Exploring SME Internet Adoption: Towards a Contingent Model

MARGI LEVY AND PHILIP POWELL

Abstract

Internet adoption, in both large and small firms (SMEs), is promoted as a means to improve competitiveness. The European Union and various national governments encourage Internet adoption predicated upon an ‘adoption ladder’ or stages model. This model only requires that the business starts on the bottom rung of the ladder for upward progression to then begin. There is, however, little research that supports such a stages model. Therefore, this paper questions current thinking that small firms progress through a ‘stages of growth’ model in their use of the Internet. Twelve SME cases are investigated. Outcomes suggest that the majority only perceive value in email and possibly a marketing website. However, some SMEs see strategic potential and will invest in e-business. The paper suggests that owners’ recognition of the business value of the Internet combined with their attitude to business growth are key factors in determining Internet adoption strategies. Thus, SMEs will aim for specific adoption strategies to satisfy these requirements rather than follow a stages model. A ‘transporter’ model is developed to reflect the drivers identified and its implications discussed.

Keywords: Internet, SME, models

INTRODUCTION

This paper investigates Internet adoption strategies in established small and medium-sized enterprises (SMEs). Extant theory suggests that businesses reap the greatest benefits from the Internet by integrating business systems and changing business processes. Indeed, such integration is the final outcome of growth models that postulate businesses move in stages from one use to another. However, there is little evidence that SMEs do more than develop websites and adopt email. This paper uses case studies of 12 SMEs to explore the adoption of Internet technologies. It considers the strategic issues limiting Internet adoption. A strategic model is developed, which suggests the criteria for adoption are dependent upon the owners’ attitude to growth. This leads to the development of a contingent (or ‘transporter’) model rather than a ‘stages’ model of Internet adoption. This research has important policy implications since, in the EU and in the UK, government SME e-business adoption facilitation is predicated upon an adoption ‘ladder’. If no ladder or stages model is appropriate for SME then governmental encouragement to move from one level to another is misguided. The transporter model identifies four roles for Internet technologies in SMEs – brochureware, support, opportunity and development. These are primarily driven by business growth planning and perceived Internet value.

The paper first investigates the current state of knowledge concerning SMEs’ adoption of the Internet. Then it describes the research approach and gives background to the cases. This leads to consideration of competitiveness, growth and Internet adoption in SMEs. The transporter model is developed and its implications discussed.

INTERNET ADOPTION AND SMEs

In essence, the Internet is a source of information and data. However, the value of the data depends on the provider, and its relevance, timeliness, accuracy and retrievability. SMEs believe that the Internet will enable them to reach wider geographical markets and increase customers (Lunati 2000). Precise Internet benefits are as yet unclear, but speculation suggests the greatest benefits occur under full supply chain integration (Currie 2000). Implementation is thought to progress through several stages and evolves as businesses recognize the benefits. Costello and Tuchen (1998) suggest firms first publish information on the Web, then
interact with customers and finally processes are transacted electronically. A further stage of integration focuses on full supply chain integration (Currie 2000). While Internet systems are necessary to develop these processes, value arises once businesses use the knowledge and experience to produce outputs accessible through the Internet (Willcocks et al. 2000). The potential for transformation is thought to emerge once businesses recognize the need to reorganize processes and focus on core competencies (Figure 1). Initially firms use some basic Internet tools such as web pages, before moving to stage 2 – transacting business. Many businesses do not progress further, as they achieve no benefits.

Moving to Stage 2 may cause difficulties for SMEs due to resource constraints: ICT is only introduced when there is a business imperative (Levy et al. 2001). At Stage 3 firms recognize that changes to processes, structures and skills are necessary to exploit the technology. Stage 4 is only reached once they recognize that the business can transcend its existing products and use the Internet to develop new markets and products.

An early study of SME Internet adoption finds SMEs followed a path similar to large firms (Poon and Swatman 1999). However, SMEs experience only three transformation stages, with integration of processes as the endpoint. This is only reached once SMEs identify benefits. However, this model does not allow for SMEs changing their business perspective. Innovative and entrepreneurial SMEs will change to take advantage of Internet opportunities (Levy et al. 2001). Thus, Poon and Swatman’s model is likely to be subsumed by Willcocks et al.’s.

In common with most large businesses, SMEs have embraced the use of email (Poon and Swatman 1999), with 90% of SMEs using it regularly a year after its introduction to the business (Chapman et al. 2000). There is evidence that many have also developed ‘brochureware’ websites. However, there is little research to indicate that many SMEs have integrated their websites with their back-office systems. While many see value in email there is scant evidence of decisions to invest in internal networks or e-business systems (Keindl 2000).

