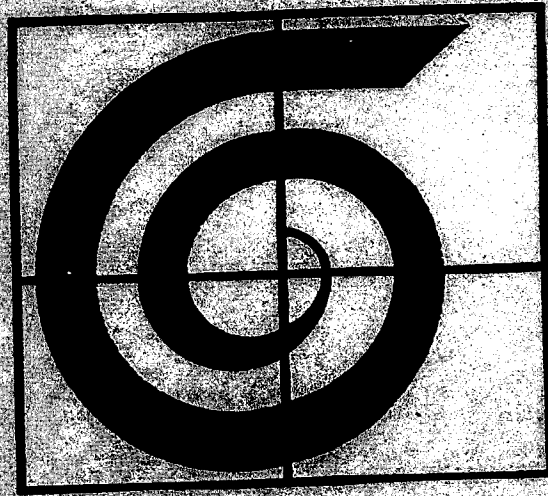


**Fakultät für Soziologie  
Universität Bielefeld**



**Forschungsschwerpunkt  
Zukunft der Arbeit**

---

**Arbeitsberichte und Forschungsmaterialien**

**Nº 76**

**Tamás Gyekiczky  
Eckhard Dittrich  
Michael Haferkemper**

**Privatization before Privatization  
(A Case study in the Hungarian  
Clothing Industry)**

**December 1992**

---

**Herausgeber: FSP »Zukunft der Arbeit« an der Universität Bielefeld.  
Postfach 9670, D-4800 Bielefeld 1; Copyright beim Verfasser  
100131**

**ISSN 0937-4256**

## 1. INTRODUCTION

The following paper presents the outcomes of a case study in the Hungarian clothing industry which was part of a several years research program originally undertaken in enterprises of the clothing industries in Italy, France and Germany.

In Hungary we concentrated our research interests on a spectrum of limited questions, which were closely connected with ongoing processes of organizational transformation within the enterprise. Besides, we describe management's and workers' behaviour and these actors' innovation strategies. Due to the orientation of the West European research program we concentrated our research on the implementation and the use of new computer-based technologies in the production process.

The surveyed garment enterprise in Budapest - we shall call it 'Super' -, is going to face privatization during the next years. This major event went to come overshadows already the present reality and in so far this research on the micro-level is connected with unpredictable changes on the macro-level of society. We term this period in the history of the enterprise, 'privatization before privatization', in order to accentuate the strategic realignments which are going on before privatization actually takes place. Consequently the conclusions of the case study cannot be considered as being valid for a longer period. They represent a transitional period, during which a kind of 'preparation' for privatization takes place.

## 2. 'SUPER' - A GARMENT CLOTHING ENTERPRISE IN HUNGARIAN SOCIALISM

'Super' produces ready-to wear clothes for men. In the past, this factory has been one of the most important enterprises in the Hungarian garment industry. The enterprise maintains five production units in the country. However, all coordination and control tasks, that is to say all production preparation and the whole process of commercial activities are concentrated in a centralized commercial and engineering department, located in Budapest. Contacts with customers, purchase of raw materials, marketing of products, planning of production processes, redistribution of raw materials and all important decisions in the enterprise are to be channeled through this department which thus monopolized officially nearly all exchange relations with the firm's task environment. In addition, communication between production units formally had to be wind up via this department.

In 1991 1200 employees worked in the whole enterprise. In Budapest 450, in the other units between 80 and 150. The firm had more employees previously, when its market possibilities in the Comecon countries were better than presently. In the seventies the number of employees reached more than 2500 in the whole enterprise. The share of white collar workers is high in Budapest while blue collar workers represented the majority in the production units in the countryside.

The labor force structure of these different units is not characterized by a unique pattern but depends on different local labor markets. Thus, labor supply is highly different and shaped by often incoherent formal training certificats and educational levels. However, a sexual division of labor and a geographical distribution of qualifications is evident. Women, whose share is high in the periphied factories, have a considerable lower level of qualification than men. Their tasks in the production process are mainly constrained to semi-skilled work. The regional development lag between the Eastern and the Western part of the country makes for a

higher level of qualifications in Budapest and in the firms in the Western part of Hungary compared to the factories located in the East. As in the countryside, wages and labor costs are low, production becomes profitable in taking advantage from these pay differences. In Budapest, predominantly skilled workers were employed. Only the sewing department runs with an above-average share of semi-skilled women.

We concentrated our study on the production planning department with 25 employees and the cutting department with 30 employees, which was called also the 'Gerber' engineering department. The management did not report any problems in respect of recruiting good qualified staff from the city's labor market. Although the qualificational background of the workers was widespread, the firm could rely on the offered certificates and work experiences. Most of the foremen possessed. From an hierarchical point of view, most of the foremen possessed university or college certificates. Furthermore, there was a close cooperation with the Technical University in Budapest and some members of the management had participated in national and international conferences referring to technical and organizational dimensions of industrial change in the clothing industry.

The equipment level in the surveyed departments reminds of patchwork because it has been puzzled together from year to year and decade to decade. In the whole plant, technological tools and machines stemmed from different periods of technical development. Matching together and coordinating this incoherent equipment to guarantee a continuous flow of production, means highly sophisticated work with large amounts of experience in the clothing industry. As a good example the cutting department can serve: besides a highly automatized machine, the computer-based 'Gerber' system, there are operating traditional cutting machines. In the production units At another place ten years old sewing-machines were installed. They have been imported had been imported more than a decade ago from a former socialist

country and operate together now with newest machines from West Europe. The resulting problems of technical interaction 'normally' lead to grave interferences and coordination problems.

Even more important for the continuity of the work-flow is the impossibility to plan towards a more integrated technological development and industrial engineering. The firm never had enough money to purchase a complete manufacturing control system. Thus sophisticated and computer-based technological equipment and steering units had to be interconnected with overannuated work stations. Production efficiency therefore largely depended on manual work by which the danger of permanent disruptions of the work-flow is combatted. Nevertheless, synchronization problems often lead to losses of time and resources in men and material.

