The Perception of Website Effectiveness by West Australian Small Business Owners in a B2B Context

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Abstract

A major cause for the failure to increase use of any form of e-commerce given by smaller business owners is that they can see no benefits or return on their investment in the websites. This research uses multiple case studies of 13 smaller businesses in Western Australia to determine the effectiveness of the websites from the owners’ perspective. It makes reference to an earlier study of user perspectives of SME websites to give context to the evaluation. The contribution of this paper is to provide an understanding of how SMEs perceive their websites in terms of value to the company. An analysis in terms of SMEs’ recognition of quality constructs of a website and of how they seek to realise benefits provides a deeper understanding of why SMEs may fail to progress their adoption of e-commerce beyond the first stages of use. The conclusions find that there is some correlation between the SME’s vision of its site and the perception of effectiveness.

Keywords: SMEs, websites, eQual, e-commerce adoption

INTRODUCTION

One aspect of SME e-commerce activity that is acknowledged but rarely examined is their use of websites. Websites are ‘a critical component of the rapidly growing phenomenon of e-commerce’ (Loiacono, Watson, & Goodhue, 2002) and their successful design and use can alter the effectiveness of an SME’s venture into e-commerce. Deeper understanding of SME websites and areas for improvement will enable development of support frameworks to improve SMEs' recognition and realisation of website benefits; a prerequisite for encouraging e-commerce adoption (Poon & Swatman, 1999).

While adoption rates continue to disappoint and e-commerce strategy remains a largely alien concept to many smaller businesses, their use of the Internet has increased substantially. To many, launching a website is the first, and often only, step towards e-commerce adoption. A major cause for the failure to increase use of e-commerce given by smaller business owners is...
that they can see no benefits or return on their investment in the websites (MacGregor & Vrazalic, 2005). This may be a self-reinforcing cycle in that many owners have little knowledge of what a website is for and fail to maximise the opportunities by launching poor or inadequate sites which then fail to deliver any benefits. Website quality must also be considered from the user viewpoint and understanding the factors used by customers to determine website quality can serve as a basis for creating and improving websites (Webb & Webb, 2004).

The contribution of this paper is to provide an understanding of how SMEs view their websites. An analysis in terms of SMEs’ recognition of quality constructs of a website and of how they seek to realise benefits provides a deeper understanding of why SMEs may fail to progress their adoption of e-commerce beyond the first stages of use. The research includes an examination of what SMEs perceive to be the critical factors in creating and maintaining an effective website.

This research builds on an earlier survey that assessed the websites of 80 small businesses in Western Australia (WA) from a users’ perspective (Stockdale, Lin & Stoeny, 2005). In this research, case studies of 13 of these businesses are used to determine the effectiveness of the websites from the owners’ perspective. Additionally, this paper supports calls for more extensive work into the analysis and evaluation of B2B websites (Chakraborty, Lala, & Warren, 2002; Ellinger, Lynch, Andzulis, & Smith, 2003; Loiacono et al., 2002). B2B e-commerce is the most profitable sector of online trading (Ellinger, Lynch, Andzulis & Smith, 2003), although it has been insufficiently addressed in website evaluation research (Loiacono et al., 2002). This research targets B2B SMEs, but includes firms that also trade B2C. Purely B2C firms are not addressed.

WEBSITES FOR SMES

Several initiatives have been launched to improve electronic adoption rates and e-competencies (Jones Donald Strategic Partners, 2000; NOIE, 2002), but many SMEs are failing to achieve the levels of e-commerce abilities required to benefit from Internet based business (Walker, Bode, Burn, & Webster, 2003). Smaller businesses are often caught between the need to understand the dynamic and frequently intimidating electronic environment and the need to respond to the many calls to conduct more business online (Goode, 2002; Walker et al., 2003). Their subsequent attempts to trade online results in e-commerce activity that is unproductive such as launching ineffective websites, ignoring customer e-mails and failing to efficiently fulfil online orders. Where smaller businesses turn to consultants to overcome their own lack of expertise, results often fall short of expectations as SMEs do not have sufficient knowledge to judge the effectiveness of a consultant’s work prior to implementation (Bode & Burn, 2001).

