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E.M.P. As Enabler Of New Organisational Architectures: An Italian Case Study
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Abstract

The opportunity for organisations to manage their own processes using electronic means has lead to the development of new inter- and intra-organisational relationships and consequently to the network firm phenomenon (Fulk, De Sanctis, 1995; Powell, 1990 ; Malone, Yates, Benjamin, 1987; Prager, 1996). Business to Business (B2B) and electronic marketplaces (EMP) are assuming an ever-increasing role in the context of inter-organizational relationships, especially in the area of information systems. In this paper, the authors aim to show how B2B marketplaces have a significant potential impact on the structure of channel relationships and IT management arrangements. For this purpose an Italian example of an EMP called Tilesquare was analysed where the development of the digital market and all the connected technologies has brought about the creation of a new type of organisation. This paper studies this new organisational scheme in the light of Transaction Cost Theory (TCT). In the context of marketplaces, Tilesquare is a particularly important case from the points of view of both the organisational integration of the various integrated participants in the digital value chain (all the possible actors of the value chain of the building and furnishing material industry are present in the market) and of the commercial coverage represented by the various participants located in different countries all over the world and integrated in the platform. IS theory traditionally investigates these phenomena from a Transaction Cost Theory (Williamson, 1975) point of view. On the contrary, the authors of this paper have taken into consideration the limitations of this approach by showing how the Strategic Network theory could provide a useful framework in order to understand the new phenomena that are distinguishing some industries. To do this, the research work of Christiaanse and Markus (2002), who have worked on new organizational assets and the development of B2B in an EMP context, has been used.

Key words: *Electronic Marketplace, Inter-organisational processes, organisational changes*

1 Introduction

The connection between organisational studies and IT research is becoming the focus of an increasing number of scholars. Following this trend, this paper underlines the relationships that link organisational and technological innovation and the aid offered by co-ordination technology in the research of new organisational forms Ciborra, (Ciborra,1993).

Nowadays, Information Technology (IT) plays a significant role in organisational studies, especially in the field of organisational design.

The opportunity for organisations to manage their own processes using electronic means, has allowed for the development of new inter- and intra-organisational relationships and consequently supported the emergence of the so-called network firm phenomenon (Fulk, De Sanctis, 1995; Powell, 1990; Malone, Yates, Benjamin, 1987; Prager, 1996)

Business to Business (B2B), e-marketplaces (EMP) and outsourcing agreements have assumed an ever-increasing role in the context of inter-organisational relationships, especially in the area of information systems.

IS (Information System) theory traditionally investigates this phenomenon from a Transaction Cost Theory perspective (Williamson 1975).

In the past, it was thought that transaction costs could be co-ordinated by market or hierarchy rules (Ouchi, 1980, Perrone 1990). Within the market, price tends to control the co-ordinating activities. On the other hand, within the hierarchy, formalised rules were necessary. But these two forms are not completely efficient, and therefore a new hybrid form was identified. According to Wigand and Benjamin, “low cost computation favors electronic markets by simplifying complex product descriptions and reducing asset specificity. An evolution from manufacturer-controlled value chains to electronic markets can be anticipated. Stakeholders will opt for markets when increased volume is greater than loss in revenue from electronic market effect". (Wigand and Benjamin, 2004).

The phenomenon of EMP, or Electronic Marketplace, can be considered a hybrid form that combines some characteristics of the market with others of the hierarchy.

The organisational role of ICT is to deal with the management of decisional and communication interdependence among participants and to produce the necessary information to support transactions. ICTs become a form of co-ordination technology, which Thompson (1967) referred to as mediating technologies. The aim of these technologies is to standardize the flow of information by making research and the selection of possible participants easier, for example contract definition.

B2B marketplaces have a significant potential impact on the structure of channel relationships and IT (Information Technology) management arrangements. The outsourcing of ICT allows organisations to externalise services when it becomes more convenient from a strategic and economic point of view.

Widespread adoption of EMP as intermediaries in inter-organisational relationships could lead to a much greater level of standardisation and/or IT outsourcing (Christiaanse, Markus, 2002).

Pfeffer (1981) studied these events from the internal and external power balance perspective (Costa, 2001; De Marco, 2000).

