues or friends (59%).

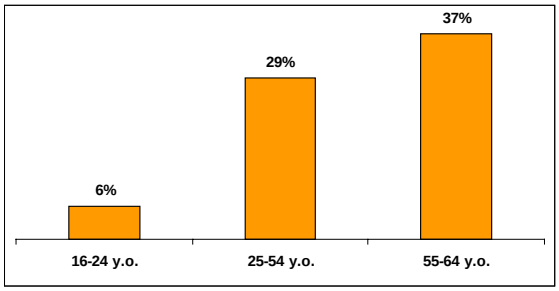

Fig.1 percentage of individuals who have obtained IT skills through training provided by employers

Even the ICT professionals community doesn't seem to have fully understood how the incompetence of end users in the use of IT can represent a serious obstacle to the implementation and success of innovative systems and solutions, both in private and public sectors. Furthermore, the lack of adequate basic training generates hidden costs deriving from reduced productivity. In this respect significant data is provided by research carried out periodically by AICA – in collaboration with SDA Bocconi – on "*The cost of digital illiteracy*" quantifying the economic impact of work force "literacy" in the general economy as well as in specific sectors.

2. Computer literacy in Italy

Digital literacy is a very broad term which can refer to very different curricula with the risk of acquiring inadequate competences with respect to actual needs.

In face of a situation with such potential for confusion or risk of under-qualification, competence certification programmes, based on the accurate identification of required topics and exams for their verification, are essential.

In Italy there seems to be growing awareness of the need for qualified basic IT competences. A significant indication of this is the increase in the last five years in the number of ECDL programme participants: they have grown from 73,000 in 2000 to over a 1.4 million in 2007 (Figure 2). An indirect confirmation of increasing attention towards qualified IT skills.

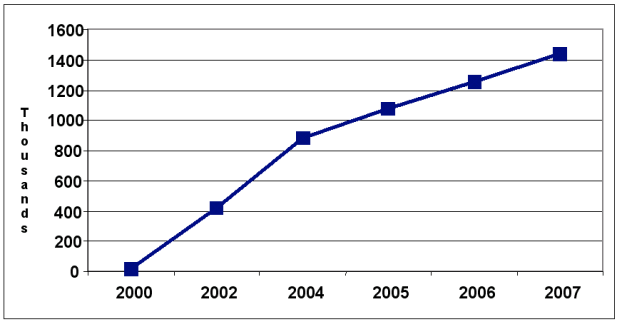

Fig.2 Italian trend for participants in the ECDL programme

3. AICA's research on successful ECDL candidates

Updating similar research carried out in the last two years, AICA has once again collected feedback and information from candidates who have acquired ECDL and are now working. The analysis integrated the information from ACIA's database with a survey involving 632 subjects.

4. Advantages of the ECDL certification

Among the primary results of the analysis particular focus must be put on those, which highlight the added value of the acquisition of basic IT skills (ECDL in particular) affords individuals – as workers or professionals and as subjects within a broad social context in relation with multiple social and economic realities.

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stands for **M**usic at La Scala
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08 and the World Computer Congress, 7 - 10 September

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- 2 hosted conferences on "**e-Inclusion**" and "**Women and Technology**"
- 13 scientific conferences covering such areas as **entertainment computing, artificial intelligence, security, education, knowledge management, theoretical computer science, human-computer interaction** and more
- 17 industry-related conferences on subjects including **sport, tourism and health, textile and fashion, environment and cultural heritage, IT-skills and smart grids**
- Over **400 accepted papers** and other communications to be published by Springer Verlag

To guarantee the success of this leading international event we have ensured the partnership and support of leading national and international institutions, including

- The offices of the President and the Prime Minister of Italy
- National ministries and regional institutions of Lombardy and the Milano county and municipality
- All universities and major research organizations in Milano and the Region
- Leading ICT companies
- The EC and UNESCO
- ACM, CEPIS, IEEE CS, IT STAR and other international and regional societies

The Milano Congress Center, an architectural and engineering masterpiece and the largest conference facility in Italy, will serve as venue to the 1,500 – 2,000 participants from some 100 countries worldwide.

Check us out at **www.wcc2008.org** for the WCC program and organization, related events and registration.

Experience the modern connotation of Caesar's "Veni, vidi, vici" by joining the international ICT community in Milano.

AICA
Your host and organizer of the 20th WCC, 7-10 September 2008

4.1 …. for workers

As further confirmation of the fact that the diffusion of digital technologies is now pervasive, it must be noted that 80% of those surveyed used a PC at work even before completing the ECDL programme. While an interesting indication of inadequate use of IT comes from the fact that half of those surveyed claimed they were motivated to invest in the certification (often as an individual investment in terms of time and money) in the hope of "being more productive and performing better at work".