One highly visible aspect of e-commerce activity that is often seen as the first step towards online trading is the launch of a website. The Australian government reports establishing a web presence is size dependant and while less than 18% of micro businesses have a web presence, the figure for firms with over 20 employees rises to 59% and reaches 91% for medium-sized businesses with more than 100 employees (ABS, 2005). Two thirds of SMEs believe that their website enhances their business effectiveness, by increasing visibility and accessibility, improving communications and increasing sales (Yellow Pages, 2003). This accords with the view of Loiacono et al. (2002, p.4) that websites ‘play a significant role in the overall marketing communication mix’. The implementation of B2B websites is seen as an important stage in e-commerce development (Ellinger et al., 2003) and a crucial part of a firm’s use of the Internet for communicating, entertaining and interaction with stakeholders (Chakraborty et al., 2002).
Despite the statistics and the frequent mention of the use of websites in the many papers on SME e-commerce adoption (Bode & Burn, 2001; Daniel, Wilson, & Myers, 2002; Korchak & Rodman, 2001), the quality of such websites and the need to determine their function is rarely addressed (Manuel, 2004). Auger (2005) discusses the impact of design sophistication and level of interactivity in increasing the number of visitors and the impact on overall performance. While design sophistication was not found to necessarily positively affect performance, interactivity is an important asset. Fry et al., (2004) examine the elements of accessibility and visibility amongst the increasing number of sites on the Web. They note however, that government targeting of small businesses in this field tends to overly emphasize the technical rather than business aspects of website use. There are numerous online sources offering, often conflicting, advice on setting up a website while business organisations and government sources continue to encourage smaller businesses to launch websites. The proliferation of sites has increased the imperative for businesses to have some knowledge of what they intend their site to achieve.

It is critical for these SMEs to understand customer requirements and to enhance their website accordingly. A SME with a website that is difficult to use and understand can weaken the firm’s presence on the Internet (Barnes and Vidgen, 2002). According to Turban and Gehrke (2000), there are significant discrepancies between factors identified in various academic publications and those rated in consumer surveys. There is a need to identify critical success factors for effective website usage by SMEs both from the customers’ viewpoint and from the designer and owner perspective. Such factors can contribute to the ability of SMEs to improve their websites over time, then benchmark against competitors and best practice in any industry (Barnes and Vidgen, 2002).

This research examines websites of SMEs based in Western Australia (WA). The region is well suited to the development of e-commerce in that it is a geographically isolated, but technologically well-developed with a strong exporting economy. WA also has a high percentage of SMEs in the private sector that employ over 47% of non-agricultural workers (ABS,2003).

**RESEARCH DESIGN**

The research builds on a previous study that analysed users’ perceptions of SME B2B websites in WA (Stockdale et al., 2005) using Barnes & Vigden’s (2001, 2002, 2003) evaluation instrument, eQual. The use of an existing, validated instrument allowed for continuity in this area of research. This research extends the earlier study using case studies to examine the perception of the websites by their owners. The firms were also asked to rate their own website using eQual. This enabled some correlations to be made between the different perspectives and supported the analysis of the interview data.

**Data Collection and Analysis**

On-site interviews were conducted with 13 of the firms used in the original survey with the interviewees being either owners or senior managers (Table 1).

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry sector</th>
<th>Position of Interviewee</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Electrical contractor</td>
<td>Owner</td>
</tr>
<tr>
<td>B</td>
<td>Commercial diving equipment</td>
<td>Owner</td>
</tr>
<tr>
<td>C</td>
<td>System engineering services</td>
<td>Owner</td>
</tr>
<tr>
<td>D</td>
<td>Paint manufacturer</td>
<td>MD</td>
</tr>
<tr>
<td>E</td>
<td>Horticulture</td>
<td>Manager</td>
</tr>
<tr>
<td>F</td>
<td>Industrial hoses</td>
<td>MD</td>
</tr>
<tr>
<td>G</td>
<td>Photography supplies</td>
<td>MD</td>
</tr>
<tr>
<td>H</td>
<td>Sanitation equipment</td>
<td>MD</td>
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</tbody>
</table>
The interviews lasted an average of 90 minutes and were semi-structured and extensive notes were taken during the interviews. The drawing up of the interviewer’s question guide was influenced by SME perceptions that websites increased business effectiveness in terms of increased visibility, communication and sales (Yellow Pages, 2003, Loiacono et al. 2002). Additionally the concepts of design sophistication and interactivity were included (Auger, 2005). These factors were drawn together and the interviewees were asked:

- their own experiences of having a website and the benefits they felt they gained
- their opinion as to what elements contributed to a good website
- to rate their own sites using the eQual instrument (scale of 1 to 7 plus comments). The instrument features are given in Table 2.

