Trust as Networking Knowledge

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ABSTRACT

Trust, rather than being a resource for establishing collaborative relationships between organizations, is an essential component of their constitution. What is trust? At base, trust involves interpersonal relations of a specific type. These are relations where there is sufficient probability that a person or organization with whom one is in contact will perform an action that is beneficial, or at least not detrimental, for one to consider engaging in some form of co-operation with this person or organization in the future. Trust establishes situations in which participants in collaboration have a long-term and recurrent relationship. Where trust exists, organizations are more willing to collaborate with other organizations on a more reciprocal basis. Trust is especially important when collaboration takes place between competitors because the risk of opportunistic behaviour is higher. Where organizations share resources and information openly with other participants they will seek to reduce opportunistic behaviour through the mutual understanding and goodwill of parties. However, trust is not static; it is a dynamic process that evolves according to the development of the relationship, as one in which the more long-term the relationship, the greater the trust. In this paper, we will present the impact of trust on business networks and cooperative networks and examine how their members developed knowledge through networking. The data presented is derived from a larger study of different networks conducted in Australia.

KEYWORDS

Trust, Collaboration, Networks

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Introduction

Many scholars have written about trust from different perspectives. Arrow (1974) considers trust as a basic element not only for organizations, but also for the economy in general, affirming that trust is a lubricant to economic exchange. As Granovetter (1985) argues, people and organizations typically seek to generate trust and discourage malfeasance. Trust can also be understood as "the expectation that some others in our social relationships have moral obligations and responsibility to demonstrate a special concern for other's interests above their own" (Barber, 1983). Implicit to this definition is a conception of trust as something that has a temporal dimension, which is captured by Thorelli (1986), when he considers trust to be a concept based on the confidence that relationships will continue in the future. Thus, trust implies a long-term projected future vision based on past reputation and previous performance. Accordingly, he defines trust as "an assumption or reliance on the part of A that if either A or B encounters a problem in the fulfilment of his implicit or explicit transactional obligations, B may be counted on to do what A would do if B's resources were at A's disposal" (Thorelli, 1986: 38). Trust is thus based on individual expectations of interpersonal or interorganizational relations premised on a specific kind of probability. One presupposes that the probability is that a person or organization with whom one is in contact will perform an action that is beneficial, or at least not detrimental, for one to consider engaging in some form of collaboration with this person or organization in the future. Indeed, a synonym for trust could well be 'confidence'—that one has confidence in the actions of another.

According to Husted (1994) there are three different kinds of collaboration depending on the degree of trust involved in each relationship: high-trust, low-trust and zero-trust, or opportunistic, relationship. A high level of trust can be achieved in a long-term relationship where members share norms and values and where relations involve more than one aspect of the organization. As Newell and Swan (2000, 1288) suggest, this can give rise to particular problems at the interorganizational level, 'because networks are not governed by traditional hierarchical relationship, critical problems surround the development and maintenance of trust and the deployment of power among members.' Trust in collaboration places a heavy emphasis on norms of reciprocity. Larson and Starr (1993) argue that interpersonal contact and sharing of understanding of the conduct and behaviour of participants in a relationship provides a certain minimum level of understanding, giving rise to trust and reciprocity. Larson and Starr (1993) consider that collaboration is based on previous positive experiences with partners; collaboration between competitors without previous experience could thus be very risky. Reciprocity encourages continuous collaboration through building social capital.

The role that trust performs

Where trust is present, it has been suggested that it can reduce the 'transaction costs' (Williamson, 1975, 1985) associated with exchange relations. Williamson (1975, 1985) considers that an action that could be seen as opportunistic by some of the members reveals a lack of trust. Trust is an implicit concept underlying economic analysis because it determines the effectiveness of transactions. It presumes that the other party is not being an opportunist; the assumption is that the third party will behave honestly during the transaction. Trust is understood as "the presumption that, in a situation of uncertainty, the other party even in unforeseen circumstances will act in accordance with the rules of behaviour that are deemed acceptable" (Bidault & Jarillo, 1997: 85). Bidault and Jarillo (1997) argue that a drawback of the market/hierarchy model (Williamson, 1975) is in the prediction of how transactions will be conducted. When trust exists, it could be presumed that no partner is taking advantage of the relationship, but when trust does not exist, the risk is perceived that one of the parties may prefer to internalise the transaction. Internalisation is thus considered to be a mechanism to eliminate uncertainty in transactions (Bidault & Jarillo, 1997).

Bidault and Jarillo (1997) argue that trust can be based on different sources. *Contracts* establish a foundation for developing trust; *ethics* provides rules and values for actors to behave in different circumstances; the role of *time and experience* is important because trust increases with the number of transactions made by participants while *familiarity* relates to participants knowing each other before a transaction. However, trust is not necessarily reciprocal—parties base it on subjective evaluation. Thus, trust is specific for each participant in collaboration and can not be interchanged as can a good or service. It is clear that in the case of total trust between actors there is no need for contracts; thus, contracts act to shape the way participants will behave when operating in circumstances of uncertainty. The less that trust exists, the more contracts should be clear and extensive. With respect to any specific issue the rule appears to be that, the more the trust, the less contracts must be extensive. In such a situation, transaction costs are reduced. Bidault and Jarillo (1997) consider trust as a co-ordinating mechanism that can make transactions cheaper, in the sense that, once trust has been established, contracts will not be needed between participants.

High levels of trust lead to informal assurances buttressing, or aiding, the interpretation of formal contractual commitments, perhaps even replacing them. What are the qualities that can achieve such outcomes? At the minimum, most people would probably agree that the following qualities should be present: integrity; loyalty; competence; consistency, and openness or transparency. Wolff (1994), drawing on the experience of various practitioners, suggested several strategies, beyond professional competence, for building trust. Among these are encouraging friendship, so that individuals get to know each other over time and facilitating communication by sharing information with counterparts and keeping them informed about plans. Also, one should limit management initiative through agreements in order to aid self control and identification of possible cultural organizational barriers. There should be anticipation of disagreement by learning about the other organization, its culture and possible areas of disagreement. One should seek to avoid surprise if one perceives something that can have an effect on ones partner, by making them aware of it. Trust increases collaboration between participants when they perceive the relationship to be long-term and one in which all members will enjoy a benefit, according to their contributions to their agreement.

