

### **CLOUDS ON THE HORIZON: IQSOFT LTD.**

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"I don't like changes. We have been the same organization for 25 years and we should stay the same."  
- IQSoft project manager

Dr. Balint Domolki, managing director of IQSoft Ltd, stared out the third floor window of his modern three story office building at the rusting vestiges of hundreds of communist era railroad cars. The contrast between the old and the new was striking. Only a few short years ago this suburb of Budapest, Hungary was bustling with heavy industry. Almost before Balint's eyes, the manual laborers and smokestacks were being replaced by suits and glass skinned office buildings. Hungary was an economy in transition (see Figure 1 insert – Transition Economies).

#### **Figure 1: Transition Economies**

One of the most significant economic and political events of the twentieth century was the fall of the Berlin Wall and the end of the centrally planned systems of the former Soviet Union. As a result of these events, Hungary joined the approximately one-third of the world's population that lives in a transition economy (worldbank.org). The wide ranging transformations which occurred in Hungary and other former Soviet Union republics are likely to be repeated across the developing world: China, the Pacific Rim, Africa and South America. There is general agreement that market economies (like the United States) and transition economies (like Hungary) have been differentially influenced by their institutional, socioeconomic, and cultural environments. The legacy mindsets from these pre-transition environments have persisted in the managerial behaviors of business leaders. Perhaps by understanding the historical experiences of those companies and countries that have successfully transitioned, future business leaders can prescribe superior strategic policies which will expedite the transitions.

Although IQSoft was housed in one of those modern office buildings, he couldn't help but wonder if the organization on the inside didn't bear a greater resemblance to the rusted out railroad cars? Was IQSoft just lucky to escape the fate of those railcars or did IQSoft do something right? A storm was on the horizon, but it was to the east and already past; to the west only a few puffy cumulus clouds had remained. History had taught Hungarians that those small clouds could not be ignored. As Balint watched those clouds move closer, he wondered if they were the precursors of a storm yet to come.

After what Balint described as a tumultuous year filled with only thoughts of survival, IQSoft Ltd had continued to expand its product/service offer and had achieved what appeared to the management as a reasonable level of stability. With the calm came an opportunity for Balint

and his team to consider the IQSoft organization that had evolved during years of entrepreneurial growth.

Since its inception IQSoft had been constantly changing in response to the stormy Hungarian political environment and the rapidly changing information technology marketplace. When the directors of IQSoft (Balint Domolki, managing director; Julia Sipka, commercial director; and Tamas Langer, technical director) finally sat down to discuss the future direction of the firm they recognized that the internal organization evolved as a reaction to the external environment and was not strategic. They debated the need for planned organizational change, how to implement change, and what would be the consequences of any proposed changes.

#### **Breaks of Sun?: Hungary, 1994**

In 1994, Hungary was in the midst of a difficult transition from a centrally planned command economy to a market economy. The country's GDP continued to contract about 1%, despite attracting about half of all foreign direct investment going into Eastern Europe. Although the privatization process was slowing, in December 1993, Hungary sold its controlling interest in the Matav telecommunications firm with a 30% share being purchased by a US-German consortium. By the end of 1993, about half of the GDP originated in the private sector, unemployment was rising to about 13%, inflation continued above 23%, and the trade deficit stood at about \$3 billion.<sup>6</sup> The government tried to express optimism that an economic recovery in Western Europe would improve exports and the Hungarian economy would be a break of sun on the horizon. But, true to character, the Hungarian people remained skeptical, focusing on the clouds.

#### **The Forecast is Cloudy: General Characteristics of the Hungarian People**

Hungarians were champions of pessimism. In Hungary the glass was always half empty. This pessimism was reflected in Hungarian folk literature where the hero/heroine rarely "lives happily ever after" but rather they live "happily until they die." In a European opinion poll designed to evaluate the state of each nation, 59% of Hungarians thought that domestic economy had worsened since the fall of Communism and 66% indicated that their personal financial situation had deteriorated (only 8% felt that they were more able to make ends meet). These opinions sharply contrasted World Bank measures of improvement and the beliefs of other regional cultures. During the same period, 50% of Albanians, 28% of Estonians, 23% of Romanians, and 22% of Czechs felt that their financial situation had worsened.<sup>7</sup>

Although pessimism could be associated with a lack of confidence, this could not be said for Hungarians. It was often said that if God knows everything, Hungarians know everything better.<sup>8</sup> This eagerness to know more than others drove Hungarians to be well educated; think, talk, and read relentlessly; appreciate the arts; and value the cultural experiences of international travel. While Americans talk about business, Hungarian

<sup>6</sup> <http://www.nato.int/general/countrydb/hungary.html>

<sup>7</sup> Vamos, Miklos, and Matyas Sarkozi. "Xenohobe's guide to the Hungarians." London: Oval Books, 1999

<sup>8</sup> Vamos, Miklos, and Matyas Sarkozi. "Xenohobe's guide to the Hungarians." London: Oval Books, 1999

conversation would focus on international affairs, historical recollection, and philosophical debate. Hungarians were loyal to their promises even at the risk of being crippled in the process. A Hungarian would keep their word, deliver as promised, and finish a job.

