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Adam, Stewart and Shaw, Robin 2004, Marketing readiness of websites and organisational performance in Australia and New Zealand: a discussion of pre-test findings, in AusWeb X: the challenge of integration as the web moves into its second decade, Southern Cross University, Lismore, N.S.W., pp. 25-35.

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Marketing Readiness of Websites and Organisational Performance in Australia and New Zealand: A Discussion of Pre-test Findings

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Keywords
Market orientation, marketing readiness of website indicator (MRWI), organisational performance, marketing concept.

Abstract
The Web played a role in the burst of economic activity that occurred in the late 1990s that saw company values dramatically rise and fall, business and government processes reshaped, traditional marketing media challenged, and much written concerning the benefits to customers from the adoption of what was initially termed e-commerce. Initial empirical studies of Australian and New Zealand business and government use of the Web found that while the Web was used for marketing communication, it was not as favoured as trade press reports suggested as a marketing transaction channel, nor for relationship management. This paper, which reports the findings of a pre-test of the self-administered online questionnaire stage of a three-phase study, suggests that little has changed in organisational use of the Web in Australia and New Zealand since the late 1990s, even among high network traffic organisations. The pre-test findings reported do not present a clear picture concerning the influence of strategic use of traditional and online marketing mix elements on organisational performance. Analysis employing a Marketing Readiness of Website Indicator (MRWI) content analysis tool is shown not to predict organisational performance as hypothesised.

Background
In the 10 years the World Wide Web (Web) has been employed by business and government, much has been written concerning the Web's role in the transformation of the processes involved in meeting consumer and business customer demand (e.g., Yakleff, 1998). Similarly, many have written about the benefits of this form of computer-mediation for service delivery to consumers and business customers (e.g., Rust and Lemon, 2001). The authors, both academic and professional journalist alike, were initially drawn to the potential of this communication medium to open global markets to the smallest of companies, and for customers to dominate the dyadic relationship with marketing organisations (Meltzer, 2000 [HRE1]). This is not to say that customers necessarily desire to enter into a relationship with all who supply them goods and services, for arguably, they do not. However, in most situations there is little choice in the matter for there is a relationship imposed by force of law, e.g., the Law of Tort (Maznev, 1980). The Web played a role in the economic hyperactivity that occurred in the latter part of the 1990s that saw an increase in initial public offerings (IPOs), inappropriate public company valuations, and corporate failures (Hatcher, 2000). Arguments put forward that e-businesses represented new and different business models (e.g., Kappa, 2001 [HRE1]; Porter, 2001) should be measured differently, were dismissed by those with a contrary, and, arguably, a more enlightened view (Rayport, 1999 [HRE2]; Porter, 2001).

Empirical Studies of the Web in Business
While few in number, empirical studies were undertaken in an endeavour to move beyond mere conceptualisations of the benefits to companies and their customers (e.g., Hoffman and Novak, 1996) to establish how organisations used what had come to be thought of as a bundle of TCP/IP (transmission control protocol/Internet protocol) tools (e.g., Poon and Swamin, 1999; Adam and Deans, 2000 [HRE6]). In many instances, researchers focused on a single aspect of Web use such as consumer perceptions of banner advertisements and the 'click-through' rates achieved (e.g., Dholakia and Rego, 1998; Ho, 1998 [HRE7]; Hofacker and Murphy, 1998), albeit that to this day only minimal rates were achieved (Sutherland, 1999). Similarly, researchers examined Web design elements (e.g., Nielsen, 2000), and elaborated on the effective use of such elements as Meta tags in order that organisational websites could be found, particularly by less experienced users, who are more likely to use a search engine or directory (Clark, 2001 [HRE8]).

Arguably, information technologists focused on the transactional capabilities of the Web, and seemingly neglected retailing via the Web, particularly by early online market entrant Amazon.com [HRE9], and auction cum reverse auction sites (e.g., Turban, Lee, King and Chang, 2000). However, not every commentator has been as enamoured with a retail business model that has kept adding, lower margin products to its assortment, and that might have taken over a decade to make a profit (Grover, 1999; Reli2 held and Schefter, 2000). Amazon.com finally reinvented itself as a service provider managing an online marketing logistics network and became profitable in late 2003.

