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**Industrial Networks: Are they a new and alternative way
to conduct business or just a logical consequence of a
globalising economy?**

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just a logical consequence of a globalising economy?

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Abstract

Networks have been a hot topic in recent years, not only in mainstream media but also in academic literature. The sociological interest in industrial networks is one of multiple levels and surely stems from the question if networks can benefit society. It was the purpose of this paper to research the emergence of the study of networks or industrial networks and validate, using articles concerned with the matter, if they are in fact a new concept in business or not. Considering the review of literature, one can conclude that by no means are networks in business a novelty but a logical consequence of human relationships in general and also that network structures have been present long before their discovery through academia, only not identified as such. It was found that the previous definition of market structures in business, while maneuvering between the two extremes of hierarchy and a free market, may have been too rigid and networks provided an excellent alternative term. It can further be suggested that the study of networks should focus on exchange mechanisms, cultural differences and emotional involvement as industrial networks may differ in their degrees of freedom, scale and purpose but always rely on reciprocity, as do all human relationships.

Key words: Networks; industrial networks

JEL codes: D21, L16, O12

The world is composed of networks – not groups.

Barry Wellman¹

Introduction

This universal and substantial quote by Wellman proves helpful to demonstrate the controversial attitude that the study of networks provokes. Networks have been all the hype, disregarding if we are referring to the media attention on terms such as Social Networks or Business Networking or in fact the recent academic research in different areas such as Politics and Sociology. It should also not be disregarded that the sociological interest in industrial networks is one of multiple levels. Politically it should be questioned if these types of networks can benefit society and can thus be the object of academic research in order to improve the economic use of resources and thus reduce waste.

As Karen Cook and Richard Emerson² defined networks of social actors as sets of connected exchange relations it becomes clear why the main concentration of the study of networks is usually set on the exchange of economic goods and services as these are the most common mean of exchange between social actors within a market.

In order to keep the sociological focus, we will look at the sociology of organisations which analyses organisations in the midst of other organisations³ (Lucien Karpik, 1978). Thus this specific field studies organisations within the economy, or businesses e.g. joint ventures and strategic alliances. Research questions are mostly centered on the issues of the organisation of power and interactions within and between organisations. Subsequently it is studied how businesses try to control an environment of suppliers, customers and competition which is naturally outside of their area of influence. Early studies have found that markets are not of an atomistic and independent structure but highly interrelated (e.g. Frans N. Stokman/ Rolf Ziegler/ John Scott 1985) and it should go without saying that this

¹ P. 31 Barry Wellman, *Structural Analysis: From Method and Metaphor to Theory and Substance.* P. 19-61 in *Social Structures: A Network Approach*, edited by Barry Wellman and S.D. Berkowitz. Cambridge: Cambridge University Press, 1988

² Karen S. Cook, Richard M. Emerson *Power, equity and commitment in exchange networks* *American Sociological Review* 1978, Vol. 43 (October): 721-739

³ P. 471 Renate Mayntz, *Policy-Netzwerke und die Logik von Verhandlungssystemen*; 1996/1993

result is of macroeconomic significance as it emphasizes the importance of interaction inside markets.

It is a focus of this paper to research the emergence of the study of networks or industrial networks and connect this rise of attention the subject experienced in academia with its previous existence or in fact as it is sometimes labeled, the emergence of networks in business in general. Mainly we will concentrate on the works written by Renate Mayntz⁴ and those of Oliver E. Williamson and Walter Powell.⁵

The origins: Studying networks in Sociology

Mayntz examines the history of how and since when networks are studied, her interest particularly are policy networks. She cites Roger Hollingsworth⁶ (1990) who identified in his policy studies that U.S. companies reacted towards anti-cartel legislation by integrating horizontally and vertically and thus formed hierarchical economic structures and further concluded this development as a historic fact. This collective movement of acquiring suppliers, competitors and vendors resulted in the emergence of Multi National Companies (hereafter MNCs) which of course needed a substantial increase in capital and thus, Hollingsworth argues, the emergence of investment banks was caused. After the 1950s the importance of investment banks diminished sporadically and Hollingsworth suggests the emergence of obligational networks to be the reason for this economic transformation. He further defines an obligational network as the assembly of interactive relationships between companies.