In the business environment, telephones were not used extensively. Even though the system was unreliable, a call home may instead be connected to a cement company in Singapore, the real reason for Hungarians' reluctance to use the telephone to conduct business was the importance of nonverbal communication. Hungarians preferred to look people in the eye and use a lot of gestures when they were talking. The telephone frustrated an important aspect of Hungarian communication. This need for intimate communication was also evident in business meetings, which were excessively long by Western standards. To Hungarians a short speech would not be taken as seriously as a long speech.

Although statistics indicated that Hungarians spent more hours at work than citizens of other Eastern European countries, this did not necessarily translate into improved productivity. The reason for this disconnect between hours worked and productivity can be attributed to two factors: the disincentives of a socialist system and the low wages relative to the cost of living. During the years of socialism people felt that their labors were only benefiting the Russian state and not their own families; thus, they focused their energy on a second black economy job. Because there were no negative consequences of low productivity in their official job (even if fired the government would quickly find them an equivalent job), Hungarians had no incentive to work hard. One positive outcome of the socialist system was the relative equality of men and women in the workforce. Many women took top leadership positions in business.

Because low wages were the norm, many Hungarians still maintained a second job. To maintain two jobs and not fall dead from exhaustion, a minimum effort was often applied to both jobs. "As the legendary Hungarian soccer captain, Ferenc Puskas, once said: 'Big money – big football. Small money – small football.'"<sup>9</sup>

The lack of work incentives had not diminished the Hungarians drive to become rich and successful. However, success and riches gained by others was looked at suspiciously. Hungarians presumed that anyone who was wealthy must have gained that wealth through illegal means. Thus, wealth was envied, but those in possession of wealth were rarely admired. There existed a general satisfaction when those in possession of wealth would go bankrupt or be convicted of crimes.

### **The Average Highs and Lows: Industry Background<sup>10</sup>**

<sup>9</sup> Vamos, Miklos, and Matyas Sarkozi. "Xenohobe's guide to the Hungarians." London:Oval Books, 1999

<sup>10</sup> Statistics in this section were gathered from notes taken in a presentation titled "Overview of the Hungarian Software Industry." A presentation by: International Data Corporation, Budapest, Hungary, March, 1995.

The long range forecast for Hungary was unsettled. Software technology firms in Hungary faced extreme market volatility. The market situation was "characterized by fleeting opportunities, shifting customer preferences ... and furious global competition."<sup>11</sup> Unlike the Western markets, these highly volatile emerging markets had no infrastructure to support the new entrepreneurial firms. Thus, Hungarian firms often relied on large international firms and governmental contacts for survival.

IQSoft Ltd competed in the international software and services market. This market could be segmented into the packaged software segment (commercially available programs for sale or lease) and the professional services segment (including information technology consulting, custom software development, system integration, education, and other services related to the implementation of information technology). The international software and services market had reached \$201 billion in 1993 and was expected to show a compound annual growth rate of 10-15% per year. The European software and services market was valued at more than \$50 billion in 1993 and was expected to grow at a slower compound annual growth rate of 5-10% per year.

IQSoft Ltd's primary focus was on the professional services segment. In this segment users were turning to outside resources for assistance in coping with the development, operation, and maintenance of information technology systems. Professional services accounted for about 60% of the international software and services market with an expected compound annual growth rate of 5-10%.

The Hungarian software and services industry consisted of approximately 300 firms that participated in the market as software developers, value added resellers of foreign products, systems integrators, and service providers. International Data Corporation estimated the value of the Hungarian software and services market at \$212 million in 1993. The initial shock of opening Hungary to free market forces caused a growth surge. By 1994, the market had stabilized and was expected to show a compound annual growth similar to that in the rest of Europe.

The major international information technology (IT) suppliers had captured about 50% of the Hungarian domestic market in three short years, and there was a general fear among the Hungarian people that the trend would continue. The remaining 50% of the market was divided among the 300 domestic firms. Of these domestic firms, the leading 36 accounted for 63% of the domestic firm's share of the market.

Within Hungary's software and service market, the capabilities and resources of the domestic industry were diluted among a wide variety of small and medium size companies. This created a situation often found in artisan communities, where people could work only on small projects. As the firms typically remained small and under-capitalized, it was impossible for them to finance the cost of creating their own packaged software or participating independently in large projects. Thus, most Hungarian firms focused on the distribution of international products to the Hungarian consumer,

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<sup>11</sup> Bossányi, Katalin, "There Is No Such Thing as Eastern Europe: An Interview with Paul Lendvai", *The Hungarian Quarterly*, VOLUME XXXVI, No. 140, Winter 1995

providing information technology services on small projects and subcontracting their services for larger projects.

