

The Quality of the Human Factor and its Implications for Network Dynamics and Small Business Growth and Development¹

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Abstract

This paper explores using network theory, in real terms, to explain economic growth and/or organizational performance, and its implications for small business growth and development. Whereas network theory suggests that networks support organisational and/or economic performance descriptive notions of the concept are vague, and network attributes are difficult to measure; how networks work is also unclear. Many observers maintain that trust is the key determinant of network outcomes. In this article it is argued that this position runs the risk of reductionism. The paper postulates that the primary determinant of economic performance in network relationships is the quality of the human factor, of which trust is only one but an important component. The relevance of this thesis in small business growth and development is explored, drawing on data from a study on the network perspective of the growth paths of small clothing manufacturing enterprises in Durban.

Keywords: small business growth and development, network theory, embeddedness, economic performance, trust, human factor.

¹ This paper was presented under the title *Understanding Network Dynamics: The Human Factor and Small Business Growth and Development* at the Business Management Conference, 5th-7th November, 2009, at the Graduate School of Business, Faculty of Management, University of KwaZulu-Natal, Durban, South Africa.

Context and Purpose

Interest in network theory and practice, particularly in relation to organisational performance and national economic growth, has increased phenomenally in the past two decades or so. Whereas in the real world, most firms have or are linked to one or more types of networks the volume of network literature has also increased exponentially across all disciplines. The surge in interest and logic of networks, in part, derives from the widely documented pragmatic gains arising from networks or networking (see, for example, Putnam, Leonardi & Nanetti 1993; Uzzi 1996; Lee & Humphreys 2007 and Ofcom 2008) and the notion of embeddedness – the notion that economic behaviour does not occur in a social vacuum but is embedded in social relations (Granovetter 1985: 485-510). The latter alludes to the recognition that the social is as important as the economic in exchange relations. The social is particularly critical in periods of economic stress or failure of markets and hierarchies, which in part arises from bounded rationality, the idea that individuals ‘... are intentionally rational, but only to a limited extent (Simon 1957b: xxiv, cited in Hardt 2009:34). Shorn of bounded rationality, all economic exchange could efficiently be organized by contract (Williamson 1981:553). Failing this, networks assume an inter-mediating role in the exchange system under the assumption that relational network structures can reduce uncertainty, malfeasance and/or opportunistic behaviour, and thereby lower transaction costs. This notwithstanding, descriptive notions of networks are vague, and network attributes are often difficult to measure. How networks work is also unclear; there is no consensus on the binding mechanism, which provides coherence to a network and its outcomes (Gonzales 2006:1). Whereas some analysts point at licence agreements, shares in equity, subcontracting agreements and/or values (Gipouloux, 2000:58), others (e.g. Arrow 1972; Fukuyama 1995; Algan & Cahuc 2007; Yang 2007) isolate trust as the key determinant of network coherence and outcomes.

Exploring network theory, in real terms, to explain economic growth and organisational performance, this article argues that the notion that trust is the key determinant of network coherence and outcomes runs the risk of reductionism. The article posits that the primary determinant of network coherence and desirable economic outcomes in network relationships is the quality of the human factor, of which trust is only one but an important

component. In other words how networks work is better explained by the human factor paradigm (HFP). In the rest of the article a conceptual overview of networks is provided, focusing on what networks are, and typology. A discussion of the attributes and effects of networks follow this. Next, how networks work is critically analysed; and the human factor paradigm is advanced as the primary explanatory model for network coherence and outcomes. The relevance of this thesis in small business growth and development is explored, drawing on data from a recent study on the network perspective of the growth paths of small clothing manufacturing enterprises in Durban.

Networks – A Conceptual Overview

What are Networks?

The term network is not a new phenomenon. In contemporary usage however, the concept is used in different ways by different people, reflecting ‘some confusion about quite what a network perspective entails’ (Faulkner & de Rond 2000:20). Some analysts perceive networks as a metaphor, lacking any properties and strategies to maximise the benefits of networks (Aldrich & Whetten 1981; Ibara 1992, cited in Faulkner & de Rond 2000: 20). Others view networks as a hybrid form of organisation located on the markets-hierarchies spectrum (Thorelli 1986; Powell 1990). Generally, however, the concept of social networks is often defined as a structure of ties or set of nodes among actors in a social system or a set of high-trust linkages connecting a set of entities (Nohria 1992a:288; Castilla, Hwang, Granovetter & Granovetter 2000; Gipouloux 2000; Casson 2000:170; Bogarti & Li 2009:2). For others like Faulkner and de Rond (2000:20), however, social networks are persistent and structured sets of autonomous players - persons or organisations - who co-operate on the basis of implicit and open-ended contracts.