One Internet adoption model (Mehrtens et al. 2001) suggests there are three main factors that influence SMEs’ decisions – perceived benefits, organizational readiness and external pressures. There are three aspects to perceived benefit. First, efficiency benefits arise from improved communication using email; this is also identified by Poon (2000). Second, effectiveness benefits arise from the ability to gather research and competitor information, also identified by Poon. Third, use of the Internet presents a modern image and improves SME promotion.

Organizational readiness for Internet adoption is personified in the SME owner. SMEs do not see...
Internet adoption as an IT issue, but as a business one. SMEs that are attracted to Internet commerce tend to be more entrepreneurial, risk takers, innovative and invariably, creative (Poon and Swatman 1999). A second organizational readiness factor is the requirement for SMEs to have adequate IS in place to access the Internet.

The final factor, external pressure, is primarily from customers, though suppliers and employees are also influencing factors. While Poon (2000) recognizes that customer pressure is influential, there is evidence that a lack of customer use is an inhibitor, particularly of email (Sillence et al. 1998).

There is little evidence of business strategy driving Internet adoption among SMEs. However, strategic commitment is critical in Singaporean SMEs (Kowtha and Choon 2001). Indeed, Internet adoption is faster when SMEs recognize a business need (Kendall et al. 2001).

Storey (1994) is critical of stages of growth models being applied to SMEs. He suggests that many firms do not move beyond the first stage. As they have no desire to progress, a stages model, which implies movement to the next stage as the result of a crisis or other driver, is irrelevant. Instead, Storey proposes that SME growth is achieved by interaction of the characteristics of the entrepreneur, the firm and its context.

Cragg and King (1998) agree with Storey that the major factor driving growth in SMEs is owner enthusiasm. They investigate change in SME IS use over four years, revealing that hardware had not been updated by 45% of their sample, while others prefer to add to, rather than replace, existing hardware. Little change occurred in IS planning, although end-users were more involved in system selection. Some SMEs made IS/IT investments to improve operational effectiveness. However, any competitive advantage achieved was accidental, not planned. The major factor in increasing investment in IS/IT is owner enthusiasm.

Cragg and Zinatelli (1995) researched 18 manufacturing SMEs over 8 years. A lack of trust of external IS sources inhibited ICT growth and evolution, as SMEs generally do not have in-house IS skills. Limited financial resources are also cited. Again, it is the interest and enthusiasm of owners that primarily contributes to IS adoption. Hence it is unlikely that time and greater knowledge of ICT will contribute to the decision to develop Internet solutions.

Most of the research on SMEs concerns behavioural and strategic issues. However, some of the issues identified by Storey (1994) are structural. That is, the structure of the firm, industry groupings, clustering, IS/IT suppliers and subcontracting networks may act as critical drivers or inhibitors of growth. Porter (1980) is archetypal of the structuralist school of competitive advantage. He argues that issues such as clustering may determine firm success. Firms that locate in a region where many similar firms are based will gain advantages over firms in remote regions. Similarly, there may be differences in SME success depending on their industrial sector, regardless of clustering. Other potential drivers include the role of IS/IT suppliers and the extent of formal subcontracting networks to which an SME belongs.

In a study of 43 SMEs Levy et al. (2002) find that there is little difference in ICT adoption behaviour between manufacturing and retail sectors and service sectors. Clustering may impact upon decisions for innovative adoption, however decisions to adopt may be purely because of industry drivers, particularly in the case of automotive manufacturers. Strategic intent is also thought to be a key driver (Storey 1994). However, Levy et al. (2002) find that those firms that sell existing products into the same markets or sell new products to the same market primarily use ICT to improve efficiency. It is only those SMEs that are looking for new markets or diversifying their business that consider innovative use of ICT.

Thus, current research suggests that there are a number of factors that influence Internet adoption and development in SMEs. Business need and perceived benefits figure prominently in SME Internet development. However, despite their popularity in early IS adoption research and their intuitive appeal, there is little evidence that SMEs follow a ‘stages of growth’ model for Internet adoption. A contingent model that involves ‘transportation’ from one use to another without the implicit idea of growth may be more useful for understanding SME Internet adoption.

