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Mobilizing Social and Organizational Resources in Project Type Cooperation

(A Case Study in Networking in Interactive Media Firms)

*The paper aims at the identification and interpretation of specific coordination problems faced by project-based work organisations using the example of an interactive portal development for a leading Hungarian economic weakly. The study provides a brief overview of the most important theoretical approaches concerning project-based work organisations and the characteristics of the new or interactive media sector, which may act as a new model in the fast growing knowledge economy. The interactive portal development is typical of the so-called studio-model of project-based firms (PBF) characterised by the novel and singular character of the product or service and by the uncertain and fluid nature of the necessary knowledge and skills. The study calls attention to the project manager's key role in combining formal and tacit skills and in the coordination of actors' behaviour which is driven by different logics. In addition, the authors stress the importance of the client's key role in designing and developing the interactive media service.**

Keywords: *Interactive media, portal development, project-based firm (PBF), different types of knowledge, 'reflexive-discursive' coordination mechanisms, trust relations.*

JEL classifications: L86; M54; Z13

Introduction: The Theoretical and Policy-oriented Importance of Interactive Media Activities

There is a general consent in the academic community dealing with the shift in production paradigms, according to which, patterns of organising and controlling work in the new/learning economy are radically different in comparison with the old one. In the light of the recent analysis, we prefer to use the term 'the learning economy' instead of 'the new economy'. To make a distinction from the widely used term 'the knowledge economy' – which stresses the importance of creativity in relation to information or knowledge (Warhurst – Thompson, 2004:2) – we intend to stress the following dimensions of this concept which "... signals that the most important change is not the more intensive use

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of knowledge in the economy but rather that knowledge becomes obsolete more rapidly than before; therefore it is imperative that firms engage in organizational learning and that workers constantly attain new competences” (Nielsen – Lundvall 2003:3). In spite of the variations in key characteristics (e.g. ‘knowledge’ versus ‘learning’ economy), all authors without exception stress that we are witnessing a weakening or even abolition of hierarchical/stable structures of organising and controlling business activities. This is occurring alongside the growing importance of network/project based organising and coordinating work.

In reviewing an extremely rich and still fast growing literature related to our core topic of the interactive media, we were too confronted with similar research difficulties experienced in analysing characteristics of the labour process in creative industries. Warhurst and Thompson (2004:1) in relation to their exploratory work on the UK creative industries stressed: “...current data allows us only limited analysis of the projected and any actual transformation of work and organisation within the creative industries. Moreover, we demonstrate that there are also conceptual limitations in the existing frameworks of analysis of developments in these industries.” In addition, we have to note that in recent years intensive research initiatives have been launched by the European Union (IST Programs) to better understand the organisational culture and employment practices in firms and public institutions “using” various ICT-solutions in their everyday activities in an international perspective. (e.g. EMERGENCE, STILE, e-Gap etc. projects). However, relatively little attention has been devoted to the work of employees who are producing or creating various types of ICT-solutions (e.g. from a standard static web-pages to interactive/dynamic portal development) (Sandberg – Augustsson 2002). In the literature review, we identified the following mainstream views.

Some authors argue that in the new economy the “old spirit of capitalism” (reflected in the Weberian concept of hierarchy and bureaucracy) is replaced by the “new spirit of capitalism” (Boltanski – Chiapello, 1999). They aim to replace such building principles of organisation as hierarchy, stability and visibility of control, by such attributes of work as flexibility, horizontality/temporality and fluidity of relations. Others even question the possibility of a reconciliation of the “individual firm centred approach” with such new organising practices in “project-based firms” (PBF). “The importance of project-based modes of organising and controlling work in new industries, as well as their increasing use in more established sectors, have been seen by some as heralding the development of a new ‘logic of organising’ in market economies” (Whitley 2004:3). This is despite the fact that project focused methods of organising work are not genuinely new and this organising principle was widely used in such sectors as the construction industry and shipbuilding among others (Gernot 2002a). What seems to us as new, is that this form of organising and coordinating work is diffusing not only in such new economy sectors as interactive media and software development etc. but even in the old economy sectors (e.g. the automobile and clothing industries, etc.) too.

The core aim of our analysis is to better understand the labour process characteristics in the interactive media sub-sector, which represents a kind of “paradigm” or “model” sector for the future economy.

