IQSOFT tények 1990-2000

Tartalomjegyzék

Bevezető

IQSOFT többségi magyar tulajdonú szoftverfejlesztő részvénytársaság volt, 1990 és 2003 között létezett. 1990-ben az SZKI Elméleti Laboratóriuma vált ki az SZKI-ból IQSOFT néven. 2003-ban az IQSOFT akkori többségi tulajdonosa, a KFKI összevonta az informatikai vállalatait IQSYS néven. Ezzel az IQSOFT története véget ért.

Jelen dokumentum az IQSOFT történetét követi végig 1990. és 2001. között a házi archívumainkban fellelhető dokumentumok adatai tükrében. Jelen bevezetőben egy táblázatban összefoglaljuk tizenkét év fontosabb adatait. Ezután következnek időrendben az adatokat alátámasztó dokumentumok.

Év	Árbevétel (mFt)	Profit (mFt)	Létszám (fő)	Nagyobb tulajdonosok	Fontosabb termékek, szolgáltatások
1990	76.7	8.5	35	SZKI(60%),Zentralsparkasse(25%), ÁVB(11%)	Z projektek, Oracle disztribúció, Mprolog projektek, kutatás
1991	160.3	13.6	43	SZKI(54%),Bank Ausztria(25%), ÁVB(10%)	Bank Austria projektek, Oracle támogatás, archiváló rendszerek, rendszerintegrálás, kutatás,
1992	242	18	51	SZKI(54%), Bank Austria(25%), WestLB(10%)	Mprolog, Zexpert, Bank Austria projektek, OS/2 tevékenység, Oracle licenc eladás és technikai támogatás, Oracle alkalmazásfejlesztés, Doktár
1993	365	4	52	IQManagement(54%), Bank Austria(25%), WestLB(10%)	Gupta, Oracle*Libraries, AVALON-CIIM, PCS*Care, DOCTAR, alkalmazási rendszerek fejlesztése, rendszerintegrálás, konzultáció, részvétel nemzetközi kutatási projektekben, oktatás
1994	334	7	57		
1995	401	8	66		
1996	521	25	59		

1997	640	21	65	IQManagement(54%), DSI(25%), ISBGmbH(10%)	Termék forgalmazás, testreszabás, támogatás (Oracle, Centura, ObjectDesign, Platinum Technology, Artemis Views, OLIB, IFS/AVALON, CSE), dokumentum kezelés és irodaautomatizálás (KOKTAR/Archiwer), alkalmazói szoftverek fejlesztése, nemzetközi kutatás
1998	758	5	81	IQManagement(68%),IFS(15%)	
1999	969	114	83	KFKI(55%), IQManagement(37%)	Termék forgalmazás, lokalizálás (Oracle, Object Design, Rational, Centura, Sictus, Filenet, Olib7, Bea, Autonomy), alkalmazásfejlesztés, termékfejlesztés (PMS), kutatásfejlesztés EU projektekben, konzultáció, oktatás.
2000	1572	195		KFKI(55%), IQManagement(37%)	
2001	1680	68	89	KFKI(55%), IQManagement(37%)	

Néhány rövidítés magyarázata

Tulajdonosok

SZKI = Számítástechnikai Koordinációs Intézet

Zentralsparkasse = Osztrák bank, Bank Austria jogelődje

ÁVB = Általános Vállalkozási Bank

WestLB = Westdeutsche Landesbank (Hungaria) Rt. (privatizált ÁVB jogutódja)

IQManagement = IQManagement Kft., IQSOFT dolgozói tulajdon

IFS = Industrial and Financial Systems (IFS AB – Svédország) IFS/AVALON Vállalatirányítási rendszer kifejlesztője

KFKI = KFKI Számítástechnikai Rt

Termékek

Oracle = Oracle adatbáziskezelő

MProlog = Prolog logikai programozási nyelven alapuló Modular Prolog rendszer

Zexpert = Mprolog alapú keretrendszer szakértői rendszerek fejlesztésére

OS/2 = Microsoft és IBM által fejlesztett operációs rendszer

Doktár = Hazai fejlesztésű dokumentumkezelő rendszer

Oracle*Libraries = Oracle alapú alkalmazás könyvtárak számára

AVALON-CIIM = Oracle alapú vállalatirányítási rendszer

PCS*Care = Oracle alapú egészségügyi rendszer

Gupta = Objektumorientált fejlesztő eszköz

Centura = Objektumorientált fejlesztő eszköz, Gupta utóda

ObjectDesign = Objektumorientált tervező eszköz

Artemis Views = Projektirányítási eszköz

OLIB = Oracle alapú alkalmazás könyvtárak számára, Oracle*Libraries utóda

IFS/AVALON = Oracle alapú vállalatirányítási rendszer, AVALON-CIIM utóda

Rational = IBM Rational szoftver tervező eszköz

Sictus = Sictus Prolog fejlesztő rendszer

Filenet = Filenet tartalom menedzsment rendszer

OLIB7 = Oracle alapú alkalmazás könyvtárak számára, OLIB továbbfejlesztése

BEA = BEA Weblogic Java alapú alkalmazásszerver

További IQSOFT-ról szóló írások

- https://itf.njszt.hu/objektum/clouds-on-the-horizon-iqsoft-ltd
- https://itf.njszt.hu/objektum/iqsoft
- https://itf.njszt.hu/objektum/vallalatok-eletciklusainak-bemutatasa-konkret-vallalat-peldajan-keresztul

SzKI Intelligent Software Co. Ltd.

Annual report 1990

March, 1991

The Company

Full name: SzKI Intelligent Software Computing Development Manufacturing and Trading Co. Ltd.

Registration number: 041344

Short name: IQSOFT SzKI Intelligent Software Co. Ltd.

Registered capital: HUF 19.860.000

Shareholders:

Computer Research and Innovation Center (SzKI):	60%
Zentralsparkasse und Kommerzialbank AG (Z):	25%
General Venture Bank (AVB):	11%
private persons (employees):	4%

Board of Directors:

Chairman:	György HALMOS	(SzKI)
Members:	Bálint DÖMÖLKI	(IQSOFT)
	Zsuzsanna FARKAS	(IQSOFT)
	Franz GILY	(Z)
	Endre NAGY	(AVB)

Supervisory Board:

Chairman:	Zsolt NÁRAY	(SzKI)
Members:	Werner KLEIN	(Z)
	Gizella VERES	(AVB)

Auditor: Károly SZÜCS (Consultatio Gmbh)

Management:

General:	Bálint DÖMÖLKI
Technical:	Tamás LANGER
Commercial:	Júlia SIPKA
Financial:	Gábor BIENER

Address: H-1015 Budapest, Donáti u. 35-45.

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Contents

I. Introduction

When IQSOFT commenced operations in early 1990 the main scope of interest centered around Artificial Intelligence and Data Bases. Also at that time the company's main *strategic* directions were defined as follows:

a. development of intelligent computer applications,
b. MProlog based tool development, mainly to support internal development activities,
c. research projects to support the preparation of the future activities,
d. imported software distribution.

The primary *objectives* or priorities in the first year of operation were to secure the independence of the company's operations and maintain its financial stability, while at the same time creating a basis for future development and expansion.

The *results* of the company's first year of activity in regards to the above-mentioned goals and objectives are summarized as follows:

1. First-year profits satisfied the business plan objectives. The two major sources of revenue were:

- application development projects for Zentralsparkasse, (Z) and

- distribution of Oracle products in the Hungarian market.

It should be noted, however, that some additional revenue sources (not likely to be available in 1991) did also contribute to this result.

2. Reorganization within the company has created dynamic new teams which have adapted well to the company's new strategic directions and projects such as the Oracle-related commercial and technical support activities.

3. The company has established its presence and image in the Hungarian market. The organizational and administrative infrastructure of the company has been firmly established and is operationing effectively.

4. Considerable revisions and adjustments have been made to employees salary and compensation packages since the company's formation.

5. The working environment has been improved significantly. Examples include hardware and software tool purchases and office renovations.

There are, however, some issues which will be given additional attention in the near future:

- to define appropriate long term strategical goals for the company, especially in the areas of new fields of activity and product development possibilities.

- to establish internal work procedures which take into consideration the circumstances and needs of our customers. Staff training will be provided on this and other topics.

- to organize a well-disciplined system of internal administrative procedures.

Summary: 1990 was a year in which the organization of the company and its financial stability were satisfactorily established. These steps have provided a firm base for future development. In order to capitalize on our strengths and opportunities, improved work organization and management practises will be incorporated in the near future.

II. Technical activities of IQSOFT in 1990

The following are short summaries of the technical content of projects undertaken in 1990. References to Appendix 1 are given in parenthesis [ ].

1. Z projects

1.1 MPROLOG extensions

The extension of MProlog IBM MVS/TSO (host) version with PL/I extended external interface [30] and with interface towards DB/2 [1] [2] [3]. They have improved the usability of MProlog in the Z environment.

1.2 PROFI

Advisory system for house loan according to the laws of Lower Austria. It was written in ZEXPERT1 for both PC and IBM mainframe host. The project was suspended in July, 1990 in the pre-testing phase. It has not been introduced to Z.

1.3 ZEXPERT1

Expert system shell for Z environment developed by Z (Kurt Fritz) on the basis of MPROLOG. Its "industrial" test was the project PROFI. IQSOFT's task was to extend the system with a control component and to measure its efficiency. Based on the findings in the PROFI project, further development on ZEXPERT1 was halted. It was replaced by the decision to develop a redesigned version, ZEXPERT2.

1.4 ZEXPERT2

New expert system shell designed according to the requirements of Z on the basis of MPROLOG, the literature and the experiences of ZEXPERT1. This system should run on both IBM AT/386 and IBM MVS/TSO environment. This year a detailed concept [6] and a detailed system design [7] were produced and some preparatory steps of the implementation phase were completed. The first version of the system will be available in 1991.

1.5 Geldhandel

Information system for domestic money brokers in Z. It is designed to operate in a network of 6-8 IBM AT/386. Its implementation tool is ORACLE. This year the prototype of the system and a configuration proposal [32] were produced. The first version of the system is over 50% completed. It will be completed in 1991.

1.6 VORAN/ABS

Advisory system for "small" investors of Z. A project analysis [8] and a fine design [11] were produced. A prototype of a subsystem ("Vermögensplan") was almost completed in MProlog for IBM MVS/TSO environment. Further steps and the final implementation tool will be defined on the basis of the experiments with the prototype. The final goal is to run this system on an IBM-HOST an also on the PC.

1.7 Druckdatenbank

A program which builds a database from different vouchers for the customers, and makes them accessible and printable at any time in a unique format. The project began in the third quarter of 1990. A rough function and database description was produced using the ORACLE CASE design tool [23]. Surveying of the possible input vouchers has begun. The first version of the system will operate next year.

1.8 Mandanten und Kontonummern system

An account number system including the new software required by Z, which provides more flexibility than what they are currently using. The new savings banks joined to Z will also have access to the new software. The project began in the third quarter of 1990, several interviews were done with Z bank experts, and a rough concept was produced [10].

1.9 Manpower sale

Some IQSOFT employees took part in other Z's software development projects.

2. Oracle

2.1 Oracle distribution

The distribution agreement was signed in May. The first quarter of the year was the period of technical preparation including being familiar with the different ORACLE products. Later IQSOFT experts had to provide continuous user support. The hardware platforms of ORACLE installation in Hungary became wider and wider during the year. Beginning with the IBM PC single user version the network, OS/2, UNIX and VAX VMS versions were installed. IQSOFT had to establish an expert team for all these platforms. The first IBM and Siemens mainframe ORACLE product sales at the end of 1990 will generate such tasks rather in 1991. In the second half of 1990 distribution of ORACLE CASE products began which are one of the first such products on the Hungarian market. IQSOFT experts hold several courses on ORACLE, and a Hungarian ORACLE text-book [4] has been written and it will be published soon. Hungarian ORACLE User Group was organized and it holds monthly meetings in co-operation with Von Neumann Computer Society. More details on Oracle distribution can be found in the commercial part of this report (Chapter III).

2.2 Oracle applications

The first aim of these activities is to gain hands-on experience. An example of an Oracle application was one done for Siemens Austria. The first version of our internal information system for commercial purposes (IQKER) was also produced.

3. Artificial intelligence

3.1 General

IQSOFT was present in the Hungarian Artificial Intelligence "life" on different conferences and through publications [19] [20] [21] [22].

3.2 MProlog development

MProlog was improved first of all for Z and our internal purposes, although there were some MProlog sales which necessitated user support activities. An extended external interface and a UNIX beta test version were developed. Several other small improvements and correction were done, and this new MProlog 2.4 release was used by us in MS-DOS/386 and IBM MVS/TSO environment.

3.3 Paks

An integrated knowledge based system for water control of nuclear power plants. It is a joint project with the Technical University of Budapest (BME) Institute of Heat- and System Engineering. This year a conceptual system design [13] was produced. The plans to continue the project in 1991, but the exact conditions are not clear.

3.4 Uncertainty handling

Some studies were done in this area [12], feasibility of its adaptation into MProlog environment was examined. The project was dropped because of a lack of resources.

3.5 Intelligence Service Shell

A simple expert system shell form GSI (France) was examined to assess its possibilities for distribution in Hungary. It was exhibited on the spring Hungarian International fair. There was no considerable interest, mainly due to its pricing.

4. Research

4.1 Parallel implementation of logical programming languages

One of the IQSOFT experts took part in international research on this theme in the last three years at the University of Bristol [25] [26] [27] [28]. Returning to IQSOFT he continues this research [24] with strong co-operation with the so-called GIGALIPS project. This work was also supported by the Hungarian National Committee for Technical Development.

4.2 Frame based knowledge representation

Its implementation is in a advanced stage both in MProlog and ORACLE environments [5]. Some experimental applications were also completed [29] [31]. These works were also supported by the Hungarian National Committee for Technical Development.

4.3 Neural network

Research on different learning algorithms using neural networks [9] [14] [15] [16] [17] [18].

5. Others

5.1 Agrosys

An agricultural information system for small farms. It is the product of Siemens Austria. IQSOFT adapted it to the Hungarian language and exhibited it on the spring Hungarian International Fair. There was definite interest, further steps are under consideration.

5.2 ADA

Some improvements were done in the compiler first of all in the IBM VM/CMS version. Producing more optimal code was one of the main directions of the improvements.

III. Marketing and commercial activities

There were two main goals for IQSOFT's marketing activity in 1990:

I.
to develop IQSOFT's image and establish it in the Hungarian and international markets

II.
to support the commercial activity at home and abroad

ad.I.

A.)

As a newly-formed company in an industry with dozens of companies of similar size and activity, IQSOFT had to develop its image and find its role in the marketplace. In this regard, the following tasks had to be completed:

- choosing appropriate name, logo and colours,
- determine style of company papers and letterheads, and
- prepare a short introduction leaflet.

B.)

By taking part at the most important Hungarian computer exhibitions, several county presentations, a series of in-house presentations and completing some marketing activities IQSOFT has gathered recognition in, and considerable knowledge of the Hungarian market.

By the end of 1990 the image associated with the phrase "IQSOFT is the official distributor of the ORACLE products in Hungary" became very strong and assisted IQSOFT in achieving its goal: that being to be considered and recognized as a unique company with a strong presence in the Hungarian market.

ad.II.
To achieve IQSOFT's commercial goals:

A.)

The following agreements have been completed or finalized:

- distributorship agreement with ORACLE Corporation giving the rights to distribute ORACLE products in Hungary

- Frame Agreement with Zentralsparkasse, regulating the main rules of our cooperation

- development and distributorship agreement with Siemens for distributing Agrosys in Hungary

- trial distributorship agreement with GSI (France), enlarging our artificial intelligence related activity

- dealership and agent agreements with several Hungarian companies and bodies to enlarge the sales force of ORACLE distribution in Hungary.

B.)

IQSOFT has established the framework of its commercial activity by utilizing its foreign trade rights and by building up the commercial staff and activities in-house.

C.)

Various marketing activities performed:

- participation at two large computer exhibition - Budapest Spring Fair in May and Compfair in October with considerable success

- organization of 3 county seminars (Salgótarján, Debrecen, Szeged)

- introduction of "IQSOFT OPEN DAYS" 6 times with daily program and over 1000 participants

- occasional advertisements in Hungarian computing and economical newspapers, periodicals

- regular publications in Hungarian computing newspapers

- establishment and maintenance of the Hungarian ORACLE Users Group under the wing of the NJSzT (computer society), organization of 6 meetings

- preparing a short company description in English

- writing detailed Hungarian description of the whole ORACLE product range
- preparation of customers' and prospects' database and regular direct mail actions
- organization of reference visits abroad, training and incentive tours for the customers
- establishment of regular ORACLE training courses
- preparation of Hungarian ORACLE text book

ORACLE is playing a considerable role in IQSOFT's activities, therefore it is worthwhile to summarize the relevant activities and results:

1.) Milestones:

February 1989	-	ORACLE starts to open in Eastern Europe
September 1989	-	meeting of ORACLE and SzKI executives in Belmont (USA)
November 1989	-	seminar at Budapest Intercontinental organized by SzKI with over 600 participants
December 1989	-	starting of "trial" sales by IQSOFT the Professional version
May 1990	-	signature of the distributorship agreement between ORACORP - IQSOFT
August 1990	-	signature of the System House agreement between ORACORP - KFKI
February 1991	-	signature of the dealership agreement between IQSOFT - KFKI

2.) Sales results:

In 1990 IQSOFT revenues from Oracle sales were

Jan-May 1990 (before the contract was signed)	USD	53,077
Jun-Dec 1990	USD	213,164
Subtotal 1990	USD	266,241
Internal Use license bought	USD	35,000
Total in 1990	**USD**	**301,241**

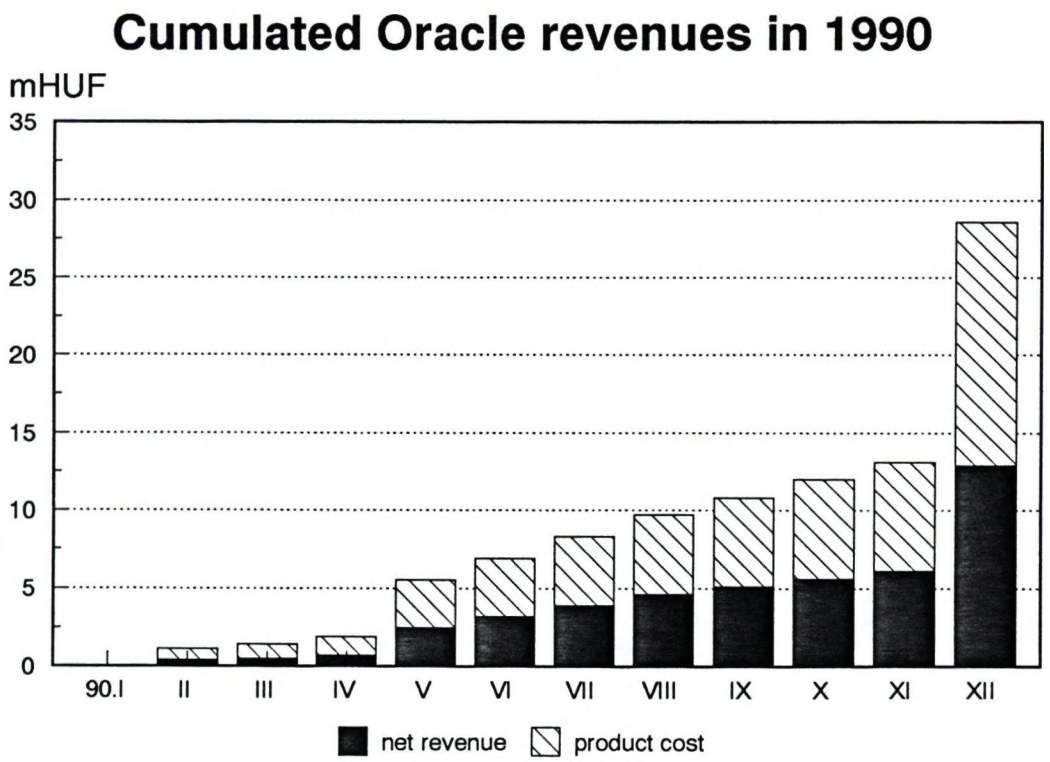


Figure III.1

A reference list of Oracle Customers is given in Appendix 2. Their distribution by industry segments is illustrated by Figure III.2.

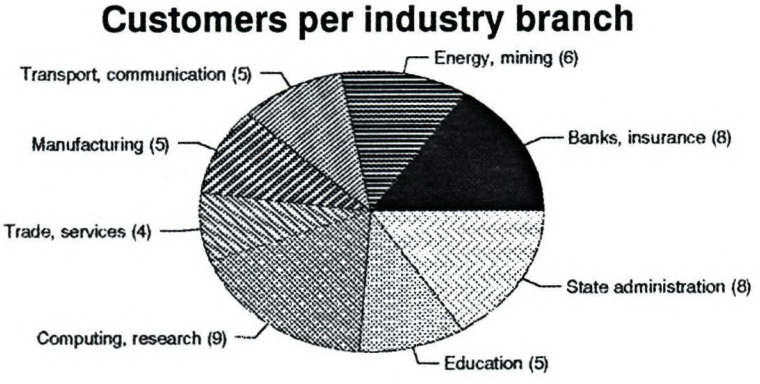


Figure III.2

In 1990 IQSOFT attained over 50 sales. Customers are classified by computer type in Figure III.3.

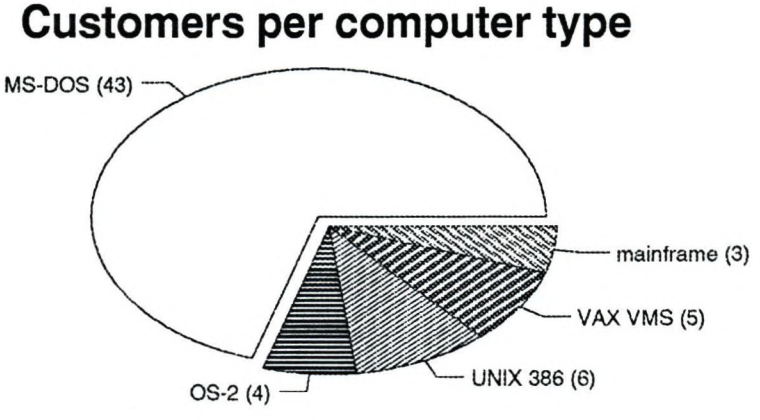


Figure III.3

IV. Financial results

A summary of the basic figures drawn from the 1990 balance sheet is given in the following table. Analyzing these figures (see Figure IV.1) and comparing them with the Business Plan prepared in January 1990, we can observe that

1. Both the revenues and expenses have increased by roughly the same amount (HUF 18 million), mainly due to the increased proportion of high-cost revenue sources, like Oracle distribution.

2. The two basic revenue sources (Z and Oracle) are covering about two-thirds of the net revenues.

3. The net revenue target was surpassed by 19%, although operating expenses increased in a similar fashion.

4. The structure of the operating expenses roughly corresponds to the plan. The proportion of personal income is unchanged at the 47-48% level, indicating that the increased income of the employees is covered by the increased net revenue level of the company.

5. The infrastructure component of the operating expenses shows a 30% increase, partly due to inflation and partly to the increased quality of the environment.

6. A considerable amount of hardware and software components have been purchased, which were not forecasted expenses of the Business Plan.

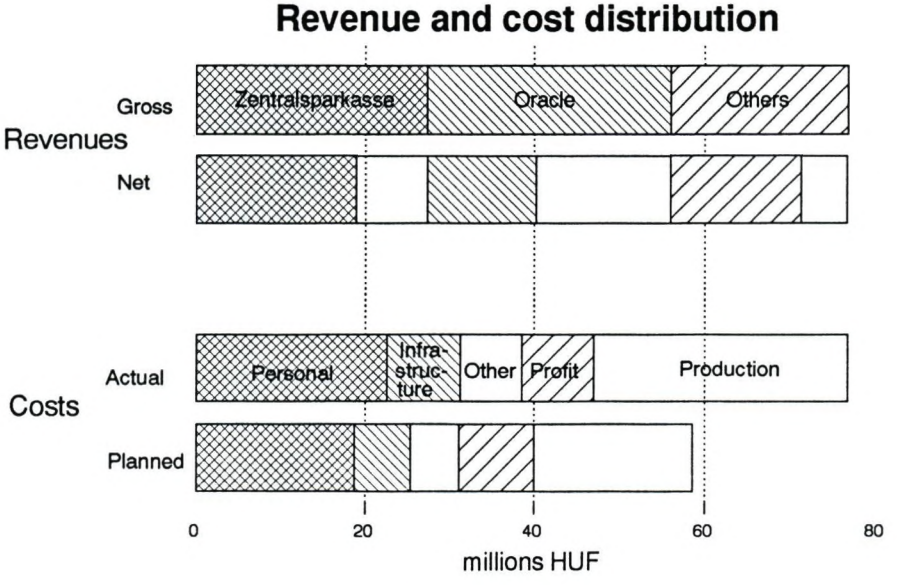


Figure IV.1

RESULTS FOR 1990

			net revenues				Business plan /Jan 1990/	
Revenues Z	27.3		18.9	40%				
Other export	3.0		2.3	5%				
Oracle	28.7		12.9	28%				
Others	17.7		12.8	27%				
		76.7	47.0			58.5	40.0	
Production costs		29.7				18.6		
travel	7.0							
Oracle products	15.8							
subcontractors	4.8							
Sipos	2.1							
Personal income		22.6		48%		18.7		47%
salary+bonus	11.9				10.9			
social security	5.2				4.7			
authors fees	3.4				2.0			
benefits	2.1				1.1			
Infrastructure		8.7		18%		6.7		17%
premises	3.2				3.0			
services	2.1				0.9			
publicity	1.5				1.6			
office	1.8				1.2			
Computing tools		5.4		11%		2.0		5%
hardware	1.4				1.8			
software	3.5							
materials	0.6				0.2			
Other expenses		1.8		4%		3.7		9%
TOTAL		68.1				49.6		
Profit		8.5		18%		8.9		22%

V. Working environment

1. Staff

The changes of IQSOFT staff during 1990 are shown in the table below (excluding the managing director):

	Technical	Commercial	Financial	Secretarial	Total
Jan. 1990	25	1	2	2	30
Dec. 1990	28	4	3	3	38

10 new colleagues joined IQSOFT this year, while nobody left for an other firm in 1990. There are 10 IQSOFT staff members on temporary leave of absence for reasons like childbirth (3), scholarship(3), accompanying spouse abroad (3) and guest professorship (1).

All the technical persons (except one) have diploma. The distribution of IQSOFT staff at the end of 1990 is shown on the Figure V.1.

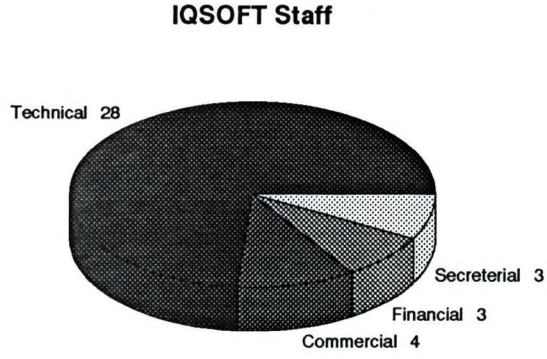


Figure V.1

The organizational structure is illustrated in Figure V.2.

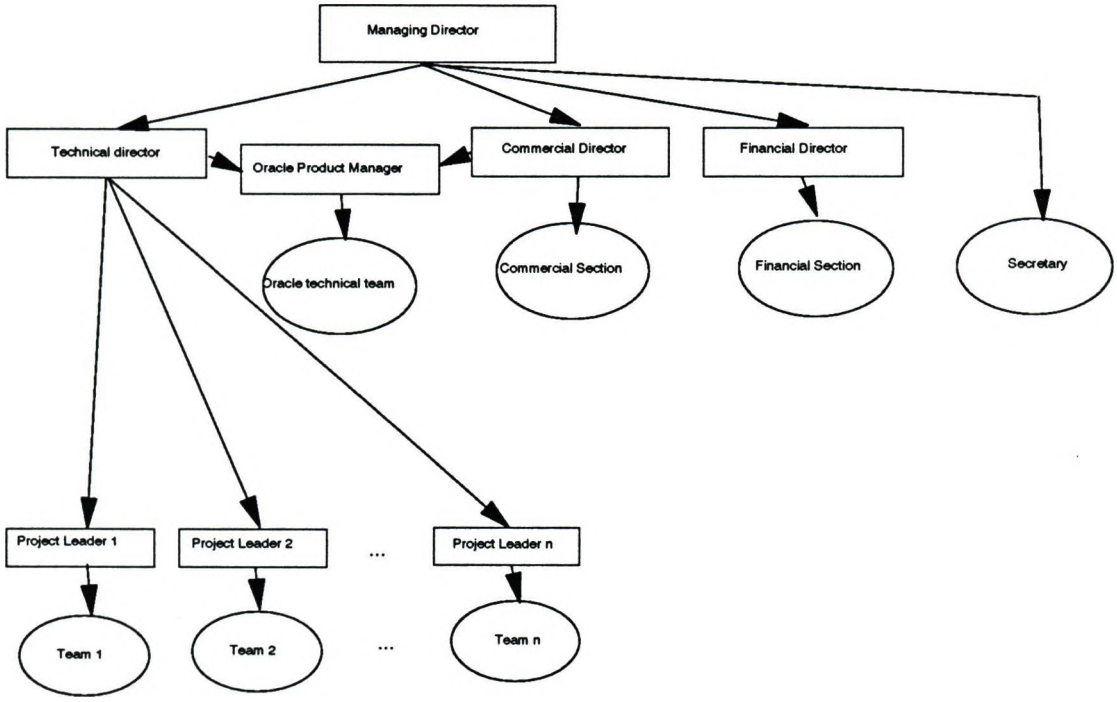


Figure V.2

2. Motivation

The average monthly salary at IQSOFT in December of 1990 was HUF 25.000. Together with other income sources, like bonuses, copyright fees and benefits (lunch, holiday, travelling support etc.) a net income of over 30 thousand forints was earned by the average IQSOFT employee. The share of these components in the gross income is represented on the Figure V.3.

