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Antonios Kaniadakis

University of Edinburgh, ISSTI, High School Yards, A.Kaniadakis@yahoo.co.uk

Alexandros-Andreas Kyrtis

University of Athens, Department of Political Science and Public Administration 6, akyrtsis@pspa.uoa.gr

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SOCIAL STUDY OF IT MARKETPLACE

THE SOCIO-LOGIC OF THE IT MARKETPLACE AND LONG-TERM RELATIONSHIPS BETWEEN BANKS AND IT FIRMS

Kaniadakis, Antonios, University of Edinburgh, ISSTI, High School Yards, Edinburgh, EH1 1LZ, UK
A.Kaniadakis@yahoo.co.uk

Kyrtsis, Alexandros-Andreas, University of Athens, Department of Political Science and Public
Administration 6, Themistokleous Str., Athens 10678, Greece, akyrtsis@pspa.uoa.gr

Abstract

The extension of IT-related change from particular organisational settings of user organisations to a broader, complex, multi-actor socio-economic environment, has shifted the attention of scholars studying IT in Organisations towards the study of the broader IT marketplace. There is however controversy on how choices on technology adoption and implementation as well as choices affecting the formulation of inter-organisational networks are made within such a complex, uncertain and challenging environment. What are the key relationships between players acting at various organisational echelons and in various parts of the networked enterprises? Are they based on formal, discursive criteria or are they a result of tacit knowledge, trust and 'strong ties'? Also, what is the 'logic' or the driving force behind the formulation of such relationships? Is it a collaborative spirit or an antagonistic attitude based on opportunism? Based on the Agora of Techno-Organisational Change concept, which refers to the broader IT marketplace and the way it is shaped, we examine the case of a long-term relationship between an IT firm and a bank in Greece. This case provides some answers to the questions above. Findings suggest that the logic that drives the shaping of the IT marketplace lies with the actor and in that sense there are multiple logics expressed by different actors' viewpoints, while relations of competition, collaboration, long-term or ad hoc are all existing possibilities within the broader IT marketplace. However, there can be shifting configurations of such viewpoints depending on the influence of critical factors shaping products, services, transactions and IS-development practices in the IT-marketplace. Such critical factors observed in the case studied are the tendency towards outsourcing / insourcing or the degree of customisation and/or in-house development as opposed to standardisation and package-oriented solution technologies.

Keywords: *IT Marketplace; Agora; Inter-Organisational Networks; Competition; Collaboration; Actors' Viewpoints*

1 INTRODUCTION

IT-related change in organisations has undergone transformations in its nature over the years. From in-house generated and implemented change of local scope, it has gradually extended outside particular organisational boundaries of the users and into a broader marketplace involving multiple actors on a global scale. Therefore, from segmented, isolated, in-house generated and maintained to more sophisticated, networked and community-based, market-style techno-organisational change. The reasons for this shift are quite complex, they are related to long-term socio-economic changes and have been explained in various ways. Scholars talk about shifts in the techno-economic paradigm (Freeman & Perez, 1988) with the emergence and dominance of ICTs-based industries which changed the ways innovation is happening. Especially technological innovation in distributed multi-task and multi-level organizational systems which face problems of efficient inter-operability significantly differs from discrete sequences of one-off processes of adoption of innovation or from local solutions to software

engineering problems. The complexity of technologies, combined with the eventual complexity of systems of functionalities within organisations, requires extended networks of service providers and vendors of IT-products. Networked enterprises (Castells, 1996; 2001; Kling, 2000; Ekbia & Kling, 2005; Damaskopoulos, 2005) where informatisation changes the nature of organisations, change also the character of nexuses of transactions (Cordella, 2006). The extension of IT-related change to a wider multi-actor, socio-economic environment has shifted the attention of scholars studying IT in Organisations towards the study of the broader IT marketplace.

