AN OUTLINE FOR RESEARCHING BUSINESS INTERACTION

AND

WHY COMPETITION MAY DECLINE IN BUSINESS NETWORKS!

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ABSTRACT

This paper argues that there is a need to move to move the research of the IMP Group away from being a generalised "approach" to understanding business networks and towards a more systematic process of developing and testing propositions about business interaction. In this way, the paper reinforces the propositions developed around the analysis of actors, activities and resources in Hakansson et al (2009).

The paper presents a tentative conceptual outline for research into the interactions between managers in business relationships. The proposed research outline builds on the Model of Managing in Business Networks (Ford et al 2008, Håkansson et al 2009) and addresses two challenges to conventional views of business that have formed the basis of IMP research over the past thirty years (Ford and Håkansson 2006; Ford and Mouzas, 2008). Thus, the first part of the research outline deals with the analysis of the *structure* within which business interaction takes place and the second part is the analysis of the *process* of that interaction. The outline examines business interaction as a problem-coping process under conditions of uncertainty (Håkansson, Johanson and Wootz and Ford et al, 2003).

The paper presents suggestions for using the outline to research business interaction and illustrates this with a set of propositions about *competition* in Business Networks.

INTRODUCTION

The aim of this paper is to present a research outline for a more systematic empirical observation and testing of propositions about business interaction The research outline has two aspects corresponding to the challenges to conventional views of business that have formed the basis of IMP research over the past thirty years (Ford and Håkansson 2006; Ford and Mouzas, 2008). The first aspect of the research is the analysis of the *structure* within which business interaction takes place and the second is the analysis of the *process* of that interaction.

The research outline is built on three foundations, as follows:

Firstly, the Model of Managing in Business Networks (Ford et al 2008, Håkansson et al 2009): This model provides an overview of the evolving context of a particular business relationship and of the managerial choices involved in the process of business interaction.

Secondly, a view of business interaction as a process through which the specific *problems* of both parties in a dyadic relationship are addressed[1]. This view suggests that companies and the managers within them will experience different *uncertainties* in addressing their problems under different circumstances. Their respective uncertainties and problem characteristics will affect the particular *abilities* of counterparts that each actor will seek from and offer to the other (Håkansson, Johanson and Wootz 1976 and Ford et al (2003).

[1] It is important to re-iterate at this point that problems can be both positive and negative. Thus an actor may face a cash-flow problem because its business is successful and expanding rapidly. Similarly, an actor may face a cash-flow problem because its business is in deep decline and its relationship counterparts are deserting it.

Thirdly, a research instrument designed to examine managers' conceptual maps or network Pictures" of their surrounding network (Ford et al 2003). Network pictures are relevant because they help us to visualise actors' subjective views and perceptions as a starting point in researching business networking.

ANALYSIS OF THE STRUCTURE AND PROCESS OF BUSINESS INTERACTION

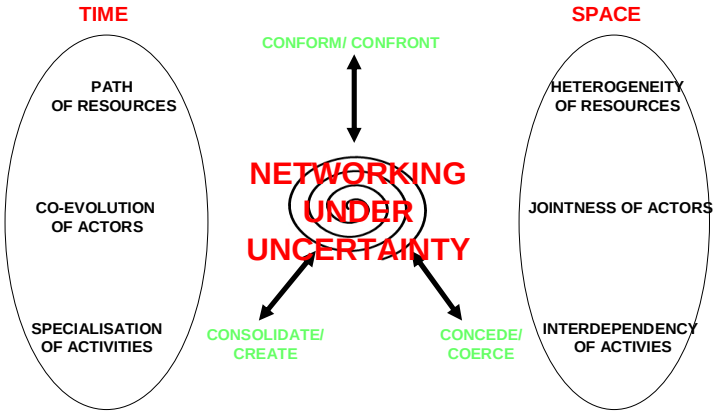


FIGURE 1
A MODEL OF MANAGING IN BUSINESS NETWORKS

Developed from Ford et al 2008

The Model of Managing in Business Networks is illustrated in Figure 1 and provides a framework for examining both the structure and process of interaction. We will firstly address the structure of interaction, as follows:

The Structure of Business Interaction

Each relationship is a unique part of a *Pattern of Activities*, *Constellation of Resources* and *Web of Actors* within the business network (Håkansson and Snehota 1995). The uniqueness of each relationship has two dimensions; space and time:

Space: Each relationship has a unique structure in network space that can be described by the *heterogeneity* of the resources; the *interdependencies* of the activities and the *jointness* of the actors involved in it. But at the same time, each unique individual business relationship is part of a universal relatedness that exists across network space through which individual relationships can be affected at a distance.

