E-relationships – emergence and the small firm

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Abstract
The e-business model has become an integral feature of business practice. Its existence has created an extra electronic layer to business relationships. This has facilitated close partnerships to add unique and complex electronic components to their relationships that are not easily copied by other firms. The emergence of e-relationships is detailed and their value creating potential explored. The e-relationship concept is then applied to the small firm. The strategic and implementation barriers that inhibit small firms from capitalising on such relationships are examined. E-relationships are found to offer competitive advantage to few small firms. Critical to an e-relationship's success is the relationship orientation of the partners.

Introduction

E-business is changing market structures and the economics of competition. Technology and business strategy have converged to the extent that e-business is an essential component of strategy (Peppard, 2000). The dot.com phenomenon has become a feature of most businesses. Consumers, buyers, suppliers are all being connected as a product of the e-business revolution. This new business model makes it necessary to focus on the electronic in relationships. The article examines the emergence of the e-relationship and the potential value it offers to a business. The concept is then applied to the small firm where strategic and implementation barriers to its adoption are outlined.

E-relationships incorporate a trading relationship that uses both computer and telecommunications technologies, and an added value layer of electronic embeddedness only available to close relational partners. Cunningham and Tynan (1993) capture the spirit of e-relationships in their e-trading concept. This has been added to by Geiger and Martin's (1999), among others, ideas on Internet relationship marketing. E-relationships can be considered a further layer of interaction that partners can "wrap around" each other to create walls of competitive superiority. To implement e-relationships can require many technologies and systems such as electronic customer relationship management (e-CRM) or virtual private networks. However, e-relationships are not technology specific but are partner-based. Managing value in an e-relationship depends on the level of co-involvement in the relationship. The stronger and closer the relationship the more unique its electronic element becomes. Electronic relationships that offer benefits to both the seller and buyer are offering a potential source of competitive advantage to partners that can exploit them to create unique social and economic ties.

Information technology has had a huge impact on business in general but also has had major effects on the nature of how partners interact (Donaldson and O' Toole, 2002). Information rich exchanges can be made at the touch of a button. Companies have been able to mass customise their products by selling them on the Internet. Organisations can use virtual transactions to maximise value; whole supply chains are interconnected by technology. Each core relationship variable has been, in some way, affected by technology. Technology, through the routinisation of many operational processes, has minimised conflicts that arise with individual transactions, for example, product availability and delivery can be checked on-line. Information technology is changing the power balance in many relationships. For example, the creation of on-line communities has challenged firms to respond to strong, more vocal, united consumer groups (McWilliam, 2000). The Internet has spawned new businesses that have managed to grow through trust with those with whom they trade, for example, E*trade (www.etrade.com) in share dealing and Amazon (www.amazon.com) in book retailing.

The growth of e-relationships is being forced by companies' adoption of the Internet and e-mail into their business process. Traditional inter-organisational systems (IOSs) are being transferred to the Internet. In 2000, Ford and General Motors announced the switching of their supply management system from electronic data interchange (EDI) to the Internet (Ford's system is Auto-Xchange (www.auto-xchange.com) and

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GM's TradeXchange www.gmtradexchange.com)). The attraction of the Internet over traditional IOS is its openness, flexibility and low cost. The impact of the Internet is also seen through the effect e-mail is having in creating bonds across organisations and between individuals who otherwise would not communicate. The content of electronic communication via e-mail varies significantly across organisations. A closer relationship is likely to have more volume of communication as well as a richer content.

Maximising value in e-relationships

Value added in a relationship, or by a relationship, may give it a competitive edge (Ramirez, 1999; Lorenzoni and Lipparini, 1999). A close relationship with a consumer, supplier and even with a competitor can represent a strategic asset (Madhavan *et al.*, 1998; Johnson, 1999). Value creation in a relationship can be seen as a strategic option, or in the case of a close relationship, as a strategic imperative. E-relationship components can add an extra layer of value in a relationship that is difficult to imitate. This electronic value appears to meet, in close relationships, the criteria for sustainable relationship advantage outlined in Dyer and Singh (1998).