One explanation for this lack of evidence is the propensity of past research to consider SMEs as homogenous group. However, heterogeneity is evident in much SME research. For example, Levy et al. (2001) demonstrate that there are four different adoption approaches to information and communication technologies (ICT) use depending upon customer dominance and strategic focus. Owner attitude and business strategy influence ICT adoption, as for Internet adoption. Hence, this research seeks to determine whether SME Internet adoption strategies are contingent on factors such as owners’ attitude, business strategy, perceived benefits and customer influence.

**METHOD**

This research seeks to identify whether approaches to Internet adoption are dependent upon contingent variables. Therefore, it is necessary to understand the reasons for SME Internet adoption. Case studies are a useful approach in achieving this objective, as it is possible to pose reflective questions. Additionally, case study research is effective when theory is relatively underdeveloped (Eisenhardt 1989). In particular, when the boundaries of the research are not clear,
there is a need to investigate the issue within a real life context, drawing on the views of a number of sources (Yin 1994). Case study research provides a means to review theory and practice iteratively. Multiple cases ensure that common patterns are identified rather than generalized from what might be chance occurrences (Eisenhardt 1989). Interviews are a key feature of successful cases.

The case studies employed here are all SMEs in the UK West Midlands. SMEs are chosen according to the EU definition of firms with 10–250 employees, though the majority of SMEs in this study are ‘small’ with 10–99 employees. All are established firms that have been trading for a number of years. There is no attempt to control for industrial sector, since it has been shown that for ICT adoption the sector has little influence (Levy et al. 2001). While most of the case firms have been researched for a number of years as part of a larger research project investigating ICT use in SMEs, for the purposes of this paper semi-structured interviews lasting between one and two hours were held with SME owners to discuss approaches to Internet development. Interview reports were sent to the owners subsequently for validation and refinement. The issues are divided into four sections: business objectives, business strategy, competitive environment, and technology and e-business. The questioning on business objectives and strategy identifies whether different strategic approaches lead to differences in Internet adoption decisions. The competitive environment discussion enables consideration of the influence of customers, competitors and suppliers on Internet adoption. The questioning on technology and e-business provide a means of identifying the level of knowledge about the potential role of ICT and the Internet for the business and the way in which it relates to business strategy.

CASE ANALYSIS

Background to the Cases

The case research was carried out during the summer of 2001. The background to the firms is shown in Table 1. Most case firms are small, though two are micro firms, Equipment Hire Centre and Curtain Textile Co. Automotive Spring Manufacturer is, just, medium-sized. However, as Levy et al. (2001) find, size is not a determinant of ICT adoption, the owners’ knowledge of ICT and attitude to growth dominate.

GROWTH, COMPETITIVENESS AND THE INTERNET

The outcomes from the case interviews are summarized in Table 2. The analysis reviews the business strategy and attitude to growth of the owner. In most cases this is one of staying in existing markets with existing products. While some owners are looking for growth, there are a number that are in business for lifestyle reasons, which impacts on their strategic intent. Additionally, owners were asked about the business value of the Internet for their firm. This ranged from high future potential to many who saw little value. For example the owner of Curtain Textiles said: ‘I deal with major manufacturers of curtain materials, I’ve known them for years, and we talk on the phone. I don’t see that situation changing.’ However, the opposite view holds for the automotive spring manufacturer who has a clear

<table>
<thead>
<tr>
<th>Table 1. Background to case firms</th>
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<tbody>
<tr>
<td><strong>Firm</strong></td>
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<tr>
<td>Automotive Spring Manufacturer</td>
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<tr>
<td>CAD Service Co</td>
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<tr>
<td>Corporate Gift Co.</td>
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<tr>
<td>Curtain Textile Co.</td>
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<td>Equipment Hire Co.</td>
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<td>Garden Ceramics</td>
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<td>IT Services Co</td>
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<td>Oil Flow Co.</td>
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<td>Patent Attorneys</td>
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<tr>
<td>Polymer Resin Manufacturer</td>
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<tr>
<td>Reduced Power Co.</td>
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<td>Savoury Pie Manufacturer</td>
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Table 2. Classification of researches by the framework for agent-based business analysis