Collaborative agreements presume a different form of exchange from the models of economic rationalism: they suggest exchange based on trust and collaboration between participants, rather than competition. However, Gambetta (1988) suggests that, in fact, trust is necessary for all exchange: "even to compete, in a mutually non-destructive way, one needs at some level to trust one's competitors to comply with certain rules" (p. 215). He says, trust

> is a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action, both *before* he can monitor such action… *and* in a context in which it affects *his own* action. [W]e implicitly mean that the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of co-operation with him (Gambetta, 1988: 217).

Trust is not static; it is a dynamic process that evolves according to the development of the relationship. Lewicki and Bunker (1996) established a model of trust in three levels linked in a sequence where, once trust has been established in one level, it moves to the next level. Those levels of trust are calculus-based, knowledge-based, and identification-based. At the calculus-based level, parties fear punishment, but also anticipate the rewards from preserving trust, in other words, trust is based on a calculus of costs and benefits. Knowledge-based trust develops over time in the permanent contact between participants; it is "grounded in the other's predictability—knowing the other sufficiently well so that the other's behaviour is anticipatable. Knowledge-based trust relies on information rather than deterrence" (Lewicki & Bunker, 1996: 121). Identification-based trust is "based on identification with the other's desires and intentions" (Lewicki & Bunker, 1996: 122). At this stage, parties know each other and may anticipate the reactions of the other participant; thus, they can act for the other. Thus, ultimately, high trust implies an expectation that a relationship will continue in the future.

Zucker (1986) argues that trust has two major components. These are *background expectations*, where things are 'taken for granted' because actors know each other in terms of their 'attitude' of daily life and reciprocity of perspectives and *constitutive expectations*, the rules defining the context of the situation in terms of independence from self-interest and intersubjective meaning. She considers the existence of three central modes of social production of trust:

> (1) *process-based*, where trust is tied to past or expected exchange such as in reputation or gift-exchange; (2) *characteristic-based*, where trust is tied to the person, depending on characteristics such as family background or ethnicity; and (3) *institutional-based*, where trust is tied to formal societal structures, depending on individual or firm-specific attributes (e.g., certification as an accountant) or on intermediary mechanisms (eg., use of escrow accounts) (Zucker, 1986: 60).

Zucker (1986) argues that trust is difficult to measure, but it should be considered a skill, thus, each one of the modes of trust production should be measured with indicators (Table -1).

Table -1 Modes of trust production

	Basis	**Source**	**Measures**
1. Process	Tied to exchange, past or expected	Reputation, brands, gift-giving	No market; investment in trust
2. Characteristic	Tied to person, ascribed	Family background, ethnicity, gender	No market; free trust
3. Institutional	Tied to formal social structures	Signals	Active market; purchase of trust
Person/firm specific		Professional, firm associations	
Intermediary mechanisms		Bureaucracy, banks, regulation	

Source: After Zucker (1986: 60)

Trust does not deny the presence of conflict. According to Coser (1969), conflict can be either positive or negative in a relationship. Negative conflict arises when groups or individuals no longer share the values or principles necessary for maintaining the relationship. Conflict is positive for the relationship when the values and goals over which there is conflict do not contradict the basic assumptions of the relationship. Hence, trust should not be equated with harmony, concord and an absence of conflict.

For instance, Dodgson (1994) has pointed out the negative implications of trust-based collaboration. Granstrand and Sjolander (1994) have noted the ways in which high levels of trust and collaboration within professional communities, for instance, can lead to conflict between collaborating professional groups with distinct cultural assumptions and identities. Different 'social capital' may create inherent trust within groups it characterises but a lack of coherence when these are collaboratively connected.

Social Capital

At the most general level, one can state that social capital comprises "the norms and social relations embedded in the social structures of society that enable people to co-ordinate action and to achieve desired goals" (Narayan, 1999, 6). Burt (1992) argues that individuals have three types of capital: physical, human and social. Physical capital refers to the resources such as money and land that an individual has access to. Human capital is the personal knowledge, abilities and charisma that the individual has while working. Social capital is the network of individual contacts that the individual knows and the people known by the contacts.

Burt (1992) considers that the three types of capital are important. He considers that social capital is most closely related to success because it comes from individuals who already benefit from it by way of access, time and referrals that enable them to obtain a benefit from physical and human capital. The benefits come from information gained through contacts. This is a very important factor because no one in an organization has access to all existing information. Related to access is the time to obtain the information. Burt (1992) argues that in general, personal contacts offer better information faster. The third benefit derived from social capital is that of referrals (Burt, 1992). Our contacts refer us to others and thus, in this way, give shape to our reputation. In this way, individuals with social capital are more able to succeed in their careers.

Putnam (1993) established the centrality of 'social capital' for the economic success of the ‘Middle Italy’ region. Much of the success of small artisans could be seen to be due to their pre-existing interdependencies and business associations, helping them to access training, capital, and R&D, as well as specific government support. Thus, with Coleman (1990), one may agree that "social capital is not a private property of any of the persons that benefit from it" but a feature of the networks that bridge between them. Indeed, the concept of bridging social capital has found explicit use in recent work from the World Bank: Bebbington *et al.* (2000) make an important distinction between *bonding* social capital (the ties within a group), and *bridging* social capital (the ties existing between different groups). Social capital not only influences policy choice, policy implementation, and market success but also people’s access to resources. As Portes (1998) suggests, "to possess social capital, a person must be related to others, and it is these others, not himself, who are the actual source of his or her advantage" (1998). Thus, in operationalizing trust one must focus on relational rather than personal attributes, as well as the capacity for learning to build trust. Building trust in business means that those who would be members of some grouping founded on trust must have confidence in a number of critical areas. Amongst these are: the overall business concept; the business synergy of the participating companies; the members' ability to formalise a business model as a vehicle for winning, doing and servicing work; the business processes developed; the market opportunity; the product/service, and the proven capacity and capability of the members.