From a review of the marketing literature, in particular, it appears that researchers have focused on the role of the Web in the traditional marketing mix elements such as marketing communication, and have turned to aspects such as 'how' - a trance-like state experienced by computer users (Novak, Hoffman and Yung, 2000) - without relating these to organisational (supplier) performance. Direct marketing practitioners and researchers have been quicker to see the role of the Web in interactively dealing with customers, and in involving the Web user in passing on the information on brands and organisations if the context is appropriate (Bryant and Wurster, 1999; Godin, 2000 [HRE10]). The awareness of direct marketers should not surprise, for this group of marketing organisations is more reliant on computer-mediation in their business fulfilment processes, as well as in monitoring the value customers represent over time (Haynes, Helms and Casavant Jr, 1992). Invariably, more valuable customers are treated better (e.g., fewer rings of the incoming phone call, and airline seat upgrades) from a relationship management viewpoint, as most people in loyalty programs, or who subscribe to such things as football club membership and...
Valued Web-based services attest to the strength of the demand for interactivity and user-controlled information management. The global adoption of such online services as telephone directories paralleled by the use of peer-to-peer information services, e.g., Global Friendsreunited.com [HREF11], Australiansreunited.com.au [HREF12], Friendsreunited.co.uk [HREF13] and Schoolfriends.com.au [HREF14]. Leaving aside the nostalgic reasons why people seek each other out, there are practical reasons, such as contacting old friends who now work in an organisation where a job is being sought (Williams, 2004). Adam and Deans (2000) conducted a three-phase study which they termed the WebQUAL Audit. Their study involved an online survey of business and government use of the Web, content analysis of respondent websites, and personal interviews with selected respondents (Adam, 2001). They found that 84 per cent of respondents used the Web for promotional reasons, 36 per cent for transactional online, and 41 per cent to maintain relationships with customers. A comparison of Australian, New Zealand and UK organisations found that there were similarities in use of the Web on the three roles mentioned, but that UK organisations took a more strategic view of Web use (Adam, Mulvey, Deans and Palihawadana, 2002). From the three country comparison, 14 per cent of Australian respondents, and 19 per cent of New Zealand organisations were employing the Web for strategic reasons, whereas 77 per cent of UK respondents were using the Web to gain a competitive edge (Adam et al., 2002).

While the self-administered questionnaire phase of the WebQUAL Audit sought to establish the relationship between website expenditure and return on investment, respondent information was not as complete as the researchers had hoped for. Unpublished data analysis established that 54 per cent (216) of the study's respondents to this item had budgeted less than $5,000 for their public website for the year of the study, and that a further 23 per cent (90) had either no budget or were unable to report a budget. Of the 390 completing the item relating to return on investment, 55 per cent reported that no return was expected on the investment in their organisation's website at that time.

The study reported in this paper continues the investigation. The paper presents findings from the pre-test phase of a larger study investigating the role of the Web in market orientation and the influence of the latter on organisational performance. These, and other areas of investigation, are discussed further in the Antecedent Studies and Item Development section of this paper.

**Conceptualisations and Hypotheses**

A study which examines the progressive use of an innovation such as the Web, termed a diffusion study, should ideally be conducted at more than one point in time, and while the diffusion of the innovation is still unfolding (Tornatzky and Klein, 1982). With these points in mind, and following an extensive review of the literature, the present study was designed. It is to be noted that it is not the intention of this paper to present a complete literature synthesis and analysis, but rather to refer the reader to relevant antecedent studies from which the present study drew items for the self-administered questionnaire stage of the study.

**Conceptualisations**

The literature synthesis and analysis encompassed the three strategic areas of marketing identified by Adam and Deans (2000) and conceptualised in Figure 1, i.e., marketing communication, marketing logistics networks (comprising marketing channels), and relationship management. In each area, the literature relating to use of the traditional marketing mix (Culliton, 1948; Borden, 1964) and online marketing was examined. The descriptive model presented as Figure 1 also identifies other areas encompassed by the literature review, i.e., organisational demographics and structure, market orientation, innovation culture, environmental aspects, and importantly, organisational performance.