Besides the general notion of social networks two conceptions of networks have emerged in recent times. At one level, a network refers to a new organisational form - the network organisation. It is a form of organisation which is integrated across formal groups created by vertical, horizontal, and spatial differentiation for any type of relation, and distinct from Weberian bureaucracy or hierarchies and markets (Baker 1992; Piore

1992). The basis of relationships in this new organisational form is also different from those designed by market or hierarchical authority (Nohria 1992a; Nohria & Eccles 1992:288; Piore 1992:430; Ibara 1992:169; Baker 1992).

All organisations are networks – patterns of roles and relationships – whether or not they fit the network organisation image. Organisational type depends on the particular pattern and characteristics of the network. For example, a network characterised by a rigid hierarchical subdivision of tasks and roles, vertical relationships and an administrative apparatus separated from production is commonly called a bureaucracy. In contrast, a network characterised by flexibility, decentralized planning and control, and lateral (as opposed to vertical) ties is closer to the network organisation type (Baker 1992:399-400).

At another level, a variant of the new organisational form derives from the modern information and telecommunications technologies, e.g. facsimile, e-mail, teleconferencing, and Internet. Castells (2000:187) calls this organisational form the network enterprise, defined as ‘that specific form of enterprise whose system of means is constituted by the intersection of segments of autonomous systems of goals’. The conception of network from the information and communication technologies perspective has drawn conclusions towards a vision of Network Nation (Hiltz & Turoff 1978) or Network Society (Castells 2000).

Nohria and Eccles (1992:289) point out that the two conceptions of network often converge but network organisation is not the same as electronic networks although the latter can, and will play a key role in shaping the former. For these authors electronically mediated interactions are not always as effective as face-to-face exchanges. Inasmuch as this may be true, it can also be argued that the use of the electronic medium does not obliterate the traditional medium of communication: printed matter. This view is likely to be upheld by the actor-network perspective of the network phenomenon which emphasises the human as well as the technical components in social network relationships but this need not detain us here. It might suffice to say that actor network perspective recognises an

environment of interconnected hybrid entities, and that ‘(i)n networks of humans, machines, animals, and matter in general, humans are not the only beings with agency, not the only ones to act; matter matters’ (Risan 1997).²

Typology of Networks

The conceptual uncertainty surrounding network theory is not limited to what networks are: typology of networks is, as well, a source of uncertainty. Inasmuch as many types of networks exist, there is also a considerable degree of overlapping. In some cases differences may not be real but a matter of semantics. This is reflected in the works of network analysts such as Redding (1990), Brass and Burkhardt (1992), Ernst (in Castells 2000: 207), Casson (2000), Wu Wei-ping (2000), and Bogarti & Li 2009: 2-3). Ernst (in Castells 2000:207), for instance, maintains that a great deal of economic activity in industries in the global economy is organized around five different types of networks, namely, supplier networks, producer (or factor) networks, customer networks, standard coalition networks and technology co-operation.

Whereas Brass and Burkhardt (1992), highlight communication and fraternal networks, Casson (2000: 178) identifies a spectrum of binary network-types, e.g., regional and inter-regional networks; open and closed networks; vertical and horizontal networks; and visible and invisible networks. For Casson (2000), a network may be forgiving or unforgiving; transparent or opaque; open or closed; tough or lenient; vertical or horizontal; business or social; and visible or invisible. Bogarti and Li (2009: 2-3) on the other hand observe network types at two levels. At the top level the typology divides ties into two basic kinds, continuous and discrete; at the next level, four major groups are identified: similarities, social relations proper, interactions, and flows. The authors maintain that any or all these types of ties can exist simultaneously, a property known as multiplexity.

Arguably, network theory is a labyrinth of conceptual uncertainties, but this does not appear to significantly undermine its instrumental and/or

² For more information on actor-networks perspective see, for example, Callon (1987; 1993); Latour (1992; 1993); Stalder (1997); Risan (1997); Cordella and Shaik (2006).

analytical capacity in the context of economic and/or organisational growth and development. Adapting Hernando de Soto's insight on what the informal sector is, we may not be able to define a network accurately but we know it exists (see de Soto 1989, cited in Parlevliet, Jütting & Xenogiani 2008:1); the key elements being actors, activities, resources and a binding mechanism (Gipouloux 2000:58), which is the focus of this paper.

Network Characteristics and Effects

Several network analysts, e.g., Ibara (1992), Castells (2000), and Casson (2000) observe that network outcomes are contingent upon network type and properties. A well-structured network is an invaluable resource to its members. Castells, (2000: 187), for example identifies two fundamental attributes of a network that determine a network's performance: consistency and connectedness. Consistency refers to the extent to which there is a sharing of interests between a network's goals and the goals of its components; connectedness, on the other hand, refers to the ability of a network to facilitate noise-free communication between its components, i.e., the nature of connections and how it facilitates interactions between the members in a network. The dimensions of connectedness include density (presumably, the most important), positioning, openness, diversity, strength of ties and medium of interactions, e.g., face-to-face (FTF), the print and electronic.