Analysing one of these areas, the nature of marketing relationships, Morgan and Hunt (1994) consider that trust was one of the most important factors in the effectiveness of organizations. They consider that the efficiency and survival of any group depends on the construction of trust. Sabel (1993), in a study of some segments of the garment, foundry, injection moulding and machine-tool industries in Pennsylvania, considered that trust was a prerequisite for social life and competitive success. He considered that trust was the mutual confidence that no party involved in collaboration would exploit another party. If there was no trust, none of the participants would take the risk to move first, thus, collaboration would not take place, and an individualistic approach would prevail over a collective, collaborative effort.

Building collaboration in networks

Trust is a crucial element for collaboration. Where trust exists, one can propose that organizations will be more willing to collaborate with other organizations on a more reciprocal basis. Further, organizations will tend to share resources and information more openly with other participants; they will tend to reduce opportunistic behaviour through the mutual understanding and goodwill of parties. Thus, different reasons exist for establishing collaborative arrangements between organizations.

As Child and Faulkner (1998) claim, "a co-operative strategy is the attempt by organizations to realise their objectives through co-operation with other organizations" (p. 1). They argue that collaboration, as well as competition, can be more or less intense between partners. Figure 1 introduces different possible combinations between collaboration and competition between organizations.

Figure 1 Alternative relationships between collaboration and competition

Collaboration	High	Merger or acquisition	Mutual benefits organizational learning
	Low	Failure	Risk of opportunistic behaviour
		Low	High
		Competition	

Source: After Child and Faulkner (1998: 3)

One can appreciate from Figure 1 that, in Child and Faulkner’s (1998) terms, where both collaboration and competition are low it is most likely that the relationship will fail to achieve its goals or, at best, obtain poor results. This is the result of poor interaction between participants in any relationship. In the case where collaboration is low and competition is high there is an increasing risk that one of the parties will act opportunistically against the other participant in the relationship. This is the case where a powerful member dominates the relationship. Both situations manifest a poor degree of collaboration between participants and it is more likely that the relationship will terminate sooner rather than later. Two situations are also possible where collaboration is high. Where competition is low and collaboration is high, the most viable option is vertical integration, when one of the partners will integrate with the other partner through merger or acquisition. This strategy has been widely used to order relations between organizations; however, this strategy is not an option when organizations need to collaborate with other organizations. The best strategy for organizations is where both collaboration and competition are high; in such a case the major benefit is mutual learning for participants, all of which remain individual organizations collaborating in some areas of their business activities, while remaining competitors in the rest of their activities.

In collaborative interorganizational settings, trust increases where each project team is self-sufficient and includes 'outsiders' like user-representatives (Clegg *et al., 1996*). Trust increases also when the member organizations have had previous contact. When teams have a social and celebratory dimension trust levels typically increase. Also, where project participants have prior experience with relevant technology or previous co-operative programs, it increases the probability of success in any given project. Another element that has a positive effect on trust is the intensity and duration of the relationship. According to Clegg *et al.* (1996), the more long-term the relationship the greater the trust. Following Luhmann (1979) if trust exists, people can allow themselves forms of collaboration that will help them in the rational pursuit of their interests. Thus, trust is a precondition for collaboration, but it is also a product. Therefore, trust building is an important element in collaboration. Participants must demonstrate their willingness to commit to a collaborative relationship by adapting to each of the participants. Trust is an important variable affecting the effectiveness of any relationship.

Networks

In this paper we centre our analysis on network forms of organization. Networks are one of many different types of strategies used to pursue business objectives, including strategic alliances (Harrigan, 1987), joint ventures (Harrigan, 1988), and various forms of network organization (Alter & Hage, 1993; Ebers, 1997; Ebers & Grandori, 1997; Ebers & Jarillo, 1997; Grandori & Soda, 1995; Jarillo, 1988; Miles & Snow, 1986; Snow, Miles & Coleman, 1992; Powell, 1987, 1991; Thorelli, 1986). While networks may be relatively recent phenomena of explicit design, 'network approaches' are well established in the literature. During the 60s and 70s, sociologists used networks to understand norms, exchanges and power. Since the 80s, the 'network' concept has become more fashionable in the social sciences in business (DeBresson & Amesse, 1991; Jarillo & Ricart, 1987; Jarillo, 1988; Nohria, 1992).

Networks have become fashionable because they have been seen as a superior form of organization for firms under conditions of uncertainty (Jarillo, 1988; Limerick & Cunnington, 1993). For example, in systems and marketing (Håkansson, 1989, 1992; Forsgren *et al.*, 1995), collaboration of small-scale enterprises and or entrepreneurship (Johannisson, 1987; Larson, 1992), industrial geography (Grabher, 1995; Piore & Sabel, 1984; Putnam, 1993), and supplier-user relationships (Burnes & New, 1997; DeBresson & Amesse, 1991; Provan, 1993; Provan & Gassenheimer, 1994). While some writers look at substantive aspects of networks (such as Ebers, 1997; Ebers & Grandori 1997; Grandori & Soda, 1995), other researchers consider different theoretical approaches (such as Blankenburg & Johanson, 1992). Some network literature starts at the enterprise level and consider networks basically as economic relationships (Buttery, 1993; Håkansson, 1989; Johansson & Mattson, 1988, 1991). In contrast, other literature has used the network concept to address social relations among individuals (Granovetter, 1985).

Analysing the development of organizations, Castells (1996) considers that the old 'one best way' of production is being substituted for a new paradigm based on networks. He considers that "networks are the fundamental stuff of which new organizations are and will be made" (Castells, 1996:168). He notes that in an era of new information technologies, a new organizational form has emerged, the 'network enterprise'. Accordingly, a network enterprise is "that specific form of enterprise whose system of means is constituted by the intersection of segments of autonomous systems of goals" (Castells, 1996: 171).

For the purpose of this paper, a network is a long-term relationship between organizations as actors that share resources to achieve negotiated actions for joint objectives. It should be a long-term relationship because in the short-term members could take advantage of other members and the relationship will not prevail. It is in the long-term that all members or participants can have a benefit from the relationship, while in the short-term not all the participants in the network may benefit. Shared resources are vital for establishing long-term relationships. A network can be established only when based on mutual sharing of resources. A network should thus have common goals for its members in order to achieve negotiated outcomes.