The lack of capital in the domestic Hungarian industry created opportunities for Western software firms and service organizations of large hardware firms to capture the most lucrative Hungarian projects involving the computerization of public administration and utilities. On large projects, the main contractor could often make arrangements for favorable financing. Large Western firms were generally able to do this based on their strong banking relationships outside Hungary while Hungarian firms were limited to local contacts. Therefore, Hungarian industry participation was limited to subcontracting, as the providers of programmers and technicians to the largest projects.

Such limitation created some problems for Hungarian firms hoping to compete internationally. To participate in large international projects, a firm needed to have some very strong domestic references. For a Hungarian firm, this meant they must participate in several of the large projects available in Hungary. Unfortunately, most of these projects existed exclusively in the government sector where power and politics played a major role in supplier selection. The larger international firms continued to have the upper hand and were awarded most large contracts. Thus, without domestic references Hungarian firms remained relatively small and isolated within the European and world markets.

Compounding domestic industry's problems, the Hungarian firms had taken very few proactive marketing steps to increase sales of their products and services. For historical reasons, many Hungarian firms preferred to rely exclusively on direct selling and informal marketing channels. In contrast, Western firms, as recent entrants to the market, often took a different approach. In these organizations there was much greater emphasis on market research and segmentation, understanding customer behavior, developing different marketing channels, and focusing the product to reach specific consumer groups. Although direct selling and informal marketing channels could be highly effective in the Hungarian market, this strategy left a firm vulnerable to losing a crucial sales channel whenever the key contact left. It was common practice for Western firms to offer lucrative employment opportunities to these key individuals and with them obtain the valuable contacts.

Production costs were steadily rising in Hungary and were quickly approaching Western levels. Although low labor costs were once a chief competitive advantage for Central/Eastern European companies, this did not prove to be sustainable. It was becoming more important to compete with superior products and services.

In the professional services segment of the Hungarian software and services market, consumers were reluctant to pay service fees (fees related to the installation and maintenance of information systems). This reluctance severely limited the professional service segment's growth and profitability. There were three primary reasons attributed to Hungarian reluctance to pay service fees.

The first reason for Hungarian reluctance was their naiveté. Under the former communist system the customer never had to pay for the service portion of an information system installation. Therefore, they had little experience valuing these services and were extremely skeptical of any intangible charges.

The second reason was that most client companies were unaware of the real costs of information technology services. When a service provider measured costs of a project they calculated the total cost of doing business including overhead, while the Hungarian user typically only recognized the marginal cost if the service were performed internally. The user then used this marginal cost as a measure of the value of the service and compared this to the service fees charged. These procedures resulted in a distorted cost picture and ultimately purchase resistance by the client company.

The last major resistance to accepting service fees came during cost benefit analysis. When evaluating the value of a particular service, the Hungarian client often failed to consider the added value of timeliness and quality. Even in large, complex information systems projects where timeliness, quality, reliability, and supplier responsiveness were major determinants of customer satisfaction, the primary consideration remained price. There was very little scrutiny within companies of the true losses associated with incorrect or delayed systems implementations, and there was virtually no attempt made to measure the price of success versus the costs of failure.

IQSoft management believed that changing these mindsets and participating in large domestic projects were paramount to survival in the Hungarian software and services marketplace. IQSoft management also believed that key contacts, cultural understanding, and command of the local language would slow the international IT firms' expansion into IQSoft's niche, giving IQSoft time to solidify its position as one of the top 36 domestic firms. According to Balint "the value of domestic market knowledge should not be underestimated."

#### **The Weather Makers: Keys to Success**

*"Hungarians' strength lies in technical matters related to hardware and software. Their weaknesses generally show up at the beginning and at the end of the project life cycle. Their weaknesses can be classified as a lack of experience in the business related matters of information technology."* - Industry expert, Majteny Gyorgy

Inside Hungarian software companies, management staff was relatively small and handled all activities related to the company's operations, sales and marketing, and project management. To assist with these activities, management maintained a pool of various professionals that they freely moved from one activity to another. For a particular project, the individuals would generally be assigned on an ad-hoc basis.

Hungarian programmers had a good reputation internationally for their technical knowledge and many of these software professionals had worked in Western countries.

Such global experience created a core workforce of very capable internationally competitive personnel. However, they lacked skills in software engineering methods and expertise in overseeing the full life cycle of an information systems project. These software professionals also lagged behind Western countries in their IT consulting expertise, large project management skills, and quality assurance methodologies.

