

Software Development in Hungary 2004



PREFACE

Hungary is a country of favourable geographical position in the middle of Europe providing a stable political and efficient economic environment for investors. Productivity being high in relation to prices makes it an incitement for international capital investors. The primary strength of the country is still the highly qualified and creative human capital, thanks to its world-standard education system.

A large number of Hungarian scientists and engineers have marked with their names the history of information technology and programming. [János Neumann](#) started his career in Budapest and later became the inventor and creator of computer architecture. The operation principles of the IAS Computer created by him in 1951 determine the functioning of PCs even today.

BASIC, the programming language, which is easy to learn for everybody, is also bound to a scientist born in Hungary, [John G. Kemeny](#).

The ancestor of the 3.5", cartridge-type, replaceable magnetic disk had been invented and developed in the Radio Technology Factory in Budapest by [Marcell](#)

[Jánosi](#), that time "general constructor of tape recorders". The size of that cartridge-type floppy was 3" and, in terms of its technology, it did not deviate very much from the later generally known 3.5" floppy.

The professional skills of Hungarian specialists are the primary resources of many software houses in the world today. One of the leaders of Microsoft used to be [Charles Simonyi](#) of Hungarian origin for decades, and he was involved in the development of the Windows operating system and the Excel worksheet manager, and contributed to a series of genuine ideas to the operation principle of software tools used all over the world.

For the time being, [László Lovász](#), the Wolf Prize winner mathematician, is one of the leaders of Microsoft Research USA, while [Simonyi](#) has established his own firm.

A large number of firms in Europe – mainly in Germany – employ Hungarian programmers and development engineers; the number of software specialists working abroad amounts to several thousands.

Hungarian software firms of worldwide reputation

Hungarian software firms developed several products that became known in many countries around the world.

A real international success is ArchiCAD, the architectural designing software of [Graphisoft](#), tens of thousands of which are running all over the world. The firm has radically changed many areas of computer-aided designing. In 1984, it developed at first, as a 3D architectural designing software for personal computers. The firm is a good example which proves that a Hungarian firm is capable of developing a world-standard product on its own.

Development takes place almost completely in Hungary, only adaptation to local demands takes place in affiliates abroad.

In 1998, ArchiCAD won the Codie Prize, the Oscar in the software industry in America. A further recognition was the Information Technology Prize of the European Union as well as the Top Gun and the Edition Prize of the Cadence magazine. In 1999, the year of issue of ArchiCAD 6.5, Graphisoft won the CAD Cup awarded for the best architectural CAD software, and in 2000 it won the Technology Pioneer prize of the World Economy Forum in Davos. More than 100 thousand architects, construction and

project management specialists use the products of Graphisoft all over the world. The firm distributes ArchiCAD in 25 local language versions in 80 countries. With its ten affiliates and offices and over 300 employees, Graphisoft is among the first three AEC CAD companies in the world in the market of architectural designing software running on personal computers.

[Recognita](#), its outstanding feature being that it precisely recognizes special characters – e.g. the accents of various languages – is among the market leader character recognizing programs in the world. The firm has established its professional reputation and business success with its multi-language optical character recognizing (OCR) programs (capable of recognizing over one hundred languages), known by its popular name the Recognita Plus product family. Following an acquisition in March 2000, the new owner of the firm has become ScanSoft, Inc.

The dictionaries as well as the spelling and sentence analysing softwares of [Morphologic](#), also distributed by Microsoft, are successful in international markets as well. MorphoLogic applies a distinctive technique – its own development – mainly for the analysis and synthesizing of complex word formations and sentence structures of languages with sophisticated inflection and conjugation, which is very economical in terms of both time and memory demand. The products of MorphoLogic have been integrated into the software systems of the most significant editing firms (Adobe, Corel, Quark etc.)

[VirusBuster](#) possesses an experience of over 10 years in the virus protection market. Its products offer multi-level, comprehensive protection solutions to work stations, servers, and mail servers on the most popular platforms for both private and corporate users. Many firms use its virus detection engine of international recognition in their security technologies.

In the test performed by Virus Bulletin, an independent English journal, in June 2004

on Windows XP Professional platform, VirusBuster for Windows Workstations won the Virus Bulletin 100% Award in the sixth subsequent year for having achieved a 100% virus detecting rate. In the tests performed on Novell NetWare platform, Virusbuster won on the tenth occasion the Virus Bulletin 100% Award in August 2004.

Hungarian software export does not mean only the sale of packaged applications but comprises the further development, adaptation, implementation of softwares, and the services relating to softwares (consultation, training) as well. E.g. [Geometria Rt.](#) is involved in the creation of geographical databases upon German, Danish, Italian, and Dutch orders among others. The firm has an affiliate in the Netherlands.

The firm named [3D](#) made significant contributions to the development of elaborating the geographical positioning systems for cars. The graphical systems based on the computer-aided hidden formation technology invented by [Jura Trade Kft.](#) and serving for the edition of securities are used in about fifty countries all around the world.

The Hungarian [Kürt Rt.](#) has achieved considerable international success with its most secure, unique technology, which is furthermore recognized all over the world, for recovering/restoring information from heavily damaged – even burnt in fire – magnetic disks with very good results. The firm was involved in the rescue of media destructed in the attack of the WTC on 11 September 2001. Several Hungarian softwares have also been applied in international space research.

