

THE PROCESS OF ADAPTATION IN INTER-FIRM RELATIONSHIPS

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ABSTRACT

Adaptations are an important, arguably a defining, component of a long-term buyer-seller relationship. Substantial research evidence exists on the nature of the adaptations which arise within such relationships. The processes involved in adapting for a customer or supplier organisation are not so well understood. Five process metaphors for adaptation within buyer-seller relationships are explored. Each is found helpful to some extent in illuminating the process of adaptation. The metaphors are found to be complementary, so that taken together they provide a coherent process view of buyer-seller adaptations.

INTRODUCTION

Sufficient empirical evidence has now been gathered to make it uncontentious to assert that long-term buyer-seller relationships occur frequently in business markets. That is not to say that all transactions between business customers and their suppliers take place within long-term relationships. But

long-term, stable relationships are an undeniable and important characteristic of business markets.

It has been argued (Brennan and Turnbull, 1995) that a defining characteristic of a long-term buyer-seller relationship is adaptation. Adaptation, by one or both partners, is a necessary condition for the existence of a "relationship" or "partnership". In the absence of some unique adaptation, the companies must, by definition, be exchanging standard products or services on the standard terms and conditions which they would offer to any other prospective customer or supplier. To sell someone a standard item at a standard price, using standard sales procedures, delivering and invoicing according to standard terms and conditions, and then to claim that you have a relationship with them is either sophistry or self-deception.

The concept of adaptation is extensively used in the field of marketing and strategic management. Here, the key theme is that the ability of the firm to respond to environmental or market forces is a critical factor in survival and success. Researchers working in the International Marketing and Purchasing Group (IMP) tradition have long recognised the importance of the narrower concept of adaptation within

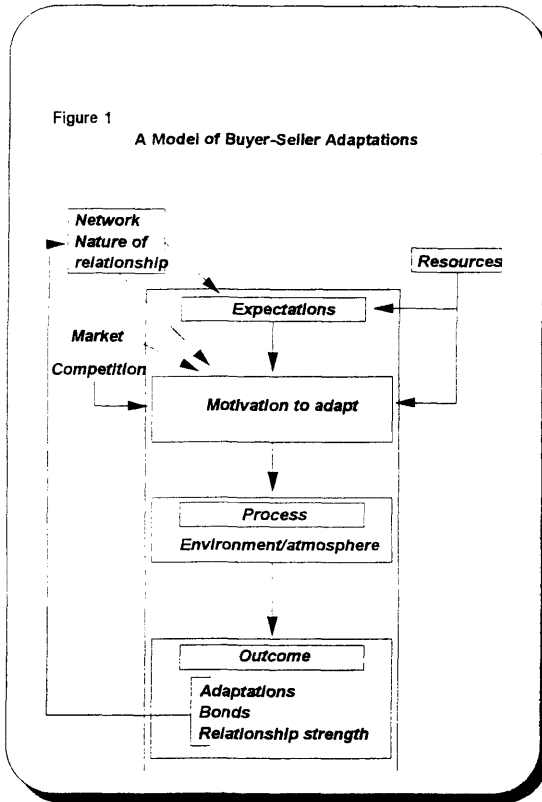
buyer-seller relationships. However, the principal research focus here has been on the outcome of adaptation behaviour within relationships. To some extent, too, the motivations behind adaptations have been explored. But something in between - the process of adaptation - has been largely ignored. That adaptation can be conceived in terms of a motivation, a process, and an outcome is summarised in Figure 1. Much effort has gone into classifying and measuring the outcome of adaptation behaviour. A synthesis of IMP classification schemes is presented in Table 1.

Table 1: Classification of Inter-firm Adaptations

Adaptations by the customer of...	Adaptations by the supplier of...
Product	Product
Production process	Production process
Production planning	Production planning
Payment terms	Payment terms
Stockholding	Stocks and deliveries
Organisation structure	Organisation structure
Information provision	Information provision

[Source: Adapted from Brennan and Turnbull (1995), p185]

The purpose of this paper is to explore the 'process' component of the adaptation model outlined in Figure 1. After a discussion of the broader concept of adaptation as it is understood in the corporate strategy and strategic marketing literature, a number of perspectives on adaptation from the IMP literature are summarised. It is argued that there is a need for a clearer 'process' view of adaptation in buyer-seller relationships. A number of metaphorical alternatives for the process of buyer-seller adaptations are described and discussed.



