Abstract

There is growing IS research concerning SME use of websites and limited but growing research on corporate social responsibility (CSR) by SMEs. However, to-date these two bodies of literature have remained largely separate. This paper links these fields by presenting an SME website content analysis method. Melville in his seminal MIS Quarterly article called for such methods which provide a nexus of IS, organisations and environment (which we extend to CSR). The method involves four steps: 1) identifying sources of SME websites; 2) determining if websites are describing CSR (based on the literature CSR by SMEs); 3) archiving website content for analysis; and 4) coding the website content using a structured framework (combining the literature on IS and CSR in an SME context). The paper also provides suggestions on how IS researchers can apply the method for quantitative and qualitative/exploratory objectives for future research.

Keywords: Corporate social responsibility, Small and medium enterprise, website, Content analysis method, Australia.
1 INTRODUCTION

There has been extensive research on small and medium enterprise (SME) adoption and use of information systems (IS) over the last decade (see Parker and Castleman (2007; 2009) for a review). In an Australian context SMEs are firms with fewer than 200 staff (ABS 2010). Much of the past work on SMEs and IS has been factor-based research exploring the antecedents of adoption by and the benefits of IS for SMEs (Parker & Castleman 2007; 2009). The increasing academic and practitioner interest in corporate social responsibility (CSR) suggests it is an opportune time to explore if and how SMEs are describing their CSR online. In this paper we define CSR as “voluntary values, technologies and practices which directly or indirectly result in a positive (or reduce negative) impact on the environment or society” (adapted from Campbell 2007; Parker et al. 2009b). We exclude positive economic impact because this has been the tradition of IS research and is well covered already. We believe studying CSR descriptions on SME websites is useful because it allows policymakers and researchers to gauge the extent to which SME owner-managers in various industries wish to be seen as environmentally and/or socially responsible by stakeholders, how this is expressed in a discursive sense (e.g. how and where they describe CSR on their website), and whether the descriptions change over time (e.g. using longitudinal studies).

The limited CSR (non-IS) research on SMEs has focused on identifying if they engage in CSR, if so what practices they use, and also the barriers/drivers and benefits for SMEs engaging in CSR (Parker et al. 2009b). Many owner-managers resist CSR for reasons such as lack of money (Revell & Blackburn 2007), time, CSR knowledge (Bradford & Fraser 2008; Revell et al. 2010) and/or, no perceived business case (Revell & Blackburn 2007; Revell et al. 2010). However, others do engage in CSR for various reasons such as altruism (Parker et al. 2009b) or to gain benefits such as improved reputation with customers (Dzansi & Pretorius 2009; Nielsen & Thomsen 2009; Revell et al. 2010).

In this paper we respond to Melville’s (2010) call in his seminal MIS Quarterly article for IS researchers to develop analysis methods for examining the nexus of IS, organisations and the environment; we extend this to CSR more broadly. Our method is suitable for studies focusing on those SMEs which, for whatever motivation, describe their CSR online. A limitation of website studies is the possible disconnect between SME CSR communication and actual practices. For example, some SMEs might not communicate CSR efforts on their website while others might potentially exaggerate how their efforts’ result in environmental or society benefits. This conceptual paper describes an SME website content analysis method (addressing this nexus) which involves four steps: 1) identifying sources of SME websites; 2) determining if websites are describing CSR; 3) archiving website content for analysis; and 4) coding the website content using a structured framework developed by combining the literature on IS and CSR in an SME context. The paper is structured according to these four steps and then offers concluding remarks and suggestions for future work.