The camera of Analogic Computers Kft. shooting ten thousand pictures per second and capable of communicating with the human brain, having already drawn the attention of NASA, is worth mentioning by all means. [AITIA Rt.](#) has developed a robot based on the principle of artificial intelligence and capable of giving intelligent answers; Meditech Kft. exports precision blood-pressure measuring devices and EKG monitors with success, including the related

operating software. Several Hungarian firms are prominent in the dissemination of GSM-based services; Itware has to be highlighted among them.

The companies excelling in individual application development are to be mentioned, as well, along with FreeSoft offering solutions for migrating software from obsolete environments into up-to-date environments. As Hungarian software specialists provided outstanding performance two decades ago in writing game programs, they became world-famous by now in various animation programs – Hungarian developers created the animation software for many world-famous movie films, e.g. that of Titanic or Lord of the Rings. The contents industry is similarly on its way to the top.

It is worth considering, what is common in the above solutions; why Hungarian engineers have managed to surprise the world, sometimes even to go ahead, just with these solutions?

It can be observed that very high standards of mathematical knowledge, a series of original ideas and algorithms have been needed for almost all of these software developments. Mathematical education in Hungary complies with world standards at both secondary and upper levels, as verified also by the results achieved in international mathematical competitions for students. Development workshops apply the most up-to-date computers, program developing tools and network systems based on their good infrastructure.

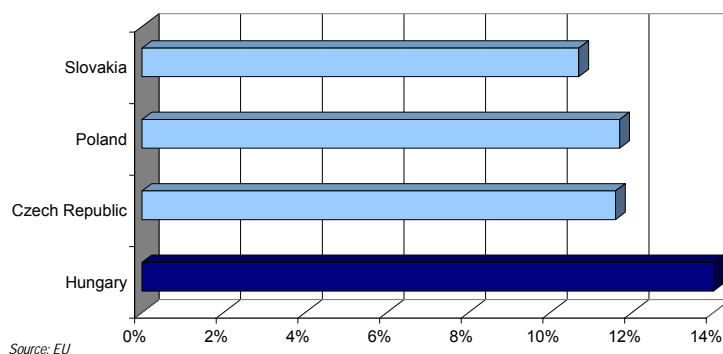
Strong education background

Hungary has a century-old tradition in searching for mathematical and physical talents. This is the country where a mathematical journal had first been launched for secondary school children, and where mathematical and physics competitions were organized. The English edition of the competition problems has become a bestseller.

In 39 olympics, Hungarian students won one of the three first places in 22 cases, and Hungarians gained most scores and most prizes in aggregate. It is partly attributed to the fact, as a matter of course, that Hungary is one of the oldest participants of the student olympics. The results verify the outstanding mathematical capabilities of Hungarian students.

Hungary has participated from the beginning in the olympics for students, and has finished always among the best competitors.

Population with University / College Education, 2001
(% of the population between ages 25-64 years)

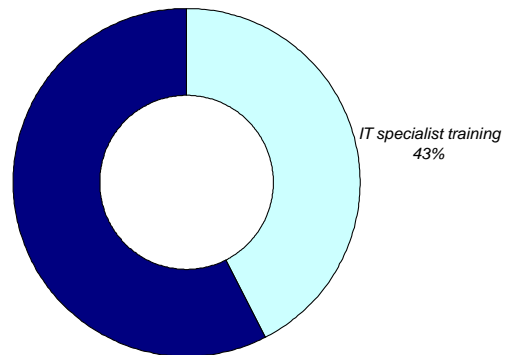


64%¹ of secondary school children continue their studies in Hungarian universities and colleges of international recognition. In 2002, more than 62 thousand students acquired higher education qualifications in Hungary. 14% of the country's adult population possess upper degree of education, being an outstanding achievement in the region.

¹ School- year 2002/2003.

In 40 public and private upper-grade education institutes, 17 provide training in information technology to their students, and 5 institutions train software developers and programmers. In the school year 2002/2003, more than 14 thousand IT students were trained in public and private higher education institutes representing 7.4% of all students in higher education. At the same time, 3,500 students studied in programming and software developing faculties representing 24% of all IT students.

Rate of public and private upper-grade education institutions providing specialization in IT



Source: Ministry of Education

Successful collaboration of multinational firms and researchers

Hungary as research basis

More and more international corporations note that Hungary is an ideal country for setting up research bases and it is worth relocating research capacities existing somewhere else to this country. The local employment of highly qualified specialists/engineers offers considerable cost benefits for international firms, while Central European ingenuity and development potential can be utilized in global markets excellently.

Siemens

The Hungarian group of [Siemens](#) has assumed a decisive role with its staff in international research and development. 25% of the staff, nearly six hundred employees, is engaged in R+D activities. Sysdata Kft., the largest Hungarian software house, and has contributed to about five hundred software developers, by developing software solutions to the tools, telecommunication and IT systems manufactured by Siemens. The 60 development staff members of the ICN business (Information & Communication Networks) integrated in the organization of Siemens National Enterprise Nemzeti Vállalat (National Enterprise) are engaged in the development of the EWSD software switching centres and of the broadband subscriber access devices (DSLAM), they have in addition successfully collaborated for several years with the Department of Telecommunications of the Budapest University of Technology and Economics in resolving research tasks. This business engaged in industrial projects and services possesses significant development capacities as well. One of the hubs of the IT development activities here is the car parking and motorway controlling systems applied in public-road traffic control; another important area comprises IT solutions to connect industrial manufacturing automation and corporate management.