Time: The actors, activities and resources involved in a particular relationship evolve through that process and so are also unique at each particular point in time. The model uses the terms; the *path* of resources; the *specialisation* of activities and the *co-evolution* of the actors to describe this evolution.

The structural context of interaction at any point in time is, in part, an outcome of the preceding interaction between the counterparts and between them and others. This continuing interaction is a determining factor in the future evolution of the *constitution* of the network or the rules, principles and other conventions that are shared by actors in business networks (Mouzas and Ford, 2009). These supply actors with the rules of the game or the humanly devised constraints that shape human interaction, whether political, social, or economic (Lewis, 1967; North, 1990).

The two sets of descriptive variables are interconnected: Thus, the Space Dimensions describe a point from which evolution may be tracked and similarly, the Time Dimensions provide an explanation of the process through which a relationship has arrived at a particular point. However, it is important to note that the evolution of an interaction process cannot be described solely in terms of what happens within that process. Nor can an interaction process be completely described at any one point in time without relating it to what happens within other connected and unconnected processes.

The Process of Business Interaction

The model in Figure 1 is based on the idea that business interaction is a continuing process of action, reaction and re-reaction. Each counterpart will attribute meaning to its own and to the actions of the other and these attributed meanings condition further actions and re-actions. The model is concerned with the conscious attempts of actors to influence the interaction process between two actors. We refer to these attempts as *Networking*. Networking is a problem-coping process for both of the participants involved. Networking is self-serving and is ultimately concerned with coping with each actor's own problems through interaction between the activities and resources of the two actors and the actors themselves. But each actor's attempts to cope with its own problems through interaction with others will also involve the actors in simultaneous or sequential *reciprocal* problem-coping with others.

The model suggests that networking involves a number of choices for each involved actor, as follows:

Networking Choices within existing Relationships: Managers face choices about which of their problems to *confront* in their existing relationships and for which to *conform* to the existing status quo. Managers must also choose how to respond to the conforming or confronting of the counterpart.

Networking Choices between Relationships: Managers also face the choice of whether to seek to cope with particular problems by *consolidating* their existing relationship structure or by trying to *change* that structure.

Networking Choices about How to Interact: These choices centre on the approaches that an actor may take in networking with a specific counterpart for a particular problem; whether to defer to the

counterpart's leadership (*to concede*) or to attempt to influence the counterpart in a chosen direction (*to coerce*).

These choices are not mutually exclusive of each other: They will be taken simultaneously by a number of individuals in both of the two companies in a relationship as they address a number of their problems. Each of the choices in any one company is interdependent with the choices taken by counterparts.

Networking under Uncertainty

The networking choices made by an actor will relate to the particular *uncertainties* that the actor faces. These uncertainties can be outlined as follows:

Problem Uncertainty: This exists when an actor is unsure of the best or most expedient way to cope with one of its own problems. An actor's problem-uncertainty may be increased or decreased either through experience, such as when supplying or buying a particular offering several times, or through attempts by a counterpart to manipulate its uncertainty.

Problem uncertainty is likely to affect the problems that an actor chooses to confront: It may lead an actor to avoid confronting a particular problem and choose instead to conform to existing interaction patterns. An actor experiencing problem-uncertainty is likely, at least initially to seek interaction within well-developed relationships with established counterparts (*to consolidate its relationships*). The interaction between the actors is likely to be relatively intense and the problem-uncertain actor is likely to *concede* to the advice of the counterpart and how the problem should be coped with.

Network-Uncertainty: Business actors are likely to face uncertainty about *where* in a network of relationships they should seek to cope with a particular problem. This uncertainty relates to the number, heterogeneity and rate of change of potential relationships as perceived by the actor.

Network-uncertainty is likely to lead to quite different interaction choices when compared with those associated with problem-uncertainty. For example, a network-uncertain actor, faced with heterogeneous or rapidly changing surroundings is likely to invest heavily in scanning and evaluating the network. This actor is less likely to commit to a single relationship at this time. Thus network-uncertainty may involve an actor in important choices between *consolidating* and *creating* new relationships.