The Main Characteristics of the Interactive Media Sub Sector

The interactive media is a special sub-sector within the ICT industry, "Interactive media production is not an industry in the traditional sense of the word. It is a rather a sector comprising a number of actors, both newly started companies focussing exclusively on interactive media production, and older companies with a long tradition in other areas such as traditional media, advertising, graphics production, journalism and computer consulting" (Sandberg – Augustsson 2002:9). The rise and strengthening of the interactive media or new media started in the middle of the nineties. In this paper 'interactive media' "refers to companies developing interactive media products or services, integrating text, graphics, sound, vision and video (multimedia or multimodal products)" (Sandberg – Augustsson 2002:9).

The companies operating in the sector are mainly small or micro enterprises. According to the data of the Hungarian Central Statistical Office 95 % of the enterprises within the sub sector employ 1 – 9 persons. The distribution of firms with more than 50 employees is less than one percent (0.7 %). The average number of employees within the interactive media sub sector is 3.2 persons per firm. In the smallest segment this average is only 1.7 persons which show the dominance of the self-employed, sole proprietors and micro firms.

Table 1

The distribution of ICT service providers by company size, 2002

Size (number of employees)	Companies	%
50 –	59	0.7 %
20 – 49	128	1.3 %
10 – 19	245	3 %
1 – 9	7863	95 %
<i>Total</i>	8295	100 %

Source: Computer Suppliers and Services 2002. Central Statistical Office, 2003, p. 18.

The small size of enterprises in the interactive media sector is far from being a Hungarian peculiarity: the same size pattern can be observed globally. In this respect it is interesting to note that firms operating in this sector in developed countries, such as Sweden, employ fewer than 10 people on average (Sandberg – Augustsson 2002: 5).

Unfortunately there are no available statistical data on interactive media activities, therefore so called "proxy indicators" have to be used in order to gain an impression of the characteristics of this sub-sector or industry. In the official statistics interactive media activities are included in 'computer and related services' a category which includes both software development and other computer related services.

Table 2

**Change in some representative indicators of the computer
and related services division, 1999–2000**

	1999	2000	2001	2002
Number of enterprises	5636	6307	7176	8295
Gross output (billion HUF)	115	150	182	208
Gross domestic product (billion HUF)	9 473	11 506	14 850	16 744
Net revenue (million HUF)	244	262	365	467
Number of employees	18 010	20 190	24 055	26 536

Source: *Computer Suppliers and Services 2002*. Central Statistical Office, 2003, p. 17.

The data in Table 2 show that the economic performance of the sub-sector has grown rapidly over the last few years. Between 1999 and 2000 the growth rate of the sub-sector was 6 % greater than the average growth rate of the national economy.

As for the division of labour in the sub-sector there are some specific characteristics. A high level of specialisation of working tasks and related knowledge is typical; and interactive media products are usually created in short-term projects, as a result of cooperation among various companies. IT significantly supports the operation of networks of firms integrated in the project. Firms in the interactive media sector usually operate in large cities with universities or other tertiary education institutions.

Interactive media is a leading sub-sector within ICT on the basis of both its economic and employment performances, and represents the emblematic mode of knowledge-use in the New Economy. All these characteristics can be regarded as one of the new developmental paths for the Hungarian economy. It must be stressed though that the interactive media sub-sector faces several problems. For example, there are no stable patterns of widely accepted leadership styles and organisational forms; the forms and mechanisms of knowledge use and creation in the interactive media activities are not sufficiently systematised and integrated into the management methods, and the often “imitated” American management patterns cannot be adopted without problems into the institutional context of the Hungarian economy.

Our ambition is not to reject the old logic of organising work or to support without critical analysis the new one. In other words, we do not intend to question the validity of the “permanent forms” organising work and to replace them with “temporary forms” as an organisational principle. Rather, we wish to better understand the labour process characteristics of project-based work in such sub-sectors of ICT as interactive media.

The analytical framework we adopt is similar to the so-called “societal school” approach according to which ‘actors’ (e.g. designers’, project leader’s, clients’ etc.) status is socially constructed and shaped by the “organisational space” of a project, but at the same time this space is structured by the actions of the actors participating in the project, too (*Maurice 2000:20*). Emphasizing the interdependencies between organisational space and actors’ actions in relations to knowledge creation and sharing, we intend to demonstrate the key role of such regulators as trust relations in the PBF. The PBF

is characterised by the high degree of singularity of output and the extremely weak predictability and stability of the knowledge mobilised in the labour process of the project.

