An audit toolkit to monitor small business usage of third party websites

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Abstract

The web presence of a small business often extends beyond its own website to listings on third party websites. This paper examines the types of third party web services on offer and introduces the notion of a website audit tool to allow a small business to keep track of all aspects of its web presence. Using a systems development approach, the potential usefulness of such a tool for small businesses is explored in a study involving a combination of a demonstration of such a system to 15 academics. Their responses to open-ended questions in an online survey related to the factors they thought might influence small businesses' adoption of such a system. The results of the study suggested that there was some value in the idea being proposed, but that the audit tool was too much effort to use by itself for the value it provided. Areas of the tool that were deemed to be most useful were its ability to manage third party contracts and subscriptions and its ability to show the business where changes needed to be made in specific circumstances when business details (such as telephone number or physical address) change. In regards to the perceived attributes of an innovation that could influence the decision by small businesses to adopt the audit tool, it was not considered that the effort needed to implement and use the audit tool would justify the potential relative advantage that it could provide.
Additionally, some of the participants considered that many small businesses would not understand the potential gains that could be achieved from using the tool and that this could negatively affect the adoption decision.

Keywords: Small Business, Websites, Web Portals, Web Directories, Study

Introduction

The web presence of a small business often extends beyond its own website to a presence on third party portals or directories, predominantly for the purpose of attracting further attention to the business. This paper discusses the types of third party web services on offer and uses a systems development approach to examine the potential usefulness of a website audit tool to allow a small business to keep track of its web presence. The potential usefulness of such a tool is explored by discussing a study involving a prototype audit tool and the observations of 15 expert academics (from the information systems and business fields) in regards to their use of the prototype and consideration of Rogers' (2003) perceived attributes (that may affect the adoption of an innovation) to suggest whether small businesses might adopt such a tool.

Background

For the purposes of this study a small business is any business with 20 or less regular employees. Many small businesses rely on a web presence to support their business activities. For instance, a 2010 Telstra study of small businesses in Australia (Telstra Corporation 2010) estimated that 60% of 1,436 small businesses had a website, with a further 11% indicating that they were intending to implement one. Websites consist of a series of website features, which can range from a listing of the address of the business to more advanced features such as online transactions (Burgess, Sellitto and Karanasios 2009). Different website features can improve business efficiencies (for instance, by providing customers with information they might otherwise have to contact the business for), add value to products and services (for instance, by providing customers with information on how to use their products effectively) and assist with business promotion (Burgess, Sellitto and Karanasios 2009). There are now many more options available to a small business, such as web portals and directories that are offered by third party website providers, when considering their online presence. A portal is a site which is intended for users to return to many times as a means of accessing other websites in a particular interest area or region. Small businesses will often hope that customers may contact their business via a portal (or directory) and can use these third party services as a means of implementing website features that they cannot due to their complexity or setup cost (such as online transactions), or as an opportunity to access new markets (Tatnall, Burgess and Singh 2006).

A portal can include a number of features (Tatnall et al 2006; Eisenmann 2002, Alan et al 2003) such as:

- Improved infrastructure and a secure online environment – for instance, the provision of online ordering and payment facilities.
- Search and directory services that can enable visitors to the portal to find small businesses offering particular services.
- Community building facilities. Community building features such as chat rooms and weblogs may be included in the portal. Small businesses can become involved in the local community and achieve other benefits that may be achieved through dealing with businesses in the local area (such as lower costs).
- They can provide benefits to SMEs (small and medium sized enterprises) in regards to access to infrastructure, sharing resources and improved relationships with other businesses.

A small number of studies have examined the use of portals by Australian small businesses (Tatnall and Davey 2005; Gengatharen 2008; Burgess and Tatnall 2007). These studies focussed on the performance of the portals being examined rather than how small businesses were using the portals. Sanders, Galloway and Deakins (2010) examined the use of Internet portals by rural SMEs (small and medium sized enterprises) in Scotland. The authors specifically examined the use and effectiveness of private and public or charity managed versus funded Internet portals and found no effective difference between the two groups of portals. Chen (2008) examined literature pertaining to the evolution of community portals and online communities and surveyed 150 South African small businesses in regards to their use of online community portals for information sharing. The results suggested that such portals could be used to provide linkages between different stakeholders in small business development and allow for greater sharing of information.