In the analysis, categories of data were initially defined by the interview question guide, but refined in an iterative manner as further/different benefits and elements were identified from the data (Miles and Huberman, 1994) and the final categories are used in the next section. The analysis of the comments from eQual also contributed input, and the data are used to support the earlier comments. (At no time were the firms told of the users’ assessment of their site.) The interview data were initially considered by the researchers independently before drawing together the final categories as a whole. This supported discussion of the different perspectives both of the interviewees and of the researchers. The guidelines set out by Klein and Myers (1999) for conducting and evaluating interpretive field studies in information systems were followed to improve the quality of the research. These steps enhance the construct validity, reliability and overall quality of the research (Yin, 2002).

<table>
<thead>
<tr>
<th></th>
<th>Commercial lighting equipment</th>
<th>Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>J</td>
<td>Specialist lighting consultancy</td>
<td>Director</td>
</tr>
<tr>
<td>K</td>
<td>Insulation materials</td>
<td>MD</td>
</tr>
<tr>
<td>L</td>
<td>Jewellery design</td>
<td>Owner</td>
</tr>
<tr>
<td>M</td>
<td>Management consultancy &amp; training</td>
<td>Manager</td>
</tr>
</tbody>
</table>

Table 1: Case Study Firms

<table>
<thead>
<tr>
<th>Q</th>
<th>eQual 4.0 questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I find the site easy to learn to operate</td>
</tr>
<tr>
<td>2</td>
<td>My interaction with the site is clear and understandable</td>
</tr>
<tr>
<td>3</td>
<td>I find the site easy to navigate</td>
</tr>
<tr>
<td>4</td>
<td>I find the site easy to use</td>
</tr>
<tr>
<td>5</td>
<td>The site has an attractive appearance</td>
</tr>
<tr>
<td>6</td>
<td>The design is appropriate to the type of site</td>
</tr>
<tr>
<td>7</td>
<td>The site conveys a sense of competency</td>
</tr>
<tr>
<td>8</td>
<td>The site creates a positive experience for me</td>
</tr>
<tr>
<td>9</td>
<td>The site provides accurate information</td>
</tr>
<tr>
<td>10</td>
<td>The site provides believable information</td>
</tr>
<tr>
<td>11</td>
<td>The site provides timely information</td>
</tr>
<tr>
<td>12</td>
<td>The site provides relevant information</td>
</tr>
<tr>
<td>13</td>
<td>The site provides easy to understand information</td>
</tr>
<tr>
<td>14</td>
<td>The site provides information at the right level of detail</td>
</tr>
<tr>
<td>15</td>
<td>The site presents the information in an appropriate format</td>
</tr>
<tr>
<td>16</td>
<td>The site has a good reputation</td>
</tr>
<tr>
<td>17</td>
<td>It feels safe to complete transactions</td>
</tr>
<tr>
<td>18</td>
<td>My personal information feels secure</td>
</tr>
<tr>
<td>19</td>
<td>The site creates a sense of personalization</td>
</tr>
<tr>
<td>20</td>
<td>The site conveys a sense of community</td>
</tr>
<tr>
<td>21</td>
<td>The site makes it easy to communicate with the organization</td>
</tr>
<tr>
<td>22</td>
<td>I feel confident that goods/services will be delivered as promised</td>
</tr>
<tr>
<td>23</td>
<td>My overall view of this web-site</td>
</tr>
</tbody>
</table>
The Tenth Pacific Asia Conference on Information Systems (PACIS 2006)

Table 2: eQual 4.0 Quality Constructs and Features

The eQual instrument data from the 13 interviews was not statistically analysed as the completion of the surveys was arbitrary and incomplete. Rather it was used as a validation of opinions expressed in the interviews and to uncover discrepancies between owner and user views.