In diverse ways, network characteristics, individually and collectively, affect exchange outcomes, and this is evident in a large and still growing body of literature (e.g. Perrow 1992; Nohria & Eccles 1992; Uzzi 1996; Villasalero 1999; Chan Kwok Bun & Chee Kiong 2000). Perrow (1992:460), for instance, maintain that the success of networks is the result of economic power of economies of scale through networks, trust and co-operation co-existing with competition, and welfare effects of networks that increase the efficiency of regions and industries. However, networks could have fewer welfare functions for society, particularly when an elite that generates trust among its members becomes powerful and exploitative (Perrow 1992:463).

Piore (1992), on the other hand, contends that networks facilitate the deepening of social division of labour, which enhances expertise and

integration, in a way that markets cannot. Whereas networks tend to enhance economic performance through inter-firm resource pooling, co-operation, and co-ordinated adaptation regarding production and information flows, business decisions and organisational learning (Uzzi 1996), Putnam (1993) observes that the quality of networking is a common factor in vibrant regional economies and polities:

Networks facilitate flows of information about technological developments, about the creditworthiness of would-be entrepreneurs, about the reliability of individual workers, and so on. Innovation depends on ‘continual informal interaction in cafes and bars and in the streets.’ Social norms that forestall opportunism are so deeply internalised that the issue of opportunism at the expense of community obligation is said to arise less often here than in areas characterised by vertical and clientistic networks. What is crucial about these small-firm industrial districts, conclude, most observers, is mutual trust, social co-operation and a well developed sense of civic duty – in short, the hallmarks of the civic community (Putnam 1993:161).

Networks also mediate labour and capital flows, with significant effects on industry and economic outcomes (Granovetter 1973; Nohria 1992b; Castilla, Hwang, Granovetter & Granovetter 2000; Kwok Bun & Chee Kiong 2000; Schak 2000). Family and friendship networks are not only a source of start-up capital and recruitment but also hiring of trusted and efficient employees. Granovetter (1973: 1369-1373) observes that recruitment occurs through the strength of weak ties where weak ties are acquaintances that form better bridges to new contacts and non-redundant information relative to strong ties, i.e., close friends who invariably know the same people and have the same information as others in the network. ‘from the individual’s point of view, then, weak ties are an important resource for possible mobility opportunity’ (Granovetter 1973: 1373).

Burt (1992) provides a mirror image of the weak ties argument in his concept of ‘structural holes’ which functions in a similar way as weak ties: diffusion of rich information and knowledge. Although the strength of weak ties argument holds some truth, it does not imply that strong ties can be discounted. Under certain circumstances strong ties generate internal

solidarity and trust with profound effect on collective achievements (Granovetter 1982; Krackhardt 1992).

From the organisational ecology perspective, institutional embeddedness, i.e. relational density – which in a limited sense, increases with population density - confers high survival rates on organisations (Baum & Oliver 1992). Baum and Oliver (1992:541) concur that institutional relationships act as buffers that protect organisations from environmental uncertainty and competitive threats to survival. As their reward for their institutional relationships organisations in a community derive legitimacy, status and vital resources that enhance their chances of survival and growth.

Notwithstanding positive network outcomes, networks could be cumbersome and costly when there are too many obligations to fulfil (Kwok Bun & Chee Kiong 2000:74). Dependence on personalized relations, as in family firms, tends to create problems of inheritance and wealth distribution. In some cases, a firm may dissolve or fragment into separate firms upon the death of the founder. Although family firms are believed to provide an organisational solution to agency costs in the labour market for managers and institutional development, strong dependence on family management coupled with restrictions on family size constrains the firms from optimally choosing management size. Large families, however, are more likely to have a larger pool of potential managers and end up with bigger firms (Ilias 2005:1).

Unguarded openness could also be detrimental whilst information flow could be hampered by gatekeepers or disgruntled network partners. Self-seeking individuals, especially if centrally placed in communication activity and have control over such activity in a network, may block the flow of information, and considerably impact on the distribution of resources (Marsden 1982:205). Similarly, negative connections do not also facilitate information flow and distribution of resources (Yamagishi, Gillmore & Cook 1988). Besides, invisible networks tend to be harmful. In opaque networks, the weak and ordinary members tend to be vulnerable, and easily fall prey to the strong and powerful members of the group (Casson 2000).

