**CENTRE FOR THE STUDY OF ECONOMIC & SOCIAL CHANGE IN EUROPE**

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# "Videoton:The Growth of Enterprise Through Entrepreneurship and Network Alignment "

**Slavo Radosevic, Denis Eylem Yoruk**

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**University College London**
**Centre for the Study of Economic and Social Change in Europe**
**Senate House, Malet Street, London, WC1E 7HU**
**Tel: 44(020) 7863 8517**
**Fax :44(020) 7862 8641**
**Email: csesce@ssees.ac.uk**

# VIDEOTON:

# THE GROWTH OF ENTERPRISE THROUGH

# ENTREPRENEURSHIP AND NETWORK ALIGNMENT[♣]

**Slavo Radosevic**
University College London
School of Slavonic and East European Studies
s.radosevic@ssees.ac.uk

**Deniz Eylem Yoruk**
University College London
School of Slavonic and East European Studies
d.yoruk@ssees.ac.uk

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'The success stories will not be the vast government organisations that are easy to identify - Robotron in what was once East Germany, Videoton in Hungary, Iskra in Yugoslavia - but companies founded by men and women whose names are as yet unfamiliar'

**Harvard Business Review, January – February 1991, p. 26**

'Micro Capitalism: Eastern Europe's Computer Future' by Esther Dyson

This quotation from 1991 Harvard Business Review illustrates the mainstream perspective on entrepreneurship in central and eastern Europe (CEE). New small firms led by unknown entrepreneurs will grow through generic expansion while large ex-socialist conglomerates are doomed to bankruptcy. Indeed, this picture reflects to a great extent what has happened to a large number of firms and sectors in CEE. However this metaphor is also excessively simplistic, as the case of Videoton shows. It abstracts from the institutional and network context in which restructuring and entrepreneurship take place. The case of Videoton shows how the growth of enterprises in CEE inevitably rests not only on entrepreneurship but also on the existence and alignment of several other factors. The business model that has been developed through Videoton has greater relevance for understanding the growth of enterprises and the modes of integration of the CEE into the global economy. It shows that the restructuring and subsequent growth of Videoton cannot be explained merely as a case of individual entrepreneurship without taking into account that its success is also based on the alignment of several networks.

In the first section we briefly present the company's history and profile. The second section focuses on the key restructuring in Videoton: a shift to contract manufacturing. Section 3 describes Videoton's first outward investment. Section 4 addresses the fact that Videoton has managed to survive and grow through a holding structure. Local networks and industrial parks are important factors in explaining Videoton's strategy (section 5). Its relationships with government are addressed in Section 6. The price of success is retreat from being a producer of final products to being a contract manufacturer. Whether this step back enables further growth is discussed in Section 7. The key strategic problem for a contract manufacturer like Videoton is how to avoid dependent and low value added subcontracting (Section 8). Finally, the growth of Videoton has led to the relocation of several investments and contracts to Hungary (Section 9). Our main conclusion is that the

growth of Videoton is best explained through entrepreneurship and alignment of the networks perspective.

## 1. HISTORY AND PROFILE

Videoton was founded in 1938 under the name Hungarian Cartridge Factory. Immediately after the war it was nationalised. Since then Videoton has developed into Hungary's biggest state owned enterprise (SOE) supplying consumer electronics (TVs, radios and cassette players), defence communication and computer technology to the Eastern Bloc. During the pre-1989 period defence electronics and computer electronics accounted for 70% of the company's turnover and 95% of its profit [Videoton, 1999 #49].[1] In 1989, Videoton's turnover was Ft30bn ($418.6m) with hard currency exports accounting for 20% of sales [European, June 1993 #48]. In the socialist period Videoton was one of the drivers of the Hungarian economy accounting for 4-5% of Hungary's Industrial Production [European, June 1993 #48]. It was a highly vertically integrated firm but also one with considerable product diversity [Young, 1993 #54].

Since most of its products were sold in the countries of the Eastern Bloc, Videoton faced a difficult situation when these markets began substantial restructuring. As a result of the loss of the COMECON markets for defence electronics and computer technology in 1991 the company was almost bankrupt. However, it managed to shift to the civilian sector and has grown into a successful private company.

In 1989 Videoton had five main civil production divisions: audio systems and loud speakers, compact discs, printed circuit boards, television production and computers. Before its liquidation procedure in 1991 only the loud speakers unit was profitable. Hungarian economic reforms allowed relatively more freedom to enterprises than was the case in other COMECON countries. As a result Videoton was effectively in control of its foreign trade organisation. This enabled it to accumulate some experience of working with foreigners during the socialist period. By 1990, it had 5 joint ventures and 2 licence agreements [Young, 1993 #54]. In 1988, in a factory near Budapest it started to manufacture TV sets in a joint venture with French Thomson [Dawkins, 1989 #30]. AKAI had had OEM co-operation

[1] Videoton was supplying the Soviet army with battlefield radios in Afghanistan [Carrington, October 11-12, 1991 #42].

with Videoton since 1979, but this ceased in 1996 because AKAI was taken over by the SEMITECH group which had a speaker box manufacturing facility in the Far East, so a Central European sub-contractor was no longer necessary.[2]

In 1989-90 management tried to restructure the company but basically focused only on filling the capacity left by the collapse of the COMECON markets. As described by [Young, 1993 #54] the restructuring proved unworkable mainly due to complex transfer pricing between units (the prime motivation for working in units was tax rather than business strategy), the lack of an effective profit centre reporting, and no effective co-ordinated managerial control. Although effectively it had failed in its restructuring attempt, Videoton's management was reluctant to break up the company into small units despite the fact that the necessary reorganisation of the company into business units had already been accomplished. In addition, the State and state banks were not willing to take the risk involved in initiating the break up. Its main creditor, Hungarian Credit Bank (HCB), was dependent on large firms including Videoton. The State, which was concerned with employment and tax collection problems, was also unwilling to take much risk. In addition, the unclear responsibilities between the State Privatisation Agency and the Ministry further delayed decisions. As [Young, 1993 #54] in his detailed account of Videoton in that period explains, the three principal constituencies (managers, bank and state) had conflicting or unclear agendas. The Videoton's management was never forced to make the difficult decision required to initiate the process.

In 1991, the Hungarian government hired a UK broker to help privatise the company. However, Videoton's management wanted to keep the company intact and rejected its recommendations that the company units be sold individually [European, June 1993 #48]. Videoton's financial situation deteriorated and it was placed in the hands of state liquidators with debts of $14.7m. The liquidators eventually sold the company's assets to a consortium comprising the state-owned HCB (70%), a consulting firm Euroinvest (20%) and three senior managers (10%) from a private computer and telecom company Muszertechnika Holding. [European, June 1993 #48]. These managers are Videoton's current team: Gabor Szeles (President and CEO) and two vice-presidents Peter Lakatos and Otto Sinko. Mr Szeles is also President of the Federation of Hungarian Industrialists. In 1996, the Videoton management undertook its own leveraged buy-out, at the market rates of

[2] Information received from Ms. Ágota Csapo, Videoton.

the HCB and acquired a majority stake [Videoton, 1999 #49]. Subsequently their share has increased to more than 85%[3]. Videoton is not listed on stock exchange.