<table>
<thead>
<tr>
<th>Firm</th>
<th>Business strategy</th>
<th>Competitive influences</th>
<th>Future Internet potential</th>
<th>Internet technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Spring Manufacturer</td>
<td>Same products, new markets, double turnover</td>
<td>High rivalry Competition from overseas Customer pressure on price Customer dominance — high</td>
<td>Strong, enabling networks between customers and suppliers to develop</td>
<td>Internal and external</td>
</tr>
<tr>
<td>CAD Service Co.</td>
<td>Existing products into new market Seeking growth</td>
<td>Customer pressure on quality Would like to use, but customers resistant</td>
<td>External Interaction with customers</td>
<td>External</td>
</tr>
<tr>
<td>Corporate Gift Co.</td>
<td>New Products into new markets Seeking growth</td>
<td>High rivalry between firms Corporate customers pressure on price Critical to future development</td>
<td>Internal and external, used extensively Online sales available</td>
<td>Intranet under development</td>
</tr>
<tr>
<td>Curtain Textile Co.</td>
<td>Existing products into existing markets Lifestyle — not growth seeking</td>
<td>Suppliers influence product availability; no pressure from customers</td>
<td>External, but not used discontinued use Brochureware</td>
<td>External</td>
</tr>
<tr>
<td>Equipment Hire Centre</td>
<td>Existing products into existing markets Lifestyle — not growth seeking</td>
<td>Highly competitive industry Focus on quality</td>
<td>Not used Brochureware</td>
<td>Internal</td>
</tr>
<tr>
<td>Garden Ceramics</td>
<td>Existing products into existing markets Not looking for growth</td>
<td>Customers pressure on price</td>
<td>Not seen as important, but owner enjoys IT</td>
<td>External</td>
</tr>
<tr>
<td>IT Services Co.</td>
<td>Existing products into new markets Focus on survival</td>
<td>'must have' as others do</td>
<td>External and internal Brochureware</td>
<td>Email: Brochureware, Website: Brochureware, Network: LAN, E-business: Used extensively with customers, EDI: Used extensively with customers</td>
</tr>
<tr>
<td>Oil Flow Co.</td>
<td>New services into new markets Survival through diversification</td>
<td>Declining industry led to diversification: offering consultancy services Customer dominance — high</td>
<td>Not seen as important External Brochureware</td>
<td>Email: Brochureware, Website: Brochureware, Network: LAN, E-business: Used extensively with customers, EDI: Used extensively with customers</td>
</tr>
<tr>
<td>Patent Attorneys</td>
<td>Existing product into existing markets Not looking for growth</td>
<td>Competition between existing firms</td>
<td>External Under development Brochureware</td>
<td>External</td>
</tr>
<tr>
<td>Polymer Resin Manufacturer</td>
<td>New products into existing markets Survival is main objective</td>
<td>Customers demand high quality and innovative products Customer dominance — low</td>
<td>Not seen as important external Brochureware</td>
<td>External</td>
</tr>
<tr>
<td>Reduced Power Co.</td>
<td>Existing products into new markets Steady growth</td>
<td>Customer pressure on price Customer dominance</td>
<td>Not seen as important Has, but not used Brochureware</td>
<td>Email: Brochureware, Website: Brochureware, Network: LAN, E-business: Used extensively with customers, EDI: Used extensively with customers</td>
</tr>
<tr>
<td>Savoury Pie Manufacturer</td>
<td>New products into existing markets, but not looking for growth</td>
<td>High rivalry between firms</td>
<td>Not seen as important Has, but not used Brochureware</td>
<td>Email: Brochureware, Website: Brochureware, Network: LAN, E-business: Used extensively with customers, EDI: Used extensively with customers</td>
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vision for the future ‘The automotive industry must work more closely together in the future otherwise suppliers won’t survive, I see networks using the Internet as the way forward in the future.’

All the case firms, bar Garden Ceramics, have Internet access and email. In the UK access and email are usually coincident due to the way Internet service providers (ISPs) operate. Curtain Textile was provided with email as part of an EU-funded project, but once this finished no longer use it. Three firms have internal email as well. Two are larger SMEs that use ICT to manage their businesses. The third, CAD Services, started as ‘dot.com’ where staff expected to be able to use email internally.

Nine of the firms have websites. Most are brochureware, providing limited information about the firms and their products or services. Only Corporate Gift uses its website as part of its strategy to develop its e-business markets. CAD Services developed its website as part of its business, but customers do not use it, primarily because of security concerns, and also because of data file size. There are difficulties over the time it takes to download files and the danger of file corruption. Hence, CAD Services finds that it is becoming more a brochureware site. Again, Curtain Textile decided not to use its website once it had to pay for it to be available. Garden Ceramics website was developed by an employee and is hosted by the employee’s ISP, it is not seen as relevant to the firm. None of the firms has an Intranet, although Corporate Gift is considering the further development of its system. Patent Attorney’s wide area network development will be using Internet technologies.