Mayntz⁷ distinguishes between promotional networks which have a high focus on Research and Development and are mostly found in fast moving and innovative industries, and policy networks, which are decision making groups mainly studied in Political Sciences. These are interesting to research as they contradict the clear separation of state and society and also the definition of the state as the highest policy maker in the political hierarchy. If policy networks form, decisions are made by finding agreements between different actors and thus decisions are made collaboratively rather than by the strongest party in the hierarchy. The reasons for the emergence of policy networks, Mayntz states, are that power was relocated to different interest groups and also the formation of unions

⁴ Renate Mayntz, Policy-Netzwerke und die Logik von Verhandlungssystemen; 1996/1993

⁵ Oliver E. Williamson The economic institutions of capitalism, chapters 1, 7 & 8;; 1990/1985; Walter W. Powell, Neither market nor hierarchy: Network Organisation 1996/1990

⁶ P. 472 Renate Mayntz, Policy-Netzwerke und die Logik von Verhandlungssystemen; 1996/1993

⁷ P. 473 Renate Mayntz, Policy-Netzwerke und die Logik von Verhandlungssystemen; 1996/1993

and other organisations in order to represent the interests of such groups. The obvious goal of policy networks is thus collective decision making, but underlying this uncontroversial purpose it is problem solving. The result is a diversification of political power and a weaker state. Thus policy networks are a result of the structural change in modern society apart from the usual measurements such as the growth in GNP per capita and education above all from the functional differentiation, as identified by and often connected to Talcott Parsons, within society on a macroeconomic level⁸. Functional subsystems in society evolved and were defined by a shared border, identity and a relative autonomy from the outside, which authors such as Niklas Luhmann identified as the most crucial factor for subsystems to emerge.⁹ One example of this structure of sectoral self regulation is the British Science Council¹⁰. Mayntz argues that no subsystem, may it be the health or education, could have achieved this degree of autonomy and functional differentiation without an increase in organisations within society. But she also states that this is only a possible reason for policy networks not an imperative.

There are substantial differences to be found between Eastern European and Western European states as there was little functional differentiation in former socialist states where the state administered education and all other sectors which were important for the economy and the society as a whole. She argues further that the fall of Eastern Germany was not a revolt against political repression but a result of restricted innovation, flexibility and reactionism and thus a lack of modernization and subsequently choice. Mayntz further connects this to the conclusion that the ability to make decisions without restraint, thus freely, and responsibly is necessary for all collective decision making in interorganisational. The existence of Policy Networks within a society is thus an indicator for modernisation and a restricted power of the state.¹¹

Earlier Powell(1975)¹² identified and defined networks as hybrids between free market and hierarchy structures and continues to describe the synthesis by which networks are created when formal organisations destroy quasi-groups and substitute them by formal hierarchies. Subsequently these growing organisations destroy the existing hierarchies and thus create networks. Economic development thus takes place when oligopolistic structures eliminate monopolies followed by the emergence of MNCs and interest groups. The network may thus be an alternative between the free market, where actors are by definition unable to control negative externalities and hierarchy, in which repression takes place through a planned economy which is administered by the state.

⁸ P. 474 Ibid.

⁹ P. 475 Ibid.

¹⁰ P. 22-23 Renate Mayntz, Funktionelle Teilsysteme in der Theorie sozialer Differenzierung, S. 11-44 in R. Mayntz/ B. Rosewitz/ U. Schimank/ R. Stichweh, Differenzierung und Verselbständigung. Zur Entwicklung gesellschaftlicher Teilsysteme. Frankfurt a.M.: Campus 1988

¹¹ P. 475, Renate Mayntz, Policy-Netzwerke und die Logik von Verhandlungssystemen; 1996/1993

¹² P. 214, Powell, Walter W. (1996/1985) Weder Markt noch Hierarchie: Netzwerkartige Organisationsformen. In: Kenis, Patrick/ Schneider, V. (Hg.) Organisation und Netzwerk: Institutionelle Steuerung in Wirtschaft und Politik. Frankfurt/ Main: Campus S. 213-271

The until then mainly ignored idea by Ronald Coase (1937)¹³ that the firm as a governance structure is by no means a black box, but an interdependent structure, was picked up by Williamson(1975/1990/1985)¹⁴ in order to construct his transactional cost theory. He mainly stated that transactions which require substantial investments and are recurring but have an uncertain outcome are far more likely to take place in hierarchical organisations rather than in a free market framework. Further he stated that transactions which are straight-forward, non-repetitive and require low transaction investments are more likely to take place in a market structure. Companies subsequently react by moving transactions out of the market as knowledge specific to the transactions builds up because, he assumes, there is bounded rationality as contracts cannot cover all contingencies and also because of opportunism because actors will most likely follow their self-interest. He states that firms are separated from markets and the society because they are opportunistic.