The new owners were faced with the formidable task of restructuring a large electronics company. Similar companies across CEE were in a hopeless position and there was little reason to think that the future for Videoton would be different. The original 10 layers of decision making were reduced to 3 - at company management, division management and production plant level. The number of employees was halved during the restructuring stalemate between 1988 and 1991. The new management reduced employment by a further 20%, but this was far less than the decreases in the earlier years. Moreover, the new strategy was developed and eventually resulted in great increases in employment. In 1999, its employment came close to its peak of the eighties (Table 1).

Table 1
Videoton: employment

| Year | Number of employees |
|---|---|
| 1988 | 20,000 |
| 1991 | 10,000 |
| 1992 | 5,7000 |
| 1993 | 4,958 |
| 1994 | 6,319 |
| 1995 | 8,515 |
| 1996 | 9,867 |
| 1998 | 16,000 |
| 1999 | 17,000 |

Source: [Szalavetz, 1997 #55] [Finczicki, 1999 #6].

Today, Videoton is Hungary's largest domestically owned private consumer electronics company. It is Hungary's fifth biggest employer with more than 16,000 employees in Hungary plus 1000 in a newly acquired company in Bulgaria, behind Hungarian State Railways Rt (MAV), Magyar Posta Rt, MOL Rt and Matav Rt. [Finczicki, 1999 #6]. In 1998, Videoton had Ft34bn in sales ($150m) revenue [Agency, 19. May 1998 #39]. In 1999, Videoton's turnover was Ft58bn ($245m).

Videoton's headquarters are in Szekesfehervar, a town of 120,000 inhabitants located 70 km from Budapest in Southwest Hungary. The company is located across 10 production facilities in Hungary and 1 in Bulgaria. In total, Videoton comprises 520,763 square metres

[3] Ibid.

of manufacturing area. It is a holding company with 34 business units located across 11 sites. Videoton's mission is to play a major role in a new industry in CEE: Contract Electronic Manufacturing [Videoton, 1999 #49].

Before 1989, Videoton was a producer of numerous final products in the area of electronics. When faced with threat to its survival it had to close most of its lines and after privatisation it has continued only with the manufacture of loudspeaker systems, colour TVs and defence equipment. However, it has begun production of CDs. The major strategic shift though, is the expansion of contract manufacturing which today forms the majority of Videoton's revenues. Exports based on contract manufacturing arrangements represent 80% in total sales. Videoton's main areas are electronics, electrical appliances and automotive supplies (Table 2).

Table 2
Videoton: Sectoral distribution of turnover

| | |
|---|---|
| Informatics | 22% |
| Automotive industry | 24% |
| Consumer electronics | 27% |
| Household appliances | 8% |
| Services and Others | 19% |

Source: [Videoton, 1999 #49]

## 2. CONTRACT MANUFACTURING: A BASIS FOR SURVIVAL AND GROWTH

The main change introduced by the new management was to abandon the manufacture of complex end products [Szalavetz, 1997 #55] and to become a subcontractor in several areas, especially in electronics assembly. In principle, the business formula was very simple. Otto Sink, a Videoton vice president, describes it in the following way:

'This was a dead company. (…) Its revival was based on a simple plan. Downsize radically, stop developing new products, and focus on labour intensive manufacturing to serve a hungry crop of multinational investors. [Beck, March 1996 #43]

Videoton has managed to establish itself as the main contracting manufacturing company in the electronics industry in central Europe. Over the past 6-7 years, it has more than doubled its output with an annual increase of 20%. This has been achieved through 30 contract-manufacturing projects for the supply network of MNCs. Some of the subcontracting arrangements have been in place since the end of 1970s, especially those with AKAI.

Videoton's 'engine of development' is strategic development of contract manufacturing through creation of new projects and businesses, from initial contract through to technical analysis and feasibility studies [Videoton, 1999 #49]. Videoton operates as a facilitator of foreign projects by lowering transfer costs, especially management costs of transfer projects. Four of the 10 Hungarian sites of Videoton also hold the official industrial park title, granted by the Government of Hungary [Report, May 5, 1999 #37]. The innovative aspect of Videoton' strategy is the use of parks not only for Group operations, but also to provide an infrastructure for partners' subsidiaries – whether or not these utilise Videoton's existing facilities or require greenfield investment. By providing a structure according to requirements, by assisting in recruiting personnel, solving legal issues and providing accounting, logistics and infrastructural services Videoton is able to enhance interaction with foreign partners and thus reap benefit in future projects. In projects with Emerson Electric Group and Alcoa Closure System International (CSI Hungary), which operate in Videoton industrial park, and IBM Storage system, which is operating as a greenfield investment, Videoton supplied these services through turn-key projects [Videoton, 1999 #49].

Videoton labels its strategy as 'integrated manufacturing services'. This is a combination of its own parts and component suppliers (background industries) and manufacturing related services to its foreign partners under contract relationships. The company has been successful in using the Industry Park as the backbone for its expansion of contract manufacturing activities. For example, a Motorola representative, said the company chose Hungary rather than the Czech Republic or Poland because of its central location and other factors. "What Videoton could offer us as a facility and a professional partner, … nobody really has in any of the other countries," he said [Sereny, 1998 #4].

Videoton's strategy is to establish contract manufacturing based co-operation providing to foreign partners:

- Qualified middle management and labour
- Flexible technological base and facilities
- Reduced investment risks and costs
- Quick project start up time
- Openness towards innovation for strategic partners [Videoton, 1999 #49]

This business model is partly the result of the inventiveness of its managers but also partly the result of the constraints which company experienced at the beginning of the 1990s. A continuation of own branded products in electronics where Videoton's finance, technology and market gaps are huge was non-viable. Antal Szabo, manager of Industrial Development at the Szekesfehervar plant, describes this step back from own brand manufacturer (OBM) to original equipment subcontractor (OEM) status in the following way:

"We don't want the high cost and risk of marketing our own products. Our principle now is to go for low risk production until we are stronger, financially and technically. But in 10-15 years, I hope we will be making our own products again." [FT, 1997 #56].

Videoton's expansion into contract manufacturing requires regular auditing by its buyers as well as by quality certification bodies.[4] The Videoton subsidiary companies are under permanent customer audits beyond the inspection of the certification bodies. Table 3 below shows the quality and environment management certifications of the Videoton Holding Plc. member/subsidiary companies:

[4] For example, VT MBKE that had ISO 9001 certifications in 1991, 1994, 1997 and 2000. In 1998, they also introduced ISO 9002 in Sanyo and Philips projects. The company has introduced ISO 14001 standard series into its production line in 2000, which are for the purpose of protection of the natural environment.