An indirect confirmation of the impact of IT training on productivity, as anticipated above, comes from the answers of those interviewed in the survey: more than 60% claim to have obtained professional benefits from the certification owing to increased autonomy and greater proficiency in using the computer and in the ability to be more effective and efficient at work (fig. 3) – all factors recurrently cited by almost the majority. This improvement in productivity obviously goes beyond the individual level impacting on the entire organisation.

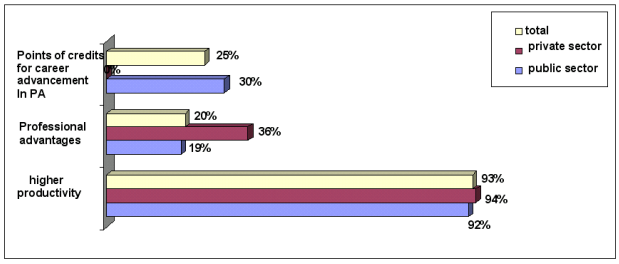

Fig.3 ECDL certification holders in working contexts: main professional advantages (multiple answers)

4.2 … for citizens

It has already been discussed how technology innovation brings about enormous transformations in the way we live, work and relate.

Public Administration in Italy, for example, has been implementing *e*government systems for many years generating a strong influence on *e*services demand in relation to those areas in which it has been able to deliver citizens effective services of public interest.

In the private sector, the *e*commerce market – defined as total sales of products and services towards end consumers made via the Internet – is starting to show significant volumes reaching a value of over 5 billion Euro by end 2007 in Italy. However, with regards\ to the Italian market at least, there are still a number of obstacles *e*commerce must overcome in order to contribute to the acceleration of the general economy. Furthermore, the possibility for individuals to access the vast number of online resources and effortlessly collect great quantities of information on products gives the user greater power in influencing demand through increased mobility and choice.

Also the banking and finance sector has made significant investments geared towards new modes of interaction with users. It is partly an evolution in the offering concept which entails significant advantages for banks and customers alike. The latter in particular can benefit from greater opportunity in terms of choice and convenience: for example more efficient use of time, and, again, wider scope of choice in relation to available offerings.

Finally there are notable implications for the development of the *e*learning sector. The rate of development of this market, which in Italy stands at 17%, has grown constantly in recent years confirming a strong interest towards this mode of education on the part of business, public administration, university and schooling.

4.2.1 on-line services

Returning to the results of the AICA survey, 86% of those who have successfully completed the ECDL programme use at least one of the online services described above; 7% of those, which we can define "enthusiasts", use Internet for all the opportunities discussed above, while 14% "conservatives" do not take advantage of any of them. There is a tight correlation between the use of online services and the level of education: 88% of those with a university degree in fact use at least one of the services mentioned above compared to 73% of those who have only completed secondary schooling (fig. 4-5).

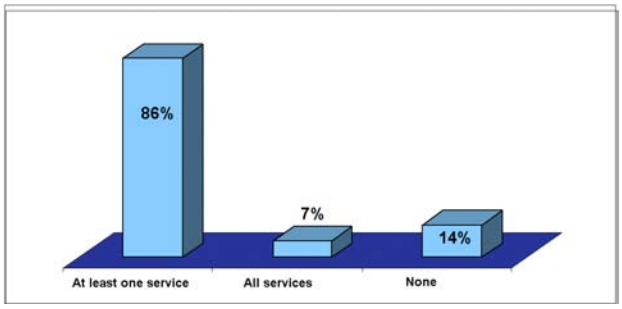

Fig. 4 use of online services by ECDL certification holders in working contexts

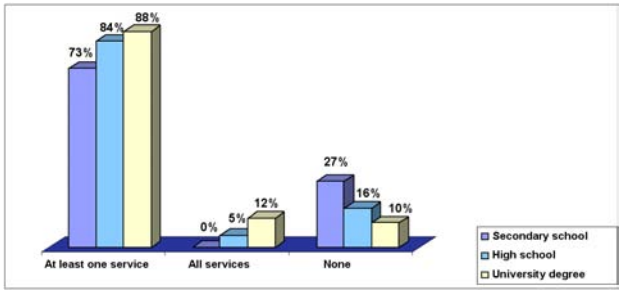

Fig.5 use of online services by working ECDL certification holders and by level of education

Adoption of new offering models require individuals to overcome strong cultural resistance; how can basic training like that provided by ECDL provide the self-confidence in the use of informatics tools which is essential for users to contrast such cultural barriers?

