

International Small Business Journal

<http://isb.sagepub.com>

E-business Development: An Exploratory Investigation of the Small Firm

Ian Fillis and Beverly Wagner

International Small Business Journal 2005; 23; 604

DOI: 10.1177/0266242605057655

The online version of this article can be found at:
<http://isb.sagepub.com/cgi/content/abstract/23/6/604>

Published by:

 SAGE Publications

<http://www.sagepublications.com>

Additional services and information for *International Small Business Journal* can be found at:

Email Alerts: <http://isb.sagepub.com/cgi/alerts>

Subscriptions: <http://isb.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations (this article cites 46 articles hosted on the SAGE Journals Online and HighWire Press platforms):
<http://isb.sagepub.com/cgi/content/refs/23/6/604>



E-business Development

An Exploratory Investigation of the Small Firm

IAN FILLIS AND BEVERLY WAGNER

University of Stirling, UK

Drawing on existing research on e-business and the small firm, this article presents a review of the literature and the formulation of a conceptual framework of e-business development. Macro-level, industry sector, firm and managerial factors are examined, together with attitudes towards e-business and the benefits of and the barriers to its development. The research is positioned within a framework that adopts the Marketing/Entrepreneurship interface paradigm as an aid to understanding how combinations of formal and informal competencies contribute to competitive advantage. A series of in-depth interviews with company managers was carried out in Central Scotland. Results indicate that industry factors, customer influences, the degree of entrepreneurial orientation of the key decision maker and the level of competency development within the organization play important roles in the level of e-business development achieved. Also, some small firms only embrace e-business to a certain level and even revert to more conventional business practices.

KEYWORDS: barriers; competencies; e-business; entrepreneurship; marketing; qualitative method

Introduction

Two decades ago, the benefits of embracing technology as competitive advantage and the opportunities resulting from globalization were identified by Levitt (1983). Today technology offers vast opportunities for instant international market access, as well as improved domestic market performance for small firms (Coviello and McAuley, 1999; Keogh et al., 1998). However, recent research has shown that, despite e-business technology facilitating improved business practice (Whitely, 2000), a number of small firms have not capitalized on this approach (Smyth and Ibbotson, 2001). In terms of basic electronic communications media (email), just over 10% of businesses in the Republic of Ireland made use of the facility, compared with less than 7% in Northern Ireland. A number of barriers were identified, grounded in a competency/skills gap framework. Development of appropriate skills, under-investment in staff training and poor knowledge of the Internet start-up process were identified as central barriers to e-business

implementation and growth. Smyth and Ibbotson confirm the findings of other studies where the adoption rate is not as high as expected (e.g. Quayle, 2002).

The article begins by examining existing definitions of the small firm and e-business and the authors subsequently derive a hybrid definition of small firm e-business. Small firm characteristics are discussed and existing research themes are identified, including e-business and internationalization, the benefits of e-business, overcoming e-business barriers, e-business models, competencies, entrepreneurial behaviour and competitive advantage. The Marketing/Entrepreneurship interface paradigm is used to frame the research within a structure that recognizes the importance of both formal and informal business mechanisms and the relevance of conservative/entrepreneurial owner-manager personality in decision-making. A conceptual model is developed which integrates these factors and a qualitative research methodology is developed. Interviews with 21 small and medium-sized enterprise (SME) owner-managers and other senior personnel were carried out. The article then discusses the results and adjustments that are made to the conceptual model to account for findings that build on existing research.

Small Firm Characteristics

The Department of Trade and Industry (2002) identified 68.3% of all businesses in the UK as sole operations. In the majority of countries, most firms are small, and the majority of these are micro in size. Therefore the expectation is that any sample of small firms will be dominated by the microenterprise. The EU definition of the small and medium-sized enterprise is based on the numbers employed in the business. It defines the micro-organization as employing up to 9 workers, the small enterprise having between 10 and 99 employees and the medium-sized enterprise having 100–499 employees. Storey (1997) notes that around 95% of all firms in the EU are thought of as being small, providing more than half of all jobs. It is the firm with more than 100 employees that is the exception rather than the rule in Europe. Bolton (1971) noted that the economic impact of the smaller firm is such that overall market share is small, the firm tends to be controlled by the owner-manager in a highly personalized way and the business is usually independent of other organizations. Many small firms occupy niche markets and offer a specialized service or product. As a result they can often charge higher prices than the industry average. Storey identifies three key areas where small firms differ from the large firm: (1) *Uncertainty*: the small firm tends to have a limited customer base and product line and there is a greater diversity of owner-objectives. Many owner-managers only wish to obtain and maintain a minimum level of income, rather than endeavour to maximize profits and sales. The motivation of the owner is a key influence on small firm performance; (2) *Innovation*: this originally relates to the niche role some small firms have acquired but it also refers to the extremely fast rate at which some firms can grow. It is also connected with the ability to produce something that varies from the standard product or service. Small firms tend to be more likely to introduce essentially new innovations and are less committed to existing practices and products; (3) *Evolution*: small firms are more likely to evolve and change than

the large firm, perhaps due partly to the existence of a more flexible culture within the firm.

The main research issues emerging from consideration of small firm characteristics and their relation to e-business development therefore focus on the need to understand behaviour grounded within the boundaries of sometimes severe resource constraints. There are also high internal locus of control effects (Boone et al., 2000) where the philosophy and motivation of the owner-manager will ultimately shape business behaviour generally and, more specifically, the decision to embrace e-business. Some small firms are only prepared to grow to a certain size due to lifestyle effects. This will also have direct implications for e-business decision-making.

Defining E-business

Examination of the literature shows that distinction between the terms e-business and e-commerce is often blurred. Ramsey et al. (2003) adopt the term electronic business in a broad fashion, and use it interchangeably with e-commerce and Internet commerce in describing business activities and processes conducted via the Internet. Poon and Swatman (1999) base their research on the definition by Zwass (1994), describing Internet commerce as the sharing of business information, maintaining business relationships, and conducting business transactions by means of Internet-based technology. Kalakota and Whinston (1997) view e-commerce as the buying and selling of information, products and services via computer networks that are mostly via the Internet. The Cabinet Office (1999) extends the previous interpretation to also involve email and Intranets in the exchanging of information within the firm and with external stakeholders. Ihlstrom and Nilsson (2003) use e-business to describe how corporations utilize information technology to conduct business and achieve competitive advantage. Putterill (2003) notes that the terms Internet, the World Wide Web and E-Commerce tend to be used interchangeably. Lawson et al. (2003) identifies electronic commerce as a whole business strategy that offers a range of services and opportunities for electronic trading globally. Sterrett and Shah (1998) view electronic commerce as representing any transaction that is handled electronically. Quayle (2002) uses the term e-commerce to embrace a number of formats including electronic data interchange (EDI), mobile telephone, Internet, intranet, extranet and email. Examining these definitions and interpretations, the authors will, as much as possible, utilize the term e-business throughout the article, and define e-business as any business carried out over an electronic network (exchanging data files, having a website, using other companies' websites or buying and selling goods and services online). Normally it does not include sending and receiving text-based email messages.

Small Firm E-business Research

There has been a growing body of qualitative research into the use of e-commerce but the focus has tended to be on the larger firm, on developing new business models and positioning its development in the new economy (Drew, 606

2002). Small firms have been much slower to adopt e-business and relevant research has also been slow to develop. Small firm e-business themes that have been investigated include barriers to adoption (Walczuch et al., 2000), benchmarking Internet use (Webb and Sayer, 1998), innovation and learning (Chaston, 2001), the microenterprise and Internet usage (Dandridge, 2000), and entrepreneurship and the Internet (Colombo, 2001). Products and services sold by the small firm via the Internet tend to be digitized services, have a community appeal, have a niche positioning, are entrepreneurial start-up related products or can be sold direct to the end user (Drew, 2003). One of the main problems of understanding the needs of the small firm is the fact that they are not a homogeneous group and so their needs will vary by sector. High-technology, knowledge-intensive small firms are more likely to use e-commerce than other small firms and there are differences between industry sectors in terms of e-commerce use and strategy development. Opportunities include the ability to reduce transaction costs, the development of a more level playing field with larger firms, being able to extend marketing efforts, improve communications, identify and develop new markets, cost reduction and developing relationships with suppliers (Evans and Wurster, 1997). Improved procurement procedures and staff recruitment are also identified as benefits (Taylor, 2001). Potential barriers include increased competition as the larger firm attempts to mimic small firm behavioural strengths such as flexibility and closeness to the customer (Kleindl, 2000). The technical and Internet-specific knowledge and competence of the smaller firm, the rate of market growth, the rate of specific industry innovation, competitive technological competencies and industry structure also impinge on how e-business develops (Drew, 2002). Entrepreneurial issues that need to be considered include the opportunities and benefits which e-commerce offers, the resources needed, the barriers that must be overcome and the management of risk.

The international body of research on small firms and the Internet has been growing steadily and shows that the Internet differs from other forms of information technology in terms of its ability to transform the way in which business is carried out (Abell and Lim, 1996; Fuller and Jenkins, 1995). Hamill and Gregory (1997) investigate the growth of Internet marketing by internationalizing small firms, finding that British firms are lagging behind their American counterparts and potentially losing competitive advantage in the international marketplace. Quelch and Klein (1996) see the Internet in terms of accelerating internationalization, lowering barriers to entry in the form of international advertising costs, adoption of global market niche strategies, reduction of the importance of intermediaries and the Internet as a marketing research medium. Recent work focuses on issues such as the service sector, e-opportunities and barriers where e-business models are formed on a network perspective (Ramsey et al., 2003). Firm size, degree of exporting, awareness of benefits and customer type appear to dictate how information communication technology (ICT) strategies develop in the small firm (Lauder and Westall, 1997). In order to encourage uptake of e-business opportunities, Government programmes of assistance are offered (Jutla et al., 2002). Due to limited resources such as personnel, finance and business knowledge, the small firm has special needs when compared to its larger counterpart. Globalization forces and e-commerce operations mean that they are often pushed

into the international marketplace but the small firm has the potential to take advantage of this situation by being able to exploit entrepreneurial competencies and develop a customized approach to carrying out business. Creativity is viewed as an important element in developing e-business by Jones et al. (2003: 287) who see a host of opportunities for small firms and their entrepreneurial owner-managers to 'creatively engage in new value creating activities'.

There is a need for more research on SME issues since these firms behave differently to their larger firm counterparts. In addition, within the wider remit of the SME community, there is a large percentage of microenterprises that need special attention when it comes to ascertaining their attitudes and motivations towards e-business adoption and development. More specifically, there is a need to realize that all SMEs should not be treated as a homogeneous mass. They do not all behave in a similar fashion; there may be sectoral differences. Other work, for example, has shown that profiling such firms and their owner-managers can assist in developing a heightened understanding of those factors that have a direct impact on owner-manager motivation and how this then shapes the business (Fillis, 2000). Also, SME e-business development is potentially an entrepreneurial activity and, as such, a series of related factors must be acknowledged as contributing towards e-business behaviour. Internal locus of control effects and the impact of particular sets of competencies that are referred to in more detail in future sections of the article have direct impact on e-business development.