The method outlined in this paper (and the coding framework in particular) makes an important contribution to knowledge for a few reasons. First, existing SME content analysis methods (e.g. Alonso Mendo & Fitzgerald 2005) do not incorporate CSR. This paper adapts this earlier work by adding a CSR context to achieve Melville’s nexus. Second, there has been limited research combining IS and CSR in an SME context. Some studies have explored which channels (e.g., reports, websites) SMEs use and, in some cases, why these channels were chosen (e.g., Jenkins 2006; Lawrence et al. 2006; Nielsen & Thomsen 2009; Zackrisson et al. 2008) but not how the channels are used to describe CSR. Existing research on CSR descriptions on SME websites has focused on the structural and presentation aspects of the CSR content (Dincer & Dincer 2010) or has examined the discursive nature of the CSR text but without formulating a content analysis method (Parker et al. 2009a). Third, if researchers apply our method (or at least our coding framework) for content analysis it will increase the comparability of future (longitudinal) studies by different authors. Fourth, the method (and coding framework in particular) could provide the basis for theory building. For example, it could be used to develop typologies of SMEs based on the extent and nature of the CSR descriptions on their websites.
2 IDENTIFYING SOURCES OF SME WEBSITES

The first step in the content analysis method is for researchers to identify a source of SME websites from which those describing CSR online can be selected. Three major types of sources are summarised, along with their (dis)advantages and the types of research for which they are useful:

1. Purchase an SME database from a commercial provider. This has the advantage of ensuring the SMEs satisfy selection criteria (e.g. number of staff, industry, ownership). A disadvantage is that it might be costly to obtain a large enough sample of SMEs describing CSR online. This approach would be most useful for quantitative research needing a representative sample of SME websites.

2. Use a list of firms certified as doing CSR. The advantage is that these firms are likely to describe CSR online. Disadvantages might include the difficulty of identifying firms satisfying selection criteria (e.g. size, ownership status) and getting third parties to offer their lists (possibly at a cost). This approach may be useful for exploratory research focusing on exemplar SMEs doing CSR.

3. Use a free database where SMEs self-register. These databases are affordable for researchers and include large numbers of SME websites. Self-register databases mean, however, that researchers cannot verify firm size, ownership or nationality, and that owner-managers may select the wrong industry. This approach would be useful for exploratory or qualitative research.

There are many variations to these source types. Also, there are ways to minimise the disadvantages of examples 2 and 3. For instance, ensuring nationality of SMEs can be increased by selecting websites with a country domain (e.g. “.au”). Websites can also be eliminated from the sample during content analysis if website text suggests the firms are large, foreign owned or in the wrong industry category. This is time-consuming and open to interpretation, and so could only be used for exploratory studies.

3 DETERMINING IF WEBSITES ARE DESCRIBING CSR ONLINE

The next step in the content analysis method is for researchers to identify websites describing CSR based on our definition, but there are issues. First, researchers cannot know motive with content analysis. This means the method must focus on descriptions which imply a positive environmental or societal impact regardless of actual intent. Second, SME activities are only CSR if they are voluntary, but this is context dependent. For example, non-discriminatory hiring is law in Australia but may not be in other nations. This implies that the method must be national (Australian in our case) and assume that SMEs are describing CSR online unless it is absolutely clear they are just complying with law.

Third, the literature is consistent in what it considers environmental sustainability by SMEs (see Table 1), but there is debate about which society stakeholders should be beneficiaries of CSR. A few authors include SME practices targeting customers (e.g. honest advertising, product safety, fair pricing, privacy and quality service) as CSR (Dzansi & Pretorius 2009; Evans & Sawyer 2010; Fuller & Tian 2006). However, in Australia honest advertising and product safety is required by law. We considered the other practices to be good business (not CSR) because most SMEs would claim to do them. Only practices targeting customers which are CSR (such as encouraging customers to do CSR or selling products and services which enable customers to do CSR) were therefore included in Table 1.