METHODOLOGY

The principal themes explored in this paper are theoretical or metaphorical in nature. Nevertheless, they are occasionally illustrated with empirical anecdotes. The origins of these anecdotes lie in a continuing project to investigate the nature of adaptations in buyer-seller relationship. The study employs a case study research strategy, focusing on two principal firms in each of three industry sectors. A 'dyadic' approach is being used, examining two or three buyer-seller relationships within each principal firm. The main method of data gathering is semi-

structured interviews with relationship managers in both the buying and selling firm. In addition, internal and external documentary evidence has been collected.

STRATEGIC MARKETING MANAGEMENT AS AN ADAPTATION PROCESS

Ansoff (1987) considered strategy to be an adaptive search process, which he summarised as:

(1) a 'cascade' procedure of successive narrowing and refining the decision rules, (2) feed-back between stages in the cascade, (3) a gap-reduction process within each stage, and (4) adaptation of both objectives and starting point evaluation.

(Ansoff, 1987 p 47)

As Mintzberg (1994, p 36) has argued, the essence of the "Design School Approach" to strategic management - which is where he locates Ansoff's work - is to establish congruence, or fit, between external and organisational factors. The standard pedagogical models of strategic planning (for example, Bowman and Asch 1987; Smith, Arnold and Bizzell 1991) describe an idealised process in which objectives are set, strengths and weaknesses analysed, external opportunities and threats identified, and strategies are formulated to achieve just such congruence.

Those models of strategic planning which veer towards the 'rational planning' school of thought, then, stress that strategy is the process of adapting the organisation to its current and anticipated environment. While Mintzberg differs considerably from advocates of 'rational planning' in terms of the planning process (for example, he argues that strategy is

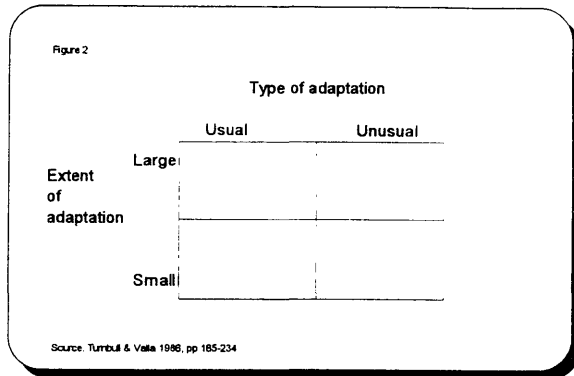
often "emergent" rather than "intended") he does not take issue with the notion of strategy as the process of adapting the organisation to its environment.

A very similar 'adaptation' model is often employed to describe the marketing management process. The ingredients are an

internal audit, an external audit, a SWOT, the selection of target markets, and positioning within those markets selected (for example, Lancaster and Massingham 1993; Cohen 1991). The organisation will adapt its objectives, structure, resources and operations to meet the challenges of the environment and the market-place.

THE IMP CONCEPT OF ADAPTATION

While strategic marketing has often been conceptualised as a process of adaptation to broad environmental and market forces, the notion of adaptation within IMP research has usually been reserved for adaptations at the level of the individual relationship. The original interaction model (Håkansson, 1982) included adaptation as one element of a long-term relationship, which was illustrated with many case study examples. Turnbull and Valla (1986) attempted to quantify adaptation behaviour, considering the number and magnitude of adaptations carried out by one partner for the other. In addition, they distinguished between "usual" adaptations and "unusual" adaptations. The former designed to suit the needs of many customers, the latter to suit the needs of only one customer. In using the term 'adaptation' for a change which is designed to serve the needs of multiple customers Turnbull and Valla seem to have a broader concept of adaptation in mind, perhaps more akin to the ideas discussed above. On the basis of the two dimensions - 'adaptation type' and 'extent of adaptation' - Turnbull and Valla proposed a two-by-two matrix for the categorisation of adaptations, which is illustrated in Figure 2.



The concept of adaptation was discussed extensively by Ford (1980) as an important component in the development of buyer-seller relationships in industrial markets. Ford postulated that adaptations played an important role in demonstrating commitment by the partners, reaching a maximum at the 'development' stage of the relationship. Hallen, Johanson and Seyed Mohamed (1991) subsequently investigated the relationships between relative power, commitment and trust, and adaptations, and echoed Ford in suggesting that adaptations may vary depending on the stage of development of a relationship.