In parallel, there is an increasing tendency towards commoditisation and commercialisation of knowledge and expertise (OECD, 1996). Some studies are exploring both the commoditisation of IT (Swann, 1990; Swann & Lamaison, 1989) and of organisational processes (Davenport, 2005) while others explore the strategic challenges around these tendencies (Tierney & Williams, 1990) and the limits of commoditisation (Brady et al, 1992; von Hippel, 1994). As a result, the above shift is reinforced and business firms, instead of developing and maintaining in-house knowledge, they choose to turn to networking and alternative market-style arrangements (Whittington, 1992; Scarbrough, 1999; Callon, 2008). In other words, tendencies of commoditisation and commercialisation of knowledge and expertise have reinforced the emergence of a broader network of socio-economic relations within which recourses for IT-related change are developed, diffused and used. Therefore, IT-related change in organisations is becoming increasingly commoditised, commercialised and it is extended from particular organisational boundaries of a user to a broader, multi-actor, marketplace. The extension of IT-related change as a social situation has opened the door to a wide range of diverse, heterogeneous actors (suppliers, vendors, consultants, systems integrators, industry analysts, the state, etc.) with diverse interests and strategic orientations. These actors sketch the emergence of a broader socio-economic environment which was created by forces of globalisation causing the gradual extension of local IT-change instances to include broader and sometimes abstract influences. However, there are at the same time countertendencies veering attention to needs for customization. Customization is a process of adaptation of generic or standardized technologies to proprietary solutions within more or less defined organizational boundaries. Commoditization is a process working in the opposite direction: solutions are implemented through the adaptation to standardized products and services which allow a more efficient link of cost-benefit estimates to price-discovery mechanisms. The latter is not necessarily compatible with organizational efficiency and can often provoke reactions from various stakeholders. However, in many other cases long-term relationships stabilising intra-organizational networks comprising both vendor and user enterprises rely on productive social relations.

This kind of combination of organizational politics (and trans-organizational politics) with commercial strategies is characteristic for the banking sector. Banks have become especially after the late 1980s highly complex knowledge- and technology-intensive organisations with very tricky connections to extensive trans-national financial networks. They can be the example par excellence on the basis of which we can illustrate the issues arising in every attempt to understand the IT-market places.

The extension of IT-related change to a wider multi-actor, socio-economic environment has shifted the attention of scholars studying IT in Organisations towards the study of the broader IT marketplace. There is however controversy on how choices on technology adoption and implementation as well as choices affecting the formulation of inter-organisational networks are made within such a complex, uncertain and challenging environment. Are they based on formal, rational criteria or are they a result of trust and 'strong ties' shaping action and decision-making and emotional aspects of organisational life at various echelons? Also, what is the 'logic' or the driving force behind the formulation of such relationships? Is it a collaborative spirit or an antagonistic attitude based on opportunism?

In this paper we are exploring the case of a long term symbiotic relationship between a bank and an IT firm, following the viewpoint of the IT firm. Employing the Agora of Techno-Organisational Change perspective (Kaniadakis, 2006) we will explore the choices of the IT firm and how they have contributed to the relationship in question. The findings of this paper will offer a better understanding of the forces

driving the process of shaping/structuring the IT marketplace with special reference to multi-level mechanisms and to the impact of the diversification of viewpoints of the involved actors.

2 THE SOCIO-LOGIC OF THE IT MARKETPLACE

The actors populating the broader IT Marketplace (suppliers, users, intermediaries, vendors, etc.) are involved in the formulation of relationships. The nature of such inter-organisational relationships has been described in different terms by different people:

Castells, for instance, describes this shift towards more open organisational forms as the emergence of the networked enterprise signifying a new form of society based on networks (Castells, 1996; 2000; 2001). The network enterprise is a new form of business organisation, made up of networks of firms or subunits of firms organised around the performance of a business project (Castells, 2000). In our case, instances of IT-related change in organisations may be defined as such business projects where various heterogeneous actors are involved. Furthermore, in this new organisational form based on ICTs, where large organisations are decentralised and organised around projects, it is 'cooperation' amongst these various actors that keeps the networked enterprise together. In other words, it is strategic alliances and partnerships between large corporations that constitute the driving dynamics of the networked enterprise, that is the 'networking logic' [Castells, 1996]. Other scholars, such as Miles and Snow (1992), when they talk about the networked organisation, although they have different starting point, they share the assumption that it is trust and cooperation that keeps together the components of a networked enterprise (Ekbja & Kling, 2005). This model of the networked enterprise has been criticised by social informatics literature as too narrow and unrealistic in that it presents trustful cooperation amongst enterprises as the networking logic of networked enterprise, leaving out of the analysis relations based on antagonism and coercion (Ekbja & Kling, 2005). In their new Multivalent Negotiated Network (MNN) model, Ekbja & Kling (2005), apart from relationships of complete trust, voluntarism and cooperation they also include relations based on outright deception, coercion and antagonism (Ekbja & Kling, 2005). However, beyond these forms of purposive conduct, we must take into consideration the structural constraints setting limits to voluntaristic and constructivist interpretations (Kallinikos, 2004). In this respect it is relevant to draw on concepts of network analysis which have been developed within the framework of new economic sociology.