The enterprise can be characterized as a sort of 'ideal type' of the 'classic' East-Central-European large scale industrial organization in respect of hierarchical relationships, the linear system of management and the formalization of individual responsibilities. Due to its highly formalized structure, all decision processes and resulting political actions are centralized at the top of the enterprise in Budapest.

The administrative structure was headed by the general director, who was elected by the enterprise council, i.e. the 'board of directors' consisting of delegates from the management, the employees and the trade unions. This type of councils had been established in the mid 80ies in parts of the state owned sector in order to give a stimulus towards industrial democratization. The intent was to guarantee a higher degree of formal representation of the different social groups of employees and to control the efficiency and the performance of the general management, i.e. the enterprise director and his staff.

Three directors were subordinated to this general director - the commercial, technical and personal directors -, who were strictly responsible only for their own domains. The whole departmental authority structure represents a strictly centralized command system characterized by a mutual delimitation of departmental domains and a hierarchical concentration of management decisions at the top of the command lines. The hierarchical rigidity lead to a weakening of horizontal exchange relations between departments and within departments.

As a consequence, the domains of product policy, of production engeneering, marketing and manpower policy were remarkably unrelated. This fragmentation and outdated overcentralization was the source of the main conflicts within the firm. For the researchers, these characteristics of the administrative system became revealed quite quickly and directed the research towards the informal networks of social relations between employees and managers. Many interviewers pointed out, that these 'informal' networks had been the main source of efficiency in the past and that adjustment to change in technical, administrative or marketing affairs was largely due to this 'organizational underground'.

Due to its monopolized market access, communication with customers was the privilege of the commercial department. This department - supported by external lawyers - negotiated the contracts and determined the main conditions of business activities. The contracts were binding for all departments and units. The parameters of the production process, i.e. the sum of estimated costs, the wage level, the disposition of materials etc, thus was centrally fixed before the concrete production process could begin. The commercial department calculated costs and profits according to its own method and logic, that contrasted sharply different with the needs of the department, that coordinated and controlled the shop floor processes: the production planning department.

Costs and prices were calculated by the commercial department as if mass production was functioning on the shop floor according to the formal work-flow diagram, which was completely outdated. The real output rate and quality standards for example of the cutting work station were insignificant. Interest in shop-floor problems to reach its costs did not guide calculations. The commercial department's calculations were strictly orientated towards the incoming orders. On their base, general costs were calculated, which were not connected with cost-calculations made for each work position on the shop-floor. Thus two calculations coexisted. The guiding calculations became the one of the commercial department because of its hierarchical position. The cutting work station's inferior hierarchical position made its management to keep the central cost plan. The lack of confidence towards the center's accounting and the top-down pressure towards lowering costs and increasing output often lead to enormous tensions.

The tasks of the production planning department onla began when the main conditions of the production process were fixed. What followed was the calculation of the concrete conditions of production (place, time schedule and structure of manufacturing), the cut drawing and modelling and cut manufacturing as such. The department had different subdivisions including the fashion and model bureau, the cut design, and different maintenance divisions. These subdivisions were closely connected by their tasks and by mutual trust relations. Cooperation was necessary to provide a compatibel stock of data and to apply them as a logically integrated data-system which could be 'understood' by the computer.

The integration of creative design work into production planning was computer-aided. The cuts were designed and modelled on screens and on the basis of the resultant computerized data the production planning happened. The data were combined with the necessary parameters for production engeneering and stored on disks. With the resulting program

the automatically running cutting machine could be steered. In addition to that, all necessary production process informations had to be kept on different documents, which accompanied the pieces during the whole production process in the local units outside of Budapest so that a constant control of the work-flow was made possible. This was a consequence of the lack of computerization in the local units, so that the extent of computerized steering activities was in fact limited to Budapest and in special to the two departments of production planning itself and of cutting. The cutting for all suits was localized in the so-called 'Gerber' engineering department. All parts of the suits had to be transported to the different local producers, where the sewing was to take place. The single units were highly specialized, e.g. one of them produced trousers another one only coats. Quality control and assembling of parts was centralized in Budapest again.

### 3. STRATEGIC REALIGNMENT BEFORE PRIVATIZATION

As the breakdown of the Comecon forced 'Super' into reform, most of the employees and the management had hopes of getting an enterprise status of private ownership. In Hungary today, these necessary enterprise reforms happen in a highly politized atmosphere: Old strategic positions between branches in industry, between enterprises of the same branch and within enterprises and between enterprise units are broken up and new strategic realignments take place. Our central question was, with which actors, to which extent and on which base these realignments took place at 'Super'.

#### 3.1. THE STRATEGY OF THE ENTERPRISE CENTER

One major actor towards higher performance and a better market adaptation was represented by the enterprise's upper



management. Given their stable background especially in economic, social and political 'capital' they could form their own reform strategy. It was not designated exclusively towards the enterprise but included external social and political environments as f.e. the Hungarian privatization agency. Their reform strategy mainly was based on their own social and organizational position and power. The whole production process and its administration followed centralized principles of a highly formalized division of labor, which reflected thirty years old constitutional rules.

In the pursuit of reforms in the 80s the power of the upper management had been strengthened by the establishing of enterprise councils. These councils were dominated by the general directors and their staff. Their power resulted from their possibilities and duties to acquire all necessary informations and to define and present decisions and strategic options. The resultant enterprise public was thus made up decisively by them and their decisions lost their contingent character. Options in respect of product, production and manpower policies automatically became reduced to the upper management's decisions. The departments of the center at the top of hierarchy, empowered by their central resources, could concentrate all relevant decisions on themselves and thus prolonged the old patterns of market and production strategies against which the reform was directed.