According to industry experts, there existed four key areas a Hungarian software company needed to address in order to achieve success in the Hungarian marketplace:

- the consumers needed to be educated in the value of integrated information systems before they would make the purchase decision
- the systems integrator needed to supply turn-key solutions to the customer
- the employees needed to be knowledgeable in the base technologies and latest advancements
- the software needed to be open to interact with external systems

### **Weathering a Storm: IQSoft Ltd's history**

When SZKI Intelligent Software Company Ltd (now IQSoft Ltd) began independent operations in 1990, its activities centered on artificial intelligence research and data base implementation. Balint Domolki identified the primary company objectives for the first year of operations as “securing the independence of the company’s operations and maintaining its financial stability, while at the same time creating a basis for future development and expansion.”

Two major revenue sources were established during the first year of operation: application development projects for Bank Austria and distribution of Oracle products in Hungary. In 1991, Balint saw the extension of business activities beyond these two sources as “absolutely necessary for maintaining the stability of the company.”<sup>12</sup> Thus, the goal for 1992 was to “identify new directions and to provide the preconditions for such an expansion, both in terms of the staff’s skills and the market connections of the company.”<sup>13</sup>

The dominance of these two revenue sources continued through 1992, “accounting for approximately 85-90% of all revenue.”<sup>14</sup> In May 1993, IQSoft Ltd's market position was shattered. IQSoft’s exclusive distribution contract with Oracle Corporation expired. Some hoped that Oracle Company (USA) would buy a majority stake in SZKI Intelligent Software Company Ltd, but instead, Oracle Company (USA) decided to establish an independent branch office in Hungary and hire some key individuals from SZKI Intelligent Software Company Ltd. This move put the company in crisis. In addition to the significant loss in revenue, IQSoft Ltd. had an organization that focused on servicing a single product, with little sales and marketing effort required.

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<sup>12</sup> IQSoft Ltd Annual report 1992

<sup>13</sup> IQSoft Ltd Annual report 1992

<sup>14</sup> IQSoft Ltd Annual report 1992



Due to previous contract commitments and a slow start by Oracle Hungary, the company had some time to refocus and avoid bankruptcy. In June of 1993, the management and employees bought a majority of SZKI Intelligent Software Company Ltd, and the name was changed to IQSoft Intelligent Software Company Ltd (or IQSoft Ltd). Management was forced to rely heavily on the success of the new directions strategy, which began in 1992, for financial existence. The evolutionary intent of this strategy had to be quickly changed to revolutionary.<sup>15</sup>

IQSoft Ltd sought quick expansion, attempting to capitalize on the emerging sectors within Hungary. The firm's important government contacts, continued joint projects with Bank Austria, employee investment in the company, and luck all played roles in IQSoft's ability to remain solvent during this critical period. The financial performance of IQSoft Ltd highlighted the situation and the eventual recovery in 1994 (Exhibit A: IQSoft Ltd's income statements 1991-1994; Exhibit B: IQSoft Ltd's balance sheets 1991-1994). Despite IQSoft Ltd's difficult situation the company continued to grow, with a greater need for non-technical support (sales/marketing) as the product mix changed and new products were introduced. Exhibit C shows IQSoft Ltd's organization structure.

### **Preparedness: IQSoft Ltd's 1995 Position**

The forced acceleration in IQSoft Ltd's new directions strategy left the company with a large product assortment that spanned the information technology market's needs. With an expanded product portfolio, IQSoft recognized the opportunity to formulate a new strategy that would reposition the company as a systems integrator.

The new directions strategy was modified to reflect the complete solution systems integrator that the Hungarian consumer was demanding.<sup>16</sup> The new products and services that the firm offered needed to address the emerging market environment and the market expectations of a systems integrator. IQSoft had a combination of products and services that it felt addressed the market's needs. By 1995, IQSoft Ltd had developed a complex list of activities focused on six main business areas: software distribution, hardware distribution, software development, software research, software training, and system integration. Exhibit D shows labor allocations and costs for each business area.

Organizational issues, market forces, and competitive forces would all determine whether IQSoft Ltd could weather the storm.

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<sup>15</sup> IQSoft Ltd Annual report 1993

<sup>16</sup> IQSoft Ltd Annual report 1994



**A High Pressure System: IQSoft Ltd's Competitive Position.** Despite the management's efforts to become a systems integrator, IQSoft Ltd's market position remained one of software distributor. Although there was some progress in adding systems integration capabilities and expanding software development skills, the main revenue producing activity remained software distribution. The situation for IQSoft was worsening as the Hungarian information systems market matured and an environment that benefited the full service systems integrator was created. This development left IQSoft Ltd competing between the large hardware/software developers and the large information technology-consulting firms.

The hardware suppliers were beginning to get involved in the highly profitable consulting business. Firms such as IBM, HP, Digital, Compact and Bull all had a significant presence in Hungary. These firms sometimes used local firms (like IQSoft Ltd) to fill the missing gaps in their own resources, but in the lower risk, higher volume business areas they continually sought to internalize these activities.