Summing up, one can say that, in the past, the literature tended to look at the phenomena of trust as something more or less embedded, naturally, in specific social contexts. More recently, however, with the emergence of the importance of network concepts, both researchers and policy makers have become aware of the positive economic benefits that might flow from collaborative, trust-based relations being grafted on to the paradigm of competition. Such grafting is, of course, rather more mechanical than organic: hence it involves some directing agency. In Australia, it was the Commonwealth government that acted in this role, when it established the Australian Business Networks Program.

Australian Business Networks Program

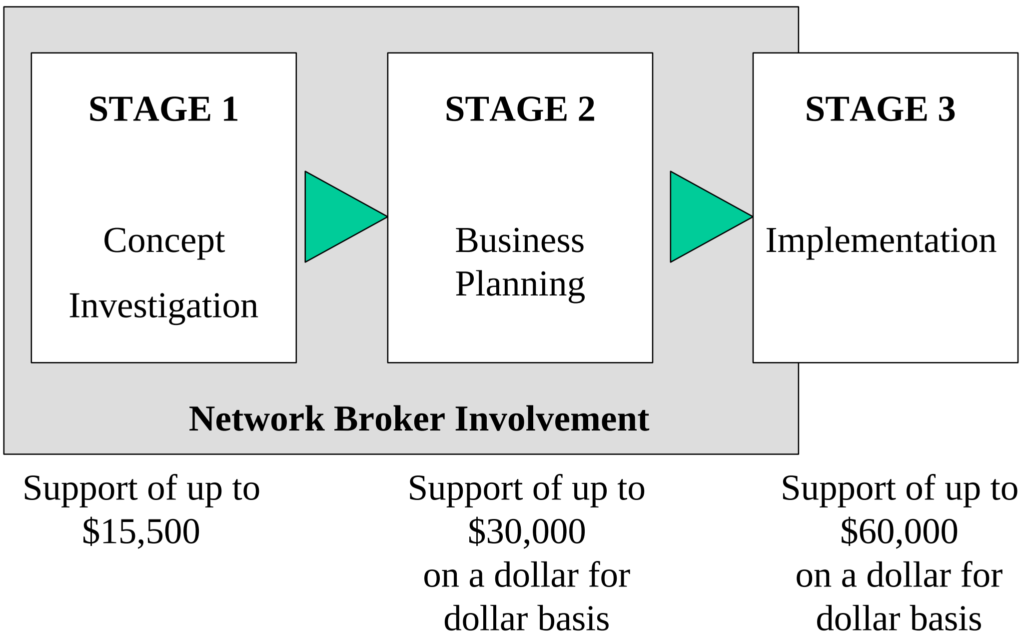
The use of networks as public policy instrument of the Australian Commonwealth government has to be seen in the context of the very favourable reception that Porter’s (1990) work on the competitiveness of nations had in elite policy circles in Canberra. The Australian federal government launched the Business Networks Program (BNP) in May 1995 as an initiative of AusIndustry, with a budget of AU$ 25 million. "The aim of the program is to encourage businesses to co-operate in areas of strategic business, including exporting, import substitution, sharing costs for production, research and development, and marketing" (Department of Industry, Science and

Technology, 1995: 1). The Australian Business Network Program divided the territory in six regions: NSW/ACT, Victoria, Queensland, Tasmania, Western Australia and SA/NT. The funding for the program was only available until June 1998.

The Australian Business Networks Program was divided into three stages (Figure):

1) *Feasibility Report Stage*: It included the selection of partners, the establishment of the concept and its feasibility, and the establishment of a working relationship. The role of the broker at this stage was to facilitate the participant's discussions and to establish the feasibility report for the network. At this stage, the network could be granted up to $15,000 for the broker's services, but the network had to pay extra services for specific advice. This stage needed to be completed within six months.

Figure 2 The Australian Business Networks Program



Source: Our own elaboration

2) *The Business Planning Stage*: This stage included the development of co-operation as a basis for the network, the formulation of the co-operation agreement, and the preparation of the business plan for the network. The business plan included an assessment of business objectives, financial projections, market analysis and confirmation of whether the network wanted to proceed to the final stage of the program. The broker's role in this phase was to facilitate meetings and

provide information and technical input in order to prepare the business plan. Legal advice was necessary during this stage. Networks could obtain up to $30,000 reimbursement at this stage. This stage needed to be completed within six months of the participants accepting an offer to join the program.

3) *Implementation of the Business Plan*: This includes the establishment and operation, as well as the further development, of co-operative relationships according to the strategic plan established in the previous stage. At this stage, the use of a broker was not required. The reimbursement provided by the program was for the 50% of operating costs (non-capital items) up to a maximum of $60,000. (Minister for Industry, Science and Technology, 1995a; AusIndustry Fact Sheet June, 1995; Business Networks Program: Guidelines, Terms and Conditions, N.D.; Business Networks, AusIndustry-Bureau of Industry Economics: Links to Success, Business links and Networks in Australia, 1995).

The Australian Business Networks Program made use of brokers to promote network formation. It was a requirement for admission as a network in the program to have a network broker for the two first stages of the program. As noted in the previous experiences, brokers were consultants that helped the development of the network. In the Australian case, two types of brokers were used: *host brokers*, employed by organizations such as industry associations, and *private consultants*. Both groups had to undertake a short training program to become accredited as AusIndustry brokers.

To be eligible for the program, the basic requirements were that there should be at least three participants, two of which should be a small or medium size enterprise, while the third one could be a non-SME. For the purpose of this program, a small or medium size enterprise was a business with an annual turnover of less than $100m, or less than 500 employees. Collaboration in the network had to have the intent to produce internationally traded goods or services. Participants had to agree to provide information about their individual business to the BNP and members of the network had to commit senior staff to the Network Project. Network organizations must improve collaboration in a strategic area of their business activity such as procurement, production, product or process development, distribution, domestic and/or export marketing, as well as after sales service. Members should not be currently linked in anyway, and, should not be receiving financial support for networking from another Commonwealth or State agency.