According to a survey conducted by ISTAT on the Italian population [6], around 41% of the population in the 25 - 64 year range uses Internet to obtain information from the Public Administration, while over one third accesses government websites to download forms.

The survey conducted by AICA on ECDL certificate holders shows that acquiring basic computer skills results in a notable increase in the use of *e*government services:

71% of those interviewed claim to use the Internet to interact with Public Administration; more in particular 70% do so to obtain information from the PA and 58% to download forms. As to age groups, people over 40 constitute the majority of users of these services: 81% of people in this category search for information and 75% access PA websites to download documents.

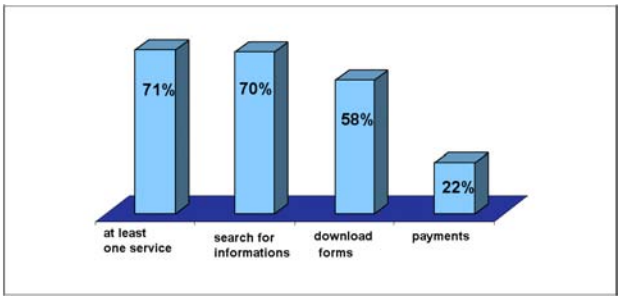

Fig. 6: use of egovernment services by ECDL certification holders

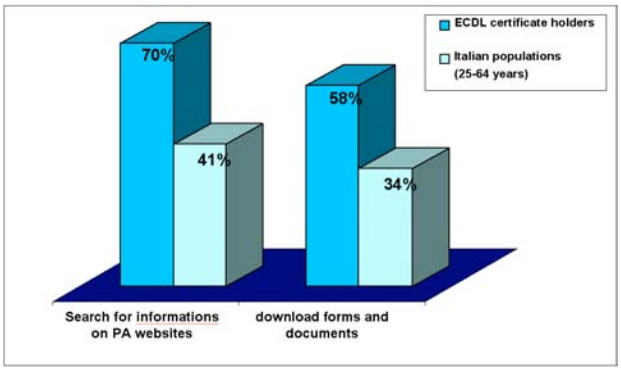

Fig. 7 frequency of egovernment service use: ECDL certification holders vs. Italian population

Furthermore, ISTAT data quantifies at 27% the share of Internet users (over 14 years of age) that access the web for purchase purposes; the 25-34 age group shows the highest frequency for a total occurrence of 35%. Use of online banking systems on the part of individuals between 18 and 65 years of age varies from 9 to 39% depending on age groups; while the percentage of those enrolling in online courses doesn't exceed 6%.

Also for these activities basic computer skills obtainable through the ECDL certification seem to play an important role in guaranteeing a level of confidence conducive to a broader use of the Internet. The percentage of ECDL holders that purchase online is in fact 45%, a significantly higher rate compared to the general Italian population; ECDL holders using home banking applications vary from 28 to 44% in the various age groups, with the 25-45 age group showing the highest frequency (fig. 8-9) similarly to trends for Italy in general.

Finally, the use of online training was much higher than the general national average involving 36% of those interviewed by AICA; this is mainly accounted for by the great number (53%) of *e*learning users belonging to the professional educator category, which make up a significant portion of ECDL holders.

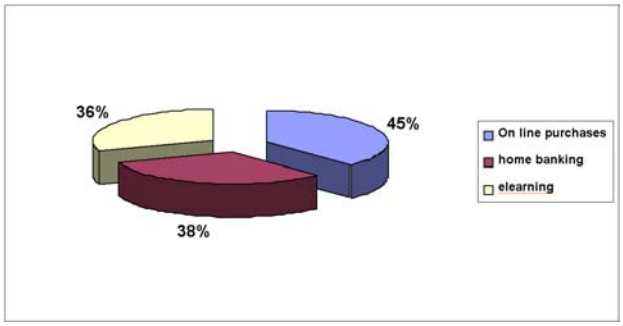

Fig. 8: use of online services by ECDL certification holders

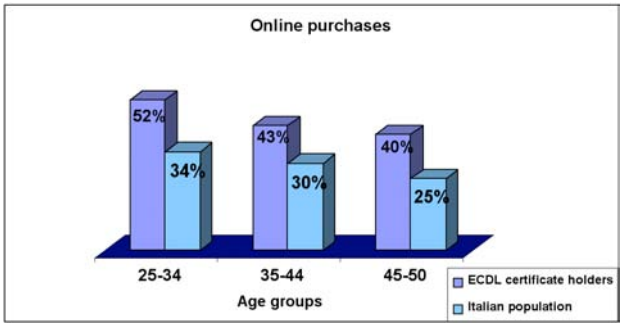

Fig. 9: online purchasing by age group and frequency for ECDL holders and Italian population