In this extension of inter-organisational networks one can also add the dimension of time (Orlikowski, 2001). Both long-term symbiotic relationships and also shorter-term ad hoc relationships can be found within the complex socio-economic environment of the IT marketplace. The new economic sociology (Granovetter, 1985; Smelser & Swedberg, 1994) which emerged to respond to under-socialised economic accounts of markets and over-socialised sociological accounts of economic action, offers some insights in explaining inter-organisational relations. The notion of 'embeddedness' (Granovetter, 1985) is one that shows how economic action and economic rationality is embedded into networks of social relations as opposed to stand alone rationality and methodological individualism. Also the notions of 'strong' and 'weak ties' (Granovetter, 1973) capture the informal characteristics of such relationships between economic agents. The understanding of inter-organisational relations by means of concepts such as the ones described above has implications to the understanding of the IT marketplace as an environment which presents both stable, rigid, long term relations of strong ties and also fluid, ad hoc, temporal relations of collaboration and competition (Kaniadakis, 2006). In other words, long-term embedded relationships co-exist with ad hoc networks (along the horizontal inter-organisational, as well as the vertical intra-organisational dimension) giving the IT marketplace both a momentum of stability but also of fluidity in the way it is configured and penetrates into various industrial fields. The case that will be presented later on shows how an actor like a systems integration firm strategically balances (or better, is aware of) this duality in the nature of the IT marketplace. Whatever the case, markets in general and the IT marketplace in particular can be seen as phenomena socially constructed and politically maintained (Clark, 2000) where the complexity and heterogeneity of market networks are arranged by means of different actors pursuing their diverse interests. In other words, what is important

to understanding the directions and the 'logic' behind the formulations of long or short-term networks or competition or collaboration, is to explore and understand how different kinds of actors manage their relationship as strategic entities capable of producing action and choice. The production, promotion and negotiation of choices by different actors during instances of IT-related change reveal how actors manage and shape the nature of multilevel inter-organisational networks.

Recent research based on Science & Technology Studies (STS) approaches on Information Systems (IS) has started showing an interest on the broader IT marketplace and its significance for the relationship between technology and organisation. Pollock and Williams (2009) for instance suggest a shift towards the study of the broader socio-economic environment of the IT marketplace and away from fragmented, episodic, snap-shot studies of local implementation. In so doing, they propose the Biography of Artefacts approach which offers an analytical template which extends in time and space to capture how technologies and socio-economic relationships evolve over time and also how the networks of actors extend on a global scale. Forces of globalisation and commoditisation have been stretching the boundaries of what is included as part of the empirical field of study of IT-related change in organisations and therefore there is a need for more inclusive and integrative analytical templates that re-define this extending research field. As part of this emerging tradition from STS scholars studying IS, the concept of "Agora of Techno-Organisational Change" (Kaniadakis, 2006) has been introduced to analytically capture and understand the shaping of the IT marketplace. Agora is a spatial concept of expanded analytical scope that re-defines the research field of IT-related change in organisations. The Agora lenses reveal an extended on a global scale socio-economic environment, ranging from local, particular implementation settings to global, abstract influences. It has no clearly defined boundaries and it involves diverse and heterogeneous actors. Such actors, in light of instances of IT-related change, are forming relationships with each other and give the broader Agora certain shapes.