Fulfilment Uncertainty: This occurs when an actor is uncertain that a counterpart will actually provide the means of coping with a particular problem. An approach to coping with a particular problem of an actor may be designed or developed by the actor or its counterpart or interactively between them. The approach may require different contributions from the activities, resources and individuals of both the actor and the counterpart. But for the problem to *actually* be coped with, the approach must be followed through to completion. In other words, fulfilment must take place. Fulfilment may involve financial investment, service or product delivery, administrative restructuring, staff recruitment, training, financing, changes in relationships with other actors etc. The extent to which an actor believes that a counterpart will actual approach will *actually* cope with its problem at the right time and right cost may be an important source of uncertainty for the actor.

The Evolution of Uncertainties: The uncertainties of business actors evolve over time. Thus, problem-uncertainty is likely to decrease with experience of coping with a problem. Further, when an actor has gained experience of coping with a particular problem then it is possible that it will place less emphasis on the way that the problem can be coped with and more emphasis on the cost or efficiency of coping. In this way, fulfilment-uncertainty may increase. Similarly, experience may

lead an actor to consider other potential counterparts as a way of improving the way that the problem is coped with or achieving greater efficiency in coping. Both of these situations are reflected in an increase in the actor's network-uncertainty.

The Abilities of Actors

Problem coping in the business network is an interactive process involving multiple actors. The abilities of actors are rooted in their respective resources and activities, in how they are combined together and in how they relate to the resources and abilities of others to which they are linked through connecting relationships. The actors in a dyad each contribute to coping with each other's problems. The resources and activities of an actor together with its uncertainties determine the respective *contribution* to problem-coping that each will require from their counterpart and contribute themselves.

The contributions to coping with a counterpart actor's particular problem involve two distinct abilities: *Problem-Coping Ability* and *Fulfilment-Ability*.

Problem-Coping Ability: The problem-coping ability of a single actor is manifested in its contribution to the *development* of an approach to a particular problem of a counterpart. Problem-Coping Ability is perhaps best interpreted as a *promise* by an actor to a counterpart to develop some aspect of a problem approach. For example, an actor (either "customer" or "supplier") may promise to take major or exclusive responsibility for the design of a product or of a service organisation. The Problem-Coping Ability of a counterpart is likely to be important to an actor when its problem is new or complex and when the actor has problem or network-uncertainty about how to approach the problem and with whom to do so. In these situations, an actor is likely to accept inadequacies in fulfilment by a counterpart manifested in such things as late deliveries or payments or consistency of

supply or demand. Of course, if an actor has low problem or network uncertainty then it is less likely to seek or to pay for the problem-coping abilities of a counterpart.

Developing and maintaining the ability to cope with a wide range of its own or others' problems is resource-intensive and abilities are prone to obsolescence. This often leads companies to increasingly rely on the problem-coping abilities of others for many of their continuing problems.

Fulfilment Ability: This ability is a measure of the extent to which a counterpart is able to fulfil its promise and to actually carry out what is required by the actor on time, at the agreed cost and specification. The fulfilment-ability of a counterpart is likely to be important to an actor when that actor has little or no problem-uncertainty about the best approach to cope with the problem or network-uncertainty about where to look for an approach. However in this situation an actor may have significant fulfilment-uncertainty about efficiency, reliability or cost in actually coping with the problem. Hence, it may choose to rely on the fulfilment-ability of a counterpart. Common examples of fulfilment-ability include the ability to *install* complex business software or to provide regular, trouble-free or consistent orders. The fulfilment-ability of their counterparts is often critical to actors when seeking to cope with mundane problems centring on convenience or cost. In contrast, fulfilment may be difficult or complex and involve high-cost organisations. Examples of complexity in fulfilment-ability occur in the management of just-in-time delivery or sourcing of components for high volume users.

The role of problem-coping and fulfilment-abilities in business interaction emphasises that nothing is fixed or predetermined in the heterogeneous business landscape. Depending on their network position, resources and activities, both "suppliers" and "customers" may seek the problem-coping abilities of counterparts to help them develop new products or procedures, to enhance their reputations in particular areas or to ease cash or profit problems. Each may seek the fulfilment-abilities of counterparts to efficiently implement approaches that they have developed or that are

commonly understood. Any actor in the network may develop products and services. Some may also produce offerings based on those designs whilst others simply sell their designs to other producers. Some actors only produce, whilst others neither produce nor design but rely on the abilities of others. Either or both of the actors in a dyad may coerce or concede in particular aspects of their interaction. For example, either or both may determine price. Similarly, logistics may be designed or undertaken by manufacturers or by retailers. Superficially similar actors may seek widely different network positions ranging from a small number of stable, high-intensity relationships to a larger number of short-term opportunistic interactions.