In 1999, Siemens signed a long-term support agreement with the Budapest University of Technology and Economics with the purpose of improving the education standards and the teaching of engineers as well as facilitating the scientific research activity carried out at the university, in

particular in the electric engineer and the IT faculties.

Ericsson

[Ericsson](#) has about 30-40 R+D divisions around the world, among which the Budapest division with an R+D basis of about 450 employees is engaged with research and development in telephone exchanges and telecommunication networks. The main track of Hungarian research and development is the traffic analysis of telecommunication networks and equipment in order to make such facilities function at the highest efficiency and utilization rate possible. Another important area of research in Hungary is the so-called conformance testing. Similarly to any complex tool, one of the basic prerequisites of good operation is perfect communication between various units. It is checked in the course of the conformance test, whether the rules of communication – protocols – between each unit are identical regardless of where in the world they have been produced. Hungarian developers carry out the conformance test of each tool and issue compatibility certificates.

Scansoft-Recognita

It verifies the significance of the Hungarian R+D centre of the American [Scansoft](#). 80 out of its 500 employees work in Budapest, and their number is increasing. As a matter of course, qualified manpower does not solely play a considerable role in the fact that the American owner transfers higher and higher proportions of development overseas but the per capita costs have contributed to this as well. While the per capita cost of a developing staff amounts to 150-200 thousand USD p.a. in the United

States, it is about 40-45 thousand USD here. From the 110 million USD total turnover of Scansoft, the Hungarian basis delivers 40 million USD i.e. more than one third of revenues comes from development projects in Hungary.

Nokia

The [Nokia](#) Group carries out R+D activity in 14 countries around the world, and about 30% of the employees of the Finnish firm work in this area. The divisions working in Hungary are important elements of the global R+D network of Nokia. In 1998, Nokia had established three research and development centres in Hungary. One of them belongs to Nokia Networks, the infrastructure business line of Nokia, the second is related to Nokia's mobile phones, and the third is the central R+D unit of Nokia i.e. Nokia Research Center. IP Mobility Networks (IMN) is the R+D division of Nokia Networks. Its task is the implementation of research and development related to GPRS and 3G networks in every phase of the product cycle. IMN has units in Helsinki and Tampere in Finland; in Budapest; and in Dallas in the United States. The activity of the Hungarian division is part of the global R+D activity, and not that of local or regional markets. Connected to Nokia's mobile phone business, this Hungarian R+D unit is

engaged in the development of WAP gateways, servers controlling mobile terminals, and in the system testing the middleware (intermediate software) serving for mobility, which forms part of the global R+D network of Nokia.

Nokia employs 600 people in Budapest, dominantly in research and development. Mainly Hungarian software engineers work in the R+D divisions, working together with foreign staff members, since every division is part of Nokia's global R+D network. Nokia has maintained an R+D division in Hungary since 1998, more than 100 graduates were employed in the first years of the running-in period.

Nokia fosters close relation with upper-grade education institutions in Budapest and across the country. Joint research projects have been launched among others with the Budapest Technical University, the Szeged University of Sciences, and with the Veszprém University. Under this collaboration, software laboratories were set up at many technical universities and colleges with the support of Nokia (e.g. BMGE, Technical Universities and College in Budapest, Győr, and Szeged).

Collaboration between Hungary and India

Hungary has started to build up lucrative connections with India, the „superpower” of software development. For Indian firms, Hungary functions as a gateway to the European Union, while the advanced software markets of India provide good opportunities to appear with data protection, character-recognizing systems, software installed in mobile phones, or virus protection. Further specific cooperation will

take place in the field of software development in the second half of 2004, when [Satyam Computer Services Ltd.](#) – the third largest IT corporation of India – is going to set up a software centre in Budapest, following the affiliate of Tata Consultancy Services – part of [Tata Sons](#) holding, the renowned business conglomeration of India – established in Budapest in 2002.

Infopark

The park of ICT firms in Budapest

The [Infopark](#) in Budapest is the first innovation and technology park in Central and Eastern Europe, located at Lágymányos

bridge next to the University of Technology and Economy and to Eötvös Loránd University of Sciences.

The objective of the infopark is to establish an activity-specific business centre, offering an ideal environment to firms engaged in computer hardware and software, telecommunication, and in the new media. The Infopark offers the opportunity of communication between companies and for implementing common projects. The vicinity of universities makes staffing by highly qualified specialists extremely convenient

and efficient. For the time being, the offices of IBM, HP-Compaq, and Panasonic can be found here.

The Infopark makes efforts to become the leading scientific park in Budapest and in Central and Eastern Europe, and the most significant technology and innovation centre of the region. A total area of 106.000 m² of the park is expected to be built in by 2007.

EU-conform regulation

Software firms in Hungary work in the same regulatory environment as their competitors in Western Europe. The harmonization of the Hungarian information technology regulation took place before Hungary's accession to the European Union on 1 May 2004.