Although the Agora is initially conceived as an environment with no clear boundaries, actors populating the Agora develop bounded understandings of it based on their interests, role and capabilities (Kaniadakis, 2006). The Agora as a practice space, therefore, can be understood and defined in many different ways depending on the 'viewpoint' of a certain actor. That is, a supplier firm has a different understanding of the broader socio-economic environment of the IT marketplace than a particular user organisation and both of them, based on their understandings are pursuing different ways of engaging with the Agora. An actor's viewpoint, then, is a rationality that guides choice. Different actors' viewpoints are expressed or 'performed' through choices they are called to make in relation to IT-related change. Such choices include ones related to technology adoption, design, implementation and so on. Actors therefore, guided by their viewpoints and while pursuing their engagement with the broader Agora are involved in the negotiation of choices on the design, procurement, adoption and implementation of IT in organisations. These choices have an impact on broader market structures and are contributing to the shaping of alternative Agora configurations. For instance, a decision to use certain technological products in a particular change instance, would lead to the formulation of relations amongst certain actors on a global scale and cross-cutting various levels, that are related with the design, diffusion and implementation of these products (i.e. international vendors, intermediaries, consultants, systems integrators, user organisation and so on). Within this scheme, therefore, particular instances of IT related change reflect alternative configurations of the Agora in the form of alternative possibilities of socio-economic relations amongst various actors. With this paper we hope to shed some light on how actors (firms) decide on what kind of relations to form and with whom. In turn, this will improve our understanding of the dynamism, the rationale and the driving forces behind the operation of the IT marketplace.

The Agora of Techno-Organisational Change is therefore a concept that defines the broader IT Marketplace as a practice space involving diverse and heterogeneous actors who interact with each other, pursuing their viewpoints, and form relationships and networks but it also suggests an alternative, relational (not relativist), integrative analytical approach to capture and understand the social shaping of the IT marketplace. As an epistemological and analytical project, the Agora could be

contrasted with other popular approaches that refer to the shaping of inter-organizational socio-economic relations. The Actor-Network Theory (ANT) (Law & Callon, 1992; Monteiro, 2000) and the Neo-Institutional (N-I) paradigm (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1994) are such approaches, which are quite useful and heavily used, yet incomplete and with restrictions for the study of the IT marketplace. N-I is too rhetorical and analytically restricted to a meso-level analysis, while ANT approaches offer rather limited conceptualizations of action and choice entrapped in hidden theoretical assumptions viewing all agents as over-socialised. Another ANT-based relevant concept is the 'arenas of development' (Jørgensen & Sørensen, 1999) but it also provides a restricted view of techno-organisational change due to its artefact-centrism typical for ANT-approaches. In other words, the Agora of Techno-Organisational Change as a research approach, when contrasted with similar approaches, it offers a broader multilevel, analytical space to include developments ranging from local, particular implementation settings to global, abstract and distant influences. Traditional analytical distinctions in levels are seen here as relational categories that are re-determined based on an actor's viewpoint. For instance, what for one actor is seen as micro level for another actor might be part of a broader, macro environment. This multilevel aspect of the Agora perspective allows us to integrate the organisational level into the broader institutional and market levels. As shown in the case study that follows, complex organisational interactions occurring in the context of IT-related change, affect the shaping of an actor's viewpoint and in consequence, the rationale and the logic behind choices around outsourcing and around the engagement with the broader IT marketplace. Additionally, in accounting for choice, the Agora approach goes a step back to explore the rationale behind choices and not just completed actions examined a posteriori, as in ANT approaches. This makes actors more visible analytically, it links more effectively choices with the actors making them, and allows the exploration of dynamism or stability in the IT marketplace. Different actors, then, emerge as important entities that can have a significant impact on the structure of the broader socio-economic environment of the Agora practice space. The Agora practice space as an IT marketplace is something more than a series of commercial transactions between suppliers and users of technological solutions. It is rather a social and political terrain where the actors involved in it frame and pursue their interests, they get involved in negotiations and politics, and they form relationships based on a mix of formal and intangible criteria. The decisions that determine the above characteristics of the Agora are guided and justified by actors' different viewpoints.

3 THE IT FIRM AND THE BANK

We have mentioned that although the Agora of Techno-Organisational Change as a practice space is at a first instance an abstract, indeterminate space with no clear boundaries, the actors populating it develop bounded understandings (viewpoints) of it that guide them through choices during IT-related change. Such choices contribute to the development of alternative Agora configurations and make the Agora environment more particular for an actor (particularisation process) (Kaniadakis 2006). In the empirical case that follows we are exploring the viewpoint of a certain actor, the IT firm, the way it is shaped and how it influences choices with an impact on the broader Agora structures and more particularly on its long-term relationship with a large customer, the bank. Empirical data were collected based on semi-structured interviews with people from different hierarchical levels and different roles within the IT firm. Later on, these data were combined with evidence coming from extensive narrative interviews with the same people and ethnographic participant observation.