In its entirety network theory constructed upon structural and cognitive properties is problematic: structural analytical approach negates cultural nuances, agency, process, and the quality of the human factor. This limitation suggests that structural analysis of network relations, though

useful, cannot, and does not sufficiently explain economic behaviour and outcomes. The question may be posed: What, then, makes networks work? This is discussed in the next section, which also presents a plausible explanatory model.

How do Networks Work?

How networks work or what makes networks work is not easily perceptible (Gipouloux 2000:60). Attempts to explain how networks work tend to focus on co-operation though, paradoxically, co-operation co-exists with competition in the real world. Analysts of diverse theoretical persuasions explain the rationale for co-operation differently. Explanations range from administrative and legal precepts, designed to enforce contractual obligations, to the qualitative properties of networks, particularly the idea of embeddedness, values, culture and social capital (Gipouloux 200:58). Many business networks and/or social capital analysts (e.g. Arrow 1972; Fukuyama 1995; Knack & Keefer 1997; Faulkner & de Rond 2002; Yang 2007)), however, pay particular attention to trust, as the key determinant of economic success. For Faulkner and de Rond (2002):

Trust gives rise not only to lower transaction costs and higher investment returns, but also to more rapid innovation and learning, according to Sabel (1994), as a consequence of a joint problem-solving attitude by the partners, free from the constraints that follow from anticipated defection (Faulkner & de Rond 2002:31).

Fukuyama (1995:7) observes that a nation's (or be as it may, an organisation's) well-being, as well as its ability to compete, is conditioned by a single pervasive cultural characteristic: the level of trust inherent in the society.

Whereas legal-administrative precepts and antecedents are secondary but important devices to pre-empt transaction costs this paper argues that the key role assigned to trust in economic performance in the industrial networks literature is problematic; it runs the risk of reductionism, and as critics of reductionism argue, complex systems are inherently irreducible (wikipedia.org/wiki/Reductionism). Trust does not manifest itself

in isolation of other human characteristics and values; it does so in *pari passu* with several attributes such as honesty, competence, loyalty, accountability, reputation, discipline and responsibility. The degree to which one party trusts another is a measure of belief in the honesty, benevolence and competence of the other party (wikipedia.org/wiki/Trust). Together with other personality traits trust elicits appropriate behaviour that contributes to economic performance.

While it is difficult to refute the role of trust in the functioning of economies, social institutions, organisations and communities, much of the claim is largely anecdotal and/or intuitive. To isolate and establish trust as a decisive factor would require a far more rigorous empiricist approach than has thus far been demonstrated in the literature. Of the few empirical studies of note some have managed to establish a strong correlation, but not causality between trust and economic performance (e.g. Knack & Keefer 1997). Those studies that appear to have offered a plausible causal explanation, have only done so indirectly, using a proxy variable (see Aglan & Cahuc 2007); others have neither found any significant relationship (see Wei-Ping Wu & Choi 2004) nor uncovered significant evidence to support the valorisation of trust amongst other values (see Adobor 2005; McCarthy 2007, in CDE 2008:32-33). A common trend in the literature has, however, been the establishment of the positive effects of socio-cultural factors or social attitudes, which include trust, on entrepreneurship and economic performance.

The difficulty of measuring the causal impact of trust is largely because trust in a moral sense is a mental state that cannot be measured directly although confidence in the results of trusting may be measured through behaviour. Alternatively, one can measure self-reported trust, (with all the caveats surrounding that method) (wikipedia.org/wiki/Trust (social sciences)), and the thrust of conceptual complexities underlying trust. On the latter, for example, it may be asked: What kind of trust should be prioritised? Is it trust evoked by personalised confidence or trust conditioned by impersonalised or rationalised confidence (Tönnies 1955)? Or in Luhman's equivalent terminologies, is it personal trust or system trust? (Luhman 1979 cited in Holbig 2000:19)

Whereas these questions are essentially rhetorical, it is even suggested that trust, networks, civil society, and the like are all

epiphenomenal. They arise as a result of social capital but do not constitute social capital itself (Fukuyama 1999: 2). The valorisation of social capital, however, does not resolve the puzzle of pinning down the primary determinant of economic progress. Social capital is conceptually problematic. It has been described as nebulous and unwieldy; an umbrella concept that means many things to many people (Adler & Seok-Woo Kwon 2002); and something of a cure-all (Portes 1998). Nevertheless, used interchangeably with networks, the concept is not entirely irrelevant as it rejuvenates interest in culture in relation to economic growth and development (see Weber 1968). For human factor proponents, however, it is neither social capital nor just simply trust alone that primarily underscores economic or organisational performance but the quality of the human factor (See for example, Adjibolosoo 1993; 1995 and Owusu-Ampomah 2001; 2002).

