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An Exploration of the Marketing Readiness of Websites

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Abstract

The aim of the reported study was to assess the marketing readiness of websites using a tool developed from studies in the late 1990s. The research hypotheses suggest that, in line with earlier studies, government websites are more marketing ready than commercial service organisation sites in Australia. The paper reports findings that commercial service organisation websites are not as marketing ready as might be expected. The research hypotheses are partially supported in that Victorian local government websites show evidence of more sophisticated marketing capability than those of commercial service organisations in Australia and that the service organisations sampled are less likely to employ the Web as a marketing channel than local government.

Keywords: Marketing readiness of websites indicator (MRWI), online marketing communication, online marketing channels, online relationship management.

Background

In this first section of the paper, a brief overview of the development of the content analysis tool employed in the study is provided, in addition to the reasoning behind the choice of the websites analysed in the study. The study seeks to contribute to marketing knowledge concerning use of the Web beyond its oft-reported use in marketing communication.

Content analysis and Web audits

Arguably, content analysis is a commonly employed research technique across a variety of disciplines (Kassarjian, 1977), and may broadly be described as "any technique for making inferences by objectively and systematically identifying specified characteristics of messages" (Holsti, 1969, p. 14). Employing this definition permits extension of the technique from its origins of analysing text messages to analysis of television programs, commercials, advertising generally (Resnik and Stern, 1977), and indeed websites (Adam and Deans, 2000). In the case of websites, it is recognised that while we can really only know why organisations use the Web by asking them, we can ascertain how they use the Web by observation.

The technique has developed from content analysis and establishing basic word counts to infer importance ascribed to ideas and matters such as quality and pricing, and now includes richer analyses where coding instructions are employed to standardise the approach and ensure reliability and validity. Where coding instructions are developed, multiple researchers may be trained to undertake the content analysis task across a greater number of, and more varied, units of analysis and thereby increase reliability.

As part of a detailed discussion on various tools and methods of analysis appropriate to the task of website and network analysis Bauer and Scharl (2000) discuss Web audit typology in terms of five classifications: 1) textual analysis; 2) manual classification; 3) statistical analysis; 4) unsupervised learning; and 5) supervised based learning. As the name implies, textual analysis entails searching Web pages for text strings. One use of this approach – whether manual or automated – might be to test if body copy text aligns with the 'ALT'

statements (alternative text that appears when the mouse pointer rests on a graphic) in HTML code relating to images, and that there is no gratuitous use of images. Such an evaluation can be conducted by software tools typically used in qualitative marketing research, such as Atlas/ti and Nudist, provided one is prepared to extract the textual content of the websites (Barry, 1998).

Conducting a manual classification involves a researcher manually examining website content against a multi-attribute framework, including examination of the HTML source code. Statistical analysis is involved in quantitative studies such as the present study, where the content analysis phase was undertaken with 120 websites.

Online services and the research question

There is evidence suggesting that expenditure on the Web in marketing communication will soon overtake magazine advertising expenditure in Australia (C.E.A.S.A., 2006). Of course, this is but one element of marketing, albeit a highly visible one, that receives much commercial investigation and news media commentary.

It has already been suggested that Australian federal and state government use of the Web in marketing is more sophisticated than the use of the Web made by business, noting that government sites solely seek improvement gains, while business sites may also seek market growth gains (Palmer, Adam and Deans, 2000). The difference in sophistication of use might have been attributable to a slower start in such use by business. The prompt to the researchers in the present study was to ascertain if the lead that government previously showed had been extended, or the gap closed. The authors are currently involved in a longer-term study of the use of marketing communication in achieving behavioural change in the personal consumption of water (Fitzgerald, Adam and Bednall, 2006), and given this interest, it was decided to investigate the marketing readiness of water industry websites. Apart from the commercial interests involved, these organisations are government instrumentalities (e.g., Yarra Valley Water) or local government managed (e.g., Dubbo City Council). In order to make the comparison between government and business use of the Web, commercial service organisation (CSO) websites (e.g., banks and financial institutions, professional bodies such as accounting and legal firms) were also included in the study, the selection of which is described in the next section.

In line with the earlier study's findings concerning government use of the Web, hypotheses to be tested by this more extensive audit are:

H_1: Local government websites give more evidence of sophistication of marketing use than commercial service organisation sites in Australasia.

H_2: Commercial service organisations give evidence of greater capability in their use of the Web as a marketing channel (e-commerce) than local government.