**Table 3: A Videoton Holding Rt.: quality and environment certificates by subsidaries**

| | *ISO 9001* | *ISO 9002* | *QS 9000* | *VDA 6.1* | *ISO 14001* |
|---|---|---|---|---|---|
| VT Circuits Kft. | | x | x | x | |
| VT MBKE Kft.Kaposvár | x | | | | x |
| VT Induktiv Elem Vállalat Sárbogárd | | x | x | | |
| VT Informatika Kft. | x | | | | |
| VT Galvano Plastic Kft. | | x | x | x | |
| VT Mechanika Kft. | | x | | | |
| VT Mech.Wagner Projekt | | x | | | |
| VT Preciziós és Szerszámgyártó Kft. | x | | | | |
| VT Rendszertechnika Kft. | | x | | | |
| VT BRG Rádiótechnikai Rt.Salgótarján | | | | | |
| VT Hybrid Elektronikai Kft. | x | | | | |
| VT Slider Vállalat | x | | | | |
| VT Mechatronika Kft. | | x | | | |
| VT Autoelektronika Kft. | | x | x | X | |
| VT Autoel.Texas Projekt | | x | | | |
| VT Kenwood Vállalat | | | | | |
| VT Kábelkonfekcionáló Vállalat Veszprém | | x | x | | |
| VT Kábelkonfekcionáló Vállalat Enying | | | x | X | |
| VT Kábelkonfekcionáló Váll.Törökszentm. | | x | | | |
| VT Televízió Kft. | | x | | | |
| VT Audio Vállalat Veszprém | x | | | | |
| VT Elektromechanika Kft. | | x | | | |
| VT Elektroakusztika Vállalat Kunhegyes | | x | x | | |
| VT Relé Kft.Jászberény | x | | | | |
| VT Ipari Park Vállalat Energia ágazat | | | | | |
| VT Plastic Kft. | | x | | | |
| VT Artrans Kft. | | x | | | |
| VT Transman Kft. | | x | | | x |
| VT Rév Kft. | | | | | |
| VT Qvarc Kft. | | | | | |
| VT Szerviz Kft. | | | | | |
| VT CD Kft. | | | | | |
| VT Softver Kft. | | | | | |
| DZU | x | | | | |

Source: Videoton

Below we will briefly review some of the most important projects (subcontracting agreements).

Videoton MBKE Ltd., one of the most important of the 34 subsidiaries, located in Kaposvár, is involved in the following three basic types of activities:

a) Contract manufacturing among which the most important are:

rechargeable battery sets - SANYO

household appliances – PHILIPS

b) Electronics manufacturing

c) Tools and plastic parts manufacturing.

Dutch Philips is among the few MNCs that have quickly grasped the opportunities offered by the opening of the Berlin Wall. In 1990, Philips entered the Hungarian market by subcontracting semi-finished parts and components from Videoton videocassette recorders facility. From 1990 – 1997 it constructed 12 production facilities in Hungary, investing a total of $78million and creating 5,200 jobs thus becoming one of the country's largest exporters. Its Szekesfehevar plant is the European product mandate supplier for video combis for the entire European market. [Robinson, 1997 #28]. Philips invested in Hungary primarily as a low-cost production base. In 1998, Videoton MBKE Elektronikai Kft has launched production lines for assembling electrical kitchen appliances for Philips. This HUF 1.3 bn ($6.1mn) plant is located in the Videoton Industrial Park in Kaposvar, South West Hungary [MTI-EcoNews, 1998 #14].

In 1995, IBM started by sub-contracting magneto resistive reading-writing heads for hard disk drives from Videoton – Mechatronika Kft. In 1996, it expanded this hard disk drive manufacturing into the assembly of the whole (3.5 inch) hard disk drives through an arrangement with Videoton who built a new plant in its Székesfehérvár Industrial Park to IBM's specifications.

The third plant is also in Székesfehérvár, close to Budapest - a new greenfield building leased by IBM just like in the earlier set-ups. In the two hard disk drive plants all the staff are from IBM with the exception of the manufacturing personnel (direct and indirect) who are provided by Videoton; whereas for head manufacture all the staff are under contract to Videoton-Mechatronics. The new plant, the largest in Europe, produces more than three million drive units for 2.5 inch drives for laptops.

The fourth large co-operation between IBM and Videoton is again a magneto resistive reading-writing head manufacturing project. The factory was constructed (and is

owned) by Videoton in Veszprém where Videoton operates the state-of -the-art technology (owned by IBM) in another pure sub-contracting set-up.

In 1996, Kenwood Electronics Bretagne (KEB) (France) shifted a part of its production of car audios to Videoton through subcontracting with the agreement that KEB would provide the major components for assembly. The starting monthly allotment was established as 20,000 tape decks. This move allowed KEB to widen sales throughout Europe, especially in Eastern Europe and Russia.

The Japanese Electronics Company, Matsushita, has sub-contracting arrangements with Videoton. Since 1996, all CD player sub-assemblies and most of the VCR sub-assemblies for the European market are being made by Videoton. Videoton manufactures for Matsushita Panasonic music centres under contract[5]. It also manufactures for Matsushita under the Technics brand name. Videoton's contractual partner in this case is MAVD: Matsushita Audio Video Deutschland.

The relationship between Texas Instruments (TI) and Videoton Holdings started in 1996. The initial production of parts for TI started with 70 employees. In December 1999, Videoton Holding Rt opened a new production facility in Szekesfehervar. When in full operation 400 workers produce 47 million components per year [Finczicki, 1999 #6].

In February 1999, Videoton opened a new plant in Kunhegyes to produce loudspeakers for the automotive industry. The company is 100% owned by Videoton but it is jointly built with British Goodmans Loudspeaker Ltd. who provided the production lines. Videoton has invested Ft100m ($0.4m) in its construction. The plant is producing 4 million loudspeakers, and this may increase with the revival of the Russian automotive industry [Reports, 1999 #19].

In cooperation with Videoton, Motorola opened a regional service centre in Budapest to serve the whole of CEE, with the exception of Russia. The centre aims to carry out repairs to Motorola products within four days including delivery time. Besides Motorola radios, mobile phones and pagers, modules and software will be repaired and systems integration will be dealt with.[6]

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[5] Panasonic, one of Matsushita's brand names, does not have a production site in Hungary.

[6] This investment is part of a broader trend. Swedish-based Ericsson Telecommunications established a 12-country regional repair and service center in Hungary in 1992 that employs 200 people. Finnish-based Nokia also is considering making Hungary its service center for the region. Nokia has no Eastern European regional repair facility for now [Sereny, 1998 #4].

Videoton is one of the 8-10 Hungarian component suppliers to VW with annual purchases worth DEM15m[7].

Sanyo's subsidiary Sanyo Energy in Germany is in subcontracting agreement with Videoton MBKE Electronics Kft, which assembles rechargeable battery packs for Sanyo at a plant in Kaposvar[8]. Currently, 250 to 300 employees at the Videoton subsidiary are working exclusively on the Sanyo product and, according to company information, in 1999 they supplied 35 million battery-pack units [Washio, 1999#8][Agency, 1998 #12]. Sanyo provided the raw materials and the technology, and Videoton MBKE the infrastructure and labour.

Videoton is producing loudspeakers for Sony. By 1998, Videoton produced 500,000th speakers for Sony (www.globalarchive.ft.com).

An impressive though not complete list of Videoton's foreign partners and related products is given in Table 4.

