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KNOWLEDGE ASYMMETRY IN SHORT-TERM EMPLOYMENT RELATIONSHIPS: OPPORTUNISM INHIBITORS IN THE HIGHLY-SKILLED SECTOR OF IT MARKETPLACES

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Abstract

The paper discusses the specific conditions under which the likelihood of contractual hazards is reduced and organizational equilibrium is ensured between the two parties of a contingent employment relationship: the highly-skilled contractor and his/her client-firm. In particular, it identifies the institutional norms, technical affordances, legal jurisdictions and social formations, as the conditions that appear to curb the potential of opportunistic behavior on behalf of the contractor and operate as stabilizers of the asymmetrical employment relationship.

Keywords: *contractual hazards, opportunism, knowledge workers, informal networks, reputation*

1 INTRODUCTION

In today's post-modern societies, labour loses its collective identity and becomes increasingly individualized and contingent in many of its manifestations. "The new social and economic organization aims at decentralizing management, individualizing work and customizing markets, segmenting work and fragmenting society" (Castells, 2000, p.5). Individuals and organizations can be imagined as nodes tied together in short-lived or enduring relationships or networks, which are brought together or kept apart according to the prerequisites of emergent business projects. Stable and salaried employment declines, while contingent work arrangements proliferate across the globe. Professional services and highly skilled labor instead of being developed and provided inside the walls of the firm, tend to become more and more often an object of on-the-spot economic transactions between various market players (Barley and Kunda, 2004; Pollock and Williams, 2007).

It is worth noticing that although highly-individualized forms of employee involvement and time-limited contracts are not new, -they have always constituted standard hiring practices of low-skilled workers-, it is only the last few years that the latter have started governing the organization of highly-skilled or professional labor force. Interestingly enough, there are certain theoretical oppositions with reference to the feasibility and efficiency of contracting practices for knowledge workers or professionals (Goldthorpe, 1998; Coase, 1937; Williamson, 1975; 1979). Professional or highly-skilled work is not subject to the managerial rationalization and control and as a result, it allows margins for opportunism exertion on behalf of the contractor. The asymmetry of knowledge between the two parties results to asymmetry of power which can be manifested in various and unpredictable ways. The question which arises is how the possibility of opportunism exertion on behalf of the highly-skilled contractor is curbed? How the notion of control and supervision is revised under the scope of ephemeral employment relationships?

Aim of the current paper is to identify the activation of those mechanisms which account for the opportunistic inclinations evasion and the rehabilitation of the balance between the highly-skilled IT and his/her hiring organization. In particular, focusing upon the working practices of highly-skilled IT contractors, it attempts to investigate how the aforementioned relationship is enacted in practice, overcoming the managers' inability to control and supervise highly-skilled contractors.

The investigation is based on the analysis of qualitative data gathered from thirty interviews with IT professionals working as independent contractors in Greece. Highly-skilled IT contractors are always on the move, develop ephemeral types of relationships with heterogeneous groups of people, and are continuously called to perform their job in dissimilar organizational settings they are not acquainted with. A large part of the communication and interaction with their client-firms may take place in a virtual mode, while the actual performance of the task can be done remotely or in-house according to the special needs of the project.

Analysis of the findings suggests that although the knowledge work of IT contractors is not subject to easy monitoring and immediate control, there are various conditions and mechanisms which alleviate the potential of opportunism exertion and counterbalance the asymmetry of knowledge and power that traditionally resides in the employment relationship.

Institutional norms, technical affordances, legal jurisdictions and social formations appear to account for the balancing of the asymmetrical employment relationship and safeguard against the potential of opportunistic behaviour.

The structure of the paper is as follows: the next section briefly overviews the trends and controversies which delineate short-term employment relationships, section three introduces the theoretical underpinnings of the analytical approach of the study, section four presents the research methodology, section five presents the analysis of the empirical findings and the last section concludes the paper.