All actors face problems and all seek counterparts to help them cope with these. All actors face uncertainties and these affect their choice of counterparts, their interactions and the coercion and conceding between them. Customers choose suppliers to help them address specific problems and often have to compete with other customers for the problem coping or fulfilment abilities of those suppliers. Similarly, suppliers choose and compete for the customers that will help them cope with particular problems. All actors conform and confront aspects of their interactions. All face choices about their position in the network and all must choose when, where and how to consolidate or create, to coerce or concede.

RESEARCHING MANAGERIAL INTERACTION

The research outline that we have described is based on the idea of interaction as a problem-coping process under uncertainty. This process involves managerial choices within relationships, between relationships and about how to interact with a counterpart. Interaction takes place within a structure that can be described in terms of the evolving connections between the activities, resources and individual actors of the counterparts. The approach emphasises the uniqueness in time and network space of each relationship. This uniqueness suggests that the following areas for analysis:

Studies of the Structure of Business Interaction: The first aspect of structural analysis would be concerned with describing and explaining variations in resource heterogeneity, activity interdependence and actor-jointness in specific relationships at particular times. Key areas requiring explanation are the connections between previous interaction patterns and current structure; similarities and differences between the structures in adjacent or supposedly "similar" relationships. The second aspect of this work is to examine and account for the evolution of the structure of interaction, the path followed by resources, the specialisation of activities and the co-evolution of actors. The scale and detail required in structural analysis and the uniqueness of each business relationship is likely to lead to the use of case-study methodology and there have already been many examples of IMP case studies of both the current situation and evolution of interaction studies.

Studies of the Process of Business Interaction: These studies would include a wide range of areas:

Firstly, studies of managerial choices (to confront or conform) within particular relationships. These studies would be concerned with how managers order their problems and plan and implement their approach. They would also include studies into the actual process of interaction that is involved in conforming or confronting. Secondly, studies into the choices that managers make between their relationships and their attempts to change their *position* in the network (to consolidate or create). Thirdly, studies of the approaches taken by actors to different aspects of their relationships with others (to coerce or concede). The studies on asymmetry in relationships are examples of early approaches to this (for an outline see, Johnsen and Ford, 2008).

Another important area of process study is into the uncertainties faced by actors in particular situations and how those uncertainties evolve over time. There appear to have been no organised studies of this area since the original studies of Håkansson et al (1975).

LINKS TO MANAGEMENT PRACTICE: THE ISSUE OF COMPETITION

We can illustrate the use of the research outline proposed in this paper and how it could be used to generate propositions by linking business interaction with the idea of competition in business networks. Competition is a central area of managers' attention, but it has received remarkably little attention in IMP literature. There may be a number of reasons for this: Perhaps we thought that there was a niche to be exploited by examining cooperation because other researchers concentrate so heavily on competition; perhaps because we concentrated so much on the detail of what happened in single relationships, we neglected to look at the ways in which parallel relationships are connected; perhaps, we neglected competition simply because we don't understand it!

Nonetheless, both marketing and purchasing people are concerned with competition and competitors: Both have to interact with major counterparts; both are concerned with their company's current and evolving position in the network; both have to interact with each other and with other subunits within their companies; both have to work within the existing interaction structure of actor-jointness, resource heterogeneity and activity interdependence. Both have to cope with problems by relating their company's activities and resources to those of others and both need the resources and activities of counterparts. Both marketers and purchasers have profound effects on the work of other subunits in their companies. Both have to interact with the powerful managers of these subunits in areas of which they know relatively little. Both affect the processes of co-evolution, specialization and the path of the company's and its counterparts' resources. Both marketing and purchasing people network under conditions of considerable uncertainty!