Outsourcing of ICT has become increasingly important in the last few years. Rockart, Earl and Ross (1996) consider this solution a practical option in business management. Moreover Fowler and Jeffs (1993) maintain that it acts as an accelerator for organisational changes.

The Transaction Costs Theory helps to understand the perspective of EMP and the reasons why outsourcing strategies have been adopted, but, after a certain point, this theory no longer helps to interpret new organisational forms.

This paper focuses on a case study of an EMP and on the IS literature where the role of co-ordination technology has been studied, emphasizing the limitations of Transaction Cost Theory and the need to refer to other theories, according to the framework presented by Christiaanse and Markus in the last ICIS(1).

2 The Case Study

2.1 Methodology

The following case study concerns an Italian e-marketplace.

The case study research method was chosen because it is useful for examining a phenomenon in its natural settings (Benbasat, 1984). The table below shows the flow of major activities involved in the study.

The case study research method was also chosen as it can be an ideal vehicle for gaining a deeper understanding of implicit and explicit business processes and the roles of people and systems in organisations (Campbell, 1975; Dukes, 1965; Hamel et al., 1993; Lee, 1989; Stake, 1995).

The following case study is a qualitative research carried out with the use of semi-structured interviews.

The sample was made up of the general marketplace manager, the IT manager and the project manager who responded to questions regarding the development of the platform, the project management and the organisational impacts.

The interviews involved the general management of a marketplace management company and the first to be interviewed was the managing director. He was asked questions about the general aims of the company, its mission, definition processes and the development of the idea of creating a company with a particular objective. After having collected the initial motivations, the interviews continued with some of the other departmental managers: the IT and organisation manager, the marketing manager and sales manager.

The questions asked of the IT and organisation manager were strictly concerned with the organisational and technological aspects regarding project development phases and the problems encountered.

Finally, the sales manager was asked questions focused on marketing aspects and the management of sales relations with customers who, in the case of the marketplace, are market participants.

All the questions on strategic marketing were discussed with the managing director. In fact, it became clear how the strategic sales policies used by the management considerably influenced primarily the survival, and then the development of the marketplace itself.

The main objectives consisted of describing real-life interventions, an unprecedented case of IT adoption or diffusion in an organisation where IT actually enabled business process

[1] International Conferences on Information Systems, Christiaanse E., Markus L., "Business to Business electronic marketplaces and the structure of channel relationships" Barcelona, 18-21 December 2002.

innovation. At the same time, it was important to investigate those situations in which the interventions being evaluated had no clear set of outcomes.

Table 1: *Major Activities In Case Study*

September 2002	Scanning and preliminary investigation
October 2002	Selecting the research topic and subject organisation
September – November 2002	Collecting and analysing secondary data
November 2002 - April 2003	Collecting and analysing primary data
May 2003 – June 2003	Overall assessment
July 2003 – September 2003	Structuring the write-up
September 2003 – December 2003	Preparing the write-up

2.2 Description

The marketplace analysis started in January 2001 from the idea of an independent IT group called Tilesquare. It operates in the building and furnishing materials industry and its aim was to enable the development of relationships between participants and focus on common issues concerning operators in this field.

The main reason that leads us to consider the analysis of this particular case study to be of significance is related to the fact that the sector in which it operates is at present involved in a process of re-organisation due to ICT factors. Indeed, the use of ICT is dramatically influencing the power of the different actors within the value chain, in particular the role of resellers.

In order to describe the building and furnishing materials industry, it is necessary to refer to the actors within it and put them into macro-categories:

- machinery and material suppliers,
- building material producers,
- importers and distributors,
- specialists.

The suppliers: this category includes raw material suppliers, mostly local (from Sassuola in the province of Modena) but also foreign (particularly from Eastern Europe or South America), and machinery suppliers (all Italian).

The producers: for this category it is not possible to make a distinction on the basis of the product type since the production process of building materials does not require particular know-how and therefore market segmentation is not relevant.

As for the Italian market, over 80% of the building material industry is located in Sassuolo and, for this reason it can be referred to as an industrial district. This percentage is made up of 4 large groups who alone are responsible for 40% of the sector's turnover.