Similarly, practices targeting employees which some authors list as CSR include fair wages, diversity in hiring, and health and safety (Dzansi & Pretorius 2009; Evans & Sawyer 2010; Fuller & Tian 2006; Jenkins 2006) but these are legislated in Australia. Other practices stated by these authors include offering social events, involving employees in decision-making, and providing rewards/incentives and job training/mentoring. These practices are voluntary but mostly benefit SMEs by retaining valued staff. Some SME owner-managers believe that employing staff is practicing CSR because it helps the economy (Fuller & Tian 2006; Jenkins 2006), but our definition shows the focus must instead be on creating social good. We therefore did not include these practices in Table 1.
<table>
<thead>
<tr>
<th>CSR by SMEs</th>
<th>Literature support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community stakeholders: as above, engagement projects, events, ethnic minorities, sport teams, youth (e.g. work experience), churches, volunteers</td>
<td>Collins et al. (2007), Dzansi and Pretorius (2009), Evans and Sawyer (2010), Fuller and Tian (2006), Jenkins (2006)</td>
</tr>
<tr>
<td>Staff or firm sponsor, donate to, volunteer/mentor for CSR programmes/events and to stakeholders</td>
<td>Aragon-Correa et al. (2008), Collins et al. (2007), Dzansi and Pretorius (2009), Evans and Sawyer (2010), Fuller and Tian (2006)</td>
</tr>
<tr>
<td>Promote CSR by others (community/environment/Aboriginal culture descriptions, encourage CSR)</td>
<td>Based on Chen et al. (2008). See also Jenkins (2006)</td>
</tr>
<tr>
<td>Educate staff about CSR in the firm (e.g. policies, procedures, practices, etc)</td>
<td>Aragon-Correa et al. (2008), Borga et al. (2009), Collins et al. (2007), Rao et al. (2009), Revell et al. (2010)</td>
</tr>
<tr>
<td>CSR positions or roles in the firm</td>
<td>Hitchens et al. (2005), Revell et al. (2010)</td>
</tr>
<tr>
<td>CSR policies, statements (e.g. impact reduction targets, family-friendly services), principles/codes</td>
<td>Bos-Brouwers (2010), Borga et al. (2009), Collins et al. (2007), Dzansi and Pretorius (2009), Fuller and Tian (2006), Revell et al. (2010)</td>
</tr>
<tr>
<td>Product lifecycle (e.g. waste reduction, sustainable design/packaging, recycled/non-toxic/organic input materials, help customers to dispose)</td>
<td>Aragon-Correa et al. (2008), Borga et al. (2009), Bos-Brouwers (2010), Evans and Sawyer (2010), Hitchens et al. (2005), Marshall et al. (2010), Rao et al. (2009), Revell et al. (2010)</td>
</tr>
<tr>
<td>Waste management (e.g. separation and recycling, avoid disposable goods, waste reduction)</td>
<td>Aragon-Correa et al. (2008), Borga et al. (2009), Bos-Brouwers (2010), Collins et al. (2007), Evans and Sawyer (2010), Hitchens et al. (2005), Marshall et al. (2010), Rao et al. (2009), Revell et al. (2010)</td>