The transaction cost theory further states that all those costs incurred by making an economic exchange can be either search and information costs, which are incurred in determining that the required good is available on the market and who is offering the lowest price or bargaining costs, which are those costs required to come to an acceptable agreement with the other party and thus formulate an appropriate contract. Policing and enforcement costs are further defined as those costs which are incurred to make sure the other party sticks to the terms of contract and taking appropriate legal action if this turns out not to be the case. Further he defines the costs for searching for the best suppliers, partners and customers and also the cost for establishing a valid contract which mainly concern the monitoring and enforcing of the implementation of the contract.

Transaction costs are unnecessary as they are not directly connected to production, thus firms will try to avoid incurring them, Williamson argues. They can also be called coordination costs, which are well defined as the costs of 'all the information processing necessary to coordinate the work of people and machines that perform the primary processes, whereas production costs include the costs incurred from the physical or other primary processes necessary to create and distribute the goods or services being produced'.

From this standpoint originated his theory of transaction cost economics which states that the costs and difficulties associated with market transactions sometimes favor hierarchies or in-house production and sometimes markets as an economic governance structure.

¹³ P. 2 Williamson, Oliver E. (1990/ 1985) Kap. 1,7 und 8. In: ders. Die ökonomischen Institutionen des Kapitalismus. Tübingen: Mohr/Siebeck, S. 17-48 und S. 186-236

¹⁴ Ibid.

Later Powell (1996/1990)¹⁵ formulated a critique of the rigid approach to categorising organisational structures. He argued for the existence of networks, rather than the two extremes of market or hierarchy. His main argument was that firms are blurring their borders and increasingly collaborate in hybrid forms between hierarchy and market in order to benefit from economies of scale, reliable interconnections within their industries and various suppliers.¹⁶ Powell does not agree that the market-hierarchy continuum restricts the form of organisation of firms as this argument is historically inaccurate and too static. Markets have never been the beginning of transactions and hierarchies were not the end points. Also, he argues, that reciprocity and collaboration are not considered. Examples which are stated here are the research by Larson (1988) on High-tech start-ups in the Silicon Valley and also the work of Lorenzoni & Ornatio (1988)¹⁷ on craft based firms in Italy, which show clearly that the network structure was key to success in these regions. He expresses his view that 'networks are lighter on their feet'¹⁸ and 'that the distinction between markets and hierarchies is too rigid for the reality of inter-firm relations and that their structures are too diverse to be classified between these two pillars solely.'

Powell illustrates his argumentation for several network forms by using different industries as examples for successful networks. Networks in craft industries for example have existed for centuries and are by no means a new invention as the work has always been project-based because unique products are created. Similar prerequisites determine the nature of most construction firm networks too, as the relationships between general contractors and subcontractors are usually stable so that a quasi-firm emerges (Eccles, 1981). Less rigid networks, but never the less network structures, can be found in publishing where mostly autonomous subsidiaries collaborate and a large degree of freedom for authors persists. The same applies to film and recording industries where great unpredictability and high variance cause uncertainties.

Further he refers to regional economies and industrial districts such as the German textiles network which is a close community network of highly specialized manufacturers and suppliers in the South West of Germany and the Emilian model in Italy which consists of a small group of firms closely connected in a vertical manner.¹⁹ He also refers to extended trading groups which are different national economies relying on trust and networks more than western markets e.g. Japan and Sweden. Here competition is taking place between different interest groups based on development and knowledge accumulation rather than price. An alternative to mergers and acquisitions are strategic alliances and partnerships

¹⁵ Powell, Walter W. Weder Markt noch Hierarchie: Netzwerkartige Organisationsformen. In: Kenis, Patrick/ Schneider, V. (Hg.) Organisation und Netzwerk: Institutionelle Steuerung in Wirtschaft und Politik. Frankfurt/Main: Campus S. 213-271

¹⁶ For a summary of Powell's categorization of the differences between market, hierarchy and network please consider appendix I

¹⁷ P. 217 Powell, Walter W. (1990)

¹⁸ P. 220 Powell, Walter W. (1990)

¹⁹ P. 233 Powell, Walter W. (1990)

between companies where equity arrangements, collaborative agreements and joint ventures substitute the purchasing of companies.