Main Categories Used in the Research: Forms, Actors and Regulations in Project-based Work

Instead of a shortage, there is an abundance of definitions related to project based forms of organising work. A common feature of the various attempts to define this type of organising and controlling work is the use of the following dimensions (Whitley 2004, Grabher 2002b):

1. Temporary nature of project or project based firm (PBF),
2. Stable, predictable or fluid, unpredictable character of skill (knowledge) use and mobilisation in project work,
3. Actors and the logics behind their actions represent a stable or unstable constellation of relations

Using these dimensions and reviewing the great variety of definitions, we adopted the following definitions on project work: a "... construction of temporary systems for accomplishing specific goals with diversely skilled people working together on complex tasks within a specific time period" or "... project based firms are economic organisations, that structure their activities around a number of relatively discrete projects that can be treated as separate organizational entities. These projects are temporary coordination systems in which diversely skilled specialists work together to accomplish complex and innovative tasks in a predetermined period of time" (Whitley 2004:3, 4). The next Table summarises the key features of the project-based firm (PBF):

Table 3

Typology of Project – Based Firms (PBF)

Reliability and Stability of Expertise and Knowledge	Singularity of Goals and Outputs	
	Low ("multi projects")	High ("single project firm")
Low	"Organisational" PBFs producing multiple outputs with varied and changeable skills. E.g. strategic consultancy, innovative business services. ("Agency model")	"Precarious" PBFs producing risky, unusual outputs with varied and changeable skills. E.g. new drugs, packaged software. ("Studio" model)
High	"Craft" PBFs producing multiple, similar outputs with standardised roles and skills. E.g. some business and professional services, Danish furniture and machinery firms, some I.T. consulting.	"Hollow" or "Contractual" PBFs producing single outputs and coordinating tasks through standardised roles and skills. E.g. complex construction, films.

Source: (Whitley 2004:25.)

Evaluating the various types of PBF, our case study represents the “precarious” version of the PBF or more precisely the so-called “studio” model instead of the “agency” one. Comparing the two highly singular forms of PBFs, according to *Whitley* (2004:6) – borrowing the terms used by *Grabher* (2002b) – in “... the “studio” model of PBF, where the firm is simply a vehicle for constructing a single product, and the production of advertising and marketing services where “agencies” employ a variety of skilled staff to work on series of projects for a variety of clients, often with the assistance of outside freelancers”.

In stressing the “temporality” of cooperation and the high complexity of the interactive media product analysed (the development of a dynamic and complex portal for the National Economic Weekly in Hungary), we intend to draw attention to the dynamic interactions between the practice of knowledge mobilisation and the logic of actors participating in the project. Before focusing on the relations between the knowledge use and the regulation of actors’ actions in relations to their roles, we briefly describe the relations between the key categories used in our analysis.

Table 4

Project Roles, Logics and Regulations of Actors Participating in the Portal Development of an Economic Weekly: Studio vs. Agency Model

Actors*	Logic of Actors’ Action*
Project Leader	Managerial logic
Project Manager	Service logic
Portal developers (professionals)	Technical logic
Forms of Regulation of Actors’ Actions (Behaviour)	
Agency model of PBF	“Category Driven Trust” relations
Studio model of PBF	Combination of “Category”** and “Individual/ Community Driven Trust” relations

* (*Grabher 2004*), *Op.cit.*: 108.

** (*Grabher, 2002b*), *Op.cit.*: 210.

Evaluating the roles, logics and regulations of the actors presented in the Table 4, we may say that professionals or technical experts are responsible for the creation of the project output, project managers are responsible for working for/with the clients – in the studio model almost permanently; in the case of the agency model in a looser form of cooperation – and finally, the project leader is responsible for keeping track of the project’s progress (“not to miss the deadline”) and keeping within the original budget. In other words professionals and project managers together are responsible for professional success and the project leader is responsible for the business success.

In the case of the “agency” modelled project, actors or participants listed in Table 2 are working together in series of projects and have enough “social time” to develop not only individual but collective routines which may help not only with the process of knowledge formalisation but also to develop tested and legitimated managerial control.