</tr>
<tr>
<td>Paper conservation (e.g. recycle/reuse paper, use recycled paper, double-sided printing, avoid use)</td>
<td>Aragon-Correa et al. (2008), Evans and Sawyer (2010), Fuller and Tian (2006), Revell et al. (2010)</td>
</tr>
<tr>
<td>Water conservation (e.g. no water leaks, use recycled water, reduction targets)</td>
<td>Aragon-Correa et al. (2008), Borga et al. (2009), Bos-Brouwers (2010), Collins et al. (2007), Evans and Sawyer (2010), Hitchens et al. (2005), Marshall et al. (2010), Rao et al. (2009)</td>
</tr>
<tr>
<td>Energy conservation (e.g. reduction targets, switch off lights/heating not in use, green energy, efficient lights, calculate carbon footprint)</td>
<td>Aragon-Correa et al. (2008), Bradford and Fraser (2008), Borga et al. (2009), Bos-Brouwers (2010), Collins et al. (2007), Evans and Sawyer (2010), Fuller and Tian (2006), Hitchens et al. (2005), Jenkins (2006), Marshall et al. (2010), Rao et al. (2009), Revell et al. (2010)</td>
</tr>
<tr>
<td>Travel reduction (e.g. telecommuting, carpooling, low-carbon vehicles, reduce sales/delivery travel)</td>
<td>Bos-Brouwers (2010), Evans and Sawyer (2010), Fuller and Tian (2006), Hitchens et al. (2005), Revell et al. (2010)</td>
</tr>
<tr>
<td>Responsible advertising (e.g. reduce paper adverts, electronic brochures, CSR claims in advertising)</td>
<td>Aragon-Correa et al. (2008), Revell et al. (2010)</td>
</tr>
<tr>
<td>Pollution prevention (e.g. reduction targets, filters, controls, reduction of solvents/chemicals)</td>
<td>Aragon-Correa et al. (2008), Borga et al. (2009), Bos-Brouwers (2010), Evans and Sawyer (2010), Hitchens et al. (2005), Jenkins (2006), Rao et al. (2009)</td>
</tr>
<tr>
<td>Process quality (e.g. implement environmental management system, certifications, etc)</td>
<td>Aragon-Correa et al. (2008), Borga et al. (2009), Bos-Brouwers (2010), Collins et al. (2007), Hitchens et al. (2005), Revell et al. (2010)</td>
</tr>
<tr>
<td>Procure CSR products/services (e.g. CSR certified, recycled, green IT services/products, organic)</td>
<td>Aragon-Correa et al. (2008), Evans and Sawyer (2010), Hitchens et al. (2005), Revell et al. (2010)</td>
</tr>
<tr>
<td>Procure from CSR suppliers (e.g. environmental criteria for supplier selection, no child labour)</td>
<td>Aragon-Correa et al. (2008), Borga et al. (2009), Bos-Brouwers (2010), Collins et al. (2007), Hitchens et al. (2005)</td>
</tr>
<tr>
<td>Procure locally to reduce carbon miles</td>
<td>Revell et al. (2010)</td>
</tr>
<tr>
<td>Sell products/services helping customers to do CSR, resell CSR products to customers</td>
<td>Bos-Brouwers (2010), Hitchens et al. (2005)</td>
</tr>
</tbody>
</table>