In the case of 'Super' the central departments gradually developed a privileged position. The gaps between market orientation and production needs, mass market policies and efforts towards decentralization on the shop-floor and in the field of production engineering, which had begun in the 70s thus became dramatized in the 80s, when Comecon slipped into crisis and the reform efforts only produced new centralizing effects. The market access monopoly enabled the commercial director and with him the new market-oriented upper management to impose their policies on the shop-floor oriented departments, the duty of which consisted of planning and controlling workers' behaviour and the production

process. This shift, which was due to the shift of business policies towards market demands, reaffirmed the center of the enterprise inspite of the intent towards decentralization of the enterprise reform. This reaffirmation was stabilized by the reputation of the upper management built up during the 70s when the East European and Russian market demands allowed for an enormous growth and a period of prosperity. That was the most flourishing episode in the history of the enterprise.

This period can be characterized by large markets, low-level quality-requirements and a large pool of labor-force. The firm produced clothing articles in large series on the background of a rigid mass production philosophy. On the macro level the enterprise's business success corresponded to the situation of the Hungarian economy in general. Western credits were given with favourable conditions. The supply of cheap capital and growth allowed the leadership to invest in modern technology, though on a deficit spending base. Although subsidies from the West and the Hungarian government into industry were widespread, the lucrative path to grant-in-aids for 'Super' had been obstructed: it had been excluded from the general state programme of development for the consumer goods industry. As they nevertheless acquired high growth rates, the image of the upper management within the enterprise grew. But that was the past.

At present the most important factor, influencing management's reform aspirations was the present economic situation of the enterprise after the collapse of Comecon cooperations and the destruction of the mass markets in the East. The Hungarian garment industry had slipped into crisis. Supply costs rose and the ailing general economic crisis forced the management to cut back the manufacturing capacity, to reduce costs, to curtail wages and to reduce employment.

Nevertheless, the present economic situation of 'Super' was above the trade's average. Its relatively favourable position was caused by developments in the early 80s. At that time,

the enterprise began to adopt design and quality standards towards Western market demands. The firm began to diversify its traditional Soviet and Comecon related market orientation just before the collapse of these markets. This shift in policies had been accompanied by a consecutive organizational transformation, that was due to innovative technological investments, especially the introduction of electronic data processing techniques, which were financed by the large-scale profits earned on the Soviet markets.

The partly modern technological equipment of 'Super' was a kind of insurance for Western partners and customers, whose engagement had been highly contingent upon the fact, whether quality levels and delivery times could be reached on the producer's side. 'Super's' upper management tried now to use 'their' Western market access as resource to stabilize their power. Customer contacts strictly had to be made by this department. Direct communication with Western partners by other departments were cut off. Thus, alternative possibilities to participate in new market and technology developments were supposed to be restricted, were supposed to be the exclusive right of the commercial department. This strategy especially hit the production planning department. Because of its advanced technology and because of the necessity to interconnect closely market and production demands it had been established Western contacts on its own. They were threatened now. In the eyes of the production planning department, the strategy of restricted 'high-quality' market access and confidence in the recovery of protected mass markets proved that the old bureaucratic leadership of the enterprise was not well up in the modern problems and demands in the field of production engineering and was not competent enough to organize and control the production process on the shop-floor level and to connect it with market and customer demands. They argued, that only if the 'productive' departments of the enterprise would cut loose of its bureaucratic center, flexible specialization and decentralization could be enforced, to stabilize the enterprise's position towards its Western costumers.

On the whole, the former business success, including the opening to Western costumers helped until now to legitimate the position of the commercial department and the central enterprise staff. Organizational domains and power positions were reproduced as a consequence of privileged market access. In addition, the internal command and control system was legitimized, too. And despite informal discussions in the enterprise and in the public about bureaucratic waste and overlap, the general and simple top-down-mode of the factory regime had not been changed yet. But around this problem open rivalries between the majority of the 'old' management, who still seemed to have the monopoly towards customers on their own and 'young' factions stemming from the so-called middle management level, especially from the production planning department, had broken up. Both factions agreed in the fact, that wage-work for foreign partners would gain more and more importance in the future. In fact, the possibility of working in commission for Western customers meant to become dependent of their orders. The fears of becoming reduced towards a 'prolonged workbench' of the West were evident and promoted 'nationalistic' arguments. As all other possible choices appeared highly unstable this dependancy was closely connected with prospects of economic success in the eyes of the majority of management. The contact with Western partners and the stabilization of regular costumors opened up new chances to learn from the West. These connections seemed to provide a certain degree of protection against the domestic economic difficulties. But this path of industrial reconstruction raised special new problems as it coupled the production processes with customers' needs in the West including the cyclical up-and-downs of the market. It was common sense, that 'Super' had to use its chance to reform and reconstruct its organization and technology under competitive market constraints. However, the main interests of the Western partners were of course to use pay differentials to minimize their own costs. From this point of view, the use of low-wage production together with high qualification and technology requirements were central

preconditions to attract foreign capital and to direct customers' attention to investments. But despite all of these ideas and speculations, up to now, the Western partners had shown only very little interest in the reform of the enterprise through investments. From this resulted a precarious situation. Enduring orientation to the Western market stabilized the enterprise's chance to survive and at the same time outdated gradually the 'modern' equipment, on which production for the Western market and economies of scale relied. But the Western business did not produce the opportunity to further modernization due to narrow cost calculations. Thus market reorientation stabilized the power situation in the enterprise with its decisive role of upper management.

This situation was due to the present paradoxical alternatives for 'Super'. On the one hand Western partners with their large, but high-quality demand potential, could help upper management to stabilize the enterprise's market position and its own economical and organizational positions, too. Otherwise, these calculations might be out, because the risk is evident, that this cooperation could put an end to further technological and organizational development due to the low foreign interest in expensive measures of technological and organizational rationalization. Following the pursued path of the above mentioned 'commission work' concept, i.e. small badges combined with a flexible production organization corresponding to the requirements of higher market segments, could emerge as a political means in the hand of the middle management factions' strategy, that aimed to destroy the present constitutional enterprise frame and, by this way, the organizational power positions of the old ruling management elite, too.