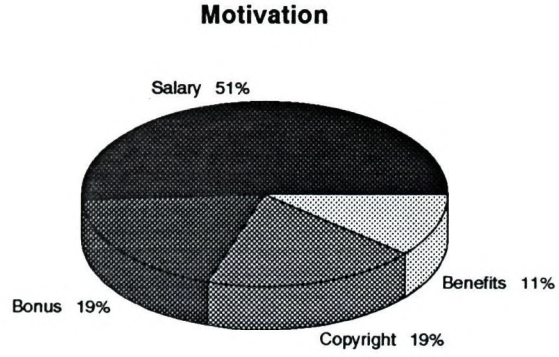


Figure V.3

3. Working conditions

IQSOFT is located in the building of SZKI. It has eight rooms and a space for computers. The total area is about 315 square meters. The rooms are fully utilized and the office lacks adequate meeting rooms. IQSOFT supports its employees having computers in their own home to make working at home possible.

SzKI gives the necessary amenities (library, restaurant, buffet, telephone, etc.). IQSOFT also rents other services from SzKI such as travel administration and postal services. IQSOFT has his own copy machine and fax.

On the secretariat there is a small meeting place for the IQSOFT employees where refreshments are available free of charge.

The technical work, especially the Z projects, requires a considerable amount of work in Vienna. In 1990 IQSOFT employees spent approximately 1000 man-days in Vienna. IQSOFT rents a four room flat with a computer in Vienna.

4. Hardware and software environment

IQSOFT's computer background consists of a Microvax II. with eight terminals and thirty PC's. Of these, 11 are obsolete XT type computers (due to put them out of use), 8 are AT/286 and 11 are AT/386 with 4 or 8 Megabyte main memory (see also Figure V.4). For detailed listing of IQSOFT PC-s see Table V.1. The items written with bold characters show the growth of 1990. The growth in CI (Computational Index) and hard disk capacity is illustrated on Figure V.5.

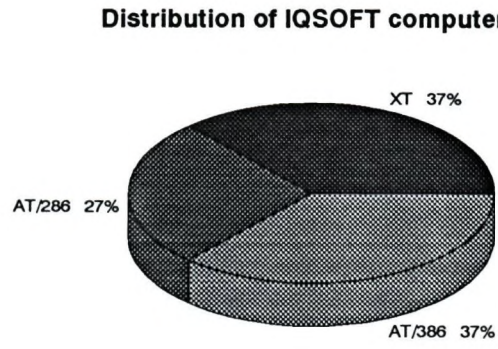


Figure V.4

Most of the PC-s are organized in a Novell network. The network was formed according to the requirements of both the development projects and the Oracle distribution work of IQSOFT. The file server contains the total software "gold mine" of IQSOFT. Its flexibility serves a wide possibility of computer resource allocations as well as communications between employees and within projects. The network, together with a streamer, makes a regular and central saving mechanism possible, thereby improving software development security.

In 1990 IQSOFT bought an SCO Open Desk Top (UNIX) environment for AT/386 PC with two work-places. This environment is used for research projects and as an ORACLE test environment.

Contact with IQSOFT's inland and foreign partners is supported by E-mail connection, which is the part of the ELLA system installed also in 1990 in IQSOFT. Other possibilities are access to Mini-tex and Telebox services.

The Xerox Ventura Publisher (Desk Top Publishing software) and a new laser printer (HP Laser Jet IIP with postscript option) will assist greatly in giving IQSOFT documents a professional appearance.

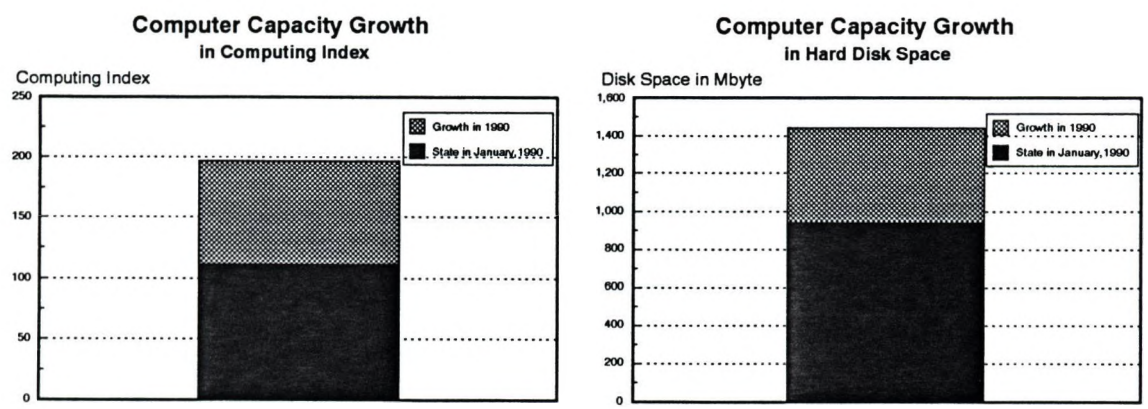


Figure V.5

IQSOFT computers

(State of December 31, 1990)

No.	Room	Type	Os	Proc.	Mon.	Eth.	Mem.	W	MHz.	CI
01	328	P16	3.2	088	CGA	1221	704	20	4.7	1
02	231	P16	3.2	088	CGA	-	704	20	4.7	1
03	332	P16	3.2	088	CGA	-	704	20	4.7	1
04	328	P16	3.2	088	CGA	-	704	20	4.7	1
05		P16	3.2	088	CGA	-	704	20	4.7	1
07	328a	P16	3.2	088	CGA	-	704	20	4.7	1
08	328	P16	3.2	088	CGA	-	704	10	4.7	1
09	321	P16		088			704		4.7	1
12		Sie					900	-		2
13	329	Acer	3.3	386	EGA	Lant.	640+2304	40	16	11.6
15	330	Acer	3.3	386	EGA	Lant.	640+2304	40	16	11.6
17	331	P16CA	3.3	286	CGA	3C2012	640+3072	32	10	6.7
18	331	P16CA	3.3	286	CGA	NE1000	640+3072	32	10	6.7
19		P16	3.2	088					4.7	1
20	332	IBMAT	3.3	286	CGA	1221	640+2944	21	8	4.4
22	332	PS260	3.3	286	VGA	WD -	640+384	115+90	10	6.7
21	231	P16	3.2	088	CGA	3C1221	640	20	4.7	1
23	329	PS280	3.3	386	VGA	-	640+2432	70+70	16	11.6
30	**231**	**P132**	**Nov.**	**386**	**f/f**	**EthB16**	**640+3072**	**80+80**	**20**	**10.5**
31	**331**	**P132**	**Os2**	**386**	**VGA**	**NE1000**	**640+7166**	**80**	**20**	**10.5**
32	330	P132	Unx	386	VGA	-	640+7168	80+80	20	15.3
33	329	P132T	3.3	386	EGA	EthB16	640+3072	60	20	12.4
34	330	P132T	3.3	386	EGA	EthB16	640+3072	60	20	12.4
35	**331**	**P132**	**3.3**	**386**	**EGA**	**NE1000**	**640+3072**	**65**	**20**	**10.5**
36	**332**	**P132**	**3.3**	**386**	**EGA**	**1221**	**640+3072**	**40(klt)**	**20**	**10.5**
37	**Rad**	**Sky**	**3.3**	**386SX**	**EGA**	**-**	**1024+2048**	**40**	**20**	**11.8**
38		**GEA**	**3.3**	**286**	**VGA**	**1221**	**1024**	**40**	**20**	**7.9**
39		**GEA**	**3.3**	**286**	**EGA**	**1221**	**1024**	**40**	**20**	**7.9**
40	**328a**	**GEA**	**3.3**	**286**	**VGA**	**-**	**1024**	**40**	**20**	**7.9**
41		**GEA**	**3.3**	**286**	**VGA**	**-**	**1024**	**40**	**20**	**7.9**

Table V.1

Appendix 1

Documents and publications prepared in 1990

[1] K. Balogh:
SQL Interface for MProlog Reference - Release 2.4 - May 1990

[2] K. Balogh:
SQL Interface for MProlog DB2 Release 2 Version 2 (IBM MVS/TSO) Specific Details - Release 2.4 - September 1990

[3] K. Balogh:
Optimized Execution of SQL Statements - (Internal paper)

[4] K. Balogh, P. Ecsedi-Tóth, Gy. Ujfalussyné Nagy, P. A. Wágner:
ORACLE (Introduction to the ORACLE DBMS) (in Hungarian) - Textbook to be published.

[5] P. Ecsedi-Tóth, Gy. Ujfalussyné Nagy, P. A. Wágner:
FAIR*ORA: A knowledge-based application generator in ORACLE - Presented at European ORACLE User's Group Conference, Madrid, April 1990

[6] Zs. Farkas, G. Umann, G. Gerlei:
Detailed concept of ZEXPERT2 - September 1990

[7] Zs. Farkas, G. Gerlei, K. Molnár, G. Umann:
Design of ZEXPERT2 - 15 December 1990

[8] M. Hargitai, G. Rédey:
Projectvorschlag "Voran-Neu" - Diskussionpapier - 19 September 1990

[9] M. Horváth (BME), J. Rácz, T. Klotz, Cs. Csáki (BME):
On the Applicability of Competitive Learning in Part Classification - CIRP Budapest

[10] V. Kiss, A. Galai:
Mandantenfahigkeit und Erweiterung der Z-Kontonummernsystematik (Grob Konzept) - December 1990

[11] Cs. Mec:
Vermögensplan - Programm-Analyse (Fine Design) - 19 December 1990

[12] Molnár K.:
Modelling of Uncertainty in Artificial Intelligence (in Hungarian) - Infomáció Elektronika 1990/1-2 pp. 32-45.

[13] J. Ösz (BME), Gy. Lipovszki (BME), E. Sántáné-Tóth, G. Rédey:
Expert System for the Secondary Water Cycle of a VVER-440 Nuclear Power Plant - Conceptional System Design (in Hungarian) - 15 April 1990

[14] J. Rácz, T. Klotz:
Pattern recognition with a multilayered neural network trained by Dynamic Competitive Learning - INNC 1990, Paris

[15] J. Rácz, T. Klotz:
Knowledge representation in DCL - send to SPIE conference, Orlando

[16] J. Rácz, T. Klotz:
Dynamic Competitive Learning - CIRP Budapest

[17] J. Rácz:
Special Properties of DCL - send to Second AID conference in Hungary

[18] J. Rácz:
Learning without Teacher (in Hungarian) - To appear in the book "Pléh. Cs.: A megismerés tudomány egy új útja".

[19] E. Sántáné-Tóth:
Artificial Intelligence (AI) tools and applications in Hungary 1990 - draft - 3 October 1990

[20] E. Sántáné-Tóth:
Methodology of Knowledge-Based-System building (in Hungarian) - Infomáció Elektronika 1990/1-2 pp.77-96.

[21] E. Sántáné-Tóth:
Artificial Intelligence in Engineering (in Hungarian) - To appear of Proceedings of the Conference of GTE. September 1990

[22] E. Sántáné-Tóth:
Artificial Intelligence in Medical Practice (in Hungarian) - To appear in periodical "Természet Világa".

[23] K. Soós, A. Galai:
Grobfunction und Datenbankbeschreibung des Druckdatenbank-Systems - December 1990

[24] P. Szeredi:
Design and Implementation of Prolog Language Extensions for Or-parallel System - November 1990

[25] A. Beaumont (Univ. Bristol), S.M. Raman (Univ. Bristol), P. Szeredi:
Scheduling Or-parallelism in Aurora with the Bristol Scheduler - University of Bristol, Computer Science Department - March 1990

[26] P. Szeredi, Mats Carlsson (Swedish Institute of CS):
The Engine-Scheduler Interface in the Aurora Or-Parallel Prolog System - University of Bristol, Computer Science Department - April 1990

[27] A. Beaumont (Univ. Bristol), S. M. Raman (Univ. Bristol), V. S. Costa (Univ. Bristol), P. Szeredi, D. H. D. Warren (Univ. Bristol), R. Yang (Univ. Bristol):
Andorra-I: An Implementation of the Basic Andorra Model - University of Bristol, Computer Science Department - September 1990

[28] P. Szeredi:
Using Dynamic Predicates in Aurora - a Case Study - University of Bristol, Computer Science Department - November 1990

[29] K. Tarnay (KFKI), S. Wágner-Dibuz (KFKI), P. A. Wágner:
A Knowledge-Based Approach to Communication Protocol Engineering - Proc of FIT'90. Salzburg, 26-29 September 1990

[30] G. Umann:
Extended External Interface for MProlog - PL/I interface on IBM under MVS/TSO

[31] S. Wágnerné Dibuz (KFKI), P. A. Wágner:
An Object Oriented Method for Protocol Modelling (in Hungarian) - Infomáció Elektronika 1990/1-2 pp. 118-133.

[32] T. Klotz:
Konfigurations Vorschlag für Miss Finance - June 1990

Appendix 2

Reference List of Hungarian Oracle Customers

1.	**BKV Számítástechnikai Fôosztály** 1980 Budapest, Akácfa u. 15.	PC, MS-DOS; DEC VAX, VMS; Siemens 7536 BS2000
2.	**OT Informatikai és Módszertani Intézet** 1149 Budapest, Angol u. 27.	PC, MS-DOS
3.	**Transelektro** 1051 Budapest, Münnich F. u. 13.	PC, MS-DOS
4.	**Vízgazdálkodási Tudományos Kutató Intézet** 1091 Budapest, Kvassay J. út 1.	PC, MS-DOS
5.	**OLAJTERV** 1117 Budapest, Schönherz Z. u. 16.	PC, MS-DOS; UNIX 386
6.	**DUNAFERR Dunai Vasmû** 2401 Dunaújváros, Pf. 110.	PC, MS-DOS
7.	**OTP Számítástechnikai Rendsz. Fôosztály** 1101 Budapest, Pongrácz u. 21.	PC, MS-DOS
8.	**IBUSZ Idegenforgalmi, Utazási és Szállítási RT** 1074 Budapest, Dob u. 1.	PC, MS-DOS
9.	**M&M Szoftverház Kft.** 4028 Debrecen, Simonyi u. 14.	PC, MS-DOS
10.	**Középdunántúli Gázszolgáltató Vállalat** 8800 Nagykanizsa, Zrínyi u. 32.	PC, MS-DOS
11.	**SzKFI Geofizikai Fôosztály** 2443 Százhalombatta, Pf. 32.	PC, MS-DOS
12.	**SzÜV Számítástechnikai Ügyviteli Szervezô Vállalat** 1145 Budapest, Szugló u. 14.	PC, MS-DOS
13.	**Postabank és Takarékpénztár RT** 1920 Budapest, József Nádor tér 1.	PC, MS-DOS; DG AV/4100
14.	**INTERFLEX Kisszövetkezet** 1062 Budapest, Székely Bertalan u. 27.	PC, MS-DOS

15. MEGAMICRO Kisszövetkezet	
1145 Budapest, Lumumba u. 127/b.	PC, MS-DOS; DEC VAX, VMS
16. Magyar Távközlési Vállalat Távközlési Központ	
1471 Budapest, Távíró u. 3-5.	PC, MS-DOS; OS/2
17. Magyar Távközlési Vállalat Informatikai Központ	
1471 Budapest, Távíró u. 3-5.	PC, MS-DOS
18. KSH Számítástechnikai és Ügyvitelszervezési Vállalat	
5601 Békéscsaba, Kinizsi u. 4-6.	PC, MS-DOS
19. ROLITRON Bioelektronika RT	
1023 Budapest, Felhévízi u. 3-5.	PC, MS-DOS
20. Csepel Mûvek Számítástechnikai Vállalat	
1751 Budapest, Pf. 65.	PC, MS-DOS
21. Fejér megyei Gabonaforgalmi és Malomipari Vállalat	
8001 Székesfehérvár, Pf. 16.	PC, MS-DOS; DEC VAX, VMS
22. Gödöllôi Agrártudományi Egyetem Gazd. Kar	
2001 Gödöllô, Péter Károly u. 1.	PC, MS-DOS; OS/2
23. INTERFLEX - INVESTBANK	
1062 Budapest, Székely B. u. 27.	OS/2
24. PSzTI Pénzügyi Számítástechnikai Intézet	
1023 Budapest, Lajos u. 17-20.	PC, MS-DOS
25. PM Állami Bankfelügyelet	
1920 Budapest, József Nádor tér 2-4.	PC, MS-DOS
26. MHB Magyar Hitel Bank RT	
1033 Budapest, Pozsonyi út 77-79.	PC, MS-DOS
27. IKARUS Budapesti Gyára	
1165 Budapest, Margit u. 2.	PC, MS-DOS
28. Ipari Fejlesztési Bank RT	
1054 Budapest, Rosenberg hp. u. 25.	PC, MS-DOS; UNIX 386
29. Joint Co.	
1073 Budapest, Erzsébet krt. 48.	PC, MS-DOS
30. MHB Számítástechnikai Fôosztály	
1054 Budapest, Hold u. 16.	PC, MS-DOS

31. Geofizikai Kutató Intézet
1068 Budapest, Gorkij fasor 42. PC, MS-DOS

32. PMIMI PM Informatikai és Módszertani Intézet
1051 Budapest, Roosevelt tér 7-8. PC, MS-DOS

33. Alföld Élelmiszer és Vegyipari Nagykereskedelmi Vállalat
4002 Debrecen, Pf. II. 48. UNIX 386

34. Nagyalföldi Kôolaj és Földgáztermelô Vállalat
5001 Szolnok, Pf. 86. PC, MS-DOS; OS/2; IBM-4361-4 VM

35. TRAFCOMP Kft.
1199 Budapest, Mészáros L. u. 99. PC, MS-DOS

36. Geometria Kisszövetkezet
1064 Budapest, Rózsa F. u. 91. PC, MS-DOS

37. BME Közlekedési és Szervezési Intézet
1111 Budapest, Bertalan Lajos u. 2. PC, MS-DOS; UNIX 386

38. Állami Fejlesztési Intézet Számítástechnikai Fôosztály
1052 Budapest, Deák F. u. 5. PC, MS-DOS

39. Debreceni Távközlési Vállalat
4047 Debrecen, Bethlen út 1. PC, MS-DOS

40. ARECO Informatikai Kft. - PAV
1325 Budapest, Pf. 168. UNIX 386

41. GEOVIEW SYSTEM BT
1132 Budapest, Victor Hugo u. 32. PC, MS-DOS

42. ALUTERV
1136 Budapest, Pozsonyi út 56. DEC VAX, VMS

43. JATE Számítástechnikai és Alkalmazási Tanszék
6720 Szeged, Árpád tér 2. PC, MS-DOS

44. JATE Számítástechnikai Tanszék
6720 Szeged, Aradi vértanúk tere 1. PC, MS-DOS

45. KLTE Számolóközpont
4032 Debrecen, Egyetem tér 1. PC, MS-DOS

46. KSH Számítóközpont
1024 Budapest, Buday L. u. 1-3. UNIX 386

47. MHB Nemzetközi Igazgatóság 1133 Budapest, Pozsonyi út 77-79.	PC, MS-DOS
48. STRUKTURA Datacenter Kft. 1137 Budapest, Radnóti u. 2.	tanfolyam, karbantartás
49. MEGAMICRO (MH Térképészeti Anyagellátó) 1443 Budapest, Pf. 254.	PC, MS-DOS
50. APEH - Adó és Pénzügyi Ellenőrzési Hivatal 1054 Budapest, Széchényi u. 2.	DEC VAX, VMS

SZKI INTELLIGENT SOFTWARE Co.

ANNUAL REPORT 1991

May 1992

CONTENTS

Appendixes

Remarks

1. As this Annual Report 1991 was completed in May 1992, some aspects of the status of the company (staff, resources etc.) are described according to the present situation.

2. An on-line version of this Annual Report has also been prepared, using the IBM OS/2 Information Presentation Facility.

I. INTRODUCTION

1. OBJECTIVES

When IQSOFT commenced operations in early 1990 the main scope of interest centered around Artificial Intelligence and Data Bases. Also at that time the company's main strategic directions were defined as follows:

- Development of intelligent computer applications,
- MProlog based tool development, mainly to support internal development activities,
- Research projects to support the preparation of the future activities,
- Imported software distribution.

The primary objectives or priorities in the first year of operation (i.e. 1990) were to secure the independence of the company's operations and maintain its financial stability, while at the same time creating a basis for future development and expansion.

2. 1991 RESULTS

Much of this has been achieved in 1990. The main tasks of the year 1991, however, have still appeared to be similar to those of 1990. While maintaining a revenue and profit level satisfying the business plan objectives, internal processes started in 1990 have continued in areas like

- Creating and stabilizing teams for the main strategic directions,

- Establishing the company's presence and image in the Hungarian market,

- Providing a suitable working environment both in terms of physical conditions (office building and hardware-software tools) and the employees salary and compensations.

The two major revenue sources in 1991 (as in 1990) were

- Application development projects for Bank Austria (former Zentralsparkasse) and

- Distribution of Oracle products in the Hungarian market.

Extending the business activities beyond the present two main areas (Bank Austria and Oracle) is absolutely necessary for maintaining the stability of the company. Development of new directions will require a considerable expansion both in terms of activities and resources.

3. NEW DIRECTIONS

Besides maintaining the stability of the company, the main result of the year 1991 was to identify the new directions and to provide the preconditions for such an expansion, both in terms of the experience of the staff and market connections of the company. The new directions can be seen as more or less direct continuations of present activities. In the following a summary of the four new directions will be given:

ORACLE Applications

Many Hungarian Oracle customers are interested in purchasing not only software tools but complete solutions. Therefore application development projects, sometimes combined with some system integration activities can be expected. This application development is understood on the basis of well defined system design and implementation methodologies and their supporting CASE tools.

Banking Software

Banking software experience gained in Bank Austria projects should be utilized in the Hungarian market. This involves productization of the results of some development projects performed

for Bank Austria (e.g. ZEXPERT). Distribution (and technical support) of some banking software products in the Hungarian market might also be considered (potential partner ACTIS, Germany).

Archive Systems

Document handling systems based on imaging techniques represent a rapidly growing domain of computer applications all over the world, and will arrive in the Hungarian market very soon. Both technical know-how and customer base gained in connection with Oracle activities might be very useful here.

Commercial and technical cooperation partners:

TechKNOWLOGY (USA)
Hypermedia Systems (Hungary)

User Interface

User Interfaces are becoming more and more important components of modern information systems. Their development, especially in sophisticated software environments like OS/2, requires special knowledge and experience, thereby providing a good consulting opportunity to a specialized group of experts. Bank Austria development plans may also underline the importance of this directi.

4. SUMMARY:

In the year 1991 the company continued to maintain its organizational and financial stability in a satisfactory level and provided a good starting point for further development. Possible new directions for this development have been identified and basic conditions provided to start new activities. As a result, IQSOFT at present is a well established, flourishing company, having gained a good position in its specific market areas. Realization of the expansion plans outlined above would significantly improve both the market position and the stability of the company.

II. The Company

Full name:	SZKI Intelligent Software Computing Development, Manufacturing and Trading Co. Ltd.
Registration number:	041344
Short name:	IQSOFT (SZKI Intelligent Software Co. Ltd.)
Registered capital:	HUF 23.860.000

Shareholders:	Computer Research and Innovation Center (SZKI):	54%
	Z-Länderbank Bank Austria AG :	25%
	General Venture Bank (ÁVB):	10%
	private persons (employees) voting:	7%
	private persons (employees) non voting	4%

Board of Directors:	Chairman:	György HALMOS	(SZKI)
	Members:	Bálint DÖMÖLKI	(IQSOFT)
		Günter ERNST	(Bank Austria)
		Zsuzsanna FARKAS	(IQSOFT)
		Gizella VERES	(ÁVB)
Supervisory Board:	Chairman:	Zsolt NÁRAY	(SZKI)
	Members:	Lajos CSÁNKY	(SZKI)
		Franz GILY	(Bank Austria)
		Endre NAGY	(AVB)
Auditor:		Károly SZÜCS	(Consultatio Gmbh)
Management:	General:	Bálint DÖMÖLKI	
	Technical:	Tamás LANGER	
	Commercial:	Júlia SIPKA	
	Financial:	Gábor BIENER	

Address:	Budapest, Iskola u. 10. H-1011
Phone:	(36-1) 201-6764
Fax:	(36-1) 201-7125
Telex:	22-5381
E-Mail:	h1053int@ella.uucp
Bank account:	Budapest Bank 208-18926 AVB 206-12490 EKB 219-93569, 100149/0001

III. Technical activities of IQSOFT in 1991

The following are short summaries of the technical content of projects undertaken in 1991. references to Appendix 1 are given in parenthesis [].

1. Bank Austria projects

1.1 ZEXPERT

An expert system shell designed according to the requirements of Bank Austria on the basis of MProlog [1][8][9][10][11][12]. The ß-test version of the system under MS-DOS has been completed and was successfully demonstrated in Bank Austria. Comprehensive testing and its trying in applications are under way. The final host environment for ZEXPERT is OS/2. Therefore porting of MProlog under OS/2 has been done. The task in 1992 are to adapt and tune ZEXPERT to OS/2 and to produce real applications with it.

1.2 Geldhandelsprogram

Information system for domestic money brokers in Bank Austria. The implementation in ORACLE was finished after a long iterating period when newer user demands had been satisfied [16][17][18][19]. The environment was changed from DOS/Novell network to OS/2 LAN. Introduction of the system with continuous IQSOFT support is the task of 1992.

1.3 Druckdatenbank

The original aim of this project was a program which builds a database from different vouchers for the customers and makes them accessible and printable at any time in a unique format. A rough concept[37] and a detailed informatic design[38] were produced. Then the general aim was canceled by Z, because of the fusion with Länderbank. A restricted task was set including only the production of a statement of accounts with their vouchers at the same time, and thus the manual sort of vouchers will be superfluous. Detailed informatic[39] and programming design[36] have been produced. Programming is the task of the year 1992.

1.4 Dauerauftrag (Neu)

A new "Daueauftrag" system, which realizes the functions of the recently used system and other new functions, gives the possibility of the shorter updating terms and enlarges the flexibility of performance date and period. The project began in the second quarter of 1991. Several interviews were done with Z experts and a study was produced [27]. The project can be continued in the new Bank Austria's environment, too if it is necessary.

1.5 ABS

Advisory system for "private" investors of Bank Austria. A subsystem ("Vermögensplan")[21] has been completed under IBM MVS/TSO in MProlog and introduced into some branches with success. Some modification was done according to the users' feedback. Porting to PC is under way. Design of the next subsystem (leasing) began. In 1992 this and other subsystems are to be designed, implemented and introduced.

1.6 OS/2 in Bank Austria

In 1991 Z made the strategical decision that in the longer run OS/2 will be the working environment in branches. IQSOFT experts took part in the elaboration of the strategy [20][13]. IQSOFT also made a prototype of the OS/2-based transaction system as its suggestion for the user interface of such systems. In 1992 IQSOFT hopefully will take part in the OS/2 based development projects of Bank Austria.

1.7 Participation in other Bank Austria projects

Some IQSOFT employees took part in other software development projects at Bank Austria (e.g. central customer data base, general ledger, user authorization).

2. ORACLE

The main task of the Database Group was to support the ORACLE RDBMS and its different tools on different platforms (like MS-DOS, UNIX, VMS, IBM MVS, BS2000, etc.). Apart from this general activity they work in the following directions.

a. On behalf of ORACLE company they started to work on the Hungarian national version of the RDBMS. The most frequently used texts (error messages, prompt, menues, etc.) had been translated, and after proof-reading we sent them to ORACLE Europe. The following components have already been completed: RDBMS Kernel V6.0.34, SQL*Forms V3.0.16, SQL*Menu V5.0.11, SQL*Loader V1.1.7. The official support for the Hungarian language starts from RDBMS V6.0.34, which provides the usage of the Hungarian conventions -national character set, date, currency, etc.-, and it will be followed by different nationalized components.

b. IQSOFT investigated RDBMS from a performance point of view. A simple benchmark was set up for a raw comparison of ORACLE implementations on different platforms. We made test runs in different available environments (Novell, RS6000, AT&T, Sequent). We also tried to describe the behaviour of query optimizer, and to find ways (with a given data distribution) to optimize SQL statement.

c. IQSOFT began to produce some tools written in ORACLE which helps to support the different activities. One of these is an application which stores all the parameters of the customers, installations (product versions, licence dates, etc.) and provides different access paths to the relevant installation information. Another one provides quick price calculation according to the international price list and storing all this data in a database. IQSOFT also made some experiments with the new tools, which are not in use in Hungary now, but would probably be important in the future. (ORACLE*Card). [34]

As the main activity of the Database Group the professional support service has been established, backed by ORACLE Customer Support staff, located in Belmont California and the United Kingdom. IQSOFT prepared itself for the support of the total ORACLE application lifecycle and has a considerable application experience and support infrastructure. We have 10 people totally devoted to ORACLE support. This gives unique position to IQSOFT on the Hungarian market.

For the orientation phase of a project we help our customers by preparing feasibility studies, making benchmarks, organizing reference visits to help them to establish their decision (HW/SW). When the real system design begins, we can help them in different details: we have experiences with different methodologies (CASE*Method, SSADM) and have good practie in using CASE*Tools, and the ORACLE Tools. This knowledge combined with a relational data design experience aids us to tune their design best fitted to ORACLE possibilities. In the next phase we install the system which they ordered, and organize training courses. During the implementation and the maintenance phase we help them through our hotline service, which is available through phone, fax, and E-mail. For extra fees we are ready to support special needs: support of a customer specified character set, support for special devices (not supported by ORACLE) or tuning.