Overall, this research provides support for the current literature, as there is only limited Internet development in the case SMEs. Email and websites are common. What is of greater interest is whether the firms perceive that the Internet holds future benefit, either to mitigate competitive pressures from competitors or customers, or to grow the business.

BUSINESS GROWTH AND THE INTERNET

Analysis of the interview data reveals that two drivers are key in determining SME use of the Internet. The first driver is business growth. In some firms business growth is planned and investment made ahead of need. In many other SMEs growth may occur but it is not as a result of planning. Attitudes to business growth often determine whether SME owners consider resource investment in the business. IS investment is traditionally restricted in SMEs, with many investing at start-up, but no further investment is usually made until the business outgrows existing systems (Levy et al. 2001). Therefore, it is plausible that attitudes to growth will impact SMEs’ decisions to invest in the Internet. The second driver is business value from use of Internet technologies. Business value of the Internet is identified through response to the firms’ competitive positioning and their knowledge of what is happening within their industry.

The analysis indicates that SMEs have considered the role of the Internet for their businesses. Their approach is generally cautious. Most firms do not see the value of the Internet to their growth strategy. However, a number of visionary owners believe that they can change their business through the use of the Internet. What is striking in discussions with the SME owners is that they are not Luddites, but are very knowledgeable about their industries. They also appreciate the tight resource constraints they are under and, as with ICT investment, Internet investment has to have more than a perceived benefit.

Interaction of the two drivers allows the identification of four groupings or SME segments. These are brochureware, business opportunity, business development and business support (Figure 2). The characteristics of these groupings and some exemplar SMEs are discussed in the next subsections.

Brochureware

Those firms that do not plan business growth and see the value of the Internet as low all have email and have experimented with website development. The owners have thought about the Internet, but cannot see its relevance to their business. Among the reasons for this is the nature of the industry. Savoury Pie Manufacturer said (as he presented a large, well-thumbed black tome): ‘This is my bible, I can’t take my computer to bed with me, this tells me everything I need to know and I can’t see it changing.’ Not only did he not need the Internet for information, but he said: ‘I have a close relationship with the managing director of (major regional supermarket), we prefer to meet regularly to discuss orders and promotional activities. Neither of us wants to change this.’ Curtain Textile expresses similar sentiments.

Garden Ceramics believes that their customers would not buy online, they tend to sell to the quality end of the market and sales are made through garden exhibitions. In contrast, Equipment Hire Centre has invested heavily in IT, but mainly because the owner enjoys using it. It is not seen as a means of growing the business. For example, the owner decided that mobile toilets were a useful addition to his hire range and was pleased to advertise them on his website, but when asked whether he would deliver them to a town about 80kms away said ‘No, I only want to trade locally’. He is a ‘lifestyle’ owner not looking for growth.

This group contains the largest proportion of case SMEs. They have all investigated the Internet and...
taken what they consider to be the most useful parts, email and websites, in some cases, and made a decision not to invest further. Hence, there is a role for the Internet for these firms but it is restricted to the presentation of online firm information or brochures.

**Business Opportunity**

Two SMEs perceive the Internet to offer high business value but are not planning business growth. Patent Attorneys is looking for business efficiencies from the use of Internet technologies. In particular, access to international patent information is faster using the Internet. Otherwise they primarily see it as a tool to obtain advice from their experts located in different offices. They foresee the Internet as a key medium for information and research for their industry. The current systems development is being planned to support this future growth. However, the firm does not foresee a need to move into e-business.

IT Services has been using the Internet for some time to provide information on its services and products. The firm provides training services, employment services and systems development opportunities. It sees the Internet as a means to promote employment and training services. Systems development is declining as business investment in IT is generally slowing. The SME does not see the Internet playing a role here. Its main function is to manage the business internally and to communicate with customers. Therefore, the main issue for IT Services is to maintain its presence with its current Internet service provision, and plan for the future.

This group of SMEs recognizes that the Internet has some value to them, in the future. However, it is limited to improving efficiency internally, customer communication and research. The contrast between this group and the brochureware group is that owners recognize the business value of the Internet and although not seeking growth, recognize that competitive pressures demand investment. These firms see a business opportunity from use of the Internet.