OWNERS PERCEPTION OF THEIR WEBSITES

This section discusses the analysis of the interviews and examines the different levels of success that the case firms have achieved in using their websites effectively, and the benefits that they have gained. The section first discusses the firms’ rating of their sites using eQual (Table 2). Their informal assessment has been related to the earlier users’ ratings to provide some context of website quality, although it is recognised that the quantitative nature of the data from the original study (Stockdale et al., 2005) is not directly comparable. Nevertheless, interesting insights were gained from encouraging the interviewees to assess their websites using a user perspective instrument. Their comments are discussed within the three quality constructs of the instruments: usability, information, and service quality and interaction.

Quality constructs of the websites

The SMEs tended to rate their site’s quality more positively than the users, although with some features the discrepancy between the ratings varied greatly. The firms that were most highly rated by the users had fewer discrepancies between the firms’ own assessments of the quality of their site. Conversely, the greatest differences lay between sites that were poorly rated by the users where owners were actually very satisfied with their sites.

Usability – produced few differences overall between the user assessment and those of the case firms. Attractive appearance produced the biggest gap with three firms strongly diverging from the users’ poor assessments. Interestingly, one firm was unhappy with the attractiveness of its site although it was rated highly in the user survey. This was attributed to the firm’s comments that their site did not reflect their company strategy and the type of site they were aiming for; although they considered the design to be above average.

There was a surprising amount of agreement between users and owners overall, with 11 firms rating their sites within a point of the users in all but one category (attractiveness of the website).

Information Quality – produced some significant differences between user and SME perceptions. Only one feature, ‘information presented in appropriate format’ had an overall consensus. This disparity in the perception of information quality raises some important issues on the presentation of information by businesses on the Web. For example, perceptions of what is relevant and understandable information varied widely between users and firms. There were also some significant differences in the users’ opinions as to timeliness and the accuracy of content.

Service quality and interaction – was the most widely varied quality construct. This reflected users’ conclusions in the previous research that businesses were not very conversant with service quality online. The majority of case firms ignored the questions on security of information and transactions; only one firm (offering online sales) reflected users’ ratings. One firm that invites customers to enter credit card details onto an online form rated their security as excellent in contrast to the users who rated it as unacceptable. The concepts of personalisation and sense of community provided little agreement. Some of the firms rated
their sites poorly in contrast to the users and there appeared to be little understanding of what was meant by either of these features.

**Gaining benefits from the website**

When discussing benefits that could actually or potentially be gained from having a website, firms’ responses varied greatly, as is to be expected given the wide range of firms involved. Nevertheless, there were several areas of consensus with regard to achievable benefits and identification of barriers.

In discussing overall satisfaction with their websites, the three firms that had rated lowest with the users (Stockdale et al., 2005) expressed discontent with their websites, despite rating them as above average in the eQual assessment. A theme common to each of these firms was the lack of control over their sites, which had all been created externally by consultants or friends. In each case, no training or instructions as to how to access the site to update it were given and the sites were seen by their owners as ‘embarrassing’ and ‘outdated’. In one case the site was 6 years old and did not reflect the product lines currently offered to customers. Firm F states;

‘I am actually quite embarrassed about our website; we never really tell people we have a website, though I am sure that people look it up. We want to improve it but we are too busy’.

In another case, the firm had moved offices and the contact details on the site were incorrect. Time was cited as the common reason for not addressing the situation along with a reluctance to repeat the outsourcing experience. Both these reasons are well addressed in the literature (Bode & Burn, 2001; Stockdale & Standing, 2004).

Five sites had rated as well above average in a user survey and all were satisfied with their sites. All these firms had clear ideas of what they expected from their site and believed that they were achieving the outcomes planned. Each expended effort and resources in managing the site and were striving to improve the features offered. A sixth, Firm B was happy with its site which was rated as well below average in the user survey. This was an interesting case in that the owner recognised several areas where improvements could be made but felt that the website achieved what was expected from it and offered a ‘presentable front’ for the business.