More recently, Halinen (1994) distinguished between 'investing' and 'adapting' within buyer-seller relationships:

investing - the firm purposefully adapts or changes its resources in order to make the relationship more beneficial....
adapting - the firm adapts itself to the requirements of the other party or to the demands of the contextual setting and eventual changes in it. [Halinen 1994, p226]

However, as Halinen herself observes (p226) "The two dimensions can actually be seen as different sides of a same phenomenon". The entirely valid distinction which Halinen makes is between active adaptation (investing) and passive adaptation (adapting). Investing is the taking of active steps to foster the partnership, while adapting is refraining from action which might damage the relationship, such as doing business

with a specific third party. For the purposes of this paper both of these senses will be considered to be covered by the terms 'adaptation' and 'adapting'.

METAPHORS FOR INTER-FIRM ADAPTATION

Morgan (1986, p12) argued that the way in which people understand and interpret organisational behaviour is rich with metaphor:

The basic premise on which this book builds is that our theories and explanations of organizational life are based on metaphors that lead us to see and understand organizations in distinctive yet partial ways. Metaphor is often just regarded as a device for embellishing discourse, but its significance is much greater than this. For the use of metaphor implies a way of thinking and a way of seeing that pervade how we understand our world generally. [Emphasis in original.]

Easton (1989) has applied metaphorical thinking to the concept of industrial networks, concluding like Morgan that different metaphors illuminate the subject in different, and partial, ways. Five different metaphors for buyer-seller adaptations are explored below.

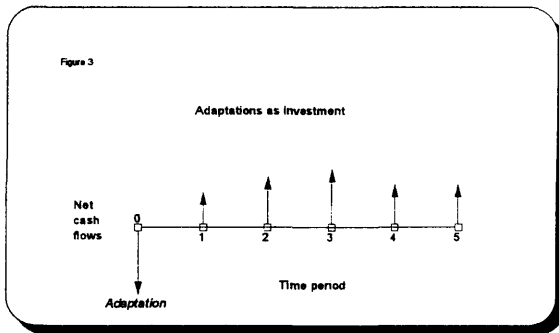
ADAPTATION AS AN INVESTMENT PROCESS

The word 'investment' can readily be applied to buyer-seller adaptations. There is some correspondence between Williamson's (1985) concept of investment in transaction-specific assets and the idea of adaptations. From a transactions cost economics perspective, adaptations create non-market assets which render the adapting firm vulnerable to opportunistic behaviour by its counterpart. Easton and Araujo (1994) argued that Williamson's concept was a very narrow one, essentially the bare minimum investment that a partner needs

to make to sustain the relationship at all. They proposed a hierarchy of investments within buyer-seller relationships:

- minimal investment
- relationship specific investment
- relationship development investment
- secondary investment.

The notion of investment carries with it the idea of expending resources today in the expectation of receiving eventually greater returns over an extended period. This is illustrated in Figure 3.



A sequence of positive net cash flows is expected to follow from an initial adaptation.

In order to calculate the equivalent values of cash-flows received at different points in time, the process of discounting is employed. Alternatively, the internal rate of return on the adaptation could be deduced from the net cash flow figures. The decision whether or not to proceed with the adaptation could then be based on a simple decision rule, for example:

- proceed if discounted net present value of cash flows exceeds zero

- proceed if discounted NPV exceeds the best alternative investment
- proceed if the internal rate of return exceeds the cost of capital.

It would be naive to argue that there is unlikely to be sufficient data available to carry out the sort of calculations outlined above. Uncertainty and inadequate information are conditions of virtually any complex business investment decision. It seems much more plausible to argue that such processes are simply not customary in the case of buyer-seller adaptations. Perhaps not customary, but that does not mean entirely absent. Examples may be found in the car industry.

There is a clear trend in the European automotive industry towards "systems buying". Rather than buying many different parts from a multiplicity of small suppliers, the major car manufacturers would prefer to buy pre-assembled "systems". This is creating a system of 1st tier suppliers who do business with the car firms, and 2nd tier suppliers who do most of their business with the 1st tier suppliers. It is highly desirable that 1st tier suppliers should locate their assembly plants near to the car production plants, to enable true just-in-time operation. One such 1st tier supplier, a supplier of exhaust systems, is currently deciding whether or not to invest in a plant to meet the specific needs of GM. This same firm has already invested over £5m in an overseas facility located next door to a Ford car plant. The process of deciding whether or not to carry out these specific adaptations is strikingly similar to the standard model of an investment decision. Indeed, in this case the adaptation decision is a decision whether or not to invest in specific fixed assets.