Benefits of E-Business

Ellsworth and Ellsworth (1995, 1996) identify factors such as improved communications, logistics, competitive advantage, cost savings, collaboration, information search and retrieval, marketing and sales promotion. Sterne (1995) identifies the potential for improved corporate image and customer relations, increased market visibility, cost reductions, customer acquisition, market expansion and improved internal communications. Poon and Swatman (1999) found that it was the perception of future benefits that was driving small business Internet commerce (SBIC) but that expansion will only continue to occur if tangible benefits are realized. The perceived benefits can be categorized as direct or indirect and can be further subdivided into short-term and long-term factors. Examples of short-term direct benefits include communication cost savings, and indirect short-term benefits include possible business and marketing opportunities. Long-term direct benefits include customer retention and the development of business relationships and long-term indirect benefits can include the development of new business initiatives.

Tse and Soufani (2003) identify a number of benefits resulting from virtualization, or the electronic transaction process. Firms can communicate with a large number of customers, in a variety of geographical settings, and distribute information-intensive based products and product information to them and information can be accessed to the same degree as in the large firm. The flexibility inherent in the small firm is especially suited to the Internet and e-business where a rich set of alternative future directions are possible (Courtney, 2001). The breakdown of the economy into smaller subsets, or molecularization, is particularly appropriate for the smaller firm where they can access a variety of different

networks. Development of relationships within these networks is of prime importance (Kelly, 1998). Molecularization benefits include the facilitation of outsourcing opportunities, the promotion of business networks and the growth of innovative product and service offerings.

Given the various orientations found within SMEs, from entrepreneurial to conservative behaviour, it would be expected that entrepreneurial owner-managers therefore exhibit a greater likelihood of embracing the e-business medium compared to their risk-averse colleagues. Entrepreneurial owner-managers will, however, only invest in the necessary time and effort if they are confident that they can realize on their investment within a realistic time frame. Any investment will mean that scarce resources will be reallocated, albeit perhaps temporarily. There is an expectation that benefits must be realized in the short to medium term rather than over a longer period due to the wider resource deficiencies found within the SME. Therefore, the magnitude of this expectation or perception, together with the actual likelihood of realizing tangible benefits in the foreseeable future, will impact on the decision to embrace e-business.

Overcoming Barriers

Research on problems has tended to focus on external constraints to doing business with little being done in terms of modelling the process (Katsikeas and Morgan, 1994). Internal factors are equally if not more important for the small business where firm and managerial factors merge to act as one due to the high locus of control exerted by the key decision maker (Boone et al., 2000). Psychological barriers can be overcome through increased awareness of Internet benefits. Operational barriers can be overcome through the use of data transfer of online documentation. Organizational problems can be dealt with through the adoption of low-cost market research resources. Product and market barriers can also be overcome by online market research and improving customer orientation through online feedback. The amount of limited resources within the small firm serves as a barrier to e-business adoption (Thong, 2001). Barriers identified include security and privacy worries, costs of consultants and lack of IT competence. The small firm often views costs as prohibitive unless they can clearly see a competitive advantage in doing so (Clarke, 1997). Barriers can be classified as either technical or social. The former include poor telecommunications structure and security of transactions and the latter may relate to lack of trust of the medium, poor knowledge of the medium and insufficient skill in IT, and general lack of awareness of potential opportunities for its use (Wai-Pun et al., 1997). Although the majority of small firms in Europe and the USA have access to the Internet, this does not necessarily mean that access is directly related to practice (Hobley, 2001). Other barriers include finding difficulty with the design and upkeep of websites (Blackburn and Athayde, 2000), together with low expectations of what can be achieved (Poon and Swatman, 1999). Many small firms are failing to develop an appropriate strategy and have not, as yet, realized the cost and time benefits of e-business (Quayle, 2002). There is a degree of dissatisfaction with the perceived failure to deliver the early promises of the new business approach (Wallace, 2000). This is accompanied by a lack of research in

the area of small firm e-business development and an under-estimation of the importance of the small firm in general (Quayle, 2002).

It is equally important, therefore, to conceptualize and investigate internal impediments to e-business development as it is to incorporate external barriers in any research on SME e-business development. In fact, it may be more beneficial to place greater emphasis on internal effects as the firm becomes smaller and smaller. Understanding intangible, qualitative factors is just as important as understanding quantitative, cost-based issues. Ultimately, the SME can overcome perceived and actual barriers to e-business growth by thinking creatively. There is a need for reaching a holistic understanding of the combination effects of hard and soft barriers that are grounded technologically and socially. Ultimately, these barriers can be overcome by considering how to exploit sets of appropriate competencies, as discussed in the next section of the article.

Competencies

Competencies refer to the ability to make effective use of knowledge and skills in a managerial context (Middleton and Long, 1990) or the underlying characteristic of a person that results in effective and/or superior job performance (Klemp, 1980, cited in Boyatzis, 1982). Other terms such as management process, roles, and attributes have also been used to describe competencies (Gilmore and Carson, 1996). Competencies should continuously evolve as the small firm develops and very often they are situation specific rather than generic (Buchanan and Body, 1992). Competencies can be technical; for example, associated with the operational aspects of marketing tactics; or linked to decision-making where conceptual and human competence are important. The former refers to the mental ability to coordinate company issues while the latter refers to the ability to motivate, work with and understand other people (Schein, 1987). The main decision-making competencies comprise knowledge, experience, judgement and communication and these competencies are specific to the industry in which the small firm is located (Carson and Hill, 1992).

Development of an Internet commerce strategy is reliant on the appropriate integration of core organizational competencies via a value chain analysis, managed within the requisite e-business infrastructure and developed through external information-intensive resources (Ramsey et al., 2003; Tetteh and Burn, 2001). The competencies of the small firm and the owner-manager have been shown to shape business development (Gilmore and Carson, 1996). Tapscott (1996) describes an internetted enterprise as being flexible, opportunistic and dynamic, exactly like the entrepreneurial marketing-oriented small firm (Carson et al., 1995). Therefore, the e-enabled smaller firm is likely to embrace elements of entrepreneurial marketing. As the small firm moves from traditional business to e-business, this must be accompanied by the development of appropriate knowledge and competence among the employees. The internal competencies of the organization are central to efficient production of products and services through the construction of profitable relationships with customers (Schuppel et al., 1998). The small firm grows through the ability to exploit its internal knowledge competencies and the entrepreneurial small firm is best

placed to do so with its higher levels of creative thinking (Blackler, 1995; Fillis, 2002).

So, there is a need to view SME e-business development in terms of how well the owner-manager and related key decision makers can develop and exploit an appropriately built competency portfolio. The portfolio should contain both hard technology-based skills together with more qualitative, softer skills in entrepreneurial marketing. Those firms with more developed sets of entrepreneurial marketing skills grounded in opportunity recognition, networking, word-of-mouth marketing and creativity are best placed to take advantage of e-business opportunities. These factors are discussed in more detail later in the article. In combination, the competency portfolio of hard and soft factors can equip the SME with a distinct competitive advantage.

Competitive Advantage

Although there is no single agreed definition of competitive advantage (Day and Wensley, 1988), it can be viewed as the unique position that the firm develops in comparison with competitors (Hofer and Schendel, 1978). The small firm owner-manager has a high probability of knowing their main customers and competitors. The term 'competitive advantage' has been used interchangeably with 'distinctive competence' when referring to superior resources and skills (Day and Wensley, 1988), the development of strategies and communication (Shearman et al., 1993) and in describing superior customer value, lower comparative costs and heightened market share and profitability (O'Donnell et al., 2002). Porter (1985) sees competitive advantage factors as the determinants of cost or differentiation advantages. Innovation has been identified as a frequent contributor to positional competitive advantage (Hooley et al., 1998; Roth and Morrison, 1992).

O'Keefe et al. (1998) investigate the strengths and weaknesses of being an early adopter of the Web from a small firm context. They believe that proactive first users of information technology can gain business advantage in the same manner as early market entrants. The notion of e-marketing as competitive advantage is discussed by Weiber and Kollman (1998) in an examination of virtual value chains where increased access to information networks is a key success factor. Poon and Swatman (1997) identify the importance of entrepreneurship and managerial support as the way in which sustainable advantage can be obtained. O'Donnell et al. (2002) investigate competitive advantage in the small firm and note that issues of competitive advantage differ from previous models derived from large firm investigations. Research into small firm competitive advantage is underdeveloped. Rather than developing as part of a formalized strategy, it tends to emerge as an unplanned, accidental phenomenon due to situation-specific circumstances (Jennings and Beaver, 1997). Models of competitive advantage are based on the existence of economies of scale in the large firm but the small firm has been shown to be unable to compete on this basis (Maclaran and McGowan, 1999). O'Donnell et al. (2002) note that the small firm is unlikely to be able to follow the prescriptive models of competitive advantage due to its lack of resources (Hogarth-Scott et al., 1996), chaotic market conditions (Wynarczyk et al., 1993) and a reactive marketing approach (Carson,

1993). O'Donnell et al. (2002) found that the main competitive advantages relate to personal networks and competencies. Networking can be enhanced by developing e-business where existing networks intermingle with virtual networks and network members. Word of mouth communications convert readily into 'virtual' word of mouth recommendations.

So, linking back to the previous section, it can be seen that e-business competitive advantage can be achieved through the exploitation of relevant hard and soft competencies, selected from a wider portfolio of relevant skills. Competitive advantage is achieved by thinking entrepreneurially about e-business issues. The way in which the SME owner-manager thinks about e-business is very often in an informal, unplanned way, leading to a more intuitive path to e-business decision-making. E-business growth, like SME growth generally, tends to be non-linear and does not conform to the stage-by-stage approach prescribed by authors elsewhere (e.g. Daniel et al., 2002). This non-linear behaviour can be better understood by placing SME e-business development within a framework of entrepreneurial marketing.

Defining the Marketing/Entrepreneurship Interface

The Marketing/Entrepreneurship interface paradigm (Carson et al., 1995) can be utilized to assist in the explanation of SME behaviour generally, given that many firms compete unequally in terms of factors such as business and marketing skills, available resources, creativity and identification of opportunities. Many small firms carry out business throughout their lifetime via highly informal, unstructured, reactive mechanisms while others develop, over time, a proactive and skilled approach where innovation and identification of opportunities give the firm a competitive edge. Formal marketing involves highly structured, sequential decision-making while entrepreneurial decisions tend to be haphazard and opportunistic. The Marketing/Entrepreneurship interface deals with the overlap, such as analytical skills, judgement, positive thinking, innovation and creativity. Morris and Lewis (1995) identify the three key characteristics of entrepreneurial activity that can also be regarded as integral to the successful marketing-oriented firm: innovation, risk-taking and proactiveness. Very often, the focus of the Marketing/Entrepreneurship interface is the owner-manager who is also the key decision maker. In embracing the Marketing/Entrepreneurship paradigm, an enhanced understanding of core entrepreneurial marketing issues can be reached which subsequently contribute to business creativity:

marketing and entrepreneurship share common conceptual and practical ground and that this commonality can be made sense of in the context of a conceptual framework which emphasises the applied creative problem solving dimension of each field. Thus to the extent that creative (or innovative) behaviour is a significant feature of radical marketing success, it might also be said to lie at the heart of much successful entrepreneurial endeavour. (Hackley and Mumby-Croft, 1998: 505)

Carson (2004) carried out a membership survey of the Academy of Marketing special interest group in Entrepreneurial and Small Business Marketing in order to define the boundaries of the Marketing/Entrepreneurship interface. He

concluded that the domain was concerned with overcoming formal marketing expertise constraints and other resource limitations, and the discovery of new opportunities via networking, use of judgement, vision and creativity. Entrepreneurial marketing can provide the SME with competitive advantage through appropriate exploitation of the necessary competencies, which are grounded in intuitive, non-linear modes of thinking.