**Table 4: Videoton products and references**

| | |
|---|---|
| **Consumer Electronics** | **Automotive Industry** |
| Mini audio systems | Auto relays & controllers |
| Car stereo sets | Car speakers |
| Loudspeaker boxes | Mechanical parts and subassemblies |
| CD & VCR subassemblies | Raw PCBs |
| Appearance parts | Electronic subassemblies |
| Flexible flat cables | Aluminum die casted parts |
| PCB assembly | Machined and plated metal parts |
| References | Wire harnesses |
| CANTON (D) | **References** |
| KENWOOD (F) | ALCOA FUJIKURA (US) |
| MATSUSHITA (D) | BECKER AUTORADIOS (D) |
| PHILIPS (D; A; NL) | BOSCH (D) |
| SONY (D) | GOODMANS (UK) |
| TANNOY (UK) | KNORR - BREMSE (D) |
| SUMITOMO (UK) | SHW (D) |
| SAMSUNG (H | SIEMENS REGENSBURG (D) |
| | SUZUKI (H) |
| **Battery and Lighting** | FORD (H) |
| Rechargeable batteries (assembly) | VDO (G) |

[7] VW group purchases from Hungarian suppliers more than DEM 200m of the groups' total annual purchases of DEM 13bn. The ISO 9000-9004 quality certificates is a basic requirements for the group's suppliers [Agency, 1998 #9].

[8] In Europe, Sanyo Energy is a leading manufacturer of long-life nickel-cadmium and nickel-metal hydride batteries, as well as lithium-ion batteries used in such products as cordless phones. It holds a 30% market share in Europe.[Washio, 1999 #8].

Plastic parts
References
GE LIGHTING TUNGSRAM (H)
SANYO (D)

**Telecommunication**
Raw PCBs
Electronics
ISDN card
SEDLBAUER (DEUTSCHE TELECOM) (D)
SIEMENS (D)
**Controls & Automatization**
Electronic controllers
Machined metal parts
Control devices
Aluminum die casted parts
Plastic parts
Raw PCBs
Hybrid circuits
**References**
ABB (D)
ALFA LAVAL (S)
BUSCH JAGER (D)
HONEYWELL (D)
ITT - CANNON (D)
ITT - JABSCO (UK)
SIEMENS (D)
TEKMAR (D)
TEXAS INSTRUMENTS (I; NL)
Source: Videoton

**Office Automation**
Paper cutters, paper shredders
Plastic parts & electronics for copy machines
Controllers
DAHLE (D)
MATSUSHITA BUSINESS MACHINE (D)
SHARP (F)
**Powered Tool**
Machined aluminum parts
Paint sprayers
References
METABO (D)
WAGNER (D)
**Household Appliance Industry**
Household appliances
Touch control panels
Controllers
Plastic & metal parts
Heater units
Tools
Wire harnesses
ELECTROLUX (H)
KRUPS (D)
MGA (SIEMENS-BOSCH SLOVENIA) (SLO)
PHILIPS (A)
SHARP (UK)
**Informatics**
Head of hard disk drives (assembly & testing)
IBM (US)

## 3. VIDEOTON GOES EAST EUROPEAN?[9]

Videoton's first foreign investment was a partial take-over of the Bulgarian socialist-era Electronics Company DZU-Disk Memory Devices of Stara Zagora **(**South Central Bulgaria). In June 1999, Videoton bought a 48% stake, which it increased to 51%. The co-owner is the Bulgarian *Multigroup* conglomerate which holds 29.35% of the shares. Videoton was the only one out of eight potential buyers that actually submitted an offer.

DZU has been wholly decapitalised. Its tangible assets have been evaluated at old BGL23, 000 million ($13m), whereas debts exceed old BGL120, 000 million ($6.7m) [News, 1998 #21]. DZU has stakes in 20 companies and all of them were included in the works' consolidated balance sheet [Daily, 1998 #16][10]. However, at the end of 1999 most of them had been written off.

Videoton bought a 48% stake for $54,200 but was obliged to invest a further DEM 1.2mn for 3 years into the company to clear DEM 0.9mn of DZU's debts and raise the capital by DEM 1mn. It also agreed to retain 1,000 workers. The sale of DZU to Videoton was facilitated by the Bulgarian government which agreed to repay part of DZU's debt from the special reserve for structural reform out of which government allocated 204.500 new leva (DEM204500) [Services, 1999 #25] [Report, 10. June 1999 #36].

Videoton's basic motive for this investment was to take advantage of Bulgaria's highly competitive labour costs and to use DZUm as a cheap assembly plant for its contract manufacturing for Western firms [Mohorovic, 1999 #1]. Videoton will also introduce a new production line that is expected to increase the standards of DZU to Videoton's levels.

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[9] Videoton is not the first Hungarian company to enter into outward investment. Probably, the first Hungarian controlled company that went abroad is *Ikarus*, a bus producer, which in April 1998 established a joint venture in Brasov, Romania [Mohorovic, 1999 #1]. The operation allowed the company to sidestep a 20% import tax. Also, MOL, Hungarian oil and gas company, has partially bought a Slovakian refinery, Slovnaft. In 1998, the drug manufacturer, Richter established joint ventures in Ukraine, Romania and Russia. These events seems to be a part of a growing trend amongst Hungarian exporters to take advantage of western firms' reluctance to target eastern markets, as well as saturation of domestic market.

[10] According to *Business Central Europe* "Under Communism DZU sold hard drives to Comecon, and (via a network of discrete subsidiaries) abroad was a key player in the bloc's efforts to filch high-tech firms from the West. When the Wall collapsed, so did DZU's secure markets. So it turned its hand to making CDs-some with pirated recordings' [, 2000 #46]. DZU started to produce and export CDs, and recently its CD production licence was cancelled because of the illegal recordings of CDs that were exported to Turkey. However, Videoton will not continue CD production since it can produce more cheaply in its Hungarian plants.

By going abroad Videoton is taking risks in uncertain eastern markets in order to grow. However, according to Videoton sources the company is in full control of operations. Videoton also expects to acquire a majority stake in another Bulgarian company, Microprocessing Systems, Pravets as well as to entering the Romanian market.

## 4. VIDEOTON HOLDING AS A NETWORK ORGANISER

The important factor in the emergence and then growth of Videoton is that the company was not broken up before privatisation. Videoton continued to operate as a holding which enabled it to develop a strategy based on building diverse production activities and synergies among its company units.

If Videoton had been broken up, its individual units would have been fully exposed to exogenous circumstance. Being part of a holding their exposure to exogenous circumstances is controlled by the parent company. In 1991, a liquidator appointed for the six major Videoton companies determined that the interests of the creditors would be best served by maintaining parts of the business as a going concern [Young, 1993 #54]. The advice of the consultants was to break away from these companies and then re-establish links through long term contracts. It was thanks to the inability or unwillingness of the State Privatisation Agency and the Ministry to impose the plan recommended by consultants that the break up did not take place. As [Young, 1993 #54] points out 'if the plan had been adopted, the restructuring would require parallel efforts to promote small firms (SMEs) that could than take over many of the production and distribution functions performed under the Videoton umbrella'. However, once these newly formed SMEs enter into arm's length relationships with each other the whole restructuring process becomes very dependent on the external availability of finance and infrastructural support as well as on effective co-ordination among them. It could be expected that many of them would fail and the outcome of the entire process for the local economy would be highly uncertain. Some of units would grow but many could not survive without Videoton to sustain them [Young, 1993 #54].