It seems likely that the investment metaphor is of greatest relevance where an adaptation is on a large scale and involves physical assets.

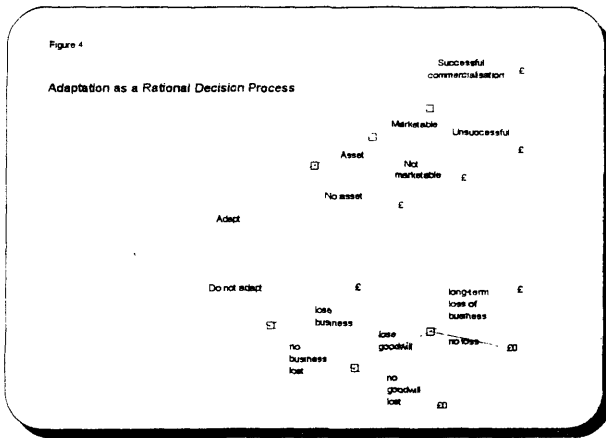
ADAPTATION AS A DECISION-MAKING PROCESS

The investment metaphor is also a form of decision-making metaphor, which involves a particular type of decision-making process based on discounted cash flows. The decision-making metaphor can be generalised to what Moore and Thomas (1988, p2) call "a formal theory of decision-making". The process of decision analysis advocated by Moore and Thomas comprises the following steps:

- decomposing and structuring the problem
- assessing the uncertainties and values
- determining the optimal strategy.

The process of decision analysis, as it might be applied to an adaptation decision, is illustrated in Figure 4. The process may be summarised as one of:

- 1) identifying the decision alternatives
- 2) predicting the different environmental circumstances which may prevail
- 3) associating probabilities with different environmental circumstances
- 4) estimating the 'value' of each decision alternative under each set of environmental circumstances
- 5) calculating the 'expected value' of each decision alternative
- 6) selecting and implementing the optimal decision.



In Figure 4 the key decision is whether or not to implement a specific adaptation for a partner organisation. The upper line of the tree diagram explores the consequences of adapting. A tangible asset may or may not be created; that asset may or may not have a potential market value; in attempting to commercialise the asset, the company may be successful or unsuccessful. The lower line of the tree diagram explores the consequences of not adapting. There may, or may not, be an immediate loss of a contract. Even if no immediate contract is lost, there may be a loss of goodwill, which may subsequently lead to the loss of later contracts. By associating probabilities and monetary values with each possible outcome, the 'expected value' of each node within the diagram can be calculated. By successively comparing the nodes within the diagram, it can be established which of the alternatives - to adapt or not to adapt - has the greater expected value. The normal decision rule would be to implement the decision with the higher expected value.

This metaphor is not far removed from the idea of adaptation as investment, and the same comments apply here regarding uncertainty and information inadequacy. Similarly, just because there is information missing, or because there is uncertainty, is no reason to reject the model as a description of adaptation processes. While it might be considered unlikely that one would ever come across such an explicit process as that described in

Figure 4 in practice, there is no doubt that many of the considerations outlined in Figure 4 are present when managers consider adapting for business partners.

The Sales and Marketing Manager of a medium-sized (£25m turnover) automotive components supplier described one important characteristic of a 'partnership' as follows:

"Of course, large customers sometimes make demands on us which they simply don't realise are unreasonable. You've got to have the confidence to go back to them and say, 'Look, is this really important?' If it is, of course we'll do it. But you might find out it was just an off-the-cuff sort of request, they just didn't consider the impact it might have on a business our size...."

Implicitly the kind of thinking illustrated in the bottom half of Figure 4 is involved here. The supplier calculates that he can fail to adapt without incurring any penalty in terms of lost business or lost goodwill. And it seems likely that similar decision processes are often present *implicitly* in buyer-seller adaptations.

In considering adaptation as a decision-making process it is interesting to return to Mintzberg's distinction between deliberate and emergent strategy. Mintzberg (1994, p23-24) argued that:

organizations develop plans for the future and they also evolve patterns out of their past. We can call one intended strategy and the other realized strategy.

To an extent, concludes Mintzberg, strategy is deliberate, and yet it also emerges as a pattern in a stream of decisions. The same conclusion may be equally valid for the adaptations process. In some cases, without doubt, adaptation decisions are made explicitly and on the basis of the best information available. But in many cases, as with strategy, the pattern in a stream of decisions by which two firms 'grow together' may only be discerned retrospectively.