Much of the initial developments in e-relationships have been to automate existing transactional, production and service functions. This automation adds value in terms of cost reduction and possibly higher reliability in service operations. A lot of this value is probably relatively easy for other firms in any given sector to copy and thus is of a short-term nature. By taking a relationship management perspective to the study of e-relationships we can distinguish other levels of value created. Value can be added in information exchanged that allows knowledge to be pooled for joint advantage, in dense and rich communication patterns, in integrated business processes, through new products and services that are created or developed electronically, and in bonding with consumers that creates extra symbolic value in brands. The potential to transform organisations with technology is real (Brady *et al.*, 2000; Knol and Stroeken, 2001), but in relationships is dependent on another, at least one, partner. Using e-relationships as a tool to better manage partner interaction provides a myriad of possibilities.

E-relationships require a trusting culture for exchanges of strategic value to take place. Not all relationships may be worth this but there is considerable potential where it is judged possible. In the absence of absolute co-operation maximising communication and information value using technology is limited. Not all a firm's relationships will offer similar potential. For example, a manufacturer could share sales and customer data with its retailer who could, in turn, provide more accurate forecasting of the demand for the manufacturer's products.

On the manufacturer's side, all order processing, inquiry, and service problems could be solved on-line within agreed time frames. Plus the retailer could participate in a product design group on-line due to its knowledge of customers of the manufacturer's product. However, in other relationships of either partner, the IT integration may be present but not as strategically used or pervasive (O'Toole and Holden, 2001). Therefore, linking technology strategy to overall relationship strategy is vital. Holland and Lockett (1993) attempted to match relationship structures to IOSs in a supply chain management application. The issue of control over the information system dominated many hyopthesised structures. However, the authors did develop a competitive space for a co-operative information system that is analogous to the e-relationship concept of this paper. The core strategic questions when considering an e-relationship strategy are:

- How can e-relationships be used to strengthen ties between partners?
- Which partners should we use e-relationships with?
- How can e-relationships be used to integrate partner firms' systems?
- What effect has electronic integration on traditional and on on-line marketing techniques?
- Do e-relationships offer sustainable competitive advantage?
- Can firms manage e-relationships or are they optimised through trust?

Using relationships strategically, to add value through integrated electronic exchanges with consumers and other businesses, appears to be the preserve of the larger firm. Smaller firms adopt electronic relationships when they have to, for example, if forced by a larger partner, or at a time lag when clear technology standards and off the shelf packages become available that are easily managed. The exceptions to these trends tend to be the case of the very few. The remainder of this paper considers the strategic and implementation barriers in the small firm, which impede its exploitation of

the e-relationship concept to create strategic value.

E-relationships and the small firm

The definition of a small firm varies from country to country. However, common characteristics include less than 50 employees and independent ownership and management. Most decision-making functions in small firms rest with the owner-manager. Small and medium sized firms are estimated to comprise over 90 percent of all firms and are, therefore, an important focus for the direction of strategic and marketing planning.

The physical and knowledge resources available to plan and execute strategy in the small firm are limited (Rothwell and Dodgson, 1992; Nooteboom, 1994). The skills needed to assess strategic opportunities at a macro level are beyond the capacity and competence of most small firms. Strategy in small firms originates at the level of the firm and with issues that reflect its immediate environment. Relationships and network perspectives on strategy present smaller firms with real opportunities, as they are dependent on the network to which they are connected (Bryson *et al.*, 1993; Perry, 1999). Their relationships with customers, suppliers, employees can define their business. Therefore, they would seem well placed to take advantage of electronic relationships to add value to their business and to further copper fasten their ties to their network of partners.

Small firms have lagged their larger counterparts in adopting and gaining value from information technology (Yap *et al.*, 1992). However, the Internet and using it as a marketing tool was seen as a mechanism for small firms to use their advantage of flexibility and adaptability to minimise their barrier of scale and geographic reach. This use of the Internet by small firms seems to be the case of just a few firms rather than the many. Characteristics of the smaller firms that have used Internet marketing successfully appear to parallel the rationale of their larger counterparts – they saw a first mover advantage and went for this opportunity. The exploitation of first mover advantage depends on many factors but especially on management commitment and technological sophistication. Many of the successful smaller firms have been a long time developing their product and thus honing their Internet marketing skill.