As an additional element of the program, in October 1995 the Minister for Industry, Science and Technology announced the allocation of $1 million for a three-year pilot scheme to support business networking between Australian firms and organizations from the APEC economies (Minister for Industry, Science and Technology, 1995b).

An important characteristic of this program was the use of public and private brokers. Public brokers (host brokers) were government employees trained by the Business Network Program to promote networks, while private brokers were their counterparts from the private sector.

In June 1997 major changes to the Business Network Program came into effect. The conception of a small and medium-sized enterprise was modified to include being business with annual turnover of less that $50m and less than 200 employees (Douglas, 1997: 16). Networks could include foreign domiciled firms as members; with the stipulation that the intended network activity was not a common practice in the sector, nor part of day-to-day-existing practice, with the requirement remaining that the network produce something of economic significance to be supported. 'Vertical networks', groupings along a segment of the supply chain, were not eligible for support during stage three (Douglas, 1997: 16).

Not all networks are Federal government spoonsored. In addition to AusIndustry, other institutions in Australia promoted networks. These included for example, the Registry of Co-operatives of New South Wales (and a sub-sample of seven network co-operatives were also investigated as a point of comparison with the business networks, which we refer to in the data below); Australian Trade (Austrade), which supported a series of *host* brokers; local councils such as Liverpool City Council; industry associations such as the Australian Business Chamber, as well as Business and Regional Development Units.

Network Co-operatives

Collaboration between independent firms encouraged by government programs, on the model of the Danish case, is one way of creating a collaborative inter-organizational focus on competition. However, there are other ways—some of which have a long history of collaboration. Notably, there is the example of co-operatives, whose history is based on member collaboration. As we will see shortly, where the primary members of co-operatives are organizations, rather than individual co-operators, then collaboration between them may produce network co-operatives. Given the history and philosophy of the co-operative movement, one might think that such network co-operatives would be uniquely placed to practice effective collaboration.

Co-operatives are a particular form of organization in which agreement on co-operation is used to achieve social objectives. The history of co-operatives goes back at least to the early eighteenth century in the United Kingdom, but it was in 1844 that a formal model of the consumer co-operative first appeared. It was the Rochdale Society of Equitable Pioneers, formed in the English industrial north. In its original form, the Rochdale Pioneers had in mind the creation of a New World based on consumer co-operation. The essence of their plans was to assure common benefits for co-operative members (Cornforth *et al.*, 1988). Another important area of influence for co-operatives developed in banking in its various forms, including savings and credit unions. For example, much of the co-operative banking sector around the world is derived from the efforts of Frederich Raiffeisen and Herman Schultze Delitsch in Germany in the mid-nineteenth century (Cornforth *et al.*, 1988).

In Australia it was in the marketing of commodities within primary industries, for example, agriculture, fishing, and forestry, that co-operatives first flourished. This influence owed much to the innovations of Danish farmers in the late nineteenth century. This form of co-operation in primary industry is still one of the most common forms.

During the last half of the nineteen-century the co-operative movement spread all over the world. In 1895 the International Co-operative Alliance (ICA), an association of co-operative societies, was created to promote all forms of co-operation. Today, the co-operatives grouped in the ICA amount to more than 237 national and international co-operative organizations representing over 750 million individuals (ICA, 1998). According to the International Co-operative Alliance statement on co-operative identity, a co-operative is an autonomous association of persons united voluntarily to meet their common economic and social needs through a jointly owned and democratically controlled enterprise.

The organised co-operative movement emerged as a reaction to modern industrial society. The emergence of the factory and the industrial city meant that people were alienated from their work; standards of living depended on the market place; control of money became vitally important; and farm families had to find ways to bring their products to market at a fair price. The co-operative movement emerged to organise human requirements—the need to consume, the need to produce, and the need to save. In its most complete form, the co-operative movement sought to harmonise these three approaches to human social and economic activity so that human beings—whether as consumers, as producers, or as savers—would receive a fair return for all their efforts. (ICA, 1998)

The essential characteristic of a co-operative is that it is a democratic organization providing goods and services. A co-operative is based on people (members), not on capital or government direction. A co-operative is a form of organization where the members are the owners, exercising ownership through rights and responsibilities associated with the election of directors and through co-operatively giving direction to the organization. Members control the co-operative and are also the users of its services. In cases where a co-operative has a surplus, members receive a return, usually based on the extent to which they used the services provided by the co-operative, or hold primary entitlements in it.

Co-operatives are based on the values of self-help, self-responsibility, democracy, equality, equity and solidarity. Co-operative members are supposed to practice honesty, openness and social responsibility in all their activities. Co-operatives share a set of values and principles that guide their activities.

Co-operation is not based purely on a social pact. In Australia, co-operatives have long been a highly regulated part of the economy and society. Data shows that the first co-operative in NSW was created in 1859. In New South Wales in particular, the regulatory body since 1924 has been the Registry of Co-operatives, although legislation dates from 1902. The Registry frames the obligations and responsibilities of the members of co-operatives in NSW. By March 1996, 2,349 co-operatives existed in Australia, of which 891 were located in NSW (Registry of Co-operatives of NSW, 1997). This figure excludes the financial co-operatives (permanent building societies, credit unions, friendly societies and co-operative housing societies) that have been controlled by the Australian Financial Institutions Commission (FINCOM) since 1992.

More recently, a new form of collaboration has been established in the co-operative sector, in the form of a 'Network Co-operative'. A Network Co-operative "is a group whose primary activity is the provision of information and services to members, via networking methods" (Watts, 1995: 2). The characteristics of the network co-operative are that they are non-trading, have no liability, do not issue shares, and are not taxed.

At the outset of this research, when we first became aware of the existence of secondary co-operatives, through the Registry of Co-operatives, we did not realise the significance of the fact that secondary co-operatives need not be composed of primary co-operatives. In fact, all of the secondary co-operatives registered in New South Wales are, in their primary business, for-profit and privately owned small and medium-sized enterprises. The significance of this is that they are more co-operative in name than in practice because, as for-profit enterprises in their primary form, they have no tradition or even prior experience of co-operation.

In Table 2 a comparison of business networks and network co-operatives is presented. These are organised in terms of different issues, including the quantity of resources required for establishment and functioning, funding scheme, aim of collaboration, focus of activities, output measures, life cycle, type of network, typical legal form of organization, minimum number of members, benefits, and examples.