In this model of project work, the practice of knowledge use, development and the relations among the key actors (e.g. professional, project leader, etc.) are mainly shaped by the so-called "category driven trust", when "... actors can deal with one another more as roles than as individuals. Expectations consequently are more standardised and stable and defined more in terms of tasks than personalities: «We trust engineers because we trust engineering and believe that engineers are trained to apply valid principles of engineering»" (Grabher 2002b: 210). In the "studio" model of PBF (for example the portal development project presented in this paper) both the business and professional success of the project require not only the use of category driven trust but its combination with individual or community driven trust. In addition, in the context of a new sector such as ICT (and the interactive media is a part of this sector) in which network-based cooperation is characterised by the dominance of weak ties in the whole economy (Kováts 2004), the individual and community driven trust fills a "gap" in the regulatory mechanisms necessary for the smooth functioning of the PBF. This type of individual/community driven trust is the least visible tool for integrating project actors/participants, but is also a factor of social control that makes its effect felt in the long run. This type of trust has at least three dimensions: one is technical competence or knowledge; the second is so-called moral competence, i.e. the assumption of the reciprocity of responsibility for a "community" of project participants (e.g. mutual tolerance for one another's values and interests); and finally the third component is the dimension of "social time" necessary for a community member to test (approve or punish) the collective norms accepted in the everyday action of project participants. This emphasises the importance of the time-dimension of trust creation, and some authors are calling attention to the "learning" aspect of trust relations, using the term "studied trust" (Sabel 1993). It is worth noting, that alongside the increasing importance of technical competence in the PBF, aimed at mobilising unpredictable and tacit skills, securing the moral competence of participants appears to be more difficult task (Makó - Simonyi 1992). However, it is precisely trust based on moral competence that can forge cooperation. This can create stability by reducing mutual losses caused by sharp competition and dissipate tensions arising from the diversity of interests and social relations of actors cooperating temporarily. In the next section, using the case of PBF cooperation on portal development, we examine decisive roles of trust relations in regulating cooperation in highly singular and uncertain project contexts.

A High Singularity Project-based Task: the Case of Portal Development

Roles, Logics and Expectations of the Actors

The project was launched in the second half of 2001. One of the leading national Hungarian economic weeklies, EW, replaced the whole management of its subsidiary, EW Online Co., which had been established to publish the Weekly on-line. The new management was put in charge of developing a new Internet portal. They invited bidders to participate in two tenders; one tender was aimed at the design, the other at the technical development of the portal.

Hungarian and foreign companies were invited for both tenders, with the future winning prime contractor, Kowalsky Co. among them. Kowalsky won the tender for the

design of the portal. Kowalsky also managed to be involved in the selection process of the winning bid for the technical development system in an advisory capacity, before the final decision. In the course of the advisory work, Kowalsky became acquainted with MZX Ltd., and suggested that MZX should be awarded the winning contract. EW decided to award both contracts (both the design and the technical development of the portal) to Kowalsky, as the prime contractor. Later, the prime contractor subcontracted the technical development related task of the project to MZX.

The project was carried out in two main stages. During the first stage the client's requirements and the necessary tasks were specified, the contract between the client (EW) and the prime contractor (Kowalsky) was signed and the project organisation was set up. The main steps of this stage of the project were the following:

1. The management of EW decides to dismiss and replace the management of EW Online Co., responsible for the on-line publication of the weekly.
2. The new management issues two invitational tenders: one for the design of the portal, and one for the necessary technical development.
3. The description of the tasks in the tender for technical development turns out to be inaccurate. Kowalsky suggests an advisory process accompanied by a technological requirement assessment analysis.
4. EW Online Co. announces the first tender for the necessary technical development invalid. They commission Kowalsky as an advisor, and Kowalsky involves an external collaborator, I.G. in the work. The advisory process takes two weeks to complete. During these two weeks project requirements are specified, and bidders present the technologies they are offering. EW conducts negotiations with the bidders directly as well as through the advisors. By the end of the process the technological demands of Kowalsky multiply compared to the original concept. Kowalsky suggests that the final decision be made in favour of MZX Ltd., whom they recommended initially.
5. EW concludes a contract with Kowalsky, the prime contractor, who then subcontract the tasks related to the technical development of the portal to MZX Ltd. Then, the implementation of the project commences.

The project organisation was set up and administrative control was defined following the logic of the previous experience of Kowalsky. Two *project leaders* participated in the project; one from EW and another from Kowalsky. Within both firms *project managers* had to coordinate the project. In the EW an IT-expert was asked to supervise the technical aspects of the project and the IT-experts of MZX were responsible for the technical development.