The resellers: these are not only building material resellers but complete subjects who can offer a whole range of products to the final customer, from flooring to covering, parquet, bathroom furnishings, showers and so on.

It is particularly interesting to analyse the evolution of the producer-reseller relationship over time. For more than 40 years, the producer's policy has been to produce little so as to have the commercial leverage to force the hand of the reseller. In the last few years, also due to changes in the regulations (especially with the introduction of a new law that has made investments into technology easier), there has been a sudden change of perspective. New investments have produced an abundance of offers (4 times as much is produced) which does not g hand in hand with the development of the outlet market, which has more or less stayed the same. The logical consequence is to increase the contractual force of the reseller with respect to the producer. The reseller himself thus develops, he is no longer just the producer's customer, but a real businessman.

If the producer is not interested in lowering the costs, the boost in this direction comes from the reseller. The success of Tilesquare enters into this context as it was originally intended to be an instrument in the hands of the producers but it became a strong point for the resellers instead. ICT is favouring the creation of a real network of resellers to whom a certain number of producers are linked.

The specialists: this category mainly includes architects or free-lance professionals specialised in internal design. These are people who operate exclusively for resellers and who prepare projects on commission. In the traditional value chain of the building and furnishing industry, to achieve the project or the final study of the interior required, the customer goes to the reseller and must spend a certain length of time with him to arrive at an accurately detailed project but this, however, does not take advantage of the law of simultaneity. As will be seen, through the use of a particular software (3Dweb) that Tilesquare places at disposal, these limitations can easily be overcome.

In this case Tilesquare has shown a deep sensitivity and has embraced the EMP as an opportunity and not as a threat.

The EMP is open not only to firms and people connected with the building and furnishing materials industry, but also to final consumers that are interested in seeing the content of the web.

To understand the way Tilesquare works, it is necessary to take a look at the modalities offered to each individual actor when becoming a part of the portal.

The suppliers can access the EMP with a single window modality or can present and manage a real electronic catalogue to promote the sale of their products.

The producers access the EMP in order to link up with their suppliers and resellers. They can carry out product or company research and access the sites of all the network participants.

The resellers have a choice of three modalities: "simple registration", "3D registration" and "Tilesquare point".

With "*simple registration*" the reseller can access reserved areas that allow him to see the producers' special offers every day (on the portal) and he can ask for quotations, orders and reorders to be directed to the producers on the site. This is aimed at small resellers who have little or no experience with information systems. It is a professional technology access type, which solves many typical problems without any particular investment.

The "*3D registration modality"* uses 3D designing software. With this registration the reseller can only use the products of the producers present on Tilesquare.

The "*Tilesquare point*" modality is the complete module that Tilesquare offers to medium-large resellers and places strong emphasis on customer service. It is a web within Tilesquare that has applications for the organisation of its own catalogue, the optimisation of the communication procedure with the suppliers and collaborative functions for

efficiently communicating with its own customers. This module makes it possible to insert producers that are not on the site into the catalogue as well.

In fact, the producer can decide to be visible to everyone (this is only true of a few producers), by means of a transparent catalogue. Alternatively, he can decide to be visible only to his customer resellers (a password is needed for this and a kind of extranet is created).

In this way, in his catalogue the reseller can have the producer's products in a transparent catalogue and has the possibility of personalising exclusive relationships with some producers with whom "privileged" relations can be entertained.

To participate in this virtual web organisation it is necessary for the company to pay a year's subscription. After this there are no additional costs when a participant trades within the system.

Tilesquare is an independent company and its partners had no previous experience in the building materials industry. This choice is due to the fact that the company wanted to remain neutral as regards information, transactions and activities carried out in the virtual square and also guarantee the maximum level of privacy for all data collecting within the IT infrastructure.

A managing director who was already familiar with the building and furnishing material industry was nominated.

The **first phase** (January 2001- December 2001) was uncertain. The initiative considered producer needs to be of primary importance. However, this priority disregarded the previously existing relationships between participants and considered all the parties as being of equal importance. This eventuality wasn't appreciated by those who, for example, had been operating in that field for several years, and/or had invested a lot in advertising to promote and distinguish their products.