The IMP view of business networks and the research outline presented in this paper suggest that competition and competitors have rather counter-intuitive attributes that relate to both marketing and purchasing, as follows:

The Broad Context: Firstly, any two actors in a relationship are indirectly related to others across the network through their relationship. Sometimes even distant relatedness can have profound effects on a relationship; both positive and negative. For example, the relatedness that stretches between financial institutions meant that the mis-selling of mortgages by unknown small banks on one continent brought down major merchant banks on another. Similarly, technological relatedness stretches across the network between seemingly isolated actors so that an innovation in one geographical location or in one company or one application can negatively affect the relationships of others working in quite different applications in other countries. In contrast, a distant innovation can have a positive effect on an actor's interactions with others if it is able to adopt the innovation in its own operations.

> *Proposition 1: The networking between any two actors will be affected by the direct relatedness between those actors and specific others and their indirect relatedness with others in the network.*

The Narrow Context: Within this broad context of relatedness, the networking by any two actors will take place within a narrow context determined by their own interactive structure and that of their direct counterparts; relationships with customers; suppliers; co-developers and those that they may refer to as their "competitors". The dimensions of this narrow context or "small world" (Håkansson et al 2009) are the respective jointness of the actors in particular relationships, the interdependence of their activities and the heterogeneity of their resources. It is within this narrow context that uncertainties are experienced and problems are addressed.

Many business relationships are used by those involved in them to cope with significant problems, either continuously or on a single occasion; many involve high levels of interaction and exhibit quasi-organisational characteristics. The outline in this paper has also suggested that problem-coping actors co-evolve through their interaction under varying conditions of uncertainty; their resources

follow a particular path and their activities become specialised to a greater or lesser extent through their relationship.

Proposition 2 A: The type and intensity of the uncertainties experienced by any actor in a relationship when faced with a particular problem will depend on the actor's experience of interaction with the specific counterpart and the extent of their jointness, the interdependence of their activities and the heterogeneity of their resources. Thus, an actor's uncertainties are shaped by time and space.

Propostion 2 B: The extent and significance of the problems addressed by interacting actors will affect and be affected by the relative extent of their jointness, the interdependence of their activities and the heterogeneity of their resources.

Proposition 2 C: The extent and timing of the co-evolution of any two interacting actors, the specialisation of their activities and the path of their resources will be determined inter alia by the extent and significance of their common problem-coping and their experience of that problem-coping.

Proposition 2D: The uncertainties felt by an interacting actor that seeks to cope with a particular problem in a particular relationship will be affected both by its experience of coping with similar problems in different relationships and its overall experience of problem-coping in that particular relationship.

The extent of an actor's problem uncertainty, network uncertainty and fulfilment uncertainty in addressing a particular problem in a particular relationship will be related to the actor's experience with coping with similar problems and its view of its overall relationship with that counterpart. The

extent of each type of uncertainty will determine the abilities that an actor will seek from its counterpart.

Thus, there is no automatic evolution in an actor's uncertainties and in the abilities that it seeks from a counterpart. For example, an actor's problem uncertainty may be reduced as it learns from experience of coping with a particular problem so that it only feels fulfilment uncertainty. Hence the actor will no longer require the problem-coping abilities of a counterpart and will seek the fulfilment abilities of this or another counterpart. But in contrast, the actor may *choose not to learn* about coping with some particular problems so that it continues to rely on the problem-coping ability of the counterpart. For example, under conditions of technological intensity, many companies increasingly rely on some suppliers to tell them what they need to cope with particular technical problems[2].

Competition, Coexistence and Cooperation: These idea of the context within which business interaction takes place may help us to understand something about the business actors that we commonly refer to as "competitors" and the process of competition. This is illustrated by the following example:

Two manufacturers A and B each have a relationship with a particular major customer. It is common in this situation for the customer to seek to divide its continuing business between the two suppliers. This could be for at least two reasons:

> The customer may divide its attention between the two supplier relationships because it wishes to create or consolidate a particular form of relationship portfolio for its future interactions. The customer may see the both suppliers as sources of coping for the same problems and uncertainties. *In this case the customer will view the two suppliers as competitors.* In other words, it considers them as alternatives in a specific situation.

[2] We sometimes refer to this approach by actors as "conscious stupidity"!

> In contrast, the customer may seek to use its relationship with one supplier when it is faced with a particular problem or uncertainty and from the other when a different problem or uncertainty arises. For example, Supplier B may be concerned with the customer's problems relating to its production. This may involve the supplier in delivering large quantities of similar or identical components to those of Supplier A. But in this case they will be charged at a much lower unit price and the deliveries will be timed on a "zero-inventory" basis to several production locations in different countries. Here the relationships of the Supplier A and Supplier B with the customer are clearly different *and they are not competitors* to each other in relation to this customer, even though they may be considered to operate in the same "product market." In this situation, the two companies will at least coexist or may cooperate.