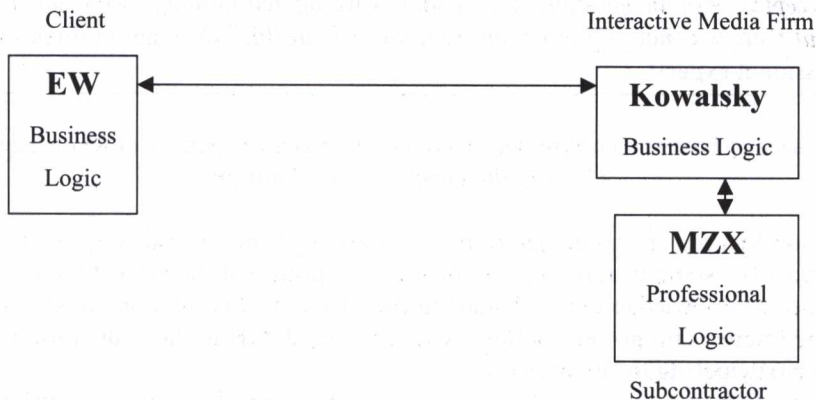
“The classical cooperation should have been organised the way that we write the specification; the developer gets it and we just have to manage the developing process. Let us say we are the “translator” between the client and the developer.” (Managing director, Kowalsky – project leader)

In Grabher's terminology, used in the earlier section, the project organisation followed the logic of the “studio” model of project-based firms (PBF), which can be characterised by the high singularity of the project. This means the PBF is a “simple legal vehicle or

'administrative convenience' for constructing a single product" (Whitley 2004:7). The individual partners joined the project with different knowledge, skills and expertise. Different and mainly non-coded professional competences were required to perform the individual sub-tasks. Positions taken by the partners in the project organisation were also different. The participants contributed not only different skill sources mobilized in the project but also followed different types of logics in carrying out the different tasks. In this sense Grabher (2002a:107) distinguished three different logics. The project leaders were responsible for the business success, e.g. keeping the deadlines and the budget within the originally accepted terms. They embodied the *business* or *managerial* logic. Project managers' tasks were to communicate between the client and the other participants, that is to 'translate' the client's requirements into work tasks and coordinate the work of professionals participating in the portal development. This special type of activity reflected in problem solving can be categorised as *service* logic. The third type of logic is *professional*, which governs the tasks related to IT-service activities in the Internet-portal development. The following diagram shows the actors and the logics they represent in the first stage of project work.

Figure 1

Actors, Relations and Dominant Logics, First Stage of the Project



Relations

— formal relations

It is worth noting the importance of the project managers who have to be able to integrate the different logics guiding the activities of the clients, professionals and project leaders. This is a kind of 'knowledge broker' role between the various actors.

From the beginning the participants had various expectations and interests concerning the project. EW was not able to oversee the technical side of the portal development. Its ambition was to have a good working new portal within the accepted time limits of the project. Kowalsky was interested in having a reference – through the portal development – from the highly prestigious economic weekly. We must mention here that the main contractor, Kowalsky, did not possess the necessary specific

skill resources for this kind of development task but the management believed that they could control the development process by ensuring the necessary knowledge via outsourcing. The decision to select MXZ Ltd. as a partner in the technical development of a highly complex and dynamic portal was based on the reputational network of interactive media firms operating in the new media market of the Hungarian capital Kowalsky Co. anticipated that it could trust this partner to keep to the deadlines. MZX Ltd. was interested in both having a good reference through an ambitious project and being forced to finish the development of its new portal frame-system. The project did, however, not work according to these guidelines.

“MZX was a new contact, it seemed to be reliable both in professional and personal aspects. The managing director has a very charismatic personality and he presented the way they would work on the project and that was very convincing. We had some information about them and the feedback was quite good. Finally we decided to take the risk.” (Managing director, Kowalsky – project leader)

“We put the technology into the project which Kowalsky did not possess. They provided the management. (...) At that time we believed that the technology was actually operational. They accepted without questions the deadlines we offered although we could not keep them but there was not any intention from our side in this.” (Managing director, MZX – professional expert)

Source of Business Failure: Discrepancies between the Nature of Knowledge Use and the Forms of Coordination

This section focuses on the description and analysis of the second stage of the project. We diagnose the structural reasons of the business failure of the project focusing on the importance of knowledge use and sharing practices. In this relation we stress the key role of the interest and power relations which emerged during the cooperation between partners participating in the project.