Normally we connect with our customers through our hotline service. It is callable in every working day (8-16) at the number 201-6452. It is also accessable through fax 201-7125. We are also in the Hungarian E-mail net (UUCP), where we get messages through ORACLE HOTLINE. All the calls, which we get, are inserted immediatly into Call Tracking System, which follows the status of every problem. When the problem is solved, the expert who is dealing with it closes it in the Tracking System. We have direct modem connection with some of our customers, to investigate the problem on site. In the future, we want to extend these type of services.

If we can't solve the problem to the best of our

knowledge, we are in connection (phone, E-mail) with ORACLE WorldWide Support (OWWS) to help us solving the problem. They have a Country Manager for Hungary to supervise all the activities. For getting help, we should open a TAR (Technical Assistant Request) which is an entry in the support database. As soon as possible (according to the priority given) an OWWS expert is assigned to the problem, and records all of his/her advice in the support database. We can query this database to know, how our problem is solved. Normally we use this facility through E-mail.

Another support facility we have is the BugDatabase (all the bugs found in the different ORACLE products) running in-house, which allow to check everything in this big pool of information, which is important for our customer. It helps quickly distinguish the real bugs from the misuse of a product.

Finally, IQSOFT is on a lot of different ORACLE mailing lists (E-mail, normal mail) and we get every information to be updated on every product, patches, versioning problems.

3. Applications

3.1 *TRIGINF*

An information system for TRIGON supporting production of medicine Interferon[45]. TRIGON is a small Hungarian pharmaceutical factory. The system was implemented in ORACLE. Currently the last refinements are in progress with continuous testing together with the user. In 1992 new modules covering other activities of TRIGON will be developed.

3.2 *EXPO*

Small management record system implemented in ORACLE.

3.3 *OEKB*

Participation in a project of Siemens Austria for Österreichische Kontroll Bank in Oracle

4. Archive systems

As an official distributor of ORACLE products and as a developer of application systems, IQSOFT has acquired considerable experience concerning large-scale data management.

We noticed that many of the difficulties suffered by our partners come from the preparation of data, since a large part of information does not generally appear in digital form, but on paper, statements, sheets, etc.

Likewise, some of the major institutions find it problematic to archive their sizable volume of paper based documents. The electronic archiving systems offer new technological and organizational solutions to process this enormous amount of information.

Products, distributed by IQSOFT, include a high-performance system of a US vendor (TechKNOWLOGY) and a flexible system developed in WINDOWS enviroment by Hypermedia Systems Ltd., Hungary.

5. System Integration

IQSOFT also made the first steps toward this quite complex activity area: i.e. to serve the customer fully including hardware, system software, application software, support and maintenance. This activity supposes good connection with different hardware and software manufacturers and distributors.

In 1991 IQSOFT delivered two complete systems. One for TRIGON which includes an AT/386 configuration with three terminals, SCO UNIX operating system, ORACLE for UNIX and the TRIGINF system (mentioned above). The second one was an archive system for ERBE. This system consists of an DELL AT/386 computer with scanner, printer, optical drive and the Archiware software including a longer maintenance contract.

6. RESEARCH

6.1 Parallel Prolog

IQSOFT has continued to work in the development and application of parallel logic programming languages within the Gigalips project in cooperation with the Argonne National Laboratory (USA), University of Bristol (UK) and SICS (Swedish Institute of Computer Science). IQSOFT has participated in the further development of the Aurora or-parallel system. This included important improvements in the handling of pruning operators and integrating graphic tracing facilities [6][40][41][42][43]. IQSOFT has continued the work on applications and language extensions of Aurora, in the area of synchronization tools and optimization algorithms. We have ported an interesting biological application of Prolog, the E. coli genetical database query program, to Aurora.

6.2 Neural Network

Some research and publicitions were done in the neural network area, mainly about learning algorithms. [23][24][25]

7. OTHER

7.1 ADA

Some completion work of the Hungarian Ada compiler remained for the first months of 1991.

7.2 ITPA

IQSOFT has produced a preliminary study [35] on requirements for basic data and services of an (ORACLE-based) integrated information system which supports everyday work at ITPA (Hungarian Investment and Trade Promotion Agency - Ministry of International Economic Relations). The study - based on the material of interviews - summarized the main activities of ITPA, the connections of elementary activities and basic information needed by them. This connection may result our participation in the development of the integrated ITPA information system.

7.3 MÜKKI

A feasibility study was produced on a project concerning updating of pharmaceutical production management by means of developing quality assurance activities [43].

7.4 Artifical Intelligence

IQSOFT was present in the Hungarian and international Artifical Intelligence life with some MProlog sales and some publications [7][14][28][29][30][31][32][33] (not mentioning again the ZEXPERT and the parallel Prolog research). IQSOFT persons also took part in the design of a knowledge based system for secondary water chemistry network of Paks Nuclear Power Plants [22].

IV. Marketing and commercial activities

The marketing strategy of IQSOFT serves the goal to attain a wider market presence. Our objective is to get a better understanding of the demands and expectations of the market and the customers. IQSOFT today has a detailed knowledge about the size and the nature of the market and the customers' profile. Being aware of these, IQSOFT will increase its market presence to introduce its products and services to the potential customers.

We perform a very thorough marketing activity and expect to arrive at a solid market position as a result. Our participation at exhibitions and product displays as well as organising seminars to present our products are all important ways to discover sales opportunities. In 1991 we performed the following main marketing actions:

1. Exhibitions:

We took part with great success in the most important computer exhibitions, i.e.

IFABO, EurOpen, Compfair

and also in several local country exhibitions mainly together with hardware vendors.

2. Presentations

Organised several seminars and demonstrations for a chosen topic or for a group of clients (Water Management, Hungarian Telecom, Saving Bank, Post Bank, Employment Office, National Health Care, Environment Offices, etc.). To introduce IQSOFT to the market, as a supplier of archiving, document handling systems, we organised an introductory seminar in May, followed by a series of seminars in December.

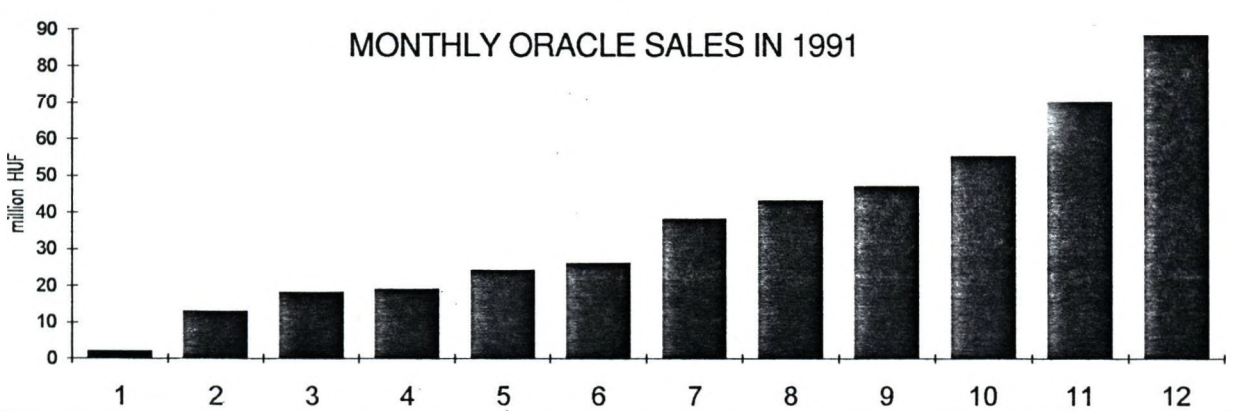
3. Publications, leaflets:

The Hungarian Oracle text book was prepared and published in 2000 copies, which, of its kind, is the first one in the Hungarian market. The Oracle News, published in Hungarian and circulated for over 2000 addresses had two issues in 1991. A special collection of articles together with the information on Oracle and IQSOFT has been prepared with the title "Oracle and the Nature" and was sent to environment protection experts and decision makers. In 1991 we prepared 4-page, coloured leaflets about IQSOFT, Oracle and DOKTÁR (the brand name of our document imaging/archiving product line).

4. Reference visits:

Organised several reference visits for potential clients (e.g. to France for the Tax Office specialists) and took part together with the most important customers in Oracle International User Group meeting in Miami. This gave us the opportunity to demonstrate to our customers the strength of Oracle, to extend the connection with different Oracle people and to gather information on the newest USA developments.

As a result of our marketing and commercial activities we have now over 100 different organisations as Oracle customers in Hungary, some of them with more than one installations (see list in Appendix 2).



V. FINANCIAL RESULTS

The main indicators of the company's management are summed up in the tables of *"Aggregated Values"* which was prepared on the basis of the 1991 balance sheet.

Based upon these and the 1990 values, as well as the provisions of the 1991 plan, the following conclusions can be drawn:

- The progress which started in 1990 continued throughout 1991. This allowed to double the company's revenues, repaying OMFB loans, as well as increasing profits to a great extent.

- The projected profits of the 1991 plan were met while having a 10 percent increase both in costs and revenues.

- The main sources of revenue continued to be the Oracle sales and the Bank Austria projects.

- Per capita net revenues increased at a greater pace than the costs of operation including personal incomes. This shows an increase in productivity.

- During 1991, the company bought great quantities of hardware and software. Part of the purchases were financed from the foreign currency capital of the company.

The 1992 plan projects the continuation of these tendencies as reflected in the *"Basic Figures"* chart.

RESULTS FOR 1991

Aggregated values from the 1991 General Ledger and proposal for profit distribution (in kHUF),
(compared with 1990 data)

		1991		1990	
0.	Average headcount	43		35	
1.	Gross revenue	160264		76700	
1.1	Bank Austria		47460		27300
1.2	Other export		2887		3000
1.3	Oracle sales		87694		28700
1.4	Oracle services		5961		
1.5	Other revenues		16262		17700
2.	Production costs	79792		29710	
2.1	Travel		12839		7000
2.2	Oracle import		48147		14350
2.3	Oracle extern costs		7670		
2.4	Other subcontractors		11136		8360
3.	Personal income costs	34963		21954	
3.1	Salary		13581		9100
3.2	Bonus		5555		2170
3.3	Benefits		3054		2098
3.4	Copyright fees		4050		3407
3.5	Social security		8724		5179
4.	Overhead costs	26866		16500	
4.1	Office space rent		4256		3242
4.2	Services		1701		1347
4.3	Office costs		3753		2028
4.4	Hw-sw resources		5204		5356
4.5	Publicity		5270		1533
4.6	Others		6682		2994
5.	OMFB loan repayment	5000			
6.	Net revenues /1.-2./	80472		46990	
7.	Operational costs /3.+4./	61829		38454	
8.	Profit /6.-7.-5./	13643		8536	
9.	Payments from profit	7026		4205	
Dividend %		25%		15%	
10.	Dividend payed	5397		3093	
11.	Dividend received	150		104	
12.	Net profit/8.-9.-10.+11./	1370		1342	

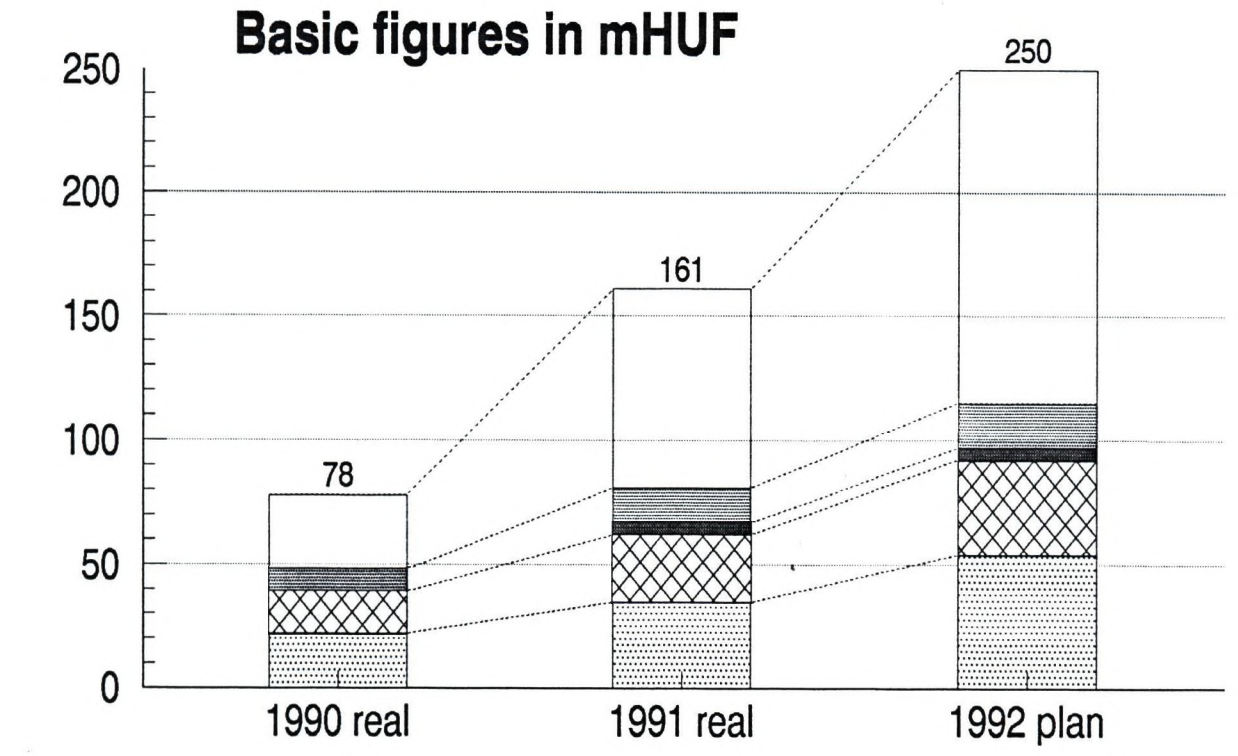
COMPARISON OF 1991 RESULTS WITH 1990 RESULTS AND 1991 PLAN (IN MHUF)

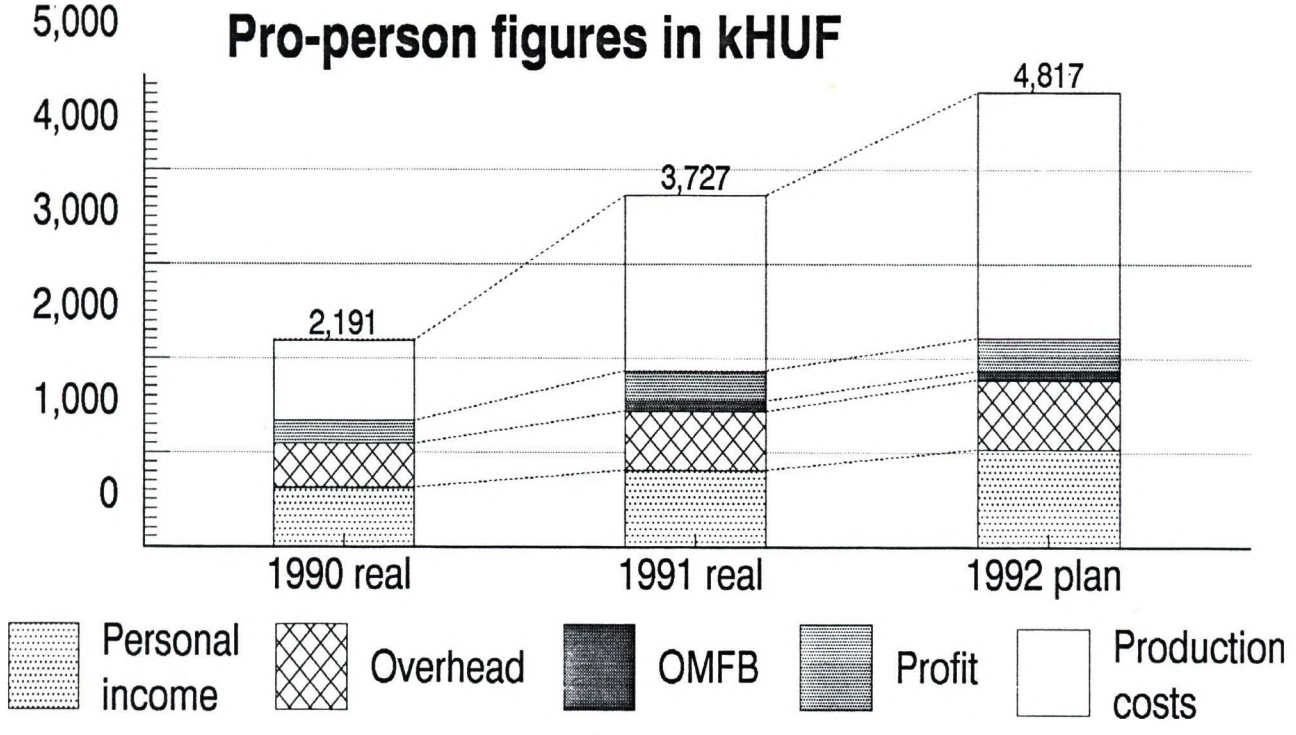
	real 90	real91	plan 91
1. Gross revenues	77	160	143
2. Production costs	30	80	72
3. Personal income costs	22	35	31
4. Overhead costs	17	27	21
5. OMFB loan repayment		5	5
6. Net revenues /1.-2./	47	80	71
7. Operational costs /3.+4./	38	62	52
8. Profit /6.-7.-5./	9	14	14

Net revenue distribution in 1991

(in mHUF)

	Revenue	Prodcost	Netrev	
Bank Austria	47	10	37	47%
Oracle	94	57	36	45%
Others	19	12	7	8%
TOTAL	160	80	80	100%


Basic figures in mHUF
250
200
150
100
50
0
78
161
250
1990 real
1991 real
1992 plan


Pro-person figures in kHUF
5,000
4,000
3,000
2,000
1,000
0
2,191
3,727
4,817
1990 real
1991 real
1992 plan
Personal income
Overhead
OMFB
Profit
Production costs

VI. WORKING ENVIRONMENT

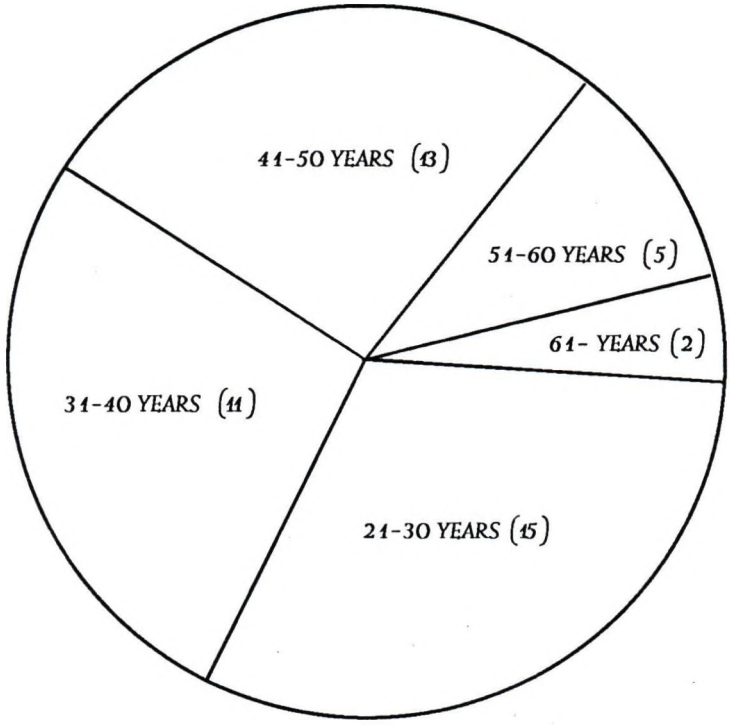
1. STAFF

The changes of IQSOFT staff during 1991 are shown in the table below :

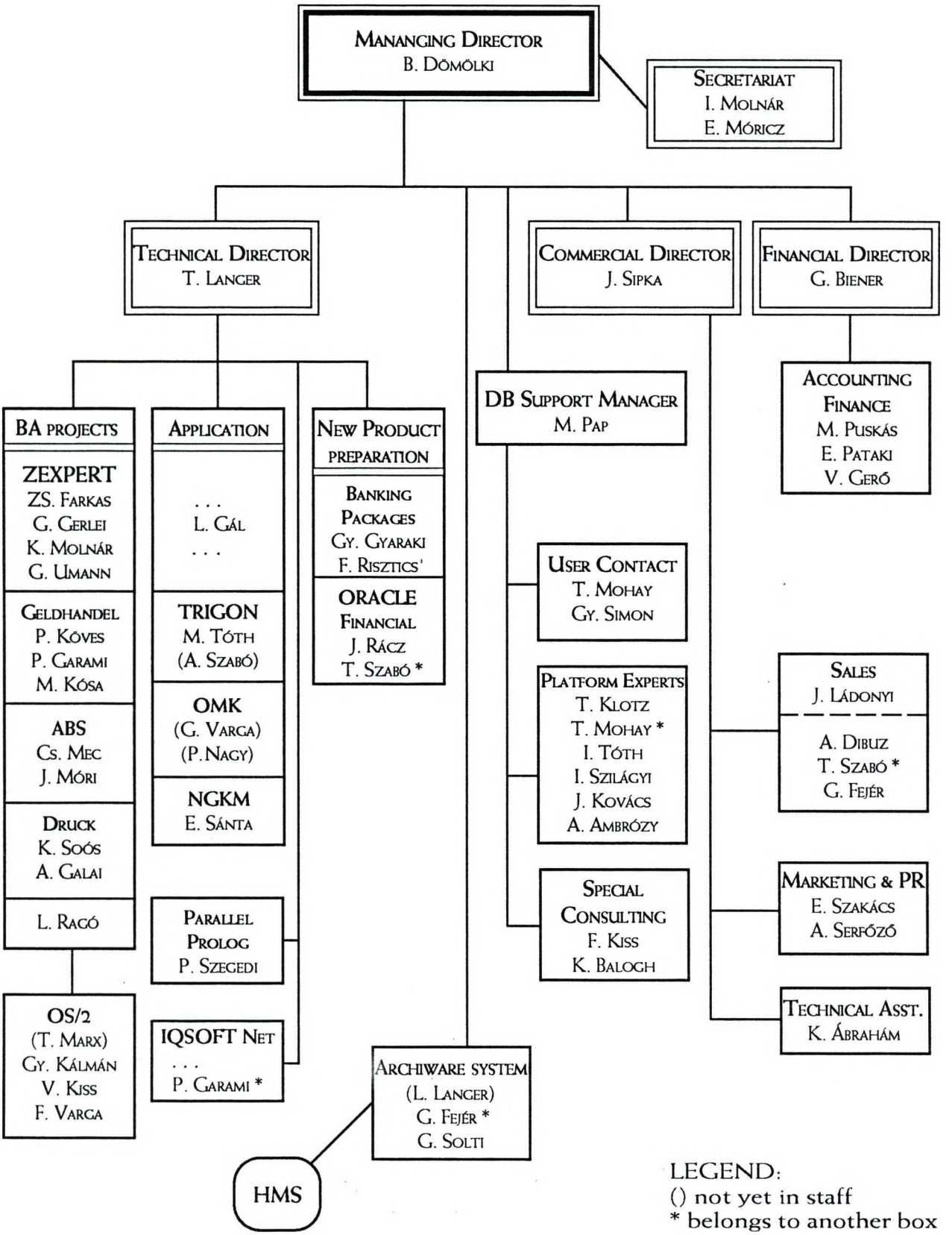
	Technical	Commercial	Financial	Secretarial	Total
Jan 1990	25	1	2	2	30
Dec 1990	28	4	3	3	38
Dec 1991	34	5	3	3	46
May 1992	35	7	4	3	49

All the technical persons (exept one) have diploma.

IQSOFT staff is good mixture of junior and senior colleagues. The average age is about 37 years. The age distribution is illustrated by the following figure.



THE ORGANIZATIONAL STRUCTURE OF IQSOFT: APRIL 1992



2. MANAGEMENT

General: **Dr. Bálint Dömölki**

Mr. Dömölki graduated in 1957 from the Eötvös Loránd University (Budapest). In 1967, he earned a doctorate in mathematic science in Moscow. Between 1957 and 1965, he was part of a team which built and operated the first electronic computer in Hungary. Between 1965 and 1977, he headed the software department of INFELOR, a company specialising in computer technology which later became SZÁMKI. He later headed the Theoretical Laboratory of SZKI until the 1990 foundation of IQSOFT.
Between 1975 and 1985, he was vice-president, then until 1990, president of the John von Neumann Society of Computing Sciences. In 1988, he received the State Prize for "MProlog". He is a founding member of IQSOFT.

Technical: **Dr. Tamás Langer**

Mr. Langer is a graduate in mathematic science of the Eötvös Loránd University (Budapest). In 1976 he earned a doctorate in computer science. Between 1972 and 1983, he worked at INFELOR and later became head of department at SZÁMALK.
He co-authored three books about computer programming, computer language and programming methods. In 1988, he received the State Prize for "MProlog". He is a founding member of IQSOFT.

Commercial: **Dr. Júlia Sipka**

Ms. Sipka is an economist specialised in international economic relations. In 1982, she received a Ph. D. at the Karl Marx University of Economics. She speaks fluent English and Russian. Participated in the marketing and selling of Hungarian software products (such as MProlog) on the international market. She is a founding member of IQSOFT.

Financial: **Gábor Biener**

Mr. Biener graduated in the Karl Marx University of Economics where he specialised in industrial matters. He first worked at the Hungarian Oil and Gas Trust and later became head of department at the Lang Machine Factory. Between 1986 and 1989, he worked as an economic strategist at the management level. He is a founding member of IQSOFT.

3. WORKING CONDITIONS

In spring of 1991 IQSOFT moved from the main building of SZKI to a small building in Iskola street 10. It is near to the main building so the amenities (e.g. library, restaurant, buffet) are available in the future, too.

IQSOFT's new building has been completely for our own use since April 1992. There are sixteen rooms with ten to one desks. Two discussion and demonstration rooms make the building complete. The total area is 570 square meters.

4. HARDWARE AND SOFTWARE ENVIRONMENT

In 1991 IQSOFT's hardware resources increased significantly. At the end of the year the "one work station for one person" situation was reached, at least in the case of technical persons. The hardware resource development strategy was motivated by the following priorities:

- A work station for each employee which is suitable for his task .The most important platforms for the distribution activities must be available
- IQSOFT internal information system
- Up-to-date architectures
- Investment of stable value

After an internal competition the following was decided about the configuration of IQSOFT system:

- Ethernet network with several protocols (SPX/IPX, TCP/IP, DECNET,

OS/2 LAN)
- In long-range the emphasized role of Os/2 and UNIX.
- Novell, UNIX, VAX VMS and OS/2 servers.
- The workstations at each work place are basically PC-s (at least AT/386 for the technical people, AT/286 for the others)
- The quality requirements are important basically in the case of servers. The workstations will be less expensive Far-East machines, purchased from a reliable vendor.

In the first step 20 workstations and a new Novell (Netware 3.11) server were installed. The supplier was chosen after a long selection process and we want to use them in the longer run. The typical workstation configuration is:

- AT/386-33Mhz CPU with cache
- 4 Mbyte main memory
- 40 mbyte hard disk
- 1.44 floppy drive
- VGA monitor and card (with 800*600 mode in Ms-Windos, OS/2 PM and UNIX X-Window)
- WD8013 Ethernet Card
- Genius F302 mouse

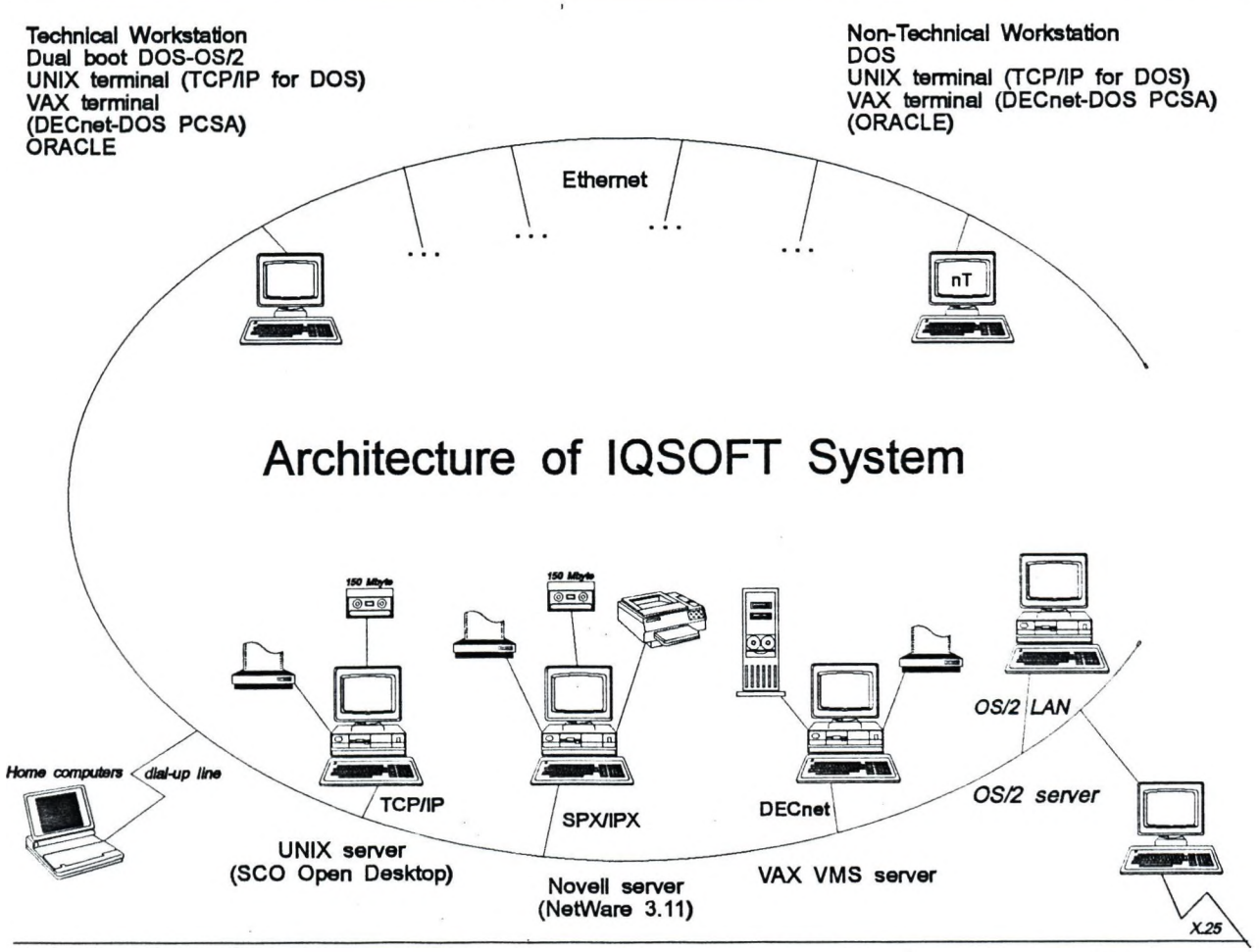
These basic workstation configurations were enlarged with memory and hard disk capacity according to the demand of the actual work of its "owner".