The consulting firms were also seeking the advantages of being a full service firm. To better position themselves for future consulting business, the consulting firms were taking on more responsibility for the entire information system design and implementation. Firms such as EDS and Anderson were becoming significant competitors in the Hungarian marketplace.

The companies without the capital to provide complete integration services were being forced to partner with the stronger, more respected, international firms and thus assumed the role of a weaker partner. They were becoming a supplier of labor for the stronger firms that would reap a majority of the profits.

The key industry and government contacts were becoming less effective in securing new business opportunities. The international reputations and market presence of the large multinationals were beginning to take their toll on the smaller independents. IQSoft was being forced to make some very difficult decisions regarding its future. The organizational structure was being strained by both the number of activities and the number of people who were now part of IQSoft Ltd. Due to traditional values, emotions sometimes influenced business decisions.

The company had fought to keep its identity as a small company with a friendly, almost family-like environment. A desire to maintain this environment, fear of losing control, and traditions (cultural and historical) all played a role in the current position of IQSoft in the Hungarian marketplace. These same factors would impact the acceptance of an organizational change.

#### **The Forecasters: The Debate ....**

It is often said that if there are three Hungarians in a room there will be four different opinions. This was the situation with the management team as they debated the strategic organization of IQSoft. Although Balint Domolki was the organization's key decision

maker, IQSoft's family atmosphere and Hungarian culture allowed even the lowest paid employee's opinion to be seriously considered.

**Balint Domolki (Managing Director).** The managing director, Balint Domolki, summarized his position on organizational change by stating any change in the organization:

"... should emphasize the Hungarian domestic marketplace as the core business and enhance our ability to execute a slow growth strategy. There needs to be a focus on finding new, complementary products to add to the current portfolio and a renewed vigor in selectively developing new products which have an identifiable Hungarian market. To finance these activities, IQSoft's management must be freed from line responsibilities so that they can seek additional outside capital investment from Hungarian sources."

Balint argues that any organization change proposal must consider IQSoft's competitive environment and its historical values and traditions. These considerations led to the identification of several strategic objectives that would be central to Balint's vision of IQSoft Ltd's future and provide the scale along which the organizations success would be measured.

"It is imperative to strengthen IQSoft's relationship with customers and suppliers. The real profitability in this business comes from establishing long term relationships with customers and providing the necessary after sales service. Since the service part of IQSoft's business is the most profitable and the fastest growing, focus should be placed on the systems integration and consulting portions of the portfolio. There are several products which continue to be a drain on IQSoft's financial resources; these non-performing products should be eliminated from the portfolio.

IQSoft has a tradition of active international research activity. I am committed to continuing the building of IQSoft's international reputation through joint research activities. Any reorganization must continue to provide a central role for research. I am convinced that our current organization is hindering our pursuit of these objectives. We need to make some changes. I have reached the traditional retirement age (*60 in Hungary*). In the next couple years, IQSoft will have to find my replacement. Grooming someone to take my position will have to be a priority of this reorganization."

**Julia Sipka (Commercial Director).** The commercial director, Julia Sipka, expressed a slightly different perspective on the future direction for IQSoft Ltd, "IQSoft has two strategies for maintaining the financial stability of the company. The first is to continue the same slow steady growth that was exhibited in the past." Julia defines slow growth in terms of labor, which she specified as 5-10 additional people hired per year. The second strategy is "radical growth." Radical growth would require the creation of profit centers and a doubling in labor. Although the second alternative is attractive, it creates some

problems for which the commercial director could not see any immediate solutions. Julia explained these alternatives.

"Radical growth through profit centers poses a significant risk to the stability of the IQSoft. In the information solutions business there is no method to stop these new profit centers from becoming independent businesses. The assets within each profit center would be concentrated in the talents and minds of the individuals. Since there is little dependency on the parent company infrastructure to make the business successful, these assets could easily be transferred to a new business. Financing radical growth would be impossible under the current capitalization structure. The company's current capital base would not justify such an expansion. Bank loans backed by company asset values are the current method for financing projects and could not be extended to this growth activity."

Even though the radical growth alternative created some interest from the IQSoft Ltd's supervisory board (board of directors) and the managing director, the current situation did not require such a radical departure from the status quo. Instead, Julia would recommend "a focus on product module development for export, product distribution in Hungary, localization of software and large project systems integration." Whatever growth this strategy would require (probably 10% per year) would be acceptable. Thus, the new organization should be designed to focus on achieving several critical objectives. Foremost, the focus should be placed on international projects.

"Export should become 20-30% of the company's total business. This focus is important because it gives an independent outside measure of profitability and performance of the business. Furthermore, since people are only differentiable asset, the organization must allow an environment which keeps the employees satisfied. This can be done by offering interesting international projects, good working atmosphere, and a good salary. Any new organization must maintain these important dimensions."