ADAPTATION AS A POLITICAL PROCESS

The emphasis now shifts from adaptation as a rational investment or decision-making process to adaptation as the outcome of a process of negotiation. The key concepts here come from March, Simon and Cyert (March and Simon 1958; Cyert and March 1963). Of course, the focus for the 'behavioral theory of the firm' was, indeed, the economic decision-making process. But, whereas models such as those considered above address decision-making as a rational process of optimisation, the focus here is on negotiation, power and satisficing. The behavioral theory of the firm postulates the firm as a coalition of participants, involved in a process of negotiation over objectives and the distribution of resources. The outcome of this process of negotiation depends substantially on the bargaining power of the participating coalitions. Bargaining power depends upon the degree of uniqueness (equivalently, the availability of alternatives) of the contribution which an individual, or a coalition makes.

By treating the partners within a buyer-seller relationship as though they were 'coalitions' in a greater organisational unit (the relationship), the ideas of negotiation, power and satisficing can be applied more or less directly. Indeed, some people might argue that this is so obviously the way that buyer-seller relationships work, that it is hardly a metaphor at all! Hallen, Johanson and Seyed-Mohamed (1991) found that the interfirm balance of power was an important variable in explaining adaptations. Their conceptualisation of power was derived from social exchange theory, with power considered to be the reciprocal of dependence.

There is little doubt that the subtleties of the political processes involved in buyer-seller adaptation, and in the management of relationships more broadly, are clearly understood by many managers involved in relationship management. For example, the General Manager of a medium-sized automotive supplier agreed that his company had the power to shut down within

hours the European production of several mass market vehicles. There is no alternative source of supply for these components, and re-sourcing them would involve a substantial lead-time. Asked if this gave his company power over the automobile manufacturers, he said "You don't feel that power. It's false power. If you exploit it, by saying 'give us better terms or we'll shut your line down' you are abusing your position. As soon as you do that, you are more or less putting an end to the relationship."

ADAPTATION AS A SOCIALIZATION PROCESS

According to Haralambos (1980, p4-5):

The process by which individuals learn the culture of their society is known as socialization.... Socialization is not, however, confined to childhood. It is a lifelong process.

To paraphrase, socialization is the process of learning how to behave properly. Having initially only a limited understanding of correct social behaviour under particular circumstances, the individual identifies gaps between their actual behaviour and 'correct' behaviour, and alters their behaviour to correspond more closely to the norm. Positive reinforcement is experienced for correct behaviour, and negative reinforcement for incorrect behaviour.

Just such a process can be envisaged in the development of buyer-seller relationships. It is most apposite in the case of a small firm, perhaps lacking formalised management systems, which begins to do business with a large, bureaucratic partner. Frequent practical examples have been encountered of smaller firms (usually suppliers) having to learn how to do business with larger partners (usually customers), and in the process having to adapt their organisational structure, systems, and behaviours. In the case of a small, but well-established supplier to General Motors, it was remarked by one manager that "of course, they are a small, traditional company, and they've had to generally pull their socks up to do business with GM".

Another automotive components supplier reported spending large amounts of managerial time simply 'learning how to do business' with Ford. The types of adaptation which are involved here would include:

- adoption of formal quality management systems
- understanding and 'working with' bureaucratic customer systems
- learning to 'trouble shoot' problems internal to the customer
- formal and informal staff training associated with these activities.

The parallels to the positive and negative reinforcement which encourage people to become socialized into a new culture, are, in the first instance, the contracts which may be won or lost. The ultimate 'positive reinforcer' is the opportunity to become a preferred supplier, and to increase the degree of security of the flow of business.

The socialization metaphor is not far removed from a more general 'learning' metaphor. The adaptation process can be envisaged as a process of learning. Here, the ideas originating with the IMP Group begin to resemble a quite separate stream of research which falls broadly within the field of organisational development and is encapsulated in the expression 'the learning company'. One might be forgiven for

mistaking the following extract on 'the learning company', from Pedler, Burgoyne and Boydell (1991, p22), for a piece of IMP literature:

Inter-company learning: Since a Learning Company seeks to delight its customers, it will engage in a number of mutually advantageous learning activities. Joint training, sharing in investment, in research and development, job exchanges - these are just some of the ways in which this takes place. The corollary, of course, is that it also joins with its suppliers in these activities.