Burgess (2010) conducted a study of 50 Australian small businesses across a wide range of sectors and found that 41 (82%) used a third party website. The main type of features employed on these websites involved one-way information (from business to customer - such as business name, location and contact details) with some use of features that allowed potential customers to contact the business (usually via an email form) and limited use of online transactions (in the *accommodation, café and restaurant* sector). The *accommodation, café and restaurant* sector lead the way in relation to third party websites used and the sophistication of the website features on those sites. The results suggested that the level of usage varies according to industry sector.

A website audit tool

Recent research into micro businesses (businesses with one to five employees) has shown that over time they often add and remove some of these features without any (apparent) reason. In many instances, this can be because the feature has been overlooked during a website update or redesign and has just been forgotten in the newer version of the website. This has happened with features as simple as the business telephone number - which, when forgotten, can have serious implications when a key method of contacting the business is missing from the website (Burgess, Bingley & Sellitto 2007). A study of the websites of (predominantly small) non-profit organisations revealed that they would be assisted by a tool that provided advice on 'good website practice' and described how different website features could assist their organisation (Burgess, Bingley & Hunter 2009).

The author proposes that a purpose-built 'website audit tool' could allow such businesses to record which website features they have over time and could act as a checklist/ reminder to ensure that website features are not forgotten during web presence updates or redesigns.

There is another potential need for a website audit tool as there are now many more options available to a small business when setting up their web presence. The website features of a small business are often spread across a number of different websites that form part of the small business web presence (the business' own website and any third party websites it uses). The content and existence of these website features will need to be reviewed and/or upgraded at different times. Sometimes this will be at the discretion of the small business, but it may also occur at the instigation of the external partner, as contracts run out at different times or as they review or upgrade their services. A website audit tool could assist in keeping track of which website features are stored on a small business' own website and which are hosted elsewhere. Thus, when the content of a particular website feature changes (such as a telephone number or an email address), the business will know where in its website presence that this feature should be updated. A website audit tool could also assist in keeping track of

the cost of these externally hosted options when contracts are due to expire or payments come due (Burgess 2008).

This research is exploratory. The main research question to be considered is what is the potential usefulness of a system that allows small businesses to keep track of the features they have on their own websites and those on portal and directory services?

Study Details

This research involved a systems development methodology, which is particularly useful when a *prototype system* is developed to test a research question that is in the early stages of development. The approach encompasses different interactions involving building a prototype, observing its use (through case studies, survey and so forth) and more formal experimentation (such as computer simulation) (Burstein 2002). This article discusses the building of the initial prototype and observation of its use.

The study involved a combination of a demonstration of the prototype system to 15 academics and their subsequent responses to open-ended questions in an online survey that related to how they thought small businesses would react to such a system. The online survey was used to collect the opinions of participants in regards to the various aspects of the prototype audit tool. In particular, it was hoped that through their previous dealings with small businesses that participants would be able to provide initial insights into the usefulness of the tool and thus the factors that might influence small businesses in their decision to adopt (or not adopt) the tool. These academics were targeted in the following manner:

- They were known to research in the small business arena and were approached to participate in the study (10 participants were recruited in this manner).
- They responded to a request for assistance placed in the online newsletter of the Institute for Small Business and Entrepreneurship (3 participants).
- They responded to a request at a presentation by the researcher (related to Stage 1 of the project) at the 2011 Institute for Small Business and Entrepreneurship conference in London in late 2010 (2 participants).

The participants conducted research in the information systems (8) or business (7) arenas, although a number of them could be described as having expertise across both areas. The academics were located in the UK (9 participants) and Australia (6 participants), which coincided with a sabbatical visit by the Australian-based researcher to Coventry University in the UK. Participant involvement (through demonstrations and online survey responses) occurred between October 2010 and January 2011.