[Szalavetz, 1997 #55] also highlights this issue in her extremely valuable analysis of Videoton:

'According to one manager, blue chip multinationals like JVC, Matsushita, Philips or Siemens would never have negotiated with an unknown, medium sized company in the Hungarian provinces, regardless of how creative the management or developed the technological abilities and capacities: 'It makes a qualitative difference to belong to Videoton Holding. The VT prefix to the company's name is in itself a pledge of the company's abilities and reliability as a co-operation partner' [Szalavetz, 1997 #55]

By belonging to a holding individual firms will benefit from the special payment terms that suppliers will grant to the group. [Szalavetz, 1997 #55] also highlights the problem of power in bargaining with foreign companies as well as of credibility.

'Most of Hungarian subcontractors remain exposed to their foreign customers because they cannot afford to procure their material inputs for themselves. The short payment period stipulated would place an extra load on their current assets position. Videoton can arrange favourable commercial credit for its subsidiaries (…) There are few other companies in Hungary to which foreign partner would deliver products worth more than DEM 100,000 on an open delivery contract with payment of 60 days' [Szalavetz, 1997 #55]

Break-up would have exposed the serious weaknesses of individual firms in marketing, finance and production[11]. In the past they were in essence production not business units. Concentration of strategic functions at holding level enabled Videoton to make a centralised search for partners, to build brand names, to get easier access to finance as well as allowing them to make reallocations of investment funds within the holding. Also, the holding could cope with orders of much larger size than any individual company would have been able to.

At the holding level, Videoton managers have learned to co-operate effectively with foreign partners in contract manufacturing. Consequently, set up times for new lines were within 6 months of the first contact.

[11] This is especially important given the inherited weaknesses of ex-socialist enterprises in marketing and finance. A journalist from *Business Central Europe* put it this way: 'Videoton was good at manufacturing. It was not good at sales and marketing'. It did not need to be: marketing consisted of hosting Soviet customers during annual visits to renew contracts [European, June 1993 #48].

All daily purchasing, sales and marketing activities are at operating company level. This facilitates customer feedback and allows close communication between sales and production. However, the marketing and sales department in the holding organisation provides significant assistance in setting up initial contacts and negotiating general terms and conditions in day to day business communication. Videoton's Foreign Trade company co-ordinates the foreign, primarily Eastern European and Asian, activities of the Videoton group. [Videoton, 1999 #49].

In 1993, the 26 Videoton companies were reorganised into 18 profit centres, concentrating on four major areas of business: consumer electronics; subcontracting; defence manufacturing, and domestic and international sales and services [European, June 1993 #48]. The Holding Company manages the profit centres until they become viable entities, then spins them off into independent companies. The long-term goal is for the holding company to act only as a financial controlling group, with independent companies responsible for their own management. The holding group will continue to co-ordinate the activities of companies in the conglomerate to seek out new markets and consolidate manufacturing processes [European, June 1993 #48]. In this way the holding operates as a restructuring agent, which actively assists in the restructuring, and growth of companies.

The re-organisation into profit centres enabled Videoton to significantly improve its operational efficiency. For example, its televisions production division used to employ 1,000 workers to make 140,000 television sets a year. In the early 1990s, Videoton Television was producing the same number of units with only 600 staff [European, June 1993 #48]. It closed this line of business in 1996.

However advantageous the holding organisation seems to have been for Videoton it cannot resolve the long-term issues of its growth. As [Szalavetz, 1997 #55] points out these issues are the lack of own brand products and relatively underdeveloped capacities for independent marketing. Sales of own brand products account for less than 5% of turnover while the profitability of manufacturing under contract greatly exceeds the profit on its own brand products (ibid). Also, the vast majority of the parts are supplied from abroad [Videoton, 1999 #49] which suggests that the local content is still low. Videoton claims that most of these imported parts could be manufactured at Videoton or at other Hungarian manufacturers at more competitive price levels. Thus, local procurement is an issue of great importance and Videoton has been playing a pioneering role in creating a local supply of

parts and components. Its future will depend on the extent to which the company will be able to strengthen its role as an organiser of a supply network and the degree to which it will expand from assembly activities to parts manufacturing. This should be done through supply contracts or acquiring partners from the medium and small companies, not just large companies [Videoton, 1999 #49].

## 5. INDUSTRIAL PARKS AND LOCAL NETWORKS

Industrial parks are an integral part of Videoton' strategy. Four out of ten of Videoton's locations in Hungary have had status of industrial parks conferred on them by the state. These are the industrial parks in Szekesfehervar (electronics, founded in 1993 and given Industrial Park status in 1997), Veszprem (component manufacturing, given status in 1998), Kaposvar (electronics and plastics manufacturing, given status in 1997) and Törökszentmiklós (given status in December, 1999).[12] Their successful integration into Videoton's strategy is based on synergies among Videoton units as well as between them and foreign operations.

In acting as intermediaries between foreign companies and local and central government industry parks are reducing the transaction costs of business [Jelinek, 1998 #5]. Unlike many other cases of industrial or S&T parks in CEE which offer only land and tax incentives Videoton, in co-operation with local government, tries to facilitate the entire process of setting up a business. Gal, an IBM representative, expressed this in the following way: "We have 200 ISDN lines in the plant, which is rare even in Western Europe," (…) "When we began the investment in 1995, the first phase was completed in just six months. … That is nearly impossible anywhere else. When the local government makes it easy to go

[12] The award of the status means that the title holder of the park and the businesses choosing the park as the site of their operation will be granted special benefits from the Targeted Allocation Funds for Economic Development and Rural Development. The infrastructure development projects launched in 31 industrial parks with support from the Targeted Allocation Funds for Economic and Rural Development will involve new investments worth some Ft 7,000 million ($32.6m) to be completed by 2001(or by end 2001??).
The title of "Industrial Park" has been awarded to 75 applicants so far. Some 60,000 people (i.e. 8% of the processing industry workforce in Hungary) are employed by the businesses operating in 55 industrial parks. In 1998, they produced almost 13% of the total manufacturing industry output, with an average share of exports of 74%. (See www.gm.hu/ippark).

through the bureaucracy, it saves time. And saving time is essential in the information technology business" [Greene, 1999 #2].

There are a number of foreign investments (subsidiaries of IBM, Philips, and Sanyo) in the industrial parks of Videoton. The Videoton industrial park in Szekesfehervar has 63 companies and plays an important role in the company activities. Local support undoubtedly plays an important role in its success. For example, in 1992, when Philips showed interest in investing in Hungary its representative commented that 'the support of the local council was an important factor in the company's decision to build a greenfield television and VCR plant in Szekesfehervar. The council helped Philips to find and buy location for the plant and to secure state subsidies to pay for its infrastructure. It also administered the deal and issued the necessary paperwork and permits as quickly as possible' [Marsh, 1995 #27].