By human factor it is meant the ‘spectrum of personality characteristics and other dimensions of human performance that enable [or disable] social, economic and political institutions to function and remain functional, over time’ (Adjibolosoo 1995: 33). Extending the human factor concept Owusu-Ampomah (2001: 6) argues that HF also connotes the entire socio-cultural and political milieu in which the being finds expression, and which defines its identity, institutions, values, needs, rights, and duties. This, in effect, implies the social, moral, and political values that promote social cohesion and guarantee the progress of a civic community.

The spectrum of personality characteristics includes honesty, reputation, accountability, trust, commitment and integrity; and the array has been broadly classified as spiritual capital, aesthetic capital, moral capital, human capital, human potential and human abilities (Adjibolosoo 1995). These human characteristics are not only a sine qua non for co-operation and network outcomes but also, more broadly, for organisational performance and/or growth and development (Adjibolosoo 1993; 1995). Whereas the positive human factor of persons in a social network may, for instance, enhance the flow and equitable distribution of resources the negative human factor may compromise the society-wide gains inherent in a social network. Contextually, networks may be either functional or dysfunctional; and the mediating factor is the quality of the human factor. Networks in which the components have positive personality traits are more likely to create

opportunities and benefits for the greatest majority in a society than those with negative traits. The negative personality traits have been described as human factor decay, that is, ‘attitudes, behaviours and actions that are contrary to principle-centeredness, moral injunctions, and ethical standards’ (Adjibolosoo 2004: 14). The greater the level of human factor decay in an organisation or society the lesser the chances of progress; conversely, the lesser the level of human factor decay the greater will be the chances of progress. The development of appropriate human factor is therefore imperative for organisational performance or societal progress. In the next section the relevance of this thesis is explored in the context of small business growth and development, drawing on a study by Owusu-Ampomah (2004) on the network perspective of the growth paths of the small clothing manufacturing enterprises (SCMEs) in Durban.

Relevance of Thesis: Empirical Evidence

Data Description and Results

The study on the network perspective of the growth paths of small clothing manufacturing enterprises in Durban, inter alia, investigated (a) the relationship between network characteristics (density, openness, diversity and geography of networks) and economic performance of small business (b) the scope of networks and inter-firm co-operation amongst the small clothing manufacturing enterprises in Durban, (c) whether the poor performance of the clothing industry could be attributed, at least, in part, to inadequate networking and inter-firm co-operation, and if so (d) the reasons for the inadequate networking and inter-firm co-operation. Ethnographic data was collected from a sample of 61 SCMEs, out of a cluster sampling frame of 237 firms. Eligibility was first determined by a simple quantitative definition of small business, i.e., a firm having not more than 200 employees; followed by a random selection of firms. The sample size was influenced largely by the willingness of the selected firms to participate in the study. Besides the sample of 61 SCMEs five key actors in the industry - representing labour and employers’ unions - were selected on the basis of purposeful sampling for in-depth interview.

Table 1: A Comparison of Very High and Very Low Performance SCMEs

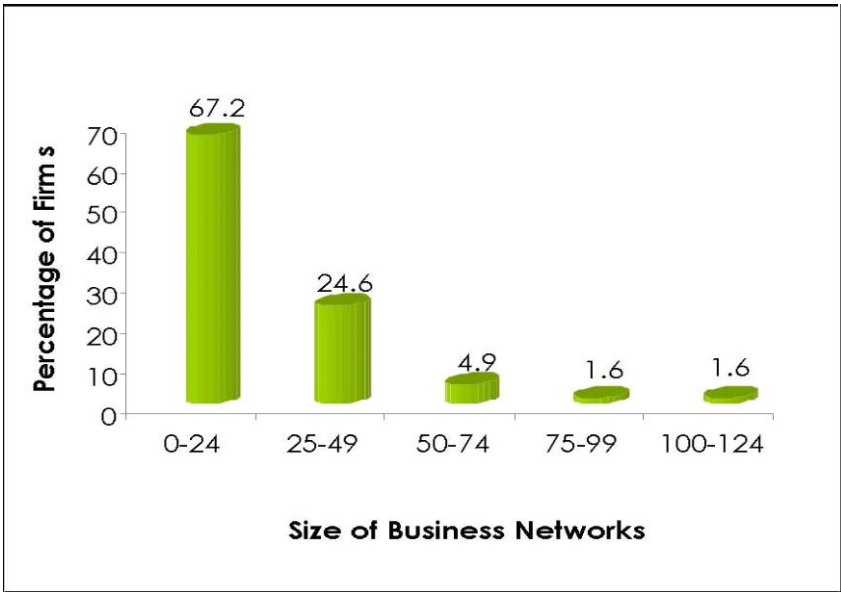
Characteristics	All Sampled Firms (N=61)	Outliers (n=13)	Very High Performance Firms (n=6)	Very Low Performance Firms (n=7)
Size/Density of Business Networks (Direct)				
Mean	23.6	22.9	30.2	16.6
Minimum	6	9	15	9
Maximum	110	50	50	30
Standard Deviation	18.76	14.39	16.73	9.02
Openness Index				
Mean	52.64	58.9	68.8	50.4
Minimum	30	35	50	35
Maximum	95	80	79	80
Standard Deviation	14.93	16.12	10.3	15.78
Diversity of Network Contacts (Mean Points Scored)			25	20
Geography of Contacts				
(i) Local only (%)	58		33.0	83.0
(ii) Local and External (%)	42		67.0	17.0