Even when network structures are meant to be implemented by a certain company, there are certain pitfalls which may prevent those structures to prevail. Not only must the Management be enthusiastic about the organizational change but all employees and other members should share this sentiment in order to ensure the implementation. Further organizational changes are always connected to high costs, especially when installing a collaboration infrastructure within a company that was previously organised in a way that leaned more towards a hierarchical culture. When assuming that the collaboration levels between partners rise one has to also consider that competition could arise when trade details are portrayed more openly.

Mariotti and Cainarca (1986)²⁰ argued for a trend in vertical disaggregation because companies are becoming smaller again in order to concentrate on their core competencies. This trend can be attributed to the inability of large companies to react quickly towards change, a resistance to process innovations and also a resistance to develop new products when they become too large to be agile. Powell further describes the etiology of network firms as the following: There has to be effective cooperation in the long run; Incentives for learning and dissemination of information must be given continuously; Networks are most useful when resources are variable and results are uncertain; further there have to be high means to using/enhancing tacit knowledge and technological innovation.

According to Powell know-how, demand for speed and trust are the critical components of networks in order to be successful and it can hardly be disputed that this is true, however it can be agreed also that these components are more or less critical for every business to succeed, not solely networks.

Industrial Networks

In order to clarify what exactly industrial networks consist of different authors were taken as points of reference. Among those were Hakansson and Johanson, who differentiate between the much studied social networks²¹ and the term industrial network by emphasizing the importance of activities and interdependencies within industrial networks as opposed to the mere existence of connections between different actors within a social

²⁰ P. 226 from Powell, Walter W. (1990)

²¹Burt 1982; Cook and Emerson 1978, Iacobucci and Hopkins 1992; Willer and Andersson 1981

network. They further elaborate that these industrial network models and the activities within them are interconnected with the resources used and the actors of the network. Industrial networks, according to Hakansson and Johanson, present the difficulty of producing interdependencies and thus results of actors' activities which reach 'far beyond the horizon of the single actor'.²²

The main characteristics of networks as governance structures were further defined by them as the dynamics of elementary structuring and restructuring, caused by power struggles within the networks. The viability of network governance structures depend on the individual actor's ability to view, convey and administer a network structure as opposed to a market and hierarchy governance. Thus not external industry characteristics are key in this analysis, but the understanding of actors within the existing or potential network to perceive it as such.

Industrial networks - A new way of conducting business?

Berger et. al²³ are considering the globalisation debate on a larger scale amongst others who do so are Martin and Schumann (1996) and Friedmann (1999)²⁴ who state that globalization is irreversible and caused by the development of new information technology, the liberalization of trade and a substantial rise in competition. Thus they argue that investment across borders increases and that national political institutions will lose power. This extreme view is contrasted with the argument of the 'contemporary globalisation' before World War I (Zevin, 1992; Strikwerda, 1993; Wade, 1996)²⁵ and further the strong concentration of MNCs on the culture of their home society (Hirst and Thompson 1996)²⁶. Examples of this concentration are IBM, Coca-Cola and Microsoft which keep a distinct U.S. character to their companies. It also needs to be considered that there are various types of networks implemented in business as, e.g. the virtual enterprise, defined as '(a) temporary network, with some stability, of independent firms connected through ICT (information & communication technologies), with the aim of reducing costs and (increasing) market share' (Kovács & Moniz 2000).

²² P. 46 Hakansson, Hakan/ Johanson, J. (1993) The network as a government structure: interfirm cooperation beyond markets and hierarchies. In: Grabher, Gernot (Hg.) The embedded firm: on the socio-economics of industrial networks. New York: Routledge

²³ P. 60 Berger, Susanne; Constanze Kurz, Timothy Sturgeon, Ulrich Voskamp & Volker Wittke (2001) Globalization, Production Networks, and National Models of Capitalism – On the Possibilities of new Productive Systems and Institutional Diversity in an Enlarging Europe, SOFI-Mitteilungen Nr 29/2001

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid. ; pp. 80 – 96

Michael Wortmann argues that MNCs are no free global networks but 'network-like manufacturing structures (...) which are still confined regionally'²⁷ He uses the argument that FDI is no indicator for an increased degree of the growth of MNCs and thus globalization on a business level. Jannika Mattes²⁸ refers to three problems caused by the physical distance and heterogeneous context in international innovation projects which could be applied to other contexts too. She finds that the distribution of power is complicated as are the creation of trust and the communication between participating actors. Thus internationalisation complicates the creation of trust and MNCs are by no means an indicator of a changing business paradigm or an ever increasing degree of globalization. Mattes further states that localization is necessary for companies in order to succeed in local markets.