2 THE GOVERNANCE OF SHORT-TERM CONTRACTUAL RELATIONSHIPS: TRENDS AND CONTROVERSIES

Statistical data about part-time, temporary and self-employed workers (OECD, Carnoy, 2000), support the claim that there is a distinguishable trend in current workplace that dictates the declining of the standard employment patterns in favor of more flexible work arrangements. Work tends to be organized as such (Carnoy, 2000): a) the working time schedule is not anymore as fixed as it used to be, 35-40 hours a week is not anymore the case of the majority of workers, b) the location of the worker is not fixed within the narrow socio-spatial frames of old times. An increasing proportion of workers perform their tasks at home, on the move or at another organization that have under their direct responsibility, c) current work patterns are rather task-oriented or project-based. The work has been divided into its simplest components and has been organized into modules consisted of sub-tasks that can be easily detached from particular contexts and be assigned to people with small or no particular acquaintance with specific organizations (Kallinikos 2003), d) The social contract between the employee and the employer is no longer based on commitment by the employer to worker's well-defined rights, standardized levels of compensation, social benefits and predictable career paths. The employee is condemned to live in a constant uncertainty, being always willing and available to offer the best quality of his services, no matter if that implies extra hours of work.

Of particular interest is the fact that the aforementioned type of work organization (particularly, subcontracting and consulting) becomes more and more associated to the employment relationship that impinges upon professional work (Castells 2000; Matusik and Hill 1998; Laubacher and Malone 1997; Tilly and Tilly, 1998;). In knowledge-intensive sectors of the economy, such as high technology and entertainment, highly-skilled workers operate outside the framework of traditional employment arrangements, as independent contractors, establishing ongoing relationships with a number of different firms (Laubacher and Malone, 1997). "Stable employment is declining and contingent work is on the rise even among professionals and managers" (Barley 1996). Both organizations and high skilled employees seem to display a significant preference towards this kind of non-standard working arrangements each one for one's own reasons.

On the one hand, enterprises seem to desire and favor the use of contractors in order to decrease fixed costs and increase organizational flexibility. In that way they attempt to maximize their ability to

respond successfully and adapt quickly to the shifting demands of the market that current competitive forces impose (Abraham and Taylor, 1996; Davis-Blake and Uzzi, 1993; Matusik and Hill, 1998). On the other hand, contingent workers and particular technical experts and professionals seem to prefer the possibility of flexibility, accumulation of general skills, experience, variety and wealth which is associated with the participation in diverse and simultaneous projects and tasks (Sullivan, 1999; Lawler and Finegold, 2000; Marler et al., 2002). Other scholars observed that technology contract workers liked working outside organizational boundaries because of the flexibility provided and the ability to keep themselves away from organizational politics, incompetence and inequities (Kunda et al., 2002). It is not by chance that technical experts and professionals are considered to be the most rapidly growing segment of the contingent staffing industry (Lawler and Finegold, 2000; Zuboff and Maxmin 2002; Castells 2000).

Nevertheless, in contrast to the testified employment trends and perceived benefits, there is a significant body of the literature, rooted in transaction costs and agency theory, that challenges the feasibility and overall efficiency of contracting highly-skilled employees or professionals (Goldthrope, 1998; Coase, 1937; Williamson, 1975; 1979). The nature of the job and the power associated with each job category make a lot of difference in terms of interpretation and understanding of the employment relationship.

Highly-skilled or knowledge workers are an exceptional category of employees since contrary to the general notion of traditional salaried employee, it is them that possess and own the means of production. In this sense, they are much more reinforced than their co-employees since the management team is not always in position to intervene and judge their work. "Professions are occupations with special power and prestige...based on special competence in esoteric bodies of knowledge linked to central needs and values of the social system" (Larson 1977). The client-firm hires a knowledge worker to act in the organization's interest under circumstances where control and supervision are rather difficult to apply (Goldthrope, 1998).

Taking the above into consideration, the paper opts to identify the conditions that allow contingent employment relationships to be sustained and spread in the highly-skilled sector of IT marketplaces. If we take for granted the inability of management to exert control over the execution of professional IT work, what are the alternative mechanisms which safeguard for the balance of the contingent relationship?

3 INHIBITORS OF THE POTENTIAL OF OPPORTUNISM EXERTION

To frame our conceptual problem, we draw upon Sharma's analysis of the knowledge asymmetry occurring between the professional agent and his/her employing organization.