Table 2 Differences between Business Networks and Network Co-operatives

Issue	Business Networks	Network Co-operatives
Resources	Require a larger amount of resources	Require minimum resources
Funding scheme	Partially from members and partially from different government bodies	Mainly from network co-operative members
Aim of collaboration	R&D, develop new product or service, expanded markets, access to new technology, access to finances	Sharing of information, creating synergy
Focus of activities	Export oriented	Local market
Output measures	Specific results ie.: new products, new services, new markets, new resources	Organizational learning through access to information
Life cycle	Shorter. Networks cease when collaboration is achieved	Longer, there is not a limit for information sharing
Type of network	Hard	Soft
Typical legal form of organization	It is not important, it can take different forms including joint ventures and strategic alliances	Co-operative
Minimum legal number of members	Three	Five
Desirable number of members	The minimum possible, in general three	Network Co-operatives tend to have between 15 to 25 members
Benefits	Project outcomes	No taxes
Examples	Daplar, Trade Facilitators International,	Sydney Food Co-operative Network, Australian Food Network

Source: Own elaboration

The Research Question

The research question was very straightforward: given the existence in NSW of the two types of network – co-operative networks and business networks – the research sought to determine which type was most effective at facilitating effective collaboration. Having answered this, then we could move to an exploration of these differences. In this paper, our aim is slightly more circumspect – we will explore the findings as they relate to the role of trust in networking knowledge.

The Research Process

In this research, inter-firm collaboration was investigated in the Business Networks Program administered by AusIndustry and the Network Co-operatives promoted by the Registry of Co-operatives of New South Wales. The ideal sample frame would have included the population of business networks and network co-operatives in Australia. In practice, however, it was not possible to achieve such a frame.

The first selection criterion in constructing the sample followed from a meeting with the State Manager of the Business Networks Program in NSW. As a key respondent he was able to identify some of the business networks on which the research should focus, because these were in a more advanced stage of development at the time. A second criterion was to access those networks in NSW that could be contacted. It was a difficult task because not all networks were publicly listed as such and the Business Networks Program, for policy reasons of protecting commercial confidence, would not release the full data set. The third criterion was to try to access all the Business Networks in Australia that could be contacted. The list of close to 190 networks existing in Australia in December 1996 was obtained. This was a list of network names, not the network member organizations. Many of these were in the very initial stages of formation. With the use of the telephone directory, the contact numbers for 29 different networks were obtained. It was not possible to obtain the telephone number for all the networks because so many of them were at the initial steps of their formation and thus, were not registered in the telephone book. Even if they had been they would not have been useful for this research.

Those business networks whose telephone numbers we obtained were contacted to seek their support for the research. All of them agreed, in principle, to co-operate in the research. Support from the AusIndustry Business Network program in ensuring participation was sought but their policy at that time was not to support specific research. It is also important to state that the change from a federal Labor to a Coalition government caused some changes in public policy support for the network program, seen as a more 'interventionist' type of industry policy than those favoured by the Coalition.

More than 100 questionnaires were sent to 29 different networks with a 33% return rate. Data from different networks in different industries and sectors was obtained. Research included the adoption of plural research approaches through distinct phases in the research, in order to have more than one method bearing on as many substantive issues as possible.

The research process began with an extensive literature search and review. This review was used to identify the characteristics of network collaboration and its forms. Based on the assessment of several frameworks, an initial model was developed for testing in the research. Before embarking on constructing a questionnaire, two pilot in-depth interviews with network members in New South Wales were conducted. These were used to develop an appropriate interview technique for open-ended, face-to-face interviews and direct field observations. In-depth interviews were open-ended, they lasted one to two hours, and were carried out over a one-year period. The interviews were conducted with actors involved in the promotion, development and management of different forms of collaboration. The aim of the interviews included obtaining feedback on the relevance of the range of questions proposed for inclusion in the questionnaire and ensuring that the questions proposed were easily understood by respondents.

After the prototype questionnaire was developed, some data collection items were shifted from a qualitative to a closed-schedule quantitative format. This final questionnaire contained 200 items, both qualitative and quantitative. Once the questionnaire was in its final version, those networks for which we could obtain the telephone number (not all networks had accessible listings) were contacted. From the response obtained in these telephone calls, 100 questionnaires were sent to different business networks all over Australia.

The Role of Trust in Business Networks

The variables used to analyse trust were seventeen in total, sourced from the literature review: all of them were scaled so that a higher score indicated greater pursuit of self-interest among network participants. Thus, the questions to network members included considerations about members' perception on:

- Sharing of information with other network members
- How collaboration had varied over the life of the network
- Members taking advantage of other network members
- Existence of conflict within the network
- The explicit recognition of trust in other members
- Contacting other network members asking for support
- Accepting competitors as participants in the venture
- Who could initiate actions on behalf of the network
- The existence of a code of conduct for network members
- Members considering difficult issues to discuss

Our investigation into trust was part of a much larger inquiry, in which a complex theoretical model was tested. In this paper we will concentrate on the most important findings from the research, in relation to the conference theme of 'trust'

Findings

The findings that we report below are drawn from analysis of the entire data set, for both business and Co-operative networks. We begin by looking at the crucial element of networks, trust - the confidence that a network member has in another network members.

The majority of respondents (66.6%) accepted that they trusted other network members (Table 2). A slight majority of members (56%) accepted that other members would consider their point of view when they were not present in network meetings (Table 2). A majority of members (64.0%) recognised that such decisions as might be made in their absence would not be likely to affect their own organization.

Table 2 Trust between members

Item	**Members trust other members (%)**	**Members consider other members point of view when absent (%)**	**Decisions will not affect members' organizations (%)**
Strongly disagree	0	0	0
Disagree	14.8	16.0	12.0
Undecided	18.5	18.0	24.0
Agree	44.4	40.0	44.0
Strongly agree	22.2	16.0	20.0

Half of the respondents recognised that members behave opportunistically, while 38.5% were undecided and the rest did not regard other network members as acting opportunistically (Table 3). The majority of members (84%) also recognised that other members did not take constant advantage of other members. Hence, Williamson's (1975) 'opportunism' was not much evident.