Therefore, in this initial phase was rather shaky because of the risk to the producers, especially the "old" ones who felt threatened by competitors who had quality products even though they were less visible commercially on the world market. Therefore, the first factor to point out is the risk or threat that the EMP represented for this category of participants in this initial phase.

In the **second phase** (December 2001 - October 2002) Tilesquare introduced a new type of software that was very useful in facilitating the sales activity of the resellers. It is important to look closely at this aspect in terms of the distribution of innovative software in order to understand the change that ITC induced regarding organisation and therefore the success of EMP itself. The software is installed at the resellers who adhere to the EMP. It is a support programme for the sale of building and furnishing materials and not software that has been developed through automatic designing. Its main feature is that it is easy to use especially considering the fact that the reference target is the reseller who frequently is not practised in information systems. Another strong point of this software is the speed at which the design draft of an interior can be achieved (it takes advantage of the law of simultaneity).

This is substantially a reproduction on a squared sheet onto which the perimeter of the interior to be designed is traced. Then the room is put into perspective as regards height. The coverings are added, the exits and the furnishings. In a very short time (a few minutes) it is possible to have a 3D low-resolution reproduction of the interior required. It is also possible to have a high-resolution photograph to show the effect in as much detail as possible. As for the coverings and the furnishings, every reseller has his own personalized supplier grid from which to choose.

With 3Dweb, once the parameters have been set and the materials chosen, it is possible to have a quotation in real time, even on the basis of any discount policies that each individual reseller can acquire from the producers. Each reseller enjoys special purchase conditions, even with just a few producers, so it is actually impossible to establish standards from the management and accounting points of view. However, the hypothetical transaction is made with the utmost discretion and with absolutely no interference from the managers of the virtual market.

Another peculiarity of the software is that it allows the reseller to offer his customer a range of products which includes more than the typical building and furnishing range.

To understand the importance of resellers in Italy, it is well to point out that 85% of this type of market is controlled by 10% of large resellers. So, one of the main objectives of Tailsquare was convince these large resellers to join the EMP.

In the **third phase** (October 2002- June 2003), Tilesquare was able to convince resellers and producers to operate within this new type of market. From the beginning there were opportunities to offer a large number of services that would allow the participant to work better. To avoid creating confusion between parties, Tilesquare decided to make only a few services available to start with and gradually release additional services, so that there would be time to train users in how to take advantage of all the benefits obtainable through the use of EMP services.

This gradual addition of services is the real strong point of the application: the widespread use among all the participants of these services has led to the homogenisation and standardisation of the link between producer and reseller. No more individual programmes for each individual producer but just one programme that manages the entire category upstream of the reseller. Before this there was an ad hoc programme for every single producer or product line with the inevitable management problems for the reseller.

It should be pointed out that one large producer, who was already present in the world markets, refused to participate in the EMP because he had already invested rather heavily in order to automate the communication flows with his own resellers. He would have taken part if the whole digital market had adopted his standards. This request was denied by the EMP management and explains the absence of this producer at the beginning. Later, the same producer, under a different brand name, subscribed to the EMP accepting the standards that all the EMP participants share.

Tilesquare is a kind of virtual warehouse: the reseller knows the availability of a determined product at any given moment, he can find out the delivery times and all the connected conditions. Furthermore, it is also possible to carry out continual trekking of the goods concerned with instant monitoring.

The portal also offers the possibility of updating catalogues instantly, of introducing new products as well as new lines, of offering special conditions for leftover stock (in the special offer section).

The resellers enrolled in the EMP can offer their own customers exclusive rights to some series of products that are only available in their catalogues. In perspective, the offer of standard packages of products could be possible with access for both the enlisted reseller (through a password) and the final customer (free access). Exclusive rights are formulated in a legally guaranteed written contract.

Another service that Tilesquare offers is the possibility to access the CWW site, which is the most influential on-line magazine in the building and furnishings sector, guaranteeing the reader with continually updated news and statistics.

Tilesquare's experience can be considered a good case study as it demonstrates the ability of the management to immediately understand the suitable parties that could be interested in benefiting from this new type of virtual organisational form, despite a shaky start.