In particular, Sharma's analytical model (1997) presents specific conditions under which the likelihood of contractual hazards is reduced. It identifies four conditions/factors that curb opportunistic behavior and operate as stabilizers of the principal-agent relationship: 1) self-control, 2) community control, 3) bureaucratic control and 4) client control.

1) self-control and identity

Sharma (1997) questions the assumption of self-interest and remarks that professional agents "are driven by a complexity of motives that include not only self-preservation but also pride in the craft and a calling to serve the public" (Sharma, 1997, p. 775).

More precisely, people attached to the IS profession seem to have some extreme differences in comparison with other occupational groups (Scarborough, 1999; Couger *et al.*, 1979). A survey on the career progression of IS professionals reports that IS jobs that are characterized by creativity and challenge, that allow individuals to make their own technical decisions, that are capable of providing "a sense of accomplishment and that allow one to do a variety of tasks and to see them through to the completion with reasonable autonomy, have a strong appeal for high achievers" (Smits *et al.*, 1993, p.

114). Along with the aforementioned findings, Barley and Kunda (2001) commenting on IT contractors' behavior, note that whenever the latter seek or decide to accept a contract, "the identity of the organization in which the project is located, is generally secondary to personal and professional considerations, ranging from hourly rates to opportunities for learning new skills, to the intrinsic challenge of work itself" (Barley and Kunda, 2001, p. 79).

IT experts are also said to be characterized by a high need for feedback, recognition and autonomy (Scarborough, 1999). It is important for them to know that their efforts are vital in achieving outcomes and that their ideas and actions are instrumental in performing the overall job well. Due to the fact that managers lack the specialized knowledge that would allow them to give IT subordinates directions about how to perform their job, it is extremely important for employees to have the autonomy and freedom to act as they wish. Along the same lines, other studies on IT contractors' behavior and working experience (Kunda *et al.*, 2002) reveal that there is a significant amount of perceived benefits that induce IT experts to enter the contingent labor market. The sense of autonomy felt at work, the opportunity to develop new marketable skills and experience diverse working environments, the increased control over one's working time and work-life balance, high pay rates, and the possibility of escaping from the politics and inequalities of organizational life (Kunda *et al.*, 2002) make contracting seem appealing to IT experts.

2) community control

Another restraint on a potential opportunistic behavior could be the acknowledgement that any devious and deceitful course of action undertaken by the professional agent might bring about incorrigible damage in his/her reputation within the broader market and the professional community. "Unless an agent does not intend to remain in business beyond one transaction, or unless the principal has a short memory or is of a forgiving kind, concern about reputation and potential for future business inhibits opportunistic behavior" (Sharma, 1997, p. 778).

IT engineering as an occupation is characterized by many heterogeneous conditions. Although it is based on technical expertise, IT engineering cannot be considered as a typical "profession", since its members could not "claim a distinctive and valued social identity, share a common perspective toward the mission and the practices of the occupation, and take part in a sort of interactive fellowship that transcends the work place (Van Maanen and Barley, 1984). Although world-wide, there are IT associations which prescribe a Code of Conduct and aim at setting out the professional standards for this occupation, these associations do not seem to possess the universality of power and control that professional associations traditionally enjoy.

3) bureaucratic control

Apart from individual motives and concerns about reputation within the market and peer communities, "restraints on opportunistic inclinations also arise from the nature of the internal structure and systems" of the client-firm (Sharma, 1997, p. 781). Drawing upon the notion of "administrative elite", initially introduced by Freidson (1986), Sharma (1997) assumes that the professional agent will behave less opportunistically, as long as the client-firm hires expert-superordinate supervisors. Alongside this argument, Eisenhardt (1989) states that the board of directors might be used as a monitoring device which ensures the alignment of the stockholders' interests with the knowledge workers' interests.

As already mentioned before, due to the nature of IT engineering work, the employing organization is not usually in a position to estimate and evaluate the specialized contractor's work. The possibility of monitoring and the ease of control seem to be rather dependent upon the type of work project outsourced.