In both cases, the relationships between the customer and the two suppliers are interconnected and the two suppliers are *related* to each other, even though they may never have contact. The two suppliers will also be related to others, as follows:

> Supplier A may face competition from a company that does not make the same components but that offers to assess the customer's maintenance requirements and provide a guaranteed level of maintenance inventory sourced from several suppliers. This "competitor" will not be likely to affect Supplier B's relationship with the customer and these different "competitors" do not compete with Supplier B!

However Supplier B may face competition from another company that does not manufacture components. Instead, this company may offer to take over production for the customer of the products that use components from Supplier B. Thus, rather than "competing" with Supplier B directly, this supplier will aim to change a particular part of the network structure.

A supplier may adjust its networking so as impact on the relationship between another supplier and the problems it addresses for the customer. This approach will be motivated by an attempt to address one or more of its own problems; perhaps to generate cash to support an investment made in respect of another relationship; perhaps to create a more widely based customer portfolio; perhaps to develop its own activities and resources, or perhaps simply to try to damage the other supplier!

But any change in the supplier's relationship with a customer is likely to involve both the supplier and the customer adjusting their resources and activities and is likely to be both costly and risky for both.

The same situation exists in the case of customers. These may also seek to maintain the status quo in their relationships with a supplier when compared with its relationships to other customers. But they may also choose to change that relationship and seek to *compete with other customers* for a different relationship and perhaps greater attention from a supplier. Many customers are simultaneously competitors in their relationships with their competitors. This competition translates directly to competition in relationships with their suppliers. In all cases, the respective problems and approaches to interaction of the three companies mean that they co-evolve together.

Thus on the one hand, the business network is full of companies that appear to compete because they supply the same customers or sell the same products. But these companies often have different relationships with each customer and address different problems and so do not actually compete. In contrast, many companies with different resource and activity structures address the same problems of counterparts, but in different ways. These companies *do* compete. Further, companies within the business network may compete with others by changing the structure of the network by intermediating themselves or dis-intermediating. Many apparently competing relationships are commonly in a non-competitive state of co-existence, either because of the costs of change or based on tacit (or explicit and illegal) "non-aggression pacts" between the suppliers.

Proposition 3 A: The existence of competition in the business network is not determined by the resources, activities or offerings of companies. Instead, competition is a unique characteristic of an actor's relationships with specific counterparts. Its existence and characteristics are determined by the similarity of the problems and uncertainties that a particular counterpart seeks to address in its relationships with two or more actors.

Proposition 3B: Companies will network with particular counterparts on the basis of their own view of competition, competitors, co-existence and cooperation rather than on the basis of the interpretation or the actual networking of counterparts.

For example, it is common for business actors to (erroneously) view themselves as competitors if their products, services or offerings are similar. Thus two suppliers could view themselves as being in competition for business from two customers. At the same time one of the customers could regard itself as competing for the attentions of one of the suppliers but not the other, whilst the second customer regards itself as not in competition with anyone for either of the suppliers and indifferent to both of them, but very concerned about a third supplier!