In any case, the market access effectively now was regulated by the demands of Western customers. The competitive pressure was hard. But the investment capital, necessary to maintain and improve technology, had to be accumulated by the enterprise on its own. The whole situation revealed as much

more dramatic due to the fact, that the large-series equipment lost its former worth and had partially to be valued as outmoded under the shifting market conditions. As the main problem, however, remained, that the foreign customers ordered smaller and smaller badges. The enterprise had to keep a precarious balance on the verge of non-profitability, increasing burdens and rising loans.

The different management factions were to look for strategic responses. As one of the strategies emerged a privatization plan of the upper management. Following this schedule, the enterprise should be privatized spontaneously by a kind of management-buy-in without any control by state agencies. Spontaneous privatization processes emerged already with the Law on Economic Associations (Company Act), which had also been prepared and passed by the previous government in 1988. It opened new chances towards the formation of companies of limited liability (KFTs) and joint stock corporations (RTs). On the one hand, this legislation offered foreign enterprises lucrative chances to invest in Hungarian firms and to participate in the widening privatization processes by supplying capital. Together with the first piece of legislation, the Law on Enterprise Councils in 1984, which transformed some ownership functions from the ministries to the newly established Enterprise Councils, the factory leadership was allowed to choose its own owners. In our factory the spontaneous privatization process came quickly to an end, because the external economic and political conditions of reform for the upper management were decisively transformed. Therefore only one part of their earlier privatization plan could be realized. They succeeded to sell a single production unit of the factory and to establish a joint venture with a former French partner in Western Hungary in 1990. In this region the economical crisis was not as deep as in other parts of the country and the unit was still profitable. A considerable part of 'Super's' qualified labour-force tried to find a job in this joint venture, causing a drain of qualified workers in other units. Though limited in scope, the upper management hoped to attract

further foreign investment through the cooperation with the French enterprise. The hopes were not fulfilled yet. For the inner disputes, the cooperation was a strong legitimation for modernization and the base of trust from the side of many employees.

The joint venture can be characterized by the combination of a Taylorian production concept with the traditional craft skills. It could only work because of the the employees' readiness and compliance to invest their whole potential, i.e. their capacity of flexible improvement and 'muddling through'. The intensity of work grew. Further characteristic corner pillars of the joint venture were the market constraints depending on the business situation of the French partner, growing responsibility of the management staff concerning their decisions and a system of group wages, corresponding to output and quality. Among certain workers the impressions grew, that 'they want us to be the losers' as one Union representative put it in our interview.

The joint venture began to undermine the strategy of the center. Its management had hoped, that the joint venture would provide them with enough orders to uphold the manufacturing capacity and thus to avoid dismissals and wage cuts. The costs of rationalization and the Western market entry were supposed to be charged to the foreign business partner's account while they for themselves were supposed to be the winners in the privatization and rationalization process. This vision revealed as unrealistic. The external conditions of enterprise-decision-making became more and more obscure, due to political interference besides all problems of adaptation to free market conditions. In 1990, the Hungarian government founded a State Property Agency (AVÜ). The whole enterprise - including all its production departments - was since then juridically a part of the national property fund and became controlled and managed officially by this state agency thus limiting managements' decisions about production and products. According to the privatization list of the State Property Agency, the

enterprise was supposed to be privatized in a third round in 1993. The uncertainty of management decisions grew under this deadline, because each internal manoeuvre concerning property rights and adaptation to market conditions could be substituted by decisions of the State Property Agency. Under these circumstances the upper management had only one aim: they tried to stabilize their power positions by getting through the muddle and producing better preconditions for their claims as potential future owners.

## 2.2. THE STRATEGY OF THE PRODUCTION PLANNING DEPARTMENT

### 2.2.1. CHANGES IN ENTERPRISE'S POWER RELATIONS

With the genesis of new connections with Western partners some typical peculiarities of the Hungarian shortage economy were put to an end, because the new partners provided the firm not only with new orders but also with all kind of raw materials and accessories, while the management only had to arrange the production engineering. Notwithstanding its relatively favourable economic parameters, the firm of course had not been independent of the Hungarian economical environment. On the one hand it was already operating in the system of market economy, on other hand it was still a part of the shortage economy. This double structure resulted in a conflict between production planning department and the enterprise center that polluted the climate and even worsened the constitutional crisis of the enterprise.

The central factory staff feared to lose its control and status while the middle management tried to loosen the productive core from overhead costs. In the past the top management acted as rent-seeking actor. It separated the tasks of production engineering from 'marketing' functions. Their supremacy over 'productive interests' hindered the necessary integration and cooperation between shop-floor and business policies, i.e. between market demands and the manufacturing process.



The main actors of the production process - departments, leaders, shop-floor management - developed their cooperation against the hierarchical patterns of direction and execution. The emerging informal structure of 'real' cooperation proved its 'oppositional' efficiency by its partly successful confrontation with competitive market demands and by its advantageous handling of computerization in the field of production engineering.

#### 2.2.2. THE CHALLENGE OF THE MARKET AS SEEN BY THE PRODUCTION PLANNING DEPARTMENT

"Economically it is not rational that those people decide for the business strategy of the firm, who do not have knowledge and informations for the whole production process, e.g. about the cost structure of production. The profit possibilities can change during the production; therefore they can not be calculated far from the shop-floor by people sitting in an office in the main building of the factory..." (Interview 1 / Production Planning Department).

The production planning department was logically located in the center of the production process. But hierarchically it was subordinated to the bureau of the technical director. This produced a highly inefficient information flow. Officially it could establish contacts with the production units and with other departments only via the bureau of the technical director. Furthermore, the department could not build up contacts with customers on their own, because the market access of the whole enterprise was monopolized and controlled by the commercial director and contacts had to be made by his bureau.

But these formal channels subscribed by the factory organization did not function well. They hindered the circulation of information. The production engineering department always needed more informations about relevant parameters than were officially available. Due to this deficit, f.e. again and again it could not reach necessary

and precise informations concerning the ordered spectrum of models or material supply. In addition, production engineering was confronted with a lot of mistakes they were not in charge of. The consequences of faulty data emerged often as grave: they could result in complaints by customers, in potential claims for damages and could in the end affect the competitiveness of the product on the market. The experience with these types of situations made production planners to view themselves as protagonists of a different and more efficient factory organization.