Using the Marketing/Entrepreneurship Interface to Understand SME E-business Development

Understanding motivational and competency-based factors is central to revealing how and why small firms develop e-business. The impact of the owner-manager on the ability of the firm to develop e-business is considered by Hodson and Whitelock (2003) in an investigation of identity, innovation and social relationships. They construct an understanding of the aspirations and expectations of the key decision maker and suggest that successful, creative, development of e-business is determined by the degree of clarity of aspirations and how the owner-manager engages in developing the appropriate knowledge for e-business implementation:

Aspirations and expectations may be understood through an examination of the ways in which exhortations to adopt and implement the Internet innovatively and entrepreneurially are addressed and appropriated by owner-managers. The fundamental point to make is that given the central role of owner/managers within SMEs an understanding of the development of an Internet capability may be understood as tied in with an unfolding negotiating of their personal identity. Such identities are not highly individualised but are implicated in the web of relationships which constitute and are constituted by the SME and extra-SME relationships . . . Conservative, less 'successful' Internet adoption in SMEs may be seen as related to not only unclear aspirations of owner/managers but also subsequently a lack of knowing how to implement the Internet within a specific context. (Hudson and Whitelock, 2003: 1)

Hudson and Whitelock identify the importance of understanding the behaviour of the microenterprise and the variety of owner-manager orientations that shape the way in which the business grows, from the lifestyle to the entrepreneurial form at either end of a continuum (Carr, 2000). These orientations also relate to issues such as locus of control, independence and self-fulfilment (Goffee and Scase, 1995).

Durkin and McGowan (2001a,b) investigate entrepreneurial small firm Internet marketing by utilizing competency constructs from the Marketing/Entrepreneurship interface. Commitment to e-business adoption is determined by factors stemming from existing network relationships between the supplier and buyer. The Internet is viewed as a revolutionary way of building and maintaining these relationships, resulting in one-to-one marketing and the nurturing of loyalty via relationship marketing (Zineldin, 2000). Durkin and McGowan believe that in order to develop e-business in the entrepreneurial small firm, this must be contingent on the degree to which competencies such as vision, value, technical ability and control can be developed. The owner-manager must possess innovative, opportunity-focused characteristics and be open to change.

The challenge for the small firm owner-manager is the ability to develop and exploit the appropriate set of competencies which e-business requires (Chaston, 2001). Competencies can be nurtured within an environment of relationship marketing where technology can increase efficiencies by lowering both tangible and intangible costs (Gronroos, 1997). The Internet offers a potential new approach to customer-relationship management with particular emphasis on communication. This can be facilitated through the development of personal contact networks that are relationships or alliances that the owner-manager needs to develop to grow the business (O'Donnell et al., 2002). The entrepreneur's personal contact network is viewed as a social structure through which the network members interact. Trust is central to the successful development of the network; lack of trust means that the network will dissolve and the social ties will be weak. The fact that these networks are not static but evolve over time (Gilmore et al., 2000) presents the opportunity to utilize e-business as a way of facilitating their development. Competencies can be developed through the interaction of experience, knowledge, communication, judgement and learning of the owner-manager and employees and are directly linked to the ability to determine competitive advantage (Carson and Gilmore, 2000). Therefore, it is crucial to understand the competency spectrum of the owner-manager and how these skills, or lack of skills impinges on e-business development. The unique characteristics of the small firm are shaped by the inherent characteristics and behaviour of the owner-manager (Carson, 1990; Carson and Gilmore, 2000):

As a consequence, SME marketing is haphazard and informal because of the way an owner/manager does business; he/she makes most decisions independent of others, responding to current opportunities and circumstances and so decision-making occurs in an apparently chaotic way, according to personal and business priorities at any given point in time (Scase and Goffee, 1980). Such characteristics will influence, indeed determine the marketing management characteristics of an SME. SME marketing is likely to be haphazard, informal, loose, unstructured, spontaneous, reactive . . . (Carson and Gilmore, 2000: 366)

Consequently, e-business development in the small firm will also tend to follow this path and not the structured, linear way proposed elsewhere (Daniel, 2003).

So, the Marketing/Entrepreneurship interface has relevance to SME e-business development in terms of reaching a deeper understanding of the motivations to embrace the technology, as well as the barriers that prevent its adoption. The interface also provides a platform for improved understanding of the necessary e-business competency spectrum. It also provides a framework for understanding owner-manager orientations and locus of control effects and how these impact on the e-business adoption decision.

Development of a Conceptual Model

A number of stage models have been developed to explain how e-commerce develops (Daniel, 2003; McKay et al., 2000; Poon and Swatman, 1999; Stroud, 1998) but the stage approach has been shown to be increasingly ineffective in

explaining how the small firm grows (Bell, 1995; Fillis, 2001). Small firm growth can be viewed as encompassing the exploitation of entrepreneurial marketing competencies such as opportunity recognition, networking, word-of-mouth marketing and creativity in an often non-linear pattern of behaviour. Some small firms are now identified as behaving in an 'instant international' or 'born global' sense, where the stage-by-stage progression is now redundant (Knight and Cavusgil, 1996; McAuley, 1999):

... the omission of the 'fully virtual' ... 'born global' ... SMEs who may have a strategic 'e' focus from conception, renders the stages approach a nonsense. This naive understanding of what motivates SMEs to adopt and assimilate ICTs in their business activities can at best accommodate a limited understanding of contextual issues and circumstances which may affect the small firm market ... For SMEs to get the full benefit of ICTs and e-business, company and market structures may have to be reinvented incorporating a business model where innovation, change, ambiguity and uncertainty are the norms and equilibrium is the exception ... It is important to realise that although there may be different levels of maturity for Internet commerce use, the majority of SMEs may have very low-level requirements and/or follow a non-linear/discontinuous path. Consequently, SMEs are obliged to use models that, although they instil the principles of e-business, have a weak theoretical underpinning that can, in SMEs consume scarce resources. (Ramsey et al., 2003: 252)

Poon (1998) identifies the importance of the interplay between market conditions, supply chain issues, industry characteristics, the particular style of management, innovation ability and entrepreneurial thinking. Jones et al. (2003) develop a stage model of Web-based commerce adoption and, although there are weaknesses in such an approach, several elements are also part of the conceptual model developed in this article. Competitive advantage, entrepreneurial behaviour, motivation, firm-level issues and perceived benefits are found in both conceptualizations but the latter should be viewed in a holistic sense, rather than a specific stepwise interpretation. Jones et al. (2003) also mention the importance of Web-based commerce strategy from an entrepreneurial marketing perspective (Collinson and Shaw, 2001). Ramsey et al. (2003) believe that e-business decision-making in the small firm is mostly directed by the intuitive competencies of the entrepreneurial owner-manager. This position therefore grounds theory and practice of small firm e-business development at the Marketing/Entrepreneurship interface.

The review of the literature on e-business and the small firm has identified a number of central contributing themes. Macro-level factors such as globalization and the development of technology (Levitt, 1983) impact heavily on e-business but these are uncontrollable external factors within the context of the small firm environment. Specific industry and sectoral factors have also been found to impact on the decision to embrace e-business (Poon, 1998). Firm and managerial factors have also been shown to affect how e-business is perceived. There are areas of research focusing on the benefits of e-business adoption (Ellsworth and Ellsworth, 1995, 1996; Poon and Swatman, 1999; Tse and Soufani, 2003), the growth of the small firm in an international context and its link to e-business usage (Hamill and Gregory, 1997; Quelch and Klein, 1996), overcoming barriers to e-business (Blackburn and Athayde, 2000; Clarke, 1997; Hopley, 2001; Thong,

2001), models of e-business development and their criticisms (Berryman, 1999; Daniel, 2003; Poon and Swatman, 1999; Stroud, 1998), the development of appropriate competencies (Ramsey et al., 2003; Tetteh and Burn, 2001), entrepreneurial behaviour (Chaston et al., 2003; Jones et al., 2003) and competitive advantage through e-business development (O'Donnell et al., 2002; Weiber and Kollman, 1998).

A range of attitudes have been identified that relate to the orientation of the owner-manager of the firm. Entrepreneurial thinking is more likely to be linked to positive attitudes towards e-business compared to conservative, risk-averse behaviour. These latter types will be less likely to take the lead in e-business development and will either be followers or non-adopters. Linked to entrepreneurial/conservative orientation is the ability to overcome both physical and perceptual barriers to e-business. Entrepreneurially oriented small firms perceive barriers in a positive fashion whereas the conservative firm may exhibit highly negative attitudes. Those small firms with an appropriate set of technical and knowledge-based competencies will readily embrace e-business. These factors also contribute to the establishment of competitive advantage through the successful implementation of relevant skills and strategies. Understanding the mechanisms and reasons behind their development is best understood from within the Marketing/Entrepreneurship interface paradigm of research, which focuses on both formal and informal methods of business development. These factors have been assembled in a working conceptual framework (Figure 1).

Research Methodology

The e-business literature review, together with the insight from the Marketing/Entrepreneurship interface paradigm and the subsequent derivation of the conceptual model, resulted in the identification of a number of connecting themes to be qualitatively investigated using in-depth interviews. In adopting this approach a rapport is formed with the respondent (Chisnall, 1986). By using open-ended questions, the respondent is free to reply in his/her own words (Churchill, 1992). The initial question is the stimulus and further probing by the researcher results in an accurate picture of the respondent's position concerning the issues involved. This method delves below any shallow surface reactions in order to discover the more fundamental reasons for the phenomena (Kinnear and Taylor, 1987). Judgement is needed in order to probe and prompt at the correct time and how to correctly word the question.