IQSOFT also bought a PS2 portable computer and a complete configuration to archive system demonstration including a fast scanner, optical drive and laser printer.

The next problems are to solve:

- OS/2 server and stronger UNIX server
- Integration of several protocols
- IQSOFT internal information system
- Parallel computer
- Integration of some up-to-date hardware devices (scanner, CD-ROM driver, etc.)

IQSOFT supports its employees having computers in their own home to make working at home possible.



APPENDIX 1

Documents and publications prepared in 1991

[1] D. Arnold (Z - LB Bank Austria), Zs. Farkas, G. Gerlei, K. Molnár and G. Umann:
ZEXPERT - an MProlog-based Expert System Shell.
Manuscript, October 1991.

[2] K. Balogh:
A Clause indexing method.
Manuscript, May 1991.

[3] K. Balogh:
Review on "Kelly, Al and Pohl, Ira: A book on C: programming in C (2nd ed.)".
Computing Review, September 1991.

[4] K. Balogh:
Review on "Mettrey, William: A comparative evaluation of expert system tools".
Computing Review, November 1991.

[5] K. Balogh:
Review on "Mooney, Raymond J.: A general explanation-based learning mechanism and its application to narrative understanding".
Computing Review, December 1991.

[6] A. Beaumont (Univ. of Bristol), S M. Raman (Univ. of Bristol), P. Szeredi and D. H D Warren (Univ. of Bristol):
Flexible Scheduling of Or-Parallelism in Aurora: The Bristol Scheduler.
In Proceedings of PARLE91: Conference on Parallel Architectures and Languages Europe, June 1991. pp. 403-420. Springer Verlag. Lecture Notes in Computer Science, Vol 506.

[7] S. Dibuz-Wagner (MTA KFKI) and P. A. Wagner:
PRO*FAIR a protocol specification language.
In Proceedings of the Second Conference on Artificial Intelligence, Budapest, 23-25 January 1991. pp. 103-114.

[8] Zs. Farkas, G. Gerlei, K. Molnár and G. Umann:
Results for the tuning and measurements of ZEXPERT2, PHASE 1. May 1991.

[9] Zs. Farkas, G. Gerlei, K. Molnár and G. Umann:
Design of the ZEXPERT Development System. July 1991.

[10] Zs. Farkas, G. Gerlei, K. Molnár and G. Umann:
ZEXPERT Language Reference Manual. December 1991.

[11] Zs. Farkas, G. Gerlei, K. Molnár and G. Umann:
ZEXPERT Development System Functions. Short Description. December 1991.

[12] Zs. Farkas, G. Gerlei, K. Molnár, G. Umann and K. Fritz (Z):
ZEXPERT and MPROLOG based banking shell.
In Proceedings of the Second Conference on Artificial Intelligence, Budapest, January 23-25, 1991. pp. 57-64.

[13] Gy. Kálmán, T. Marx and Á. Németh:
Z - LB Bank Austria Software Strategy. November 1991.

[14] I. Kilián:
An approach to integrate the Spreadsheet Paradigm and Logic Programming.
In Proceedings of the Second Conference on Artificial Intelligence, Budapest, January 23-25, 1991. pp. 301-308.

[15] V. Kiss:
General description of NJOY. (In Hungarian.) July 1991.

[16] P. Köves, P. Garami, T. Klotz and M. Kósa:
Die Bildschirme des Geldhandels- Abwicklungs- und Auswertungs- Programmsystems. September 1991.

[17] P. Köves, P. Garami, T. Klotz and M. Kósa:
Periodische und Kontrollauswertungen des Geldhandels- Abwicklungs- und Auswertungs-Programmsystems. September 1991.

[18] P. Köves, P. Garami, T. Klotz and M. Kósa:
Allgemeine Übersicht der Datentabellen des Geldhandels- Abwicklungs- und Auswertungs-Programmsystems. September 1991.

[19] P. Köves, P. Garami, T. Klotz and M. Kósa:
Installationshinweis und Hilfsprogramme des Geldhandels- Abwicklungs- und Auswertungs-Programmsystems. December 1991.

[20] T. Marx and Á. Németh:
Z Software Strategy. July 1991.

[21] Cs. Mec:
Vermogensplan - Program-Analyse (Fine Design, Updated Version). October 1991.

[22] J. Ösz (TUB), L. Kelemen (TUB), G. Lipovszki (TUB), G. Rédey, L. Subai (TUB) and E. Sántáné-Tóth:
Integrated Knowledge Based System for secondary water chemistry of Paks Nuclear Power Plants. System Design. (In Hungarian.) October 1991.

[23] J. Rácz:
Dymanic competitive learning.
In Proceedings of the Second Conference on Artificial Intelligence, Budapest, January 23-25, 1991. pp. 329-246.

[24] J. Rácz and T. Klotz:
The dynamic competitive learning method.
Computers in Industry 17 (1991), pp. 155-158.

[25] J. Rácz and T. Klotz:
Knowledge representation in neural networks, generalized association model.
In Proceedings of the SPIE Conference on Applications of Artificial Intelligence Neural Networks. Orlando (Florida), April 1991. (In press.)

[26] G. Rédey:
Text representation.
In Proceedings of the Second Conference on Artificial Intelligence, Budapest, 23-25 January 1991. pp. 211-220.

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Daueruftrag Neu - Vorstudie. July 1991.

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KBS tools and applications in Hungary 1990.
In Proceedings of the Second Conference on Artificial Intelligence, Budapest, January 23-25, 1991. pp. 11-27.

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Survey on AI engineering tools and applications in Hungary.
Engineering Applications in Artificial Intelligence Vol. 4. No. 6, 1991. (In press.)

[30] E. Sántáné-Tóth:
Computer and Medicine (1., 2.) Artificial Intelligence can help doctors - how? (In Hungarian.)
"Természet Világa" - Journal of Natural Science, Vol. 122. No. 4. (April 1991.) pp. 180-182. and No. 5. (May 1991.) pp. 224-226.

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The Future: Intelligent Information Systems. (In Hungarian.)
"FIGYELÖ" - Economyc Weekly, Vol. XXXV. No. 41. (October 10, 1991.), pp. 20-21.

[32] E. Sántáné-Tóth:
Artificial Intelligence - way to the 21st century. (In Hungarian.)
"ALAPLAP" - Microcomputer Magazine. (Manuscript: July 1991.) To be appear in 1992.

[33] E. Sántáné-Tóth:
Preliminary study on requests for an integrated information system of MIER Hungarian Investment and Trade Promotion Agency. (In Hungarian.) November 1991.

[34] E. Sántáné-Tóth and P. Ecsedi Tóth:
ORACLE and up-to-date information systems in Health Care. (In Hungarian.)
Proc. of the 3rd National Health Conference, Szeged (Hungary), Sept 12-14, 1991. Vol. 1/b, pp. 512-521.

35] E. Sántáné:
Ministry International Economic Relations Investment and Commerce Development Agency Informacion System (Requirement Study)1991

[36] K. Soós:
Druckdatenbank-Zwischenlösung EDV-Entwurf. Hauptband, Erste Version. November 1991.

[37] K. Soós, K. Balogh und A. Galai:
Druckdatenbank-System Grobkonzept. 3. Version. April 1991.

[38] K. Soós, K. Balogh und A. Galai:
Druckdatenbank-System Feinkonzept. Hauptband, Anhang A und B. 1. Version. Junius 1991.

[39] K. Soós, K. Balogh und A. Galai:
Druckdatenbank-Zwischenlösung Feinkonzept, Haupband, Anhang A und B. Erste Version. November 1991.

[40] P. Szeredi:
Solving optimisation problems in Aurora (extended abstract).
In A. Beaumont and G. Gupta (eds.): Proceedings of ICLP'91 Pre-Conference Workshop on Parallel Execution of Logic Programs. University of Bristol, June 1991. Invited talk.

[41] P. Szeredi:
Solving optimisation problems in the Aurora or-parallel Prolog system.
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Lecture Notes in Computer Science, Vol 569.

[42] P. Szeredi:
Using dynamic predicates in an or-parallel Prolog system.
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Symposium, pp. 355-371. The MIT Press, October 1991.

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In Proceedings of PARLE91: Conference on Parallel Architectures and Languages Europe, pp. 439-453. Springer Verlag, June 1991.
Lecture Notes in Computer Science, Vol 506.

[44] M. Tóth:
Feasibility Study on OMFB-MÜKKI-IFSZ project concerning updating of pharmaceutical production management by means of developing quality assurance activities. (In Hungarian.) June 1991.

[45] M. Tóth:
Description of TRIGINF system handling INTERFERON processing data of TRIGON Biotechnical Company. (In Hungarian.) September 30, 1991.

APPENDIX 2

Reference List of Hungaian Oracle Customers

. ARECO Informatikai Kft.

. AGROKER Békéscsaba

. AGROKER Debrecen

. Alföld Élelmiszer és Vegyiárú Kereskedelmi Vállalat

. ALKALOIDA Vegyészeti Gyár Tiszavasvári

. Állami Fejlesztési Intézet

. Állami Biztosító

. ALUTERV

. American Jewish Joint D.Committe

. APEH

. APEH Számítástechnikai Intézet

. BKV

. BME Automatizálási Tanszék

. BME Híradástechnikai Tanszék

. BME Hő és Rendszertechnikai Intézet

. BME Információs központ

. BME Közlekedési és Szervezési Intézet

. BME Villamosipari Anyagtechnológiai Tanszék

. Budapest Bank

. Budapest Értékpapir Rt.

. Csepel Művek Számitástechnikai Vállalat

. Debreceni Agrártudományi Egyetem

. Dunaferr Dunai Vasmű

. ELTE Könyvtár
. ELTE Számítóközpont

. Erdészeti és Faipari Egyetem

. EURO TREND Informatikai Kft

. FAIR SYSTEM Kft

. Fejér megyei Gabonaforgalmi és Malomipari Vállalat Székesfehérvár

. Geofizikai Kutató Intézet

. GEOMETRIA KSZ

. GEOVIEW System Bt.

. GIRO Elszámolásforgalmi Rt.

. Gödöllői Agrártudományi Egyetem

. Győri Hűtőipari Vállalat

. Hitelbank

. HOLDEX Kft.

. HUNORG Számítástechnikai Szolgáltató Kft.

. IBUSZ

. IKARUS Informatikai Fejlesztő és Szolgáltató Kft. Debrecen

. INTERFLEX

. Investbank

. Ipari Fejlesztési Bank

. JATE (Számítástechnikai és Alkalmazási Tanszék)

. Kandó Kálmán Villamosipari Műszaki Főiskola Matematikai és Számítástechnikai Intézet

. Központi Fizikai Kutató Intézet

. Kopint Dato

. Kossuth Lajos Tudományegyetem Számítóközpont Debrecen

. Középdunántuli Gázszolgáltató Vállalat

. KSH Számitóközpont Budapest

. KSH SZÜV Békéscsaba

. KSH SZÜV Budapest

. M és M Softverház

. Magyar Távközlési Vállalat Távközlési Központ

. Magyar Állami Eötvös Lóránd Geofizikai Intézet

. Magyar Állami Földtani Intézet

. Magyar Távközlési Vállalat Budapest

. Magyar Távközlési Vállalat Debrecen

. Magyar Távközlési Vállalat Informatikai Központ

. MEGAMIKRO

. Magyar Testnevelési Egyetem

. MH Haditechnikai Intézet

. MH Tóth Ágoston Térképészeti Intézet

. Miskolci Egyetem Számítóközpont

. MK Nemzetbiztonsági Hivatal

. MONTANA Kft

. MTV Belkerskedelmi Igazgatóság

. Nagyalföldi Kőolaj és Földgáztermelő Vállalat

. Neumann János Közgazdasági Szakközépiskola és Gimnázium Eger

. Olajterv

. Országos Rendőrfőkapitányság

. Országos Munkaügyi Központ

. Országos Találmányi Hivatal

. Országos Tervhivatal Informatikai és Módszertani Intézet

. OTP és Kereskedelmi Bank Rt

. OTP Számítástechnikai és Üzemszervezési Intézet

. Paksi Atomerőmű

. Pénzügyi és Számviteli Főiskola

. Pénzügyi Számítástechnikai Intézet

. Pharmafontana

. PM Informatikai és Módszertani Intézet

. Postabank

. PROFISYS Kft.

. ROLITRON Bioelektronikai Rt.

. Struktura Datacenter Kft.

. SUPRA Kft.

. Szénhidrogénipari Kutató Fejlesztő Intézet Százhalombatta

. SZENZOR Kft.

. Térinformatikai Rendszerház Kft.

. Transelektro

. TRIGON Biotechnológiai Leányvállalat

. UNITRADE Kft.

. UNIVET Állatkórház Debrecen Kft.

. VADECO Mérnöki Iroda

. VILLÉRT

. Vitukinvest Kft.

. Vízgazdálkodási Tudományos Kutató Központ

. VNOB Befektetési Rt. Sárszentmihály

AZ IQSOFT SZKI INTELLIGENS SOFTWARE SZAMITASTECHNIKAI FEJLESZTŐ, GYÁRTÓ, ÉS ÉRTÉKESITŐ RT. 1992. MARCIUS 12.-I ÉVI RENDES KÖZGYŰLÉSÉNEK NAPIRENDJE

1. Tisztségviselők választása

2. Az Igazgatóság beszámolója az Rt. 1991. évi gazdálkodásáról, javaslat az Rt. mérlegének elfogadására, vagyonának kimutatására, és a nyereség felosztására, az osztalék megállapitására

3. A Felügyelő Bizottság jelentése az Rt. gazdálkodásának 1991. évi tapasztalatairól

4. A könyvvizsgáló jelentése az éves mérlegről, a nyereségfelosztási es osztalékfizetési indítványról

5. Határozat a fenti jelentések elfogadásáról, az 1991. évi mérleg, eredménykimutatás és nyereségfelosztás jóváhagyásáró, az osztalék megállapitásáról

6. Tisztségviselők díjazása

7. Az ügyvezető igazgató 1992. évi prémiumfeltételeinek meghatározása

8. Az Igazgatóság előterjesztése az Rt. 1992. évi tervéről

9. Egyéb

1. napirendi ponthoz

Javaslat az SZKI Intelligens Rt.
Közgyűlésének

Az Általános Vállalkozási Bank Rt. 1992. március 12.-vel az SZKI Intelligens Rt. **Igazgatóságába** javasolja

Veresné Kovács Gizellát

míg a **Felügyelő Bizottságba**

Nagy Endrét.

Az AVB Rt. kéri a közgyűlés jóváhagyását.

Budapest, 1992. március 11.

Tisztelettel

ÁLTALÁNOS VÁLLALKOZÁSI BANK Rt.

Riedlné dr.Montvai Zsuzsa
üzletágvezető

Dr.Szőke László
jogtanácsos

Bank Austria

Z-Länderbank Bank Austria AG

An die
IQSOFT - SZKI
Intelligente Software AG

Iskola u. 10
H - 1011 Budapest

HD/fm [illegible] 27.[illegible].1992

Ressort Beteiligungsmanagement

Betrifft: *WAHL IN DEN AUFSICHTSRAT UND VORSTAND IN DER HAUPTVERSAMMLUNG AM 12. MÄRZ 1992*

Sehr geehrte Damen und Herren,

wir teilen Ihnen mit, daß die Z Länderbank Bank Austria AG anstelle des ausgeschiedenen Aufsichtsratsmitgliedes Herrn Werner KLEIN

Herrn Franz GILY

für die restliche Dauer der Funktionsperiode in den Aufsichtsrat entsenden wird.

Als Mitglied des Vorstandes der IQSOFT-SZKI wird

Herr Günter ERNST

Herrn Franz GILY nachfolgen.

Mit freundlichen Grüßen

Ressort Beteiligungsmanagement
Abteilung Handel & Dienstleistungen

Handbüchler Heidrich

Szki SZÁMÍTÁSTECHNIKAI KUTATÓ INTÉZET ÉS INNOVÁCIÓS KÖZPONT

1015 Budapest
Donáti u. 35–45.
Tel.: 350-180
Telex: 22-5381
MNB: 207-11214
Levélcím: 1251 Budapest Pf. 19

Hivatkozási szám:

Ügyintéző:

I Q S O F T

Dómölki Bálint
részére

Ezúton erősitjük meg azt a javaslatunkat, hogy az IQSOFT Felügyelő Bizottsága egy fővel növekedjék és erre a posztra Csánky Lajos munkatársat javasoljuk.

Budapest, 1992. március 11.

dr. Halmos György
gazdasági igazgató

2. napirendi ponthoz

Az Igazgatóság jelentése az 1991. üzleti évről

Az Igazgatóság megvizsgálta az SZKI Intelligens Software Számítástechnikai Fejlesztő, Gyártó és Értékesítő Rt. vezetése által összeállított, és dr Dömölki Bálint részletes szóbeli tájékoztatásával kiegészített jelentést az 1991. évi ügyvezetésről, a társaság vagyoni helyzetéről és üzletpolitikájáról és azt elfogadta, majd ennek alapján a közgyűlés elé terjeszti jóváhagyásra.

Budapest, 1992. március 12.

.....
dr Halmos György
az Igazgatóság elnöke

.....
Farkas Zsuzsa
az Igazgatóság tagja

.....
Franz Gily
az Igazgatóság tagja

.....
Nagy Endre
az Igazgatóság tagja

.....
dr Dömölki Bálint
az Igazgatóság tagja

ACTIVITIES IN 1991

Bank Austria projects

- ZEXPERT
- Geldhandel*
- Druckdatenbank
- ABS
- Analyzis: Neu-Daueraufträg
  Mandanten und Kontonummern
- OS/2 transition: strategy
- pilot programming
- PL/I programming/testing

Other projects

- Österreichische Kontrolbank/Siemens PSE*
- MVS/VSAM programming (GABE GmbH, Wien)
- TRIGON information system (+ system integration)*
- Pharmaceutical feasibility study (MUKKI)
- Requirement analizis for NGKM/ITPA
- Small administrative system for EXPO office*
- internal IQSoft network development

Oracle

- about 70 license sales
  mostly PC, some UNIX, VMS, Sun
- large accounts (over 5 mHUF):
  Pharmafontana, Datorg, OTP, MAFI, BKV
- technical support, hot-line
- National Language Support
- new products: Card, Mail, Windows ...
- participation in OCE consulting activities
- application projects (marked by * above)

Document handling systems (archiving/imaging)

- contacts with TechKNOWLOGY and HMS
- purchase of demo system
- demonstrations to prospects
- sale to ERBE (with system integration)

Research

- parallel Prolog (US support, ESPRIT ?)
- neural networks, digit recognition
- AI/KBS activities in Hungary

Aggregated values from the 1991 General Ledger and proposal for profit distribution,
(compared with 1990 data)

			1991		1990	
0.	Average headcount		43		35	
1.	Gross revenues		160264		76700	
1.1		Bank Austria		47460		27300
1.2		Other export		2887		3000
1.3		Oracle sales		87694		28700
1.4		Oracle services		5961		
1.5		Other revenues		16262		17700
2.	Production costs		79792		29710	
2.1		Travel		12839		7000
2.2		Oracle import		48147		14350
2.3		Oracle extern costs		7670		
2.4		Other subcontractors		11136		8360
3.	Personal income costs		34963		21954	
3.1		Salary		13581		9100
3.2		Bonus		5555		2170
3.3		Benefits		3054		2098
3.4		Copyright fees		4050		3407
3.5		Social security		8724		5179
4.	Overhead costs		26866		16500	
4.1		Office space rent		4256		3242
4.2		Services		1701		1347
4.3		Office costs		3753		2028
4.4		Hw-sw resources		5204		5356
4.5		Publicity		5270		1533
4.6		Others		6682		2994
5.	OMFB loan repayment		5000			
6.	Net revenues	/1.-2./	80472		46990	
7.	Operational costs	/3.+4./	61829		38454	
8.	Profit	/6.-7.-5./	13643		8536	
9.	Payments from profit		7026		4205	
9.1		Company tax		3998		2411
9.2		Fees of Board members		963		725
9.3		Bonus of managing director		974		984
9.4		Employee shares		1000		
9.5		Others		91		85
	Dividend %		25%		15%	
10.	Dividend payed		5397		3093	
11.	Dividend received		150		104	
12.	Net profit	/8.-9.-10.+11./	1370		1342	

Comparison of 1991 results with 1990 results and 1991 plan
(in mHUF)

		real 90	**real 91**	plan 91
1. Gross revenues		77	**160**	143
2. Production costs		30	**80**	72
3. Personal income costs		22	**35**	31
4. Overhead costs		17	**27**	21
5. OMFB loan repayment			**5**	5
6. Net revenues	/1.-2./	47	**80**	71
7. Operational costs	/3.+4./	38	**62**	52
8. Profit	/6.-7.-5.	9	**14**	14

Net revenue distribution in 1991
(in MHUF)

	Revenue	**Prodcost**	**Netrev**	
Bank Austria	47	10	37	47%
Oracle	94	57	36	45%
Others	19	12	7	8%
TOTAL	160	80	80	100%

AZ 1991 ÉVI TERV TELJESITÉSE ÉS
AZ 1992 ÉVI TERV MEGHATÁROZÁSA

A napirend 8.pontjához

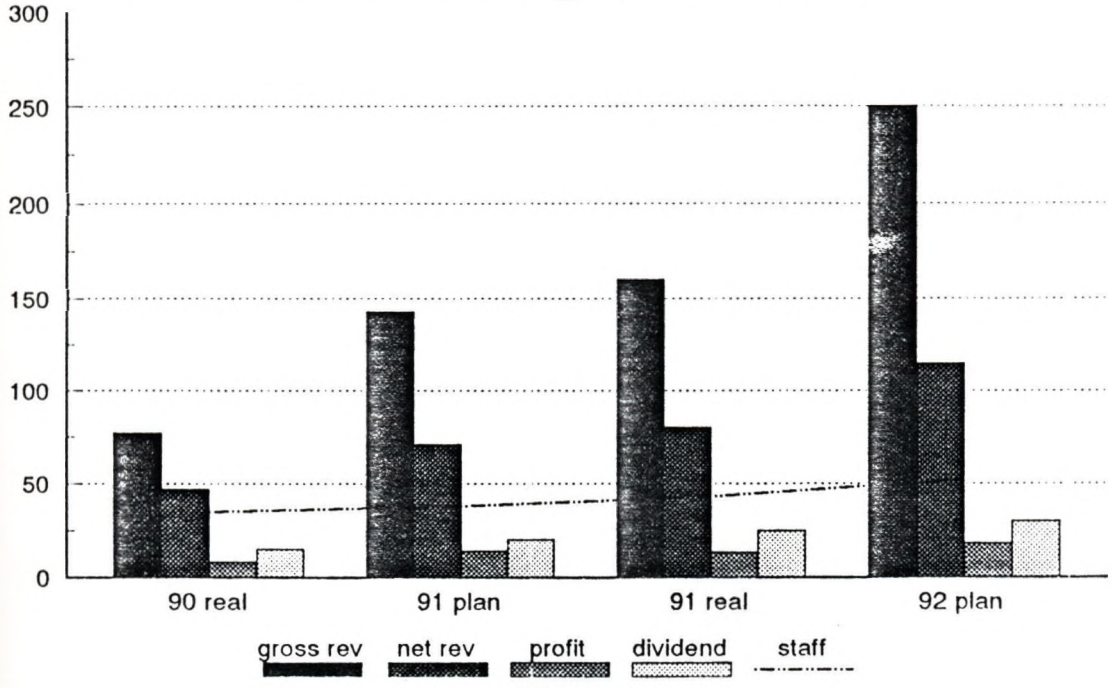
Határozati javaslat

Az Igazgatóság és a Felügyelöbizottság által elfogadott "Outlines of the 1991 business plan" cimü anyag alapján a Közgyülés az 1991 évi terv fö mutatóit - az 1990 évi tényszámokkal összevetve - az alábbiakban határozza meg:

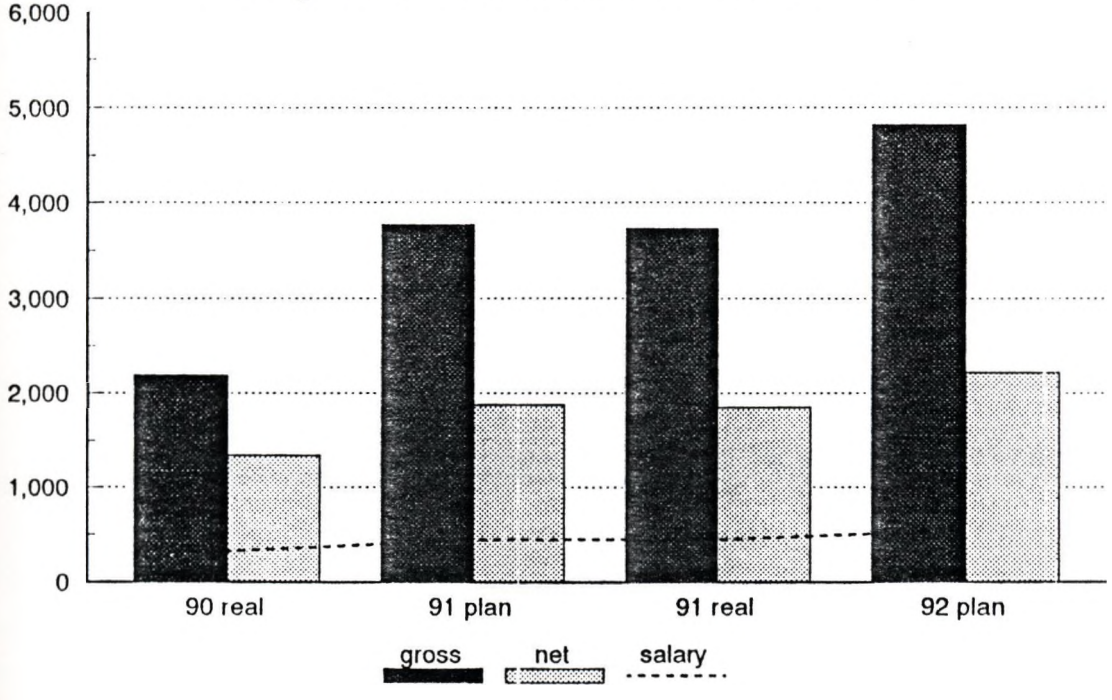
	1990 real	1991 terv	1991 real	1992 terv
Brutto árbevétel	76.6 MFt	143.3 MFt	160,3 MFt	250
Netto árbevétel (*)	47.0	71.4	80,4	115
Müködési költségek	38.5	52.1	61,8	92
OMFB visszafizetés	0	5.0	5,0	5
Adózás elötti nyereség	8.5	14.3	13,6	18
Adózás utáni nyereség	6.1	9.7	9,6	12
Osztalék százalék	15%	20%	25%	30%
Átlagos állományi létszám	35 fö	38 fö	43 fő	52 fő
Egy före jutó				
brutto árbevétel	2188 eFt	3771 eFt	3727 eFt	4817 eFt
netto árbevétel	1343	1879	1856	2220
béralap	322	440 (terv tulteljesitésének mértékében növelhetö)	445	538

(*) Az alvállalkozói, termékbeszerzési és utazási költségek levonása után fennmaradó árbevétel érték.

Basic financial figures in 1990-92



Per-person values in 1990-92



3. napirendi ponthoz

A Felügyelő Bizottság jelentése az 1991. üzletévről

A Felügyelő Bizottság megvizsgálta a Szűts Károly könyvvizsgáló által készített könyvvizsgálói jelentést. Megvizsgálta továbbá az SZKI Számítástechnikai Fejlesztő, Gyártó és Értékesítő Rt. Igazgatósága által összeállított jelentést az 1991. évi ügyvezetésről, a társaság vagyoni helyzetéről és üzletpolitikájáról, valamint az 1991. évi mérleget, eredménykimutatást és nyereségfelosztást. A fentieket a Felügyelő Bizottság elfogadja és a közgyűlésnek a napirendi pontokban foglalt előterjesztés szerint elfogadásra javasolja.

Budapest, 1992. március 12.

.....
dr Náray Zsolt
a Felügyelő Bizottság elnöke

.....
Veresné Kovács Gizella
a Felügyelő Bizottság tagja

.....
Werner Klein
a Felügyelő Bizottság tagja

4. napirendi ponthoz

Consultatio Kft. Budapest

Könyvvizsgálói jelentés

az IQSOFT SZKI Intelligens Software Számítástechnikai Fejlesztő, Gyártó és értékesítő Részvénytársaság 1991. december 31.-i mérlegének és eredményének valódiságáról

Az 1991. évi tevékenységről készült 1991. dec. 31.-i mérleget és eredménykimutatást megvizsgáltam.