To an organisation like the IT firm, managing relationships with collaborators, competitors and customers is quite important as they are selecting and combining different products and services from the global IT marketplace and sell them as integrated solutions to their customers. The IT firm started out in the 1960s as a simple distributor of an international vendor and it evolved into a more active system integrator but still maintaining some ownership structures with that vendor. Since 1975, the IT firm, has been in a long-term symbiotic and co-evolving relationship with a bank, their largest, and in some periods, their only customer. The table below shows the historical evolution of the relationship

and the levels of dependence between the two. There is an initial weak relationship gradually becoming stronger and reaching its peak in the mid-1990s, while later we see a still strong but now more distant and rational approach in managing this relationship. With the gradual increase in dependency there were increased levels of organisational blending between the two organisations (i.e. transfer of personnel from one organisation to the other) with hybrid structures and even companies emerging out of this. Also, there was a gradual strategic alignment between the two firms, especially when the bank decided to invest directly on the IT firm by financing its merger with another firm specialising in network technologies. The rationale behind this choice was that the bank wanted access to network technologies for branch automation. Of course, later on there was a tendency for strategic diversification in the fourth period when the IT firm entered the stock market and decided to develop its marketing strategy in a more rationalised way. How can the evolution of this long term symbiotic relationship between the bank and the IT firm be explained? What was the rationale and justification of the choices for close dependency and diversification over the years? What does this case teaches us in relation to how the IT marketplace is shaped and operates? We shall explore the viewpoint of the IT firm in search of answers to these questions.

Phases	1975-1987	1988-1994	1995-1998	1999-today
E V E N T S & A S P E C T S	IT firm provides MFs & Software related services To the bank	International & national mergers. Access to network technologies for branch automation	Installation of treasury systems & other projects, i.e. merging of The Bank with another bank	Relationship continues with new applications, new MF in 2000 which supports SAP applications
	Some organizational blending & development of IT specialists	New operational systems-External pressures to IT investments by suppliers.	80% of the IT firm’s operations are related to the bank- Stronger bonding	Restructuring of the IT firm, Entering the stock market
	Most end user applications built in-house	IT firm more involved in applications		Decreasing % of operations from 80% to 60%
	Still weak bonding	Dev.-strong bonding		Bonding still exists but more rationalised

Table 1: History of the IT firm-The Bank relationship

The empirical evidence presents various explanations for the evolution of this relationship presented by various people. Informants who were external to the IT firm and with a more independent view as well as middle managers have explained this relationship as a result of the IT firms underdeveloped marketing strategy. As an external consultant explains:

From the beginning of 1980 and after, the IT firm started having an underdeveloped marketing and underdeveloped sales strategy. And this is because, by then, the ‘incest’ relationship with The Bank had started becoming quite clear. (EAC).

According to this view, the big privileging customer had created a great sense of security to the IT firm. In turn, the relationship of the IT firm with its external environment has been characterised as ‘arrogant’, meaning that they do not care too much if their relationships with other customers do not work, since they can rely on the bank.

An alternative view was expressed, however, mostly by top-managers of the IT firm which explains this relationship not as a result of underdeveloped marketing and sales, but rather as a smart move of adjustment and exploiting the conditions in the market. The Information Systems Director of the IT firm explains:

It wasn't a result of underdeveloped marketing, it was a result of the conditions in the market. That is, the monopoly of the public sector by Intracom, the political conditions and interests, etc. Most of the banks in Greece had IBM mainframes and in order for us to survive in the banking sector we had to find ways to expand our profits. At that time we devoted ourselves to The Bank which was giving us large projects and prospects for profit [...] Additionally, The Bank combines a big customer with large and many projects plus lots of room for profit in combination with the know-how on the customer acquired over the years, where things have a continuity, there is lots of tacit knowledge and we don't waste any time. Therefore, this wasn't necessarily a bad move. The Bank is a good, innovative bank and the close relationship with them gave us the chance to create a strong financial base in order to be able to invest in other areas as well. (DIS, IS director).