5. Conclusions

The data resulting from the survey shows that the acquisition of qualified basic computer skills such as those attainable through the ECDL programme provide undeniable added value to individuals and society in general. Certification assures greater autonomy in the workplace contributing to reducing unproductive time related to insufficient knowledge of informatics tools. It provides even the average Italian citizens with the necessary awareness and confidence to use online services so as to take full advantage of interactivity and raising their knowledge to a comparable level with respect to that of citizens of other major industrialised economies. ■

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[6] ISTAT 2008: statistiche in breve

CEPIS
Council of European Professional Informatics Societies

The Council of European Professional Informatics Societies (CEPIS), as representative of the European Network of Informatics Professionals, is focusing on taking part in European initiatives to represent its Member Societies and to help improve the development of ICT Skills coordination at European level. Currently CEPIS is the project leader for Harmonise, a 36 month project funded by the European Commission under the Leonardo da Vinci Program of DG Education and Culture.

Harmonise aspires to establish comparable data on ICT vocational training systems and various approaches to ICT qualification and ICT certification in participating countries. The project aims to provide recommendations for the stakeholders in order to work towards the convergence of existing approaches to e-skills certification in Europe and beyond. In order to concentrate on the different scopes of the certification schemes, the study has been divided into four areas:

- **Demand and Supply** analyses the situation, the need and the importance of the certifications in the labour market.
- **e-Skills Certification** studies the certifications available at national or European level concerning their value, their importance and their specifications.
- **Market** concentrates on the organisation of the certification market in Europe.
- **Quality Assurance** of the certification schemes.

CEPIS acts as coordinator of the project. AIFB (University of Karlsruhe) and IFS (Institute for Future Studies) are the scientific leaders and are helped by the BCS (British Computer Society), AICA (Associazione Italiana per l'Informatica ed il Calcolo Automatico), GI (Gesellschaft für Informatik eV), NJSZT (John v Neumann Computer Society), the ECDL Foundation (European Computer Driving Licence Foundation) and EITS (Estonian Information Technology Society). In the long run the project intends to contribute to the actual developments towards the possible harmonisation in the field of ICT qualifications for ICT practitioners in the context of lifelong learning, drawing and building on the successful experience of the ECDL (European Computer Driving Licence).

To find out more about Harmonise visit http://www.cepis-harmonise.org

www.cepis-harmonise.org

harmonise IT
Toward Harmonisation of Information Technology Learning in Europe

Education and Culture
Leonardo da Vinci

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Member Society News

Czech Republic

CSKI – the Czech Society for Cybernetics and Informatics is associated with the organization of the following international events:

International Conference - VIASL 2008: ***Valuing individual and shared learning: the role of ICT***
June 23-26, Prague
Organizer and Contact data:
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ILP 2008 - 18th International Conference on Inductive Logic Programming
September 10-12, Prague
Contact: ilp2008@labe.felk.cvut.cz;
http://ida.felk.cvut.cz/ilp2008/?show=Home

3rd IFIP TC2 Central and East European Conference on Software Engineering Techniques CEE-SET 2008
October 13-15**,** Brno**,** Hotel Continental
http://www.continentalbrno.cz/ENG
Contact: http://cee-set.put.poznan.pl/2008/

Poland

PIPS holds Information Society Day in Poland

The 2005 World Summit on the Information Society (WSIS) in Tunisia recognized that there is a real need to build more awareness of the Internet and called upon the United Nations General Assembly to declare 17 May World Information Society Day. The UN General Assembly responded to this recommendation by adopting a resolution proclaiming 17 May as annual World Information Society Day. The Day aims to raise awareness of the possibilities that the Internet and ICT in general can bring to societies and economies and is also intended to help bridge the digital divide.

In Poland, PIPS, the Polish Information Processing Society, has taken the initiative to organize clusters of events and celebrations to mark the Day and to raise ICT awareness in Poland. The first such celebrations were in 2007 in cooperation with many public administration agencies, academia, business and non-governmental organizations. The program comprised conferences, seminars, discussion panels and other events around the country for a period of more than two months.

This year, PIPS also initiated an elaborate program of events under the Honorary Patronage of Mr. Grzegorz Schetyna, the Deputy Prime Minister, Minister of Internal Affairs and Administration, Mr. Hamadoun Touré, Secretary General of ITU and the Polish National Commission for UNESCO, with the support of the Polish TV media.