The remaining sites were rated as average by users and the firms were moderately satisfied although all identified problems that they would seek to remedy as they developed their sites. For example, Firm J’s director says:

‘We are currently very happy with the front end….the appearance and how customers handle it, but there are aspects of the back end which are difficult, like how to improve how data is entered’.

There was less clarity in what these firms wanted from their websites, with Firm I finding internal consensus difficult; ‘both sides have different ideas to what the website should have. We need to find a happy medium’ and Firm K admitting that their problem ‘was to differentiate yourself in terms of your product’ while Firm M ‘need to re-evaluate it, and decide how to manage it’.

**Enhancing the firm’s image** - Firm D was one of only two firms that had that a positive view of the benefits to a firm’s image from their website. The firm uses its website as a catalogue for its sales representatives and as an information source at trade shows. The demonstrations they give at these shows arouses a lot of interest and Firm D believes that they gain competitive advantage over larger competitors in an industry that has been slow to adopt the Internet. Firm L, the only pure play firm interviewed, also saw considerable benefit not only through sales but as a point of interest to a broader audience and is beginning to build an embryo online community with newsletter, bulletin board and giveaways.
A strong recurring theme was the sense of legitimacy given by a website (Grewal, Comer & Mehta, 2001). Firms created a website because they saw it as a necessity to give the image of IT competence rather than from an understanding of any true benefits to a firm. Comments such as it ‘makes us look more professional’ and ‘everyone has to have a website’ were common and two firms expressed the view that a website was of positive benefit to smaller firms, because ‘it makes us look bigger than we are’.

**Enhancing existing customer relations** - Although the literature is consistent on the benefits of using the web for customer relationships (Reichheld, Markey & Hopton, 2000) there was only two firms, D and L, in agreement with this view amongst the 13 case firms. For Firm L, the website is the only contact with customers. Firm D was pleased with the reaction from customers at trade shows and promoted use of the website in business packs to their buyers. This enabled them to reduce printed materials and gave customers the opportunity to look at their complete range online and interact with the firm immediately.

Other firms did not refer to customer relations at all or believed that they did not get a return on their investment in this respect. ‘Too many enquiries come from firms wishing to supply us or get information from us’ and not enough from customers. Printing costs were the only recognisable saving to be gained in relation to customer interaction according to five firms and there was a strong element of ‘our customers know us anyway’ and ‘genuine customers know that we are here’ amongst the firms.

**New Business Opportunities** - There was a wide variety of comments in regard to the development of new business opportunities. For example, Firm A reported that its website has generated 3 enquiries resulting in 2 sales since 2001. This is not surprising as the website is out of date, has the wrong address and telephone number (Firm A has moved twice since the creation of the site) and no email. There is no mechanism for counting visits to the site. In contrast, Firm B was very positive and believed that the website had generated ‘lots of new customers. Word of mouth makes them look online and then they contact me’. This positive response is a likely explanation of Firm B’s positive enthusiasm for a website that was poorly rated in the user survey.

Four firms used the term ‘tyre kickers’, or time wasters, and while three disregarded enquiries from these visits, Firm K responded to all enquiries as any contacts could develop into business opportunities.

Firm E believed that new business opportunities would develop when planned changes to its website had been accomplished. The firm intends to extend their website to include ordering, using a mechanism that gives customers an order fulfilment date based on stock levels.

Another firm believed that the website had paid for itself by attracting one very large customer to the business. The remaining firms were ambivalent about the generation of new business opportunities, reporting that the website supported existing business rather than bringing new customers to the firm.

**Resources to build and maintain the website** - There were few firms that believed they had the necessary resources to develop and maintain their websites to the standards they would like. This supports the literature that cites resources as a major barrier to e-commerce adoption by SMEs. However, the firms had all found sufficient financial resources to develop a website at some level. Although it was difficult to ascertain the cost of these sites, one firm volunteered that they had paid A$14000 for their site and another $7000.