Concerning telecommunication, the Hungarian regulation was brought into compliance with the Union's acquis of 1998 by the law No. XL of 2001. The [new electronic telecommunication act](#) (No. C. of 2003) passed by the Parliament on 1 January 2004 serves for the elimination of deficiencies and, at the same time, provides for the full adaptation of the new community telecommunication regulation package of 2002.

With the adoption of the law No. XCVII of 2003, total compliance with the directives

comprising the rules of electronic commerce were achieved along with the adaptation of the so-called transparency directive. The community regulations relating to services of conditional access have almost completely been adopted. The Hungarian law has furthermore adopted the rules of satellite and cable broadcasting.

In the field of rights bound to intellectual property and industrial law, Hungary has fulfilled most of its obligations assumed in the course of the EU accession negotiations. The regulation of this area, like e.g. [the copyright act, is in full compliance with community achievements](#). Hungary joined the European Patent Organization on 1 January 2003. The country is also party to all international conventions relating to copyright and neighbouring rights, including the two WIPO Internet Conventions of 1996.

Ministry of Information Technology and Telecommunication

A ministry for ICT

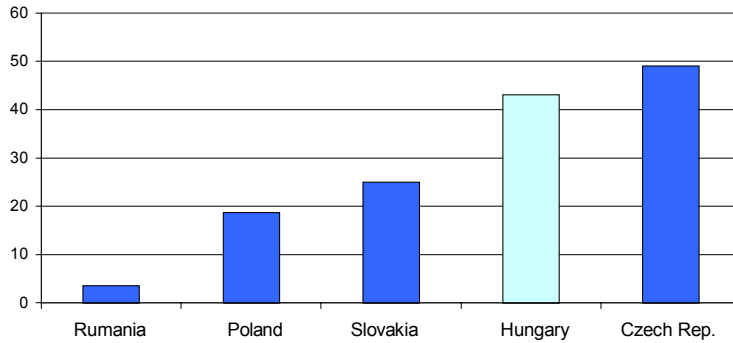
The Hungarian Government is aware of the fact that special attention and strategic thinking are required for the building up of an information society, and it has therefore established the IT Commissioner's Office (IKB) in spring 2000, the [Ministry of Information Technology and Telecommunication](#) (IHM) in summer 2002. With the establishment of this ministry, the ICT sector has gained special attention and is supported by the pro-active policy of the Government to an extraordinary extent.

By the end of 2003, the objectives set in the Hungarian Information Society Strategy (MITS) adopted by the Government, including the programs for achieving these objectives, perfectly complied with the ambitions and strategic programs of the European Union, with the eEurope+ and eEurope 2005 action plans. This has enabled Hungary to join the EU programs supporting eEurope (e.g. IST, eContent, eSafety, IDA etc.). It is possible now, too, that we use EU structural funds for the building and realisation of the information society.

Introduction of the Hungarian software market

The Hungarian ICT market

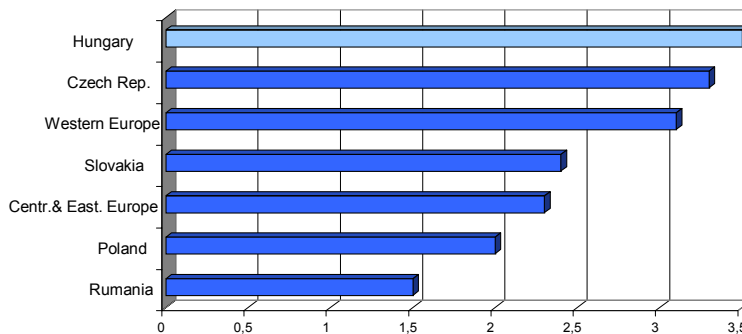
Software sales per inhabitant in Central and Eastern Europe (2003, in Euro)



Source: EITO 2004, GK1eNET calculation

Hungary has an advanced software market and software development sector. In terms of software sales per inhabitant, Hungary has occupied the second place behind the Czech Republic in the Central and Eastern European region, and has an index nearly twice as high as that of Slovakia or Poland. According to the figures of EITO, Hungary's software market represented 440 million Euros in 2003, and is expected to reach 490 million Euros in 2004.

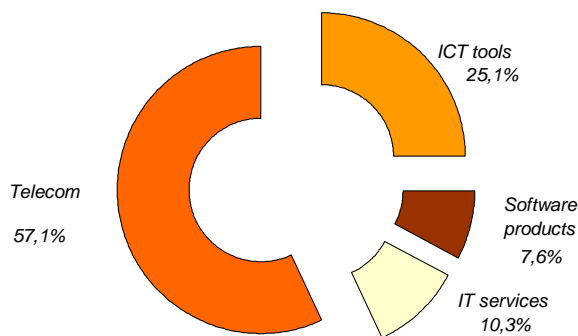
IT expenditures/GDP (%)



Source: EITO 2004

The relative level of IT expenditures is outstanding in Hungary. In 2003, according to EITO figures, Hungarian corporations and institutions spent 3.5% of the GDP on IT-related investments, which reached almost 2 billion Euros. With this, Hungary has left behind the Czech Republic, and has an even higher IT/GDP index than the Western European states.