The prototype system, known as the *audit tool* to participants, was designed and built as an online system by the researcher with assistance of the ASPRunner Professional package by XLineSoft (www.Xlinesoft.com). The initial idea was that participants would be sent the following details of the system:

- The web address of the online system
- Log-in details (set up for them specifically)
- A user manual, describing how the system operated.

Further details related to the operation of the system are detailed later in the paper. After sending the study details to participants, the intention was that the researcher would interview them, asking a series of open-ended questions related to how they thought small businesses would react to the audit tool. However, it was not possible to meet with four of the participants face-to-face, so an online survey was created (with identical open-ended questions to the interview protocol) and the researcher hoped that the user manual would be enough to allow those participants to use the system.

As mentioned earlier, interviews and surveys are often employed to 'observe' participant involvement in the use of systems, in this case the prototype system. However, early on in the interview process it became obvious that most participants required:

- further explanation of the purpose of the audit tool, and
- assistance with its operation.

This may have provided some early hints as to the complexity of the innovation. Thus, the interviews turned into *demonstrations* of the audit tool and a general discussion of its potential use by small

businesses. Email discussions were conducted with some of the participants that the researcher could not visit to further explain the purpose of the system, although these participants did appear to spend more time consulting the user manual to use the system. Subsequently, *all participants* were requested to fill in the online survey, which became the main source of the results reported here. As the online survey included all of the open ended questions that were to be included in the interviews, many of the answers that were provided were rich in detail and thus provided the opportunity for in-depth analysis. Additionally, some insights from the face-to-face meetings and email conversations were included where they provided context to the results. The next section provides a brief description of the Audit Tool system.

The Audit Tool

The purpose of building the online audit tool was to provide study participants with a prototype of how such a tool might look and operate. Not all of the 'features' of the tool were functional – this was mentioned in the user manual in the appropriate areas. The rationale for the tool itself was provided in the Introduction to the user manual:

> *The idea for this audit tool came from a number of sources. Over the years my colleagues and I have conducted some research projects that have examined how small businesses, particularly micro businesses, adjust the features on their websites over time. It seemed strange when at one time a business would have their telephone number on their website and then it would disappear. Upon further examination, a typical explanation for this was that the business had redesigned its website and forgotten to include the telephone number!*
> *Another catalyst for the tool was my shock at the number of external websites that small businesses are listed on, be they online booking engines, industry portals, regional portals, business directories and so forth. Sometimes they are even listed on websites and they are not even aware of it. This tool is to help them manage their presence on the websites they have intentionally subscribed to.*
>
> *Thus, you will see a number of references in this user guide to a web presence rather than just a website. In today's environment, the business website is just one of a number of different areas where a business can have its online presence.*

In addition to entering their own business details and those of their third party providers, participants were able to enter 'audit dates', where the intention was they would be prompted by the tool in the future to re-examine their website features. Separate dates could be set for different third party providers. These dates could a regular review period determined by a business using the system or a perhaps when a subscription to a third party provider's service was about to expire. In this way, the business would also have an archive of the features of their web presence over a period of time.

At different audit dates the business would be able to add or remove website features for their own website and third party provider websites as they desired. For instance, if a business added or removed an online payment feature to its website then this could be recorded using the audit tool.

An important aspect of the tool was the reporting feature. It performed three main functions:
- To provide a listing of the current features of the business' own website for when it was about to conduct a redesign – to ensure all existing features were considered for the redesigned website.
- To provide a listing of where particular website features were currently implemented. For instance, if a business changed its telephone number it could print this report and know where to update it on its website presence.
- To provide an historical archive of the development of its own website presence.