The literature has shown that factors such as orientation of the firm (the overriding philosophy and resultant strategic direction of the firm which may be oriented towards various degrees of conservative or entrepreneurial thinking), firm size, start-up costs, limited resources, lack of awareness and security issues act as impediments to future business development. Owner-manager characteristics and personality also impact on perceptions of e-business barriers (Covin, 1991; Poon and Swatman, 1999; Thong, 2001; Wai-Pun et al., 1997). Respondents were therefore asked about these issues and the qualitative method allowed for probing of the many informal, intangible factors that could not have been revealed by quantitative method. The literature has shown that entrepreneurial

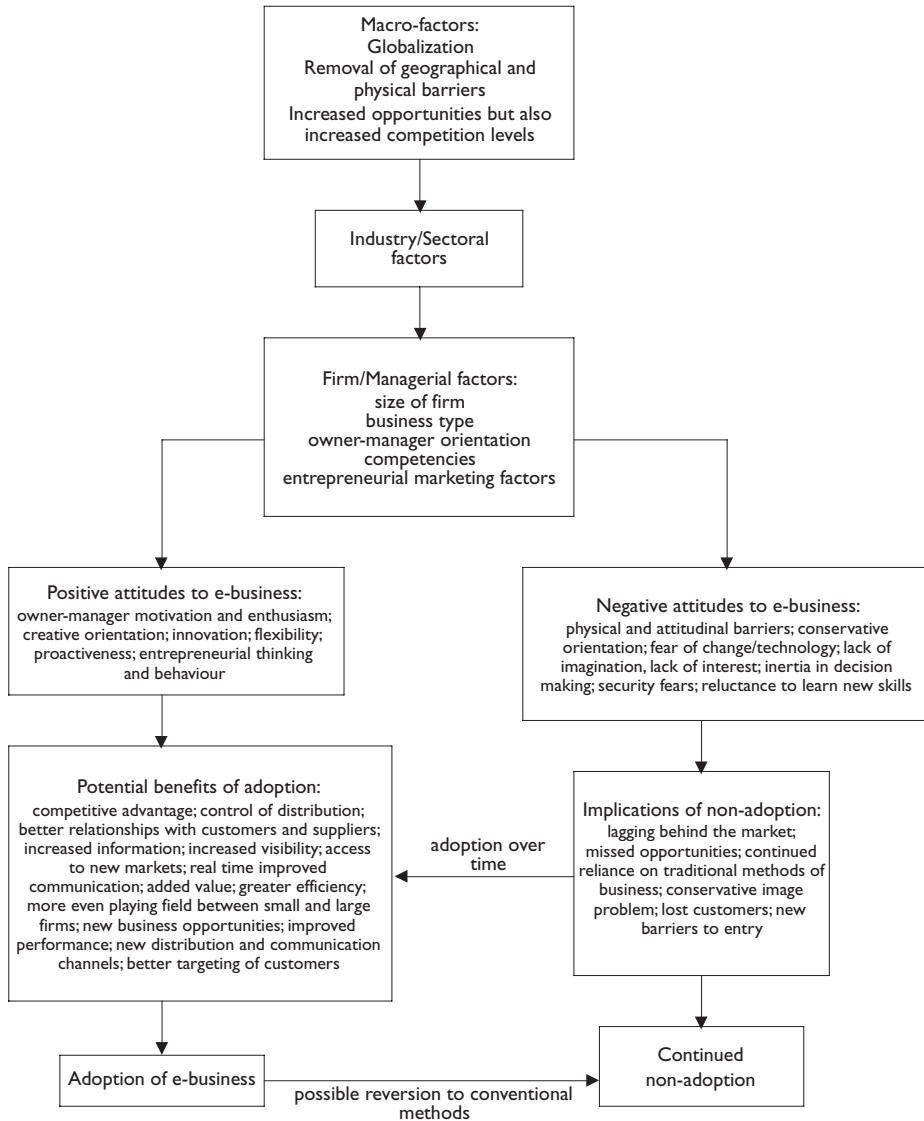


Figure 1. Conceptual Model of Small Firm E-business Development

ability has a positive impact on firstly identifying the opportunity and consequently the ability to develop e-business (Chaston et al., 2003; Jones et al., 2003). This entrepreneurial orientation is also linked to positive views of the benefits of e-business development (Ellsworth and Ellsworth, 1995, 1996; Poon and Swatman, 1999; Sterne, 1995; Tse and Soufani, 2003). Therefore it would be expected that those respondents who demonstrate entrepreneurial aptitude would be more likely and quicker to embrace e-business than those exhibiting more conservative, risk-averse traits. The literature review also showed that there are industry-specific factors that may inhibit or promote e-business development

(Drew, 2003; Smyth and Ibbotson, 2001). Also, those firms positioned in the New Economy where ideas are seen as equally if not more important than conventional products and services and which embrace creative thinking to generate and exploit networks for business development might be expected to embrace e-business technology to a greater degree than traditional firms (Leadbeater, 2000; Tse and Soufani, 2003). The literature also indicated that there are potential competitive advantages from adopting e-business practices and that competencies should consist of appropriate combinations of formal technical and business skills as well as informal entrepreneurial attributes (Durkin and McGowan, 2001a,b; Gilmore and Carson, 1996; O'Donnell et al., 2002; O'Keefe et al., 1998; Ramsey et al., 2003; Tetteh and Burn, 2001; Weiber and Kollman, 1998).

An interview schedule was developed to incorporate the aforementioned themes. The sample was drawn from a Local Enterprise Council database. Some 2400 small and medium-sized businesses were identified and every twentieth company was sampled and sent an introductory letter describing the project and requesting participation. The database was assessed as being representative of the firms in the catchment area, with coverage from a range of industry sectors. The particular geographical area investigated contains a number of firms connected with the oil and gas industry, but the region is also home to a variety of manufacturing and service organizations. Therefore any potential bias towards one particular industry should be negated. As Storey (1997) notes, the population of firms within a catchment area will tend to be biased towards the smaller firm, and in particular, the microenterprise, since these firms comprise the majority of firms generally. Out of the 120 letters sent 49 were returned, 28 not being available for interview since they were too busy and did not have the available time and 21 being willing to be interviewed. Those firms not giving reasons for being unwilling to participate were contacted again, to ensure against bias (Patton, 1980). They cited similar reasons to those who had indicated their unavailability via the letter of reply. This is not unsurprising, given the resource-based constraints under which the small firm operates. Ultimately, since qualitative research was being carried out, a representative feel was what was needed, rather than a statistically valid large sample. In total 18 face-to-face interviews were finally conducted, with the remainder by telephone. Interviewees were all at senior manager level, many of whom were owner-managers, and interview duration was between one and two hours. Interviews were recorded and all transcriptions were analysed by the researchers (Bryman and Burgess, 1995).

Discussion of Results

Evaluation of the results is framed around the following interacting factors identified from the literature and as shown in the conceptual model: the benefits of e-business development; firm level and owner-manager factors linked to entrepreneurial/conservative orientation; entrepreneurial development of e-business; the relevant competencies required in e-business development and how these can be used to establish competitive advantage; and, attitudinal barriers towards acquiring the necessary competencies and industry-level influences in e-business development. These factors contribute collectively to the wider field

of entrepreneurial marketing activities as discussed previously. The results will show that there is a need to understand SME e-business development from a perspective that firstly acknowledges the role of informal, intuitive thinking and then embraces this within the wider remit of e-business evaluation and adoption.

Benefits of E-business Development

The literature identified the potential benefits of e-business as including improved communications, establishing competitive advantage, marketing and sales promotion, and improved information search (Ellsworth and Ellsworth, 1995; Poon and Swatman, 1999; Sterne, 1995). The results show that, given the appropriate industry conditions, e-business can improve the way in which business is carried out although, as this respondent demonstrates, cost savings may only be realized in the longer term:

. . . I wanted to be at the forefront of anything that was going on and I wanted to show that we are the leaders in the industry . . . and so we are just in the middle of developing a cdrom . . . Well I suppose speed and the just in time philosophy would be the major thing . . . I'm still going to need people who put orders out at this end. I'm not sure whether it would reduce costs . . . (timber processor)

Enhanced internationalization of business and being able to function 24 hours per day are further benefits, as the owner-managers of these face-to-face and online software training organizations demonstrate (Hamill and Gregory, 1997; Quelch and Klein, 1996):

It has major benefits, mainly costs. You can deliver training via online networks to large organizations based from our premises here. It could be Australia, it could be anywhere . . . it's just the immense size of potential markets, absolutely incredible. (software training organization)

I think there's a business benefit in the sense that people will pay, someone will pay for people to learn in that way in the same way as people will pay to come and learn in classrooms . . . You can learn what you want, when you want, for how long you want and you can go back and learn that again, you can test yourself. (software applications training company)

It would be expected that companies involved in computer applications training would be well suited to e-business, but this design company owner-manager is also realizing the competitive advantage benefits (O'Donnell et al., 2002; O'Keefe et al., 1998; Weiber and Kollman, 1998):

Speed. Being up beside companies who are bigger and can afford to get online and doing it that way. New customers. There is mileage to be gained from having your web page address on your vehicle advertising just to tell them . . . The web page is saying to people that you are up there. (small design company)

It is really the entrepreneurial marketing ability to recognize e-business opportunities that can provide the SME with competitive advantage. Gaglio (2004), for example, discusses how opportunity recognition is derived from an ability to see things that do not yet exist within the organization and also to make these things possible.

Owner-manager Orientation and Implications for E-business Development

The results uncovered a range of firm and owner-manager orientations linked to the conservative/entrepreneurial continuum, from those who adopt a 'wait and see' attitude or totally dismiss the notion of the Internet as a viable business option to the proactive risk taker. An example of the former is the lifestyle-driven organization where profitability and longer-term growth are not seen as central to success:

... I'd heard of companies or individuals starting up and basically working seven days a week and night and I didn't want to do that because I had got so many other hobbies that I wanted to continue with ... so the theory was I would work ... three days a week ... and hopefully have a couple of spare days ... the idea was not to build up a significant business and to that end I haven't advertised until we got recently an indication from Yellow Pages that they were doing a free insert so I've just got myself into that ... (self-employed planning consultant)

Near the other end of the continuum, the owner-manager with elements of entrepreneurial ability appears more likely to adopt Internet technology:

... the signing industry has been changing from the actual manufacturing point of view so the idea was that I would become computerized. Took me a long time to do that because of the financial commitments where I would buy in the product until I could afford to start buy the computers which was about 1993 ... and gradually I would buy more computers so that there is now four. The admin side, we went online about 2 years ago ... So I've just always been aware and go to seminars or read the odd bits to keep up with what was needed. I didn't have a big plan written down ... Yes, I believe where we are today and the kind of business that we are getting now we wouldn't have been getting if we hadn't moved on. (small sign making company)

The respondent indicates an awareness of the benefits of adoption, although the particular company has not yet been fully e-enabled. This can be compared with an entrepreneurial organization involved in information technology training, where the owner-manager is already integrating e-business into future business strategy:

E-business is ... the fifth arm of marketing ... marketing is part of business strategy without a shadow of doubt. It's got to encompass business and it's got to have a bottom line proposition for the organization to see it forward ... The key to any business is in exploiting the voids that are there ... We certainly saw a niche where we could exploit business expertise, business advice, business planning coupled with training that we've done before ... If you match the IT exposure with exploiting e-business, then you have the strand of that business. (software training company)

The exploratory evidence supports the notion that the ability to develop e-business depends on the entrepreneurial/conservative orientation of the firm's owner-manager (Covin, 1991; Poon and Swatman, 1999). However, examination of entrepreneurial marketing research demonstrates that it is potentially dangerous to promulgate a description centred on an either/or scenario. It is more beneficial to acknowledge the impact of the social environment in shaping a more intricate owner-manager profile which takes into account a wider range of owner-manager philosophical issues (Fillis, 2000).