Within relatively few years, Tilesquare has acquired a good reputation and more than 1000 participants have collaborated with this initiative. Problems could arise from producers that are afraid of losing their competitive edge that they have succeeded in establishing over the years. These producers want to defend the power they had within the value chain of the building and furnishing materials industry.

3 A Theoretical Perspective Of EMP

EMPs are intermediaries that use ICT capacities to favour inter-organisational relationships in an industrial sector.

The main objective of an e-marketplace is to facilitate business relationships among participants using the Web. In an EMP context, inter-organisational relationships are managed by business-to-business systems. What is happening in practice is that the B2B world is influencing, and will continue to influence more and more in the future, inter-organisational operating roles, especially in the value chain context. In the field of Information Systems studies, new research questions are emerging.

Straub and Waston (2001) suggest the following table regarding the main goals and the key research questions in relation to B2B issues.

Table 2: *Key research Question. Overarching Issues*

	Goal in Practice	Key Research Questions
Strategy	Exploring successful NE[2] Initiative	What are the strategies, particularly IS ones, that transform a firm into a successful NEO[3]? And what are the inhibitors?
Organisational design	Choosing and justifying virtual design	Which virtual design increases the effectiveness of flows in B2B and B2C?
Metrics	Validating e-metrics	Which critical constructions and measures explain net enablement?
ICT Function	Creating the ICT infrastructure for NE	Which ICT infrastructure or development capacity leads to favorable outcomes for NEOs?

IS literature offers several different definitions concerning this organisational form. First of all there is the example of Malone et al. (Malone, Yates, Benjamin, 1987) who considered EMP as "Information-Technology Based Governance Mechanisms", i.e. mechanisms used to manage information based on information and communication technology.

Kaplan and Sawhney (2000), however, suggested a classification based instead on the firm's purchasing behaviour. Sculley and Woods (2001) demand different types of EMP in accordance with the different transaction mechanisms adopted by the firms.

[2] NE= Net Enablement

[3] NEO= Net Enabled Organisation which co-ordinates its activities and interacts with its stakeholders through the exchange of messages over electronic networks

A shared opinion is the one adopted by Brooks and Dik (2001) who classified three different types of EMP: 1. Private trading exchange; 2. Industry consortia; 3. Independent electronic marketplace. The case study analysed in this paper could be considered as a hybrid form between case 2 and case 3.

As already said, the Transaction Costs Theory can help to understand the perspective of EMP and the reasons why outsourcing strategies are adopted, but, after a certain point, this theory no longer helps to interpret new organisational forms. This theory does not deal with some useful factors for understanding the implication of EMP within the different industrial sectors.

The main aspects that this theory ignores or does not take into consideration with the necessary importance are (Christiaanse, Markus, 2002):

- the benefit of integration, i.e. the advantage that can be gained from the opportunity of collaborating in other than trading operations;
- the importance of extended and pre-existing relationships within the value chain of participant organisations;
- the significance of non economical factors, for instance, power (Pfeffer, 1981).

The case study analysed in this paper confirms all of the three aspects focussed on by the authors Christiaanse and Markus. The main difficulties that emerged in Tilesquare were initially problems in the management of power.

The power question had an essential influence on this EMP's chances of survival.

Failure to comprehend the benefits that could be obtained by accessing a new generation of users, the traditional hold of the producers could have caused the failure of the whole initiative. Moreover, in Tilesquare's case, the quality of relationships enjoyed by the management, both before and after the start of the EMP, assumed great importance.

The possibility of integrating all data concerning the value chain participants on the same web has been the main source of attraction for resellers and consequently the cause of the EMP's success.

Strategic Network Theory could be appropriately adopted to interpret EMP phenomenon from a theoretical point of view. Strategic network theory was proposed by Ouchi (1980) who categorised the hierarchical governance mechanism into two groups: bureaucracies and clans. At the beginning, this concept only referred to intra-firm relationships, but was later applied to inter-organisational relationships and defined as a network. For this reason, strategic network theory enlarges Transaction Cost Theory and tries to interpret the long term relationships among firms considering the reduction of transaction costs that a network collaboration brings about (Jarillo 1988; Christiaanse, Kumar, 2000).