Historically, IQSoft's distribution activities were emphasized. These activities should be considered "short term and be dropped if necessary from IQSoft Ltd's offering." Furthermore, IQSoft's efforts should be directed at establishing

"... closer relationships with the hardware vendors (IBM, HP, etc.) in Hungary as opposed to consulting firms (EDS, Anderson, etc.). The hardware vendors are not a threat to IQSoft's activities and won't be for at least 10 years because it is difficult for them to employ enough experts in the field to match a company like IQSoft. Such a move would require these hardware companies to pursue radical growth. Hungary has had bad experiences with the Big 6 consulting firms. They came into Hungary thinking they were going to make big profits fast, but instead they severely damaged their own reputations and credibility because they hired inexperienced individuals which could not deliver on what was promised."

**Tamas Langer (Technical Director).** From the technical directors, Tamas Langer's perspective:

"IQSoft is involved in too many projects and there needs to be a focus within the domestic market. The basic mix/structure of activities undertaken by IQSoft does not need to change but the current staff and organizational structure is not capable of handling the volume of activities."

"The future for IQSoft will be in providing its domestic customers with complete solutions to their information processing problems. To reach this next level of activity will require some minimal growth in people and a more significant growth in capital. IQSoft will have to find some financial investors, willing to allow the firm to grow, rather than the strategic investors, looking for low cost labor and an easy way to enter the Hungarian market. Thus, we need to structure the organization to make IQSoft attractive to these investors.

Export activity is not the future for IQSoft. Our development costs are too high for Western companies to contract with us. It will be too difficult for us to develop an exportable product given the current organizational competencies. Even when we look at exporting IQSoft services to the East (*Romania, Ukraine, Russia, etc.*), we find too many good local firms providing the same services with lower costs. In Central/Eastern European markets where we do see opportunities there exists a general distrust in Central/Eastern European companies (*IQSoft would be considered a Central/Eastern European company*). In these markets we find reputable and respected Western firms establishing local offices. (Note: Italic comments added for clarification)

The major problem with IQSoft's domestic market is that it is too small to sustain the number of companies which currently offer systems integration services in Hungary. So, IQSoft is caught in the middle without much opportunity in the export market and not a lot of room to maneuver in the domestic market. IQSoft's strength is that it stands on several legs, we aren't just a software developer, distributor, integrator, etc. but we participate in a variety of related systems integration activities. With proper focus on the domestic market, IQSoft can continue to operate profitably."

Tamas argues that leveraging the company's internal core competencies, and recognizing the lack of export opportunities and changes in the domestic marketplace, were the keys to a successful reorganization plan. For IQSoft to achieve its strategic objectives it would have to change in several important ways.

First, IQSoft must change the organizational structure.

"Seventy people is the limit to the current organizational structure, beyond this (70 people) the organization will no longer be able to function. This new

organization must focus on a limited number of business areas. A number like 5 business areas seems appropriate; possibly imaging, 2-3 database application areas, and some development (some independent and some related directly to applications).

The new organization must allow management the time to locate a financial investor, which is critical to the future life of IQSoft. There are two choices for increasing the capital base for the company. The first, keep the capital structure the same and increase the investment of each shareholder. This cannot realistically be done, because the current shareholders (*employees*) don't have the money. The second option is to locate outside investors. Most of the interest comes from strategic investors, looking for a way to enter the Hungarian market or for cheap project labor; for various reasons this has not proven to be sustainable long term. This leaves us with purely financial investors.

Any change must increase productivity per employee in a measurable way. In my opinion money productivity per employee is the best measure of success and IQSoft's current ratio is unacceptable. We have lost our focus on core competencies. IQSoft needs to reestablish its core competency focus in the areas of Oracle databases. The market sees IQSoft as an Oracle database company and we should be able to capitalize on this."

### **Additional Insights**

For any recommendation to be accepted the proposed changes would have to address the strategic objectives of these managers. To actually be successful any change would have to overcome the inevitable resistance of influential employees. One project manager commented that "there is no critical need for big changes, the company is operating normally." Another mentioned, "I don't like changes. We have been the same organization for 25 years and we should stay the same." This resistance to change can also be seen in the comments of another employee, "IQSoft is a risky company to work at (in relation to others), but we have a great atmosphere and you are able to learn a lot."

Other employees seemed to recognize the need for change, "After speaking with colleagues at other companies, IQSoft definitely has the best atmosphere for working; however, it is better to lose the atmosphere than to lose your job!" Some even identified problems that needed to be addressed, "The problem is that each product manager is not responsible for revenues," and "We need to reduce the number of products. There are too many different products that it is impossible for the sales people to know about all of them."

Still others saw a much deeper issue. "There are some people here that need to be gotten rid of. The company was a socialist organization and when it was formed it inherited a lot of baggage. The company can no longer afford to carry this baggage. As long as you have some people working 11 hours a day while others work 4, there are going to be problems."