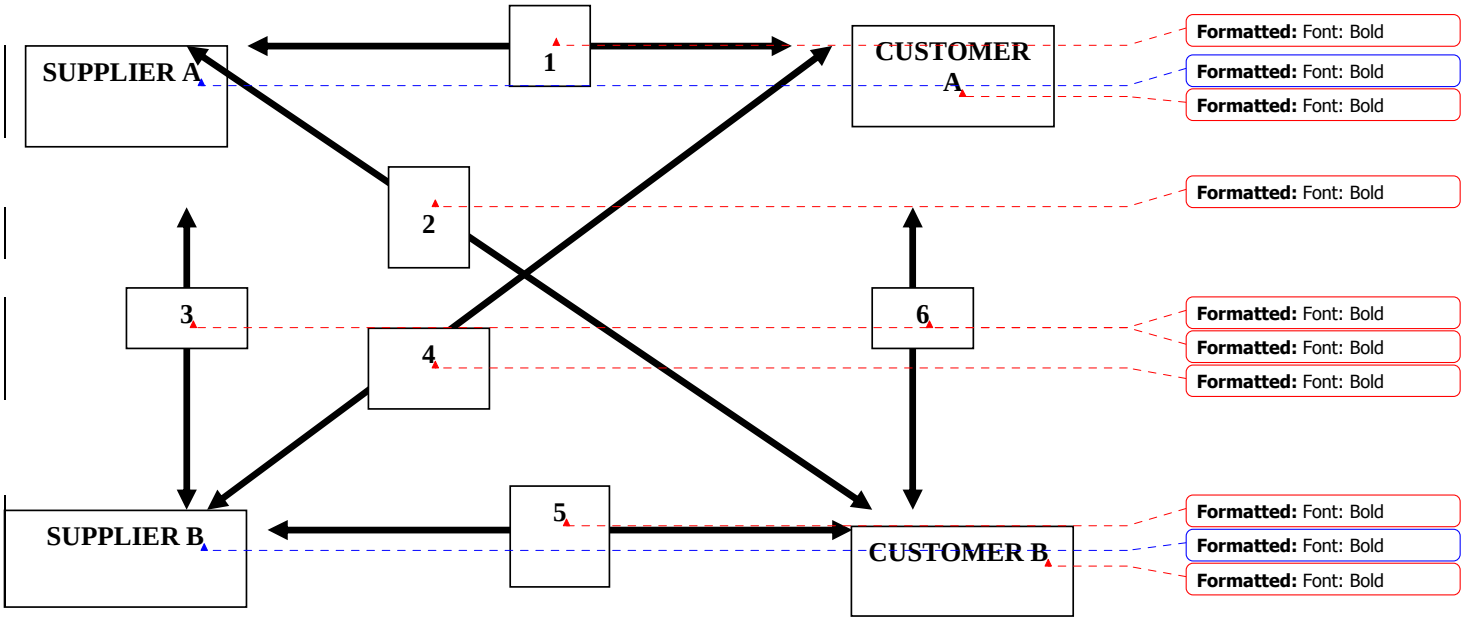
Proposition 3 C: Any two business actors may be in a state of competition, coexistence or cooperation with each other simultaneously.

Thus, the companies may cooperate in certain aspects of their activities and resource investment and the relations between their staff. In other areas they may coexist. But the two actors may also consider themselves as competitors to each other in particular relationships or in coping with some of their own problems or those of specific counterparts. For example, the companies may be in a "technology race" in certain areas of their activities or resources or may both be keen to develop

more complex problem-coping for some clients based on developments in their problem-coping abilities.

We can now examine the managerial choices involved in competition and co-existence by using the diagram in Figure 2.

FIGURE 2 CUSTOMER/SUPPLIER NETWORKING: COMPETING AND CO-EXISTING.



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Suppliers A and B both have relationships with Customers A and B. Each of these companies faces choice in its networking with the others and the characteristics of their relationships will be the outcomes of their interactions. Suppose that Supplier A's relationships with both of the customers (Arrows 1 and 2) involve similar problems and uncertainties for both of the customers. More generally, a common approach to many customers is an example of *undifferentiated* networking. Of course, common approaches to customers are likely to have cost advantages for suppliers. However, common approaches are unlikely to relate closely to individual problems and uncertainties. We have

suggested above in Proposition 2 C that the development of co-evolution in relationships is directly related to the extent of problem coping. Nevertheless, it is a common strategy for companies to avoid co-evolution and to maximise their flexibility between relationships. Also, similar relationships with customers may also only address a limited range of the supplier's problems. For example, they could restrict its attempts at technological innovation or generate copious cash but little profit.

The two customers of Supplier A are related to each other (Arrow 6) by their relationships with the supplier and the networking between them will affect these relationships. For example, each will interpret what it finds out about the actions of the other customer or each may make conditions about exclusivity etc.

Supplier B also has relationships with Customers A and B (Arrows 4 and 5), but these deal with different problems and uncertainties from each other for both customers and the supplier. The two suppliers are related to each other (Arrow 3) by their common relationships with each customer and each customer will interpret the relationships in terms of this relativity. The relative financial outcomes for the suppliers will be affected by this relativity and the evolution of their relationships. Supplier B thus has the potential advantages and costs associated with a differentiated approach to networking.