Table 1. Listing of what constitutes CSR by SMEs

By contrast, authors tend to agree that SMEs which sponsor, donate, volunteer/mentor with respect to external and community stakeholders are engaging in CSR. While such activities also benefit SMEs economically (e.g. reputation), they also result in social good and were therefore included in Table 1.

In addition, Chen et al. (2008) argue that IS can have an indirect “informating” and behaviour change role regarding the environment (and hence CSR). This suggests that the method should permit the inclusion of website descriptions (e.g. tourism firms describing their local environment, community and/or Aboriginal heritage, but not describing how they preserve it) which could have an indirect positive impact on the environment or their local community (e.g. encouraging tourism visitors to an SME’s website and premises to appreciate and thus decide to preserve these areas). For this reason, Table 1 includes such descriptions as an indirect way in which SMEs might undertake CSR.
The process by which researchers identify SME websites describing CSR based on Table 1 may vary depending on the type of research. For example, qualitative and exploratory research may only require small samples of websites and would necessitate giving researchers the discretion to include descriptions which are not included in Table 1. Quantitative research may focus more on following Table 1 without deviation to help ensure inter-coder reliability and also focus on developing large samples to enable statistical analyses on the data.

4 ARCHIVING CSR CONTENT FROM SME WEBSITES

The next step in the content analysis method (possibly concurrent with the previous step) is to archive the content for later analysis because websites are dynamic (e.g. decommissioned, redesigned or updated). Archiving ensures that a snapshot of the websites at a point in time is created to facilitate longitudinal studies and analysis which will not be affected by such changes. Archiving is a challenge, however, because of the range of website formats used including frames, Flash, multimedia (including embedded YouTube videos, Facebook pages, etc) and because of complexity such as large product catalogues and using content management systems. Based on our archiving experience we suggest:

- Archive the entire SME website using a tool such as SurfOffline Professional if the site has a small number of pages (e.g. no product catalogues) or a lot of CSR content. We have found this tool to be the easiest to use while also handling a wide range of website formats. The advantage of archiving the entire website is that this allows examining the context of CSR text within the site, returning to the site to examine new themes which might be identified during later analysis, and analysing how multimedia on the website contributes to CSR descriptions.