Their primary interest was to narrow the scope of mistakes and to acquire necessary informations to optimize production processes, informations that were constantly distorted by the bypasses via technical or commercial director. Whenever contacts with costumers, suppliers and the like were direct, they felt, that they could do their job much more efficient. However, this practice lacked regularity and was not in compliance with the official factory organization.

Furthermore, the interviewed production engineers interpreted these situations a result of the existing power relations, which constrained their management competence. As one manager put it in our interviews, "rent seeking interests alone are not sufficient to run an enterprise effectively".

"The present practice should not be followed in the future. We are preparing the whole production process, we determine the whole technical and laboratory conditions, and we don't have precise informations about the demand of customers. Why is it not possible to come into direct contact with our partners? In reality they are coming at least once or twice to us to inform us about their demands." (Interview 2 / Design Group)

The managers of the production planning department built up a flexible organization, which could give correct and quick answers to market demands without bureaucratic intermediation. If the enterprise would collapse in the

course of economic reconstruction the responsible managers we interviewed planned to reorganize 'their' department as an free-enterprise service and maintenance bureau, as a 'Service Center' as they put it. Under these circumstances of entrepreneurial autonomy, they would like to provide their partners not only with software but also with technical and organizational support in the field of modern design methods in the garment industries.

### 2.2.3. COMPUTER KNOWLEDGE AS A STRATEGIC RESOURCE

Computer techniques are used in two phases of the production process, i.e. during its planning and during the cutting. The claim of the middle management executives in charge of the two departments to represent technical and organizational rationality largely depends on their familiarity with computerized work. Their pretention to be productivity-seeking 'change agents' is closely connected with their attempt to spread and to deepen the electronic data processing.

According to their view, two opposing 'philosophies' guide further efforts to modernize through computerization: On the one hand the interests of the periphery and its representing management staff towards a higher degree of independent market access and self regulated production engineering, on the other hand, the interests of the top management.

The envisaged new wave of computerization, which was thought to be produced by the production planning department, would have to be developed as an instrument towards 'lean production'. In the context of the Hungarian transformation period towards a market economy, this meant debureaucratization, meant new and better information and communication policies. According to the opinion of our interview partners, the intensified and extended use of computers was supposed to be decisive towards further competitiveness.

"If we had more and better computers we could collect all the necessary informations for the production. With the help of computers we could produce several cut drawings and models, it means that we could be very flexible. I could present the different forms to the customers directly; we had only to sit before the screens..." (Interview 1 / Production Planning Department).

From this standpoint the use of computer meant more flexibility to integrate production and market demands. This new integration implied clear priorities. Market demands were supposed to direct design, production planning, cutting, and sewing thus fulfilling customers' or ultimate buyers' requirements.

#### 2.2.4. OLD EXPERIENCES AND NEW ORGANIZATIONAL FORMS

As production engineering suffered from the deficiencies of former 'bureaucratic integration', the department thought and tried to reintegrate the whole production process under its own charge and control. The technical core of the favoured production and marketing concept was supposed to be extended computer technology framed by a flexible organizational structure, which had to be strictly oriented towards market demands. The new organization was thought to be strictly decentralized. The confidence, to set such a concept was inspired by former experiences with self-organized work within the department. The management of the production planning department tried to take up its former experiences with the so-called Economic Working Groups (VGMKs), which had been rather autonomously organized in the eighties by the employees of the production planning department.

The practice of the VGMKs was to sublet the equipment to work groups, which consisted normally of highly qualified employees and parts of management executives. The working group was an attempt to optimize the availability of flexible manpower and services. These groups only had contract relations with the enterprise, organizationally they were independent. Proceeds had to be taxed. Work motivation

increased when the involved employees began to work in these groups. Although, under socialist conditions, in essence, the practice did not differ principally from overtime work. The department's management and especially its better qualified workers now tried to base its future activities on their past experiences with the VGMKs.

"We had an Economic Working Group since the middle of eighties. We coordinated a network of small private entrepreneurs, who did not have any possibility to make cut drawings and models in their own firms. You have to understand that the measurement of series is not important for us, because the computer can only produce one pattern... The difficulties emerge of course in the planning of the other conditions, but in the case of small 'garage' producers it is not our business. Our group had many good business possibilities and we were in our market activity totally independent from the factory. We could use the equipment, the computer, and had to pay money to the factory for its use. But in the end, in spite of our relative autonomy, our profits decreased, because the factory demanded more and more money from us. We used the technique as authentic owners why could we now not become owner in the reality, too? In this case we would not pay more money to these guys for the usage of the enterprise equipments." (Interview 1 / Production Planning Department)

Originally, the production planning department had introduced the computer to substitute manual work. Its philosophy of implementation was influenced by classic Taylorian doctrines: working tasks were narrowly defined to minimize human intervention in the work process. This concept had been regarded as the best policy to reduce the number of mistakes and to increase quality. But under the prevailing circumstances of financial, motivational and constitutional difficulties and muddle, the 'human factor' could not be discounted and substituted by automatized production lines steered by computers. The intensified use of manual work stayed to be 'the' main factor of economic success. Technocratic management visions failed as a consequence of lacking capital. In practice, computers could be used to minimize the number of mistakes. For example they could help

to narrow the degree of tolerance, by applying a quality-orientated, so-called 'negative system of premiums'. With the help of corresponding money incentives - so the management's interpretation - something like a continuous production inspection by the employees themselves could be set up. Wages became dependent on the working time on the one hand and on the frequency of the mistakes on the other hand. In the long run, this strategy was supposed to lead to a growing responsibility of workers. Although the management declared as one of its main aims to substitute manual work by technological innovation, in practice, the optimization of production processes could only be grounded in further efforts to use and to rise the qualification level of the labor force. Systemic functioning could only be put in practice on the basis of an innovative and performance oriented workforce. In compliance with this insight, optimization of the production process was believed to be highly dependent on variables like higher wages and further education and retraining of the workers and employees. The 'human capital'-oriented practice of production politics in the enterprise had proved to be more realistic than the management's Tayloristic and technocratic philosophies.