4) client control

Whenever the client-firm is "unable even to design agreements in which agents' compensation is based on the outcome of efforts" (Sharma, 1997, p. 783), it has to find alternative ways to curbe the problems arising from knowledge asymmetries. Sharma (1997) argues that one might identify two possible strategic choices that would protect the firm from an agent's opportunism: a) the client-firm could

fragment the project into very small sub-projects and assign each one of them to independent contractors or b) the client-firm could hire external specialists who are quite knowledgeable about the contractors' work and could exert significant control over it. This is how the firm attempts to internalize specialized knowledge and lessen its vulnerability to agents' opportunism. Nevertheless, such a utilization of these "external specialists" would raise the monitoring costs of the contract and might possibly trigger a sequence of questions regarding their utility to the overall efficiency of the project.

In the IT industry, the practice of "project management" (i.e. definition of "milestones" and well-specified "deliverables") seems to be widespread among organizations which have frequent interactions with IT contractors. Moreover, the terms of the contract regarding how the contractor will be paid might possibly be used as a medium to curve the contractor's opportunistic inclinations. Mayer and Nickerson (2005, p. 229) argue that if the contract compensates the contractor "with a predetermined fee in exchange for his or her services, the contractor will have incentives to get the job done as quickly and inexpensively as possible, so as to increase their profit margin. If the contractor is compensated with a cost-plus or hourly wage contract, then the incentives to shrink might be weakened.

In the following sections, the paper presents the extent to which the aforementioned conditions/assumptions are met or redefined through the lenses of highly-skilled IT contractor's working experience.

4 RESEARCH METHODOLOGY

The analysis is based on data gathered through thirty interviews with IT highly-skilled workers or professionals working as independent contractors in Greece. Eight out of the thirty interviewees, were general IT consultants and managers. Five of the interviewees had highly specialized skills in a very particular technology or commercial off-the-shelf software package such as those manufactured by SAP (www.sap.com). The remaining 17 interviewees were specialized in a wider range of technologies. All of the interviewees had university degrees in computer science or related subjects and all had at least five years work experience. The interviews (semi-structured, "ethnographic interviews", Kunda et al, 2002) were conducted in the period between autumn 2005 and autumn 2007 and each of them lasted from one hour and a half to two hours. Some informants have been interviewed twice, whenever the initial transcription of their sayings rendered necessary a second round of interview in order certain issues to be further clarified and explained.

Given that there is no an established classification of IT individuals who work as free-lancers, the selection of informants was not a straight-forward process (Voutsina et al., 2007). Informants were selected from a list of the Federation of Greek IS enterprises and IS personnel, following the logic of a snowball sampling, i.e., respondents were asked to provide details of others they deemed interesting for the study (Evans et al. 2004; Faugier and Sargeant, 1997).

The respondents were asked to describe their lived work experiences stemming from their engagement to short-term employment relationships. Attention was paid in the practicalities and risks that underlie the contingent relationship between the IT contractor and his/her client-firm. Focusing upon the way IT contractors interpret and appropriate this employment relationship, the interviews corpus aimed at identifying the conditions which curb the potential of opportunistic behaviour and allow the contingent employment relationship to be sustained and spread.

5 ANALYSIS OF FINDINGS

5.1 Self-control

Consistent to the findings of previous studies (Kunda et al, 2002, Barley and Kunda, 2004) many of the interviewees –especially the older ones who had worked for years in large corporations- noted that their choice to become contractors was a deliberate one. It was a conscious decision that would allow them

to escape from the irrationalities of the corporate life. Pursuing challenging projects, enjoying reasonable autonomy in the way work is performed, gaining control over their working time and finding a meaning in the work itself were listed as primary considerations for highly-skilled Greek IT contractors.

Their decision to enter the contracting labour force was also reinforced by the specific economic conditions occurring in the Greek IS sector in 2000. Considerably big amounts of money were diffused in the Greek economy by the European Union in an attempt to promote IT innovation in small and medium-sized companies. The demand for IS personnel increased radically, opportunities for challenging work raised and fees for highly-skilled IT work skyrocketed. Many small and medium sized IT companies have been formed and started competing against big names of the IT industry (i.e. IBM). Yet, the massive introduction of big IT companies in the Athens Stock Exchange and the radical increase of their share and capital turned upside down the Greek IT sector. Big IT companies bought many of the small and medium sized IT companies. A series of mergers and acquisitions took place without any careful planning or thorough analysis of the upcoming changes. Further to the above, the sudden fall of stock prices in the Athens Stock Exchange resulted in the bankruptcy of various organizations and triggered surges of unemployment. Under these conditions, highly skilled IT executives were found to be caught within the nets of a chaotic organizational life. Increased uncertainty, corporate politics and inefficiencies made the talented personnel to suffocate and look for alternative careers and work opportunities.