The idea of industrial park business in Szekesfehervar emerged when Mr George Loranger, an American entrepreneur, made an investment in 1991. Loranger needed a 6,000-sqaure metre building. The only building of that size in a suitable place was a former Soviet military base of 250-hectares with 125 buildings. While others had been negotiating with the town about how to buy the building, Loranger wanted to buy the entire former military base. As a result a joint venture was set up which was the first Western business that entered a joint venture with the government [Jelinek, 1998 #5][13]. This was in line with the strategy of the local government which had decided to do all they could to attract foreign investors, to help provide land and utilities and to promote retraining for the people. A decisive role in that process came from Szekesfehervar's visionary mayor, Istvan Balsay. As a director at Ford Hungaria describes 'He created a vision of what this city can become' [Miller, 1995 #44]. Balsay 'twisted the arms' of 40 authorities, including gas and electricity officials, to push through the approvals for the new facilities within 30 days instead of the usual months [Miller, 1995 #44]. In addition, the town offered favorable tax conditions.[14]

[13] Mr George Loranger, an American entrepreneur whose Pennsylvania–based family business supplies components to Ford Motor Company, originally came to Szekesfehervar to search for a site for his company's first overseas venture. His company has taken over one of the buildings vacated by the Russians, and through joint venture with the state, is developing the rest of the base into an industrial park. The joint venture offers land, buildings and advice on how to get started in business in Hungary and helps companies secure state grants for development and infrastructure [Marsh, 1995 #27].

[14] Local taxes are 1.7%. Entrepreneurs finishing investments with a value of at least Ft500m ($2m) within a tax year receive a 50% tax break from the business rates payable after the new investment for three years from the first day they are put into service. The local government provides a further reduction of the business rates on an individual basis after activities begin. Enterprises manufacturing products or offering services enjoyed a further 10% tax break in 1999.

The three industrial parks have become the drivers of development of the whole town [Greene, 1999 #2]. Up to 1995, Szekesfehervar had attracted more than $1bn in foreign investments. [Marsh, 1995 #27]. The town accommodates the operations of 21 major foreign and 7 domestic companies. The concentration of FDI in a town of 108,000 people has, in addition, attracted 16 banks and 10 insurance companies.[15]

## 6. PRODUCTIVE RENTS, ENTREPRENURSHIP AND NETWORKS

Relations of Videoton with government played an important role in enabling entrepreneurship as well as links to foreign companies.

First, the state gave the new owners a head start. All Videoton's liabilities were cancelled and the consortium inherited a much reduced workforce of only 6,000 [European, June 1993 #48]. The consortium won the open tender for sizeable assets with a bid of Ft114bn ($52m at the time). Details of the bid were confidential but the new owners disclosed that the consortium was required to put up 'a fraction of the purchase price' [European, June 1993 #48].

Second, Videoton took part in the industrial park development programme of the Ministry of Economy; and in the 'Mentor' supplier program of the Hungarian enterprise-developing foundation. In addition, Videoton was exempt from profit taxes from 1992 until 1999 to help them provide new job openings [Bulgaria, 1998 #23].

The Videoton privatisation deal was a prototype for Hungary's preferential–loans for privatisation programme. Under the programme, Hungarian citizens can purchase state property with loans funded through the National Bank of Hungary at interest rates of 16-17%, substantially lower than the normal 30% interest charged by the banks. The assets of the company being purchased served as collateral [European, June 1993 #48]

Rents similar to these have been offered and subsequently squandered in many CEE countries as well as in Hungary. However, it happens that in the case of Videoton these rents have been used productively. In January 1992, the new owners formed Videoton Holding Company with Gabor Szeles the founder and president of Muzertechnika, at the helm, Peter

[15] The press reports state that in encouraging development the city may be a bit too accommodating to corporate citizens and less sensitive to residents [Greene, 1999 #2]

Lakatos and Otto Sinko, also from Muszertechnika, formed the new management team. Their enterpreneurship led to the generation of substantial new employment and sustainable growth.

Reviving Videoton was no small challenge and undoubtedly Mr Szeles's political cronies helped it along by cancelling the bankrupt company's debts. The rents were subsequently used productively thanks to the entrepreneurship, which also involved networking skills.

Turning around Videoton required courage and skills acquired in private sector. Vice-president Sinko described it in the following way:

'I think the fact that we basically grew up in the private sector – in the most competitive part of the Hungarian market – definitely helps us. State owned companies like Videoton missed that chance' [European, June 1993 #48].

On the other hand, restructuring also requires good networking with government, and local community. This has become even more visible in the latest ventures of Videoton's CEO, Gabor Szeles. He is a shareholder in Videoton and Muszertechnika, a local PC assembler and Telecom Company, and directly and indirectly holds a stake of less than 10% in Ikarus, a troubled Hungarian bus maker, and is also its CEO.[16][17][18]

So far, it is not clear what effects, positive or negative, these ownership linkages may have on Videoton. In one case these linkages have turned out to be positive. Videoton has been able to re-employ redundant employees (around 700-1000) from Ikarus, the Bus Company whose main market is Russia. Under the regulations, employees are allowed to be employed for a maximum of two months [Agency, 1998 #15]. Ikarus will follow the path to establish an industrial park to attract strategic partners and contract work like Videoton.

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[16] For example, *Business Central Europe* reports: "In the course of his attempts to restructure Ikarus Szeles persuaded the government 'to give more than 80% of the country's entire export financing for 1997 to Ikarus, which promptly announced massively increased Russian sales and its first profits since the fall of communism. Mr Szeles was hailed as a hero and allowed to buy a controlling stake in the company it seemed to have rescued. But Russia default in 1998 meant that Hungary's government was left with the bill for several hundred unpaid buses" [, 1999 #47].

[17] Mr Szeles has also become co-president of the National Association of Employers and Industrialists [Agency, 22. July 1998 #38].

[18] Ikarus shareholders are: MtLiz 53.9%, Atex Russian State foreign trade organisation 33%, employees 10% and other Hungarian companies 3.4%. MT-Liz Kft. was established by Videoton and Muszertechnika in 1998 with each of them holding 49% of the stakes. The remaining 2% is held by 15 private investors [Agency, 1998 #11]

## 7. ONE STEP BACK TWO STEP FORWARD ?

During the socialist period Videoton was a producer of complex end products. In the period between the 1950s-60s and up to 1989 Videoton was producing under its own brand name, radio sets, black & white television sets, military radio transceivers, car stereo systems, computer terminals, office automation, and line printers. The production of these products had ceased either by or during the early 1990s.

This retreat into contract manufacturing led to the abandonment of R&D. Videoton lost most of its R&D workforce in the period around 1989. However, even in its heyday Videoton, as [Young, 1993 #54] argues '(…) did not have the R&D potential to innovate in product design. Instead, the 2000 employees in the company's various R&D departments devised processes for manufacturing other company's products and also served as a "fire fighting force" to find solutions to problems that threatened the meeting of deadlines'. Yet, according to Videoton sources, in this period company R&D engineers were designing products for the American Dataproduct and/or the French CII (later SEMS, the current BULL).

Videoton had developed imitative capabilities in product design and product engineering which was sufficient for it to become a product leader within the COMECON market.

The bulk of its activities since 1989 have been through contract manufacturing. Of the old products Videoton continued to produce loudspeaker systems, colour TVs and defence communication systems. Most of these products Videoton sells under other companies' names. Videoton had a foreign trade company and several sales offices abroad but these have been closed down since 1993.