Breakdown of the ICT market of Hungary, 2003



Source: EITO 2004

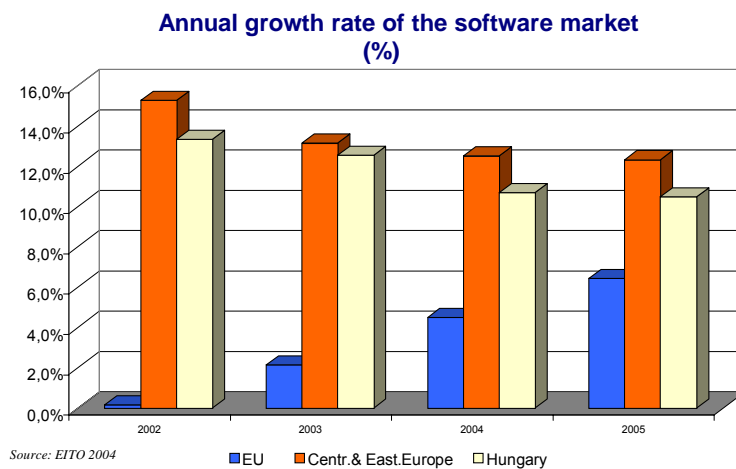
In 2003, telecom represented the largest volume in the Hungarian ICT sector with a market value of 3.4 billion Euros. Both wired and mobile communication has reached very high development standards. Mobile penetration is going to exceed 80% in 2004, and several innovative mobile communication applications have been introduced first in Hungary. E.g. the world premiere of MMS in Budapest in 2002, or the pioneer actions in introducing mobile banking services were such conspicuous events.

The manufacturing of ICT tools makes up one quarter of the ICT sector; within this the PCs, servers, and mobile phone sets sold in Hungary represent the highest ratio.

In 2003, the software market with its volume of 440 million Euros represented 8% within the Hungarian ICT sector. Due to the over 10% increase of the software market, calculated in Euros, the share of the Hungarian software industry shows continuous growth within the ICT sector.

ACHIEVEMENTS OF THE HUNGARIAN ICT SECTOR

- security of IT information, data protection
- CAD/CAM designing
- character recognition
- software development for mobile tools, integrated mobile applications
- document management, data processing
- e-Government solutions
- virus protection
- digital movie films
- language technologies
- Bio information technology
- computer animation
- GRID solutions

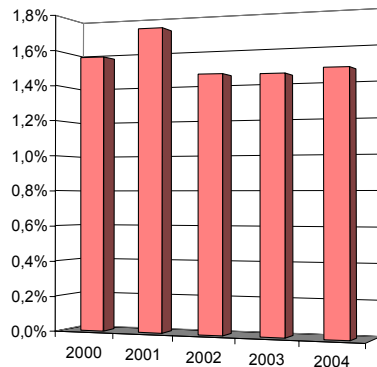


Software markets in Central and Eastern Europe have realized significantly higher growth rates in recent years than the markets of the EU as whole. In 2003, the software market of Hungary grew six times as fast as the EU markets, calculated in Euros. Although forecasts claim that the growth rate of software sales will slow down in Central and Eastern Europe and increase in the EU, the considerable difference in dynamics will remain between the two regions.

The Hungarian software firms

Hungary has become a regional superpower in certain segments of software development, including the market of process control software and the production of game programs. Another success sector of Hungary is geographical information technology, within this the development of car positioning systems. Fast marketability of Hungarian achievements in this area is facilitated mostly by the fact that priority is given to software products with predictable return of investment.

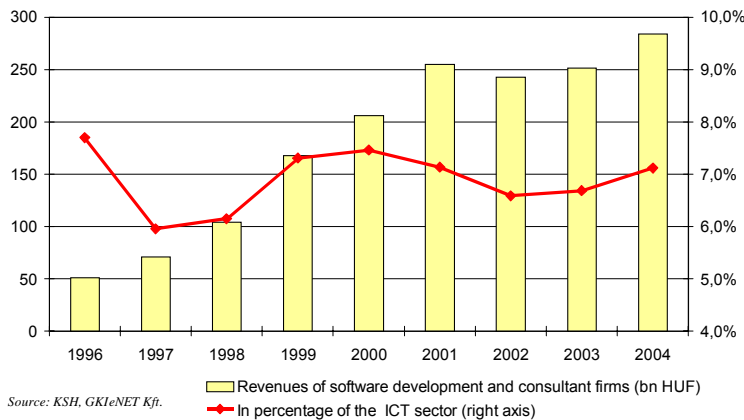
Sales revenues of software development and consultation firms in percentage of the GDP



Source: KSH, GK1eNET Kft.

The sales revenues of software development and consultant firms in Hungary increased dynamically, by over 25% p.a., in recent years. In 2003, firms in this industry achieved 1 billion Euros revenue in total, representing nearly 7% of the total ICT market and 1.5% of the Hungarian GDP. The software developing firms are expected to increase their software sales by 13% in 2004.