Figure 1 shows the opening screen of the audit tool (after users had logged on using their provided user name and password). Participants were asked a series of questions related to the Audit Tool (hereinafter referred to as 'the tool'). Most of these questions were in two parts, with the first part providing the opportunity to enter a single, Likert-scale type response to a question such as "*Please rate the usefulness of the tool to monitor website features*" and the second part being an open-ended question such as "*Please comment on your answer*". The Likert-scale type responses were not used for detailed analysis, or for any form of generalisation. They assisted in assessing the opinions of the participants. The participants were asked to rate the tool in the following areas:
- Its usefulness to monitor the features on a small business' own website

- Its usefulness to monitor third party website features
- Its usefulness to review the history of the business' own website
- Its usefulness to review the history of the business' presence on third party websites
- Its usefulness to show the user where website features can be updated when im portant information changes (such as the business telephone number)
- Its usefulness to help manage third party contracts/ subscriptions
- Its usefulness as a general reminder to review website features

It was hoped that the open-ended questions would provide the main insights into the factors that could affect the adoption of the innovation by small businesses. Additionally, some further questions were asked about the tool, related to:
- The potential usefulness of adding an option to track website features on competitor websites
- If small businesses would devote the time needed to use the tool effectively
- Improvements that could be made to the tool
- Aspects of the tool that should be modified or removed
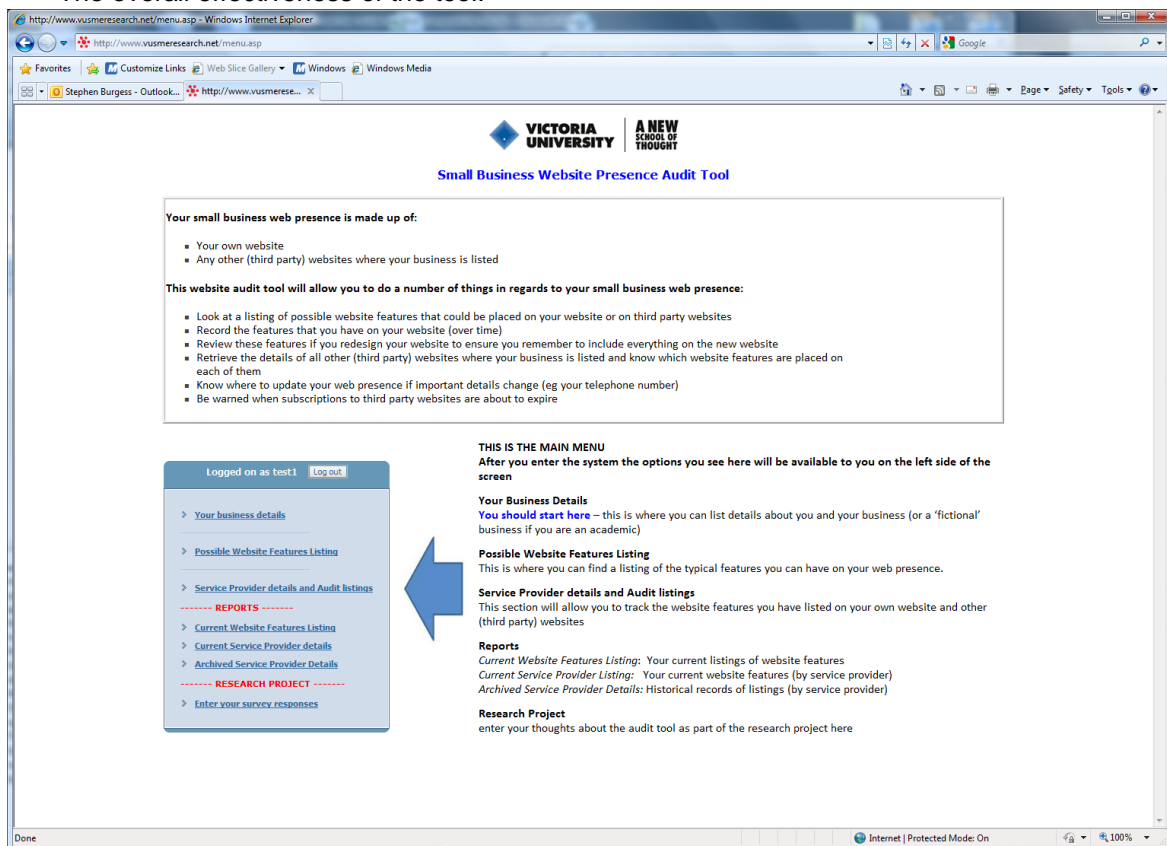- The overall effectiveness of the tool.