Source: Owusu-Ampomah (2004)

Combining questionnaire-based and qualitative research approaches, and descriptive network data and hermeneutic analyses the study found limited networks and/or networking and inter-firm co-operation amongst the sampled small clothing manufacturing enterprises (SCMEs) in Durban. The mean density of business networks of the sampled firms (N=61) was 23.6, with a standard deviation of 18.76 (Table 1). The maximum density for the sample was 110, and the minimum was 6. The means for the very high (n=6) and very low (n=7) performance SCMEs were calculated as 30.2 and 16.6 respectively. Within the very high performance firms (VHPF), the maximum density of network contacts was 50, and the minimum was 15. In contrast the maximum density of network contacts of the very low performance firms (VLPF) was 30, and the minimum was 9.

The study strikingly observed that the number of networks of two out of three of the sampled SCMEs did not exceed two dozen, with diminishing proportions in the higher ranks of network contacts (Figure 1). This was in sharp contrast with network density of Chinese firms which could be several dozen at any particular time (Wei-ping 2000:46).

Figure 1. Size of Business Networks of the Sampled SCMEs



Source: Owusu-Ampomah (2004)

Regarding the extent of openness amongst the sampled SCMEs, the study recorded openness indices of 52.64 and 58.9 for the sampled SCMEs as a whole and the outliers respectively (see Table 1). Strikingly, the openness index for the VHPFs (68.8) was significantly higher than the index for the VLPFs, estimated at 50.4. Whereas the data suggested a positive relationship between openness and economic performance of firms, it was evident that the level of openness of the sample as whole was extremely low, and this appeared to partially explain the low performance of the sampled SCMEs in Durban. Similar conclusions were drawn with respect to diversity, which showed a relatively high mean score for the VHPFs (25), compared to the mean score of the VLPFs (20). On the geography of networks, a good majority (67%) of the VHPFs had local and external networks, compared to the VLPFs, an overwhelming majority (83%) of which had locally-based networks. The data reflected the relevance of the geography of networks in relation to economic performance.

In sum, the statistical data confirmed limited network contacts and/or networking and inter-firm co-operation amongst the sampled SCMEs in Durban – to reiterate, network density was low, the firms were significantly inward-looking, the degree of diversity was low, and most of the networks were localised. The data also suggested a positive relationship between network characteristics and economic performance of firms. Density of networks and degree of openness were higher amongst HPFs than they were amongst the VLPFs; similarly network diversity and spatial distribution were more pronounced amongst HPFs than they were amongst VLPFs (see Table 1). This suggested a positive relationship between network characteristics and economic performance. In other words the SCMEs in Durban were more likely to perform better if they were more open, had high network density which were also diverse, and an appropriate mix of local and external networks. On the basis of the statistical data it was clear that (a) the disparities in the performances of the sampled firms, and (b) the relatively poor performance of the industry in Durban as a whole over the past decade and a half, could be partly explained in terms of inadequate networks and/or networking and inter-firm co-operation.

This finding was unanimously confirmed in interviews with a few key actors in the clothing manufacturing industry in Durban. A Cloted official observed that inter-firm co-operation within the industry was at one level primarily pipeline driven. At another level it was needs driven, and often occurred at the level of policy intervention, particularly where the government's trade and industrial policy seemed to have a negative impact on the industry, and success was not always guaranteed. From labour perspective relations in the clothing manufacturing sector was anything but cordial, and clearly not supportive of effective inter-firm co-operation:

The small companies are being squeezed by the big companies. If you are small you'll be small until you die or don't survive; if you are big you'll be big in order to squeeze those that are small. That's the fact of the game in South Africa. Small companies are not enjoying any good co-operation from the bigger companies. In the clothing sector it is really a disaster area, except that if a big company wants to outsource some job because they have a huge customer base that they cannot satisfy then they begin to look for

companies that they can outsource to do the work, i.e. CMTs. But they dictate the price. If you (CMTs) don't take their price you (they) are out. They will look for other smaller companies that will take their price (SACTWU Official 2001).