4 Conclusion

There is an evolving stream of thought that has characterized organisational studies and IT research. These two branches of knowledge, in particular areas, need to continue to be developed simultaneously. A new emerging discipline is coming to light. It is a form of hybrid research (Olrlikowski, Barley, 2001) appropriate for the study of new organisational phenomenon and for referring to other organisational theories, previously unused in the interpretation of this type of phenomenon.

This could be an appropriate route to follow in order to understand the rapid and continual changes that provoke the creation of new organisational forms.

In this paper, the authors have analysed the existing relations between organisational and technological innovation underlining the increasing weight ICTs are assuming in organisational studies, focusing the attention on organisation design.

The paper also analysed how great use of new technologies could facilitate the emergence of new intra- and inter-organisational relationships.

Some new organisations have been interpreted in the Information System literature using Transaction Costs Theory. On the other hand, the limitations of this new approach must be considered showing how the Strategic Network Theory could provide useful frameworks for understanding the new phenomena that are distinguishing some industries.

Using the case study approach, the development of an EMP in an Italian industrial district and the noticeable organisational impacts have been analysed.

The author used the research work of Christiaanse and Markus (2002), who have worked on new organisational assets and develop of B2B in an EMP context, to aid his analysis.

This case study shows how the widespread use of ICT has favoured the development of a network with about 1000 participants. Even if difficulties were encountered at first, within three to four years the number of participants has constantly increased involving above all foreign participants who have used the technology as a vehicle of intra-organisational integration. In fact, it can be seen that the EMP, originating in Italy with Italian participants, has gradually become larger, encompassing mainly resellers who operate in the East European markets, with some participants from Thailand too. The ease and simplicity with which this increase in participants from other countries occurs in respect to Italy is due to the optimal use of ICT, which facilitates the communicative effect and integration between participants. Little has been mentioned in this case study about the brokerage effect as transactions are still made with traditional methods with a direct meeting between buyer and seller. The next development phase of Tilesquare will also concentrate on this aspect, but, at the moment, this is not one of the priorities of the services offered which are more geared towards the communication and integration aspects. Once these aspects are satisfied, the need to manage the brokerage component will emerge more strongly.

It is therefore beyond any doubt how, as underlined by Straub and Watson (2001), the conduct of net-enabled business, and various know-how like electronic commerce (EC) or e-Business, have changed the landscape and opportunities for IS research by shifting the focus from internal to consumer/partnership systems.

Kambil and Van Heck (1998) have argued about how networks transform organisations: they enable information to support, enhance, and substitute physical processes (i.e. physical costs, including logistics of goods and services movement from source to destination) with logical processes (i.e. information costs).

The authors of this paper agree with Straub and Watson on the above characteristics of the NE (Net Enablement) revolution, which places IS research at centre stage of the most exciting organisational and social phenomenon of our times. Straub and Watson argued that “information and systems that deliver this information are integral to causes, processes, and outcomes of net-enablemement, no matter which other factors might be driving NE”.

The research lines initiated with this work will encourage further contributions to make a deeper study on the theme concerning the initial research question: to what degree can ICT favour the development of organisational forms, especially strategic networks, considered as a new way to govern transactions? The question which authors are asking of themselves is to what degree does the use of networks really represent a new

organisational form, as illustrated by Castells in his many contributions (Castells 2000/2002), or perhaps the question has not yet been clearly defined and, to quote Kallinikos again, still needs to be identified: "…to identify a set of crucial issues associated with the emergence of networks as alternatives to organization and markets".

References

Benbasat, I. (1984). "An Analysis of Research Methodologies," in McFarlan, F. W. (Ed.) The Information Systems Research Challenges, Boston, MA: Harvard Business School Press, 47-85.

Brooks J., Dik R., (2001). "B2B eMarkets: The Smart Path Forward", Accenture,.

Campbell, D. T. (1975). "'Degrees of Freedom' and the Case Study," Comparative Political Studies, (8) 2, pp. 178-193.

Castells, M (2001), The Internet Galaxy. Oxford University Press, Oxford.