The past changes as a consequence of the introduction of computer technology stayed 'imperfect'. They did not correspond to the theoretical design of Taylorization, i.e. a clear hierarchical separation of planning and working and a dequalification of the majority of the workers. Instead, high qualifications stayed decisive for a continuous work-flow and became the corner stone of socialist reform to improve efficiency. The VGMKs exploited workers' abilities to manage imperfect work-processes. The experience made up for the base of further reform in the eyes of the majority of the planning department, including a new distribution of property rights in their favour. The close interdependence between the production planning management and the local producers offered a strategic realignment to defend common employment and productivity interests against the supremacy of the old administrative center. Models of formalized top-down control

with help of computers based upon management dominance and dequalification of work had no chance within this configuration of social actors, that is workers and management of the production planning department and the production units.

### 2.3. THE 'IN-BETWEENS'

The staff of the 'Gerber' cutting machine, closely linked with production engineering, was acting in a paradox situation. On the one hand, they had partly a post - Taylorian wage system due to the rising quality demands and the flexibility of job demands; on other hand their technological equipment still was inseparably attached to mass production and economies of scale. The further aims and strategies of its employees and managers were due to these contradictory conditions. The department had only two possibilities to shape an innovative strategy, either to reform the Taylorian production concept or to reconstruct mass - production conditions.

Originally, with the introduction of the 'Gerber' machine the 'universal' worker, capable of any type of work and strictly controllable by technology and management, was thought to enter the center of the manpower policy. The group system of wages, introduced 1991, was still based upon this assumption of a relatively homogenous type of work force in this part of the enterprise. Due to the assumption of qualificalional standardization, the management thought, that it could renounce further wage differentiation. In practice, however, the effect on qualification of the automatized 'cut-island' had been overestimated.

Until now the 'Gerber' work station had not gained the importance in the context of the tasks and functions of the whole cutting department as originally was thought it would. The traditional cut-machines were still working. For this reason the cutters had to know the demands and also the muddling-through tricks of mechanized and manual tailoring

and cutting. Flexible job demands gained importance. They were additionally increased according to the growing pressure towards higher quality, lacking spare parts, strengthened terms of delivery, shorter deadlines and decreased serial sizes. Despite the technical potential of the 'Gerber' equipment as an automatized tool, manual work characterized the department. The 'Gerber' machine had to be adjusted to the above mentioned demands towards flexibilization, too, demanding a high-level knowledge of computer techniques and software competence. Traditional handicraft skills were thus combined with sophisticated computer knowledge.

The group of employees, that worked with the 'Gerber'-machine, stressed their interest in utilizing effectively the computer system. In their eyes, this meant wage costs reduction through the possibilities of serial production, which had been made possible by the introduction of the 'Gerber'-equipment in the eighties. The argument was, that an effective utilization of the computer machine depended on economies of scale through series production of big badges.

This argument emphasized a departmental logic, built on potentials and not on reality. The use of automatization for big badgess was a result of the old Comecon market conditions, that were not longer existing.

"For our department the badge size is an important question. The 'Gerber' costs always the same money independent of badge size. Our profit will be higher if we can cut out large series. The small series are not profitable. In these cases we are sometimes working manual. It is economically better but it is true that the output quality is not too good. People make more errors than the automatized cutting by the 'Gerber'..." (Interview 3 / 'Gerber' Cutting Department).

Comecon having collapsed and adaptation to market conditions being necessary, two different policies could be found emerging in reaction to the changed conditions: on the one



hand a strategy to optimize the utilization of the existing mass production technology, and on other hand a strategy to adapt to new market demands by intensifying the use of cheap manual labor. The 'Gerber' department represented a vacillating actor. It tried to support the reform attempts of the production planning department against the centralized business policies of the center and it sympathized with the above mentioned reform strategy of the central management staff to reconstruct mass-production.

In addition technocratic visions emerged. Their protagonists argued, that it would be possible to produce smaller, high-quality badges even with mass production technology. To reach this aim, investments in computer technologies were supposed to be combined with further flexibilization of the enterprise's organizational structure. Manless manufacturing was supposed to be the future of further rationalization.

"Imagine a factory without people. The customer can enter into a room where the sizes are automatically measured. After only a few hours you can come for the ready clothes. During this time the fully computerized factory could produce the complete suits. The same can be already found in the automobile industry. This is a future vision of course... By crossing the frontier you give an order for your suit and at the arrival in Budapest you can already wear it. " (Interview 3 / 'Gerber' Cutting Department)

### 3. PRIVATIZATION AND ENTERPRISE MODERNIZATION

The ideas of technical and organizational innovation via further computerization proved as wishful thinking, as there was no money available for further investments in modern technologies, especially for further computerization.

Because of this fact the transformation of the institutional and constitutional conditions of production gained great

importance. Transformation did not only represent reorientation but also a consequence of a deadlock in modernizing production. The institutional and normative-juridical solutions of the 'constitutional questions' of the Hungarian economic transformation became relevant for the outcomes of the political struggles within the enterprise.

Two main types of these 'politics of production' or better: 'privatization politics' in the Hungarian transformation process can be distinguished: fragmentation of the existing enterprises and institutionalization of new property rights.

*- Fragmentation of the existing enterprises:*

This strategy is related to the second economy experiences in Hungary. During the last ten years numerous small businesses had been set up in close relation to the state-run big enterprises. Those employees who were working in these small businesses, for example the VGMK, articulated their motivation to evolve as independent entrepreneurs.