### **Resolution ....**

Balint, Julia and Tamas needed to set the course for IQSoft's future. As Balint once again gazed out the window, he noticed that the clouds on the eastern horizon were thickening. What changes should the team make before the next storm arrived?<sup>17</sup>

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<sup>17</sup> The teaching note may be obtained by contacting the author, [chris.scherpereel@nau.edu](mailto:chris.scherpereel@nau.edu).

**Exhibit A: IQSoft Ltd's Income Statements 1991-1994**  
(HUF = Hungarian Forint)

**IQSOFT Intelligent Software Company Ltd.**  
**Income Statements**  
**For the Years Ended December 31 (1,000,000 HUF)**

	1991	1992	1993	1994
<b>Gross Income</b>				
Domestic	103.3	165.8	306.6	263.4
Export	53.3	74.4	58.0	74.3
<b>Total Gross Income</b>	<b>156.6</b>	<b>240.2</b>	<b>364.6</b>	<b>337.7</b>
<b>Cost of Sales</b>				
Product & material costs	65.5	115.0	203.0	150.9
Subcontracting costs	4.9	3.5	14.5	10.0
Depreciation	1.2	6.3	11.8	16.3
Labor	44.9	68.8	82.4	89.2
<b>Total Cost of Sales</b>	<b>116.4</b>	<b>193.5</b>	<b>311.7</b>	<b>266.3</b>
<b>Expenses</b>				
Overhead	30.1	35.9	52.8	60.7
<b>Operating Income (EBIT)</b>	<b>10.0</b>	<b>10.7</b>	<b>0.1</b>	<b>10.7</b>
<b>Other Income</b>	4.0	6.0	6.5	1.5
<b>Other Expenses (Interest)</b>	3.5	3.8	2.4	5.2
<b>Net Earnings Before Taxes (NEBT)</b>	<b>10.5</b>	<b>12.9</b>	<b>4.1</b>	<b>7.0</b>
<b>Taxes</b>	4.0	4.2	0.6	1.4
<b>Net Earnings After Taxes (NEAT)</b>	<b>6.6</b>	<b>8.7</b>	<b>3.6</b>	<b>5.7</b>
Number of Employees	38	46	61	63
Average HUF/USD exchange rate	74.74	78.99	92.5	102.0
Inflation rate	35%	23%	23%	17%

**NOTES**

- (1) Financial information for 1990 is not available due to major accounting law changes  
(2) All data was obtained from company documentation and adapted to US reporting formats



**Exhibit B: IQSoft Ltd's Balance Sheets 1991-1994**  
(HUF = Hungarian Forint)

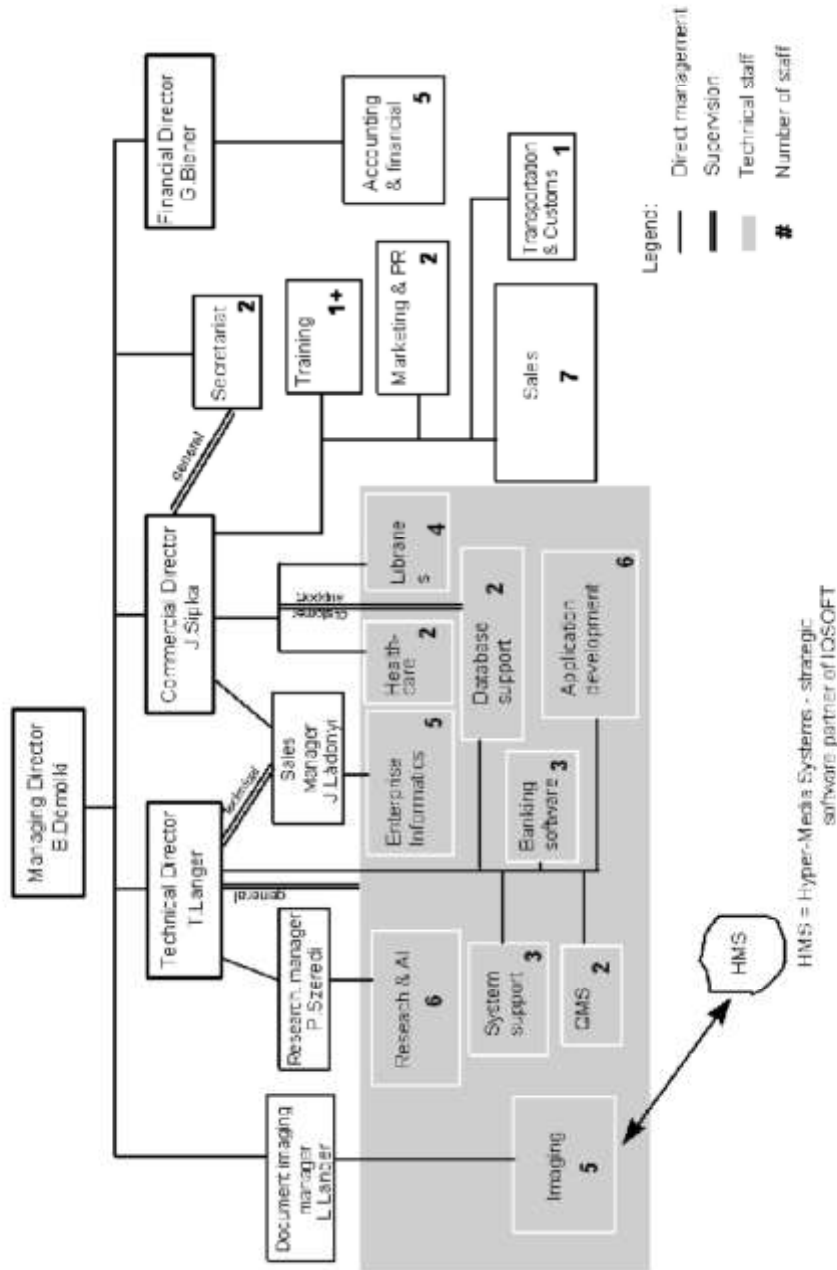
**Balance Sheets**  
For the Years Ended December 31 (1,000,000 HUF)