Small firms have adopted the Internet but have not universally managed to extract competitive value from it. The fact that most small businesses have not used the Internet to transform their business is not surprising considering the pace at which small firms have adopted information technologies. They have been found to be at the early stages in the adoption of information systems in general, see, for example, Bridge and Peel (1999) and Poon and Swatman (1999). Therefore, small firms are often placed in the early stages of accepted models of IT evolution, for example, at the initiation stage of Nolan's (1979) information systems growth model, or at the very early stage of Venkatraman's (1994) transformation model that is enjoying a low level of benefits and potential to transform business processes through information technology. This is illustrated in a study by Chaffey (2000) that found low levels of e-commerce integration among small firms that are a lack of full integration of back office to customer processes.

Basic marketing tasks such as electronic availability of brochures and ordering on-line are not backed up with business integration. Larger firms, on the other hand, appear to have the financial and technological resources to achieve integration. For example, Dell computers (www.dell.com) on-line ordering and configuration of personal computer requirements are fully linked to back office and production processes. This allows Dell to earn more from its value chain. Indeed, this approach has been used by some firms to capture further sources of revenue such as Ryanair's (www.ryanair.com) use of its online booking and ticketing system to lower brokerage fees and ticketing costs and redefine its relationship to its customer markets.

The small firms that have had the greatest Internet marketing success are those who owe their existence to the Internet such as ebay (www.ebay.com), the auction portal. The research in this paper suggests some reasons as to the lack of strategic success by small firms in exploiting the potential of electronic relationship marketing. The research for this paper was based on consultancy and case research by the author and is supported by a benchmark study on e-commerce usage in small and medium sized enterprises (Clancy, 2001). The case research incidents reported involved small companies – two precision engineering firms, two professional services firms, and two specialised food companies – and the research and validation procedure followed Yin (1993) and Patton (1990). The benchmark e-commerce study audited the information

technology and e-business practices of 100 small and medium sized enterprises (regional random sample included manufacturing, primary processing, and service firms) and confirmed the usage findings of the more in-depth case studies.

Electronic relationship strategy

Through the series of case studies, three key issues emerged that determined the strategic approach and potential of e-relationships to the small business. They are manager/owner commitment, technological sophistication and relationship orientation. Manager/owner commitment and technological sophistication are recurring themes in information technology adoption literature. They also apply to electronic relationships. These issues along with the extent of relationship orientation in the business set the boundaries for the strategic potential of electronic relationships for the small business. A relationship orientation is needed to maximise value including joint communication and information sharing in an electronic relationship. Given that general strategy development is more limited in small firms, it is not surprising that many have not realised the potential of e-relationships.

In the small enterprise, the owner/manager characteristically plays a dominant role in the organisation, thereby shaping the organisational culture with respect to the use of IT (Thong and Yap, 1995). Often they are the only ones in the organisation with the authority, responsibility and access to the information needed to evaluate opportunities for strategic or competitive purposes. Owner/managers, unless they come from an IT background, may not see the benefits of e-relationships. The lack of knowledge of e-business models impedes the development of electronic relationship forms in the small business. The majority of firms in the sample had adopted e-mail with customers but few had integrated electronic relationships into their demand or supply chain. Indeed, there appears to be an industry effect, high technology industries and service businesses had more use of relationship technologies, especially Web pages with functionality including ordering.

However, the firms that used electronic relationships to their fullest extent were pioneers, found in all industry types, and saw a potential into the future. These enterprises were placing future bets and were not sector specific but had owners/managers who were totally committed to a new business platform. In one case, a company had limited sales through its electronic relationship presence but believed that the industry future was to go that way – they were ahead of the game. In another case, a company had used technology with an overseas partner to add value to its product offering. Instead of just supplying a basic raw material to a pre-specified low technology design they were able to design and make complete units through a close e-working partnership.

The case studies in this research confirmed existing studies (see, for example, Poon and Swatman, 1997) that without a certain level of firm technological sophistication it is difficult to integrate information and communication technologies back into the business, and in the case of this research, back into the relationship processes within the firm. For example, there was little back-end automatic order fulfillment. The confinement of firms' electronic business application to e-mail and Web brochures limits their ability to exploit the linkages that technology can create. There are many issues that compete for the attention of the owner/manager and e-relationships may not be a high priority. Outside the lack of expertise, many small businesses won't move until the industry does. This follower status, which is often reactive, does not contribute to the build up of technology competencies in the small firm.