The culminating point of the celebrations was the Grand Gala of the Information Society, held on 15 May at the Ujazdowski Castle in Warsaw. For this event, along with Polish dignitaries, members and partners, representatives of CEPIS, ECDL, IT STAR and LIKS-Lithuania were invited to take part and to meet with their Polish colleagues.

Mr. Marek Hołyński, President of the Mazovian Branch of PIPS and Polish representative to IT STAR, was responsible for the program issues within the Organizing committee's scope while Mr. Radosław Bursztynowski, Secretary General of PIPS, did a splendid job in stage-managing the Gala.

A VIP meeting was hosted by Vice Prime Minister Mr. Grzegorz Schetyna on the topic "Bringing together various professional groups to interact on issues of the Information Society". Then, commemorative statuettes were awarded by sponsors and partners to activists for achievements and best projects, the electronic ECDL WebStarter was launched, and the celebratory atmosphere was amplified by musical and artistic performances of the BISQUIT band.

During the Gala, Mr. Hołyński kindly arranged for the IT STAR Chief Executive to meet with Mr. Witold Droździ, Undersecretary of State, Ministry of the Interior and Administration, who has the responsibility for Information Society matters in the Polish government. Here is what Mr. Droździ had to say:

"Our approach until recently was to concentrate on programs and projects in the Information Society (IS) without necessarily adopting a holistic view. This approach was not successful and currently, our priority is to develop a comprehensive strategy for the development of the IS in Poland to serve as a basis on which we could build upon. We are looking into existing experiences, which the European Commission offers. Not many structural changes in the government organization related to IS should be expected until such a strategy is in place.

We are naturally interested to interact on IS issues within IT STAR and the forthcoming 3rd IT STAR Workshop on National Information Society Experiences, in Budapest."

Slovenia

Conference "i2010 - Information Society at the Crossroads", Brdo, Slovenia

by Cene Bavec

Prof. Dr. Cene Bavec was Chairman of this important recent European information society event and in this article expresses his personal view and perception of the Conference outcome, particularly from the IT STAR members' perspective.

Slovenia hosted the EU Conference "i2010 – Information Society at the Crossroads", 13–14 May 2008 with some 300 participants and attended by Commissioner Mrs. Viviane Reding, Slovenian minister Mrs. Mojca Kucler Dolinar, Directors of Information Society Directorates from EU member states, representatives of industry and academia.

Three main issues were addressed: future networks, pan-European services and products, and user perspective.

Behind official and politically colored conclusions supporting the EU strategy "i2010 – A European Information Society for growth and employment" we witnessed very interesting presentations and suggestions that are particularly relevant to many of IT STAR's members. The conference focused on the new generation of broadband networks as a crucial infrastructure for further economic and social development. But, among other more technical issues, the participants questioned the costs of new generation broadband networks and expressed concern about the damaging consequences of the widening gap in regional development and consequently the fragmentation of the information society and the Single Market.

We have heard some words of warning that very high cost of new generation networks could easily widen the technological gap between economically stronger and weaker countries, including the gap between urban and rural areas. It is definitely worrying possibility and a real treat for less developed regions. Obviously, governments' rule is limited and the main player will be the private sector. At the end, we will essentially depend on economic motivation of industry and service providers. Nevertheless, national and particularly local governments can help very much by supporting a friendlier environment to stimulate private and possibly local government investments. In informal discussions we reopened the question of a new definition of universal service that would at least partially protect regions with less intensive usage of new generation networks.

Technological possibilities of new networks are endless and we cannot fully foresee the outcome, so EU and national governments should just encourage information providers and users to go and try. Very interesting is the Commission's effort to promote pan-European information services that will promote a Single European Information Space. It adopted Services Directive to eliminate obstacles to trade in services totally liberating all cross-border operations. At first sight it is a political statement, but the Conference participants generally agreed that a successful introduction of pan-European information services could significantly contribute to more homogeneous development of information society in the EU. However, we are still aware of discriminatory administrative barriers on national levels. Some of them are intentionally imposed, and some are just governments' inflexibility and echo of past regulations.

In the session on user perspectives particular attention was given to users and their acceptance and confidence in new e-services. We witnessed some solutions that indicated new perceptions of user-friendly services and their usability. Particularly one presentation addressed the user protection issues that are much wider and relevant than we usually assume. It was agreed that a more visible role should be given to civil society and different user oriented associations. ■

Institute for Prospective Technological Studies, EC JRC-IPTS, Seville

Do Market Rigidities Explain Why Europe Invests Less in ICT?

by Marc Bogdanowicz

There is a growing consensus in the public debate and among policy makers in particular, in support of the idea that market rigidities in the EU may explain why Information and Communication Technologies (ICT) still have a rather weak impact on growth performance in most EU countries.