"I have worked in this firm for ten years. I have made three trade certifications, i.e. I can cut, sew and make a cloth alone. More than that, I mastered to use the computer but I can not operate with it's programs. I used to work with it like with a tailor's scissors. Consequently I pressed the bottoms during the worktime; it was not a satisfying work. In the last few months I designed and produced clothes, not only suits but also dresses and costumes for my own. I made them with my wife at home. Consequently, after my official worktime begins my second job, but in my profession and in my own responsibility. We make ten or twenty pieces not more. We could find a market for our products; we have set up stable business partnerships. We can get more money for our products than I could earn in the factory by wages. We would like to build up our own one-family- house; therefore we need additional income." (Interview 1 / Production Planning Department)

Especially highly qualified workers articulated enterprise reform ideas, that prolonged their old experiences with the VGMK reform strategy. They tried to seek their advantage by

using the politically supported possibilities of 'entrepreneurial individualization' in founding individual 'small ventures'. For the workers of 'Super' the first step usually was to establish an independent business activity 'at home', which - under these circumstances - could guarantee additional economic and financial security supplementing wage employment in the state industry. 'At home' they planned and cut, tailored, sewed and sold their products. That was the Hungarian solution of the contradiction between the decline of mass production on the one hand and the increased diversification of markets on the other hand. Wage labour became to function gradually only as a supplement to private business interests 'at home'. Wages supported and subsidized the necessary private investments. Many workers believed, that an extended VGMK-strategy, a further and direct organizational fragmentation of the performance exchange relations in the enterprise could be the necessary economic reform to adopt to market relations in the nineties.

*- Institutionalization of property rights:*

Juridically, various versions and alternatives can be imagined, e.g. foreign property buy-outs, founding of joint stock companies together with and/or free of Hungarian state assets and of course buy-ins by different management factions and interested groups of employees. Privatization concepts like these were under way in the parliamentary process, including employee ownership programs (ESOP). But none of those - up to now - had gained any importance within the enterprise although each interviewee had its own favorable solution in his head and argued from such an anticipated situation when explaining possible strategies of change.

#### 4. CONCLUDING REMARKS

To generalize our findings, two reform strategies can be distinguished. They represent idealtypes, not the reality. But in future research, they might be helpful to sharpen our view on reality.

#### Reform Strategies

	<u>1. Strategy</u>	<u>2. Strategy</u>
<u>Actors:</u>	Enterprise Center	Shop-floor management and skilled workers
<u>Arenas:</u>	Enterprise and state bureaucracy	Enterprise
<u>Type of reform:</u>	Conservation and reconstruction of the enterprise organization	Fragmentation and flexibilization of the enterprise organization
<u>Action orientation:</u>	Stabilization of the existing power structure	Destruction of the existing power structure
<u>Market orientation:</u>	Economies of scale	Flexible specialization
<u>Production concept:</u>	Mass production	Flexible manufacturing
<u>Strategic resources:</u>	Profits and state support	Profits
<u>Constitutional options:</u>	Joint venture; management buyout and/or buyin; joint stock company with(out) state assets	Joint venture; management buyout and/or buyin; ESOP

Though the privatization process is politically and economically highly contingent, the new market demands of the clothing industry are hard facts and put constraints towards industrial modernization and privatization. The actors responded to the challenge of the market in different ways.

Innovation of the production process was looked for by revitalizing earlier mass market traditions and by using the qualificational potential of the available knowledge. In summer 1991, during our research, everyday conflicts were overshadowed by speculations about appropriate market adaptation, about possible losers and possible winners. Coalition-building to meet future challenges created a highly politized atmosphere. It seemed, as if two major acting groups had somehow stabilized: the center with its staff and a coalition of those groups of the shop-floor management, that controlled high-tech devices, with skilled workers. They saw themselves and were looked upon as potential winners of the political and economic changes. The production units played an unimportant role. Activities concentrated on members of steering departments be the the center itself or the production planning department.

This intended type of reform was widely acknowledged to conserve the enterprise as a whole. The protagonists of the fragmentation and flexibility oriented reform strategy denounced these attempts as illusionary. They argued, that markets in the East could not be revived and that markets in the West demanded small badges, highly differentiated products and a corresponding production process of flexible specialization. They doubted possible state support, based on the nationalistic argument, that 'Hungary needs its own textile industry', by which the center tried to attract financial support from the state. Their main argument was, that the only chance would be, to use the actual pay differential between the Hungarian garment industry and the Western and Asian competitors in order to attract commission work. They argued, that economic dependency might be more attractive than bancruptcy. Though not outspoken, this strategy implied a rationalization process during which only those parts of the enterprise would survive, that could stand intensified competition and flexible specialization. Of course, this was looked upon as a danger from potential losers.

This second strategic option had been decisively influenced by the organizational development of the past ten years. The VGMK, having operated in recent years, formed the basic new options for a new type of work steered by the production engineering department. The VGMKs had also produced the confidence that those cooperations and business relations which demanded a broader utilization of computers could be found. The system of spreading home fabrication, in-door ventures, the need for team-work and also dismissals to optimize the labour force pool - all these processes had an empirical base in the experiences with past reforms under 'socialist' conditions.

The center of the enterprise tried to reestablish mass production relations without being able to find adequate sale markets. Due to this dilemma, they tried to build up a new cooperation with state administration in order to apply for financial subsidies and market protection. They said for example, 'we can sell at a premium and make profits if we get a state premium on exports'. The shop-floor management followed another strategy: It began to reconstruct parts of the production organization according to empirical market requirements. But they lacked capital, too, so that large scale reorganization did not occur. Reorganization mainly stuck to the necessity of executing appropriately the commissions that resulted from the existing joint venture. That meant, f.e. cooperation only with one production unit in the countryside. The different management strategies represent the shift from mass production to flexible specialization under the special Hungarian circumstances. The main actors of that shift were professionals with computer experience. On the one hand they tried to standardize the production process by further computerization, while on the other hand they were forced to use the unexploited knowledge of manual labor and handicraft skills to meet the growing demands towards market flexibility and to match organizational and technical deficiencies. This group regarded its education and knowledge as main resource and as basis of the necessary reforms.