Table 3 Are members behaving opportunistically?

Item	**Members acting opportunistically (%)**	**Members taking advantage of other members (%)**
Strongly disagree	0	28.0
Disagree	11.5	56.0
Undecided	38.5	8.0
Agree	15.4	8.0
Strongly agree	34.6	0

The literature on collaboration suggests that members can be competitors in some area outside the collaborative agreement (Gray, 1989). Different questions were used to identify the acceptance of competitors as network members. It was found that the majority of respondents (79.1%) recognised the importance of discussing the acceptance of competitors as members and 72.0% recognised the necessity to admit competitors as network members (Table 4). Members accepting competitors considered that competition "is essential to change people's mind" or "competitors force you to become better, faster and obtain better quality" even more, "competition is healthy: makes you try harder to maintain standards". Those that did not want to accept competitors as members considered that "we don't need in what we do" or rejected it "because it would limit open and frank discussion" or simply because "we lose our uniqueness and competitive edge". In a study conducted on business networks in Australia Fulop and Kelly (1997) reported that 49.4% of members were direct competitors in their network, which confirms the finding of this research. Competition has not yet being well understood between network members and trust plays a crucial role for its understanding.

Table 4 The network should accept competitors as members

Item	**Discuss inclusion of competitors as members (%)**	**Admit competitors as members (%)**
Strongly disagree	4.2	16.0
Disagree	16.7	4.0
Undecided	0	8.0
Agree	45.8	52.0
Strongly agree	33.3	20.0

Regarding who could initiate actions on behalf of the network, respondents considered neither that any member of the network could initiate such actions (60%) nor that the broker could initiate actions on their behalf (52.2%) (Table 5). Thus, only the chairperson of the network was regarded as legitimately in charge of initiating actions on their behalf.

Table 5 Who can initiate actions on behalf of the network?

Item	Members can initiate actions (%)	The broker can initiate actions (%)
Strongly disagree	6.7	8.7
Disagree	30.0	26.1
Undecided	23.3	17.4
Agree	26.7	39.1
Strongly agree	13.3	8.7

The majority of respondents (65.7%) recognised the existence of a moderate level of conflict in the network and they did not consider that there was a critical member whose participation in the network was vital for its survival (63.6%). At the same time, respondents recognised that collaboration has increased over the life of the network (90.0%). This confirms the argument that collaboration will increase the more the network develops.

Different forms of conflict are present in networking. Network members considered the main forms of conflict to be related to: discussion concerning the acceptance of new members; financial aspects of the network such as the amount of member contributions and the way money is spent; differences in goals between members organizations and the network, as well as occasion when members might be thought to have acted individualistically, contrary to the interests of the network as a whole. The way conflict was resolved in the majority of the cases was through discussing the issues in the network monthly meetings. In the case of individualistic members, where a big partner took advantage of the rest of the members through controlling the network and acting in its own interest, conflict was resolved when these bigger partners left the network. This is one of the reasons that members did not feel confident sharing their information with competitors. A lot of effort has to be expanded to create confidence between members. Where trust is not achieved, the network will not function properly for the benefit of its members.

Comparing Business and Co-operative Networks

A similar pattern emerges in the responses regarding trust when comparing network co-operative and business network members. Both groups of respondents considered that they could be trusting of other network members and they both thought that members would consider their point of view in any decision-making (Table 6). A significative difference results, however, when members were asked about whether other members would make decisions that affected their organizations. While network co-operative members agreed they would not, business network members did not have the same opinion (Table 6). There was more trust between network co-operative members than between business network members. If one considers that networks are formed for the purpose of develop a project, then total trust is not necessary; however, a minimum level of trust is necessary, at least in the areas where participants are collaborating.

Table 6 Is there Trust between network members?

Variable	**Whole sample (%)**	**Network Co-operatives (%)**	**Business Networks (%)**
I trust other network members	66.6	83.3	61.9
Other members consider my point of view	56.0	60.0	55.0
Members will not take decisions affecting other participants' organization	12.0	80.0	15.0

Regarding network co-operatives, more than half of the respondents (60.0%) accepted there were members behaving opportunistically, while another 20.0% were undecided and only 20.0% of members did not consider opportunistic behaviour an issue (Table 7). In the case of business networks, only 47.6% of members recognised opportunistic behaviour by other participants, 14.3% were not decided, and the rest did not observe opportunistic behaviour on the part of other members (Table 7). If undecided responses are considered as negative, an important difference emerges. In this case, both groups consider it likely that there will be opportunistic behaviour by other network members.

Table 7 Do members behave opportunistically?

Item	Whole sample (%)	Network Co-operative (%)	Business Network (%)
Strongly disagree	0	0	0
Disagree	34.6	20.0	38.1
Undecided	15.4	20.0	14.3
Agree	38.5	40.0	38.1
Strongly agree	11.5	20	9.5

In order to support the questions concerning opportunistic behaviour, respondents were asked whether members took advantage of other network members. As one can appreciate from Table 8, in neither case did members consider participants to be taking advantage.

Table 8 Do members often take advantage of other network members?

Item	Whole sample (%)	Network Co-operative (%)	Business Network (%)
Strongly disagree	28.0	80.0	15.0
Disagree	56.0	0	70.0
Undecided	8.0	20.0	5.0
Agree	8.0	0	10.0
Strongly agree	0	0	0

Regarding the acceptance of competitors, it was an opposite difference between both groups. While only 20.0% of network co-operative members did accept having competitors as network members, 75.0% of business network respondents accepted competitors as members (see Table 9). Business networks members recognise the necessity of including all kind of participants within the network in order to increase collaboration.

Table 9 The network should accept competitors as members

Item	Whole sample (%)	Network Co-operative (%)	Business Network (%)
The network should discuss the acceptance of competitors as members	79.1	80.0	78.9
The network should admit competitors as members	72.0	20.0	75.0

Respondents were asked to gauge the level of conflict in their network. A difference was found between participants of network co-operatives and business networks. Within network co-operatives, 58.3% of members considered there was no conflict within the network. The remainder recognised the existence of moderated conflict. In the case of business networks, 80.0% of members recognised the existence of a moderate level of conflict in the network. Respondents considered that collaboration had increased over the life of the networks. This is valid for both, network co-operatives and business networks (90% for the former and 81.0% for the latter).