The step back to the position of contract manufacturer and abandonment of its own brand products meant a huge decrease in profit margins. Given the size of finance, market and technology gaps that it faced after 1989 this was probably the only solution for Videoton. A contract manufacturing strategy enabled Videoton to apply new technologies and to manufacture new products without making investment commitments. The company has become financially stable and has even succeeded in revising its existing technological background on a step by step basis using its own resources [Videoton, 1999 #49]

Although Videoton documents highlight the intention and plans to produce own export brands this still seems a bit premature. Margins in OEM assembly of parts and final products are low but the investments needed for both independent manufacturing and selling for exports are still probably beyond Videoton's current capabilities. The desire to get into own brand manufacturing and distribution is logical given the dangers inherent in continuous subcontracting. While contract manufacturing seemed to be the most effective in implementing the recovery of a company with such limited resources there is a danger that Videoton may become trapped into being a competent assembler but whose market position eventually depends on the price of its labour.

Whether it is possible move upwards in the value chain after the making the inevitable backward step will greatly depend on the breadth and depth of its mastery of the technology. This depends to a great extent on the realisation of synergies among its different businesses. We address this issue in the next section. Here we analyse the breadth of technologies that Videoton has acquired through its background industry, single product manufacturing and own brand activities. Table 5 shows the organisational structure of the Videoton group based on this classification. We observe that the number of firms that are active in own brand manufacturing is small compared to the total number of firms.

**Table 5: Organisational structure of Videoton**

| **Type of activities** | **Number of firms** |
|---|---|
| Single product manufacturing | 7 |
| Background industry | 6 |
| Background industry/Own brand manufacturing | 4 |
| Own brand manufacturing | 3 (manufacturing / software)* |
| Single product manufacturing/Own brand manufacturing | 1 |

* Three trade and service firms excluded
Source: Calculated based on Videoton, 1999

**Table 6: Number of acquired technologies across types of firms**

| **Type of activities** | **Number of technologies** |
|---|---|
| Background industry | 19 |
| Background industry/Own brand manufacturing | 18 |
| Single product manufacturing | 10 |
| Single product manufacturing/Own brand manufacturing | 4 |
| Own brand manufacturing | 0 |

Source: Calculated based on Videoton, 1999

Most technologies have been acquired in background industries and in firms that combine background industry activities with their own brands (Table 6). There are no instances of technologies that have been mastered solely in own brand product manufacturing. Ten technologies have been mastered through production for individual foreign clients and relatively few (4) in activities where experience from single product manufacturing could be used in own brand products.

**Table 7: Number of technological references (partners) across mastered technologies**

| **Technological areas** | **Number of references** | **Partners** |
|---|---|---|
| Electronic assembly | 15 | Philips MAVD, ABB, Evic, Mars Electronics, IVO, Tekmar, Mercedes, BMW, VW, Audi, Volvo, Porsche, MAN, Sony, Kenwood |
| Wood processing technology | 6 | Philips, Canton, Sony, Tannoy, B&W |
| Mechanical assembly | 5 | Philips, SHW, Alcoa, Wagner, TI |
| Plastic technology | 4 | MAVD, Sony, Philips, Berolina |
| Machining technology | 4 | Metabo, SHw, SEM, ITT Canon |
| Tool manufacturing | 4 | Platro M, Starmix, VW, Mercedes Benz |
| Sheet metal processing | 3 | Dahle, Suzuki, ~~RUF~~ |
| Printed circuit board manufacturing | 3 | Siemens, Mars Electronics, AFL, Samsung |
| Chemical technology | 3 | Koloman H, Knall B, MAVD |
| Casting technology | 2 | SHW, ITT Canon, VW, Mercedes Benz |
| High precision processing | 1 | IBM |
| Compact disk mastery & management | 1 | Sony |

Source: Calculated based on Videton, 1999

The majority of technological references have been acquired in the area of electronic assembly (table 7). Other references are not directly related to electronics (wood processing technology, plastic, machining and tools). According to Videoton sources its primary target is to build 'box' production not to supply components or parts.

The learning path of Videoton proceeds from assembly to quality control, process/technical maintenance, process engineering, procurement, logistics, product engineering, towards product design, sales and marketing [Videoton, 1999 #49]. These stages correspond to increases in added value and hence it is clearly of commercial interest that the company should progress along this learning path. This learning pattern resembles the pattern of east Asian electronics companies as described by Hobday (1994). A great

number of partners in electronic assembly is the first step in this process which is then followed by own quality control systems. In 8 out of its 34 subsidiaries Videoton has ISO quality assurances [Videoton, 1999 #49]. There are signs that in some areas it is starting to take over procurement functions and logistics [Szalavetz, 1997 #55]. Also, the impression is that the operational efficiency through Videoton Manufacturing Method (MVM) which standardised the operational and management experience built up by subcontracting for multinationals, is at a high level (ibid.).

## 8. STRATEGIC CHALLENGE: HOW TO AVOID SUBCONTRACTING TRAP ?

The Videoton case shows that subcontracting is a very good way to get access to markets, technology and finance. However, its drawback is that the subcontractor often is trapped into tying down production capacity for the client and neglecting its own R&D or product design. In addition, subcontractors can become divorced from market trends as a result of not having any marketing or sourcing activities.

The strategic challenge is how to get out of the subcontracting trap which creates dependence and low value added. Videoton's strategy to cope with this has taken into account three dimensions.

*1. Expansion of number of contracts*

This objective is explicitly stated as follows: 'Videoton is striving for horizontal expansion by attracting more and more subcontracting activity, appealing to large MNCs to outsource their manufacturing to Videoton until the existing infrastructure is completely utilised'. [Videoton, 1999 #49].

*2. Forward integration*

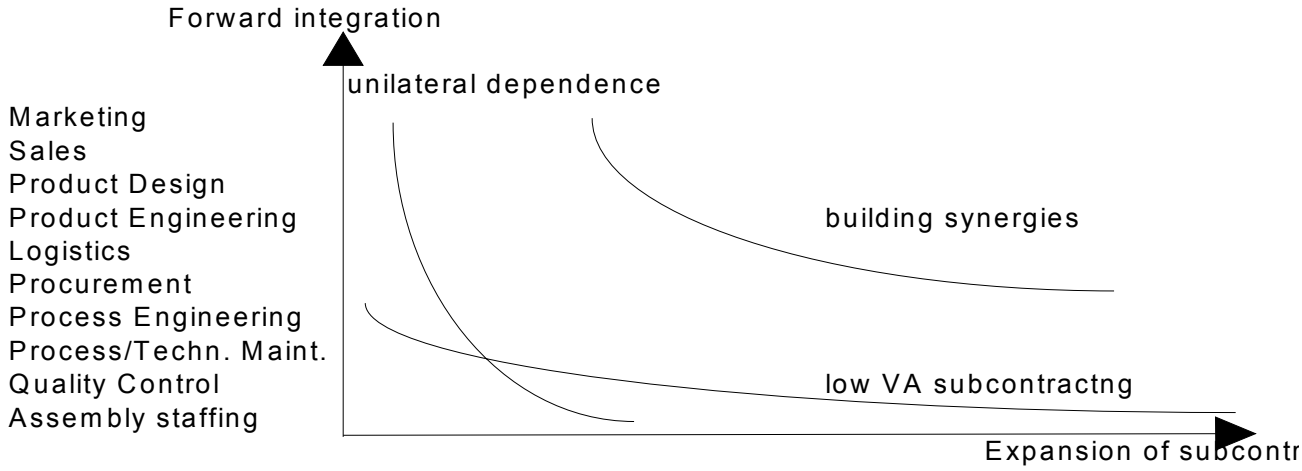
Videoton's goal is to move forward along the added value chain by moving through different stages as depicted in graph 1.