Given the two differing explanations along with the necessity to be close to customers in order to benefit from tacit knowledge, it seems that there was and there is a dilemma surrounding the choices of the IT firm on how to manage its relationship with the bank. And the dilemma is: If I stay in a close dependent relationship with a large customer I have benefits in terms of tacit knowledge, trust, and development of realistic solutions. Increased levels of organisational blending are crucial here. On the other hand, increased levels of dependence on one large customer pose risks. What will happen if the bank decides to look for alternative suppliers for whatever reason? Therefore, long-term close relationships with one large customer might be beneficial technically and organisationally but from a marketing perspective it is rather risky. Eventually, after the mid to late 1990s the IT firm decided to decrease the levels of dependence from the bank and rationalise their marketing and sales approach. A middle manager of the IT firm explains:

Five to six years back this relationship was very close. The Bank was the only customer of SIF. But this wasn't a good strategy because you had all your eggs within one basket. Therefore, the goal changed and we wanted to reduce the percentage of dependence from The Bank and increase the percentage with other customers. (MRD, R&D manager)

The IT firm, then, reduced the degree of dependence from 80% to 60%. They entered new markets and sectors but also approached other banks to expand their clientele. New organisational structures (i.e. banking, culture, public sector etc.) and various business units were created to manage various customers, however, for the particular bank they devoted a whole business unit, although they were in the process of reducing dependence. What can this story tell us about the shaping of the IT marketplace, how choices are made and which is the 'logic' that drive the formulation of inter-organisational relations? Two main rationalities exist behind the viewpoint of the IT firm in relation to the Bank and the broader Agora. One justifies positively the decision of the IT firm to remain in close dependence with the bank as a necessary adjustment to the market conditions while the other exposes the dangers of such a close relationship by holding accountable the IT firm's underdeveloped marketing strategy. Eventually the IT firm is pursuing a balanced approach in their relationship with the bank. On one hand they still maintain a relatively close relation to them but with tendencies to reduce dependency while they are rationalising their marketing strategy by exploring other sectors and diversifying their clientele. As the relationship history shows, however, each of these two differing rationalities (one pointing towards a close dependence to the bank and the other towards diversification) was becoming dominant in different times determining the relationship of the IT firm with the bank and the broader Agora environment.

The above empirical evidence was later combined with data gained from extensive narrative interviews with key persons belonging to both organisations and whose roles have determined this co-evolutionary relationship. Further analysis has led to useful insights on how the organisational co-evolution between the two firms influences the viewpoint of these two actors and in turn the choices that affect their engagement with broader market structures and institutions in different times in history.

The relationship between the two firms is still strong in terms of organisational blending and co-evolution but more rational in terms of marketing and sales. The figure below shows how the two firms are connected organisationally.

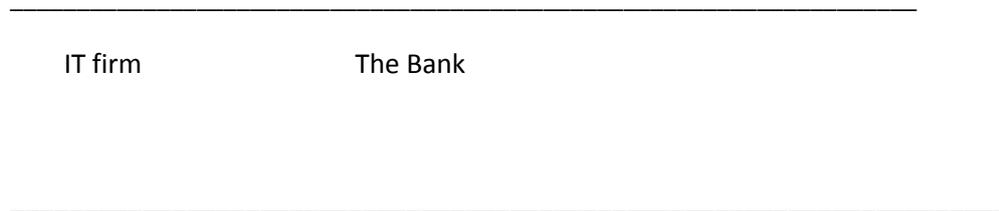


Figure 1: Contact between the bank and the IT firm at different hierarchical levels

At the top level, there is contact between the top management of the IT firm and The Bank. At the level of middle management, there is day-to-day contact between various managers and at the lower level²⁶, technical staff such as software engineers, programmers) both from the IT firm and The Bank work together in the same space. The little circles represent various different projects where people from both organizations work together.