Similar choices face Customers A and B: Traditionally many companies took an undifferentiated approach to their supplier relationships by avoiding co-evolution and its associated interdependencies. This approach maximises flexibility, but limits the advantages of activity specialisation and a dedicated resource path. However, a differentiated approach to relationships with suppliers has a number of advantages that have been demonstrated in IMP studies. Thus, the networking in a relationship with extensive and significant problem-coping for the customer is also

likely to mean that the relationship also evolves in the direction of extensive and significant problem-coping for the supplier (Håkansson and Persson 2008).

We can now relate these ideas on interaction, uncertainties, competition, problem-coping and the evolution of business relationships through time to present a final and rather challenging proposition:

Proposition 4A: The extent of competition in any network will tend to decrease over time.

A decrease in competition would be a major factor in the evolving stability of business networks. The decrease is likely to be fuelled by actors' developing experience of networking with each other and a tendency towards more extensive and significant problem solving between them; by the effects of that networking on their uncertainties and their increasing investment in activity specialisation, actor co-evolution and dedicated paths of resources – whether planned or unplanned.

But of course, the tendency towards decreasing competition is often arrested or reversed, as follows:

Proposition 4B: The tendency for competition to decrease in a business network may be arrested, disrupted or reversed by three inter-connected factors:

Changes in the wider network; activity structure, resource constellation or actor web. These changes may arise from entry or exit by actors, from technological changes or evolving social or economic problems.

Changes within the structure of one or more relationship: Resource heterogeneity, activity interdependence and actor jointness.

Changes within the process of one or more relationship: Changes in the problems or uncertainties of actors; changes in the networking of individual actors.

CONCLUSIONS

This paper has presented an analytical outline to researching business interaction. The outline envisages business interaction between any two actors as an evolutionary process that is unique in time and space, but which is related to other interaction processes in a wider network. The outline draws an analytical distinction between the structure within which an interaction takes place and the process itself. The structure of interaction can be described using the ARA (Actors, Activities, Resources) Model. Interaction is described as a problem-coping process under uncertainty, involving three aspects of Networking; choices within relationships, choices between relationships and choices about the approach to networking.

The paper has used the analytical outline to generate a number of propositions about the nature of competition and competitors within business networks. But the most important message from the paper is that the study of business networks has now reached the stage where it can and should develop from generalised descriptive or abstract "interaction approach" to more analytical research involving testable network theory that may explain what is involved in real problems and actual behaviour in the contemporary business landscape.

Go forth and research!

REFERENCES

Ford D., Gadde L-E, Håkansson H, Snehota I 2003, Managing Business Relationships, Second Edition, Chichester, John Wiley, 2003.

Ford D., Gadde L-E, Håkansson H, Snehota I and Waluszewski A, Analysing Business Interaction, Paper presented at 24th IMP Annual Conference, Uppsala, Sweden, September 2008, impgroup.org.

Ford D. and Håkansson H. 2006, IMP – Some Things Achieved: Much More to Do, European Journal of Marketing
Vol 40 No 3 / 4 pp 248 -258.

Ford, D. and Mouzas, S. (2008). Is There any Hope? The Idea of Strategy in Business Networks. Australasian Marketing Journal, 16(1): 64 -75

Johnsen, R. and Ford, D. 2008, Exploring the Concept of Asymetry: A Typology for the Analysis of Customer-Supplier Relationships, Industrial Marketing Management, Vol 37, No4, 471-483.

Håkansson H., Johanson, J. and Wootz, B. 1976, Influence Tactics in Buyer-Seller Processes, Industrial Marketing Management, Vol 5, December, 319-332.

Håkansson, H. and Snehota I, 1995, Developing Relationships in Business Networks, London, Thomson International.

Håkansson, H. and Persson, G, 2007, Supplier Segmentation
"When Supplier Relationships Matter", IMP Journal Vol 1 No 3, 1-14.

Håkansson, H., Ford D, Gadde, L-E, Snehota, I and Waluszewski, A, Business in Networks, Chichester, John Wiley, 2009.

Lewis, D. (1967). Convention: A Philosophical Study. Harvard University Press, Cambridge.

Mouzas, S. and Ford, D. (2009). "The Constitution of Networks". Industrial Marketing Management, 38:495-503.

North, D. (1990). Institutions, Institutional Change and Economic Performance. Cambridge University Press, Cambridge.

Ramos, C. and Ford, D. 2009, An Empirical Examination of Contextual Factors in Network Picture Formation, Paper presented at the IMP Annual Conference, Marseille, 2009, impgroup.org.