Research methodology – MRWI and website sampling

The content analysis tool used in this study, the Marketing Readiness of Website Indicator (MRWI), employs emergent coding that began with the work of Adam and Deans (2000). The MRWI coding instructions were developed from the initial Adam and Deans (2000) three-phase study that firstly entailed managers completing a self-administered questionnaire, content analysis of the respondents' websites, and follow-up personal interviews (Adam, 2001). This initial content analysis tool was developed further following discussions with a network-centric market intelligence firm involved in data analysis of Internet Service Provider (ISP) cache data and geo-demographic information. The MRWI has been used in various studies (e.g., Adam, 2004; Adam and Shaw, 2004) and is used commercially. In essence, the MRWI entails evaluating websites in terms of the capability of the sites across three main elements of marketing, *viz*., marketing communication capability, marketing channel capability and relationship continuity capability. These three major uses emerged from the initial Adam and Deans (2000) study and personal interviews as described. It is not meant to suggest that these elements alone define online or traditional marketing practice.

Fifty points are allocated across marketing communication items, which includes up to 10 points for identification of 10 of the 14 Resnik and Stern (1977, p. 51) information cues, *viz*., "price, quality, performance, components or parts, availability, special offers, guarantees or warranties, safety, independent research, and company research". While some useability indicators such as ALT statements, the use of META tags (used by Search Engine spiders and robots), and suitability for the visually challenged (e.g., the third party Wave 3.0 Web Accessibility Tool is employed to reduce subjectivity in this assessment) are included, the MRWI is not meant to be an indicator of Web design per se but mainly assesses marketing communication elements such as brand – URL association and prominence.

Online marketing channel capability, e-commerce in the argot of the Internet, does not simply involve transactions and the use of shopping carts on websites for it also includes online payment of bills and co-ordinating the activities of channel members (Steinfield, Kraut and Plummer, 1995). Accordingly, 25 points are allocated across items such as the degrees of Web use in order-processing. In addition, 25 points are allocated across a range of items for relationship continuity capability, e.g., whether an extranet is provided for customers/members/subscribers. The total rating out of 100 indicates the marketing readiness of the websites concerned.

The unit of analysis in this study is the organisation's website. One hundred and twenty websites were analysed from the classifications shown in Table 1.

Table 1. Sampled websites by classification

Commercial service organisations (CSO) sites (n = 30)	savewater ® Alliance member (SAM) sites (n = 30)
NSW local government authority (NSWLG) sites (n = 30)	Victorian local government authority (VICLG) sites (n = 30)

Organisational websites were selected as follows: The CSOs comprised randomly selected service organisation respondents to an online survey concerning Web use in marketing and organisational performance, and where the initial sampling frame involved a purchased list. The chosen water retailers and associated organisations comprise all but two of the members of an association of water retailers and associated organisations involved in reducing water consumption in Australia – the savewater ® Alliance. NSWLG and VLG sites were also

chosen at random from the publicly available census at <www.alga.asn.au>. In each case random numbers were assigned to the organisations in the lists and samples derived from random numbers generated in Microsoft Excel. The websites were each evaluated by two researchers. The reliability of the coding instructions was tested by means of reaching agreement on any variations in the individual assessments. In most instances, the MRWI relies on investigating word (e.g., information cues) and tool usage (e.g., secure online payments) by way of internal search of each site where a search mechanism was provided, and/or by using the following command line at Google – 'keyword site:www.sitebeingsearched.com'. The MRWI also relies on use of such publicly accessible computer-based tools as the previously mentioned Wave 3.0 Web Accessibility Tool as a means of increasing inter-rater reliability.

Findings and discussion

Palmer et al. (2000, p. 925) observed that the "Victorian State Government is one that has shown a firm commitment to online information and service provision" and it would appear from the findings that this commitment has migrated through to local government website capability in that state. From analysis employing MANOVA, univariate homogeneity of variance across the four organisational groups is evident in the case of Web capability in marketing communication (Levene test 0.48, $p = 0.69$) and a subset of that capability, *viz*., the Resnik and Stern (1977) Information Cues (Levene test 1.37, $p = 0.26$). A post hoc Scheffe test was employed in analysing the between group differences in website capability in marketing communication, indicating that VLG websites are significantly more sophisticated in terms of marketing communication capabilities than the CSOs and that the VLGs and the other groups' websites are not significantly different in terms of marketing communication capability (see Table 2).

