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with

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BUSINESS NETWORKS: EPHEMERAL STARS OR PERRENIAL TRIBES ?

Report by Sylvie Chevrier English Translation by Lisa Ballé

Summary of the meeting

Gianni Lorenzoni, who has been studying corporate networks for a number of years, shows that the classic academic approaches describe these networks as centres linked through temporary contract and obligation to a main satellite. However he thinks that good networks are lasting, multipolar and based on a relationship of mutual trust that is largely informal.

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PRESENTATION by Gianni LORENZONI

Gianni Lorenzoni is convinced that there is considerable scope for research into business networks He defines business networks, suggests a method for analysing them and describes how they work.

Defining the unit of analysis

A network is an organisational structure that features a high density of relationships between different companies. Most of the research into networks to date has been concerned with the 'dyadic' relationships between a central company and its satellites.

Some researchers concentrate on certain types of relationship, such as subcontracting, franchises, joint-ventures, and so on. However, the central companies foster more than one type of relationship at the same time. This calls for research into the whole network of relationships, as acknowledged by the Swedish school.

Gianni Lorenzoni starts his research by identifying the central company. One of the ways of doing this is to make a tally of all the relationships in the network and to find the company that is involved in the largest number of them. Another approach is to compare the turnover per employee between companies in a given sector. For example, in the computer industry, the turnover per employee at Apple Computer appears to be three times higher than that of its competitors, which means that Apple makes considerable use of skills from outside the company. Similarly, in the car industry, Toyota's turnover per employee is four times higher than Fiat's or Renault's. This type of analysis gives us a quick way of identifying the central companies.

What happens in the networks ?

The way the networks operate breaks away from the economy of contracts as analysed by Williamson. Williamson believes that inter-company relationships are set up selectively via opportunistic fixed-term contracts that involve transaction costs. Companies only resort to the market if transaction costs remain lower than the price of vertical integration.

Packaging machine and co-engineering

However, network research shows that although inter-company relationships are not always based on formal contracts they may still be successful. Research has also shown that networks rely on numerous long-term stable relationships. This is illustrated by the packaging machine below:

This machine is manufactured by a process of co-engineering, carried out by the central company and its peripheral units. The diagram shows the geographic proximity and the duration of the relationship (about 10 years on average) between the central firm and the units that supply the components.

The bubbly organisation

As the inter-company relationships develop, the number of peripheral units grows until there are several companies acting as motors in the same network. The polycentric network can then be described as a 'bubbly organisation' in which initiatives from all sides keep the network from becoming stillified.

A price-based system or relationships built on trust?

The way the networks function is in stark contrast to contractual economics. This is shown in the table below, which compares the two approaches, notably in terms of the different types of relationship and communication. The differences boil down to a marked contrast between the price-based system implied by the contractual economy and the relationship of trust that binds the networks.

Price-based system

Relationships built on trust

| Contracts | Networks |
|--|--|
| Dyadic relationship | Intensity of inter-company relationships |
| Opportunism | Long-term |
| Transaction costs | Relationships |
| Sequential relationships | Parallel relationships |
| Explicit information | Tacit communication |
| Selective, unilateral information | Frequent, reciprocal information |
| Deferred transfer | Anticipation and mutual adjustment |
| Implications for future research into networks | |

Implications for future research into networks

Research into networks is still not in the main stream and is not widely available. Currently the main people interested in them are production economists and strategists but it has yet to attract the attention of organisational theorists. Further research is needed to provide a model of the networks and define the conditions for their existence, as well as to analyse inter-company relationships and how these are managed. There is a definite lack of research into the long term evolution and performance of networks.

DEBATE

Modelling networks and the relationship of trust

Participant : We havn't managed to construct reliable models of networks and the relationship of trust for two reasons. Firstly, from a theoretical standpoint, we are prisoners of our geometrical minds. We draw circles joined up by arrows, implying that the relationship is permanent. Our epistemological inflexibility prevents us from making models of anything that is flexible. What's more, in practical terms, management science is a slave to the consultancies. Network research is limited because consultants are paid to carry out work in companies, not outside them! So we stick to a geometrical description that is confined to the company's internal relationships.

However I've been working for years on the relationship of trust and I believe I've found an answer in the works of certain anthropologists, notably Emile Durkheim. Instead of talking about networks, I've started to talk about tribes, a term that does not prejudge the nature of the links between the members. The members of a tribe

© École de Paris du management - 94 bd du Montparnasse - 75014 Paris tel : 01 42 79 40 80 - fax : 01 43 21 56 84 - email : ecopar@paris.ensmp.fr - http://www.ecole.org trust one another because they share the same ideas (myths) and gestures (rites). These tribes, myths and rites form a whole and if one of these cornerstones crumbles, then the entire structure collapses. But although ethnologues study this triad in distant tribes, researchers in human sciences seem reluctant to apply it to the modern world. This would weaken our Cartesian narcissism.