Competencies

Growth of the business through exploitation of entrepreneurial competencies was evident, with use of e-business being a natural extension to 'doing business' generally (Middleton and Long, 1990; Ramsey et al., 2003; Tetteh and Burn, 2001). Some firms appeared stronger at utilizing their informal business networks and experience than e-business-related technical expertise alone, supporting the Marketing/Entrepreneurship interface paradigm as an aid to understanding (Gilmore and Carson, 1996):

We very rarely advertise. Most of the business is word of mouth or people hearing about us. Then again I can take you back to that line 'we must be doing something right'. A lot of our business comes on personal recommendation. Someone will get in touch and say we've got a contract for such and such a person and we need an agency to operate through, I've heard good things, which is nice. For somebody like that you try harder. (oil and gas services contractor)

We have a lot of experience within the industry. I've been in the industry since I was 16 since I left school. My sales colleague has been about the same, he's been in it for a long time. We've got some very skilful people who have got a lot of experience in the industry. (timber processor)

Combining business and technical skills gives the firm a competitive edge. This respondent is highly experienced in human resources and has an MBA qualification, but relies on his business partner for e-business knowledge:

. . . a lot of my background was in HR management but I was always a numerate HR manager you know. I was a personnel guy who could count and you know I could read a balance sheet and I was good with costs. I was good with accounting and understood marketing but had a weakness in sales . . . contributes to the very technical end so you know we could never have become a . . . learning partner if . . . hadn't been a Director because you know, I'm lost with that stuff. Once you go above a certain, a very superficial level, I'm lost. (software applications training organization)

The small firm with an integrated e-business and general business strategy can gain competitive advantage through exploitation of core competencies:

Prior to setting up this organization I was the managing director of a Research and Development Group specializing in Information Technology, ICT and with a specific background in European funding for specific R&D projects . . . I've been trained specifically to give that training course out on a one day workshop. That looks at the marketing, business strategy of organizations who wish or may not wish to get into E-commerce. So it's turning the mirror onto themselves and looking at their strategy. (software trainer)

The qualitative data corroborates the findings of Durkin and McGowan (2001a,b) regarding the need to develop and exploit Internet-related skills. These consist of technical e-business and softer, entrepreneurial marketing competencies such as opportunity recognition, networking, word-of-mouth marketing and creativity. A company servicing the engineering industry demonstrates the balance needed, where proactive information seeking, networking, relationship building, closeness to the customer and communication are just as important as utilizing Internet technology in order to secure business:

The handiness of this office, you know, with people coming in here, it's a winner . . . You form relationships . . . and they are quite good . . . you've got to remember that as far as a web address or Internet advertising of whatever you are trying to do to get the name . . . or even more specifically advertise for actual active jobs . . . it's very dependent on your end users. How many people can access the Internet or do they know about your web site . . . We are doing a job at the moment for _ in the US and most of these responses are off . . . either Internet advertising or from a web site that we subscribe to . . . We are very much customer driven . . . (engineering recruitment company)

So it is not sufficient to explore formal competency-based issues alone. Neither is it particularly useful to focus solely on technical competencies. By positioning SME e-business research within the Marketing/Entrepreneurship interface, future work can build on the findings uncovered here by acknowledging the mutual impact of quantitative and qualitative effects within a wider hard and soft e-business competency spectrum.

Barriers to E-business Development

The results indicate that there are a range of tangible and intangible barriers which must be overcome if the small firm is to develop its e-business activities. Access to finance is a major difficulty for some small firms, and compares similarly to previous studies (Doole and Lowe, 1999; Thong, 2001):

Funding is the main barrier. Banks are significant barriers to growth in this environment. Banks don't take risks. They won't lend against intangible assets. Banks are the biggest hurdles. They operate a Small firm's Loan Guarantee, but are reluctant to let businesses have this. Although the DTI is behind this, there is still too much risk for the bank i.e. 10%. Banks don't want to push it, they will give any excuse under the sun. Where to get funding? Venture capital is very difficult to get. There are no local players. (software systems business)

As well as the financial costs involved, there are other issues relating to the sometimes unwanted additional business that e-business activity would promote. These lifestyle factors also relate directly to owner-manager orientation. Interestingly, despite the fact that this particular respondent is aware of the benefits of e-business such as networking, the overwhelming lifestyle orientation dictates the way in which the business runs:

Really all I know is a limited amount that I have read but I have to say that I have had a couple of gentlemen from companies promoting if you like designing your own web site for businesses to go on the Internet so if you like I have taken it a stage further and found out what it entails and what it costs and whilst I appreciate that the indicative cost to me for having this facility may well pay its way after two clients have passed through my hands because of the way in which it has operated to date where I seem very fortunate to have two or three jobs on the go at the moment; as one finishes another one seems to emerge. So I don't, all this sort of technology I fully appreciate and if I wanted my business to grow I would certainly seriously consider using it but given the nature of the beast it is and as I want it to remain, you know I haven't gone any further in my investigations . . . (self-employed planning consultant)

There were also concerns about the costs of maintaining the website once it had

been designed, alongside indications that attitudinal, cultural and workforce competency factors also served as barriers to implementation:

Oh well it always cost money and time and blips happen and things go down. We do have a great source of help through the chap who helped me install software last year . . . He was associated with the University. He had a business . . . and just works for himself. Barriers to e-commerce! One of my members would like to be able to use the computer, his skills are such that I'm reticent to let him loose on the machines. He is keen but anyway he's learning. You have to balance people and their skills . . . (sign making company)

Results confirm that both external and internal barriers impact on e-business development and that internal factors such as lifestyle orientation can have significant impact, despite awareness of the potential benefits (Boone et al., 2000). By grounding barrier research within the Marketing/Entrepreneurship interface an in-depth understanding of internal owner-manager factors can be uncovered. Perceptual barriers relate directly to owner-manager orientation and the degree to which the key decision maker is open to risk-taking and opportunity recognition. All businesses will need to overcome physical barriers but e-commerce and globalization effects can be used to circumvent many of these. Understanding the attitudes and philosophies of the owner-manager assists in the construction of a more complete picture of SME e-business development (Brown, 2005).

Industry- and Customer-Level Factors in E-business Development

The results of this study indicate that there are differences across industries in terms of the ability and willingness to develop e-business and that industry-specific competencies are often needed in order to grow the business, thus supporting previous research (Carson and Hill, 1992; Drew, 2003; Poon, 1998; Ramsey et al., 2003). Although a particular company may have developed, or is planning to develop e-business activities, this is often shaped by customer demands. The data shows that in some circumstances the customer wants e-business relationships while in other cases, they prefer more conventional business interfaces. This packaging company dealing in palettes and corrugated cases demonstrates how their customers dictate e-business requirements:

We've actually been driven by our customers . . . We didn't have email when I first started whereas now email comes back to all the desktops. We have an EDI link with one of our customers. I would say the introduction of email has been a big, big influence. The amount of emails that go through this company now we depend on it greatly . . . between customers and suppliers . . . The EDI link, we don't use a great deal, I must admit. We've had meetings with customers . . . and they have intimated that they would like online access to our manufacturing module. But that hasn't come to fruition as yet. So we are really driven by our customers: if they say right, we want to link up next Wednesday, we will link up next Wednesday. (packaging company)

This compares with a graphic design business that has adopted e-business to a degree but is reluctant to develop their activities further due to customer wishes. They believe that personal, face-to-face service is their primary business strength. So even though technology may be embraced within the business in terms of the

design process, more traditional face-to-face business methods are preferred when looking for business opportunities:

As far as e-business is concerned . . . you need to understand the business to be able to design for them and so I do not think in the long run that e-business will do an awful lot for us. Obviously, it's quite useful to have . . . adequate e-mails to and fro with changes but otherwise we have to . . . have a rapport with people and you can't do that on e-mail . . . we have had a web presence and e-mail now for four and a half years . . . it's just like our brochure on web almost . . . that's all that we have there for people to look up if they want to . . . people will look it up once they've got to know us, to just see what we really have there . . . We need the personal touch; we need to be able to understand a person's business, how they work . . . (graphic design company)

In some instances an integration of conventional methods and e-business practices have been established, although this appears to vary depending on the particular business function within the organization. Sales are still often generated by telephone in this company operating in the imaging supplies industry and customers often prefer more traditional approaches, whereas purchasing is carried out largely online:

. . . as far as purchasing goods we are now probably doing 60 to 70% of our goods electronically . . . The website is not as interactive as it could be by far because the sales people are not pushing it because they do not understand how to sell it. They know how the Internet works . . . I've spoken to some customers themselves and they don't jump at the opportunity to use it. What happens then is because my sales staff who don't have the same understanding of how the Internet works, when they try to sell it to the customers they are not presenting it the right way and also the customers are not giving them the relevant feedback that they want to know. Because of that they are quickly put off . . . Our sales people are thinking a difficult part for them because they themselves prefer to deal in the traditional way. When they are selling it they are not getting the feedback. There is also the customers themselves who are like happy know how to sell it and you have to believe in it I think. Our sales staff here don't know enough about how to sell the Internet. They know how it works but they don't know how to sell it. (imaging supplies company)

The software training product obviously lends itself well to e-business technologies but the owner-managers also exhibited strong entrepreneurial growth ambitions:

. . . there will always be a need . . . for the traditional methods of stand up and deliver. But I think people are moving away from that concept as technology and software improve, particularly when communications improve . . . (E-business) opens up different avenues of training, it widens the portfolio . . . You've got to keep ahead. Software is always being developed, new technology is always being developed, you know. Yes, we have confidence in the whole lot, it's never ending. (software training company)

So the main issue here is to promote understanding of SME e-business issues within the specific situation, rather than to make generalizable claims. Research at the Marketing/Entrepreneurship interface has continually made efforts to seek understanding from particular industry settings and to compare and contrast findings across sectors. The research also recognizes that, due to owner-manager

effects, there will be also behavioural differences within each sector (Miles et al., 2000; Stokes, 2002).