ADAPTATION AS AN EVOLUTIONARY PROCESS

In common usage 'evolution' is regarded as synonymous with 'development'. Indeed, one definition of evolution provided by the *Concise Oxford Dictionary* is "gradual development, especially from a simple to a more complex form". However, the sense in which 'evolution' is used in the natural sciences is far more precise. According to Jones, Martin and Pilbeam (1992) Darwinian evolution comprises four main parts:

- there is inherited variation between organisms
- organisms are engaged in a struggle for existence
- certain inherited variations enhance the probability of successful reproduction - there is natural selection
- over a long period the accumulation of favoured variations leads to new forms of life - the origin of species.

The Darwinian model allows for cumulative selection over multiple generations. Douma and Screuder (1992) have argued that a Lamarckian evolutionary model may be a more appropriate metaphor for organisational processes. In the Lamarckian model individuals may develop unique characteristics during their life-time, which are then capable of being passed on to subsequent generations. While it is generally regarded as discredited in the biological sciences, the Lamarckian model makes sense in the context of the world of organisations which, self-evidently, are capable of developing new characteristics and passing them on to their 'offspring'.

Adaptation is central to the process of biological evolution, and is defined by Jones et al (1992: Glossary, p 458) as:

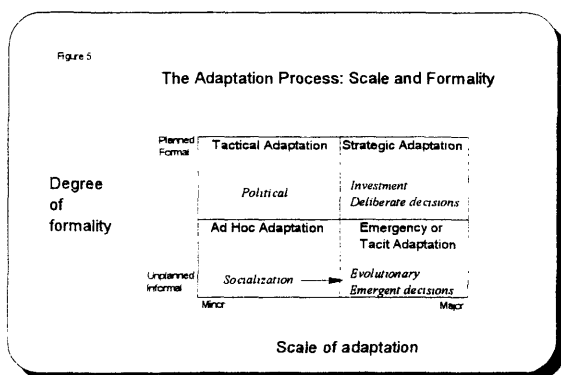
Adaptation: an evolutionary process by which an organism becomes adjusted to its environment; a feature fitted through natural selection for some special activity.

Adaptation as a process by which buying and selling organisations adjust in order to serve each other better would seem to be best described by a Lamarckian evolutionary process.

This is not to deny that Darwinian processes may also be important. Where a large new customer enters a local market, some local suppliers will be better than others at meeting its needs (variation), and will therefore have a greater chance of thriving and 'reproducing' (natural selection). But this is not a sense in which the expression adaptation has been used within the IMP tradition.

CONCLUSION

Each of the metaphors offers a slightly different perspective on the adaptation process. They all contribute to an understanding of adaptation in buyer-seller relationships. For example, the investment metaphor is particularly apt in the case of adaptations involving the acquisition of substantial fixed assets, and the socialization metaphor helps to understand the process of getting to know a new customer or supplier's management systems. In Figure 5 an attempt is made to summarise the principal contribution of each metaphor to understanding the adaptations process.



The dimensions used are the scale of the adaptation and the degree of formality in planning the adaptation. Many minor adaptations 'just happen', and are here called 'ad hoc adaptations'. It is suggested that the socialization (or learning)

process is particularly apt to describe this process. Relatively minor adaptations which, nevertheless, are formally planned (for example, certain changes to contractual terms and conditions) are here called 'tactical adaptations'. It is suggested that these may be considered as bargaining chips in a political process. The top right-hand quadrant contains large-scale, carefully planned adaptations, such as the investment in a manufacturing facility specifically for a single customer. Deliberate decision-making processes involving investment appraisal are likely to be used in such cases. The fourth, bottom right hand quadrant is in many ways the most interesting. These are substantial adaptations which are largely unplanned. To a large degree these are likely to emerge from a long-term socialization process, or a Lamarckian evolutionary process, as the accumulation of small changes creates large scale adaptation. Almost without knowing it, over a lengthy period one or both partners to a relationship have adapted their whole business to the needs of a customer or supplier (hence 'tacit adaptation'). This is very much like Mintzberg's idea of emergent strategy: only in retrospect does it become obvious that the firm has adapted extensively for its partner.

Naturally, each of the metaphorical processes may be applicable in other quadrants of the matrix. The political process, in particular, may be more or less ubiquitous. Nevertheless, the pattern of forces identified in Figure 5 is proposed as a useful indication of the primary processes involved in adaptation behaviour.

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