Adam (2002, p. 266) comments as follows on the conceptual model presented here as Figure 1:

The main research question posed, and which this model suggests, and involving a number of paths, is to what degree businesses from various points on the spectrum presented in Figure 11 have integrated the various marketing techniques shown in cells C1 to C6 (independent variables) into their overall marketing strategy, and with what outcomes? While it is intuitively appealing to believe that, in general, companies move from use of the Net in marketing communication to online fulfilment and CRM, the answer to this question is thus far in the negative (Adam and Deans, 2000). Moreover, we know little of the characteristics of the companies that have incorporated online marketing approaches into their marketing strategy, and we know little of their quantitative and qualitative performance (dependent variables).

The commentary continues as follows:

The model also seeks to illustrate the conceptual integration of direct and online marketing using traditional interactive media such as the telephone, and online methods such as email and websites (almost pure online marketing approach represented by cells C2, C4 and C6), and distinguishes these from the mass marketing paradigm (almost pure offline approach represented by cells C1, C3 and C5).

It is taken as given that the majority of direct response marketing organisations begin by communicating their offer either using approaches such as direct mail to a known subscriber base (or some other approach from cell C1), or using online marketing approaches in an endeavour to generate a self-perpetuating friend-to-friend (P2P) campaign involving email, or some other online approach from cell C2. Alternatively, they may use a combination of offline and online approaches.

It is further suggested that marketing organisations that adopt a marketing communication approach or approaches from those presented in cell C1 in Figure 1, may proceed to fulfil customer requirements using one or more traditional offline methods from those shown in cell C3 - such as the firm's own marketing logistics network (MLN) or the services of a third party. Additionally, businesses may seek to maintain customer intimacy and handle conflict resolution using traditional methods such as the telephone and through the company's own outlets from cell C5. Many different permutations are possible. For example, an international airline may communicate with frequent flyer subscribers using direct mail to announce special holiday packages (C1). It may direct its customers to the company website as the only means of taking up the special discounted package holidays (C4). On the website, subscribers could be asked to opt-in to receive marketing communication on future package deals, and even to email
information on the current package to their friends (C2) directly from the website (C6). This latter step meets privacy legislation requirements, and enables the company to build customer trust (Adam, 2002, p. 266).

![Diagram of marketing process](image)


**Figure 1. A Model of Web Use in Marketing**

**Antecedent Studies and Item Development**

The extant literature set out in Table 1 was employed in developing the items included in the self-administered questionnaire [HREF] for the present study.

**Table 1. Item Development**
Areas of study | Studies
---|---

The organisational demographic and structure items were drawn in part from Yaman (2000). The items concerning market orientation were drawn from studies by Narver and Slater (1990) and Ambler, Kokkinaki, Puntoni and Riley (2001). As Narver and Slater (1994) theorised and illustrated, market orientation is viewed as having three major components - customer orientation, competitor focus, and cross-functional co-ordination. Innovation culture items were drawn from Menon and Varadarajan (1992). Environmental items were drawn from Jaworski and Kohli (1992).

Traditional marketing communication usage and expenditure items were modified from Yaman (2000), while traditional marketing logistics and transaction items employed the competencies put forward by Bowersox and Closs (1996). Relationship marketing items were drawn from Selnes (1996). Items relating to direct and online marketing were mostly drawn from Adam and Deans (2000) and modified, particularly with regard to use of a standard 11-point Likert-type scale. A Marketing Readiness of Website Indicator (MRWI) has been developed from the work of Adam and Deans (2000) following discussion with a major online marketing intelligence firm and their clients. For commercial confidentiality reasons, the complete list of Marketing Readiness of Website Indicator (MRWI) items is not detailed at this time. While the MRWI indicator is ultimately to involve an Internet spider, and, therefore, become a partially automated process, in this study a single researcher undertook the content analysis manually. The analysis involves awarding 100 points across the categories of new media, e-commerce transactions, and customer relationship management.