In the successful e-relationship small businesses tend to have long experience and are first movers in their sector. The technology sophistication needed to integrate is much higher than the purchase of front-end packages. The business case is not there as most firms still find it is possible to process orders manually and just don't see the financial case for integration even though orders may be taken, manually completed, and then transferred to a computerised financial system by different people. Lack of technology sophistication is a significant barrier to developing integrated e-relationships as there is little integration between the Internet and internal information technology in organisations and between the companies studied, and for this to happen it would appear that a considerable organisation-wide change would be necessary.

Small businesses often become focused in order to maintain the specialised needs of a few customers. They are therefore likely to suffer from forced adoption of information technologies; whether the adoption of such technologies will be of long term strategic benefit to the SME depends on the trading relationship with their dominant partner.

This was mainly the case in this research and confirms existing work on the adoption and response to e-business being driven by factors external to the small firm (Poon, 2000). For example, Sillince *et al.* (1998), in a study of 360 UK small and medium sized enterprises, found that e-mail was used primarily in response to external pressures of the customer or supplier. The small firm that develops e-relationships with its suppliers or customers from its own strategic intent could exert significant competitive advantage. Therefore, an additional level of e-relationship strategy is relationship orientation. A firm's belief and actions in a relationship can influence how an e-relationship develops. In a hierarchical relationship structure, e-relationships will be delineated by strict rules and procedures and the smaller firm will continue to seek means to balance its electronic dependence on its powerful partner. A relationship based on a more inclusive basis can exploit higher order value from e-relationships, for example, through the integration of business processes across organisations or through the direct involvement of customers in the design and configuration of products/services. There were few cases in the study that had realised significant benefits. In the absence of absolute co-operation (a strong relationship orientation) maximising strategic value using technology is limited.

Implementation-level barriers

There are many implementation issues that small businesses must address when implementing electronic relationships. These implementation issues parallel general IT implementation issues found in previous studies (for example, Yap *et al.*, 1992; Palvia *et al.*, 1994; Thong, 1999). Firms need to reassess their business processes to exploit e-relationships. However, the most pervasive use of information technology is to automate existing processes and to place this automation on top of existing processes without any evaluation. The strategy is based on reducing costs of processes rather than increasing the value of these processes to the relationship. It is transaction orientated rather than relationship orientated. E-relationships must be linked to the business processes such as production, sales, service, and supply to be effective.

E-relationships require people and processes to support them. Often, getting the back office support right requires considerable changes to current ways of working. The information intensity of e-relationships places huge importance on managing volumes of data to best understand the relationship. Having systems in place to do this is critical, for example, well-managed databases. Again the costs for a small business to get the back office right can be prohibitive, for example, the need for network expertise, data mining capability, etc. This factor makes many small firms wait for standard solutions rather than bespoke investment (for example, off the shelf e-CRM packages). This can minimise flexibility and responsiveness rather than create advantage in the e-relationship. Only relationship-centred firms are willing to take long-term views of the cost of developing e-relationships. When short-term benefits do not appear to accrue, a "wait and see" attitude seems prevalent. This approach may be linked to the lack of strategic planning in general in the small firm and has many parallels in the literature (Bridge and Peel, 1999).

There are numerous control issues when other independent organisations/individuals have access to your information. Given the independence mentality of many small business owners, control over information flows was a major issue in implementing e-relationships. Relationships based on high trust may not perceive the risk of information abuse to be that great. However, many firms aim to monitor information exchanged and to put in place safeguards to manage access. Security and access to perceived strategic data of a firm are a major concern. Security of information exchanged between partners and access to each other's systems remains a barrier to implementing e-relationships. Considering the information that can be exchanged on e-mail across companies without any potential control gives one the idea of the need for security. In addition, consumers are concerned about the type of information disclosed about them and the security of electronic monetary exchanges. There is also much doubt about what electronic relationships can deliver, as there are problems with quality of connectivity. Telecommunication services for high speed and content rich exchanges are not universally available or competitively priced. This can cause partner friction and hinder e-relationship development.

Electronic marketing and technology expertise and competence is mainly not found in the small firm. For example, Web site management is ongoing, yet, often in the small business the development and design are completed by external software providers. Therefore, there is no internal

expertise to continue to develop and actively engage in the use and promotion of the site. Small firms in the study were dependent on external expertise or on the internal person assigned to the task for most of their IT expertise. There is little technology expertise diffusion, thus limiting its application. E-relationships as a communication channel are one-to-one which can lead to a splintering of overall marketing messages. This poses huge risks for the marketing function in its contribution to e-relationship management. Fragmentation of message and associated media makes it very difficult to communicate standard advertising messages and retain consistency in brand and product images. Given that smaller firms have limited resources devoted to marketing, adding another communication medium does pose challenges to its integration into the other elements of brand and company communication. Many of the companies studied stressed the importance of salespeople to complement e-relationships.