Sales revenues and rates of software development and consultation firms in relation to the ICT sector



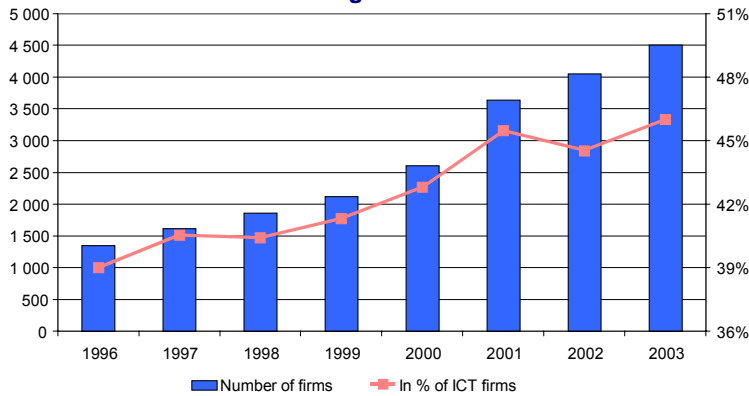
Source: KSH, GK1eNET Kft.

About 60-62% of the revenues of software development and consultant firms derive from software sales while the rest stems from other activities (consultation, training).

Based on the above, from the 1 billion euro revenues of firms in this industry, about 600-620 million Euros came from the sale of software products in 2003, and about 400 million Euros from other software-related activities.

Hungarian firms develop predominantly application software. 86% of all own products of the Hungarian software firms are application programs, while only a few firms are directly engaged in the development of system-related programs (e.g. file management, virus control, ZIP) or of programming tools (programming languages, development tools).

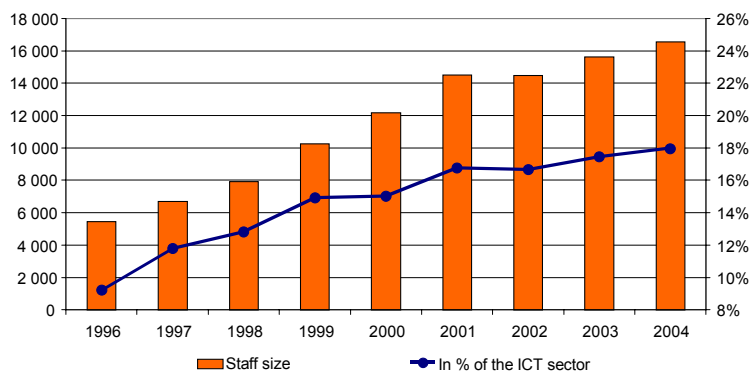
Number and ratio of software development and consultation firms among ICT firms



In Hungary, nearly 5 thousand firms keeping double-entry books are engaged in software development and/or consultation as a core activity, with a continuously increasing number in recent years. Almost half of the firms in the ICT sector deal with software development as a core activity, and the Hungarian software firms have a 2% share in all Hungarian business organizations.

Among the ICT firms where software development is not the core activity, a large number of firms possess considerable programming capacities and succeed in selling their own software products in Hungarian and in the international markets.

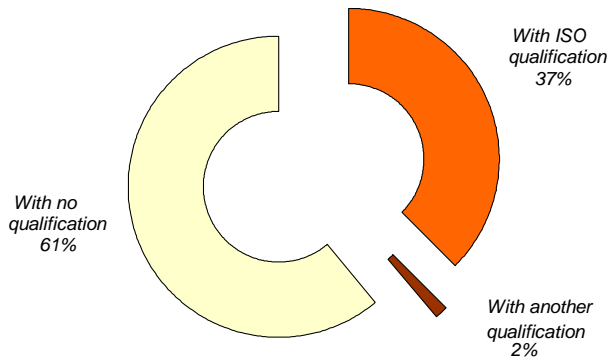
Number of employees of the software development and consultation firms, and their ratio in the ICT sector



Software designing/developing firms have 14-15 thousand employees in Hungary, representing 18% of all employees in the ICT sector. Nevertheless, the number of professionals engaged in programming and software development in Hungary may be higher than 15 thousand because of the considerable number of contract relations and of developers employed in other industries.

Software firms over 5 employees apply, as a rule, 7-8 software developers, 64% of whom are younger than 35 years.

Ratio of software development firms applying quality assurance system

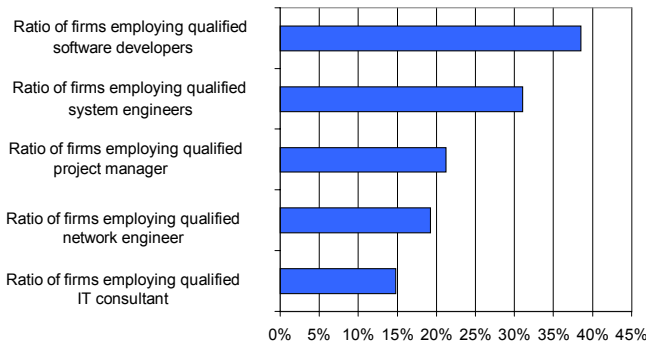


Source: GKLeNET Kft.

Nearly 40% of the Hungarian software development firms apply some kind of quality assurance system. Qualification is more typical to firms with over 10 employees than to the smaller firms. 52% of the firms with over 10 employees and 22% of the smaller firms have already introduced quality assurance systems.

The overwhelming majority of the software firms (96%) use some category of ISO qualification in their operations, and only very few firms have some other kinds of qualifications.

Ratio of software development firms employing qualified staff



Source: GKLeNET Kft.