Conclusions

Examination of the literature shows that technology and globalization offer opportunities and threats to the small firm. Such firms tend to dominate industries and so understanding small firm behaviour and owner-manager motivation for e-business is central to forming a clear picture of how and why small firms develop e-business. The literature highlights the benefits of e-business, such as improved communications, cost savings, greater visibility, ability to develop new markets and greater levels of information retrieval. However, e-business development only succeeds if perceived benefits can be realized. A variety of internal and external barriers impinge on small firm e-business development. Factors such as security and privacy fears are important but the degree of influence of the owner-manager and how he or she perceives barriers must also be considered. Since the small firm often tends to be managed by a single owner-manager who exhibits a high locus of control, understanding motivational and other psychological aspects of decision-making are needed. Lack of appropriate information technology competencies affects e-business development. A combination of technical and decision-making competencies are needed in the small firm, where formal and informal factors interact. Judgement, managerial knowledge and experience are just as important as in-depth e-business awareness. Competitive advantage is secured through the exploitation of superior skills and resources and in the small firm; creative use of limited resources is needed. Here, competitive advantage often emerges as an unplanned phenomenon and e-business strategic advantages often result from successful exploitation of personal networks and competencies. The Marketing/Entrepreneurship interface paradigm, which focuses on factors such as judgement, opportunity recognition, positive thinking, innovation and creativity has been used as an aid to understanding how small firms develop e-business. This paradigm offers explanations of how owner-manager orientations and their motivations shape the way in which the business develops. Lifestyle and entrepreneurial orientations, for example, can result in radically different business directions. Important entrepreneurial marketing competencies that have been found to be central to e-business development include vision, the development of trust within personal contact networks and technical ability and control.

The conceptual model developed from the literature acknowledges the limitations of the stage-based approach of previous models, while also focusing on the importance of entrepreneurial marketing factors relating to competitive advantage, entrepreneurial behaviour, motivation, perceived benefits of e-business and the competencies needed to develop e-business. A qualitative methodology was adopted in order to probe in depth the factors discussed. The results found that the main potential benefits of e-business related to improved communication, establishing competitive advantage, and access to new markets, including international opportunities. There are a number of owner-manager orientation implications that relate directly to e-business development. The

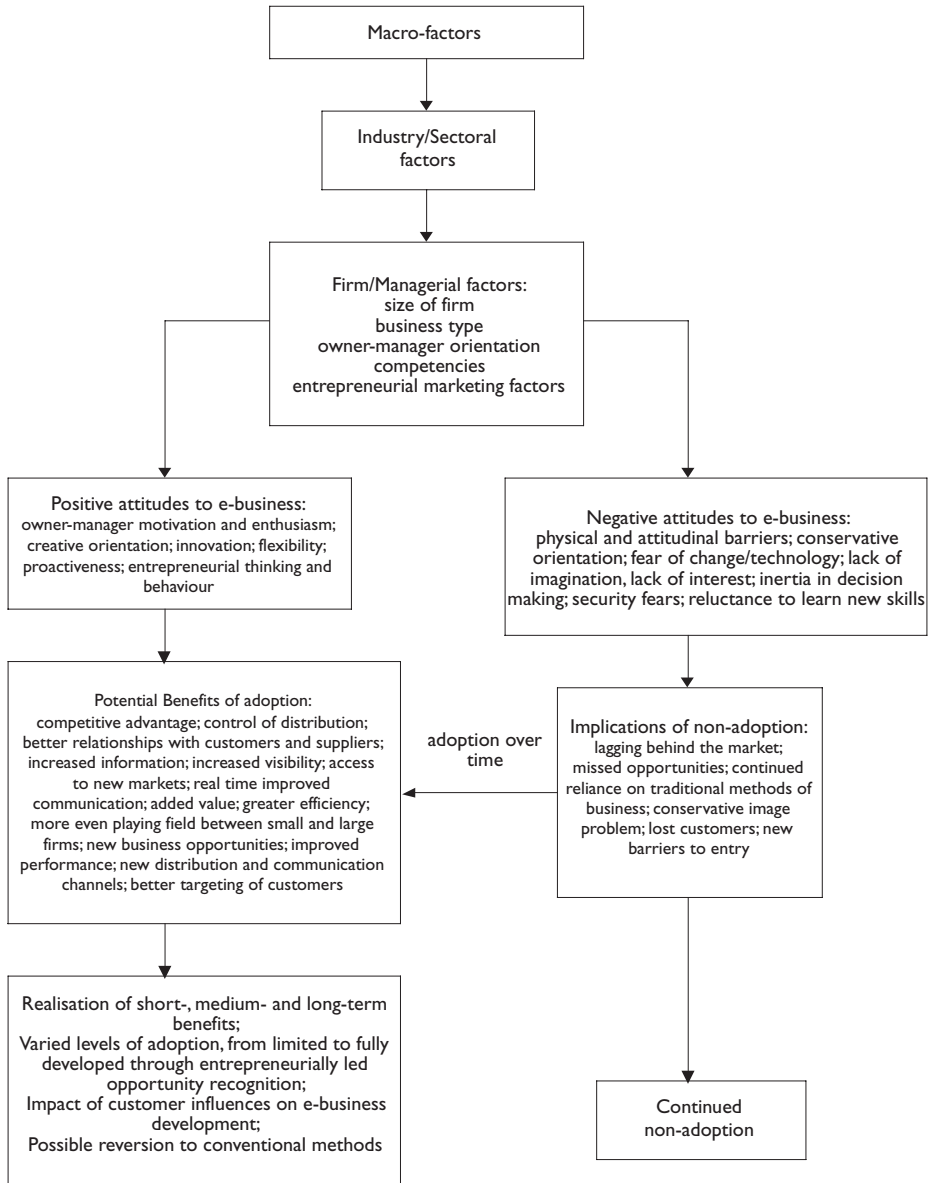


Figure 2. Revised Conceptual Model of Small Firm E-business Development

results indicated a variety of attitudes, from the outright dismissal of e-business, to a ‘wait and see approach’, through to the strategic integration of e-business as part of ongoing business development. The lifestyle orientation was found to affect the degree to which e-business was developed, with some firms only prepared to embrace it to a certain level. The entrepreneurial small firm views e-business as a natural extension of doing business generally. Some firms were stronger at utilizing their business and personal contact networks rather than

development and exploitation of e-business competencies. Being able to successfully combine the hard technical skills alongside the often softer entrepreneurial marketing competencies was identified as a key factor in small firm e-business development. Industry-specific and customer-related factors were also found to affect the situation. Customers in some industries were found to drive the innovation while in others the customer actually resisted small firm attempts to develop e-business. The qualitative data collected generally supports the conceptual framework but a number of amendments are deemed necessary (Figure 2).

Although awareness of the benefits of e-business are commonplace, only the entrepreneurially oriented business, both within and outside the software training industry, have embraced it wholeheartedly as a fully integrated business function. Some businesses have developed it to a certain level, while others have actually reverted to more conventional means. E-business development is determined by industry- and customer-level factors, but the ultimate decision is made by the owner-manager of the small firm. The realized benefits are short term and longer term in nature.

This research has also shown that, while exploratory qualitative techniques do uncover many relevant factors, there is also a need for a longer-term assessment of e-business development. Longitudinal data collection may uncover changing attitudes towards e-business, given the dynamic nature of the marketplace. Future quantitative research should examine the relationship between owner-manager orientation and e-business development, specifically examining the impact of lifestyle and entrepreneurial factors. Large-scale survey work may uncover additional industry differences; for example, those firms in the service sector where face-to-face customer contact has been crucial in maintaining business growth may offer difference experiences to information technology businesses. Issues such as competitive advantage and competency development also need further investigation.

References

- Abell, W. and Lim, L. (1996) 'Business Use of the Internet in New Zealand: An Exploratory Study', URL (consulted August 2000): <http://www.scu.edu.au/ausweb96/business/abell/paper.htm>
- Bell, J. D. (1995) 'The Internationalization of Small Computer Software Firms', *European Journal of Marketing* 29(8): 60–75.
- Berryman, E. (1999) 'Getting On With the Business of E-Business', URL (consulted August 2000): <http://e-business.pwcglobal.com>
- Blackburn, R. and Athayde, R. (2000) 'Making the Connection: The Effectiveness of Internet Training in Small Business', *Education and Training* 42(4–5): 289–99.
- Blackler, F. (1995) 'Knowledge, Knowledge Work and Organisations, An Overview and Interpretation', *Organisation Studies* 16(6): 1021–46.
- Bolton, J. E. (1971) *Report of a Committee of Enquiry on Small Firms*. London: HMSO.
- Boone, C., De Brabander, B. and Hellemans, J. (2000) 'Research Note: CEO Locus of Control and Small Firm Performance', *Organisation Studies* 21(3): 641–6.
- Boyatzis, R. E. (1982) *The Competent Manager: A Model for Effective Performance*. New York: Wiley.
- Brown, C. (2005) 'Subjectivity in Innovation Management of SMEs', paper presented at

- the 10th Annual Research Symposium of the Academy of Marketing Special Interest Group on Entrepreneurial and Small Business Marketing, University of Southampton, 5–7 January.
- Bryman, A. and Burgess, R. G. (1995) 'Developments in Qualitative Data Analysis: An Introduction', in A. Bryman and R. G. Burgess (eds) *Analysing Qualitative Data*. London: Routledge.
- Buchanan, D. and Body, D. (1992) *The Expertise of the Change Agent: Public Performance and Backstage Activity*. New York: Prentice Hall.
- Cabinet Office (1999) 'E-commerce@its.best.uk', The Performance and Innovation Unit Report, London.
- Carr, P. (2000) *The Age of Enterprise: The Emergence and Evolution of Entrepreneurial Management*. Dublin: Blackhall.
- Carson, D. (1990) 'Some Exploratory Models for Assessing Small Firms' Marketing Performance: A Qualitative Approach', *European Journal of Marketing* 24(11): 1–51.
- Carson, D. (1993) 'A Philosophy for Marketing Education in Small Firms', *Journal of Marketing Management* 9(2): 189–204.
- Carson, D. (2004) 'Toward a Research Agenda', report to the Special Interest Group Meeting of the Academy of Marketing SIG on Entrepreneurial and Small Business Marketing, University of Stirling, January.
- Carson, D. and Gilmore, A. (2000) 'SME Marketing Management Competencies', *International Business Review* 9(3): 363–82.
- Carson, D. and Hill, J. (1992) 'Marketing Education for Entrepreneurs', in *Proceedings of the International Council for Small Business, 37th World Conference, Toronto, June*, pp. 607–31.
- Carson, D., Cromie, S., McGowan, P. and Hill, J. (1995) *Marketing and Entrepreneurship in SMEs: An Innovative Approach*. London: Prentice Hall.
- Chaston, I. (2001) 'The Internet and E-Commerce: An Opportunity to Examine Organisational Learning in Progress in Small Manufacturing Firms?', *International Small Business Journal* 19(2): 13–30.
- Chaston, I., Badger, B., Mangles, T. and Sadler-Smith, E. (2003) 'Relationship Marketing, Knowledge Management Systems and E-Commerce Operations in Small UK Accountancy Practices', *Journal of Marketing Management* 19(1–2): 109–29.
- Chisnall, P. M. (1986) *Marketing Research*. Maidenhead: McGraw-Hill.
- Churchill, G. A. (1992) *Basic Marketing Research*. London: Thomson Learning.
- Clarke, R. (1997) 'What's Holding Up EC in Australia?', URL (accessed February 2003): <http://www.anu.edu.au/people/Roger.Clarke/EC/Impeds97.html>
- Collinson, E. and Shaw, E. (2001) 'Entrepreneurial Marketing: A Historical Perspective on Development and Practice', *Management Decision* 39(12): 1157–63.
- Colombo, M. G. (2001) 'Technology-Based Entrepreneurs: Does Internet Make a Difference?', *Small Business Economics* 16(3): 177–90.
- Courtney, H. (2001) 'Making the Most of Uncertainty', *McKinsey Quarterly* 4, URL (accessed February 2003): <http://www.mckinseyquarterly.com>.
- Coviello, N. and McAuley, A. (1999) 'Internationalisation and the Smaller Firm: A Review of Contemporary Empirical Research', *Management International Review* 39(3): 223–40.
- Covin, J. G. (1991) 'Entrepreneurial Versus Conservative Firms: A Comparison of Strategies and Performance', *Journal of Management Studies* 28(5): 439–61.
- Dandridge, T. (2000) 'High-Tech Potential? An Exploratory Study of Very Small Firms' Usage of the Internet', *International Small Business Journal* 18(2): 81–91.
- Daniel, E. (2003) 'An Exploration of the Inside-Out Model: E-Commerce Integration in UK SMEs', *Journal of Small Business and Enterprise Development* 10(3): 233–49.
- Daniel, E., Wilson, H. and Myers, A. (2002) 'Adoption of E-Commerce by SMEs in the UK', *International Small Business Journal* 20(3): 253–70.