Figure 1: The opening screen of the Small Business Web Presence Audit Tool

When participants were sent the link to the audit tool and the user manual, they were requested to look at the manual before using the tool and also to try to ignore the obvious shortcomings of using an automated database design tool when considering the responses to the research questions. In hindsight, this was an unrealistic and unfair expectation of busy people. This was partly overcome by replacing the interviews with demonstrations of the audit tool, but the subsequent survey responses by participants suggested that the user interface still played a major role in their responses.

Results and Discussion

This section presents the results of the initial stage of the study, which are reported according to the themes identified in the online survey questions.

It was obvious from the results of the survey that the design of the prototype influenced the answers to some of the questions. Some of the participants (perhaps those more familiar with the type of interface) provided positive comments about the interface: "compact, clear, easy to use", "easy to

access and use", "I think it is well-designed and very clear" and "very impressive piece of kit here". However, many of the participants were not as complimentary with negative comments related to the colour, interface design, and the "clunkiness" of the interface. Most of these comments related to the number of steps it took to navigate through different aspects of the interface. This was an unavoidable problem as it was a limitation of ASPRunner package. Although this was clearly an issue related to the complexity of the tool, this was initially viewed as a serious concern as it was not intended that the final version of the audit tool would be built using the same interface that was used to build the prototype.

Monitoring website features

Participants were asked if the tool would be useful to monitor the features on a small business' *own website* and on third party websites. In relation to their own websites, the general responses from participants were split between those who suggested that it *was useful* and those that were *unsure*. One participant commented that small businesses needed to more aware of the *need* to audit their websites and the *need* to turn this into action. Another participant made a similar comment, but added the proviso that although it was a "useful background tool...its only as good as the person who maintains the accuracy of the records". Another participant (who was 'unsure') commented that it would be challenge to get small business owners to use the tool in the first place and suggested that it could be useful if changes were not made too regularly. Participants were then asked if the tool would be useful to monitor the features implemented on the websites of *third party providers*. There was a more positive response to this question with most participants suggesting that the tool would useful for monitoring these features. In fact, there were more than twice as many comments for this question than the previous one. One participant noted:

> …[It] forces the SB [small business] to think about when they have updated this feature last as part of their web presence. I suggest that they currently might undertake this in an ad hoc manner without actually knowing when they changed things.

There were also some useful suggestions made by participants in regards to this question. One participant asked if it would be possible to automatically "draw some of the information in" rather than having to enter into the system and another participant warned that monitoring the third party website features could be "tricky" if the small business did not have control over the changes made on these websites. These comments related to how the tool could provide advantages over existing practices, with suggestions as to how even greater advantage could be achievement by improvements in the prototype.

Reviewing the history of website features

Participants were then asked if the tool would be useful in reviewing the history of their own website and of their presence on third party websites. Although the responses to these questions were generally positive, there were some participants that thought the feature may not be that useful. On the positive side, one participant suggested that it would be useful to review a history of the usage of third party websites, with another noting:

> I think this is where the value lies. For a new website it would not show anything, but over 5 years it would show its evolution, and could be useful to see the cost / value impact of certain decisions.

The same participant comment that he thought that this 'longitudinal' aspect was the *only* useful aspect of the tool – with the other aspects "just recording steps with no value". However, another participant had a completely opposite view:

> I am not convinced many businesses will be interested in reviewing website history…… For many businesses which will just have links on online directories and so on. I don't think the third party element will be that useful. I appreciate it might be useful for keeping track of what business information is where when changes are made.