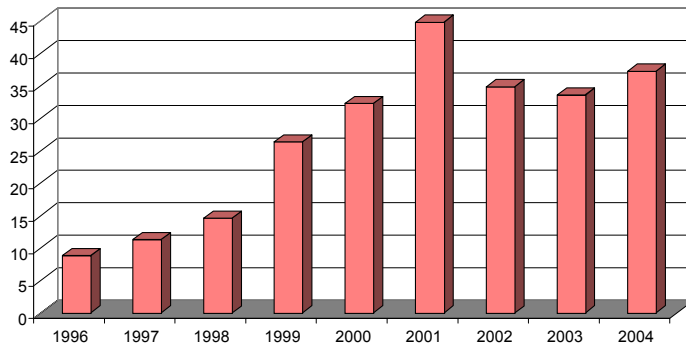
44% of the Hungarian firms work with qualified staff, mostly (38%) qualified software developers. 31% of the companies employ a qualified systems engineer, 21% a qualified project manager, and 19% a qualified network engineer.

Every tenth employee of the software firms possesses a relevant qualification.

Most professionals have gained a relevant Microsoft qualification but many Hungarian software developers possess Oracle, IBM or Cisco qualifications.

SOFTWARE EXPORTS FROM HUNGARY

Export revenues of software developing and consultation firms (bnHUF)

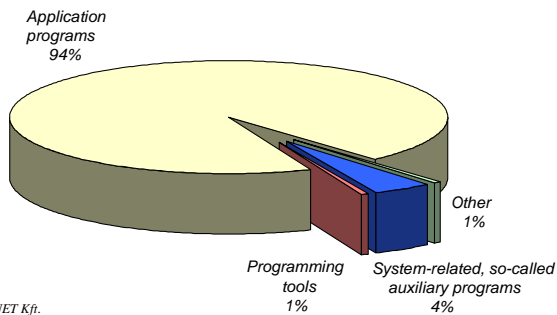


Source: KSH, GKIeNET Kft.

One fifth of the software development and consultation firms having at the minimum 5 employees export software products to foreign markets. Their export revenues dynamically increased until 2001 and, following a decline in 2002-2003, growth continues in 2004.

The export revenues of software producers amounted to about 130 million Euros in 2003 representing 14% of their total sales revenue. Software developing firms expect 11% growth in 2004 in relation to their software export revenues achieved in 2003.

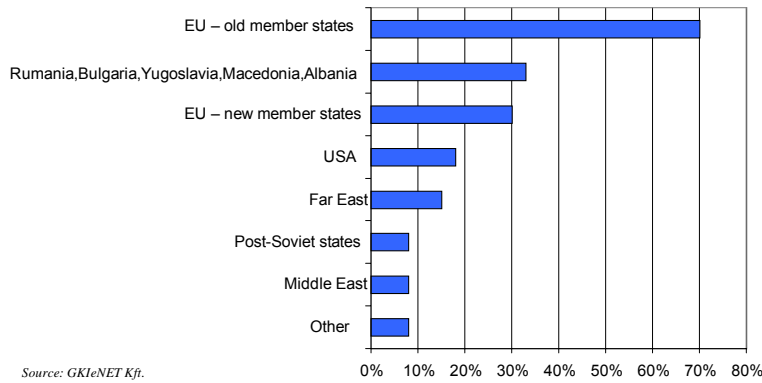
Breakdown of software export revenues by software categories, 2003



Source: GKIeNET Kft.

Similarly to the share of software development by product categories, the highest export revenues (94%) also came from selling application programs abroad within the software exports in 2003, and only 4% of the export revenues came from system-related, the so-called auxiliary programs, and only 1% from programming tools sold abroad.

Destinations of the Hungarian software export
(in % of exporting firms)

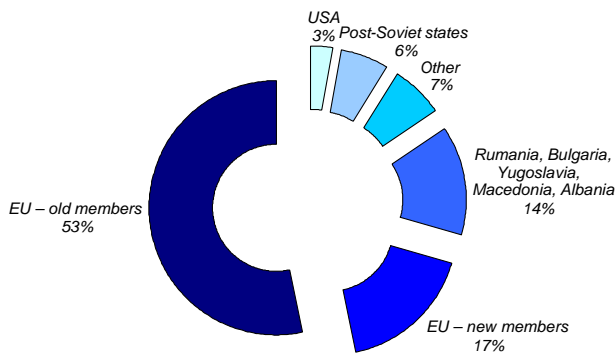


Source: GKleNET Kft.

The main export destinations of Hungarian software exporters are the 15 member states of the EU that made up the European Union before 1 May 2004. 70% of the software-exporting firms deliver software products to the old EU member states. The second important destinations are the Balkan countries (Romania, Bulgaria, the former Yugoslavia, Macedonia, Albania), where one third of the exporters engaged in software development and involved in the delivery of surveys.

Similarly important markets are the new EU-countries where 30% of the firms sell their products. 18% of the Hungarian software exporters are present in the USA, and 15% in the Far East. Less important markets for Hungarian software exporters include the markets in the post-Soviet states and in the Middle East.

Breakdown of software export revenues of Hungarian software exporters by destination



Source: GKleNET Kft.

Most of the export revenues of the software firms (53%) came from the former 15 member states of the EU in 2003, followed by 17% share of the new EU-members and 14% of the Balkan countries. Export sales in the USA represented 3% of software export revenues.