*3. Synergy*

This objective is also explicitly stated: 'Videoton is building up synergies among the group companies including own–product manufacturing, single partner manufacturing and background industry both in communication and technology by means of:

* Better assets utilisation and sharing information on all levels of production
* Moving workers between projects according to needs, resulting in lower sensitivity to fluctuation and seasonality
* Creating co-operation, subcontracting within the Company and throughout Hungary' [Videoton, 1999 #49]

We present these three strategic dimensions in graph 1. The graph shows that the key strategic challenge is to generate synergies among individual contracts. Alternatives, e.g. expansion of contracts without progression in value added as well as progresses in value added but for a limited number of partners, have their drawbacks.




**Graph 1: Videoton's strategic options**

In the first case, the value added generated is small and the company is very sensitive to labour costs. In the second case, unilateral dependence generates uncertainty and may threaten independent growth. Building synergies through different projects is the solution that incorporates the best growth opportunities. Know-how acquired from subcontracting for one customer can be useful in subcontracting for another customer. However, this is not a simple strategy as the dependence on one partner may clash with the interests of another partner. Hence, a large number of single partner manufacturing agreements does not necessarily ensure synergies among them. Especially in terms of intra-group sales the linkages are still very limited. [Szalavetz, 1997 #55] reports that in 1996 the proportion of intra group sales to total sales was 2.5% but in relation to total domestic sales was 45%. This suggests that in domestic sales, where own-brand products are sold, linkages do exist. However, as the bulk of Videoton sales come from exports (80%) intra-group linkages are still small, especially given the high share of single product manufacturing agreements.

It seems that the company is not able to generate synergies through direct technology transfer between different single partner manufacturing agreements as that would probably lead to withdrawal of a partner and would threaten Videoton's long-term future. It is our impression that synergies are built through offering a more complex service which Videoton calls Integrated Manufacturing Services (IMS) which involves a wide range of background industry and manufacturing related services [Videoton, 2000 #50]. This move from the traditional contracting in electronics involves in addition to production quality, procurement, engineering, logistics, technology and financing (ibid.)

Videoton has accumulated a $20m cash reserve, which it can now invest in new products and acquisitions or in developing sophisticated manufacturing services for foreign partners [Gazdasag, 1999 #34]. The sourcing department of the holding is continuously searching Hungary for new suppliers and is also taking the first steps towards realising a global initial purchase function. A realisation that good prices and short delivery times are no longer sufficient is forcing Videoton to search for new solutions. One of its long-range goals is to expand in the field of parts manufacturing through acquiring partners from not only large but also small and medium sized firms and through establishing co-operations with foreign or other Hungarian firms that operate as suppliers. In following this route, Videoton may become much more active as an organiser of subcontracting networks than as a producer.

## 9. EFFECTS OF VIDEOTON GROWTH: RELOCATIONS AND CLUSTERING?

Videoton has become an important, if not *the* most important, contract manufacturer in electronics in CEE. A large number of its foreign partners have relocated their activities to Videoton. Below we list several cases which are either directly or indirectly linked to Videoton.

- In 1998 Texas Instruments and Videoton agreed on a seven-year subcontract deal, whereby TI moved its parts production from Aversa, Italy to Hungary [Finczicki, 1999 #6].

- From April 1996 a portion of car audio production by the French based Kenwood Electronics Bretagne (KEB) was consigned to Videoton. [Comline, April 17, 19996 #17].

- IBM moved its production of hard disk drives from Havant in Hampshire (UK) to Hungary [Schonfield, 1995 #32]

- Matsushita moved its hi-fi manufacturing plant from Singapore and brought it to Szekesfehervar at a cost of $25m ([Strauss, November 1996 #41]

- Philips and Grundig shifted production from their plants in Nuremberg and Vienna to the new factory in Hungary, Philips Bundling, which is a Videoton contractor[19].

[19] This factory has a regional product mandate, and is the sole European production and distribution centre for Philips VCRs and TV-Video combis – television sets with a built in video player.

Finally, Videoton itself has expanded to Bulgaria and has plans for expansion to Romania. Although very limited in scope these moves nevertheless suggest the emergence of a new industrial architecture of the wider Europe.

A further effect of the relocations is the emergence of investments, which are oriented towards foreign companies in Hungary, and not just towards exports. Two examples illustrate this point.

- Videoton Holding Rt opened a new production facility in Szekesfehervar in December 1999, which will supply parts for refrigerators and automotive engines to the U.S.-based electronics manufacturer, Texas Instruments Inc. The new plant will provide parts for at least 16 multinational end-users and producers such as Ford, Audi, Renault, Philips, AEG and Zanussi.

- A new investment was made by Sanyo Electric Co. for the production of lithium ion and nickel metal hydride rechargeable battery sets, mostly used for mobile phones sold in Hungary, mainly to Nokia[20] [Washio, 1999 #8]

Although the number of cases of this type is still very limited it is an encouraging sign for Hungarian industrial policy.

## 10. CONCLUSIONS

The restructuring and subsequent growth of Videoton cannot be explained only as a case of individual entrepreneurship without taking into account that its success is also based on the alignment of several networks. The presence of foreign demand through MNCs that came to Hungary supported by a stimulative government policy also played an essential role. Local initiatives to attract foreign companies and facilitate their establishment through

[20] The new plant would not affect Sanyo's subcontracting agreement with Videoton MBKE Electronics Kft, since the battery market is growing rapidly and because Videoton is making a slightly different product. The type of battery cells to be manufactured in Hungary is currently produced only in Japan [Washio, 1999 #7].

industrial parks further enhanced the actions of other actors. Prospects of EU entry and proximity to EU markets have further stimulated the entry of foreign companies. The simultaneous presence of these factors is essential to understanding why Videoton has succeeded. Its success is not only the result of developing individual networks, in particular of Videoton Holding as a restructuring agent, but also of integrating Videoton and local networks with the networks of global companies.

Entrepreneurship alone cannot explain why most of the other ex-socialist electronics companies failed. However, if we take into account the quality of networks and their (non) alignment as factors behind the failures and successes the individual cases become clear.

Finally, Videoton shows that domestically controlled modernisation is possible. The transformation of Videoton took place without any sizeable foreign direct investment. Nevertheless, even domestically controlled modernization has to rely on foreign partners for most of its strategic aspects, especially accessing markets and finance. The combination of entrepreneurship and several factors at local, national and global level raises the issue of whether Videoton's model can be replicated. Irrespective of this Videoton's case offers many valuable lessons for CEEC latecomers faced with similar challenges.

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