To explore such assumption, IPTS has launched a study and published a report whose objective is to check whether this view is backed by empirical evidence in a sample of EU countries, Japan and the US during the period 1980-2004.

In order to do so, the report examines two separate, albeit necessarily linked, questions:

- What is the influence of market rigidities on ICT investment?
- How do market rigidities influence the contribution of ICT investment to GDP?

IPTS investigates these issues by testing econometrically the determinants of ICT investment and ICT contribution

to growth. The latter is derived from a growth accounting exercise using results taken from the now world-known EU KLEMS database.

The study provides a number of important results. First it shows that the persisting lower ICT investment intensity in the EU economy as compared to the US since the early 1980s cannot be attributed to lower dynamism in overall capital investment in the EU. The US economy, in particular, seems to have benefited from a first-mover advantage, given that it started to invest in ICT much earlier and has continued to do so to a greater extent (as measured in percentage of its GDP) than the EU and Japan. Consequently, the US economy was also able to reap greater benefits faster from ICT investment than EU countries.

Second, while the EU also experienced a rise in the contribution of ICT to value-added growth after the mid-1990s, this contribution seems to have been much more limited. Also, the rise in the ICT contribution to growth has been broadly limited to relatively small EU economies such as Denmark, Luxembourg, Finland or Sweden.

Third, the different experiences of the US and the EU in terms of ICT contribution to growth do not appear to be fully explained by differences in specialization in ICT-producing and ICT-using industries. This evidence tends to suggest that the US economy was able to reap the benefits from ICT investment faster and to a greater extent than EU countries with similar specialization in ICT-producing and ICT-using industries.

Therefore, other structural factors must explain why ICT diffusion is still slow and its relative economic benefits are still hardly perceptible in the EU economy, at least by US standards.

The study shows that greater market rigidities in the EU constitute one of the main culprits for this state of affairs. Countries where market regulations, in particular labour market rigidities, were particularly burdensome have also invested less in ICT and benefited less from ICT investment in terms of GDP growth.

The study also considers the manufacturing and service sectors separately, given that existing evidence suggests that the US service sectors have largely contributed to the US growth resurgence since the mid 1990s, and that ICT investment in these sectors has also influenced these evolutions. A distinctive feature of the US service sectors as compared to those of the EU is its much lighter regulatory burden and its high level of integration. In the EU, the study finds that market regulation has tended to deter the positive impact of ICT on growth rather significantly in the service sectors and more so than in the manufacturing industry.

A number of policy implications can be derived from these results. First, they provide evidence for the central role played by labour market rigidities in influencing ICT investment and ICT contribution to growth. This suggests that labour markets reform may play a key role in the modernization of the EU economy and in boosting EU economic growth. These reforms should be seen as part of the essential conditions for increasing EU growth potential via technology diffusion.

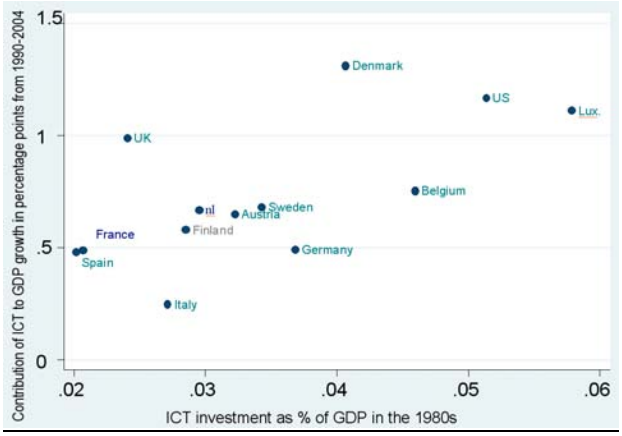
Second, the results suggest that the reorganisation of production and the skills-improvement called for by ICT diffusion could help to explain why the EU economy is still slow to invest in ICT. The explanation put forward in the report is that market rigidities, and labour market rigidities in particular, make these changes too costly. It follows that, market-oriented reforms, like those proposed by the renewed Lisbon strategy, cannot be considered as stand-alone policies and that radical changes at the firm/business level and reforms to improve labour skills are called for in order to promote technological change in the EU economy.