In order to identify who could initiate actions on behalf of the network, respondents were asked whether any member, or the broker, could initiate actions on behalf of the network. In the case of network co-operatives, the broker could initiate actions on behalf of the network, but not any member (Table 10). In the case of business networks, neither the broker, nor any member could initiate actions on behalf of the network. It was necessary to have an authorisation by members in order to do so (Table 10). A big difference was found between both types of network, in particular regarding the broker. It seems that network co-operative members were more confident where the broker initiated action on their behalf rather than when a member did so. It was not the case in business networks; here, the situation was the opposite because it was more acceptable that members could initiate actions.

Table 10 Who can initiate actions on behalf of the network

Item	Whole sample (%)	Network Co-operative (%)	Business Network (%)
Any member can initiate actions on behalf of the network	40.0	22.2	47.6
The broker can initiate actions on behalf of the network	47.8	71.4	37.5

Two thirds (66.7%) of respondents of network co-operatives did not consider it necessary to be a critical member whose participation in the network was vital for its survival. In the case of business networks, 62.9% of members gave a similar response. There is not a single critical member in either of the groups.

No difference was found between network co-operatives and business network members regarding whether there were issues that were difficult to discuss in network meetings or issues raised by other network members that they would prefer not to have arisen.

Implications and Conclusions

Implications for Theory and Research

In the research we compared two different types of networks, the business networks, funded by AusIndustry Business Networks Program and those networks established under the support of the Registry of Co-operatives of New South Wales, network co-operatives. The research provides a comparative analysis of both types of networks, suggesting the elements commonly shared and the elements that make them different forms of collaboration. While some previous research had been conducted on business networks, to date no empirical research had been conducted on network co-operatives. The latter consistently showed higher levels of trust than did the former. We can attribute this to the fact that they are more deeply embedded in social capital than are the network relations. The former are often somewhat more artificial, being brought into existence as a result of a government program and the initiative of network brokers. The co-operative networks were based less on opportunistic mechanical grafting and more on necessity. Further research needs to be conducted on the long-term trajectory of networks: what were the characteristics of those that survived and thrived after the extinction of the program and what was the role of social capital in their success and longevity? To what extent are brokered relations capable of building social capital, similarly to the way that arranged marriages are often reported to flower, despite the absence of initial intimacy?

Implications for Practice

Different lessons may be derived from experiences gained in the formation and implementation of networks programs. The existence of social capital has been shown to be very important in the development of industrial policy. Where sufficient social capital did not exist, public policy has sought to address this issue in order to try and create the necessary conditions for collaboration between organizations. The AusIndustry Business Networks program is an excellent example of such an attempt.

Business networks and network co-operatives were clearly different. Both served the same purpose of increasing collaboration between organizations but they did it in different environments. Business networks programs sought to establish an organizational culture based on collaboration between firms, both at the national and international levels. The research suggested that the commitment of resources to the promotion of business networks by the state was important: otherwise the results would have been evaluated in terms of the traditional economic/financial ratios, without considering the social effects that the policy could have. The relatively greater success of the business networks programs, as compared to the network co-operatives, was in part a testament to the importance of resources. Business networks programs, as public policy for industrial promotion for small and medium-size enterprises, have had a positive impact in different countries in which they have been established. Collaboration between firms has been achieved.

One implication that emerges from the research was that opportunities for learning from the program of Business Networks were limited. While *Network News* was an AusIndustry publication that sought to promote successful examples of networks, little concerted effort was made to learn from the program overall. An evaluation was supposed to have been conducted by a Consultancy but this was not conducted until after the program had ceased funding networks formation. At the interorganizational level, there appeared to be little learning going on from one network to another, while there was some evidence of some learning occurring at the firm level within networks. The process of organization learning through networks sharing information had only a minor impact on network members. The areas in which learning was most likely to occur included operational and marketing procedures, industry knowledge, staff motivation, and the use of IT. In the web-enhanced world of the twenty-first century there would be many more opportunities for systematic learning from business networks programs being facilitated by an enabling public policy.

From the point of view of an interest in trust, we can note that while network members recognised the existence of moderate levels of conflict within the network, this did not mean that trust was lacking. Thus, we concur that it would be a mistake to necessarily associate harmony with trust or to see it as a precondition. Participants considered that networks should admit competitors to the network as members and, to the extent that they did, were able to build the basis for trustworthy collaboration within the collaborative/competitive framework. They did so largely through careful delimitation of the areas in which they competed and the areas in which they collaborated. One sign of trust was that members believed that they could share their organizational problems with other network members. Members considered they could trust other network members; they were convinced that network members should not act alone, on behalf of the network. There was a perception that this kind of action could lead to opportunistic behaviour.

Conclusions

In Australia, network programs now seem to be an idea whose time has passed in as much as they are no longer funded as a public policy program. However, the demise of these programs may have been premature. As the 'New Economy' looms large in the imagination of policy-makers, based very much on networked forms of organization and innovation, for which high-trust, if not high face-to-face relations are a *sine qua non*, then the ground for business networks may be more fertile than ever. We know very little at present about the network conditions of Dot.com start-ups.

One field that would be ripe for extension of this research is precisely this area. How do Dot.coms, with great ideas and few resources, build and deploy social capital, create trust, and establish networks not only with other Dot.coms but also with seed capitalists, markets, management expertise, and so on?

The research reported here suggests that applying the network concept in business is a sound way of building on, and amplifying, existing trust relations and indicates the centrality of these for success in the contemporary business world. Just as micro-economic reform processes have been oriented towards the economic basis of relations between different economic actors then the networks program may be thought of as an attempt to intervene in the social basis of these relations: building trust and social capital. These do not have to be left to the market and can be facilitated: the social basis of market relations is as evident as it is important and needs to take a more central role in public policy and in those disciplines – such as economics and management – that inform it. Future public policy initiation in Australia should reconsider the network idea, in light of this and other research.

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