It needs to be mentioned here that network structures do by no means guarantee systemrational decision making as greediness and selfishness cannot be guaranteed to be eliminated but they do ideally facilitate them. In networks bargaining or generalized political exchange (Marin 1990)²⁹ is not only a key characteristic but it also takes place on a multilateral rather than bilaterally or indirectly. Mayntz states also that not only is bargaining the key in policy networks but also strategic interaction. Thus, if there is a common interest to solve a problem or change a situation issue networks will form to solve this specific problem according to the needs of those actors interested in the issue. In order to do so successfully Mayntz mentions cooperation and a common system interest as necessary.

In order for negotiations in policy networks to be successful it needs to be considered and realized that different actors have their self-interest in mind. Thus, as it is also mentioned in game theory, actors have to be willing to compromise and follow rules which they consider worthy and relevant. Further it has to be assumed that all actors within the system have to act rationally. Wilke³⁰ states correctly that the problem of complex interdependencies is the blind eye actors persist to have towards externalities due to them following their self-interest. Thus decision making in policy networks depends mainly on a common direction of interest but also on the ability of the individual actors to collaborate and compromise. Not the single decisions are key in cooperative long-term alliances but an acceptance of responsibilities, identities and the institutional arrangement as such. Chester Barnard (1950)³¹ identified the zone of indifference as crucial for successful collective decision making and thus a certain personal distance that is necessary for successful decision

²⁷ P. 1 Wortmann, Michael (2000) What is new about 'global' corporations? Interpreting statistical data on corporate internationalization Discussion Paper FS I 00 – 102, Wissenschaftszentrum für Sozialforschung, Berlin

²⁸ P. 6 Mattes, Jannika (2006) Innovation in multinational companies – An empirical analysis of innovation networks between globalization and localization, Bamberg. From: Bamberger Beiträge zur Europaforschung und zur internationalen Politik Nr. 14

²⁹ P. 18 Marin, Bernd (Hg.) (1990) Generalized Political Exchange. Antagonistic Cooperation and Integrated Policy Circuits. Frankfurt a.M.: Campus

³⁰ P. 484, Renate Mayntz, Policy-Netzwerke und die Logik von Verhandlungssystemen; 1996/1993

³¹ P. 485, Renate Mayntz, Policy-Netzwerke und die Logik von Verhandlungssystemen; 1996/1993

making. Niklas Luhman (1964)³² has also examined the conflict of interest in the process of collective decision making and identified an acceptance of authority as crucial. Actors thus have to be willing and able to base their decisions on external rule without considering possible costs or advantages for themselves solely and keep a personal distance to the issues discussed or problems to be solved.

One can argue that this requirement might be of theoretical significance; however it needs to be questioned if it is possible for actors to move away from their self-interest. This could only take place when a normative identification with the task to be carried out takes place and also if there is no additional cost for the decision maker. It can thus help to choose supposedly neutral and objective individuals to make decisions in policy networks. I would like to argue that this argument is rarely realized in practice as actors are usually unable to ignore their self-interest as, e.g. political actors will not act against their self-interest of being re-elected and thus will not make decisions in a way that the relevant public will disagree with. It is however possible that the interest in the policy network overpowers the individual self-interests of involved actors. Mayntz argues that a loose connection between principal and agent can be found when the normative-ideological integration within an organization is low and when the actor strives to be flexible towards his environment. Further it is beneficial when the actor's interest is not clear or not yet defined. She also states that problem solving in policy networks could be made possible despite different interests by ensuring that there is a flexible connection of multilevelsystems, differentiation of prime identification and orientation and also a lack of defined strategic objectives.

However there is a weak spot with this suggestion of a recipe for successful decision making in policy networks as later instances have to accept the achieved consensus and results but will rarely agree completely. Also it is difficult to determine what an adequate and system-rational result would be as perspectives differ and not all actors or authorities to be considered will perceive the solution as equally beneficial for the system interest.

From a business studies perspective Hakansson et. al³³ identified collaboration between different companies and thus strategizing in industrial networks, especially on a global level as crucial, in order to succeed in the market. One could conclude that this strengthens the argument that we live in a network society which requires cooperation between companies in order to grow, innovate and compete but also this statement is so broad and general in its' implications that it could be applied to nearly all market structures, times and industries while still holding true. Collaboration through strategic networks, when implemented successfully, will most likely always benefit the industry concerned.