Although the majority of the case firms had outsourced their websites, none of them appeared to realise that ongoing maintenance would be needed. The type of outsourced web designer used varied greatly from ‘a family friend’ and ‘our landlord’ to large well-established web consultancies. No more positive experiences were expressed from those who had employed a web consultant at higher cost than case firms who had developed their sites internally or ‘paid a friend’. The pure play firm (Firm L) had begun by employing a web designer, but reverted...
to ‘buying a book and learning’. Firm L had then employed a company ‘guaranteed to have you ranked 1 in search engine rankings’. This again proved unsatisfactory and Firm L has since managed the website internally and has achieved high rankings on Google and MSN. Firm D also manages their site in-house through their technical manager and makes frequent updates.

Other firms that have employed consultants have mixed reactions. One firm pays to outsource as ‘we do not need the (IT) capability – it is not what we are about’. They retain control of the site but give content to the consultant to keep them up to date. Firm A was ‘talked into it, as it was the thing to do at the time’. The site was done by a friend and is ‘now out of fashion. At the time it was done it was all the rage to have flashy bits’. Firm A has since moved and the website is out of date but no-one within the firm has the means to change the site. Other firms have learned to make minor changes ‘I am not really a computer literate business but I manage some’ and ‘my partner does it all. We are very dependent on one person’.

Although development costs are paid, financial restraints appear to prevent firms from employing external sources to maintain the website once launched, and time restraints appear to hinder the training of an in-house person to learn how to update the site. Where a good relationship had been maintained with the website designer, firms were more positive about the resources they devoted to the site. Of the five top rated sites in the user survey, all maintain their sites in-house or through personal contacts with friends and family. The four lowest rated websites in the user survey were created by web consultants (two) or by personal contacts (two). Only those created by personal contacts are maintained. The remaining four sites were also developed by consultants (two), personal contacts (one) and in-house (one). Only the in-house and one consultancy sites are maintained regularly.

Other benefits – Other website benefits were raised by the interviewer, but few responses were forthcoming. These benefits included enlarging market share, improving efficiency and reducing search costs. Firm E anticipated more efficiency once they had online ordering, but no firm agreed that market share had increased as a result of having a website. One firm responded that efficiency had decreased because the web designer had included a generic email address and it attracted too much spam. The firm asked for the ‘info@ address to be removed’. The only firm to display enthusiasm over efficiency and cost savings was the pure play firm.

Factors critical for successful websites

The case firms were asked what they considered to be the factors that, in their experience, hindered the development and maintenance of a B2B website. From a number of perspectives, return on investment was seen as difficult to justify, although only two firms did not see any ‘proof of return’ and did not believe that benefits accrued to smaller firms through having a website. Nevertheless, the strong need for legitimacy meant that neither firm had any notion of dispensing with a website and both were forthcoming in identifying critical factors that contributed to success. The majority of the sites reviewed were brochure sites and had little intention of becoming transactional. From a technical context, the complexity required for a good transactional site made them expensive to create and firms did not believe that returns on such a site would be sufficient to make such development cost effective.

A second critical factor seen as a barrier was the lack of support for the sites. As discussed, a number of sites were left untended once they had been created, were out of date and not contributing to the firm’s image. Blame was attributed to consultants’ failure to ensure that their customers could maintain the site once it has been launched (Bode & Burn, 2001).
Time is seen as another crucial factor in extracting value from a website. Not only the time to update the site, but also to respond to enquiries from all over the world. The balance between time to respond against the returns offered was seen as a negative by three firms, although the effort was considered necessary by at least one firm. Time was also an issue for Firm C which believed that its website was a complementary channel to existing communication methods. Its concern lay with the extra effort required to maintain customer relationships in this environment where additional business was not being generated.

A measured approach was recommended by firms to alleviate the slow return on costs and to enable the necessary expertise to build up in the firm. Firm M had outsourced their website several years before to a web consultancy. They now believed that a slower, balanced approach would have benefited them more than ‘going in with a big bang and then never change it.’

Once the firms had identified critical factors from their own experience, they were asked to comment on what they consider to be important success factors for a B2B website. These comments were analysed with subsequent comments made during their eQual assessment of their sites and are discussed within the constructs of the instrument.