A mérleg a leltárakkal, a tartozások-követelések analitikáival, a banki és pénztári zárlatokkal egyező adatokat tartalmaz.

A részvénytőke emelését a Részvénytársaság (19.860 eFt.-ról 23.860 eFt.-ra) 1991. december 20. előtt hiteles aláírásokkal a Cégbíróságnak bejelentette. Az alapítói vagyon emelését a Cégbíróság még nem jegyezte be, de bejegyzését nem tagadta meg (információk szerint a bejegyzésről szóló írásbeli értesítést az Rt. rövid időn belül megkapja). Ezért az alapítói vagyon 23.860 eFt.os összegét a mérlegben elfogadtam.

A mérlegfolytonosság elvét a mérleg betartotta, mert az év elejei nyitó értékek azonosak az 1990. dec. 31.-i záró értékekkel.

Az eredménylevezetés valódiságát a számlázás teljeskörűségével, a számítógépes rendszer kontrolljának felhasználása révén a Részvénytársaság bizonyítani tudja. Csupán egy kis tétel válhat a jövőben kétes követeléssé (Videoton 29 eFt.). Ezt azonban jelenleg még nem minősítettem kétesnek, mert a felszámolási hirdetményre az Rt. írásban bejelentette igényét.

A mérleg főösszegét 81.291 eFt.-tal, a nyereség összegét 13.643 eFt.-tal állapítottam meg.

A mérleg és eredmény vizsgálatát az Rt. számítógépes analitikus és szintetikus könyvelési rendszerének felhasználásával megbízható módon lehetett végrehajtani. A mérleg valódiságáért és az eredmény helyességéért erkölcsi és anyagi felelősséget vállalok.

dr. Szűts Károly
okleveles könyvvizsgáló
K-460/88/VI.
1126 Budapest, Németvölgyi út 9.

Melléklet: 4 db.

Budapest, 1992. február 25.

dr. Szűts Károly

Consultatio GmbH
Budapest

1. melléklet
(1000 Ft-ban)

Innere Bilanz vom 31. Dec. 1991
der Intelligens Software AG.
(aufgrund des Kontenübersicht)

1./ Geldmittel (Pénzeszközök)		22.910	1./ Aktienkapital (Részvénytőke)	23.860	
			Vermögen akkumulation (felhalmozott vagyon)	1.944	25.804
2./ Forderungen (Követelések)		37.758	2./ Kurzverbündlichkeiten (Rövid lejáratú kötelezettségek)	47.794	
			Ab: Tax zurücklage (Le: VÁRVA túlfizetés)	-4.110	43.684
3./ Gekaufte u. eigene Vorräte (vásárolt és saját készletek)		5.243			
4./ Sonstige Aktiven (Egyéb aktívák)		1.319	3./ Reserven (Tartalékok)		ø
5./ Investitionen (Befektetések) Részvények		1.170	4./ Gewinnkonto saldo nach Steuerung (adózott eredményszla T egyenlege)		x - 1.840

4./ Nettovest des Anlagevermögens (Immobilien) Állóeszközök és beruházások	12.881	5./ Gewinn (Nyereség)	13.643
Gesamte Aktiven (Eszközök összesen)	81.291	Gesamte Passiven und Gewinn (Források összesen)	81.291

	1990.	1991.	erweiten (1000 Ft)	
Gesamte Aktiven (Bilanz Hauptsumme)	44.903	81.291	+ 36.388	+81,- %
Gewinn	8.536	13.643	+ 5.107	+59,8 %

x = 1,840.000,- Ft Tisztségviselők díjai és munkatársak részvényei
Direktiersrat und Aufsichtsrat und mitarbeiteren Actien.

dr. Szüts Károly
okleveles könyvvizsgáló
K–450/89/VI.
1126 Budapest, Németvölgyi út 9

Budapest 27. Feb. 1992

dr Szűts Károly
Dipl. Buch- und Wirtschaftsprüfer

Eredményelszámolás 31. dec. 1991.

(Kost und einahmen)

2. melléklet

K o s t e n

alap- segéd és egyéb anyagok	
Grund-, hilf und sonstige material	2.349
Arbeits-Lohn (munkabér)	19.459
Sozialsicherung (társ. biztosítás)	8.529
Amortization (értékcsökkenés)	1.154
Sonstige materialkosten (egyéb anyagköltség)	10.446
Sonstige lohnkosten (egyéb bérköltség)	14.903
Dienstliches arbeit (szolgáltatás)	22.523
Kleikosten (egyéb kisebb költségek)	1.549

Gerade kost zusammen aufwendungen	
Közvetlen költségek	80.912
Egyéb ráfordítások:	
Regie Kosten und Import Kosten (für Betriebkosten und importkosten u.s.w.)	65.709
Üzemi és import költség	
Aufwendungen und Kosten zusammen (ráfordítások és közvetett költségek)	146.621
Gewinn (nyereség)	13.643
Hauptsumme (összeg)	160.264

E i n n a h m e n

Belföldi árbevételek (eladás, szolgáltatás)	
Julander verkaufwaren und Dienst	104 462
Nach Ostländer verkaufen (Export)	3 846
Keleti (Rub) export	
Konvertibilische Export (Tőkés export)	50 534
(Netto árbevétel) Verkaufen netto einnahmen	158.842
Sonstige (kleiner) einnahmen (Egyéb bevételek)	1.422
Zusammen (Összesen)	160.264

Budapest 27. Feb. 1992

dr Szűts Károly

Dipl.Buch- und Wirtschaftprüfer

dr. Szűts Károly
okleveles könyvvizsgáló
K-450/89/VI.
1126 Budapest, Németvölgyi út 9.

3. melléklet

(1000 Ft)

Steuer und Zoll für Budget 1991.

(adók és vámok a költségvetési elszámolásokról)

Steuerung nach Gewinn (váll. nyereségadó)	3.997	
Steuerung nach persönliches (SZJA) lohn und wunst.	6.508	
Steuerung nach "ÁFA" (mehrwertsteuer)	18.429	
Zoll (ván)	83	
	29.017	29.017
Andere aus Zahlungen;		
(Egyéb kifizetések /díjak, járulékok/)		
- nach Zoll (vámilleték)	32	
- nagy Mitarbeiter hilfe für arbeitlos % (Munkanélküli járadék)	58	
- sonstige aus zahlungen nach lohn-entwicklungen (zurückzahlung nach ergebnisse 1990.) (bérfejlesztési befizetések 1990. után)	798	
Egyéb költségvetési befizetések:	888	888
Zusammen (Összesen)		29.905

Budapest 27. Feb. 1992

dr Szűts Károly

dipl. Tax retgeber

dr. Szüts Károly
okleveles könyvvizsgáló
K–450/89/VI.
1126 Budapest, Németvölgyi út 9.

4. sz. melléklet

A könyvvizsgálói jelentéshez tartozó vizsgálati megállapítások

(IQSOFT SZKI Intelligens Software Rt. 1991. dec. 31.-i mérleg és eredményvizsgálata során tapasztalt fôbb tényezôk)

1. A mérleg- és vagyonkimutatásról szóló 3/1991.(II.9.)PM, a 32/1990.(XII.28.)PM és a 48/1989.(XII.27.)PM rendeletekkel módosított mérlegrendelet elôírásainak a Részvénytársaság eleget tett.
A könyvvitel rendjérôl szóló 18/1989.(IV.30.)PM és 33/1989.(VIII.5.)PM rendeletekkel módosított 52/1988.(XII.24.)PM rendelet 2.§ -ban meghatározott egyszerûsített kettôs könyvvitel szerint könyvelte az 1991. év gazdasági eseményeit, ill. e szerint készítette el mérlegét, eredménykimutatását- és felosztását, valamint költségvetési kapcsolatainak alakulásáról szóló mérlegmellékletét.

2. A mérleget komplett módon benyújtotta az adóhatóságnak.

3. A mérleg és mellékleteinek adatai eleget tesznek a kötelezô számszerû összefüggések követelményének.

4. Az alapítói vagyon (részvénytôke) emelését évközben hajtották végre, és nyújtották be a Cégbírósághoz.

5. A költségek és ráfordítások bizonylati alapjai megvannak, az árbevételek és egyéb bevételek számlákkal ill. egyéb bizonylatokkal alátámasztottak.

6. Az idôbeli elhatárolások elfogadhatók.

7. A vevôk és szállítók tartozásai és követelései 1992. I-II. hónapjaiban túlnyomórészt befolytak. 1992. február 25.-ig a be nem folyt vevôtartozások 4.Ø82 eFt.-ot tettek ki a mérlegben szereplô 37.112 eFt.-ból. Ezek a kinnlevôségek nem kétesek. Ki nem egyenlített szállítói követelések: 11 eFt.-ot tesznek ki. A mérlegben szereplô magas tartozási és követelési állomány a magyarországi nehéz fizetési készség miatt volt dec. 31.-én.

8. A hitelek törlesztései az év folyamán rendszeresen megtörténtek.

9. Az adóhatósági elszámolások és pénzforgalmi teljesítések megfelelnek az adózás rendjérôl szóló elôírásoknak

10. A könyvvitelre kialakított - évközben bevezetett - számítógépes rendszer alkalmas a könyvviteli és mérlegkészítési feladatok jó ellátására.

Budapest, 1992. február 25.

dr. Szûts Károly

5. napirendi pontjoz

1991. évi EREDMÉNYFELOSZTÁS

(tervezet az IBÁOFT Rt. 1992. március 12.-i közgyülésere)

Mérleg szerinti eredmény	13.563	eFt
Vállalkozási nyereségadó	- 3.973	"
(kedvezményekkel csökkentve)		
Adózott eredmény	9.590	eFt.

Evközi változások:

Tisztségviselők tiszteletdija	- 795	eFt.
Közerdekü kötelezettségváll.	- 45	"
Kiosztandó osztalék	- 5.397	"
Ügyvezető ig. premiuma	- 963	"
Ingyenes dolgozói reszvény*	- 1.000	"
Tiszta eredmény	1.390	eFt.

Megjegyzés: a közgyülésre beterjesztett felosztási javaslat összességében kismértékben módositja az Igazgatóság és az FB által korábban jóváhagyott javaslatot. Ezek közül is az említést érdemlő tételek::

- eredményt csökkentő tétel a helyi iparüzési adó utólagos korrekciójából adódó 80 eFt. többletráfordítás
- a tiszta eredményt növelő tétel a tisztségviselők tiszteletdijának elszámolási változása (korábban az egész évre járó, a jelenlegi javaslatban a naptári évben kifizetett összeg szerepel)

IQSOFT SZKI Intelligens Software Rt.

Javaslat az IQSOFT SZKI Intelligens Software Rt. választott tisztségviselőinek 1992. évi díjazására

Az IQSOFT Rt. Igazgatósága javasolja, hogy 1992. január 1-től a Részvénytársaság tisztségviselői az alábbi tiszteletdíjakban részesüljenek:

Igazgatóság elnöke	(1 fő) évi 200.000,- Ft/fő
Igazgatóság tagjai	(3 fő) évi 176.000,- Ft/fő
Felügyelő Bizottság elnöke	(1 fő) évi 200.000,- Ft/fő
Felügyelő Bizottság tagjai	(2+1 fő) évi 176.000,- Ft/fő

Javasoljuk továbbá, hogy az időarányosan járó összegeket (a Közgyűlés által jóváhagyott összeg 25 %-át) minden naptári negyedévet követő 10 munkanapon belül a Részvénytársaság az érintetteknek fizesse ki.

7. napirendi ponthoz

IQSOFT SZKI Intelligens Software Rt.

Javaslat az ügyvezető igazgató 1992. évi alapbérére és prémium feltételeire

1. Az Igazgatóság javasolja, hogy az ügyvezető alapbére 1992. január 1.-től 120.000,- Ft/hó legyen.

2. Az Igazgatóság javasolja, hogy az 1991. évhez hasonlóan az ügyvezető igazgató prémiuma az IQSOFT Rt. adózott eredményéhez kapcsolódik. Az elfogadott terv szerinti adózott eredmény megvalósulása esetén az ügyvezető igazgató éves prémiuma az alapbérének 150 %-a. Ennek minden 1 %-os túlteljesítése esetén a prémium növelendő 2 % ponttal (az alapbér 150 %-a felett), minden 1 %-os elmaradás esetén a prémium csökkentendő 3,5 % ponttal (az alapbér 150 %-ához képest). A prémium felső határa az éves alapbér 200 %-a.

A napirend 8. pontjához

Határozati javaslat

Az Igazgatóság és a Felügyelôbizottság által jóváhagyott elôzetes anyagok alapján a Közgyùlés az 1992 évi terv fô mutatóit - az 1991 évi tényszámokkal összevetve - az alábbiakban határozza meg:

	1991	1992
Bruttó árbevétel	160 mFt	250 mFt
Nettó árbevétel*	80	115
Mûködési költségek	62	92
OMFB visszafizetés	5	5
Adózás elötti nyereség	14	18
Adózás utáni nyereség	10	12
Osztalék százalék	25%	30%
Átlagos állományi létszám	43 fô	52 fô
Egy fôre jutó		
bruttó árbevétel	3727 eFt	4817 eFt
nettó árbevétel	1856	2220
béralap	445	538

(*) Az alvállalkozói, termékbeszerzési és utazási költségek levonása után fennmaradó árbevétel érték

Basic considerations for the 1992 business plan

1. Previous revenue sources continue with moderate increase

- Bank Austria: on 1991 level
  effects or reorganization
  OS/2 ? Oracle ?

- Oracle: market slow-down on small accounts
  but "harvesting" on some large ones
  growing direct OCE/oem participation

2. New directions starting to emerge

- new product line: archiving/imaging

- banking software: packages to sell/support

- Oracle applications/system integration
  projects and capacities coming

- creating OS/2 expertize

= partners, markets and people already identified
needs time and resources to build up new revenue sources
more investments, moderate revenues in 1992

3. Increasing (and unforeseeable) expenses

- inflation continues (decreasing ?)

- labour costs growing
  new tax and social security laws

- effects of new accounting regulations
  hardware/software costs

4. Consequence:

- less ambitious growth planned for 1992

- might be exceeded if
  new directions bring revenues earlier
  cost increases less than expected

- collect strength for big expansion in new directions

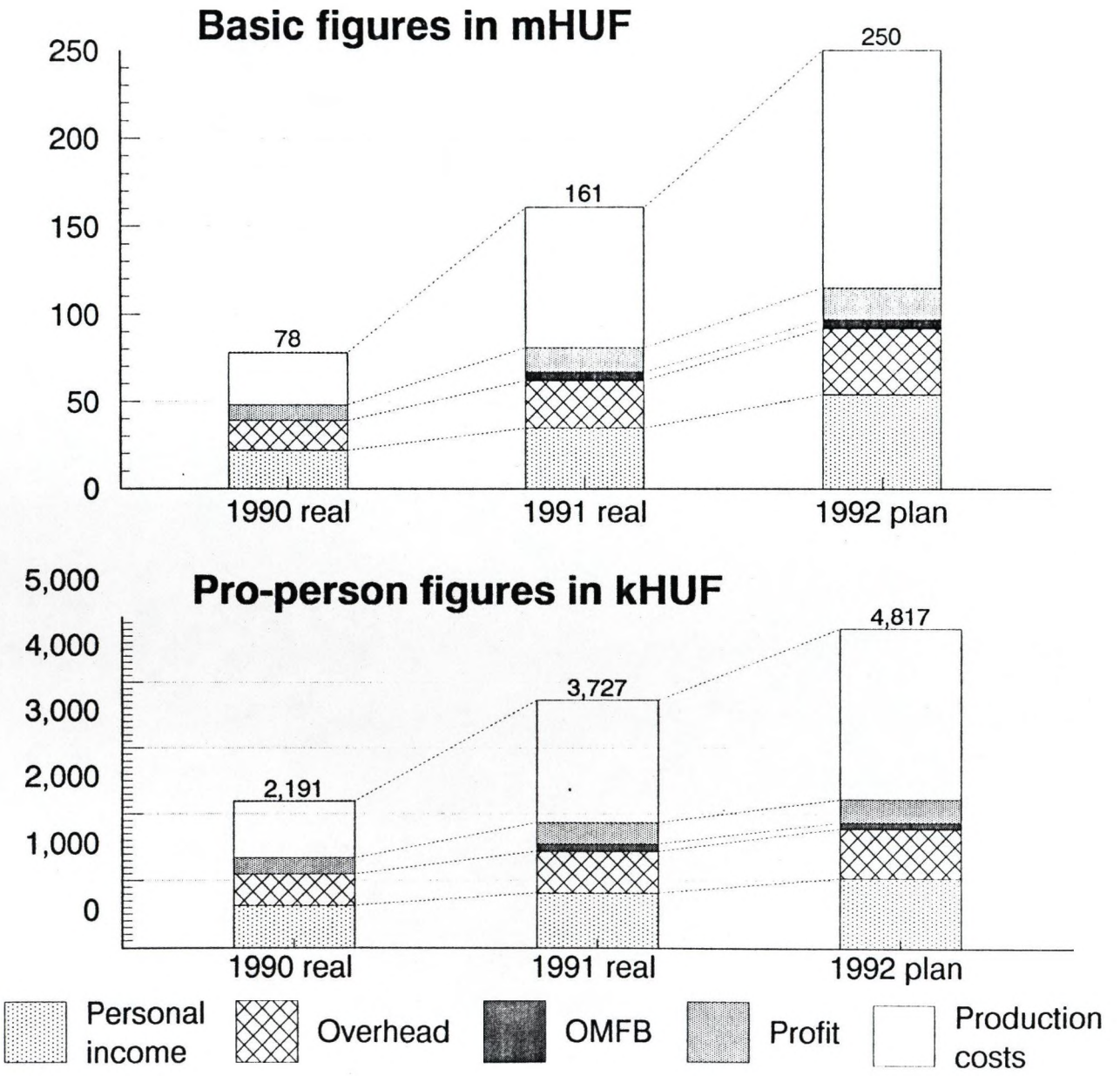
Plan for 1992
(extrapolated from 1991 figures)

		1991 real	*91 -> 92*	1992 plan
0.	Average headcount	43	*21%*	52
1.	Gross revenues	160	*56%*	250
1.1	Bank Austria	47	*30%*	62
1.2	Other export	3	*40%*	4
1.3	Oracle sales	88	*60%*	140
1.4	Oracle services	6	*100%*	12
1.5	Other revenues	16	*100%*	33
2.	Production costs	80	*69%*	135
2.1	Travel	13	*50%*	19
2.2	Oracle import	48	*75%*	84
2.3	Oracle extern costs	8	*50%*	12
2.4	Other subcontractors	11	*80%*	20
3.	Personal income costs	35	*55%*	54
3.1	Salary	14	*50%*	20
3.2	Bonus	6	*50%*	8
3.3	Benefits	3	*60%*	5
3.4	Copyright fees	4	*60%*	6
3.5	Social security	9	*60%*	14
4.	Overhead costs	27	*43%*	38
4.1	Office space rent	4	*50%*	6
4.2	Services	2	*20%*	2
4.3	Office costs	4	*30%*	5
4.4	Hw-sw resources	5	*50%*	8
4.5	Publicity	5	*100%*	11
4.6	Others	7		7
5.	OMFB loan repayment	5		5
6.	Net revenues /1.-2./	80	*43%*	115
7.	Operational costs /3.+4./	62	*49%*	92
8.	Profit /6.-7.-5./	14	*32%*	18
9.	Payments from profit	7		8
9.1	Company tax	4		6
9.2	Fees of Board members	1	*30%*	1
9.3	Bonus of managing director	1	*25%*	1
9.4	Employee shares	1		
9.5	Others	0		
	Dividend %	25%		30%
10.	Dividend payed	5		7
11.	Dividend received	0		0
12.	Net profit /8.-9.-10.+11./	1		3

Comparison of pro-person values in 1990-1991-1992(plan)

(in kHUF)

	1990	90 -> 91	1991	91 -> 92	1992 plan
0. Average headcount	35		43		52
1. Gross revenues	2191	*70%*	3727	*29%*	4817
2. Production costs	849	*119%*	1856	*40%*	2597
3. Personal income costs	627	*30%*	813	*28%*	1039
4. Overhead costs	471	*33%*	625	*18%*	737
5. OMFB loan repayment			116		96
6. Net revenues /1.-2./	1343	*39%*	1871	*19%*	2220
7. Operational costs /3.+4./	1099	*31%*	1438	*24%*	1776
8. Profit /6.-7.-5./	244	*30%*	317	*10%*	348


Basic figures in mHUF
250
200
150
100
50
0
78
161
250
1990 real
1991 real
1992 plan
Pro-person figures in kHUF
5,000
4,000
3,000
2,000
1,000
0
2,191
3,727
4,817
1990 real
1991 real
1992 plan
Personal income
Overhead
OMFB
Profit
Production costs

ANNUAL REPORT 1992/93

June, 1993
(Preliminary Edition)

I. The Company

Full name: IQSOFT Intelligent Software Computing Manufacturing and Trading Co. Ltd.
Registration number: 041344
Short name: IQSOFT Intelligent Software Co. Ltd.
Registered capital: HUF 23.860.000

Shareholders:

~~Computer Research and Innovation Center /SzKI/~~:	54%
~~(to be purchased in July 1993 by~~ IQ Management Ltd =IQSOFT management + employees)	
Z-Länderbank Bank Austria AG :	25%
Westdeutsche Landesbank Hungaria (West LB):	10%
private persons (employees) voting:	7%
private persons (employees) non voting	4%

*Board of Directors:**

Chairman:	~~György HALMOS~~	~~(SzKI)~~
Members:	Bálint DÖMÖLKI	(IQSOFT)
	Günter ERNST	(Bank Austria)
	~~Zsuzsanna FARKAS~~	~~(IQSOFT)~~
	~~Gizella VERES~~	~~(West LB)~~
	Péter Szeredi	(IQSOFT)

*Supervisory Board:**

Chairman:	~~Zsolt NARAY~~ Dezső SIMA	
Members:	~~Lajos CSÁNKY~~	~~(SZKI)~~
	Franz GILY	(Bank Austria)
	~~Endre NAGY~~	~~(West LB)~~
	Pál ZSEDÉNYI	

Auditor: József GUNGL

Management:

General:	Bálint DÖMÖLKI
Technical:	Tamás LANGER
Commercial:	Júlia SIPKA
Financial:	Gábor BIENER

Address: H-1142 Budapest, Teleki B.u. 15-17.
Phone: (36-1)-251-5949 *Fax:* (36-1)-120-0050
E-Mail: iqsoft@iqsoft.hu

Bank account: Budapest Bank 208-18926
Westdeutsche Landesbank Hungaria 206-12490

* new boards will be elected in September, 1993

II. Background of the company

IQSOFT's predecessor, the Theoretical Laboratory was established in the Computer Technology Coordination Institute (hereafter SZKI; the legal predecessor of the Computer Technology, Innovation, Communication Co.Ltd and the Computer Technology Research Institute and Innovation Center) under the direction of IQSOFT Rt's current managing director. The Laboratory was assigned the task of exploring matters serving the long-term development of the institute. The initial staff of 10-15 persons grew to 40-50 persons by the end of the 1980s and developed a number of software products, which achieved outstanding sales results and contributed to the success of SZKI that had a leading role on the software export market.

Similarly to several other domestic institutes satellite firms were started to be formed in SZKI by the end of 1980s. In this respect, the Theoretical Laboratory was also divided into three parts:

1. Together with people of SZKI's commercial section, the developers of the internationally successful optical character-recognising program established Recognita Rt;

2. The majority of the Theoretical Laboratory's employees, who mainly dealt with the development of artificial intelligence tools and applications, established SZKI Intelligent Software Rt (IQSOFT) with the financial participation of an Austrian and a Hungarian bank.

3. Developers of the Qualigraph software quality control tool - also succeeding on the international market - remained in the Software Quality Control Office of SZKI.

The Theoretical Laboratory's part dealing with artificial intelligence can be regarded as the direct predecessor of IQSOFT. Their main product was the MProlog logic programming system, which was highly successful in the early 1980s around the world (including North America and Japan), as the first commercial purpose realisation of the ("fifth generation") Prolog language.

Later on partly as a result of the technical and commercial (moreover financial and infrastructural) difficulties of maintaining and selling a software product from Hungary and also because of the decreasing international interest, the trade of MProlog as a software product was pushed into the background. After the establishment of IQSOFT MProlog was used for internal development (see below in detail).

Consequently new income sources had to be searched for when IQSOFT was established and this was found in software development projects for Austrian Zentralsparkasse (later on Bank Austria), and in the distributing of the relational data-base management software products of ORACLE Corporation(USA). In the first three years these two fields accounted for approx. 85-90% of IQSOFT's revenue.

In order to counterbalance some problems of the above two income sources' perspectives the firm initiated the foundation of some new profiles too (document handling and archiving systems, distribution and development Oracle applications, OS/2, etc.)

III. Main products and services

1. MProlog, ZEXPERT

MProlog is a Hungarian version of the logic-based programming language Prolog. It was developed in SZKI as a first realisation of its kind in the world. It is an internationally recognised product by the Theoretical Laboratory having an extensive distribution network around the mid-eighties (USA, West Germany, Italy, France, Japan, etc.). It can be used on a wide scale of computers from PCs (IBM PC, Apple MacIntosh, SUN, Apollo) to large computers (IBM 370 series, Siemens, VAX). In 1988 the development won a state award from Hungary. By the end of 1980s several new Prologs appeared parallel to a narrowing market. Thus IQSOFT took some emphasis off the commercial distribution of MProlog and used it primarily as a tool for its own projects.

Sticking to the MProlog traditions, the field of artificial intelligence has an important role in the activity of IQSOFT. The MProlog-based banking expert system shell ZEXPERT was developed for Bank Austria. This system is offered mainly for the development of advisory systems. It is significant that expertise knowledge (regulations, on basis of which the advisory system operates) appears in a form close to natural language and can easily be handled by the expert. One of the first application of ZEXPERT was the advisory system named PROFI, which helps find the correct way like housing loans in the branches of Bank Austria (rather complicated in Austria). On large IBM mainframes ZEXPERT (and the consulting system in it) is used under the MVS operation system, on IBM PC under DOS and OS/2 systems.

Artificial intelligence related activity of IQSOFT includes also R & D activity, which it carries out on parallel computer architecture realisations of logic programming languages. In this area IQSOFT paticipates also in international cooperation projects, partially supported by EC.

2. Bank Austria projects

IQSOFT, since its establishment, has been participating in software development of Bank Austria (and its predecessor, Zentralsparkasse) (to the extent of approx. 400 man-month till now). In addition to ZEXPERT three important projects will be mentioned:

- Geldhandelsprogram - ORACLE-based information system for domestic financial tradesmen of Bank Austria (in NOVELL, OS/2 environment),

- Drunkdatenbank - configuration and handling of a data base containing the print image of invoices to be made as supplements to public current accounts (in MVS/IMS environment),

- ABS - consulting system for small investors on the expected types and incomes of different investment forms (e.g. deposit, leasing, insurance), (DOS and OS/2 environment).

In addition to entire projects IQSOFT collaborates in certain phases of Bank Austria projects (analysis, network-planning, programming, etc.).

3. OS/2 activity

A group at IQSOFT deals with OS/2 consulting, programming and training. Their main activities are:

- participation in Bank Austria's OS/2 projects as consultant,
-development for IBM Austria. For example the preparation of a help-editor for the a OS/2 2.0 operation system
- preparation of education material and training for IBM Hungary (educational partner).

4. Oracle licence sales and technical support

Expectations specified in the 1990 distributor contract were fulfilled as regards both professional points and turnover, making Oracle products the most widespread and sought for relational data base in Hungary, with a decisive market share. In the course of IQSOFT's three-year activity (including the turnover projected till the end of the year) Oracle products have been sold in Hungary in the value of approx. HUF 400 million.

Of course high standard commercial activity is not enough to achieve such a turnover. IQSOFT data base supporting group's work contributed greatly to this success, in addition to the product's world-wide popularity and our firm's commercial policy.

The successful activity of IQSOFT since 1990 contributed to Oracle's leading position in the Hungarian data base market. This resulted in a new step in Oracle distribution: as in most countries in the world, Oracle established also in Hungary a 100% self owned subsidiary , which after the expiry of IQSOFT's distributorship contract in May 1993, will handle the distribution of Oracle products in the Hungarian market.

A series of agreements concluded with Oracle Hungary define the future role of IQSOFT in the Hungarian Oracle market, as dealer, Value Added Resaler, consultant etc. The main part of IQSOFT's Oracle-related activities, however, will be directed to Oracle-based applications (see below).

5. Development and distribution of Oracle applications

When selling Oracle license IQSOFT was confronted more and more by users not wanting a certain software product only but an answer or assistance to their application needs, solution of their problems. Recognising this IQSOFT started to establish and train a development group based on mainly the design tools of Oracle (CASE technology). One of their first projects was the implementation of an information system to handle the free jobs in Budapest for the Unemployment Office.

In 1993 IQSOFT began to distribute different Oracle based applications. Their two significant representatives are:

- Oracle Library - Integrated system for library automation and document processing
- Avalon CIIM - Computer Interactive Integrated Manufacturing.

Further application packages, as well as other Oracle related products will also be

distributed and supported by IQSOFT.

6. DOKTÁR

As the distributor of Oracle products and developer of application systems IQSOFT Rt. has acquired the knowledge necessary on large data bases. It was observed at banks, business partners and other institutions that the preparation of data, keeping of procedures and organisation are the main problems, since the majority of information does not originate from digital data carriers but from traditional paper documents. The computer based document handling and archiving systems substitute this deficiency.

In order to fulfil users' needs a flexible system developped in MS Windows environment by Hypermedia Systems Ltd., Hungary was started to distribute at the end of 1991. The activity around DOKTÁR more and more extends with system integration and office automation tasks. The DOKTÁR system achieved initial market success by the end of 1992 and the tendency is expected to continue in the future.