³² P. 485, Renate Mayntz, Policy-Netzwerke und die Logik von Verhandlungssystemen; 1996/1993

³³ P. 1 Hakansson, Hakan; Lars-Erik Gadde, Lars Huemer (2003) Strategizing in industrial networks From: Industrial Marketing Management 32 357 -364

Networks- The question of scale and purpose

The network-type in academia and mainstream media can be interpreted as the discovery of a new concept or even as the documentation of a substantial change of society triggered by technological development and globalization but it appears to be a concept that was always present and also used by most even if in substantially different ways. A personal network of a close-knit family is just as much a network as that of a village or town in which different people fulfill different tasks and collaborate on some, as e.g. the farmer and the baker or even the whole-sale which subsequently sells the finished product.

The main questions that research on networks should concern are those of scale and purpose. Thus what reason does a network have to exist and how large and complicated must it be in order to serve its purpose successfully. Further the cultural differences in building up and dealing with networks are interesting, especially for the social sciences. It is for example remarkable how competition and collaboration are both present in networks or how information is processed within them in order to facilitate learning.

Macneil (1985)³⁴ identified in a rather flowery language that 'entangling the strings of reputation, friendship, interdependence, and altruism' is the key to a successful network and thus emphasizes the importance of emotional reciprocity within networks.

Technological industries are often cited as being the ideal environment for network structures to thrive but it can be argued that they are solely the leaders of networks which are naturally facilitated by communication technology and the need for innovation and the development of new products. Kaneko and Imai (1987) stated that information, which is crucial for technological industries in the form of patents and innovation, in networks is 'thicker' than in the market and 'freer' than that in a hierarchy.³⁵ The reasons for this are that technology is often composed of tacit knowledge which cannot simply be bought through acquisitions. Companies here also act more risk averse on a financial and strategic level.

³⁴ P. 220 Powell, Walter W. (1990)

³⁵ P. 225 Powell, Walter W. (1990)

4. Conclusion

Considering the review of academic literature concerned with the study of networks from all different fields and subsequently consolidating those in order to answer the research question one can conclude that by no means are networks in business a novelty but a logical consequence even if not of a globalising economy directly but definitely of human relationships in general.

However it needs to be stated that the academic attention on network structures could potentially prove beneficial for society, especially if the focus is set on a sociological or political standpoint rather than an economic interest in order to maximize profits. It needs to be questioned if networks should be treated as an alternative way to conduct business or if the previous starting point for the analysis of market structures, especially in economics and business studies was too rigid and uniform already, maneuvering between the two extremes of hierarchy and free market.

Reciprocity can be identified as a key characteristic as actions and interactions may be based on self-interest, indebtedness or cultural values according to the theoretical framework used. Further it can be concluded that trust is created through long-term reciprocity and this often results in success (Arrow, 1974)³⁶. The nature of these exchange mechanisms, cultural differences and emotional involvement should be a focus of the study of industrial networks. In conclusion it needs to be questioned if the study of networks should even consider them as a new phenomenon as it is possible that their discovery solely means that previous assumptions about market structures have been false, thus every market structure is a network of some kind, just implying different degrees of freedom, scale and purpose.

³⁶ P. 226 Powell, Walter W. (1990)

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Table 1. Stylized Comparison of Forms of Economic Organization.

<i>Key Features</i>	<i>Forms</i>		
	<i>Market</i>	<i>Hierarchy</i>	<i>Network</i>
Normative Basis	Contract— Property Rights	Employment Relationship	Complementary Strengths
Means of Communication	Prices	Routines	Relational
Methods of Conflict Resolution	Haggling— resort to courts for enforcement	Administrative fiat—Supervision	Norm of reciprocity— Reputational concerns
Degree of Flexibility	High	Low	Medium
Amount of Commit- ment Among the Parties	Low	Medium to High	Medium to High
Tone or Climate	Precision and/or Suspicion	Formal, bureaucratic	Open-ended, mutual benefits
Actor Preferences or Choices	Independent	Dependent	Interdependent
Mixing of Forms	Repeat transactions (Geertz, 1978)	Informal organization (Dalton, 1957)	Status Hierarchies
	Contracts as hierarchical documents (Stinchcombe, 1985)	Market-like features: profit centers, transfer pricing (Eccles, 1985)	Multiple Partners Formal rules