One participant did suggest that the tool was not very useful for reviewing the history of a small business' own website, but this participant did indicate that he was not able to operate that particular function of the tool. Thus, the difference of opinion between participants in relation to this feature

related to whether the feature offered any advantage over existing practices. This could be worth investigating in a future research project,

General reminder to review features

Participants were also split in their views as to whether the tool would provide a useful reminder to small businesses to review their website features. One participant noted that the tool did not have a specific feature to allow this to happen, with another unsure as to whether small businesses would "purposefully visit the tool just to review features". Even some of the positive comments were tempered with a note of caution, suggesting that small businesses could perhaps be allowed to set the review time for different website features – such as reminders for features which might alter monthly, yearly and so forth.

Updating website features when details change

There were also generally positive responses to a question related to whether the tool would assist in updating website features when important business details change, such as a change in a business' telephone number. In relation to this, one participant suggested that it would be good to have 'reminders' of all of the locations of data, with another noting:

> I didn't think of this as I was using the tool, but this is great. If it is used for nothing else then the tool should be used by all businesses just for this.

However, some participants again cautioned of the challenge to actually get small businesses to use the tool. For instance, one participant was "…concerned that most will just use post-it notes or something like that!" with another cautioning that the feature would be useful only "on third party sites".

Managing third party contracts and subscriptions

The most positive response for all questions came when participants were asked if the tool would be useful to manage third party provider contracts and subscriptions. One participant suggested that it would only be useful if the *number* of third party providers justified its use:

> This is perhaps where the tool could be of most use, with those firms having more sophisticated relationships with providers like this. But perhaps only if they have a number of such subscriptions/ contracts as opposed to just one for instance.

Other respondents were also positive, with comments along the lines that managing these subscriptions would be a "nightmare" for some small businesses and that it was useful to have a "double check" to ensure that nothing was missed.

Note that this with and the previous two features of the prototype the issues were not the complexity of using the feature, but whether the potential benefits that they provided were worth the effort of using them.

An option to track competitor website features

Participants were asked if an option should be added to the tool to track the website features on competitor websites. Again, the results suggested that the views were quite mixed as to whether such a feature would be useful. Those that were either unsure or against the idea suggested that it was too much effort, too difficult to carry out, would take too much time or was not necessary. Even the comments of those participants that were in favour of the idea suggested that they were not overwhelmingly so, with one suggesting that a small business might do it as a one-off analysis if they do it all and another suggesting that even though it may be of some interest to the business it will not indicate how *useful* those features are.

Will small businesses devote the time needed to use the tool?

Up until this stage, the comments received from participants were quite positive, with some cautions about the effort needed to use the tool and potential difficulties in getting small businesses to actually use it in the first place. However, there was a *sting in the tail* that was to be delivered by participants in their responses to the last few questions.

Participants were asked if they felt that small businesses would devote the time needed to use the tool. This provided the most negative response of all questions, with respondents split between being *unsure* whether small businesses would devote the time to just stating that they *would not use the tool.* A common view was that the effort needed to enter the initial information might be too much for many small businesses to continue to use the tool, with one participant commenting that "SMEs are notoriously short of time". Small businesses are notoriously resource poor, especially in relation to the time they have to devote to the use of new technologies (Burgess et al 2009). Unlike larger businesses, they have to be sure that any decisions to invest time into new initiatives are rewarded. Similar concerns would need to be considered in relation to small businesses adopting the toolkit being proposed in this research.

Two participants raised the issue of what would happen if more than one person in a small business was responsible for the web presence, with one suggesting that the only way it could work effectively was if only one person had the responsibility of keeping the tool up to date.

Perhaps the views were best summarised by one participant who suggested that "past research with small businesses has indicated they are aware of the need but not committed to auditing their systems". Thus, it is an understanding (or knowledge) of the *need* to monitor the small business website that could enhance the chance of the adoption of the tool. If the small business owner/manager does not perceive the need for such a tool then its perceived advantage is also diminished.

Another participant commented on the nature of the tool.