IV Marketing activities

1. Exhibitions

In 1992/93 IQSOFT participated on the following international fairs:

IFABO, Budapest, May, 1992
Budapest, May, 1993
Compfair, Budapest, October, 1992
BANKTECH, Budapest, February, 1992)
Budapest, February, 1993
CEBIT, Hannover, March 1993
IFLA conference, Budapest, February, 1993

2. Demonstrations

IQSOFT sponsored (among others) :

- "The Practical Applications of PROLOG" conference and exposition in London, April, 1992

- "Future of Our Past" conference in Budapest, May 1993

- 10th International Conference on Logic Programming in Budapest, June 1993

- "Informatics in High Education" conference, Debrecen, September, 1993

IQSOFT held technical days for different professional groups and demonstrations on the following events:

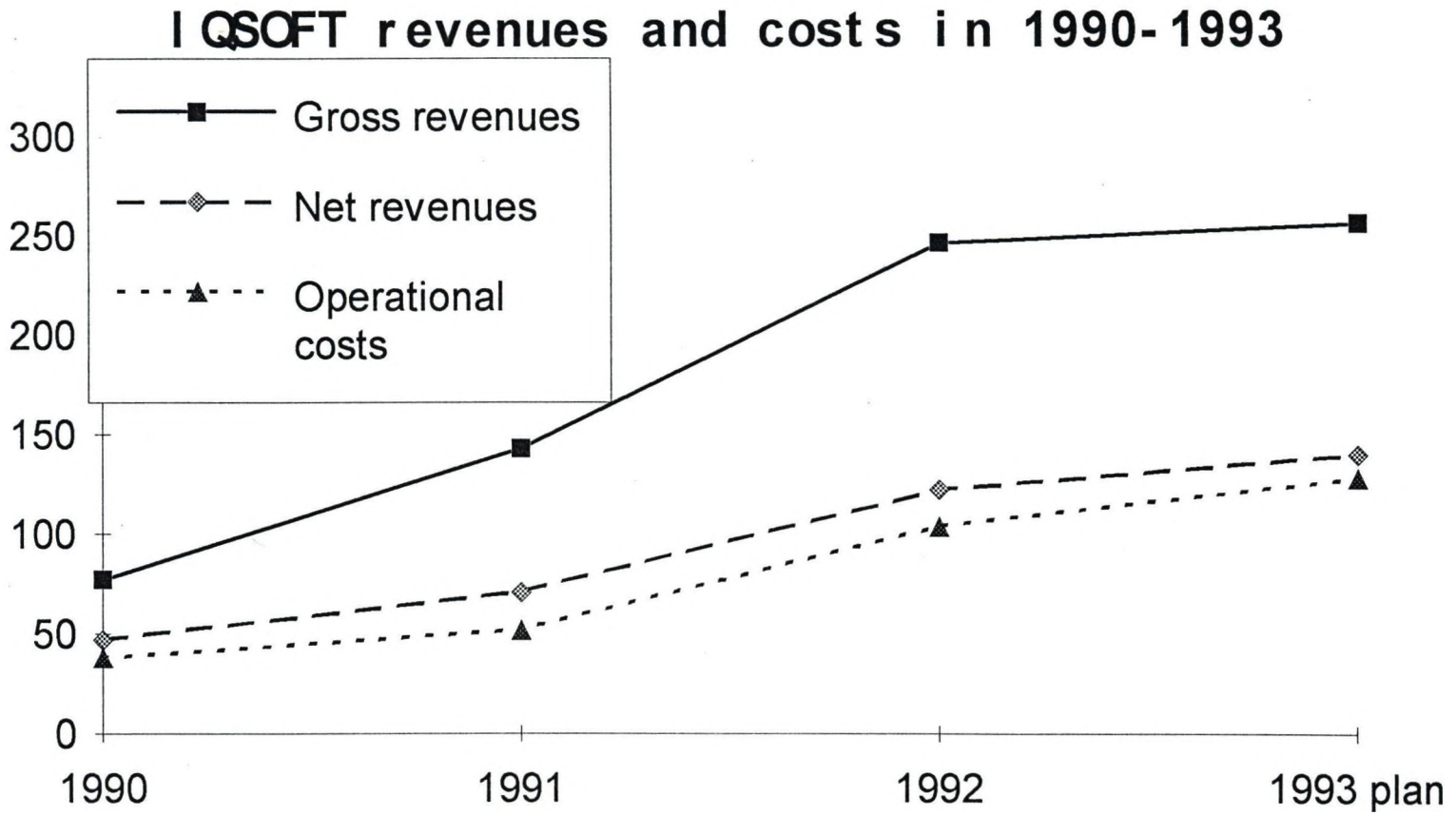
- ORACLE Technical Days, Budapest, February, 1993

- Network Shop'93, Pécs, April 1993

- AVALON course , Budapest, June, 1993

V. Financial results

	Plan 1992		Real 1992		Plan 1993.		cost	*net*	
Business revenues	**250**		**242**		**253**				
Bank Austria .		62		55		49	12	*37*	27%
Other export		4		9		20	3	*17*	13%
Oracle sales		140		146		112	59	*53*	39%
DOKTÁR sales				21		42	30	*12*	9%
Other business revenues		44		10		30	13	*17*	13%
Financial revenues			**5**		**3**				
Interest, exchange rate and others				5		3	116	137	100%
Production costs	**135**		**124**		**116**				
Travel		19		18		20			
Oracle products		84		82		59			
DOKTAR products				17		30			
Other subcontractors		32		7		7			
Personal Income costs	**53**		**55**		**66**				
Salaries		20		23		29			
Employee's bonus		8		4		4			
Copyright fees		6		8		10			
Benefits		5		5		6			
Social security		14		15		17			
Officers' fees			**3**		**3**				
Members of Boards, managing dir. bon				3		3			
Overhead costs	**39**		**35**		**50**				
Rental		6		6		14			
Services		2		4		5			
Office costs		5		5		7			
Hardware-software system		8		9		12			
Publicity		11		10		11			
Other overhead		7		1		2			
Financial and tax expenses			**11**		**8**				
Interest, exchange rate and others				9		6			
Taxes				2		2			
OMFB payback	**5,5**		**6**		**5**				
OMFB payback		5,5		5,5		5			
Net revenues	**115**		**122**		**140**				
Operational costs	**92**		**104**		**128**				
	0								
Profit before taxes	**18**		**13**		**7**				
Profit of business				25		17			
Profit of finanacial activities				-4		-3			
Taxes paid during the year				-2		-2			
OMFB payback				-5,5		-5			
Company profit tax	**6**		**4**		**2**				
Officers' fees	**3**								
Profit after taxes	**9**		**9**		**5**				


IQSOFT revenues and costs in 1990-1993
Gross revenues
Net revenues
Operational costs
300
250
200
150
100
50
0
1990
1991
1992
1993 plan

VI. Working Environment

1. Staff

Active employee number 51 persons
Inactive staff (abroad, maternity, etc.) 10 persons

Active staff by education :

Education: 44 persons with university or college degree
7 persons with secondary school certificate
Degrees: 1 candidate
5 university doctors

Division according to sexes: 22 women + 29 men

Average age: 38.6 years

Division by age:

20-29 years:	13
30-39 years:	11
40-49 years:	20
50-59 years:	5
60-69 years:	1
70- years:	1

Division by activity

	Executive	Med.executive	Collegaue	Total
Technical	1	2	29	32
commercial marketing	1	1	9	11
Economic-financial	1		3	4
Administrative	1		3	4
Total	4	3	44	51

Division by ancienity :

Joining at establishment:	23
More than 2 years, but not at establishment:	10
More than 1, but less than 2 years:	8
Less than 1 year:	11

IQSOFT's organisation diagram can be seen on Figure 1.

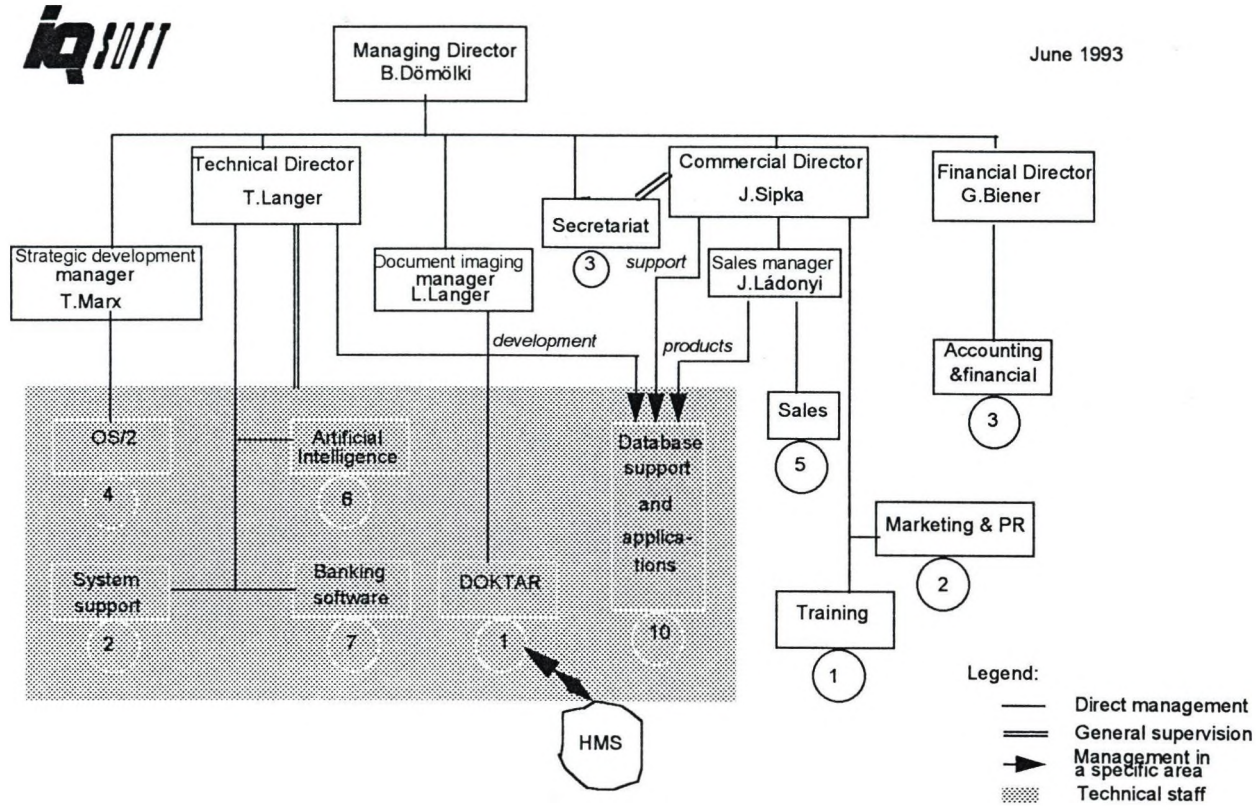

Managing Director
B.Dömölki
June 1993
Technical Director
T.Langer
Commercial Director
J.Sipka
Financial Director
G.Biener
Secretariat
3
support
Strategic development manager
T.Marx
Document imaging manager
L.Langer
Sales manager
J.Ládonyi
development
products
Accounting &financial
3
Sales
5
OS/2
4
Artificial Intelligence
6
Database support and applica-tions
10
Marketing & PR
2
System support
2
Banking software
7
DOKTAR
1
Training
1
HMS
Legend:
Direct management
General supervision
Management in a specific area
Technical staff

Figure 1

2. The office

In March 1993 the firm moved to a new building (Budapest, XIV. Teleki Blanka u.15-17). The new office provides approx. 700 sq.m. of office space, among conditions more advantageous than in the past from points of office size and infrastructure.

The total office space is divided into about 40 rooms including training, meeting, demo, server rooms and a large secretariat. The typical working room is for two people

3. Hardware and software environment

The net value of material assets in computer technology for own development purposes was HUF 16 million at the end of 1992. Value of the acquisitions in 1992 equals approx. HUF 7 million from this. Presently the computer background of IQSOFT is an Ethernet network serving nearly 50 workstations all over the building. The network is served by Novell UNIX and OS/2 servers. Servers are 486-based large configuration PCs, and one server is a SUN SLC configuration. Work stations are generally 386-based PCs with 4-16 Mbyte memory and 40-200 Mbyte hard disk capacity. IQSOFT's computer park also includes a MicroVax configuration. Nearly 25 PCs, adequate in configuration to the work stations, are in employees' homes. Outward access is realised by an X25 gateway. The network is complemented by four HP laser printers.

The draft architecture of IQSOFT System can bee seen on Figure 2.

Document handling and archiving are demonstrated on a computer configuration that includes scanners, MO disk, booster card and high resolution monitor.

Software assets of IQSOFT include major platforms (OS/2, Novell, Windows, UNIXs), office-automation and development tools.

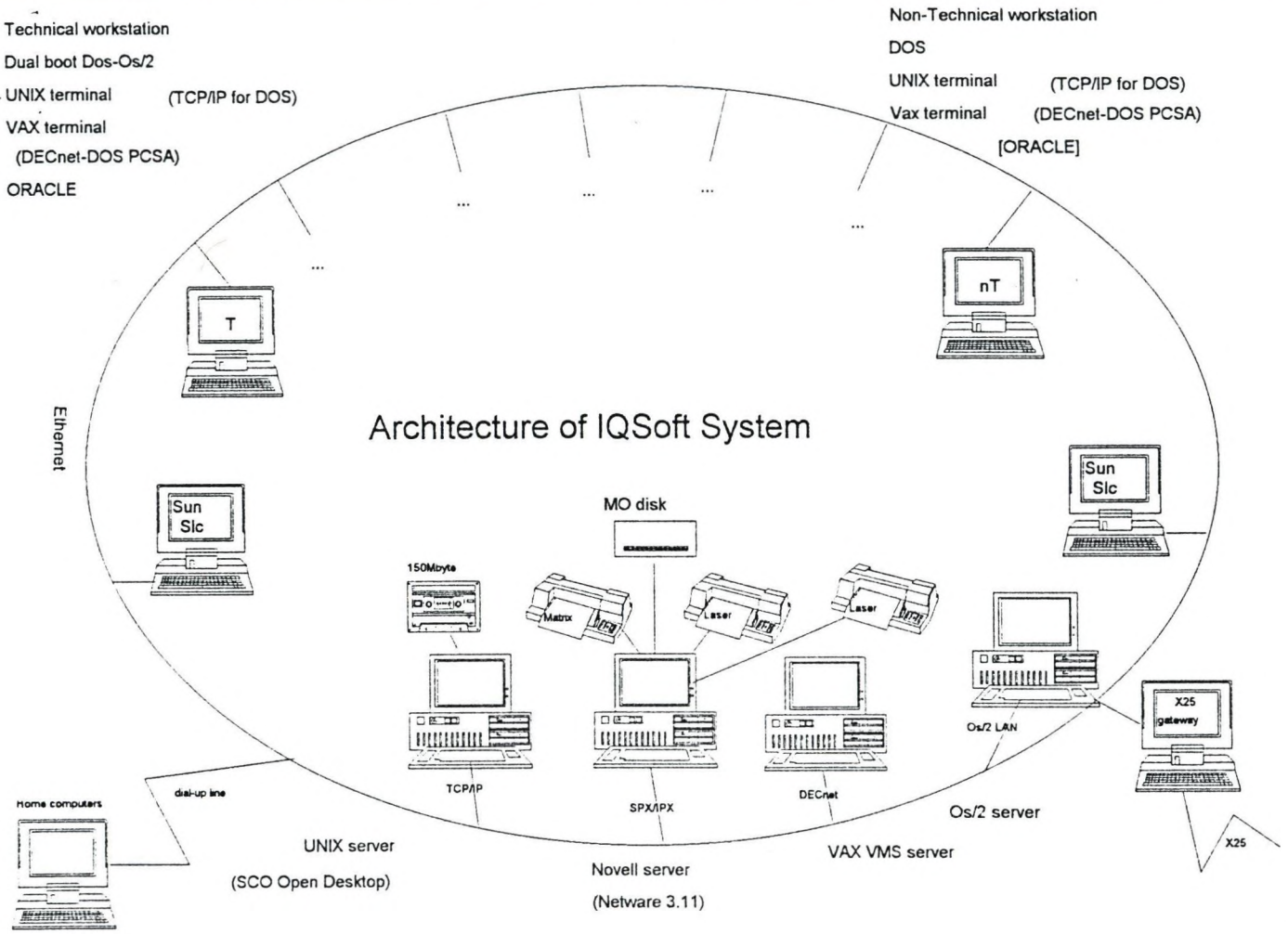

Technical workstation
Dual boot Dos-Os/2
UNIX terminal (TCP/IP for DOS)
VAX terminal
(DECnet-DOS PCSA)
ORACLE
Non-Technical workstation
DOS
UNIX terminal (TCP/IP for DOS)
Vax terminal (DECnet-DOS PCSA)
[ORACLE]
Architecture of IQSoft System
Ethernet
T
nT
Sun Slc
Sun Slc
MO disk
150Mbyte
Matrix
Laser
Laser
TCP/IP
SPX/IPX
DECnet
Os/2 LAN
X25 gateway
X25
Home computers
dial-up line
UNIX server
(SCO Open Desktop)
Novell server
(Netware 3.11)
VAX VMS server
Os/2 server

Figure 2

Appendixes

1.Brief CV Of Head Executives

Dr. Bálint Dömölki, managing director (58 years)

Mathematician (ELTE 1957), candidate (Moscow 1966, programming theory). Advanced state examination in Russian and English. He collaborated in the construction of the first Hungarian computer. He continued software research and heads development work in MTA SZK from 1957 to 1965. He held high positions in INFELOR and in SZÁMKI from 1965 to 1977. From 1977 to 1989 he was head of laboratory and scientific director at SZKI. State award: in 1988 for the development of MProlog. NJSZT vice-president/president from 1975 to 1990. Founding member of IQSOFT Ltd.

Dr. Tamás Langer, technical director (44 years)

He obtained his mathematician diploma at ELTE in 1972, then in 1976 he became doctor of computer science. He worked as research fellow, then head of department in INFELOR, then SZÁMKI, then SZÁMALK from 1972 to 1983. He is the co-writer of three books on the field system-programming, programming languages and programming methodology. State award: in 1988 for the development of MProlog. Founding member of IQSOFT Ltd.

Dr. Júlia Sipka, commercial and marketing director (42 years)

Economist of international economic relations. She obtained her university doctor degree at the University of Economics in 1982. Fluent in English and Russian. She participated in marketing work and international marketing of a number of Hungarian-developed software products (e.g. MProlog). Founding member of IQSOFT Ltd.

Gábor Biener, financial director (38 years)

Completed the industrial faculty of the University of Economics in 1978 in the branch of company planning-analysis, then he worked at the Hungarian Oil and Gas Trust and became economics head of department at the Láng Machine Works. He was employed in economic policy directing area from 1986 to 1989. Founding member of IQSOFT Ltd.

László Langer, Multimedia Application Manager (46 years)

He completed the electric engineer faculty of the Budapest Technical University in 1970, and worked as assistant professor and later first assistant as the Process-Control Chair until 1986. Following that he worked in Germany at Bertelsmann AG for four and a half years, where he primarily leads projects related to optical disk and CD-ROM applications and electronic publications. Since his return home, he is the special consultant of Hypermedia Systems Co.Ltd. and product manager of IQSOFT since 1991.

János Ládonyi, sales manager (39 years)

He obtained his electric engineer diploma at the Budapest Technical University in 1977, then his commercial engineer-economist diploma at the M.K. University of Economics in 1981. He is fluent in English and German. He performs hardware development in SZKI. Computer technology foreign trade and marketing in SCI-L. General foreign trade at TRADE COOP Trading House, and within that he was the Hungarian project director (1987-88) of the international showroom and commercial depot established in Las Vegas. Commercial director in the domestic distribution of CONNER winchesters, then MICROPLEX laser printers. He joined IQSOFT in 1992 as commercial director.

Tamás Marx, strategic development manager (35 years)

Masters in oceanography at the University of Göteborg. He studied computer technology at Sorbonne. During the 1980s he worked in different laboratories of IBM France, IBM UK, IBM Corp. and IBM Nippon. He participated in the development of the Office Vision Project and OS/2, and in the European introduction of OS/2 2.0. He has been employed by IQSOFT since 1992.

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Installation Guide
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June, 1993 (in Hungarian)

(4)G. Eiben, E. Sántáné-Tóth:
Artificial Intelligence in Hungary I. - II.
NVKI-Nieuwsbrief (Nederlandse Vereniging voor Kunstmatige Intelligentie), 9/5 (oktober 1992.), pp. 155-157 and 10/1 (februari 1993.), pp. 27-28.

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Developer's Guide under OS/2 1.3

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Outlines of IQSOFT strategy

(Extended draft, Oct. 1994)

1. Introduction

Founded in January 1990, IQSOFT will celebrate its fifth anniversary at the beginning of next year. Within five years of being spun-off from SZKI , a disintegrating state-owned institution, IQSOFT has become an expanding, privately owned software company. IQSOFT is well positioned as an acknowledged expert in the Hungarian information systems market and is continually developing its international connections.

Since inception, IQSOFT's business strategy has been guided by following mission statement

IQSOFT will continue as a respected market leader in information management systems by development and value added distribution of the most advanced products and by providing highest quality services and optimal solutions to the delight of its customers. Through an unique combination of both technical and commercial activities, IQSOFT will build its product portfolio, enhance its service offerings, and expand its knowledge base as it continuously adapts to the information technology market's changing needs.

IQSOFT's mid-range strategic plan highlights the critical business activities which will assure success in both achieving our mission and reaching our financial objectives.

To determine the optimal strategy for IQSOFT it is important to understand the market trends (both domestically and internationally) and the human resources currently available, this is discussed in Section 2. The issues and assumptions highlighted in this section are used to develop "Product and Service" strategies in section 3, "Market Position and Activities" goals in section 4, "External Relations" objectives in section 5, "Organizational" objectives in section 6, and "Financial" targets in section 7.

2. Assumptions

In defining the strategy of IQSOFT we have to consider some assumptions about the facts influencing the environment IQSOFT is going to operate in. These include an overview of the most important trends in the development of information technology worldwide, some specifics of the Hungarian marketplace in the coming years and also a summary of the technical background determining the areas where considerable knowledge and skills can be found at IQSOFT.

2.1. International trends

Some of the main tendencies are listed below, [together with their possible impact on IQSOFT strategy]:

- open, distributed systems [this increases the need for well trained expert system integrators, which IQSOFT is able to claim]

- convergence of computing and telecommunications [this is a significant trend which IQSOFT should monitor. IQSOFT should attempt to get some associations and experience working with the telecommunications industry. There are many products that might fit into IQSOFT's portfolio, for example audio/voice processing software and telecommunications management.]

- information infrastructure, superhighways [This trend is creating a real problem with information overload, people have more information than they know what to do with. The value add of an application house (IQSOFT) is taking this information (which comes from a variety of sources and databases) and putting it in a useful format for the user. Applications are the road maps on the information superhighways, that is why it is important that IQSOFT understands the infrastructure so that it can offer customers the best maps. IQSOFT should provide systems which can connect and use the information available on the information superhighway.]

- increased role of (local) Small and Medium Enterprises [This trend is partly the result of information technologies, since integration of technologies still works best in small organizations, it is the small organizations that are implementing information technologies fastest, and thus gaining a competitive advantage. However, as information processing systems become more and more powerful, and large firms can get the same type of information as small businesses currently have available (the type that is needed to assure efficient operation of their businesses) So, among the potential customer-base of IQSOFT large firms should not be forgotten.]

- ncreased significance of consulting. [The consumer now has millions of options available and is looking for someone to tell him which is the best. So the consumer is seeking professionals to consult Experience is becoming the biggest competitive advantage for these consulting firms. To compete in this market it will be important for IQSOFT to retain its experience base (continue to invest in its human capital) and continue to look for the leading edge solutions.]

- there is a tendency of concentration on the world software market: large software vendors tend to cover the whole market, e.g Oracle is offering complete solutions in many areas (rather than providing the DBMS tools only), while Microsoft have also database tools along its office automation products. (Since just these two companies are likely to emerge from this tendency of concentration as winners and strong competitors of each other, IQSOFT being at present a close partner of both of them in Hungary, may sometimes have to face the difficult choice between them.)

2.2 Hungarian market

Some of the main tendencies are listed below, [together with their possible impact on IQSOFT strategy]:

- continuing public sector investments [Rebuilding of the infrastructure is going to require tremendous investment. Information technologies is very likely going to be the tool that allows Hungary to develop its economy, and it will be important for information companies in Hungary to continue lobbying for public sector investment.]

- hope for recovery of economy, industry [The general recovery that is occurring in the rest of the world will have its effect also on the Hungarian economy. Therefore, IQSOFT should aggressively seek business from industries that will be important for Hungary's development and are attractive markets for the available Western investors, like. businesses involved in building the countries infrastructure - telecommunications, construction (commercial and residential), transportation (logistics, shipping), and public utilities.]

- competition from multinationals and (cheap) freelancers [In general, people look for safety when investing in computer technologies (because the capital expense is so high), therefore the large multinationals have the advantage. IQSOFT needs to understand this advantage and position themselves as a safe supplier (through advertising, keeping good relations with current customers who will provide testimonials, and key strategic partnerships ie. association with safe suppliers). For small projects (or pieces of small projects) the "cheap" freelancers have the advantage, thus, IQSOFT may not be able to compete directly. Therefore IQSOFT should focus on the larger projects and use these freelancers as a subcontracting resource.]

- integration towards Europe [It continues to be important that IQSOFT gets involved in as many EU activities as possible. It is important that the EU is aware of the IQSOFT name and reputation so that when Hungary becomes a member of the EU, IQSOFT is ready to benefit from a broader market rather than be a victim of new EU competition].

2.3 Technical background

Building upon the history and traditions of IQSOFT considerable technical expertise has been developed mostly in the areas described below. This capacity is continously maintained by hiring the best people, providing training and an advanced working environment.

- database management systems and related methodologies and tools for the development and adaptation of application systems;
- knowledge based technologies (logic programming, expert systems);
- document imaging and office automation system development and -integration.

There are some additional areas being considered critical to IQSOFT's future, where it is necessary to develop an adequate level of knowledge and skills: The major such areas of focus are highlighted below:

- object oriented methods and tools (design, programming, databases)
- system analysis methods in connection with enterprise-wide information systems
- computer networks, information infrastructure (information services)

3. Products and services

Activities of IQSOFT (at present and in the foreseeable future) can be divided into the following main categories:

- value added distribution of products,
- application systems development, system integration and consulting,
- participation in international R&D projects,
- network development and information providing services,
- training.

In the following (Sections 3.1 -3.5) a short description of each of these activity forms will be given, outlining their role in the present and future scope of IQSOFT.

3.1 Value added product distribution

This is considered as the most important revenue source of IQSOFT. In accordance with the "mission statement" (see in 1.) the products IQSOFT distributes are typically

advanced products having worldwide reputations in their category, their sophistication requires a considerable amount of adaptation and technical support work both pre- and after-sales.

Products that meet these criteria come from the following categories:

a) *Software tools*, mainly connected with (relational) data base management. In this field, IQSOFT has extensive experience due to its historical connection as an Oracle distributor. Oracle involvement still has a noticeable impact: on existing technical knowledge and market connections allowing the company to remain an important player in the Hungarian Oracle market . In the same time the above mentioned assets can be "extended" to other - not necessarily competitive to Oracle - data base tools and application products. On the tools side the most promusung product is Gupta, where a leading position in Hungary, with a considerable volume of sales is within reach.

b) *Application systems*, mainly Oracle based. This is currently - and will continue to be - the central focus of IQSOFT's activities. Distribution of such systems requires a considerable amount of localization and adaptation work (including but not restricted to language translation) as well as consulting and training. Tools and know-how have to be developed to perform these tasks, including some technical expertise in the particular application domain of these systems Thus, a considerable amount of financial (and human) investment is required for each new product included in IQSOFT's portfolio. Although the investment is substantial, with the proper marketing efforts these systems can be sold with very high profit margins. This results in a business case which justifies such a large investment.

   At present IQSOFT carries three such application products:

   · *Oracle*Libraries*, a general purpose library management system (Fretwell-Downing Ltd. UK)

   · *AVALON-CIIM*, a comprehensive system for enterprise wide processing of manufacturing, distribution and financial information, with both Oracle and Sybase versions (Avalon Software Inc. USA)

   · *PCS*Care*, a completely Oracle-based complex hospital management system (PCS Spol. S.R.O, Czech Republic),

   Due to high levels of investment and risk associated with these activities, all future expansions of the product portfolio will be done with caution. Both current and new products will be continually evaluated based on market potential and strategic value. While some products will be eliminated from the portfolio, others will be added, resulting a slow steady growth in overall portfolio performance.

c) *Document imaging and office automation products* generally used in systems integration activities. IQSOFT's current activity in this category includes:

   - the DOKTAR family of software products, developed by Hypermedia Systems (Hungary), in close cooperation with IQSOFT, as distributor and system integrator. While DOKTAR basically is a set of modules from

which tailor-made solutions are created for each customer, some off-the-shelf products (DA-Dossie) will be developed to address simple document imaging applications;

- a high-end document imaging system, were IQSOFT will act as the value added distributor for one of the market leading software products (negotiations have begun);

- a hand-written form processing product, originating from a solution developed for the Hungarian Post Office and using a number-recognition algorithm developed by a small Hungarian company;

- Microsoft products, used in larger office automation system integration projects along with imaging products. Existing know-how and the Solution Provider relationship with Microsoft allows the adaptation of these products (e.g. Mail, Schedule, Exchange etc.) to the specific systems being developed;

- complementary products (usually Windows based) to be integrated into office automation systems (e.g. Vineyard, an object oriented visual information manager)

d) *Other products*, carried primarily to complement the core activities of IQSOFT. The three most important examples are:

- *Topic*, a highly sophisticated full-text information retrieval system (Verity Inc. USA)

- *Artemis Prestige* multi-project, multi-user project management system (Lucas Management Systems, USA) using SQL databases (eg. ORACLE, SQLBase) together with a projekt management technology. It can be effectively used along with large enterprise-wide control systems based e.g. on Avalon-CIIM;

- *Sequent* multiprocessor computer systems (Sequent Corp. USA), carried as the *only* (and there is no intention to change this situation) hardware product at IQSOFT, mainly because this is a platform exceptionally suitable to run complex Oracle-based applications. Since hardware neutrality is considered as one of the important assets of IQSOFT, the dsitribution of Sequent should be handled as a (possibly temporary) exception with extreme care to minimize competitive situations with hardware vendors being important potential cooperation partners in many projects (see 5.x)

Distribution of each of these products should be based on a very thorough market analyzes (both about the world-wide status of the product and about the Hungarian market situation) and a business plan should be prepared, outlining the investments (financial and human) needed and revenues expected Understanding the costs associated with each one of these projects and getting meaningful profit projections is difficult, but an absolutely necessary task, which is to be given much priority in the future.