Comparatively, the Durban cluster appeared to be atypical:

When you look at the Far East the SMMEs are very *supportive* of each other hence they are very successful in the export market. What they do is they try and help each other to overcome problems *all their problems are dealt with by groups of people that have got the interests of the country at heart*. In South Africa we work as individuals because we haven't been exposed to the culture. To a large extent, that explains the failure of the SMME sector to grow as it should (Clofed official 2001; e.a.).

Discussion

Several factors account for the low level of networking and inter-firm co-operation which in turn explains, albeit, partially, the poor performances of the Durban cluster as a whole. The key factors that came to light in the study under reference (Owusu-Ampomah 2004) were human factor decay, cultural and religious differences, and the erstwhile apartheid system. An interview with an official of the South African Clothing Workers Union (SACTWU) in KwaZulu Natal, was very illuminating, and it is worthwhile quoting him at length:

There are two sections of the Indian community: Muslim and Hindu, who traditionally do not want any form of association with one another. *They don't co-operate*. They even undermine each other, which badly affects workers and the industry. Even the nature of the relationship they have with their workforce is different. I don't want to be unfair to any of the religions but to hear a worker say, 'I don't know what it means for my employer to go to the Mosque (or Temple, if you like) and pray while he's doing this to us' is bad for business. I am thirteen years old in the clothing industry so I know that culture and religion play a role in business (SACTWU 2001; e.a.).

A critical element underlying the lack of co-operation between the Muslim and Hindu owner-managers, and the tendency to undermine one another, could be attributed to a high level of mistrust and suspicion, and a Clofed official was unambiguously frank about it: 'When a party approaches you, and tells you here is an opportunity for, say, export, you ask yourself, 'Where is the catch?' That is something of a mindset among the actors in the industry' (Clofed Official 2001). Interestingly, the mindset was not only rooted in religious differences but also in the apartheid system which sowed seeds of fragmentation, hate, selfishness and other forms of human factor decay, and disrupted social and economic relations within and between races (Maasdorp & Humphreys 1975).

It may be conceded, however, that mistrust is ubiquitous, especially in a competitive environment. Co-operation is not enhanced where firms produce the same product and compete in the same market for financial rewards. In this event homogeneity is antithetical to cooperation and ultimate success; diversity in specialisation, e.g., by garment components and gender, may enhance trust co-operation and joint action, say, in export orders. But this is not a reality in Durban's clothing manufacturing sector. Most of the firms compete for subcontracts from the big manufacturers and wholesalers. Specialisation is limited to occupational, age and gender categories (see Owusu-Ampomah 1997); and specialisation by garment components which holds much promise for inter-firm co-operation, is yet to develop on a large scale.

Scholars of the New Institutional Economics (NIE) e.g. North (1981) insist that formal institutions play a significant role in economic performance. However, as Owusu-Ampomah (2004) observed, the owner-managers of the sampled SCMEs did not appear to have faith in their formal network structures - the Clothing Federation of Southern Africa and the Natal Clothing Manufacturers' Association (Clofed Official 2001). While this has the potential to exert negative impact on networking, inter-firm co-operation, and performance, it also suggests that economic actors shape network structures inasmuch as network structures shape actors' behaviours and the performance of firms. In this context, informal institutions shaped by culture, norms, ideology, religious beliefs, values, morals and ethics, often neglected by classical and neo-classical economics and the NIE are critical elements in the growth of firms.

As observed elsewhere in this paper, Granovetter (1985) particularly, stresses the embeddedness of economic behaviour in social relations. But while he may be correct in arguing that economic behaviour cannot be explained by under-socialised (institutional structures) or over-socialised (general morality) conception of humans but by on-going networks of social relations between people (Granovetter 1985:495), he misses the point that the functioning of networks is premised primarily on the human factor as defined in this paper. From the human factor perspective, norms, ethics, values, and social relations are not only instrumental in business performance, but are also 'environmentally determined' (Adjibolosoo 1993:146). For effective and efficient networks, entrepreneurs must acquire appropriate skills e.g. information skills, and personality traits such as integrity, loyalty, drive, positive attitude, vision, negotiation skills, trustworthiness, reliability, reciprocity, willingness to share, credibility, love, responsibility, and accountability. These skills are acutely relevant for fruitful strategic alliances and relationships. Ineffective networks may be the result of negative personality traits in entrepreneurs such as lack of management and information skills, cynicism, suspicion, mistrust, disloyalty, acrimony, deceit, selfishness, fecklessness, dishonesty, penchant for a free ride, fraudulence, haughtiness, and greed, to mention a few. Such qualities are antithetical to building sound business relations rich in information and potentially productive.