> *The tool is primarily a "recording" tool and for this reason I don't think most operators will devote time to using it. Many don't devote enough time to recording their accounting which is arguably more important.*

Finally, one participant commented that small businesses may not use the tool unless it was provided free of charge.

Potential Improvements

The next questions ask participants to identify areas where the tool could be improved or modified. Most of the suggestions related to improving the interface or operations of the tool (which unfortunately the researcher had little control over for the prototype), but there were some useful suggestions in regards to added functionality:
- Suggestions for additional website features that were not included in the prototype
- A reminder to businesses to check for 'broken' website links.

The idea of incorporating 'automated' facilities into the tool was raised throughout the responses to many of the questions. For instance, there were suggestions to:
- Having the tool 'in the background' whenever changes to the business or third party websites were made. In this way, the actions could be recorded in the tool at the time of completion.
- Integrate the tool with the business website so that changes to the website were automatically updated within the tool.
- Provide a 'seek' capability that would search the web for references to the business and automatically update the tool with these details.

These would have the combined effect of reducing the complexity of the tool and using less of a small business' time taken to use the tool.

In reality, there would be more of a chance for having the tool 'in the background' in the short term than having the tool integrated with the business website or performing an active seek. In relation to the business website, perhaps if businesses increasingly use features such as cascading style sheets to standardize the terminology used in different website features or the semantic web to recognise where different terminology refers to the same website feature then the possibility for such a feature may emerge.

Overall effectiveness

Finally, participants were asked to consider the overall effectiveness of the tool. Responses were evenly split between participants that suggested that the tool was useful and those that were unsure. The general feeling from participants was that there was some value in the idea being proposed, but that the audit tool – in the manner in which it was presented as a standalone system – could be too much effort to use for the value it provided.

Some typical comments along these lines were:

> *I think the tool needs to value add. This can only be achieved if it is tailored to particular industries. The underlying data model of the audit tool could be the same. But the field names, features, etc should be tailored…..*

> *Effective as I can see its value fairly clearly. But what all the information will mean to the SME is unclear. How do they act on it? Maybe I'm thinking too far ahead as it is [an] audit tool at this stage.*

Other comments related to whether small businesses would actually use the tool:

> *Small business commitment would likely be the limiting factor.*

> *It is innovative, but the challenge will be to ensure that it is used.*

> *Having been the owner of several small businesses, I wonder to what extent the tool would be used by SMEs.*

> *[It] will only be as good as the updating/maintaining.*

> *I am unsure that owner-managers will take the time. My own research in how they store data on customers shows that most aren't organised at all! You know this though…*

The results of Stage 2 of the study suggest to the researcher that there is some merit in continuing with the idea of providing a tool that small businesses can use to 'audit' their web presence, but that an online, standalone tool of the type provided is not the format that such a system could take. In its current form it appears that it does provide some advantage over existing practices in small businesses, but that this advantage does not justify the resources needed to adopt and implement it as a new innovation. Future research could take into account the suggestions for improvements by participants and could examine different forms that the tool could take.

It should be noted that the previous studies conducted by the author referred to in this article, as well as this study, have been conducted with Australian small businesses and academics in Australia and the UK. Whilst some of the findings could be applicable in developing countries, at the moment it is best to limit the potential generalisability of this work to small businesses in developed countries.

Conclusion

This study used a systems development approach to consider the potential usefulness of a website audit tool for small businesses, designed to keep track of website features employed as part of the small business web presence. This occurred through the development of a prototype of an audit toolkit and 'observing' its use by assessing the views of 15 academic experts in the information systems and business fields that have had experience conducting research into small businesses. The results of the study suggested that there was some value in the idea being proposed, but that the audit tool was too much effort to use *by itself* for the value it provided. Areas of the tool that were deemed to be most useful were its ability to manage third party contracts and subscriptions and its ability to show the business where changes needed to be made when specific circumstances, such as a change in business telephone number, occurred. Most of the negative comments related to whether small businesses had the motivation and/or time to use the tool. Potential improvements to the tool were proposed by the participants. Generally, it was considered that the effort needed to implement and use the audit tool would not justify the potential advantage that it could provide and the likelihood was that it would not be used by small businesses in its current form. Additionally, some of the

participants considered that many small businesses would not *understand* the potential gains that could be achieved from using the tool and that this could negatively affect the adoption decision.