Third, the results concerning the influence of past ICT investment suggest that the EU possibly lags behind in terms of ICT benefits because it started to invest later than the US. However, the report shows that even in those EU countries where ICT investment has caught up with US levels since the mid-1990s, the contribution of ICT investment to growth has taken time to materialize. It is therefore important to bear in mind that, even if greater product and factors market flexibility in Europe is a pre-condition for increased growth potential, in particular via ICT investment, these benefits may take time to bear fruit.

Fourth, the study shows that lower market regulation, especially in the case of the service sector, promotes a larger contribution of ICT to GDP growth. The latter suggests that lower overall regulation in services can act as an important lever for increasing ICT contribution to growth, given the size of the service sector in total EU economic activity.

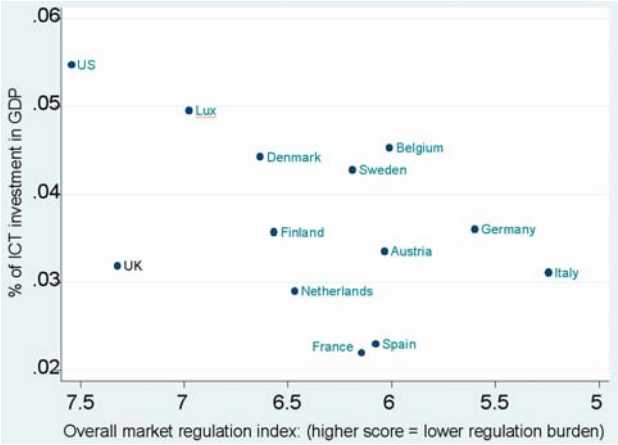
The full report is available at:
http://ipts.jrc.ec.europa.eu/publications/pub.cfm?id=1508

ICT Growth impact during the period 1990-2004, vs ICT investment in the 1980s



Sources of data: EU KLEMS and authors' calculations
Published in: Barrios S., Burgelman J.-C., 2007. Information and Communication Technologies, Market Rigidities and Growth Implications for EU Policies. JRC, IPTS. Sevilla, Spain.

ICT investment and overall market regulation (1980-2004)



Sources of data: Fraser Institute, GGDC-EU KLEMS database and authors' computations
Published in: Barrios S., Burgelman J.-C., 2007. Information and Communication Technologies, Market Rigidities and Growth: Implications for EU Policies. JRC, IPTS. Sevilla, Spain. ■

CEPIS News

Getting Closer to its Members

At the initiative of the CEPIS President, 3 regional associations, namely IT STAR, I-12 (a grouping of IT organizations in Austria, Germany and Switzerland) and the Nordic Data Union (NDU), were invited to present their activities during the CEPIS Council meeting on 12 April in Ljubljana, Slovenia.

Asked about the purpose of this initiative, Mr. Schlamberger responded: "CEPIS being a membership organization needs to support activities of its constituency (i.e. its member societies) beside having and carrying out its own agenda. Regional associations, which too are membership organizations are in no way a competition to CEPIS but rather a complementary means of exchange of information and experience." He also offered a short and comprehensive definition of a membership organization: "This is an organization established by the members for the members."

↑
Mr. Schlamberger, together with other foreign guests and PIPS officials, during the World Information Society Day in Poland

Following-up on his initiative to listen attentively to what member societies have to say, Mr. Schlamberger took part in the Celebration dedicated to the World Information Society Day on 15 May 2008 in Poland, organized by the Polish Information Processing Society (*see article on p. 10)* ■

Of Cats and Men

Jeannie the NL Secretary

We found Jeannie in 2005, on the way back from an IT STAR Executive meeting in Buk, Hungary. Jeannie had lost her mother and was waiting desperately for a new family in a border village near Hungary.

The NL adopted her, and she reciprocated lovingly by being a devoted Secretary - she is the first to get in the office and to catch the computer mouse. It's really hard to get her out after office hours and we worry about "pension" costs.

Expect a welcome "Miao" if you call! ■

Type of organization

Regional non-governmental and non-profit professional association in the ICT field.

Web-site

www.itstar.eu

Date and place of establishment

18 April **2001**, Portoroz, Slovenia

Membership

Countries represented (*see next page for societies*), year of accession, representatives

- Austria (2001) V. Risak, G. Kotsis
- Bulgaria (2003) K. Boyanov
- Croatia (2002) M. Frkovic, M. Glasenhart
- Czech Republic (2001) O. Stepankova, J. Stuller
- Greece (2003) S. Katsikas
- Hungary (2001) B. Domolki
- Italy (2001) G. Occhini
- Lithuania (2003) E. Telesius
- Macedonia (2003) P. Indovski
- Poland (2007) M. Holynski
- Romania (2003) V. Baltac
- Serbia (2003) G. Dukic
- Slovakia (2001) I. Privara, B. Rovan
- Slovenia (2001) N. Schlamberger

Statutes

IT STAR Charter http://www.starbus.org/download/charter.pdf adopted on 23 October 2004 by the IT STAR Business Meeting in Prague, the Czech Republic.