At the organisational level, then, there have been very strong and deep professional and personal relationships among staff from both companies. But in spite of such convergence, it is of paramount importance to listen to the parts of narratives showing differences both in style and content. There are apparent differences showing the diverging points of view that persist despite the fact that both companies have experienced a more than fifteen years long process of organisational co-evolution. In both cases there are two-layer processes of legitimacy of discourses and practices. Top management people in both cases are very much concerned with balance sheets and the over-all image of the company they represent to the general public and to the shareholders. At this level we have interacting processes of decision making and generally of practices that differ significantly from practices constituted at a lower level at which the technical experts are operating. There the crucial issue is technical and professional standards that produce the legitimacy of actors in their own "guild". In the case of the IT-people of the Bank, the most important things are bank operations. They are very much interested in having a good reputation especially among line managers. They are also the ones who create the general climate according to which higher echelons of management and the top management make up their view on IT-people and IT-groups. Customers are another very important group for the IT people. Although technology is to them totally transparent, their complaints can be easily translated from front line managers as the direct or indirect outcomes of technological deficiencies. Since IT personnel of the bank are very often participating in the decision-making process leading to outsourcing, they are held responsible not only for in-house applications. Contrary to the case of the bank's IT-personnel, the IT-Company people think more in terms of software engineering standards, presales standards and integration skills. Not business aspects and the user's whims (as they see it) are their main concerns, but rather questions of purely technical performance. Business and user aspects are for them just requirements of sometimes technological illiterates. They are operating in the framework of requirements agreed upon as if they were mere burden. These differences in view have organisational implications. Both sides are trying to invent the organisational schemes that seem to them appropriate in order to cope with the tasks they have defined for themselves. For the IT-firm sales efforts concentrating in vertical markets, presales operations differentiated according to IT products and the ability to set up project groups possessing the appropriate knowledge and skills are the decisive challenges. The Bank's IT people tend to organise available staff according to Information System segments, as well as according to clusters of bank operations. This differentiation creates both in The Bank and in the IT-firm distinctive groups with their own consciousness, knowledge, skills and most

²⁶ The Bank pyramid is not the actual pyramid representing its organizational structure. This is how SIF people would perceive their customer organization in terms of working together in projects and maintaining a relationship. In other words, this doesn't mean that the IT people of The Bank are the lowest in the hierarchy of the organization.

importantly their own professional, occupational and social identity. Identities of such groups create discourses and practices, which constitute the *internal* environments of decision making for the top management of both sides. The long term organisational co-evolution with the bank and the attempts to balance the tensions between hierarchical levels within the two organisations and attitudes towards broader marketing strategies, has been a determining factor shaping the viewpoint of the IT firm overtime throughout the different chronological periods of the relationship. The relationship of the IT firm with the broader Agora is for many years concentrated around their relationship with a large customer, the bank. Levels of dependence on that customer change overtime and as we can see different levels of organisational blending and co-evolution bring about different elements and discourses that dominate the viewpoint of the IT firm in different times.

4 CONCLUSIONS

This paper aims at exploring the driving forces, the rationale and logic behind the operation and the shaping of the IT marketplace. Existing research offers different and sometimes opposing answers to this question. Is it collaboration or antagonism that drives things? Is it long-term symbiotic relationships based on trust or ad hoc, opportunistic relationships based on formal criteria of selection? In exploring such a topic we suggest an alternative, integrative and expanded analytical framework based on the concept of Agora of Techno-Organisational Change (a practice space but also an analytical approach) which makes different actors more visible and shows how their choices and their viewpoints contribute to shaping the broader, abstract Agora in certain, more particular ways. The relationship between the bank and the IT firm presented here is an illustration of how actors' viewpoints and choices shape the Agora environment in certain ways instead of others. For the bank and the IT firm the Agora had a quite particular and rigid shape for a number of years. High levels of dependence in certain periods of time was seen as necessary by the IT firm due to adjustments to the market conditions or due to inert marketing approach from the IT firm, but also for the bank. This close relationship was beneficial for both organisations in terms of choices having to do with assessing technological capabilities of solutions, achieving high levels of trust and through increased organisational blending there were high levels of tacit knowledge that made implementation less problematic. In such close relationships then choices of technology adoption and implementation are easier to justify.