The next stage will involve a much more formal study of the web presence of small businesses, involving a much larger sample of businesses. This will also give the researcher time to consider the appropriate form that an audit tool (for small businesses to monitor their web presence) could take and how it could be delivered. After this the tool could be tested with owner/managers of small businesses.

References

Alan, C., Annear, J., Beck, E., & Van Beveren, J. (2003). A framework for the adoption of ICT and security technologies by SME's. *16th Annual Conference of Small Enterprise Association of Australia and New Zealand*, Ballarat, Australia.

Burgess, S. 2010, "A comparison of features on the websites and third party websites used by Australian small businesses", *33rd ISBE conference proceedings,* Institute for Small Business and Entrepreneurship, London, Nov 2-4.

Burgess, S. 2008, "Determining website content for small businesses: assisting the planning of owner/managers", *International Journal of Knowledge Management Studies,* vol. 2, no. 1, pp. 128-146.

Burgess, S., Bingley, S. & Hunter, M.G. 2009, *The websites of community-based organisations*, Victoria University, Centre for Tourism and Services Research, Melbourne, Australia.

Burgess, S., Bingley, S. & Sellitto, C. 2007, "A Model for Website Content Decisions in Micro Businesses", *Global Business & Economics Anthology,* vol. 1, pp. 474-487.

Burgess, S., Sellitto, C. & Karanasios, S. 2009, *Effective Web Presence Solutions for Small Businesses: Strategies for Successful Implementation,* Information Science Reference, Hershey, PA.

Burgess, S. & Tatnall, A. 2007, "A Business-Revenue Model for Horizontal Portals", *Business Process Management Journal,* vol. 13, no. 5, pp. 662-676.

Burstein, F. 2002. "Systems development in information systems research" in Williamson, K. 2002. *Research Methods for students, academics and professionals: Information management and systems*, 2nd ed, Charles Sturt University, Centre for Information Studies, Wagga Wagga, Australia.

Chen, H. (2008). *Online community portals for small businesses*. (Magister Artium), University of Johannesburg, South Africa.

Eisenmann, T.R. 2002, *Internet Business Models: Texts and Cases,* McGraw-Hill Irwin, New York.

Gengatharen, D.E. 2008, "Interpreting the success and failure of regional internet community portals in promoting e-commerce adoption by SMEs: A cultural perspective", *Journal of Systems and Information Technology,* vol. 10, no. 1, pp. 56-71.

Sanders, J., Galloway, L., & Deakins, D. (2010). The effectiveness of internet portals on the E-commerce activities of rural SME business owners: A study of rural SMEs in Scotland. In B. Thomas, & G. Simmons (Eds.), *E-commerce adoption and small business in the global marketplace: Tools for optimization*. Business Science Reference, Hershey, PA, pp.100-115.

Tatnall, A. & Davey, B. 2005, "An Actor Network Approach to Informing Clients through Portals", *Informing Science: International Journal of an Emerging Transdiscipline,* vol. 2, pp. 771-779.

Tatnall, A., Burgess, S. & Singh, M. 2006, "Small Business and Regional Portals in Australia" in *Encyclopaedia of E-Commerce, E-Government and Mobile Commerce*, ed. M. Khosrow-Pour, Idea Group Reference, Hershey, PA, pp. 1016-1021.

Tatnall, A., Burgess, S. & Singh, M. 2004, "Community and Regional Portals in Australia: A Role to Play for Small Businesses?" in *Electronic Commerce in Small to Medium-Sized Enterprises: Frameworks, Issues and Implications*, ed. N. Al-Qirim, Idea Group Publishing, Hershey, PA, pp. 304-320.

Telstra Corporation 2010, *Sensis E:Business Report: The Online Experience of Small and Medium Enterprises*, Sensis, Australia.