Having experienced the negative aspects of corporate life almost at its extreme made highly-skilled IT personnel to re-estimate its value-system and consciously be turned towards contracting. To them contracting was an opportunity to regain control over their work and their time. In the Greek IT contractors' eyes the possibility of opportunism seemed both non-desirable and non-existent.

5.2 Community control: Professional identity, reputation and normative control mechanisms

Although contractors chose to enter the contracting world in order to "gain "independence and distance from the irrationalities of organizational life" (Kunda et al, 2002), they were soon faced with a new burden: the sense of professional isolation and perpetual insecurity. Developing only short-term employment relationships with the client-firms, contractors were considered to be "outsiders who claim double of the money than the money earned by a permanent employee in an equivalent position". IT freelancers are usually employed to accomplish a very specific task for a short period of time and their contact with the organization is limited to few meetings with the manager or the technical supervisor of the project. Sometimes, there is only one initial meeting with the above individuals and the rest of communication is taking place on-line. The level of task interdependency between the contractor and the firm's employees as well as the need or not of physical proximity depends on the degree of project complexity. Interestingly enough, even when the contractor works at the premises of the client-firm, his/her interaction with the permanent staff is kept to the minimal and the pressure on him/her to display "knowledge" to others and persuade for his/her skill is immense.

Apart from feeling socially isolated, IT contractors have also to take into account a number of serious problems related to their professional training and career advancement. There is no anymore an employing organization responsible for their professional training and career planning. It is up to them to keep themselves "marketable and technically up-to-date" (Kunda et al, 2002).

To manage all the above unpleasant practicalities of free-lancing, IT experts engaged themselves in the following activities: a) they formed networks of relationships with ex-peers/ friends who share the same professional interests and deal with the provision of similar or supplementary IT services, and b) participated in diverse kinds of virtual IT communities (user groups, web forums specialized on specific technologies, etc.).

According to the respondents' testimonies, virtual communities and informal networks among peers constituted the virtual places where IT contractors with common interests and concerns gather regularly to "trade stories and share advice" (Laubacher and Malone, 1997, p.5) about technical problems they

were puzzled about. For instance, two of the interviewees who were specialized in SAP solutions were members of an informal group of 50 SAP-contractors who have been working in the wider area of Europe. Through a common project, they had met a former member of the group who introduced them to the overall group. The members of this group are electronically connected via a kind of intranet, share their experiences and support each other on a daily basis. Twice a year they organize a training seminar among themselves and have the chance to interact face-to-face, as well.

This kind of informal groups and virtual networks are considered as dynamic repositories of knowledge, where learning occurs when a node of the network -an IT contractor-mobilizes the network in order to find out specific information about a technical problem s/he is supposed to resolve. Bearing in mind that a) the "technical knowledge is encoded in and transferred through the narratives that technicians recount for themselves and each other" (Barley and Kunda, 2001), b) IT contractors cannot be turned to the client-staff to ask for advice or help, these communities constituted the contractors' sole chance to stay technically competent.

These networks apart from being a dynamic repository of knowledge and timely technical support, they operated as triggers of job placement in the market. Through them, IT experts build their reputation and render themselves more capable in being continuously employed for a prolonged periods of time. Simon and March (1958) note that the greater the range of contacts in diverse organizations an individual has, the more visible s/he is in the market and the more visible are the existing alternatives to him/her. Moreover, the greater the reputation of an IT expert about his/her uniqueness of skills and high status is, the greater the number of organizations that will desire to collaborate with him/her. The interviewees who had worked at some point in their career as employees of large multi-national companies, were keeping their membership in the Club-of-Multinational "X" Hellas and through it they were connected to huge pool of executives who were moving across various corporations (in large multinationals like Johnson Hellas, the rate of turnover of executives/employees is very high). Access to people in various corporations increased the possibility of new future contracts.