3.2 Application systems development, system integration and consulting

These activities are in most cases are complementary to the product distribution described above (although they might be significant as a stabile revenue source as opposed to the high risk product distribution.). Main categories are:

a. development and consulting in connection with tools being distribued (Oracle, Gupta)

b. development of additional modules to application products being distributed, including joint devel;opment with the vendor (e.g. in case of Oracle*Libraries)

c. system integration around office automation products

d. software development for export (Bank Austria, ...)

A few remarks are to be made in connection with these activities:

- Due to the fact that software development is a business being made in most cases on the basis of trust, *reliability* is a very important asset of a supplier in this area. IQSOFT should achieve and maintain being recognised as such. Quality Assurance methods (cf. 6.x) are being extremely important here;

- Development activities are to be concentrated around topics connected to the products being distributed and the development (plus consulting, system integration etc.) activity should have a role serving as reference to product distribution, demonstrating the competence of the IQSOFT staff iabout these products;

- A simple calculation comparing the (relatively high) labour costs at IQSOFT with the (relatively low) manpower capacity prices chargable in the Hungarian market will show, that development work itself can hardly be profitable in itself. This situation can - and should - be changed by increasing significantly the level - and reliability - of our development and consulting work, partly through the introduction of an efficient Quality Management System (and obtaining corresponding ISO 9001 certificate). Until this can be achieved, we have to continue to regard development mainly as a complementary activity in order to support product distribution.

- ·Application development projects should lead to results being genralized as separate products to be sold independently. There are a few promising possibilities (e.g. the Class Library in SQL*Windows) and the development of such products should be of high priority at IQSOFT. It should be noted, however, that making a real product out of a (well operating) program needs a termendeous amount of additional efforts and resources.

- ·In development activities for export we have to continue to concentrate on complex projects to be performed in our environment in Hungary. Sending

developers to abroad for a longer time should be done only in case of exceptionally favourable (financially or technologically) projects.

3.3 Participation in international R&D projects

This is an important part of the activities of IQSOFT for at least two reasons:

- to attract (and keep) good people by providing high-level, interesting work,
- to maintain relations within the international academic world and EU institutions.

Moreover, participation in such activities may have a positive effect to the image of the company and in some cases may prepare projects in other areas too.

By participation in different programmes sponsoring such research activities (mainly EU), these research projects shoulg be self-financing.

Such activities are going on in the following directions:

a. (parallel) logic programming, expert system tools
(US-Hungary cooperation, DG-III:CUBIQ)
(DG III Copernicus in preparation ?)

b. network development in Central and Eastern Europe
(DG-XIII/DG-III: ESATT/INDIS)

c. object oriented tools and methods (technology transfer)
(DG-III Copernicus in preparation ?)

3.4 Network development and information providing services

This is an area promising to have extreme importance in the future of information technology (see 2.1.x). IQSOFT should become an important player in the information market in Hungary.

Preparation started with a few activities of this category:

a. ·assistance in the development of information service networks in Hungary
(MTESZ, ITD, ...)

b. ·participation in the development of information bases
(CD-ROM, on-line data)
(strong cooperation with HMS)

c. ·supporting activities in the ESATT/INDIS programs in Hungary
(see 3.3.b)
(together with Budapest Technical University)

d. ·information providing services in international cooperation
(foreign - French ??? - partner)

3.5 Training

An activity form of IQSOFT with increasing siginificance..While being profitable in itself, it can complement effectively the product distribution activities and enhance the image of the company. It is also useful as a complementary activity of IQSOFT staff members, increasing their professional level as well.

Similarly to product distribution, training also should concentrate on sophisticated topics (preferably connected to IQSOFT products and services) Teaching of basic computing skills should be avoided.

4. Market position and activities

Due to the diversity of its products and services, IQSOFT is present in many different sectors of the Hungarian market, including

- industry/commerce (enterprise informatics, office automation, development)
- public administration (office automation, application development)
- education and culture (library systems)
- health care (hospital information system)

That means a very wide range of customers and prospects (see also attached list of major customers), who should be continously informed about the activities of the company, new developments etc. A very active marketing activity is needed to maintain the image of IQSOFT as a company who can provide solutions in a very wide range of problems to their customers. The level of support being provided is also to be emphasized as one of the most important differentiating factor in product distribution: that is where IQSOFT can (and shpold) be much better than the distributors of competitive products. The wide range of support services should also be emphasized, including consultancy and training too.

As can be seen from the “mission statement” (p.1), the synergy of technical and commercial activities (and people) is considered as a very important feature of IQSOFT From this also follows, that while we will have a strong group of professional marketing and sales persons, these activities will continue to form an important part of the work of all IQSOFT employees: technical people also should contribute to maintaining and communicating the image of the company and to direct and indirect relations to the customers and prospects.

Naturally, traditional forms of PR activities (advertisements, exhibitions, sponsoring etc. should be continued, reinforced with being present in and maintaining good contacts with all kinds of national and international professional organizations (see 5.5).

5. External relations

[to be worked out in detail for the final version]
[see also attached list of major partners]

5.1. vendors of products distributed

(diversification of database vendors)

5.2. hardware vendors in Hungary

Present connections to hardware vendors can be summarized in the following way:

- *Sequent*: sole Hungarian distributor (yes it contradicts to the neutrality of a software company, but strategic partners (like Police, Westel) appeared on the market, therefore this connection is important for us.
- *HP*: seems to be a good partner in AVALON, the level and form of connection is to be maintained this way.
- *BULL*: strategic partner in our new field of interest, in health care.
- *SUN* (ICON): partner in Libraries activity, appearing in AVALON. Besides good wishes nothing done jointly.
- *Silicon Graphics*-(CADServer): emerging partner in libraries, due to multimedia possibilities.
- *ICL*: nice wishes and plans, no joint activity.
- *IBM*: seems to play important role in some office automation activities, without any financial success yet.
- *DEC*: finally they've approached us too, most probably they general attitude will be changed because of ORACLE-DEC connections worldwide and in Hungary.

5.3. strategic alliances with similar or complementary companies

(special connection with HMS)

5.4. partner companies in Western Europe

(selling capacity, joint projects in Hungary and C&EE)

5.5. national, international and European organizations

(participation in activities, establishing contacts)

6. Organization

[to be worked out in detail for the final version]

6.1. preserve working style traditions, devoted staff

6.2 more organized work,

(formal quality assurance:ISO-9001 by 1995)
(administrative/financial procedures)

6.3 synergy between different topics and activities
(development, sales-marketing, research, services)

6.4 improve management working methods
(clearly defined responsibilities)
(prepare for retirement of managing director)

6.5 enhance internal infrastructure
(improved information flow within the company)
(external networking connections)

6.6 develop organizational structure
(profit centers, separate companies, joint ventures)

7. Finances

[to be worked out in detail for the final version]

- stabil financial situation
- (continous profitability, dividend)
- (controled cash-flow)
- (capital inrease: new shareholders ?)
- (reserve funds, flexibility for investments)

A table of financial projections outlining a rough estimation of the assumptions about the net revenues from different sources and also about cost items for the years 1995-97 is given below:

Financial projections for 1995 -1997

	1993 (actuals)	1994 (basis)	1995	1996	1997	Total 1995-97
1. Revenue sources (net)						
1.1 Software export (Bank Austria, ISB, ...)	48	42	30	20	20	70
1.2 Tools distribution (Oracle, Gupta, ...)	78	58	42	35	25	102
1.3 Application product distribution (Avalon, Library, PCS*Care, ...)	5	7	30	50	70	150
1.4 Other product distribution (Sequent, ...)	0	6	10	15	20	45
1.5 Imaging and office automation (products + system integration)	8	15	20	25	30	75
1.6 Application development	12	27	32	40	50	122
1.7 Research projects	6	16	20	20	20	60
1.8 Networking and information market	0	6	8	12	18	38
1.9 Training + others	5	7	8	10	13	31
T O T A L N E T R E V E N U E S	**162**	**184**	**200**	**227**	**266**	**693**
2. Costs						
2.1 Personal income costs	74	86	90	96	106	292
2.2 Overhead costs	84	90	100	115	130	345
T O T A L C O S T S	**158**	**176**	**190**	**211**	**236**	**637**
3. Profit before taxes	**4**	**8**	**10**	**16**	**30**	**56**
4. Number of employees	**52**	**58**	**60**	**62**	**65**	

REMARKS

1 These are very rough estimations, based on the market assumptions and on our intentions concerning the different activity types.

2 Figures are given in MHUF, rounded to 1 million.

3 Everything is given in 1994 prices, with no inflation calculated

4 Revenue figures are net revenues, i. e cost of goods and subcontractors deducted

IQSOFT partnership structure

Vendors of products distributed

Oracle Hungary and Oracle Central and Eastern Europe
Avalon
Fretwell Downing
Lucas
Sequent
GUPTA
Verity
Data Fellows
...

Product development partners

Hypermedia Systems (HMS)
Recognita Corp. (in preparation)
...

Hardware/software vendors in Hungary

Bull
Hewlett Packard
ICL
Microsoft
ICON (SUN)
CAD server (Silicon Graphics)

Other strategic project.partners (in tenders etc)

IBM Hungary
Geoview
TeleDataCast
IDOM
KPMG
Ernst & Young

Major export software development customers

Bank Austria / Dataservice
Institut für Software-Entwicklung und EDV-Beratung (ISB)
...

International R&D cooperation partners

University of Bristol
City University (London)
Institut fur Informatik in Entwurf und Fertigung (IIEF)
Deutsche Fernkabelgeselschaft (DFKG)
System Research Instiute of Polish Academy of Sciences
Institute of Computer Science of Bulgarian Academy of Sciences

Major Hungarian customers

	Oracle, Gupta	Avalon, enterpr.	Libraries	Doktar, off.aut.	Applic., consult.	Others
State Holding Co. (ÁVRt)	x			x	x	x
Hungarian Police (ORFK)	x				x	x
National Labour Center (OMK)	x				x	
Trade Development Agency (ITD-H)						x
Budapest Economic University (BKTE)			x			
Gamma Technical Ltd.		x				
Hungarian Post Office				x		
Securities and Exchange Commission				x		
Hungarian Statistical Office	x					
Inter-Europa Bank				x		
"Nepszabadsag" editorial office				x		
Hungarian Parliament	x				x	x
Prime Minister's Office				x		
TRIGON pharmaceutical factory	x				x	
RICO medical supply factory		x				
Fed. of Technical Societies (MTESZ)						x
World Economics Research Institute			x			
County and City Library Kecskemét			x			
Budapest Vegetable Mart		x				
North-Hungarian Gas Supply Co.	x				x	
KOPINT-DATORG	x				x	x
...						

1995-ös tájékoztató jellegű fejlesztési irányáraink - elsősorban belső használatra

Feladat	1994-es ezer Ft/enap	1995-ös ezer Ft/enap	1995-ös ezer Ft/ehó	1995-ös ezer DEM/ehó**	1995-ös DEM/enap**
Programozó	25	28	500	10	600
Tervező/ szervező	25	32	580	10	600
Konzultáció	40	50	900	*	*
Projekt-vezetés	60	70	1200	*	*

* Nem tipikus igény, megbeszélendő
** Ezek a nettó díjak, nem tartalmazzák az utazási és a kinn tartózkodási költségeket.

Az óradíjak a napi díjak 8-cal való osztásával és 500 forinttal oszthatóra felkerekítve számolandók jönnek

1995-ös tájékoztató jellegű oktatási irányáraink - elsősorban belső használatra

	1994.	1995.
Oktatási nap az IQ-ban teljes csoport	70.000	80.000
Oktatási nap kihelyezve telj. csop.	50.000	60.000
1 hallgató 1 hétre	38.000	44.000
1 hallgató 1 napra	7.000	9.000

1 nap minimum 6 órát jelent
1 csoport minimum 10 fő

	PLAN FOR 1995							
		Plan 94	Real 94		Plan 95	change		
1	PRODUCT SALES	108	92	85%	130	41%		
1.1	Data base tools	53	59	111%	50	-15%		Oracle, Gupta
1.2	Data base application products	34	6	18%	50	733%		Enterprise informatics, Library, Health care
1.3	Imaging and Office Automation	10	9	90%	14	56%		DOKTAR, Microsoft, ...
1.4	Other products	11	18	164%	16	-11%		Sequent, IQDBA, Class Library, Artemis, ...
2	PROGRAM DEVELOPMENT	85	81	95%	70	-14%		
2.1	Software export	40	46	115%	30	-35%		ZEXPERT, ABS, Geldhandel, Ristits, Rago, ...
2.2	Data base application development	37	28	76%	20	-29%		AVRt, ...
2.3	Imaging application development	8	7	88%	20	186%		Posta, Pannon, ...
3	OTHER SERVICES	17	24	141%	45	88%		
3.1	R&D projects	12	17	142%	38	124%		CUBIQ, EXEMPLARY, ADOORE, ESATT,
3.2	Training	2	5	250%	5	0%		MNB, Gupta,...
3.3	Others	3	2	67%	2	0%		...
4	TOTAL NET REVENUES	210	197	94%	245	24%		
5	LABOUR COSTS	92	90	98%	115	28%		
5.1	Salary	45	45	100%	57	27%		
5.2	Copyright & Bonus	12	10	83%	18	81%		
5.3	Benefits	7	5	74%	6	16%		
5.4	Social security	25	26	105%	30	14%		
5.5	Officers	3	3	111%	4	20%		
6	OVERHEAD COSTS	108	100	92%	120	20%		
6.1	Rental	14	14	103%	17	18%		
6.2	Services & Office	16	16	98%	20	27%		
6.3	Travel	20	19	95%	20	6%		
6.4	Computer	25	25	100%	30	20%		
6.5	Publicity	12	11	88%	14	33%		
6.6	Others	5	3	69%	4	17%		
6.7	Financial	16	12	74%	15	27%		
7	TOTAL COSTS	200	190	95%	235	24%		
8	PROFIT BEFORE TAX	10	7	74%	10	35%		
9	Number of employees	58	57	98%	60	5%		

PLAN FOR 1996							4/4/1996
Revenues	**staff**		**gross96**	**net96**	**net95**	**change**	**Remarks**
Data base tools and development	15	ADA, PLU	185	95	42	226%	
Enterprise informatics	9	AVA	80	58	21	276%	
Library informatics	5	OLI	60	30	20	150%	
Document imaging	8	IMA	96	48	30	160%	
Research and development	8	KUT	31	29	45	64%	a.
Support services	9	SZO	33	23	22	105%	b.
Training	1	OKT	17	9	15	60%	c.
Other revenues			38	38	48	79%	
TOTAL REVENUES			540	330	243	136%	
departments	55						
admin. staff	15						
TOTAL employees	70						
Operational expenses							
Salaries				81	61	133%	
Social security				35	31	113%	
Bonus				57	18	317%	c.
Benefits				7	6	117%	
Officers' fees				5	4	125%	
Rental				25	16	156%	
Services				25	21	119%	
Travel				6	9	67%	e.
Computer				20	32	63%	d., e.
Publicity				11	12	92%	e.
Other costs				8	6	133%	
Financial costs				20	19	105%	
Reserve				10			
TOTAL OP. EXPENSES				310	235	132%	
PROFIT				20	8		

Remarks

a. Large advance payments were received in 1995

b. Sequent and other external support services included

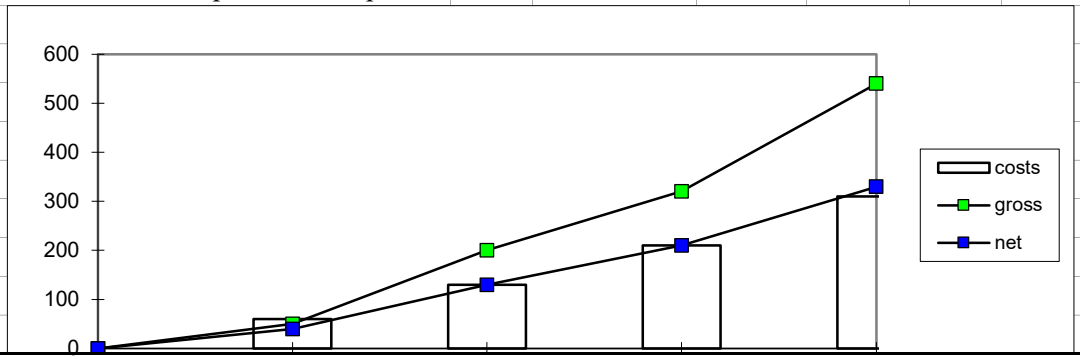
c. More realistic calculation introduced, cost items hidden earlier in other positions collected here

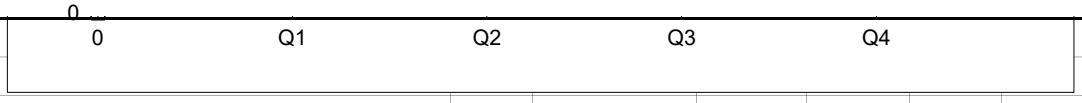
d. Some of the Equipment cost items moved to other positions

e.. Part of Travel, Equipment and Publicity expenses will be covered from departmental production cost budgets

Quarterly distribution

	Q1	Q2	Q3	Q4	1996
Gross revenues	50	150	120	220	540
Net revenues	40	90	80	120	330
Operational expenses	60	70	80	100	310





	0	Q1	Q2	Q3	Q4	1996
gross	0	50	200	320	540	
net	0	40	130	210	330	
costs	0	60	130	210	310	

AZ IQSOFT FŐBB TEVÉKENYSÉGEI

Szoftver fejlesztések exportra

Bank Austria

Szakértői rendszerváz (MPROLOG-ban)
Treasury rendszer
Banki adatfeldolgozás

Szoftver disztribúció Magyarországon

1989-1993

- *Oracle* termékek kizárólagos disztribútora Magyarországon

1993 II. felétől

- Dealer, VAR és "rendszer ház" kooperáció az *Oracle Hungary*-vel

1995 II. felétől

- *Oracle* termékek disztribútora Magyarországon

Több, mint 150 Oracle eladás, köztük olyan országos hálózatot kiépítő szervezetek, mint

- Központi Statisztikai Hivatal
- Munkaügyi Központ
- Rendőrség

Szolgáltatások:
telepítés
testreszabás
support
konzultáció
tanfolyamok

1.	*Oracle* (USA*)*	1. RDBMS, WEB szerver, fejlesztőeszközök
2.	*Centura* (USA)	2. Adatbázis front-end, OO fejlesztőeszközök, WEB fejlesztőeszközök
3.	*ObjectsDesign* (USA*)*	3. OO adatbáziskezelő, WEB fejlesztőeszközök
4.	*Platinum Technology* (USA)	4. Adatbázis alkalmazásokat felügyelő, teljesítményüket növelő eszközök
5.	*CSC* (USA*)*	5. Artemis Views projektirányítási rendszer
6.	*Fretwell Downing* (UK)	6. OLIB könyvtári információs rendszer
7.	*IFS* (Svédország)	7. IFS/AVALON termelési és vállalati információs rendszer
8.	*CSE* (Ausztria)	8. munkafolyamat követés

Dokumentum kezelés és irodaautomatizálás

- Windows alapú dokumentum kezelő és archiváló csomag: DOKTÁR/Archiware a Hypermedia Systems Kft. (H) fejlesztésében
- Rendszerintegráció DOKTÁR-ral és a Microsoft termékekkel
- Optikai karakterfelismerés
- Kérdőív- és bizonylat-feldolgozás
- archiválórendszerrel integrált munkafolyamat követés (workflow)
- iktatórendszerek

Főbb vásárlók:

- bankok
- önkormányzatok
- újságok
- repülőtér
- távközlés

Alkalmazói szoftverek fejlesztése

- Legkorszerűbb (pl. objektumorientált) technológiák alkalmazása és átadása
- Technológiai projektvezetés és tanácsadás
- Integrált vállalati rendszerek fejlesztése
- Teljes szolgáltatás az igényelemzéstől a megvalósításon át a követésig
- Kulcsrakész rendszerek szállítása (beleértve hardver és alapszoftver elemeket is)

- Magyar Posta
- Westel 900 GSM
- MNB
- Rendőrség
- KSH
- MOL

Nemzetközi kutatás

- Logikai programozás
- Tudásalapú rendszerek
- Constraint programozás
- Objektumorientált programozás

- Gigalips (UK, USA, S, H)
- CUBIQ (UK, H)
- ADOORE (F, ČS, H)
- TRACE (I, F, BG, RO, H)
- TACIT (F, S, H)

1997

BEMUTATKOZIK AZ IQSOFT

IQSOFT Közepes méretű magyar software fejlesztő és kereskedelmi részvénytársaság

Teljes név IQSOFT Intelligens Software Számítástechnikai Fejlesztő, Gyártó és Értékesítő Rt.

Részvényesek

IQ Management Kft (management , dolgozók)	12.6 Mio Ft.	54%
Data Service Informatik GmbH(Bank Austria AG)	6.0 Mio Ft.	25%
ISBGmbH (Németország)	2.4 Mio Ft.	10%
Magánszemélyek	2.9 Mio Ft.	11%

Története

1977	Állami tulajdonban lévő Számítástechnikai Kutatóintézet (SZKI) részlege
1990	Leváló, önálló vállalat fő részvényes SZKI
1993	Vezetői/dolgozói kivásárlás

Főbb adatok

év	dolgozók	bevétel	profit	osztalék
1990	35	77 Mio Ft	8 Mio Ft.	15%
1992	56	246 Mio Ft.	13 Mio Ft.	25%
1994	62	340 Mio Ft	8 Mio Ft	20 %
1996*	64	543 Mio Ft	23 Mio Ft	20%

Dolgozók

20-29 év	16	Egyetem	55	Felsővezetés	4
30-39 év	18	Középiskola	9	Műszaki	47
40-49 év	24	Összes	64	Kereskedő	6
50 év fölött	6	Férfi	37	Adminisztratív	7
		Nő	27		
Összesen	64	Összesen	64	Összesen	64

Infrastruktúra

épület	700m^2 bérelt terület (2-4 fős irodák, oktatóterem)
hardver	Sequent 2000/250 server (2 összesen 6 processzorral) SUN szerverek és munkaállomások (4) 586/486 bázisú személyi munkaállomások (70), 586/486 bázisú PC-k a dolgozók otthonában (30), notebook-ok (5) HP printerek, MO, CD, szkennerek
szoftver	UNIX, Windows NT, Novell, Windows 95, MS Exchange, MS Office. ORACLE, Centura, MProlog, C és C++, Objectstore
hálózat	LAN, Compuserve és Internet kapcsolat

Cím

H 1142 Budapest Teleki Blanka u. 15-17.
Telefon : (361)-251-5949
Fax : (361)-220-5598
E-mail: iqsoft@iqsoft.hu
www: http://www.iqsoft.hu

*Az 1996-os adatok nem véglegesek.

NAPIREND

- Az 1998-as év lezárása
- Szervezeti változások
- 1999-es tervek
- Eseménynaptár
- Sikergyanús projektek 99’-ben
- Mozgó szabályozás
- Összegzés

IQSOFT Osztályértékelés - 1998

	Árbevétel	Költségek	Fedezet	Élőmunka költség
AVA	108	18	90	88
IMA	55	19	36	75
KER	91	47	44	44
KUT	72	5	67	50
OBT	279	84	195	189
OKT	34	14	20	16
OLIB	37	22	15	42
PMS	63	2	61	34
TAR	19	4	15	
Összesen	**758**	**215**	**543**	**538**

IQSOFT vagyon változása

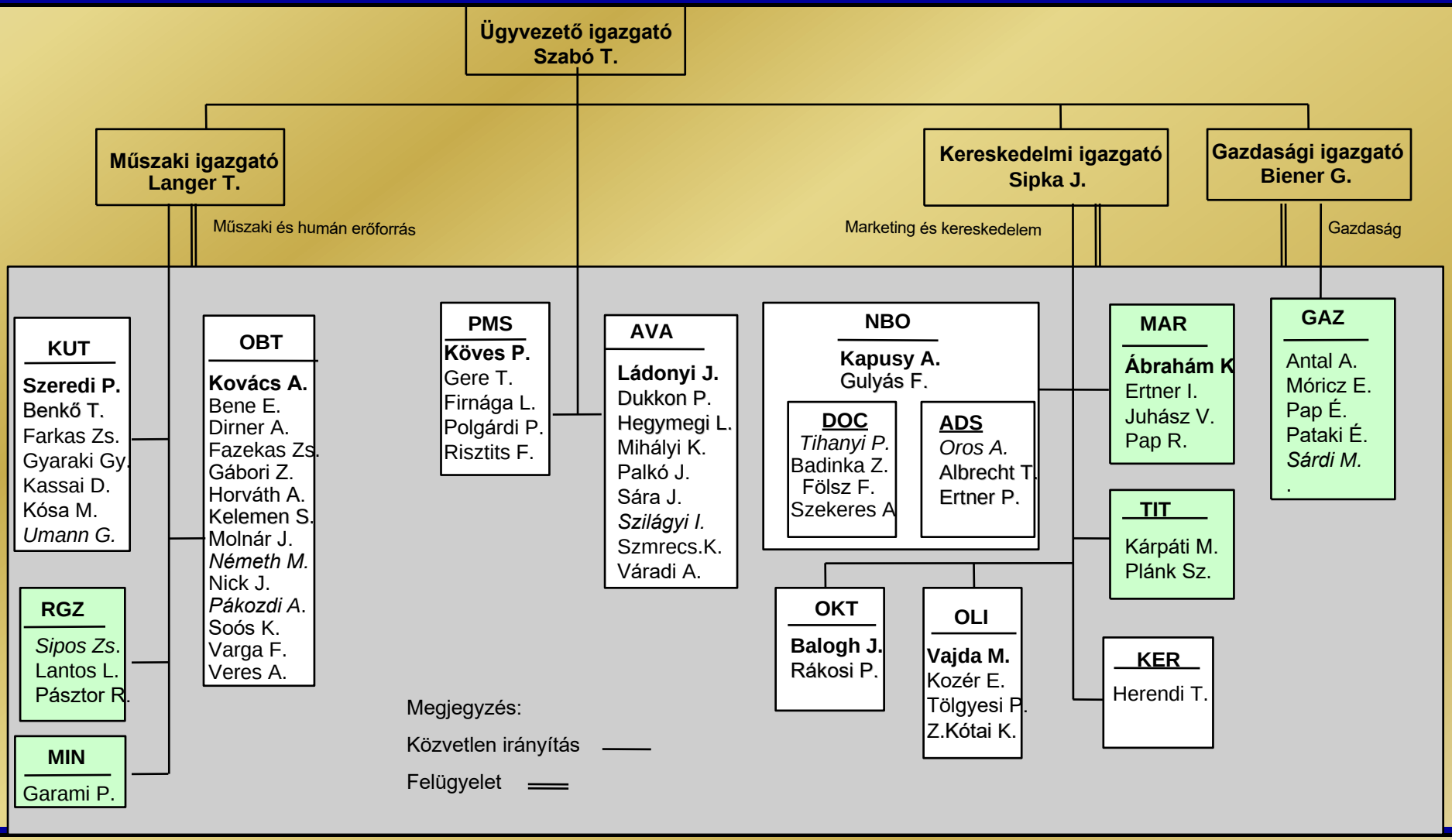
- Alaptőke: 28mFt
- Eredménytartalék: 22mFt
- Teljes vagyon 97.12.31. 50mFt

- Tőketartalék 98: +85mFt
- Teljes vagyon 98.12.31. 135mFt

IQSOFT Pénzügyi terv - 1999

	Árbevétel	Költségek	Fedezet	Növekedés
IFS	150	50	100	11%
NBO	180	80	100	
KUT	85	5	80	19%
OBT	300	60	240	23%
OKT	35	5	30	50%
OLIB	70	35	35	
PMS	120	5	115	89%
Összesen	**940**	**240**	**700**	**29%**

szervezeti felépítés



IQSOFT Belső és külső elszámolás

- IQSOFT szakemberek árbevételi követelménye
  - 60eFt/nap/fő, ha a munkavégzés az IQSOFTban folyik
  - 50eFt/nap outsourcing esetén
- Nem IQSOFT-os szakemberek árbevételi követelménye*
  - 20eFt/nap, ha a ha a munkavégzés az IQSOFTban folyik
  - 10eFt/nap, ha a ha a munkavégzés nem az IQSOFTban folyik
- *Az alvállalkozói díjon felül

1999. 01-12 hó Megnevezés (E Ft)	Tény 1999	Terv 1999
1,1 Alaptevékenység árbevétele	929,341	880,000
1,2 Pénzügyi műveletek bevételei	5,729	
1,3 Rendkivüli árbevétel	7,299	
1,4 Aktivált saját teljesítmények értéke	0	
1,5 Egyéb bevétel	26,671	
ÁRBEVÉTEL ÖSSZESEN	969,040	880,000
2,1 Értékesítési költség I.	56,235	
2,2 Értékesítési költség II. (ELÁBÉ)	109,071	
2,3 Értékesítési költség III. (alvállalkozói telj.)	106,843	
2,4 Pénzügyi műveletek ráfordításai	337	
2,5 Rendkivüli ráfordítások	39,419	
2,6 Egyéb ráfordítások (KFKI hozzajarulas)	-20,000	
ÉRTÉKESÍTÉSHEZ KAPCSOLÓDÓ KÖLTSÉGEK	291,906	209,000
FEDEZET	677,134	671,000
	73%	76%
4,011 Bér és bérjellegű jövedelem	142,372	146,000
4,012 Egyéb jövedelem	151,335	139,000
4,013 SZJA, TB ,egyéb járulékok	63,494	71,000
4,01 Jövedelem és járulékai összesen	357,202	356,000
4,02 Bérleti díj	40,329	53,557
4,03 Marketing	25,796	22,457
4,04 Oktatás	5,178	4,371
4,05 Kommunikációs költségek	12,802	11,871
4,06 Informatikai költségek	0	0
4,07 Gépjárművek költségei	0	0
4,08 Különféle adók	11,266	8,419
4,09 Értékcsökkenési leírás	61,919	49,557
4,10 Holding költséghozzájárulás	11,000	13,000
4,11 Egyéb költségek	72,342	76,153
EGYÉB ÖSSZESEN	597,835	595,385
ADÓZÁS ELŐTTI EREDMÉNY	**79,299**	**75,615**
ADÓFIZETÉSI KÖTELEZETTSÉG	12,654	13,611
ADÓZOTT EREDMÉNY	**66,645**	**62,004**
OSZTALÉK(ELŐLEG)	0	35,764
MÉRLEG SZERINTI EREDMÉNY	**66,645**	**26,240**

KFKI osztalek kompenzcio	9,000
IQM osztalek - vagyoncsokkenes	18,000
Vagyon valtozas: merleg szerinti eredmeny-vagyoncsokkenes	48,645

Ami még kimaradt a könyvekből:

Bevétel

10mFt bevétel áttéve 2000-re
10mFt CGSAT 2000-ben könyvelődik
30mFt IFS 2000ben növeli a vagyont
4mFt FW kompenzáció a parlament elvesztéséért
10mFt FW kinnlévőség
kb. 15mFt Mozgó (IQM+Színes)
Összesen: 79mFt

Kiadás:

kb. 10mFt költség még leírható lett volna 99-ben
kb. 30mFt mozgó /folyamatosan ennyivel tartozunk a dolgozóknak /
12mFt FW szállítói költség. Erről folyik az alku az FW-vel.
holding ado 99-re 2mFt
Összesen: 54mFt

JELENTŐS KONCENTRÁCIÓ A HAZAI INFORMATIKÁBAN

sajtóanyag

Új együttműködés

A hazai informatikai élet két meghatározó szereplője, a KFKI Számítástechnikai Rt és az IQSOFT Rt. a jövőben szorosabbra fogja együttműködését. A két cég által aláírt megállapodásnak megfelelően az IQSOFT Rt. csatlakozik a KFKI Számítástechnikai Csoporthoz, megtartva eddigi profilját és önállóságát.
Az IQSOFT oldaláról a csatlakozás melletti döntésben meghatározó szerepet játszott a növekedés ütemének felgyorsítása és a piaci jelenlét erősítése iránti igény.
A KFKI Számítástechnikai Csoport azért kereste az együttműködést, mert az IQSOFT csatlakozásával a piac elvárásainak megfelelően bővül a KFKI Számítástechnikai Rt. tevékenységi köre. Az IQSOFT Rt. hagyományosan sikeresen végez olyan tevékenységeket, mint a termék- és egyedi szoftverfejlesztés, a szoftverforgalmazás, valamint a kutatás és oktatás.
A tulajdonosok és a cégvezetés elvárásainak megfelelően, az együttműködés hatására, a jövőben nő a csoport piaci súlya, versenyképessége. Várhatóan lehetőség nyílik a tudatosabb üzletfejlesztésre és a csoporton belüli szinergia hatékonyabb megvalósítására is.
A cégek megállapodása értelmében a KFKI Számítástechnikai Rt tőkeemeléssel az IQSOFT Rt többségi tulajdonosává válik. Az IQ-Management Kft. - az IQSOFT eddigi többségi tulajdonosa -, kisebbségi tulajdont szerez a KFKI Számítástechnikai Rt.-ben.