**Business Support**

Firms using the Internet for business support are planning growth, but currently see little future for their businesses from the Internet. All the SMEs here are innovative firms seeking to grow. Oil Flow Services is undergoing a major change from providing a key product to the oil industry to providing global consultancy services. They believe this will provide them with growth opportunities. As the patent on their key product is expiring shortly, diversification is seen as a means of leveraging the knowledge within the firm. However, while the Internet is used for research and email is used extensively, they do not believe that it will change the way they do business in the next three years. Although, they use email for customer communication, Reduced Power expresses similar sentiments. They have a number of innovative products that are sold into large firms, so personal contact is regarded by customers as important and there is little indication that the Internet is of value.

This contrasts with the experience of CAD Services that developed an e-business website to provide services to customers for their CAD systems. However, their experience is that customers prefer personal contact and that traditional marketing techniques are more effective. While CAD Services uses the Internet, it does not plan to develop it further as part of its growth plans.
These SMEs are seeking to grow, but do not believe that the industry demands investment in Internet systems to support that growth. These SMEs see the worth of the Internet as a business support medium.

**Business Development**

Opportunity from the Internet is seen as key to the development of the two SMEs in the final grouping. Both see their future tied into using the Internet. Corporate Gift is furthest ahead in its development with a strategic decision to diversify its business from its corporate customer base. It is building on its core competencies of design and quality manufacture to develop online retail sales. The firm has always developed its IT strategy alongside its business strategy. Hence, it is well positioned to take advantage of e-business. Corporate Gift has an effective internal network that is accessible and used by all staff as means to manage the business processes. The firm is integrating online sales with their back-office systems. Additionally they are introducing Internet-EDI systems to work more closely with their major corporate customers.

Automotive Spring Manufacturer is, in contrast, at the planning stage of its Internet development. Currently EDI is used to deliver order-processing information from customers. Design material is also delivered electronically. The firm is not yet using the Internet to any great extent, but the CEO foresees major industry restructuring that will require the formation of strategic partnerships among suppliers. He is focusing on changing the business strategy to develop the network partnership he sees as important for future development.

These two firms plan their growth and perceive value from the Internet. Its role therefore is in supporting a business network.

**DISCUSSION AND CONCLUSIONS**

This research has investigated the role of the Internet in 12 case SMEs. It has derived a model of Internet use driven by perceived value and growth planning. The message from the research is that, overall, there is little sign that SMEs see the Internet as being a major future change agent. However, there is evidence that the owners’ attitudes to growth and their understanding of the business value of the Internet are instrumental in their decisions to adopt. There is scant support from these cases for a stages model of development, as the SMEs appear to consider the role of the Internet as they would other technology investments: if it supports the business then the investment will be made. Thus, this research supports Kowtha and Choon (2001), as strategic commitment is essential. There is some confirmation here too for the concept of perceived benefits as articulated by Mehrtens et al. (2001). However, it is important to note that those SMEs in the brochureware quadrant perceive little or no benefits. Organizational readiness as indicated by level of Internet knowledge among SME owners is a factor in adoption, although as has been shown, it is also a factor in the decision not to adopt. There is only limited evidence of external pressure for change in this group of firms. Only one case firm sees the need to refocus due to industry pressure, Automotive Spring Manufacturer. It is unlikely that time is a major factor in the adoption decision. These SMEs have been analysed over a number of years, and while there clearly is a general move towards more Internet use as technology improves and costs fall, the research has not witnessed this as a major driver of change in Internet use.

Figure 3 summarizes the adoption issues and demonstrates that different types of business will view Internet adoption in very different lights. This suggests
that SMEs are unlikely to follow a stages model. Rather, they will focus on what is best to meet the owners’ strategy for business growth. Internet development in SMEs is likely to be slow to reflect this approach to resource investment.

While this research is only in 12 case SMEs and replication across other sectors and geographic regions is needed, the research does have implications for policy development. These SMEs are part of a long-term project that monitors ICT development among SMEs in the West Midlands of the UK. Early indications of results from further SME cases suggest similar results. There is also evidence that solutions providers concur with the focus on owners’ strategy with respect to growth as a way of targeting the SME sector (see for example, SAP, 2002).

In the UK, policy guidelines from the Department of Trade and Industry are developed around the stages of growth concept for SME Internet development. The government expects all SMEs to follow this path and directs its policy to achieving this objective. The EU has a similar view of how Internet use develops in firms (Filos 2002). This paper suggests that Internet adoption policies should more closely reflect the four segments identified here, recognizing that the Internet is a business tool for some but not all SMEs.

References