- Day, G. S. and Wensley, R. (1988) 'Assessing Advantages: A Framework for Diagnosing Competitive Superiority', *Journal of Marketing* 52: 1–20.
- Department of Trade and Industry (2002) 'Small and Medium Enterprise (SME) Statistics for the UK 2001', URL (accessed December 2002): <http://www.sbs.gov.uk/default.php?page=/statistics/default.php>
- Doole, I. and Lowe, R. (1999) *International Marketing Strategy*. London: International Thomson Business Press.
- Drew, S. (2002) 'E-Business Research Practice: Towards an Agenda', *Electronic Journal on Business Research Methods* 1(1): 18–26.
- Drew, S. (2003) 'Strategic Uses of E-Commerce by SMEs in the East of England', *European Management Journal* 21(1): 79–88.
- Durkin, M. and McGowan, P. (2001a) "'Net Effect": Views from the Periphery: Exploring the Role and Importance of the Internet on Marketing Activity in Entrepreneurial Firms', *Irish Marketing Review* 14(1): 15–25.
- Durkin, M. and McGowan, P. (2001b) 'Exploring a More Complete Competency Spectrum in Entrepreneurial Small Firm Internet Marketing', paper presented at the Marketing and Entrepreneurship track at the AMA Summer Educators Conference, August, Washington DC.
- Ellsworth, J. H. and Ellsworth, M. V. (1995) *The Internet Business Book*. New York: John Wiley.
- Ellsworth, J. H. and Ellsworth, M. V. (1996) *Marketing on the Internet: Multimedia Strategies for the WWW*. New York: John Wiley.
- Evans, P. B. and Wurster, B. S. (1997) 'Strategy and the New Economics of Information', *Harvard Business Review* 75(5): 70–83.
- Fillis, I. (2000) 'An Examination of the Internationalisation Process of the Smaller Craft Firm in the United Kingdom and the Republic of Ireland', PhD thesis, Stirling, Scotland, Department of Marketing, University of Stirling.
- Fillis, I. (2001) 'Small Firm Internationalisation: An Investigative Survey and Future Research Directions', *Management Decision* 39(9): 767–83.
- Fillis, I. (2002) 'An Andalusian Dog or a Rising Star: Creativity and the Marketing/Entrepreneurship Interface', *Journal of Marketing Management* 18(3–4): 379–95.
- Fuller, T. and Jenkins, A. (1995) 'Public Intervention in Entrepreneurial Innovation and Opportunism: Short Cuts or Detours to the Information Superhighway?', in *Proceedings of the Babson Entrepreneurship Conference*. London.
- Gaglio, C. M. (2004) 'The Role of Mental Simulations and Counterfactual Thinking in the Opportunity Identification Process', *Entrepreneurship Theory and Practice* 28(6): 533–52.
- Gilmore, A. and Carson, D. (1996) 'Management Competencies for Services Marketing', *Journal of Services Marketing* 10(3): 39–57.
- Gilmore, A., Carson, D., Grant, K., Pickett, B. and Lancy, R. (2000) 'Managing Strategic Change in Small and Medium-Sized Enterprises: How Do Owner-Managers Hand Over Their Networks?', *Strategic Change* 9(7): 415–26.
- Goffee, R. and Scase, R. (1995) *Corporate Realities: The Dynamics of Large and Small Organisations*. London: Routledge.
- Gronroos, C. (1997) 'Value-Driven Relational Marketing: From Products to Resources and Competencies', *Journal of Marketing Management* 13(5): 407–19.
- Hackley, C. E. and Mumby-Croft, R. (1998) 'Marketing Entrepreneurs as Creative Agents in a Social Matrix: Towards a Theoretical Framework for Marketing Entrepreneurship', in B. Hulbert, J. Day and E. Shaw (eds) *Academy of Marketing/UIC/AMA Symposia on the Marketing and Entrepreneurship Interface, Proceedings 1996–1998*, pp. 505–13. Northampton: Faculty of Management and Business, Nene University College.

- Hamill, J. and Gregory, K. (1997) 'Internet Marketing in the Internationalisation of UK SMEs', *Journal of Marketing Management* 13(1): 9–28.
- Hobley, C. (2001) 'Just Numbers: Numbers on Internet Use, Electronic Commerce, IT and Related Figures for the European Community, January 2001', European Commission's Electronic Commerce Team, URL (accessed December 2001): <http://www.drecommerce.com/justnumbers/>
- Hodson, M. and Whitelock, J. (2003) 'Owner-Managers, Identity and Innovation in Adoption and Early Stages of Internet Implementation in SMEs', paper presented to the Business Innovation in the Knowledge Economy Conference, Warwick, 1 July.
- Hofer, C. W. and Schendel, D. (1978) *Strategy Formulation: Analytical Concepts*. St Paul, MN: West Publishing.
- Hogarth-Scott, S., Watson, K. and Wilson, N. (1996) 'Do Small Firms Have to Practise Marketing to Survive and Grow', *Marketing Intelligence and Planning* 14(1): 6–18.
- Hooley, G., Broderick, A. and Moller, K. (1998) 'Competitive Positioning and the Resource-Based View of the Firm', *Journal of Strategic Marketing* 6(2): 97–115.
- Ihlstrom, C. and Nilsson, M. (2003) 'E-Business Adoption by SMEs: Prerequisites and Attitudes of SMEs in a Swedish Network', *Journal of Organizational Computing and Electronic Commerce* 13(3–4): 211–23.
- Jennings, P. and Beaver, G. (1997) 'The Performance and Competitive Advantage of Small Firms: A Management Perspective', *International Small Business Journal* 15(2): 63–75.
- Jones, C., Hecker, R. and Holland, P. (2003) 'Small Firm Internet Adoption: Opportunities Forgone, A Journey Not Begun', *Journal of Small Business and Enterprise Development* 10(3): 287–97.
- Jutla, D., Bodorik, P. and Dhaliwal, J. (2002) 'Supporting the E-Business Readiness of Small and Medium-Sized Enterprises: Approaches and Metrics', *Internet Research: Electronic Networking Applications and Policy* 12(2): 139–64.
- Kalakota, R. and Whinston, A. (1997) *Electronic Commerce: A Manager's Guide*. Reading, MA: Addison-Wesley.
- Katsikeas, C. S. and Morgan, R. E. (1994) 'Differences in Perceptions of Exporting Problems Based on Firm Size and Export Market Experience', *European Journal of Marketing* 28(5): 17–35.
- Kelly, K. (1998) *New Rules for the New Economy: 10 Radical Strategies for the Connected World*. New York: Penguin.
- Keogh, W., Jack, S. L., Bower, J. and Crabtree, E. (1998) 'Small, Technology-based Firms in the UK Oil and Gas Industry: Innovation and Internationalisation Strategies', *International Small Business Journal* 17(1): 57–68.
- Kinney, T. C. and Taylor, J. R. (1987) *Marketing Research: An Applied Approach*. New York: McGraw-Hill.
- Kleindl, B. (2000) 'Competitive Dynamics and the New Business Models for SMEs in the Virtual Marketplace', *Journal of Developmental Entrepreneurship* 5(1): 73–85.
- Knight, G. and Cavusgil, S. T. (1996) 'The Born Global Firm: A Challenge to Traditional Internationalisation Theory', in S. T. Cavusgil and T. K. Madsen (eds) *Advances in International Marketing*, 8, pp. 11–26. London: JAI Press.
- Lauder, G. and Westall, A. (1997) 'Small Firms Online', Commission on Public Policy on British Business, No. 6.
- Lawson, R., Alcock, C., Cooper, J. and Burgess, L. (2003) 'Factors Affecting Adoption of the Electronic Commerce Technologies by SMEs: an Australian Study', *Journal of Small Business and Enterprise Development* 10(3): 265–76.
- Leadbeater, C. (2000) *Living on Thin Air: The New Economy*, London: Penguin.