WHY HUNGARY?

Investors building on software development in Hungary, and the firms and institutions seeking cooperation in this area can start cooperation

- in a favourable economic environment,
- with firms successful in international markets, working with
- highly qualified staff.

Why just in Hungary?

Primarily for the following reasons:

- Stability
- A stable economic environment;
- a legal and political background modelled on OECD recommendations;
- membership in international organizations (EU, CEFTA, EBRD, IMF, NATO, OECD, WTO);
- liberalized investment policy;
- repatriation of profits and capital guaranteed by law;
- agreements on investment protection and on the avoidance of double taxation.

Profitability and high productivity

- Low wages in relation to productivity;
- rates of return are higher than in Western Europe;
- a well-trained, motivated and creative labour force.

Geographic advantages, infrastructure

- Beneficial possibilities for establishing regional financial, commercial and logistic centres;
- telecommunication, financial and transportation infrastructure on a par with Western European standards;
- efficient logistic services.

Local knowledge

- Knowledge of market characteristics in Hungary, Western Europe, CEE, Balkan states, and post-Soviet states;
- effective management of cultural differences.

Why with Hungarian software specialists?

- Because the names of Hungarian scientists have marked the progress of information technology;
- because they received high-standard mathematical and IT education;
- because they have proved on international stages many times;
- because they are creative and work well;
- because they can be motivated.

The [Hungarian Association of IT Companies](#) (IVSZ) and the [Investment & Trade Development Agency Hungary](#) (ITDH) are able to provide assistance in making contacts and finding partners in software development and production.

IVSZ

IVSZ, founded in 1991, is the interest protection and representation agency of IT businesses functioning partly or entirely in Hungary. The mission of the [Hungarian Association of IT Companies](#) is to positively influence the progress of the Hungarian information society by identification and

elaboration of break-through points and by intensive lobbying. Such break-through points are the development of e-confidence; the acceptance and encouraging of the use of digital signatures; and the topic of internet access and internet contents. The Association makes efforts to involve as many of its members as possible in its life

and in the efficient common work. Beyond its activities in Hungary, IVSZ is also represented in the presidium of the largest IT organization of the European Union (EICTA), offering to its members efficient representation of interests in the EU as well.

international relations. The Association provides assistance to foreign partners interested in business opportunities, cooperation, or investment possibilities in Hungary through organizing presentations and business meetings, and through advising its members on new opportunities.

IVSZ IS THE BRIDGE TO THE HUNGARIAN IT BUSINESS

IVSZ supports every initiative that facilitates the development and strengthening of

ITDH

The Investment & Trade Development Agency Hungary (ITDH, www.itd.hu) is a government-funded agency that provides complimentary services supporting bi-lateral trade and investments in the country. The agency manages more than \$8 billion (USD) of Foreign Direct Investments (FDI) in Hungary, which totals \$24 billion. ITDH employs trade commissioners with deep experience in both the American and European business markets and has a comprehensive network of offices in 34 countries across the globe.

WHY ITDH?

- Since ITDH is an agency of the Hungarian Government, it offers all its services free of charge.
- It provides personalized customer services. ITDH offers complex services tailored to the needs of foreign business partners.

- Working with a global network support system, ITDH operates 34 trade service offices and 10 representative offices in 29 countries, as well as 14 regional offices across Hungary, to assist the Budapest-based headquarters in serving clients.
- It assists in building trade relations and attracting foreign investments, ITDH has more than 12 years of experience in serving foreign and Hungarian companies.
- It provides prompt and thorough information. Based on updated databases (potential Hungarian trading partners, subcontractors, investment sites, industrial parks, investment projects) ITDH offers prompt answers to your information needs.

BEST PLACED COUNTRIES TO DEVELOP HIGH-TECHNOLOGY INDUSTRIES

1. Switzerland (52 pts.)
2. Sweden (44 pts.)
3. USA (40 pts.)
4. Ireland (38 pts.)
5. The Netherlands (33 pts.)
6. **HUNGARY (31 PTS.)**
7. Belgium (29 pts.)
8. Canada (29 pts.)
9. Great Britain (28 pts.)
10. Finland (27 pts.)

10. South Korea (27 pts.)
12. Germany (26 pts.)
13. Japan (20 pts.)
14. Austria (15 pts.)
14. France (15 pts.)
19. Norway (12 pts.)
20. Italy (10 pts.)
21. Czech Republic (8 pts.)
23. Poland (6 pts.)
25. Portugal (1 pts.)

Source: OECD - Science, Technology & Industry Scoreboard

HUNGARY IN FIGURES

Area: 93 030 km²
Population: 10 103 thousand
Unemployment rate: 5.8%

GDP

Per capita GDP (PPP): 13 680 Euro
Share of agriculture in GDP: 4%
Share of industry in GDP: 31%
Share of services in GDP: 65%

The largest cities with population:

Budapest - 1,72 million
Debrecen – 206 thousand
Miskolc – 180 thousand
Szeged – 163 thousand
Pécs – 159 thousand
Győr – 129 thousand
Nyíregyháza – 117 thousand
Kecskemét – 108 thousand
Székesfehérvár – 103 thousand

Ratio of urban population: 65.2%
Share of adults with upper-grade education: 14%

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