- Archive the webpages containing CSR content only if the website is large and complex, but only has a few pages or phrases of CSR content. The visual aspects of the webpage can be captured by browser plug-ins (e.g. Webpage Screenshot, Web2PDF). However the tools do not handle Flash and multimedia, and so might require other methods to archive the page (e.g. Print-Screen).

Qualitative analysis of the textual CSR descriptions are often best handled using Word processing or qualitative analysis (e.g. NVivo) software. For this reason researchers may also find it useful to copy CSR descriptions into such software for coding purposes.

5 CODING WEBSITES USING A STRUCTURED FRAMEWORK

The next step in the content analysis method is for researchers to use a structured framework for coding. This is important for a few reasons. First, if all researchers use the same structured approach it will increase the comparability of their studies and also facilitate longitudinal research (e.g. to explore the maturity of online CSR descriptions by SMEs over time). Second, new themes identified during exploratory and qualitative research relating to CSR descriptions on SME websites will have a basis on which to make refinements – that is, our framework. This section summarises the development of this framework which merges the literature on CSR (Table 1) and on SME website design.

5.1 Dimensions of SME Website Analysis

The seminal work of Alonso Mendo and Fitzgerald (2005) was used as the overall structure of the framework because they identified content analysis dimensions which have been used successfully for SME websites relating to design, content and features (see Table 2) and because their work has been used by other authors (e.g. Burgess & Bingley 2007; Fisher et al. 2007) to develop their SME website content analysis methods. We also believe these dimensions are useful because in addition to categorising what content can be included on SME websites, the dimensions also indicate why the content should be included (e.g. the promotion and the relationship enhancement dimensions).
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Example website design, content and features</th>
</tr>
</thead>
</table>
| Identification and image  | • Company contact and location details (Burgess et al. 2009; Burgess 2008; Burgess & Bingley 2007; Burgess et al. 2005; Fisher et al. 2007; Zafiropoulos et al. 2006)  
• Company history (Alonso Mendo & Fitzgerald 2005)  
• Company mission/values (Alonso Mendo & Fitzgerald 2005)  
• Company policies (Burgess & Bingley 2007)                                                                 |
| Promotion and contract    | • Information about products/services, their use and prices (Alonso Mendo & Fitzgerald 2005; Auger 2005; Burgess et al. 2009; Burgess 2008; Burgess & Bingley 2007; Burgess et al. 2005; Fisher et al. 2007; Zafiropoulos et al. 2006)  
• Financing, guarantees, payment conditions (Alonso Mendo & Fitzgerald 2005)  
• Annual report (Burgess et al. 2009)  
• Press releases (Alonso Mendo & Fitzgerald 2005; Burgess & Bingley 2007)  
• Special offers (Burgess et al. 2005; Zafiropoulos et al. 2006)  
• Financial status of the firm (Alonso Mendo & Fitzgerald 2005)                                   |
| Relationship enhancement   | • Customer testimonials/reviews (Alonso Mendo & Fitzgerald 2005; Burgess et al. 2009; Burgess & Bingley 2007; Burgess et al. 2005)  
• Frequently asked questions (Alonso Mendo & Fitzgerald 2005; Burgess et al. 2009; Burgess 2008; Burgess & Bingley 2007; Burgess et al. 2005)  
• Links to related information (Alonso Mendo & Fitzgerald 2005; Burgess et al. 2009; Burgess 2008; Burgess & Bingley 2007; Burgess et al. 2005)  
• Careers information (Alonso Mendo & Fitzgerald 2005)  
• Company newsletters and mailing list (Burgess et al. 2009; Burgess 2008; Burgess & Bingley 2007; Burgess et al. 2005)  
• List of community events (Burgess 2008; Burgess & Bingley 2007)                                             |
| Relational interactivity   | • Alerts/messages about company (Alonso Mendo & Fitzgerald 2005)  
• Alerts/messages about products/services (Alonso Mendo & Fitzgerald 2005)  
• Website customisation (Alonso Mendo & Fitzgerald 2005; Burgess & Bingley 2007)  
• Discussion groups and chat (Alonso Mendo & Fitzgerald 2005; Auger 2005; Burgess et al. 2009; Burgess 2008; Burgess & Bingley 2007; Burgess et al. 2005)  
• Guest books (Alonso Mendo & Fitzgerald 2005)  
• Members’ only sections (Alonso Mendo & Fitzgerald 2005; Burgess & Bingley 2007)  
• Customer feedback option (Auger 2005)  
• Online help desk or email support (Auger 2005)  
• User-generated content and Web 2.0 (Burgess et al. 2009; Chua et al. 2009)                                    |
| Transactional interactivity| • Online enquiries/quotes (Burgess et al. 2005)  
• Online ordering/booking and status checking (Alonso Mendo & Fitzgerald 2005; Auger 2005; Burgess & Bingley 2007; Fisher et al. 2007; Zafiropoulos et al. 2006)  
• Online payment (Alonso Mendo & Fitzgerald 2005; Burgess 2008; Burgess & Bingley 2007; Burgess et al. 2005; Fisher et al. 2007) |
| Navigability               | • Menu structure and path followed (Alonso Mendo & Fitzgerald 2005)  
• Site map (Alonso Mendo & Fitzgerald 2005; Burgess et al. 2009; Burgess et al. 2005)  
• In-site search or searchable databases (Alonso Mendo & Fitzgerald 2005; Auger 2005; Burgess et al. 2005; Fisher et al. 2007) |
| Design/aesthetics          | • Website space allocation and colours (Alonso Mendo & Fitzgerald 2005)  
• Content readability and scannability (Alonso Mendo & Fitzgerald 2005)  
• Website and webpage layout (Alonso Mendo & Fitzgerald 2005) |
• Animation (Alonso Mendo & Fitzgerald 2005)  
• Audio (Alonso Mendo & Fitzgerald 2005; Auger 2005)  
• Video (Auger 2005; Burgess et al. 2009; Zafiropoulos et al. 2006) |
| Site management and maintenance | • Last update date on pages (Alonso Mendo & Fitzgerald 2005)  
• Dynamically generated pages (Alonso Mendo & Fitzgerald 2005; Burgess et al. 2009) |