Az IQSOFT Rt.

Az IQSOFT 1990-ben alakult részvénytársaság, gyökerei az SzKI-ba nyúlnak vissza. Az 1990-es 30 főről mára a dolgozók létszáma 75 főre bővült és további 25 fős, kiképzett szakértői csoport vonható be az egyes fejlesztési feladatok megvalósításába. 1998 évi árbevétele több, mint 700 millió Ft volt.

Az IQSOFT megalakulása óta a hazai szoftver piac meghatározó tényezője. E pozíciót elsősorban szakértelmével vívta ki magának, a társaság sikereihez a legkorszerűbb technológiák alkalmazása is hozzájárult. Az IQSOFT büszke arra, hogy nevéhez fűződik az Oracle adatbáziskezelő magyarországi elterjesztése és az objektumorientált technológia üzleti célú felhasználásának bevezetése. Az IQSOFT által forgalmazott IFS integrált vállalatirányítási rendszer, az OLIB könyvtár- és dokumentumkezelő csomag, valamint a befektetési alapok portfolió-kezelését támogató, saját fejlesztésű IQ*PMS szoftvercsomag mellett említést érdemel a Rational cégnek a szoftver fejlesztés teljes életciklusát támogató eszközei, a Platinum

További információ:
Hajós András PR vezető, KFKI Számítástechnikai Rt., tel: 452 1221, fax: 452 1301, ahajos@kfkicsc.hu
Ábrahám Katalin marketing osztályvezető, IQSOFT Rt., tel.: 363 2200/216, fax: 220 5598, abraham@iqsoft.hu

Tehnology monitorozó és adatbázishangoló termékei, továbbá a FileNet világelső dokumentumkezelő és archíváló megoldásai.

Projektjeiben komplex informatikai feladatok elvégzésére vállalkozik, a legkorszerűbb technológiák (pl. objektumorientált, CORBA, JAVA) felhasználásával. A nemzetközi K+F projektekben való aktív részvétel lehetővé teszi, hogy az IQSOFT - a számítástechnika fejlődési irányait nyomon követve - a magyar felhasználók számára is jól hasznosítható eredményeket közvetítsen, új megoldásokat ajánljon. Szolgáltatásai között, a rendszertervezés mellett, kiemelt jelentőségű az oktatási tevékenysége.

Az IQSOFT, 1998-ban, teljes szakmai tevékenységére megkapta az ISO9001 minőségbiztosítási tanúsítványt.

Referenciáik között megtalálhatóak a különféle ágazatok képviselői: telekommunikációs cégek, termelő vállalatok, államigazgatási és kulturális intézmények.

A KFKI Számítástechnikai Csoport

A KFKI Számítástechnikai Csoport összetett szervezetű vállalatok és intézmények számára kínál versenyhelyzetet javító megoldásokat információtechnológiai rendszerek minőségi megvalósításával. A KFKI Számítástechnikai Csoportot az 1990-ben megalakult KFKI Számítástechnikai Részvénytársaság és a többségi tulajdonában lévő, önálló gazdálkodást folytató cégek együttese alkotja. A KFKI Számítástechnikai Rt. tulajdonosként egyrészt holding funkciókat lát el, másrészt elvégzi a nagyobb, összetettebb rendszerszállítások fővállalkozási feladatát. A KFKI Számítástechnikai Rt. saját tőkéje meghaladja a 2 milliárd forintot. A csoport fő pillérei a KFKI ISYS, az LNX, az ICON és az újonnan csatlakozott IQSOFT. A KFKI Számítástechnikai Csoport tevékenységének alapelemét az üzletágak képezik. Az üzletágak jól definiált termékekhez és szolgáltatásokhoz kapcsolódva profit centrumként működnek. A KFKI Csoport teljesítménye folyamatos és erőteljes fejlődést mutat: az 1998. évi árbevétel az előző évhez viszonyítva 40 százalékkal növekedett és elérte a 7 milliárd forintot. A 80%-ban felsőfokú végzettséggel rendelkező informatikai csapat létszáma 1999 során meghaladja az 500 főt. A Csoport fő stratégiai célja, hogy az időtálló értékekre, innovációra és stabilitásra alapozva megtartsa fejlődésének eddigi lendületét, így értékében és súlyában növekedjék a magyar informatikai piacon. A KFKI Csoport teljesítménye folyamatos fejlődést mutat. A cégcsoport ezt a növekedést szerves fejlődésének eredményeképpen érte el. A KFKI Számítástechnikai Rt. saját tőkéje meghaladja a 2 milliárd forintot, a cég magyar többségi tulajdonban van.

KFKI SZÁMÍTÁSTECHNIKAI Rt.
1135 Budapest, Tüzér u. 39-41.
Tel.: 452 1210, Fax: 452 1220
www.kfki.com

IQSOFT Intelligens Software Rt.
1439 Budapest, Teleki B. u. 15-17
Tel.: 363 2200, Fax: 220 5598
www.iqsoft.hu

ICON Számítástechnikai Kft.
1135 Budapest, Tüzér u. 39-41.
Tel.: 452 1250, Fax: 452 1251
www.icon.hu

KFKI ISYS INFORMATIKAI Kft.
1135 Budapest, Tüzér u. 39-41.
Tel.: 452 1300, Fax: 452 1301
www.kfki-isys.hu

LIAS-NETWORX
Hálózatintegrációs Kft. (LNX)
1135 Budapest, Hun u. 2.
Tel.: 452 1400, Fax: 452 1401
www.lnx.hu

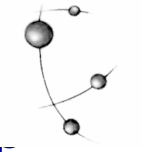
IQSOFT RT

	2000. 01-10. hó	1-12	2000. Éves	1-12 tény+terv/éves terv
	Megnevezés (E Ft)	tény+terv	terv	
	1,1 Alaptevékenység árbevétele	1,491,012	1,102,500	135%
	1,2 Egyéb bevétel	22,063	37,000	60%
	1,3 Aktivált saját teljesítmények értéke	0		
1	**ÁRBEVÉTEL ÖSSZESEN**	**1,513,075**	**1,139,500**	133%
	2,1 Értékesítési költség I.	63,916	29,500	217%
	2,2 Értékesítési költség II. (ELÁBÉ)	170,509	125,000	136%
	2,3 Értékesítési költség III. (alvállalkozói telj.)	216,042	115,000	188%
	2,4 Egyéb ráfordítások	3,168	0	
2	**ÉRTÉKESÍTÉSHEZ KAPCSOLÓDÓ KÖLTSÉGEK**	**453,635**	**269,500**	168%
3	**HOZZÁADOTT ÉRTÉK**	**1,059,440**	**870,000**	122%
	4,011 Bér és bérjellegű jövedelem	157,805	174,900	90%
	4,012 Egyéb jövedelem	228,936	193,700	118%
	4,013 SZJA, TB ,egyéb járulékok	67,087	77,900	86%
	4,01 Jövedelem és járulékai összesen	453,828	446,500	102%
	4,02 Bérleti díj	76,800	59,600	129%
	4,03 Marketing	56,356	34,700	162%
	4,04 Oktatás	9,586	10,000	96%
	4,05 Kommunikációs költségek	12,208	14,800	82%
	4,06 Gépjárművek költségei	0	0	
	4,07 Különféle adók	20,002	13,800	145%
	4,08 Értékcsökkenési leírás	65,797	50,400	131%
	4,09 IT infrastruktúra	0		
	4,10 Dokumentáció	0		
	4,11 Egyéb költségek	85,122	81,000	105%
4	**EGYÉB ÖSSZESEN**	**779,699**	**710,800**	110%
5	**FEDEZET 2**	**279,741**	**159,200**	176%
6	Holding költséghozzájárulás	37,738	34,800	108%
7	**FEDEZET 3**	242,003	**124,400**	195%
8	Divízió általános költség			
9	**FEDEZET 4**	242,003	**124,400**	195%
10	Vállalati általános költség			
11	**FEDEZET 5**	242,003	**124,400**	195%
	12,1 Pénzügyi műveletek bevételei	6,612	0	
	12,2 Pénzügyi műveletek ráfordításai		0	
12	**Pénzügyi műveletek eredménye**	6,405	**0**	
	13,1 Rendkivüli bevételek	2,823	0	
	13,2 Rendkivüli ráfordítások	116,000	0	
13	**Rendkivüli eredmény**	-113,177	**0**	
14	**ADÓZÁS ELŐTTI EREDMÉNY**	135,231	**124,400**	109%
15	ADÓFIZETÉSI KÖTELEZETTSÉG			
16	**ADÓZOTT EREDMÉNY**			
17	OSZTALÉK(ELŐLEG)			
18	**MÉRLEG SZERINTI EREDMÉNY**			

Tamás Langer
Technical director
Langer@iqsoft.hu

About IQSOFT

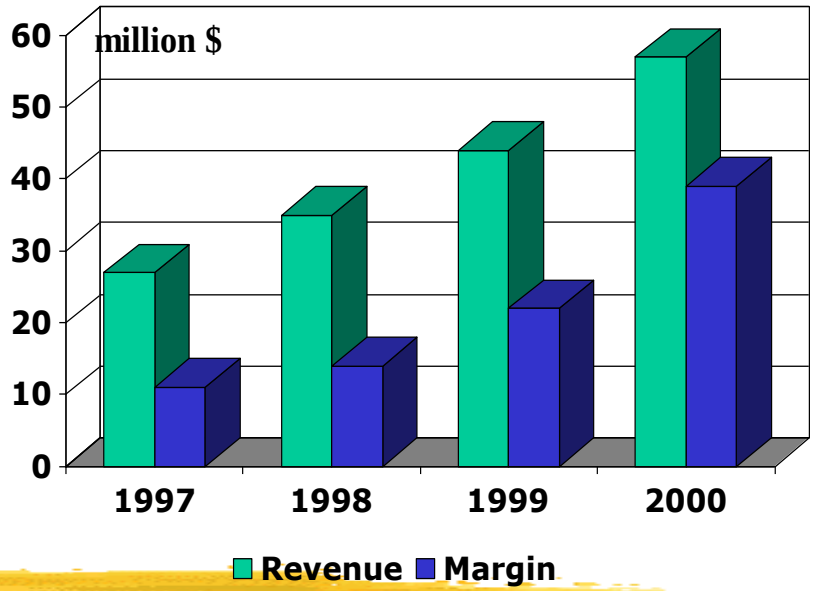
- **Significant shareholders:**
  - **KFKI Computer Systems Grou** **55%**
  - **IQManagement Ltd.** **37%**
  - **Knorr Capital Partner AG(D)** **4%**



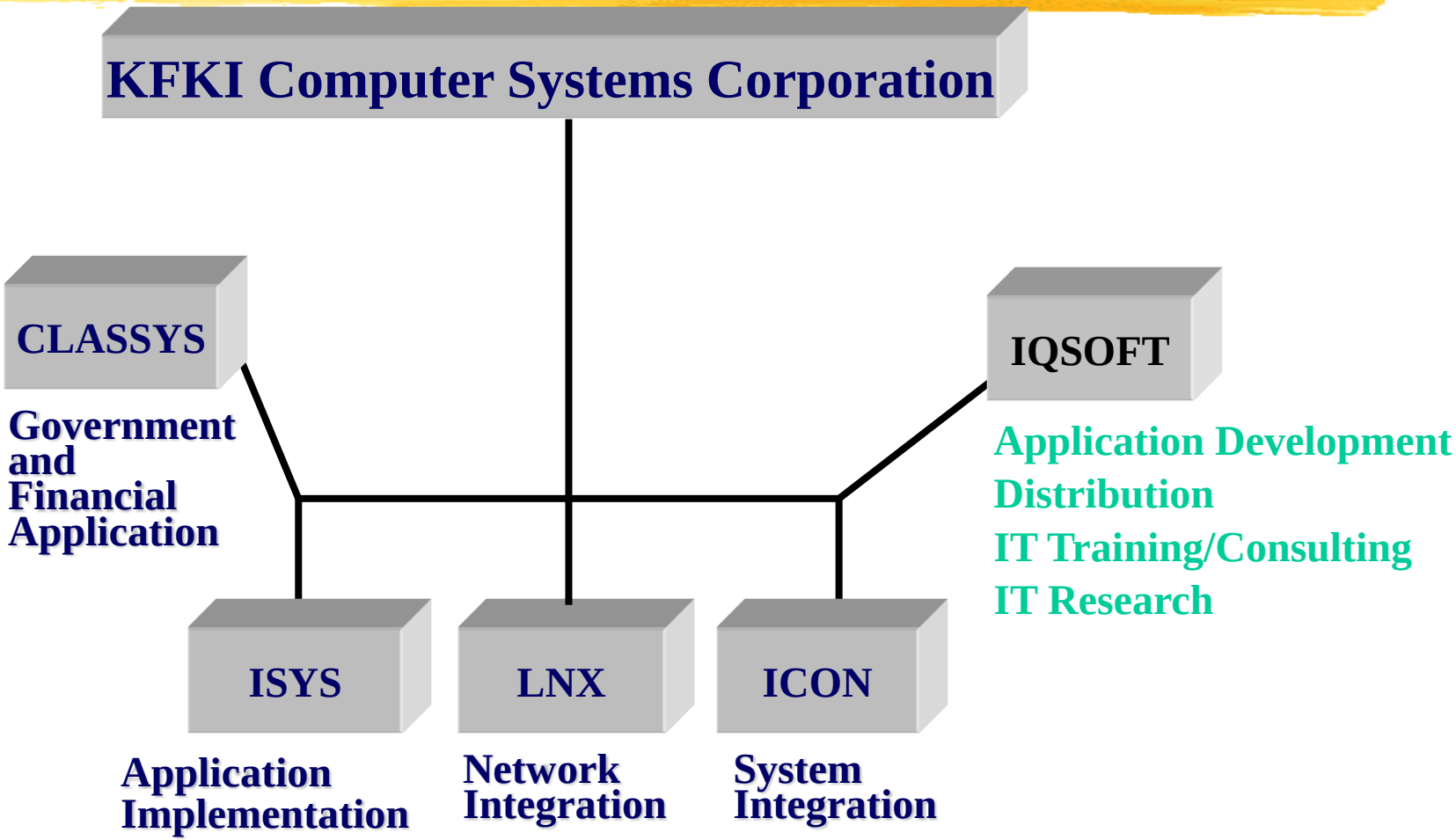
- **Number of employees: 80+**
- **Additional resource pool: ~ 60**
  - **smaller companies**
  - **freelance programmers**

Some basic data about KFKI Group

- 57 million USD revenue in 2000
- Over 700 highly educated employees
- Application development
- Systems integration
- Distribution
- Privately held
- Dynamic expansion

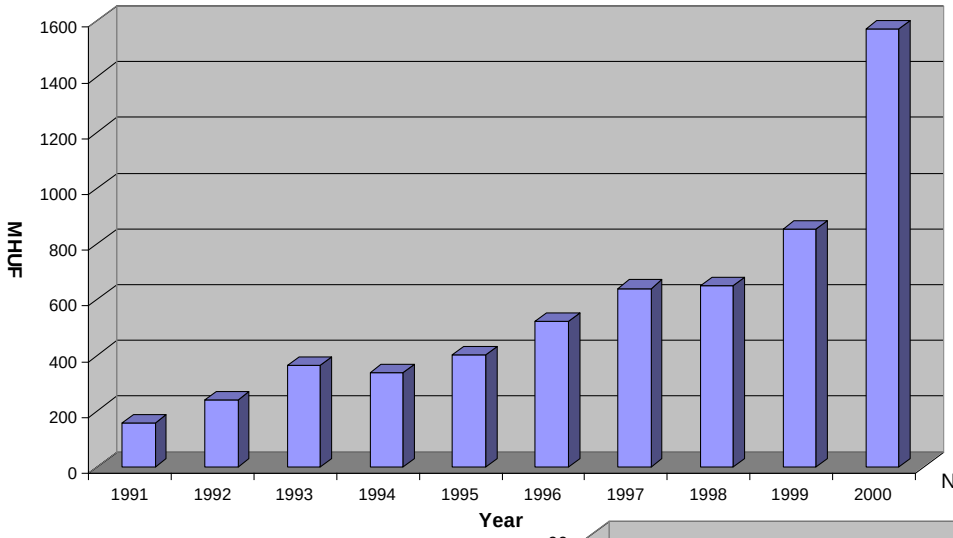


KFKI Organisation

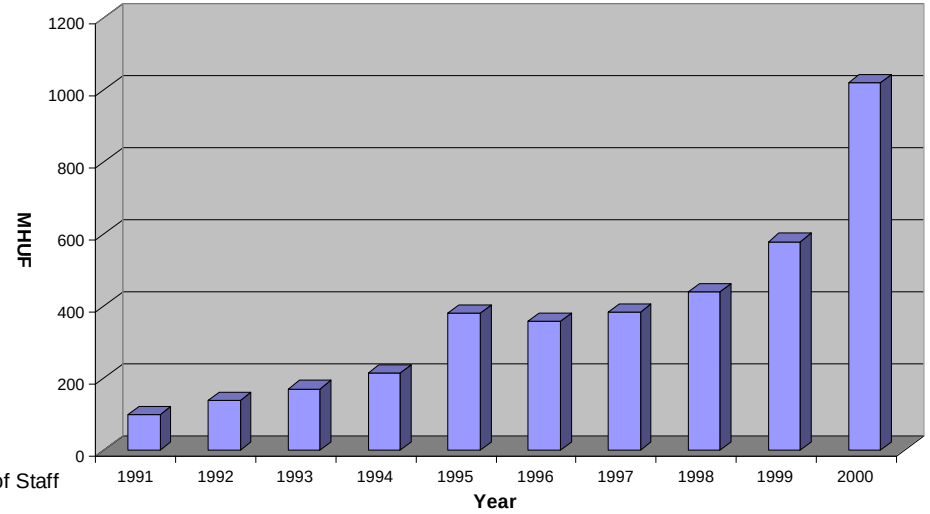


Some charts about IQSOFT

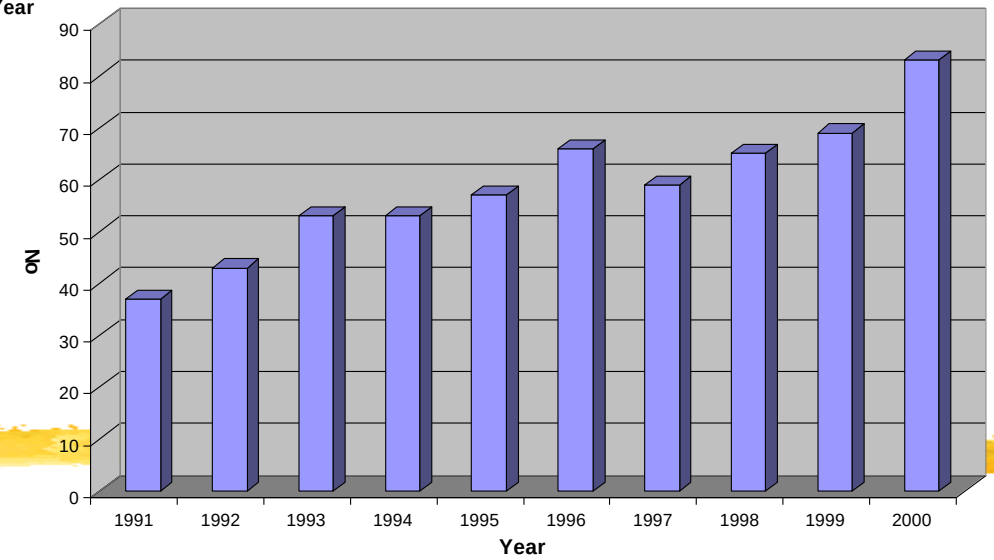
Net Revenue



Value Added



No of Staff

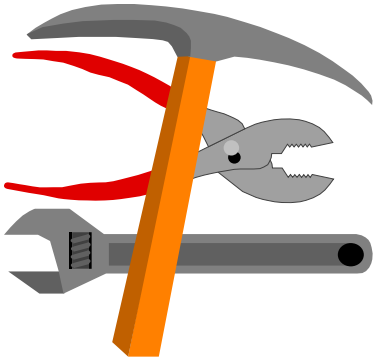


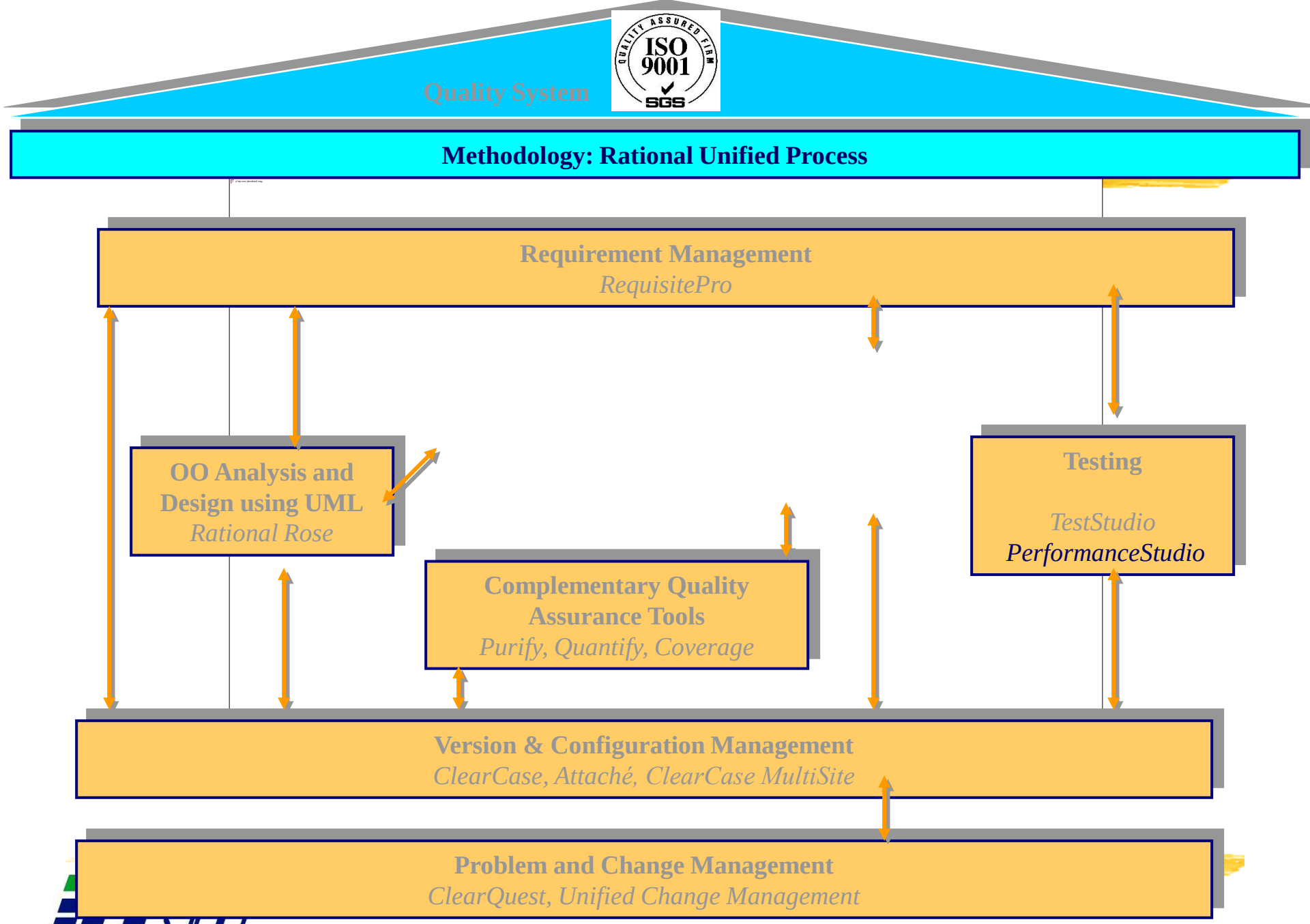
Business Areas

- **Product distribution, localisation**
  - **see the next slide**
- **Application development on demand**
  - **The main revenue source**
- **Marketable software product development**
  - **Fund Management System and software tools**
- **Professional services**
  - **training and consultation**
- **Applied R&D mainly in EU projects**
  - **artificial intelligence, constraint programming, object technology (since 1990; partners: UK, F, S, Cz, RO, BG, D, RU, AUS, GR)**

Software Distribution

Tools and methods in SW developments




Methodology: Rational Unified Process
Requirement Management
RequisitePro
OO Analysis and Design using UML
Rational Rose
Complementary Quality Assurance Tools
Purify, Quantify, Coverage
Testing
TestStudio
PerformanceStudio
Version & Configuration Management
ClearCase, Attaché, ClearCase MultiSite
Problem and Change Management
ClearQuest, Unified Change Management

International development projects

- **Bank Austria**
  - **ZEXPERT: a banking expert system shell**
- **SICS - Swedish Institute of Computer Science:**
  - **participating in the development of SICStus Prolog**
- **Netinteractive USA, complex service provision**
  - **Highly interactive applets, video**
- **Nokia Finland**
  - **HTML-WML converter for their WAP server**
- **AstraZeneca**
  - **Clinical Trial Management System - worldwide usage**

Some important domestic development projects

- **Westel Mobile GSM Company**
  - billing and CRM system
- **AB-AEGON Life Business Unit**
  - complete unit-linked insurance system
- **Hungarian National Bank**
  - statistical information system
- **Hungarian Post**
  - Intelligent Post Offices System
- **HVG JobLine**
  - e-employment agency

Thank you for your attention