Ciborra, C (1993), Teams, Markets and Systems. Oxford University Press, Oxford.

Costa G. (a cura di), (2001). "Flessibilità & Performances. L'organizzazione aziendale tra istituzioni e mercati", Isedi, Torino.

Christiaanse E., and Kumar K., (2000). "ICT Enabled Co-ordination of Dynamic Supply Webs", International Journal of Physical Distribution and Logistics Management (30:3/4), 268-285.

Christiaanse E., Markus L., (2002). "Business to Business electronic marketplaces and the structure of channel relationships", in Proceedings of the ICIS 2002, International Conferences on Information Systems, Barcelona, 18-21 December.

De Marco M., (2000). " I Sistemi Informativi Aziendali", Franco Angeli, Milan.

Dukes, W., (1965). "N=1,"Psychological Bulletin, (64) 74-79.

Fowler A., Jeffs B., (1993). "Examining Information Systems Outsourcing: a Case Study", Journal of Information Technology, Vol.13 N.2.

Fulk J., De Sanctis G., (1995). "Electronics Communication and Changing Organisational Forms", Organisation Science, Vol.6 N.4.

Hamel, J., S. Dufour, and D. Fortin (1993). Case Study Methods, Beverly Hills, CA: Sage Publications, Inc.

Jarillo J. C., (1988) "On Strategic Networks", Strategic Management Journal (9), January-February 31-42.

Kallinikos, J. (2003) "Networks as Alternative Forms of Organization: Some Critical Remarks", 11th European Conference in Information Systems, New Paradigms in Organizations, Markets and Society, Napoli, 16-21 June, 2003.

Kambil A., Van Heck E., (1998). "Reengineering the Dutch flower auction: a framework for analysing exchange organisations". Information System Research Vol.9 N.1 1-19.

Kaplan S., Sawhney M., (2000)."E-hubs: the new B2B marketplaces", Harvard Business Review, May-June.

Lee, A. S. (1989) "A Scientific Methodology for MIS Case Studies," MIS Quarterly, (13)1, 33-52.

Malone T., Yates J.E., (1987). "Benjamin R.I., Electronic Markets and Electronic Hierarchies", Communications of the ACM, 30(6).

Orlikowski W., Barley S., (2001) "Technology and Institutions: what can research on information technology and research on organisations learn from each other?", MIS Quarterly (25), 145-165.

Ouchi W. G.,(1980). "Markets, Bureaucracies, and Clans", Administrative Science Quarterly (25), 129-141.

Perrone V., (1990). "Le strutture organizzative d'impresa: Criteri e modelli di progettazione", Egea, Milan.

Pfeffer J. (1981). "Power in Organisations", Ballinger Publishing Co., Cambridge, Mass.

Powell W.W., (1990). "Neither Market not Hierarchy: Network forms of organisations", in B.Staw, L.L. Commings eds., Research in Organisation Behaviour, 295-336, CT:JAI Press, Greenwich.

Prager K. P., (1996). "Managing for Flexibility: the New Role of Aligned IT Organisations", Information Systems Management, Fall, 41-46.

Rokart J.F., Earl M.J., Ross J.W., (1996). "Eight Imperatives for the New IT Organisation", Sloan Management Review Vol. 38 N.1.

Sculley A.B., Woods W.A., (2001). B2B Exchanges. The Killer Application in the Business to Business Internet Revolution. HarperCollins, New York.

Stake, R. E., (1995). The Art of Case Study Research, Thousand Oaks, CA: Sage Publications.

Straub D.W., Watson R.T., (2001). "Research Commentary: Transformational issues in researching IS an net-enabled organisations". Information System Research, 12(4) 337-345.

Thompson J. D., (1967). Organisation in action, McGraw-Hill, New York.

Wigand R.T., Benjamin R.I., (2004). Electronic commerce: effects on electronic markets, Journal of computer mediated communication, Vol.1 N.3

Williamson O., (1975). "Market and Hierarchies. Analysis and Antitrust Implication", The Free Press, New York.

Yin, R. K., (1994). Case Study Research: Design and Methods, 2nd edition, Vol. 5, Thousand Oaks, CA: Sage Publications, Inc.