Chronologically, in the first weeks – after setting up the project organisation – it became obvious that the outsourcing partner MZX was not able to meet the original deadlines of the project. Delays became permanent. In the meantime MZX changed their employment structure; four new IT-experts were hired and the old ones were replaced. In order to quicker solve the problems generated by the lack of necessary knowledge, Kowalsky had to lend one of its own IT developers to MZX. The project, which was originally planned to be completed in 3 months, was finished in 6 months and EW, enforcing its contractual rights, obliged Kowalsky to a pay penalty for the delay. Kowalsky devolved this obligation onto MZX.

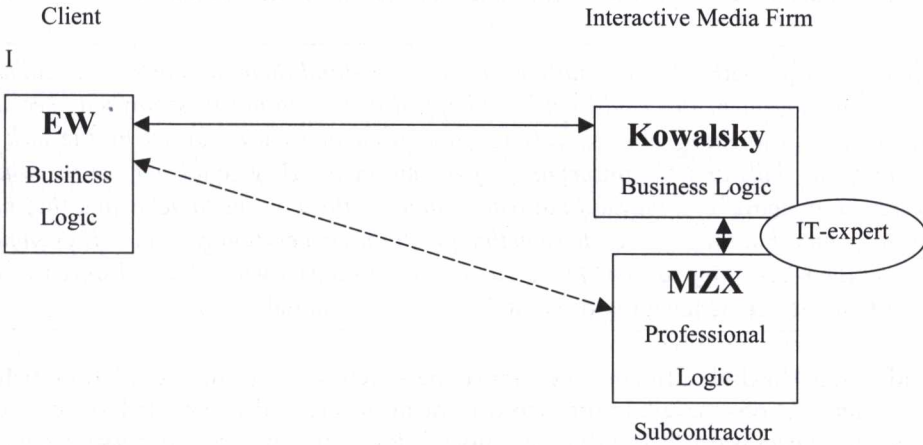
As we discussed before, cooperation among partners was developed within a formally structured hierarchical project organisation. Kowalsky, who maintained the direct contact with the client, was in charge of managing the project (See Figure 1). From the beginning, the communication between the participants was organised according to this stylised diagram. The general manager of EW, as the representative of the client,

was responsible for the final implementation of the project and he communicated with the owner of the publishing house. The publishing house managed the budget; here EW Online had no decision-making power. From EW's side, two contact employees were assigned for the portal development: a project manager and a technical contact responsible for IT. They were responsible to the management of EW Online, while during the project they communicated with Kowalsky. According to the original plan, communication between the participating partners was organised by Kowalsky. Communication took place both electronically and personally. The latter was facilitated by the fact that the developers' team of MZX used the infrastructure of Kowalsky Co.; i.e. their employees effectively moved into Kowalsky's premises during the project.

Originally, the partners agreed that the communication should be documented: memos had to be written about meetings and the project manager of Kowalsky had to deliver weekly status reports. However, during the implementation phase, the actors failed to maintain the originally designated frame of communication. Instead, an informal communication channel emerged between EW's IT specialist and the manager of MZX. The primary aim of this informal regulation was to solve the interim technological problems, but later the channel developed completely outside the control of the main contractor Kowalsky, who was formally responsible for the management of the whole project (See Figure 2).

Figure 2

Actors, Relations and Dominant Logics, Second Stage of Project Work



Relations

— formal relations
 --- informal relations

Kowalsky as the main contractor was responsible for managing the cooperation between the participating parties. The technical-managerial and strategic problems, which can be connected with the business failure of the project were mainly related to the high degree of unpredictability of knowledge use and to the various motivations

and ambitions of the project partners. Three main difficulties surfaced during the project management. Firstly the project manager dedicated to the project by Kowalsky did not have the necessary competence; she could not integrate the different, largely tacit skills of the partners. Thus the role of the “knowledge broker”, which is indispensable for securing the smooth coordination of cooperation, was missing. She could not help to integrate the different skills and facilitate the sharing of the largely tacit knowledge of the participants. Due to a lack of previous collaboration between the partners, the well-established norms and sanction systems did not function, and this did not help the integration of the different interests and were unable to create a lasting power balance among the project participants.