Gianni Lorenzoni : Sophisticated corporate networks fit with what you've just described. The central companies have a certain way of seeing the tribe. Benetton, for example, creates a tribe. The most important part of this process is selecting the tribe members (the partners), i.e. clones who share Mr. Benetton's ideas. The problem is not managing the peripheral units but getting them all to share the same idea of what should go in the shops. To recruit nonconventional people, Benetton don't hire experienced managers from the clothing retail trade; instead they recruit florists!

Participant : One of your students has studied a leading valley of companies near Bologna in the packaging industry. It started when a group of people resigned from a big company in order to set up their own companies and work together. What has kept them going is mutual trust. They form a tribe with its own rites and share the myth of coming from the same company and therefore having the same 'parents'.

G. L.: This is the industrial district effect. If we look at a map of the Bologna region, we can see a large concentration of companies from the same sector in a space of 15 square kilometres. At first, the homogeneity of the industrial districts' culture will favour quick growth, but later on there's a risk of inertia setting in unless the structure is updated.

Trust : does it mean different things in different cultures ?

Participant : Aren't there different interpretations of the word 'trust'? To Toyota, trust means fostering long-term relationships. But in the United States, people are interested in the short-term and they haven't yet caught onto trust. I am currently working on French-Slovenian relationships and I've observed suspicion disguised as trust.

G. L.: We've worked on American cases in order to convince people of the importance of networks in the United States. In the American computer industry, biotechnology and the Manhattan clothing industry, we've observed the same process going on between the centre and the periphery as we've seen in Italy. It's essential for competitivity. These days the Americans are making huge efforts to build close relationships because contracts can only regulate what is predictable.

Fifteen years ago I attended a Harvard presentation on a strategic plan, given by the chairman of General Electric. Fifteen years later, the same chairman is giving lessons to managers at General Electric University. Rather than being happy just speaking, he is now trying to train people and share key, tribal ideas. Organisations must not only break down the external barriers that separate them from their clients, but they must also make a special effort to break down internal barriers.

Networks on a quest for the mainstream ?

Participant : *Mainstream organisations have precise barriers that set the limits for a closed system. However, organisational barriers are no longer in step with legal*

© École de Paris du management - 94 bd du Montparnasse - 75014 Paris tel : 01 42 79 40 80 - fax : 01 43 21 56 84 - email : ecopar@paris.ensmp.fr - http://www.ecole.org barriers; there is no way of properly analysing this. We need to define the tribes, rites and myths for the network theory. It's a subject that could interest organisational theorists.

G. L.: Economic theory has evolved and theoreticians are now interested in the company (Coase). Economists acknowledge that you can run an organisation without owning it but they still see the organisation as a closed system. They consider that organisations belong to networks but they haven't yet conceived a network organisation *per se*. In a way, they see networks simply as computer networks. But managing big networks calls for other tools, like a group of people who have worked together before.

Participant : The Americans reject the idea of networks which conflicts with their democratic ideal of open dealings. For them, networks conjure up images of the Mafia.

G. L.: Networks do exist in the United States (for example, Apple has shaken up the status quo for designing its products), but researchers still don't see the topic as a 'normal' science.

Participant : The American mainstream is a very close-knit tribe that clings to the myth of universal reason, as well as the rite of contracts and written rules. The tribe is made up of WASPs who understand this language because they are trained in mathematics and law. They see others, including Europeans, as suspect.

Networks: a structure suited to change

G. L.: Network structures are suited to developing countries and there are a large number of them in Hong Kong, Taiwan and China, amongst others. The family, along with competitive forces, plays a leading role in building the networks. This is what should happen in East Europe. Fast development with modest means needs companies to seek outside resources and share ideas.

Participant : This is co-opetition!

Participant : The network could be seen as a third degree organisation. First of all we had the classic pyramid suited to stable situations and incarnated in administration. Then there was the Taylorist organisation with the staff and line workers suited to intermittent progress, as in the car industry. We now have the network organisation that allows continuing progress. The shift from one type of structure to another is rather painful and tends to be forced upon a company by competitive forces.

G. L.: Organisational changes generally lag behind strategic changes. The network, which is both stable and flexible, allows companies to face up to a changing environment. Networks reconcile differentiation and integration, and allow greater speed with creating, selecting and storing information. In other words, it's all about organisations that learn faster (with simultaneous decision-making) and in a different way (by interacting with other companies in the network).

Participant I would replace the notion of barriers with the idea of proximity, in three forms:

© École de Paris du management - 94 bd du Montparnasse - 75014 Paris tel : 01 42 79 40 80 - fax : 01 43 21 56 84 - email : ecopar@paris.ensmp.fr - http://www.ecole.org - proximity in terms of time (for example, it can be quicker to get from Paris to Nice than to Fontainebleau),

- tribal or procedural proximity (a Chinese person living in Paris does business with Hong Kong over the phone, whereas he signs a contract with his French neighbour), - technical proximity (proximity in terms of know-how).

Proximity is vital to industrial networks.