Usability
There was widespread agreement throughout the interviews that usability was a key element of a successful website. Interviewees pinpointed issues relating to ease of use and navigation as essential elements for a business website using expressions such as ‘functional’, ‘simple and up-to-date’ and ‘quick to download’. If a website was not easily accessible and clear to the user then it gained no advantage for the firm. Although design was considered to be of importance by all, there was some disparity in the responses. In contradiction of established theory, four of the interviewees believed that poor design would not influence a user that found the site easy to use (Albert, Goes & Gupta, 2004).

The concept of a positive experience for the user (Barnes & Vigden, 2003) was not widely accepted. Only Firms B and L strongly believed that the site must remain interesting and attract visitors. The lack of importance attached to this feature appears to be related to a utilitarian view of B2B sites; two firms mentioned that B2B websites were not meant to be attractive, but functional as the business customer was ‘not after a pleasant experience’.

Efficiency and clarity were key to business websites and not elements of community, attractiveness and fun.

Information Quality
Owners had strong views on the presentation of quality information on their websites. They all believed that good information was very important if the site was to be an asset to the firm, although there was less consensus on the need for detailed and timely information. Additionally, the presentation of content was not considered to be of high importance, underlining the views on design in the usability section above.

Other factors refer to the quality of information. This is both from an appearance and content perspective with an attractive brochure site considered to be the main way to develop a site that supports the firm. Once benefits were realised from the brochure site then firms could develop the site to include more functionality. These views are interesting when compared with the perception of information quality reported by the users in the earlier studies. The case firms are in full agreement with the idea of quality information, but appear to have a different perception from the user of what is required.

Service Quality and Interaction
The emphasis placed on usability and information quality was not reflected when discussing service quality and interaction. Few of the firms regarded online transactions as important and also disregarded security as an issue. Only one owner not currently transacting online believed that online selling was important. Nine of the firms interviewed were strongly of the
opinion that websites in a B2B situation were most effective as informational sites and interaction with customers was left to offering an easy means of communication.

CONCLUSIONS

Although the user survey (Stockdale et al., 2005) was used as a guide and not a definitive assessment measure there were clear interrelationships between the higher quality rating perceived by the users and the benefits perceived within the firms. The lower rated sites did not project the same positive images. The former have a focused view of the objectives they envisaged for their sites and a clearer sense of how to progress with website development. One exception was Firm B, which was clearly benefiting from its website and attracting business. This may be a feature of the industry sector and the lack of competition within WA that encourages more use of the site than can be attributed to quality factors. Where value is gained by the SME, perception of website usefulness and hence commitment remains high. Firms had a good understanding of the features that contribute to a successful website. Despite disparities in the assessment of their own sites, SMEs were able to see where they would like to progress in the future, given the resources (particularly IT skills and time). In the short term, the majority of the case study firms believed that the costs of having a website outweighed the benefits that could be realised. There was no perception that they would progress beyond the brochure sites that were common amongst the case firms. Those SMEs that had employed web consultants were surprised and disappointed at subsequent maintenance costs, both in terms of money and time. Thus again progression to more complex transactional sites was not considered to be feasible. Where firms had in-house skills to either build or just to maintain sites, satisfaction with results was higher and user perceptions were also more positive.

From a general perspective of identifying success factors the majority of firms placed far more emphasis on usability and information quality than on service and interaction. This was reflected in the preference for brochure sites. However, some questions are raised by the disparity between SME and user perceptions of information quality where the firms were more positive regarding the appropriateness and timeliness of the information they supplied. This supports the argument that a firm’s view of a website rarely coincides with users’ needs (Heldal, Sjovold & Heldal, 2004). Finally, the low priority that SMEs place on the value of service quality and interaction was reflected in the disinterest regarding the features of security, personalisation and community. These are likely to develop from more sustained and strategic use of websites and will be more evident if benefits become realisable and SMEs progress their adoption. As yet, only SMEs that have a clear view of how they want to proceed and are capable of self-learning appear to be benefiting beyond the brochure stage of website development.

LIMITATIONS AND FURTHER RESEARCH

This research is confined to businesses within WA and does not differentiate between size of businesses. Further work remains to be done on a wider national scale, but also to assess the influence of size on website effectiveness. Additional identification of correlation between effective sites in an industry specific setting would contribute to the literature. Finally, it is intended to pursue this research to effect more direct comparison between user perceptions and those of SMEs.
REFERENCES