Although impersonal social exchange and agency relationships persist, principals still willingly trust strangers (Shapiro 1987). For most people however reputation is worth protecting. 'You sleep with dogs, you catch fleas' (Govender 2001), and therefore partnership, for instance, may be determined not only by opportunity and profit but also the quality of the human factor of potential partners. To be sure, pervasive human factor decay would discourage co-operation, which in turn would underscore poor performance, as has been the case with the small clothing manufacturing enterprises in Durban. Manifesting itself in the larger South African society as racism, deprivation, corruption, discrimination, and hatred, human factor decay has historical roots in the ideological values of the apartheid system. This decay has created a condition for entrepreneurial malfeasance and non-co-operation, resulting in the collective poor performance of the SCMEs in Durban in the last few years, contrary to the collective efficiency theory of

clusters elsewhere (Marshall 1920; Nadvi 1997). Thus, in the same way as colonialism killed the entrepreneurial spirit of Africans (Adjibolosoo 1999), apartheid denied blacks in South Africa the opportunity to acquire the appropriate qualities of entrepreneurship and/or build upon whatever entrepreneurial skills they were endowed with.³ Instead it opened the floodgates for horizontal, negative and/or underground networks that are inconsistent with production coordination, competitiveness and firm/industry performance in the current international capitalist economy.

However, with the advent of the new South Africa, some observers believe that cultural and religious differences among the SCMEs owner-managers are becoming a less serious factor than it was about twenty years ago.

Culture is certainly an issue but mostly among the older generation, who are more conservative and traditionalist. The majority in the clothing industry today regards themselves first as Indian, and Muslim or Hindu, second. As the young become educated, cultural distinctions tend to blur. The level of education of today's CMT operators is higher than that of their counterparts of the past, and what we have today is 'Westernised-Indian' who is more open (Clofed Official 2001).

In spite of this, the level of openness in general is yet to be optimised, although the optimum level of openness necessary to maximise the gains from social and business networks is open to conjecture. Perhaps it is too early to expect too much but if higher levels of networking and inter-firm co-operation are a necessary condition for performance enhancement of SCMEs, rapid transformation of the black entrepreneur is the ultimate solution.

³ It is not implied here that all categories of blacks were equally deprived of economic participation, ideal for entrepreneurial development. Indians/Asians enjoyed far more industrial exposure than Africans, and it is not accidental that, today, they do not only control the Durban economy but also own a sizeable proportion of the country's wealth. Considering the fact that the unit of analysis of the study in question was the clothing manufacturing industry, which is controlled by the Indian/Asian community, this viewpoint is arguable, and ought to be qualified.

Conclusion

This article has explored using network theory to explain economic growth and organisational performance. The article has shown that there are conceptual uncertainties surrounding networks. Acknowledging the role of legal-administrative precepts and trust as important explanatory models for economic performance, the article maintains that while the legal administrative precepts are secondary and critical to the reduction of transaction costs, trust runs the risk of reductionism. The central argument has been that whereas networks provide opportunities and benefits the primary determinant of network coherence and economic outcomes is the quality of human factor, including but not limited to trust. Trust is an indicator of belief in several attributes of the Other, e.g., honesty, competence, commitment and loyalty, and together with these attributes it elicits appropriate response and action in exchange relations for economic performance. On the other hand mistrust and its corresponding negative attributes, or human factor decay, e.g., dishonesty, incompetence, bad reputation, and disloyalty tend to undermine economic performance. Networks may thus be functional or dysfunctional and the primary determinant is the quality of the human factor; not institutions or systems which by themselves cannot function without a network of people who are committed, loyal, honest and determined to make such institutions and systems work.

The article has illustrated the implications of this thesis in the context of the growth and development of the small clothing manufacturing enterprises in Durban. There is empirical basis to believe that the poor performance of the clothing manufacturing industry in Durban is partly due to inadequate networking and inter-firm co-operation, and, controlling for other factors, this in turn is significantly underscored by human factor decay. Whereas other analysts (e.g. Fukuyama 1995) would point at low-trust as the key explanatory factor for the poor performance, this paper has shown that it is not only low-trust but also an array of inappropriate personality traits, i.e., human factor decay that accounts for it. It is thus fair to argue that the development of appropriate personality traits or human factor is a precondition for network effectiveness and economic performance. Entrepreneurs make things happen, not inputs, by themselves; but whereas this is true, it is the quality of entrepreneurship that really matters.

Entrepreneurs who possess appropriate personality traits, including trust, *ceteris paribus*, are more likely to succeed than those who do not. Similarly, industrial districts that boast a network of men and women who are committed to not only their personal successes but also the well-being of the region as a whole, *ceteris paribus*, is more likely to prosper than industrial districts in which entrepreneurs show little or no commitment to the collective good of their society. In light of this, human factor development amongst entrepreneurs, focusing on the spectrum of appropriate personality traits and values, not only trust, is a *sine qua non* for effective networks and small business growth and development, which in turn constitute a catalyst for national economic performance.

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