The development of e-relationships has been used to reduce sales costs, especially sales visits and number of salespeople – there was considerable dissatisfaction with this approach in the case companies. Firms still put salespeople first as their most effective communication medium. In fact, e-relationships should free the salespeople to work on the relationship, as the time spent on the order fulfillment process should be much reduced. Customers, in business-to-business relationships, believed that any reduction in salesforce contact and communication would have a negative effect on the relationship. The evolution of electronic business relationships is focusing more pressure on small businesses to develop technology and electronic marketing skills and to integrate these into their existing marketing communication.

The overall picture from our sample is one of limited integration of e-relationships into the business system and processes of small firms, with few exceptions. The patterns emerging may be expected given similar findings in small business IT literature in general. Competitive opportunity available to the small firm through e-relationships may be limited, as an additional layer of expertise is needed to fully exploit this medium. Far from promising to make the small firm competitive with its larger counterparts, e-relationships may have widened the performance gap. However, a similar barrier faces all organisations – to exploit e-relationships requires a close relationship that may only be available to the few.

Conclusions and managerial implications

The emergence of e-relationships has been hastened by technological developments aimed at linking firms to their partners in their demand and supply chains. However, partnerships that are close have most to gain through implementing electronic relationship strategy. E-relationship advantage is sustained in the value created in a co-operative relationship. A joint value maximisation approach creates uniqueness through information and communication rich exchanges not easily copied, through linked business processes, new products and services, and adds an extra element to customers' relationship to the brand.

E-relationship advantage may only be available to the few as a close relationship is the basis for creating such sustained difference. An e-relationship strategy requires management commitment and resources. These may not guarantee success unless a relationship orientation is present in the first place. A relationship orientation is a co-operative, trusting partnership for mutual value creation. For smaller firms, there are many strategic and technology barriers limiting their e-relationship potential. However, some small firms have developed unique customer relationships using e-technologies even though these relationships may not be linked to back office processes and, therefore, not fully exploited for the firm. Nonetheless, they represent asset bases that can be developed further. How can this latent potential be harnessed?

A long-term perspective is necessary to justify the costs and benefits from fully integrated e-relationships. Therefore, management awareness and commitment to this platform for competing is a prerequisite to success. Training of owner/managers will be a critical issue with the objective of exploiting e-relationships as a strategic asset. This training impetus may have to originate from, in the case of the small firm, a co-ordinated national policy response. It could be implemented using industry associations, consultants, government agencies, universities or a network of such providers. One idea would be to use a virtual e-business laboratory as a demonstrator of potential. This would enable firms to visualise the long-term benefits of e-relationships to the costs and performance of their supply chains and to their relationships with their customers.

The apparent high usage of some e-commerce tools (for example, e-mail and Web pages) by the small firm clouds the reality of a significant technological lag

compared to its larger counterpart. This, coupled with a lack of strategic resources in most small firms, makes e-commerce and e-relationships a policy issue. From a non-interventionalist economic perspective, the marketplace would determine the survival or not of firms in a new technology age. A more minimal policy case may be to ensure the infrastructure for these technologies is made more widely and cheaply available and no more. However, as small firms represent the bulk of enterprises and are often the source of much economic innovation and growth, use of our network of policy agents, agencies, and institutions can be advocated. For example, universities can act as providers of discussion forums and training for companies in exchange for data and participation in new technology development. Indeed, some such programmes are already in place.

Competing, using an e-business model, is still at a nascent state for the small firm. Therefore, as a corollary, the opportunities suggested in this paper for e-relationships have yet to be fully exploited. The strategic questions presented earlier can form the commencement debate in any company as to whether e-relationships are part of the competitive competencies a firm wishes to use. Nevertheless, the strategic and implementation barriers to e-relationships for the smaller firm are numerous and outlined in detail in this article. However, the key question facing all businesses is whether or not a relationship approach represents a credible strategy for competing. If it does it can be complemented by an electronic relationship platform that adds strength and depth to the core partnership.

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