Additionally, due to the fact that the employing organization is no longer the primary source of occupational identity nor an object of emotional attachment (Barley and Kunda, 2004), IT contractors feel the need to redefine their relationship with the current workplace. The virtual communities and informal networks become for them the locus of social interaction and the object of professional identification (Laubacher and Malone, 1997). The needs of acceptance, belonging and socializing were largely covered through these informal social formations.

Interestingly, members of these informal groups tend to have the characteristics of the members of clans (Ouchi, 1980). The members are tied together through bonds of reciprocity and trust, share mutually defined goals and have internalized the same norms and values. "Through social interaction, contract professionals constitute a culture with informal expectations for participation and standards for occupational practice. Adherence to cultural codes and norms marks practitioners as occupational members in good standing" (Osnowitz, 2006). A highly-skilled contractor may choose to behave in a reliable way towards the client-firm, because such a behavior is consistent with his/her identity as a "good colleague", "real professional", and such a behavior is applauded by the members of the community. Moreover, when an IT contractor is introduced by a member of his/her professional network to a prospective client-firm, s/he is expected to behave reliably, performing the assigned task in the most efficient possible way. This was originally the very logic underlying the formation of these networks: circulation of accurate and trustworthy information (Granovetter, 1985) among peers and prospective client-firms. And gaining legitimacy in the eyes of clients and peers involved the adoption of behavioral patterns and the employment of particular practices which were dictated by the occupational norms of the community and expanded beyond the technical standards of a high-quality task performance.

In the eyes of the community members and prospective clients, this kind of legitimacy has mostly relied upon the past record of business interactions and cooperation the contractor has had with other firms

and individuals. It is closely related to the notion of reputation. In particular, it mostly has to do with the way people make sense and perceive the quality and reliability of work and the overall professional conduct of the freelancer. The reputation that the freelancer builds around his/her name is manifested in the everyday discourse of the business world and is widely spread across the market. The connectivity of organizations brought about by the extended use of ICTs, as well as the frequent mobility of individuals across organizational borders, has rendered the trajectory of the IT contractor as visible as ever before. And this transparency and visibility accounts significantly for the contractor's future employability and positioning in the market.

Information about IT contractors circulates so quickly and spreads so widely through the professional networks among former and current business partners and agents (including individuals, organizations and staffing agencies) that the exposition of a kind of unreliable or amateurish behavior on behalf of a freelancer - even if it were only once - could irreversibly destroy his/her career.

In conclusion, it can be argued that the IT contractors' behavior is largely influenced by the her/his struggle to build a coherent identity, stay technically up-to-date and secure continuous employability. In their attempt to do so, the contractors find themselves attached to social and virtual networks. These networks constitute a point of reference according to which individuals make sense of their occupational identity and operate as a buffer against the possibilities of social isolation and occupational insecurity, inherent characteristics of the freelancing work. It is the internalization of norms - which happens through past social interaction among members of these communities (Granovetter, 1985), and the extended transparency of members' professional trajectories, brought about by the use of mobile and internet technologies - that account for and guide the independent contractors' behaviors.

5.3 Bureaucratic and client control: The labor contract and the rationale of project management

Apart from identity related issues and reputation related concerns, the contract itself is regarded as a prescriptive mechanism of the contractor's behavior. According to the respondents' views the contract - the milestone of bureaucratic organizational forms and the industrial era (Perrow, 1986) - constitutes a substantial coordinator and regulator of the economic transaction between them and the client-firm. The specific terms and jurisdictions anticipated in it, no matter how abstract or concrete they might be, delineate the general landscape within which the two parties may legitimately assert their demands and fulfill their obligations, respectively.

Once signed by the two parties, the contract is submitted to and certified by the financial authorities of the Greek government. It constitutes a formal legal document. If the behavior of any of the two parties deviates from the terms of the contract, they are accountable to the court of justice.

Although, the possibility to estimate the intensity of the effort allocated in the work task or define the detailed steps of the production process is rather absent (IT professional work resists managerial rationalization), the creation of an outcome-based contract (Goldthorpe, 1998) can support the smooth running of the employment relationship. What the final product or service will be, when it will be delivered and at what price are usually the terms of the contract that both parties have to agree upon in and stick to.