*Table 2. SME website analysis dimensions (adopted from Alonso Mendo & Fitzgerald 2005)*
5.2 SMEs, CSR and their Websites

The main problem with Table 2 is that it only presents the nexus of IS (websites) and organisations (SMEs) from Melville’s (2010) call. Instead the method should also incorporate the environment (or CSR more broadly in our case). In the next section we explain how Tables 1 and 2 were combined to achieve this nexus, with the resulting structured coding framework being presented in Table 3.

5.2.1 Identification and Image

We believe that all aspects of the identification and image dimension in Table 2 can be adapted for CSR. For example, it is reasonable to expect that some SMEs might refer to CSR in their mission, vision and history described on their website. Further, Table 1 shows that SMEs might have CSR policies. The SME location element in Table 2 also corresponds well to the descriptions which SMEs might provide on the website about the environment, community and Aboriginal heritage in their local area. Finally SMEs could include CSR in contact details (e.g. phone 131-CSR=131-277). We therefore adapted Table 2 to include these elements in Table 3.

Table 1 suggests that two other identification and image related elements which might be described on SME websites could include CSR positions/roles and staff education relating to CSR. We therefore included these in our coding framework.

Research has also shown that CSR communication is often driven in SMEs by an owner-manager's sense of moral duty, personal values and commitment (Gueben & Skerratt 2007). For this reason we added CSR philosophies, commitments and values to our framework. We differentiated these from an SME’s mission/vision because the latter describes a fundamental goal of the business, which might be different to the personal values of the owner-manager. In other words, an owner-manager could have a strong commitment to the environment and take some action to reduce the firm’s negative impact (e.g. recycling), but this does not imply necessarily that environmental sustainability will be the primary mission/vision of the firm. We therefore distinguish between the SME owner-managers personal commitment and the mission/vision (or primary goal) of the SME organisation in our framework.

5.2.2 Promotion and Contract

All the promotion and contract dimension from Table 2 relating to SME websites generally would also relate to CSR. First, Table 1 shows that some SMEs incorporate sustainability into one or more aspects of their product/service lifecycle. It is therefore reasonable to expect that some SME websites might include descriptions of the CSR features of their products/services. Second, we believe that some SME websites might include (annual) reports, press releases and special offers with CSR information relating to the company or its products/services. Third, SMEs specialising in CSR products/services might include information on how customers can obtain finance for or provide guarantees relating to the CSR qualities of their products/services. Fourth, the financial status of the firm in relation to CSR might include descriptions on their website about how they obtained grants to support their CSR activities. We therefore adapted these aspects of Table 2 for our coding framework (see Table 3).

Table 1 suggests that other promotion and contract related elements which might be described on SME websites could include their quality control processes (e.g. CSR certifications and accreditations), paper/energy/water conservation practices, waste management and pollution prevention practices, travel reduction activities, and responsible advertising. In addition, some research has found that SMEs have received CSR awards (Fuller & Tian 2006). We therefore incorporated these into Table 3.

5.2.3 Relationship Enhancement

All elements of the relationship enhancement dimension in Table 2 were adaptable for our framework. More specifically, we anticipate that CSR descriptions might appear in SME customer testimonials,
frequently asked questions and company newsletters. The websites could also provide links to external CSR-related websites, and provide information on CSR-related community events and careers. For this reason these aspects of Table 2 were adapted and incorporated into our framework in Table 3.

Table 1 suggests that other relationship enhancement elements which might be described on SME websites could include how they support external CSR initiatives (e.g. sponsoring and donating time/money), procure CSR products/services, select suppliers based on their CSR credentials, and buy locally to reduce the carbon emissions. These elements emphasise that relationships with suppliers and other external stakeholders can be developed based on CSR. For this reason, these aspects were added to our coding framework.

5.2.4 Relational Interactivity

All the elements of the relational interactivity dimension in Table 2 were adapted to introduce a CSR context. More specifically, we anticipate that some SME websites might have members-only sections/clubs, help/support, discussion groups/chat, guest books or online feedback options where website visitors can interact with SME staff in relation to CSR. We believe it is feasible that some SME websites might include customisation features related to CSR. Further, with the increasing ability for third party Web 2.0 content to be integrated into SME websites (e.g. Facebook, YouTube) it is possible that Web 2.0 features could be used to describe CSR. (We only included embedded content in our coding framework because exploring content in external, third party sites would not be part of the SMEs’ website.) We therefore adapted these for our coding framework (see Table 3).

Table 1 suggests that another relational interactivity element which might be described on SME websites could include the selling of products/services enabling customers to do CSR or reselling CSR products/services (e.g. a website selling sustainable baby products from a range of suppliers). For this reason we included these elements in our framework.

5.2.5 Transactional Interactivity

All the elements of the transactional interactivity dimension in Table 2 were adapted to introduce a CSR context. We anticipated, for instance, that some SMEs would enable customers or website visitors to submit enquiries about, receive quotes, make orders and bookings, and also make payments regarding CSR products/services in particular. We therefore adapted these for our framework. In addition, Table 1 and the CSR literature suggest that some SMEs might make payments such as donations to CSR organisations so we included this element in our coding framework (see Table 3).

5.2.6 Navigability

All the elements of the navigability dimension in Table 2 were adapted to include a CSR context. First, we anticipate that some SME websites might include sitemaps which could enable site visitors to find webpages relating to CSR. Second, we expect that some SME websites might have menus which incorporate CSR (e.g. one or more major, minor or sub-headings relating to CSR). Finally, we also believe it was reasonable to expect that some SME websites might have searchable CSR information on their sites, such as the ability to search for CSR products/services and articles. We therefore adapted these elements for our coding framework (see Table 3).