- Levitt, T. (1983) 'The Globalisation of Markets', *Harvard Business Review* 61(3, May–June): 2–11.
- McAuley, A. (1999) 'Entrepreneurial Instant Exporters in the Scottish Arts and Crafts Sector', *Journal of International Marketing* 7(4): 67–82.
- McKay, J., Prananto, A. and Marshall, P. (2000) 'E-Business Maturity: The SOG E-Model', URL (accessed December 2000): <http://www2.fit.edu.au/ACIS2000>
- Maclaran, P. and McGowan, P. (1999) 'Managing Service Quality for Competitive Advantage in Small Engineering Firms', *International Journal of Entrepreneurial Behaviour and Research* 5(2): 35–47.
- Middleton, B. and Long, G. (1990) 'Marketing Skills: Critical Issues in Marketing Education and Training', *Journal of Marketing Management* 5(3): 325–43.
- Miles, M. P., Covin, J. G. and Heeley, M. B. (2000) 'The Relationship Between Environmental Dynamism and Small Firm Structure, Strategy and Performance', *Journal of Marketing Theory and Practice* 8(2): 63–78.
- Morris, M. H. and Lewis, P. S. (1995) 'The Determinants of Entrepreneurial Activity – Implications for Marketing', *European Journal of Marketing* 29(7): 31–48.
- O'Donnell, A., Gilmore, A., Carson, D. and Cummins, D. (2002) 'Competitive Advantage in Small to Medium-Sized Enterprises', *Journal of Strategic Marketing* 10(3): 205–23.
- O'Keefe, R.M., O'Connor, G. and Kung, H.-J. (1998) 'Early Adopters of the Web as a Retail Medium: Small Company Winners and Losers', *European Journal of Marketing* 32(7–8): 629–43.
- Patton, M. Q. (1980) 'Making Methods Choices', *Evaluation and Program Planning* 3(4): 219–28.
- Poon, S. (1998) 'Small Business Internet Commerce: A Study of the Australian Experience', PhD thesis, School of Information Management and Systems, Monash University, Melbourne.
- Poon, S. and Swatman, P. M. C. (1997) 'Small Business Use of the Internet: Findings from Australian Case Studies', *International Marketing Review* 14(5): 385–402.
- Poon, S. and Swatman, P. M. C. (1999) 'An Exploratory Study of Small Business Internet Commerce Issues', *Information and Management* 35(1): 9–18.
- Porter, M. (1985) *Competitive Advantage*. New York: The Free Press.
- Putterill, L. G. (2003) 'The E-Commerce Race: Another Aesop's Fable?', paper presented at Business Innovation in the Knowledge Economy, IBM Warwick, July.
- Quayle, M. (2002) 'E-Commerce: The Challenge for UK SMEs in the Twenty-First Century', *International Journal of Operations and Production Management* 22(10): 1148–61.
- Quelch, J. A. and Klein, L. R. (1996) 'The Internet and International Marketing', *Sloan Management Review* 37(3): 60–75.
- Ramsey, E., Ibbotson, P., Bell, J. and Gray, B. (2003) 'E-Opportunities of Service Sector SMEs: An Irish Cross-Border Study', *Journal of Small Business and Enterprise Development* 10(3): 250–64.
- Roth, K. and Morrison, A. J. (1992) 'Business-Led Competitive Strategy: A Contingency Link to Internationalisation', *Journal of Management* 18(3): 473–87.
- Scase, R. and Goffee, R. (1980) *The Real World of the Business Owner*. London: Croom Helm.
- Schein, E. H. (1987) *The Clinical Perspective in Fieldwork*. Sage, CA: Newbury Park.
- Schuppel, J., Muller-Stewwen, G. and Gomez, P. (1998) 'The Knowledge Spiral', in G. von Krogh, J. Roos and D. Kleine (eds) *Knowing in Firms*. London: Sage.
- Shearman, C., Easton, G., Burrell, G. and Rothschild, R. (1993) *Managers and Competition*. Oxford: Blackwell.
- Smyth, M. and Ibbotson, P. (2001) 'Internet Connectivity in Ireland', a joint report by

- the Bank of Ireland and the University of Ulster, URL (consulted December 2001): http://www.bankofireland.co.uk/whats_new/item.php?whatsnew_id=8
- Sterne, J. (1995) *World Wide Web Marketing: Integrating The Internet Into Your Marketing Strategy*. New York: Wiley.
- Sterrett, C. and Shah, A. (1998) 'Going Global on the Information Superhighway', *SAM Advanced Management Journal* 63(1): 43–8.
- Stokes, D. (2002) 'Entrepreneurial Marketing in the Public Sector: The Lessons of Head-teachers as Entrepreneurs', *Journal of Marketing Management* 18(3–4): 379–96.
- Storey, D. J. (1997) *Understanding the Small Business Sector*. London: International Thompson Business Press.
- Stroud, D. (1998) *Internet Strategies: A Corporate Guide to Exploiting the Internet*. London: Macmillan Press.
- Tapscoff, D. (1996) *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*. New York: McGraw-Hill.
- Taylor, C. (2001) 'Windows of Opportunity', *People Management* 7(5): 32–6.
- Tetteh, E. and Burn, J. (2001) 'Global Strategies for SME-business: Applying the SMALL Framework', *Logistics Information Management*, 14 (1–2): 171–80.
- Thong, J. Y. L. (2001) 'Resource Constraints and Information Systems Implementation in Singaporean Small Businesses', *Omega: The International Journal of Management Science* 29(2): 143–56.
- Tse, T. and Soufani, K. (2003) 'Business Strategies for Small Firms in the New Economy', *Journal of Small Business and Enterprise Development* 10(3): 306–20.
- Wai-Pun, M., Farhoomand, A. and Tuunainen, V. (1997) 'A Preliminary Investigation of Business Opportunities on the Internet in Asia Pacific', in *Proceedings of the 1st Pacific-Asia Workshop on Electronic Commerce, 5th April, Queensland University of Technology, Brisbane*.
- Walczuch, R., Van Braven, G. and Lundgren, H. (2000) 'Internet Adoption Barriers for Small Firms in The Netherlands', *European Management Journal* 18(5): 561–72.
- Wallace, P. (2000) 'Just Wait for the Gold Rush to End', *New Statesman* (21 February): 8–9.
- Webb, B. and Sayer, R. (1998) 'Benchmarking Small Companies on the Internet', *Long Range Planning* 31(6): 815–27.
- Weiber, R. and Kollman, T. (1998) 'Competitive Advantages in Virtual Markets: Perspectives of "Information-based Marketing" in Cyberspace', *European Journal of Marketing* 32(7–8): 603–15.
- Whitely, D. (2000) *E-commerce: Strategy, Technologies and Applications*. London: McGraw-Hill.
- Wynarczyk, P. R., Storey, D., Short, H. and Keasey, K. (1993) *The Managerial Labour Market in Small and Medium Sized Enterprises*. London: Routledge.
- Zineldin, M. (2000) 'Beyond Relationship Marketing: Technologicalship Marketing', *Marketing, Intelligence and Planning* 18(1): 9–23.
- Zwass, V. (1994) 'Electronic Commerce: Structures and Issues', *International Journal of Electronic Commerce* 1(1): 3–23.

IAN FILLIS is Lecturer in Marketing in the Department of Marketing, Faculty of Management at the University of Stirling, Scotland. He holds a BSc in Civil Engineering from the University of Glasgow, an MA in Marketing from the University of Ulster and a PhD on the internationalization process of the small firm from the University of Stirling. His main research interests focus on issues at the Marketing and Entrepreneurship interface such as creativity and innovation, in addition to exploring international marketing and export related phenomena. He

is an active member of the Academy of Marketing/University of Illinois at Chicago Marketing and Entrepreneurship Special Interest Group. Please address correspondence to: Dr Ian Fillis, Department of Marketing, Faculty of Management, University of Stirling, Stirling FK9 4LA, UK. [email: i.r.fillis@stir.ac.uk]

BEVERLY WAGNER is Lecturer in Marketing in the Department of Marketing at the University of Stirling, Scotland. Since 1996, she has been involved in research into formation and implementation of business alliances in the Drinks and Packaging sector, also in the Microelectronics and Oil and Gas Industries. Her PhD thesis is entitled 'Progressive Relationship Development in Supply Chain Alliances: An Empirical Study' and research interests include customer-supplier relationships, inter-organizational cooperation, logistics and supply chain management.

Développement du commerce électronique

Une étude exploratoire de la petite entreprise

Ian Fillis et Beverly Wagner
Université de Stirling, R.-U.

S'appuyant sur l'étude actuellement en cours du commerce électronique et de la petite entreprise, le présent article est un compte rendu de la documentation afférente au thème et à la formulation d'un schéma ou cadre conceptuel du développement du commerce électronique. Y sont examinés les facteurs du secteur industriel, de l'entreprise et de la gestion au niveau macroéconomique, ainsi que les attitudes accusées envers le commerce électronique et les avantages que rapporte son développement et les obstacles auxquels il est confronté. Cette étude se déroule dans un contexte qui adopte le paradigme de l'interface Marketing/Entrepreneuriat en tant qu'outil permettant de comprendre de quelle façon le regroupement des compétences formelles et informelles peut devenir un avantage concurrentiel. À cet effet, il a été procédé à une série d'entrevues très poussées auprès de directeurs d'entreprises dans la région centrale de l'Écosse. Les résultats en découlant indiquent que les différents facteurs industriels, l'influence des clients, l'importance de l'orientation entrepreneuriale du preneur de décision clé, et le niveau du développement des compétences au sein de l'organisation, concourent essentiellement à la qualité du développement du commerce électronique réalisé. Il est aussi mentionné qu'un certain nombre de petites entreprises n'adoptent le commerce électronique que dans une certaine mesure, et vont même jusqu'à revenir à des pratiques commerciales plus traditionnelles.

Mots clés: obstacles; compétences; commerce électronique; entrepreneuriat; marketing; méthode qualitative

Desarrollo del comercio electrónico

Una investigación exploratoria de la pequeña empresa

Ian Fillis y Beverly Wagner
Universidad de Stirling, RU

Sobre la base de la investigación actual del comercio electrónico y la pequeña empresa, este artículo presenta una reseña de la literatura referente al tema y la formulación de un

esquema conceptual del desarrollo del comercio electrónico. Se examinan los factores del sector industrial, empresa y gestión a nivel macro junto con las actitudes hacia el comercio electrónico y los beneficios y barreras relativos a su desarrollo. La investigación se sitúa dentro de un marco que adopta el paradigma de interfaz marketing-iniciativa empresarial como una ayuda para entender cómo las combinaciones de competencias formales e informales contribuyen a una ventaja competitiva. Se llevó a cabo una serie de entrevistas en profundidad con directores de empresa en la región central de Escocia. Los resultados indican que los factores de la industria, las influencias de los clientes, el grado de orientación empresarial del responsable de adoptar las decisiones y el nivel de desarrollo de competencias dentro de la organización desempeñan papeles importantes en el logro del nivel de desarrollo del comercio electrónico. Algunas pequeñas empresas sólo adoptan el comercio electrónico hasta cierto nivel e incluso vuelven a las prácticas comerciales más convencionales.

Palabras clave: barreras; competencias; comercio electrónico; iniciativa empresarial; marketing; método cualitativo

Die Entwicklung des E-Business

Eine explorative Untersuchung des Kleinbetriebs

Ian Fillis und Beverly Wagner

Universität von Stirling, Großbritannien

Auf der Grundlage vorhandener Forschung zum E-Business und Kleinbetrieben wird in diesem Beitrag eine Übersicht über die Literatur und die Formulierung eines Konzeptrahmens zur Entwicklung des E-Business dargelegt. Makroebene, Industriesektor, Betriebs- und Geschäftsleitungsfaktoren werden zusammen mit Einstellungen zum E-Business sowie den Vorzügen und Hindernissen für dessen Entwicklung untersucht. Die Forschung ist in einem Rahmen angeordnet, der das Marketing-/Unternehmens-Schnittstellenparadigma als Hilfe zur Erläuterung dafür einsetzt, wie Kombinationen von formalen und formlosen Kompetenzen zum Wettbewerbsvorteil beitragen. Es wurden eine Reihe von Tiefeninterviews mit Firmenleitern in Zentralschottland durchgeführt. Die Ergebnisse weisen darauf hin, dass Industriefaktoren, Beeinflussung durch Kunden, der Grad der unternehmerischen Ausrichtung des Hauptentscheidungsträgers und die Ebene der Kompetenzentwicklung innerhalb einer Organisation wichtige Rollen für den erzielten Grad in der Entwicklung des E-Business spielen. Desweiteren machen sich manche Kleinbetriebe das E-Business nur zu einem gewissen Grad zueigen und kehren dann zu konventionelleren Geschäftspraktiken zurück.

Schlagwörter: Hindernisse; Kompetenzen; E-Business; Unternehmerschaft; Marketing; qualitative Methode