In the ongoing transformation process, the electronic data processing system, which was built up in the last ten years, played a very important role. The aims of the shop floor management for future development were based on its extension. But lack of capital made 'human capital' an indispensable resource for a continuous workflow thus producing a situation which only allowed for limited use of the rationalization potential of computerized production processes. Rationalization via computer stayed uncompleted. Therefore the strategy of the shop-floor management and the skilled workers represented a combination of computerized work processes and others guided by craft work. At least it seemed to allow to keep up the hopes for profit in order to invest in further rationalization and in order to pay salaries at least for the employees. A more intensified utilization of the workforce was constrained by 'exit' options of the workers due to the informal sector and by the management's refusal to accept wage increases that would close the gap of pay differentials towards other countries and regions. Flexible manufacturing in the Western sense still was an aim.

A more extended use of the knowledge and expertise of the employees was not only limited by 'exit' options and wage constraints but also by barriers, put up by the enterprise's power relations. Not only within the whole enterprise but also within the production planning department, the hierarchical organizational relations were identical with a top-down way of knowledge distribution thus limiting the use of existing human capital.

The average knowledge of the employees itself was based upon traditional, handworker's skills. Modern industrial software competence only played a part in the above described two steering departments. Even the introduction of new technologies in the eighties (the 'Gerber' machine) relied heavily on the traditional industrial culture and competence in order to overcome the deficiencies of the economy of shortage. If the distribution of skills and technology also

allowed for enterprise survival under full market conditions can't be answered today. Sure is only one prediction: In a worldwide ailing industry like garment, there is no cure for cutting corners!

**Notes:**

*The project in Western Europe was conducted under the title "New technologies in the management and leadership of industrial enterprises - the experiences of French, West-German and Italian industrial enterprises". The leaders of the projects in the countries concerned and the important research-centres are the following:*

*Universität Bielefeld, Fakultät für Soziologie:  
Prof. Gert Schmidt*

*CNRS Paris, France  
Prof. Pierre Dubois*

*University of Bologna, Italy  
Prof. M. La Rosa*

*The Hungarian project was financed by HAS (Hungarian Academy of Sciences)) and DFG (Germany).*

*Many thanks to the following persons for help and criticism:*

*Csaba Makó, Sándor Berki, Katalin Nagy, Katalin Balázs, Gergely Egyedi (Budapest, Institut of Sociology/HAS), Martin Heidenreich, Bielefeld University.*



## Abstract:

Summing up, we described the utilization of computer techniques in an enterprise, whose inner constitution and whose institutional context was 'floating'. Under these circumstances we could not test any sophisticated set of hypothesis grounding in Western experiences by the there introduction of new technologies. We concentrated our survey to technical and organizational questions on the micro level in the enterprise and especially its production engineering departments, because these units represented market oriented privatization interests against the old center of the enterprise. National transformation strategies into a free market economy had to be considered, too. Nevertheless, these macro level issues afford an investigation on its own. We studied intra-organizational processes which limited the daily operation of new, computer based technologies. Yet, the most significant experiences in the course of our analysis consist in perceiving the effects of the radical external change onto the enterprise: politics in production depend on politics of production, i.e. of privatization politics. Parts of the management staff were aware of the close interdependence between the potential of computerization, growing demands towards market flexibility and the privatization of the enterprise or parts of it.

The need to adapt to the market poses a challenge for the economic organizations and their responses to this challenge include also computer techniques as a potential source of flexibility and performance. This possibility, however, is open only for those departments which turn their attention to the market competition: where the challenge of the market is ignored, the conditions of mass productions continue to dominate. This is the main accusation of the qualified workers and the middle management towards the administrative center of the enterprise. The limits of organizational transition are set by the present interests and by more or less inherited power relations. These limits can of course be quite broad - see for example the role of an 'change agent' played by the computer department as a kind of 'profit-center'. Nevertheless, these actors cannot radically alter the existing power-relations.

A further important conclusion of our case study can be formulated as follows: in Hungary, where public education even today reacts only with difficulties - or hardly at all - to the challenges of computer technique, the computer know-how is up to now monopolized as sacral knowledge. This phenomenon is not only due to the public schools but can be diagnosed in the enterprises, too. The dominance of the power-relations within the organization, the defence of the established interests and the need of the traditional hierarchies for legitimation not only influences but also determines the fate of data processing competence of the employees. The basic experiences and knowledge of the main actors in the 'Taylorized' work organizations dates back to the age of 'handicraft industry'. Taylorism was in its beginning an engineering effort towards the 'scientific liberalization' of industrial structures, which were largely shaped by personal authoritarianism and arbitrary despotism of foremen and managers. From this point of view the Hungarian industry has only partly been shaped by the Taylorist philosophy, while flexible improvisation and traditional craft skills survived even under socialist modernization policies. In Hungary even today one can feel the effects of those industrial traditions, cultures and skills which seemed to be destroyed by the predominance of heavy industries and which offer a potential that should be discovered again. It were the 'craftsmen of the old school' who provided the knowledge and experience for the software of the computers and who trained the younger generation of workers 'on the job'.

According to our experiences the changes and alterations were decisively influenced by the organizational development of the past ten years. We demonstrated in detail: the VGMK, having operated in recent years, formed the basis for a new type of production and marketing in accordance with modern market demands. It was also the basis of those cooperations and business relations which demanded a broader utilization of computers. Spreading home fabrication in the informal sector, in-door ventures, the need for team-work and dismissals to optimize the labour force pool - all these are results of the recent years. While some sociologists characterized these ten years as a period of 'spontaneous privatization' (Stark), we call it a process, where economic privatization began before political privatization. The legitimacy of the present transition, in turn, depends on the extent to which the management and the politicians take into consideration these changes. In our case, for example, the collective ventures and buy-out interests of the production engineering department can possibly stabilize the way on the road into a free enterprise society - even if foreign ownership is inevitable and even if the employees should be given shares, participatory rights and a detailed interest representation in economic objectives.