5.2.7 Design/aesthetics

We believe that the relevance of the design/aesthetics dimension in Table 2 to our coding framework primarily relates to the layout and prominence of the CSR descriptions relative to other content on the SME websites. For example, we anticipate that some webpages might have CSR headings to draw reader attention, while pages on other SME websites might only have small paragraphs or sentences of
CSR content. Further, we anticipate there might be aspects to the webpage design (e.g. whitespace, colours) which would reflect the prominence, readability or scannability of the CSR descriptions. We therefore adapted these layout aspects of design/aesthetics for the framework.

5.2.8 Design/use of multimedia

All the elements of the design/use of multimedia dimension in Table 2 were adapted for CSR because we anticipate that some SME websites could use graphics, images, animations, audio recordings or complete video to convey an aspect of CSR. We therefore adapted these in our framework.

5.2.9 Site management and maintenance

The relevance of the site management and maintenance dimension to our coding framework primarily relates to the currency of the CSR content. For example, the website content could relate to external CSR information such as government rebates for CSR programmes, so that the question is whether this type of CSR content is current. If it is not feasible for researchers to verify the currency of such external information, the focus in this area could be on whether the CSR content is at risk of not being current. We therefore included CSR content currency in our coding framework (see Table 3).

5.3 Final Structured Coding Framework for Website Analysis

Table 3 summarises the final structured coding framework which can be used to carry out the data analysis comprising the final step of our content analysis method. The non-bold elements in Table 3 are those which were adapted from general SME website literature (Table 2). The bold elements are those which were added to Table 2 based on our analysis of the CSR literature shown in Table 1.

The use of the coding framework in this stage depends on the nature of the research. For example, quantitative research which might involve two researchers using the framework to record (e.g. yes or no) which CSR descriptions are found on each SME website (that is, each website is coded twice). The results can then be compared and a consensus reached if there are discrepancies. Researchers can then perform descriptive or inferential statistics on the resulting data.

By contrast, qualitative research would focus more, for instance, on how CSR is described online for each dimension and for all the elements in each dimension of the framework. For instance, researchers could divide the dimensions of the framework up among themselves. Each researcher can then code the archived website text using each element of their assigned framework dimension(s) using qualitative analysis software. This will produce quotes relating to all elements of each dimension of the framework which can then be interpreted to draw out themes/patterns for the CSR descriptions.

6 CONCLUSION AND FUTURE RESEARCH

This conceptual paper has combined the separate bodies of literature on IS and CSR in an SME context to present a content analysis method for examining how SMEs might describe CSR on their websites. The paper makes an important contribution to knowledge by extending existing IS research on SME website design and content to incorporate the nexus of CSR as suggested by Melville (2010). The method proposed in this paper will provide IS researchers with a common set of coding dimensions and elements which can form the basis of highly comparable approach to conduct future quantitative, qualitative/exploratory and longitudinal empirical research.
### Table 3. Dimensions for analysing online CSR descriptions by SMEs

We recommend that researchers initially conduct exploratory research using our method to determine if refinements are needed for Tables 1 and 3. This could be done using a purposive or convenience approach.
sample of SME websites across many industry sectors in multiple countries. Refined versions of Tables 1 and 3 can then be used to propose typologies or CSR maturity/stage models which represent archetypes of how SMEs describe CSR online (e.g. basic CSR descriptions through to sophisticated websites involving many descriptions from Table 3). These typologies and models can then be tested statistically using generalisable, representative samples of SME websites. Future research can also explore the possible level of disconnect between the communication about CSR efforts on SMEs’ websites, the actual CSR practices of SMEs and the positive benefits achieved by the SMEs (e.g. reduction in waste volumes sent to landfill), for instance, via interviews.

References