On the other hand, close dependence on one large customer poses risk for the IT firm. The Agora is a dynamic environment which is constantly transformed and re-configured offering indeterminate possibilities for IT-related change. Actors therefore that remain locked into long-term relationships with each other run the risk of excluding other options which might be more beneficial for them. Furthermore, such relationships can enhance diverging cultural orientations and attitudes towards operational and technological risk management, as well as towards techno-innovation in various organisational subsystems both in the IT-firm and in the bank. This can lead to higher levels of both intra- and inter-organisational complexity. Trust although it reduces complexity, is seen as a fragile construct which needs to be accompanied by explicit and discursively elaborated strategy planning. The IT firm realised this risk and attempted to expand their viewpoint of the Agora, to open themselves to more abstract influences and possibilities in the market and made choices that would shape the Agora in a way more sustainable for them. Complexity and uncertainty in organisational and technical terms would be increased but on the other hand they would also reduce risks associated with exclusive relationships with one large customer.

The way the Agora networks of relations are configured in different ways also relies on the interplay between customisation and commoditisation. Standardised products and services, as is the case when information systems tend to rely on integrated packages (ERPs), shift the techno-organisational decision-making and the related tensions towards the higher echelons of the involved organisations. For instance, top managers under pressure from shareholders tend to be more interested in commoditization, whereas middle management could be more interested in operational and organizational issues and thus being interested in acquiring less standardized products and in more

customized services. In the one case we have an orientation towards portfolio maximization, in the other an orientation towards procedural improvement.

Heavy customisation and in-house development, therefore, shift the focus towards the arenas of development where the dominant actors are the middle and lower echelon IT-specialists who operate by developing horizontal social networks of collaboration extending beyond organisational boundaries. The latter could also imply a shift of viewpoints away from the socio-economic and transactional aspects which constitute IT-marketplaces and towards techno-narratives defining the communication among IT-specialists. The more such ad-hoc inter-organisational social networks of collaboration become institutionalised, the more we observe tendencies towards horizontal convergence and towards augmented social distance between organisational echelons in both the purchasing and the vendor organisations – as we have seen in the case study presented here. In both occasions there are benefits and risks. The multilevel qualities of the Agora approach have allowed the analytical space for the integration of multiple levels of analysis (i.e. micro-meso-macro or organisational-institutional-market). In the particular case study examined here, it is shown that the complex interplay between various hierarchical organisational echelons between the two firms in different times in history, has affected choices related to the engagement of these actors with the broader IT marketplace.

Another point that we can make here is that choices relating to procurement, collaboration, competition, management of networks and so on, are also choices that have an effect on the way the Agora, that is, the IT marketplace is shaped and structured. Additionally, even choices emerging from long-term relationships based on trust require some sort of justification by means of rational explanation. We have seen how our informants provided an explanation for choices that led to the close relationship with the bank by reference to marketing strategies, conditions of the market, etc. Such rationalisations express actors' viewpoints which serve as a source for legitimisation of choice and as we have seen, viewpoints also have biographies [Pollock et al, 2003] as they co-evolve with the Agora environment. Biographies of viewpoints and narratives revealing the way these biographies are shaped in micro-fields of action should be a topic of further research (Jørgensen & Sørensen, 1999; Kyrtsis, 2008a). However, as an emerging Edinburgh-based perspective on the social study of the IT marketplace (Pollock & Williams, 2009) suggests, the micro-perspective, although informative, can create a distorted view, if not combined with the wider transactional, socio-economic and inter-organisational context of the interplay between, on the one hand markets for IT-products and services, and on the other hand distributed processes of innovations and processes of development of organisational solution technologies.

Finally, in terms of the logic that drives the shaping of the IT marketplace, we may say that relationships based on competition or on collaboration, long term or ad hoc relationships, are all possibilities existing within the Agora. For instance, at the time of data collection, the IT firm was simultaneously competitor and collaborator with the same firm in different instances of change. There is not one ultimate logic independent from the actors populating the Agora. The logic lies with the actor. And since there are many different heterogeneous actors with different roles, interests, capabilities, there are also multiple logics that drive the shaping of the IT marketplace. Such logics find formal (and informal) expression in actors' viewpoints, the configurations of which are of critical importance at all stages and levels of techno-organisational decision making. Therefore, all these types of relationships exist as possibilities within the Agora and also there are alternative diverse rationalisations (viewpoints) to justify any of them in any context.

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