Apart from the above basic terms, most of the spot-contracts signed by the client-firm and the IT contractor apply the rationale and vocabulary of project management. The project is broken down into smaller independent subprojects, which are meant to be completed sequentially and be delivered (deliverables) over the contract duration on specific pre-set dates (milestones). The principles of project management aim at: 1) increasing the visibility of an obscure production process through the identification of sub-products which jointly constitute the overall software application and 2) enhancing control over the completion pace of the project assigned, so as to ensure that the time deadlines often settled by the competitive pressure of the market will be met. The provision of timely, functional and efficient IT services is considered to lie at the heart of freelancing and sub-contracting. The increased modularization of the software production paved the way for such division of labor to happen.

Interestingly enough, in the world of Greek IT contractors, the tight coupling between effort intensification, superior performance and long hours of work tends to fade. Although the pace of professional and highly-skilled work cannot be measured or estimated, long hours of work used to be a necessity for professionals and consultants as a signal of visibility and commitment towards the employing organization (Evans *et al.*, 2004; Perlow, 1997b). Nevertheless in the project-based boundary-less careers followed by IT experts, the expected time for the completion of tasks is often related to factors other than the complexity of the task itself. For instance, client-firms, according to their organizational idiosyncrasies and sectoral competition, display particular preferences with reference to the time frames of project completion. What interests them is the timely acquisition of highly-functional, customized software solutions, given the relatively predefined budget. The actual effort - in terms of time - allocated by the contractor to the assigned project seems to escape managerial attention and interest. In the same respect, the pricing of contracting services is primarily influenced by the available budget of the firm and the prices charged for identical kinds of work by key players in the IT market. A quick search in the internet provides a good image of the IT services available in the market and the corresponding rates. The norm for the Greek IT sector is that the independent IT contractors charge for their services half of the fee charged by big IT warehouses. A well-established reputation justifies the provision of highly-rated services. In a free-market, an IT expert who has developed a unique skill in building a particular kind of software application and who can re-use a large proportion of ready made components across different contexts, can claim high rates for his/her services even if the actual effort s/he puts forth in every new application is quite limited.

Finally, drawing on the respondents recounted stories, it appears that numerous Greek client-firms tend to have repeated relationships with contractors with whom they had a good record of previous cooperation. The possibility of a contract for support or maintenance makes it too costly for a contractor to engage in unreliable modes of behavior. "Individuals with whom one has a continuing relation have an economic motivation to be trustworthy, so as not to discourage future transactions" (Granovetter, 1985, p. 490). Taking into account the above remarks, it is worth noting is that in some cases, the recurrent character of spot employment relationships calls for the emergence of intermediate organizational forms which appear to lie between the market and hierarchy. Economic transactions and employment relationships often take place within the complex webs of social contour, where coercive and normative methods of control co-exist with, substitute or complement one another.

6 CONCLUSION

The current paper argues that the alleviation of the inherent controversies (knowledge and power asymmetry, inability of immediate control and supervision, great potential of opportunism exertion) met in the short-term employment relationship between the highly-skilled IT contractor and his/her client-firm is better understood against the background of specific institutional norms, technical affordances, legal jurisdictions and social formations.

The IT contractor's behavior is largely influenced by his/her struggle to build a coherent identity within a rather heterogeneous and scattered working environment and his/her attempt to ensure his/her future employability. To pursue the above aims, s/he finds herself/himself attached to informal networks and interactive virtual fellowships which constitute the main body of professional identification and catalyst of behavior formulation. Adherence to cultural codes and norms marks practitioners as "good" occupational members and as a consequence, it widens their prospects of on-going employability, further knowledge updating and collegiality/camaraderie. Extended use of the internet and the possibilities of transparency alongside with it pave the way for the creation of "panopticon-like" structures which allow for the monitoring of individual trajectories, too. Finally, alongside with the normative and technology-mediated regulators of contractors' behavior, formal institutional arrangements, like the type of contract and division of labor techniques, operate as a coordination means that safeguard the smooth running of the contingent employment relationship. In the current boundary-free working environment, professional agents' actions emerge in response to socio-technical

and economic contingencies, and not so much as a result to an abstract, generalized morality or conformance to some kind of formally established professional standards.

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