Mission

"To be the leading regional information and communication technology organization in Central, Eastern and Southern Europe which promotes, assists and increases the activities of its members and encourages and promotes regional and international cooperation for the benefit of its constituency, the region and the international ICT community."

Governance

IT STAR is governed according to the letter of its Charter by the **Business Meeting** of MS representatives:

2007	Genzano di Roma, **Italy** (May) Timisoara, **Romania** (October)
2006	Ljubljana, **Slovenia** (May) Bratislava, **Slovakia** (November)
2005	Herceg Novi, **Serbia & Montenegro** (June) Vienna, **Austria** (November)
2004	Chioggia, **Italy** (May) Prague, **the Czech Republic** (October)
2003	Opatija, **Croatia** (June) Budapest, **Hungary** (October)
2002	Portoroz, **Slovenia** (April) Bratislava, **Slovakia** (November)
2001	Portoroz, **Slovenia** (April) Como, **Italy** (September)

Coordinators

2006 –	Giulio Occhini
2003 – 2006	Niko Schlamberger
2001 – 2003	Plamen Nedkov (currently Chief Executive)

Major Activities

- 2nd IT STAR WS and publication on Universities and the ICT Industry http://www.starbus.org/r_d_ws2/r_d_ws2.htm
- 1st IT STAR WS and publication on R&D in ICT http://www.starbus.org/r_d_ws1/r_d_ws1.htm
- IT Professional Pool Database (in progress)
- Workshop and publication on National Experiences related to the EU's 5th and 6th FP http://www.starbus.org/download/supplement.pdf
- Joint IT STAR – FISTERA Workshop on ICT and the Eastern European Dimension http://fistera.jrc.es/pages/roadshows/prague%2004/FINAL%20REPORTrevised.pdf
- Support to Member Society initiatives and events

Periodicals

The IT STAR Newsletter (nl.starbus.org) published quarterly. ■

2nd ANNOUNCEMENT AND CALL FOR CONTRIBUTIONS

3rd IT STAR Workshop on
National Information Society Experiences – NISE 08

November 8, 2008, Budapest (Godollo)
Hungary

Host Society: John v. Neumann Computer Society - **NJSZT**

Venue: St. Stephen's University at Godollo, 30 km from Budapest and easily reachable by public transport.

Mission: *To investigate the current state, problems and challenges in the development and application of National Information Society Strategies in the IT STAR region so as to identify best practices and key issues of common interest and facilitate policymaking within the Region and the European Union.*

The one-day event based on **keynotes, national and institutional reports and panels** will gather senior representatives of academia, government and industry. **Representatives of all stakeholders from the region and internationally** wishing to share their experience and views on IS strategies are offered the possibility to submit proposals for topics and papers.

Tentative Program

Opening speaker: Representative of the local authorities
Keynote speakers:

- **Giulio Occhini** (Italy), CEO of AICA "Strategies in Developing IT Skills: National and International Experiences"
- **Cene Bavec** (Slovenia), Professor at the University of Primorska - "Which Socio-cultural Characteristics Motivate the Use of e-Services in the EU countries?"
- **Representative of the European Commission**

National reports and speakers:

- **Bulgaria**: (tba)
- **Hungary**: (tba)
- **Italy**: Prof. M. Sorrentino, Milano University
- **Lithuania**: Dr. A. Otas, Kaunas University of Technology (Chairman of LIKS Council) & Dr. S. Maskeliunas (Institute of Mathematics and Informatics)
- **Romania**: V. Baltac, President, Romanian Association for ICT

Reports from other IT STAR countries are expected.

Abstracts of max. 500 words as presentation proposals should be submitted to Plamen Nedkov <nedkov@utanet.at> by 1 July. Confirmations of acceptance will be made by 15 August and the full presentations (max. 6,000 words) would be expected by 15 September.

Each IT STAR member society is invited to designate 2 participants (including speakers) whose local costs for the event will be provided for by the hosting society. There is no registration fee but other participants are expected to take care of their accommodation and other costs. Further details will follow.

Contacts

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Plamen Nedkov <nedkov@utanet.at> (international coordination, program)

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