It is important to note once again the complex and fluid nature of knowledge and skills required to carry out successfully this extremely complex and dynamic portal development. The project participants had enormous difficulties in producing the necessary skill-mix, both the technical-professional and social skills necessary for the smooth development work. The other difficulties were related to organising and controlling knowledge creation and use. The main contractor, Kowalsky, did not fully recognise the novelty, uncertainty and fluid character of the skills that were necessary to the development of this highly singular product. These problems were realised just after the project started and as a part of a “rescue operation”, the main contractor leased its own IT developer to MZX since MZX was unable to cope with the emerging technical difficulties. The third problem occurred when the project leaders and project managers failed to create new regulatory mechanisms and to revise the original project agreement to take into account the partners’ different interests in the new situation.

“They trusted us without any conditions. I can understand them although if we had had effective management this could not have happened. You do not trust anybody because you cannot do anything else. Kowalsky’s blind trust in us was caused by the lack of technological skills and the uncertainty of management. They could not see the whole process “from above” and they did not realise after the third or fourth delay that they had to change and that they have to do something with the cooperation generally. They should have let the whole thing to come to a break in order to clarify what changed since we had started the project.” (Managing director, MZX – professional expert)

In addition to the difficulties outlined above there were strategic miscalculations behind the partners’ actions as well. In order to win the project Kowalsky decided to secure core competences necessary to the dynamic portal development through outsourcing, but without building up the necessary sophisticated control mechanisms. They trusted their partner without previous common work experience. The so-called category-driven trust did not function sufficiently well as an appropriate regulatory mechanism of partners’ activities in this “studio-model” project cooperation. In order to carry out this unique project successfully the category-driven and the individual/community-driven trust should have been combined and the coordination mechanisms should have been shaped and reshaped during the process of the portal development. Cooperating partners did not have enough “social time” to test the collective acceptance of norms regulating the behaviour of partners. Apart from technical and moral competences, social time

is a necessary source of individual-community driven trust relations. To compensate for the lack of this type of trust, it would be necessary for the cooperating partners to continuously revise the originally accepted division of work, including the forms of control and coordination. In this relation, we must draw attention to the important role of the so-called "reflexive-discursive" form of coordination. The key element of this form of coordination is the "social discourse among the various interdependent actors of the system. When discursive coordination is applied, economic activities are coordinated through continuous and rich communication and mutual adjustment" (Schienstock 2003:15). In the case presented in this paper the project managers failed to combine the "traditional" (hierarchical) form of control with the discursive one, a combination which could have ensured an interactive learning process among the actors cooperating in the project work of the portal development.

Concluding Observations

In recent years we have witnessed a growing interest within the academic community in better understanding, evaluating and locating the development of various forms of project organisations in both new economy (e.g. interactive media, advertisement, film making, software development etc.) and old economy sectors (e.g. clothing, automobile industry etc.). It is interesting to note that in addition to the results from organisational science and industrial sociology, geography also produces internationally outstanding work. In spite of these innovative efforts to better understand the changes taking place in the morphology of management and organisation in these activity fields, our knowledge is still limited, especially in the emerging market economies of the New Member States. We followed the analytic perspective of the so-called "societal school", after a brief presentation of the main views on the project based work (project based firms) and the key categories used in our analysis which we adopted from authors representing various disciplines (e.g. regional studies, management science, sociology of organisation) In addition we demonstrated the important role of various types of trust relations both in the process of knowledge creation/sharing and the coordination of relations between the actors of the project work studied.

At this stage of analysis, we intend to focus on some features of organisation and regulation of project-based work aimed at developing a highly singular (i.e. an extremely complex and dynamic portal of a national economic weekly = E.W.) interactive product. The following lessons should be drawn from the case study. During the design and finalisation of the contract between the main contractor (Kowalsky Co.) and EW, Kowalsky, who played the role of "project leader", focused almost exclusively on the anticipated "benchmark" effect of such "novel" output as the development of an extremely complex and dynamic portal development. At that time (2001), this type of portal development was unique even in Hungary. The partners (Kowalski Co., MZX Ltd. and E.W.) – without exception – underestimated the core role of the use and sharing of non-standardised knowledge during the project. The "project manager" – delegated by the main contractor, was not able to appropriately translate both the requirements of the "clients" (E.W.) to the "professionals" and vice-versa. The situation was further aggravated by fact that key tasks were outsourced from Kowalsky Co. to MZX Ltd. based on an assumption of tacit knowledge. Due to the non-coded nature of