	1991	1992	1993	1994
<b>Assets</b>				
<b>Current Assets</b>				
Cash and Marketable Securities	23.0	29.7	19.6	5.0
Accounts Receivable	39.2	52.6	111.8	77.6
Inventory	0.8	9.1	41.2	4.2
Other Current Assets	0.0	0.8	1.4	0.9
<b>Total Current Assets</b>	<b>63.0</b>	<b>92.2</b>	<b>174.0</b>	<b>87.8</b>
<b>Fixed Assets</b>				
Property, Plant, and Equipment	13.6	17.4	34.5	38.3
<b>Other Assets</b>	<b>6.3</b>	<b>6.5</b>	<b>5.8</b>	<b>7.9</b>
<b>Total Assets</b>	<b>82.9</b>	<b>116.1</b>	<b>214.2</b>	<b>134.0</b>
<b>Liabilities and Equity</b>				
<b>Current Liabilities</b>				
Taxes Payable	0.0	0.0	0.0	0.0
Accounts Payable	23.0	43.1	153.6	51.9
Accrued expenses	5.3	4.2	3.4	7.4
Loans Payable	2.5	3.6	7.0	22.0
Other Current Liabilities	25.1	34.8	17.0	25.4
<b>Total Current Liabilities</b>	<b>55.9</b>	<b>85.6</b>	<b>180.9</b>	<b>106.7</b>
<b>Long Term Debt (LTD)</b>	<b>0.0</b>	<b>0.0</b>	<b>5.5</b>	<b>0.0</b>
<b>Equity</b>				
Stock	23.9	23.9	23.9	23.9
Retained Earnings	2.6	5.0	2.0	1.5
Capital Reserve	0.5	1.6	1.9	1.9
<b>Total Equity</b>	<b>27.0</b>	<b>30.5</b>	<b>27.8</b>	<b>27.3</b>
<b>Total Liabilities and Equity</b>	<b>82.9</b>	<b>116.1</b>	<b>214.2</b>	<b>134.0</b>

**NOTES**

- (1) Financial information for 1990 is not available due to major accounting law changes  
(2) All data was obtained from company documentation and adapted to US reporting formats

### Exhibit C: IQSoft Ltd's Organization 1994



\* Organization as described in 1994 annual report.

**Exhibit D: IQSoft Ltd's Labor Allocation**

**Estimates/ Assumptions**

Average labor charge / person	1.667	MHUF (Millions of Hungarian Forints)
Average overhead charge / person	1.746	MHUF
Exchange rate HUF/\$	122	HUF/\$
Estimated annual inflation %	20	%

Business Area	Business Area							Totals				Salary Weight (multiple of labor charge)
	Systems Integration	Software Distribution	Software Development	Software Research	Hardware Distribution	Other Activities (Training)	non- management overhead	management overhead	management overhead	Totals	Salary Weight (multiple of labor charge)	
Total Manpower Requirement	7	16	7	10	1.5		17.5	4	63	63	1.25	
Sales	1	3	1	0	0.5		0	0	5.5	5.5	1.75	
Program Management	1	4	1	0	0.5		0	0	6.5	6.5	1.5	
Application Development	3	1	2	3	0		0	0	9	9	1.25	
Programming	1	6	3	6	0		0	0	16	16	3	
Management	1	1	0	1	0		0	4	7	7	1	
Support Overhead	0	1	0	0	0.5		17.5	0	19	19		
Estimated Return on Sale (ROS) %	5%	5%	7%	2%	5%							
Percentage of Revenue	15%	40%	25%	10%	5%		5%					
Estimated Revenues	52.50	140.00	87.50	35.00	17.50		17.50			350.00		