Table 2. Results of Post Hoc Tests

MRWI item (VLG actual/possible rating) [1]	Group [2] (Ratings)	Post hoc test	VLG $\bar{X}$ difference from group [(1-2)]	Sig.
Resnik and Stern (1977) Information cues (7.57/10)	CSO (6.00)	Scheffe	1.57*	0.05
	NSWLG (7.80)		-0.23	n.s.
	SAM (8.13)		-0.57	n.s.
Marketing communication capability (subtotal 39.03/50)	CSO (31.83)	Scheffe	7.20*	0.05
	NSWLG (35.47)		3.57	n.s.
	SAM (35.50)		3.53	n.s.
Online order-processing (4.73/5)	CSO (2.07)	Tamhane T2	2.67*	0.00
	NSWLG (3.07)		1.67*	0.00
	SAM (2.93)		1.80*	0.00
Marketing channel capability (subtotal 16.07/25)	CSO (8.87)	Tamhane T2	7.20*	0.00
	NSWLG (9.63)		6.43*	0.00
	SAM (10.13)		5.93*	0.00
Relationship continuity capability (subtotal 14.87/25)	CSO (10.77)	Tamhane T2	4.10*	0.00
	NSWLG (12.83)		2.03*	0.03
	SAM (11.43)		3.43*	0.01
MRWI rating (total 69.97/100)	CSO (51.20)	Tamhane T2	18.77*	0.00
	NSWLG (57.93)		12.03*	0.00
	SAM (57.07)		12.9*	0.00

- The $\bar{X}$ difference (1-2) is significant at the level shown.

For various reasons, the findings concerning use of the Web in marketing communication are not altogether surprising. Firstly, as KPMG (1999) and others (e.g., Poon and Swatman, 1997; Adam and Deans, 2000) have observed, marketing communication use came to the fore very early in the commercial use of the Web, and so all organisational types have had time to develop richness in their use of the Web for marketing communication purposes. Secondly, CSOs are not a homogenous group in the same way that VLGs are – the latter group employing a common design template in regional centres, even if they demonstrably differ in their technical capabilities when populating the sites. Lastly, SAMs are comprised of both Victorian government instrumentalities and NSWLGs – the latter group illustrating a lesser sophistication of use. In the case of marketing channel website capability (Levene test 19.24, $p = 0.00$) and a subset online order-processing (Levene test 42.43, $p = 0.00$), relationship continuity capability (Levene test 11.06, $p = 0.00$) and overall MRWI rating (Levene test 6.08, $p = 0.00$), univariate homogeneity of variance was not in evidence. As Table 2 illustrates, post hoc Tamhane T2 tests were employed, indicating that in the case of marketing channel capability, the X for VLGs is significantly higher than for CSOs, NSWLGs and for SAMs. This situation is similar in the case of relationship continuity capability of websites. So too, the overall MRWI ratings show the greater sophistication of marketing capability of the Victorian government sites, thereby partially supporting H_1.

Online order-processing (which includes bill paying) ratings in the range of one to five are awarded depending on security level and how the order is taken: Online secure payment = 5; Online, no security = 4; Online form request (i.e., send form and organisation contacts you in return) = 3; Online form for fax = 2; Offline ordering details advised = 1; and no such service provision rates zero. Surprisingly there is a significant difference in the capabilities of the LG websites in Victoria and NSW in terms of permitting bill paying. When one considers the ease with which a link to Australia Post's Bill EXPRESS® secure website can be effected, it is notable that VLGs show greater initiative than their NSWLG counterparts in seeking this productivity gain. Most notable are the lower capabilities of commercial service organisations relative to the VLGs both in terms of enabling secure online transactions and/or payments, and in terms of overall use of the Web as a marketing channel. In effect H_2 is not supported. While information systems/IT professionals make much of the e-commerce (transactions) side of the Web (e.g., Turban, Lee, King and Chung, 2000), many marketers might retort that the more difficult aspect is to keep customers coming back to websites, i.e., maintaining relationship continuity. It is notable that once again the VLGs' websites offer significantly greater capabilities in this regard.

Concluding remarks

It is evident from this study that in many ways, local government use of the Web in marketing is more sophisticated than the use made by the sample of commercial service organisations examined in this study, thereby supporting H_1, but not supporting H_2. Retailers are noticeably absent from the CSO sample and from unpublished studies of this group it is evident that they demonstrate wide variance in their capability, but that overall their use is sophisticated whether they are small (e.g., <www.Bootsonline.com.au>) or large (e.g., Harris Technology, <www.ht.com.au>). Further studies involving comparisons of larger samples of homogeneous organisational types and the link between their use of the Web in marketing and its contribution to organisational performance, both financial and non-financial, are planned.

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