knowledge, the project manager was not equipped with the appropriate tools for monitoring (e.g. setting up milestones to test the progress of the project and intervening when necessary, etc.) and supervising this activity. The other miscalculation was an exclusive reliance on the reputational network in the main contractor's decision to outsource the technical development of the portal to the MZX Ltd. A reputational network based on so-called "category driven trust" functions quite well in project based work organised on the principles of the "agency model" but not in our "studio model" case. In this type of project work, it is necessary to combine the "category driven" trust regulation of actors' behaviour with "individual/community driven trust". In using these types of trust relations during the project work, alongside the adopted hierarchical type of coordination it would be necessary to complement it with the so-called "reflexive-discursive" trust (i.e. that is permanent interactions and mutual adjustment to solve instantly problems which arise during the project). These strategic miscalculations resulted in a business failure of the project for the main contractor. However, it is worth noting that in a longer-term perspective, this business failure (i.e. missing the deadline, paying a penalty to the client) produced a professional success. The firms participating in this "studio-type" project cooperation underwent a social learning process too, which opened a new path of development for them in the field of producing complex and interactive portal solutions.

References

- Boltanski, L. – Chiapello, E. (1999): *Le Nouvelle Esprit du Capitalism*. Gallimard, Paris.
- Crouch, C. (2004): *Skill Formation Systems*. In: Ackroyd (ed.): *The Oxford Handbook of Work and Organization*. (First proof.) Oxford University, Oxford, 95–114.
- Csizmadia, Péter – Makó, Csaba (2004): *Operational Problems of Economic Networks in the New Media Sector (Hungary)*. In: Ishikawa A. (ed.): *The Formation of Networking Cooperation Among Small Enterprises in Central Europe*. The Sasakawa Central European Fund (The Sasakawa Peace Foundation), Tokyo, 131–141.
- Grabher, G. (2004): *Learning in Projects, Remembering in Networks: (Communitarity, Sociality, and Connectivity in Project Ecologies)*. *European Urban and Regional Studies*, 11 (2), 103–123.
- Grabher, G. (2002a): *The Project Ecology of Advertising: Task, Talents and Teams*. *Regional Studies*, 36.3., 245–262.
- Grabher, G. (2002b): *Cool Projects, Boring Institutions: Temporary Collaboration in Social Context*. *Regional Studies*, 36.2., 208–214.
- Kováts, Gergely (2004): *Case Study on Software Development Network*. Institute of Sociology – Hungarian Academy of Sciences, Budapest.
- KSH (2003): *A számítástechnikai szolgáltatók és szolgáltatások 2002 (Computer Suppliers and Services 2002)*. Budapest, 20–23.
- KSH (2003): *Magyarország statisztikai évkönyve 2002 (Statistical Yearbook of Hungary 2002)*. Budapest.
- Makó, Csaba – Simonyi, Ágnes (1992): *Social Spaces and Acting Society*. In: Szell, Gy. (ed.): *Labour Relations in Transition in Eastern Europe*. Walter de Gruyter, Berlin – New York, 70.
- Maurice, M. (2000): *The Paradoxes of Societal Analysis*. In: Maurice, M. – Sorge, A. (eds.): *Embedding Organizations, (Societal Analysis of Actors, Organizations and Socio-Economic Context)*. John Benjamins Publishing Company, Amsterdam – Philadelphia, 20.
- Nielson, P. – Lundwall, B.-A. (2003): *Innovation, Learning Organizations and Industrial Relations*. DRUID Working Paper, No. 03-07. (http://www.druid.dk/wp/pdf_files/03-07.pdf)
- Sabel, Ch. F. (1993): *Studied Trust: Building New Form of Cooperation in an Economy*. *Human Relations*, (46), no 9., 1133–1170

- Sandberg, A. – Agustsson, F. (2002): *In-house Production, Ordering and Subcontracting of Interactive Media Among Swedish Firms and Government Agencies*. National Institute for Working Life, Stockholm.
- Schienstock, G. (2003): *From path dependency to path creation: A new challenge to the systems of innovation approach*. In: Schienstock (ed.): *Embracing the Knowledge Economy*. Edward Elgar, Cheltenham – Northampton, 3–27.
- Warhurst, Ch. – Thompson, P. (2004): *Assumptions and Evidence: Work and Organisation in the UK Creative Industries*. Scottish Centre for Employment Research – University of Strathclyde, Glasgow.
- Whitley, R. (2004): *Project-based Firms: New organisational form or variations on a theme*. University of Manchester, Manchester – Erasmus University, Rotterdam, 26.