Narver and Slater's (1990) observation still holds, in that there remains a need to extend their one industry study across a range of industries, and employ performance measures which supplement the profitability measure, when assessing the influence of market orientation. The extant literature on such measures was reviewed to develop organisational performance items (e.g., Ambler et al., 2001). Items were initially grouped based on the item-to-total correlations and the factor structure recommended by Ambler et al. (2001). These researchers identified the level of review and importance for the 19 items they argue "could be considered the primary general metrics" (Ambler et al., 2001, p. 34). In the present study, metrics such as market share and relative share, which were missing in some phases of the Ambler et al. study, were included. The items used form the variables recommended by Ambler et al., viz., Consumer attitudes, Consumer behaviour, Trade customers, Relative to competitor, Innovation, and Financial.

As can be seen from the online questionnaire [HREPIS], 11-point scales and modified Juster probability scales were employed where appropriate.

Hypotheses

The following hypotheses are tested and discussed in a later section of the paper.

H1: The use of traditional and online marketing mix elements predicts consumer attitudes.

H2: The use of traditional and online marketing mix elements predicts consumer behaviour.

H3: The use of traditional and online marketing mix elements predicts performance with trade customers.

H4: The use of traditional and online marketing mix elements predicts performance relative to competitors.

H5: The use of traditional and online marketing mix elements predicts innovation performance.

H6: The use of traditional and online marketing mix elements predicts financial performance.

H7: Marketing Readiness of Website Indicator score predicts consumer attitudes.
HI8: Marketing Readiness of Website Indicator score predicts consumer behaviour.

HI9: Marketing Readiness of Website Indicator score predicts performance with trade customers.

HI10: Marketing Readiness of Website Indicator score predicts performance relative to competitors.

HI11: Marketing Readiness of Website Indicator score predicts innovation performance.

HI12: Marketing Readiness of Website Indicator score predicts financial performance.

Methodology

The present study comprises three phases, viz., Phase one: pre-test of the invitation method and self-administered online questionnaire to sample A; Phase two: self-administered online questionnaire to sample B; and Phase three: content analysis employing the marketing readiness of website indicator (MRWI) tool. This paper reports on phase one findings only. For the pre-test, a list was prepared from the top 20 network traffic organisations from some 200 industry categories identified by the network-centric audience measurement company Hiwse [HREF16]. A postcard invitation was mailed to 1,774 Australian and 1,489 New Zealand organisations inviting the senior marketing decision-maker, or most senior manager, to visit a secure Web form questionnaire. Managers were provided with a unique PIN to enable them to access the questionnaire. Anonymity was provided, in line with university ethics policies. In the pre-test, an actionable summary of the research results was offered as an incentive, while in the case of the main study, an additional incentive took the form of a two dollar donation to a charitable organisation, the Open Family [HREF17], for each fully completed questionnaire.

Following a test with academics and practitioners and subsequent refinement of the questionnaire, university ethics committee approval was sought and gained. While the decision was made to use a postal invitation to approach sample A, for the pre-test, the decision as to whether to use an e-mail or postal invitation for the main study was held in abeyance until the pre-test had been completed, and the results of a separate online study into small business perceptions of postal and online surveys had been completed by the authors. Based on the results of the pre-test reported here, and the second study to be discussed in a later section of this paper, the decision was ultimately made that for the main study, an e-mail invitation would be made to a commercial list of 8,000 marketing decision-makers to visit the website housing the online questionnaire (Adam and Shaw, 2004).

The response to the pre-test invitation is summarised in Table 2. The response level is poor. It could be argued that the 104 who visited the site but did not complete the questionnaire found the questionnaire too long, or otherwise not to their liking. The 46 respondents each took 20 to 25 minutes to complete. Questionnaire, where they completed the questionnaire in one sitting. McDonald and Adam (2003) note that while response levels for self-administered questionnaires have been falling for some time, online studies such as their own had achieved satisfactory response levels. They point out, however, that this was the result of sampling subscribers, and because the invitations came from respondents' own AFL or NRL football club, in addition to which, the topic of the football club's service quality, and team performance, greatly interested respondents.

It was decided not to contact non-respondents, even though all but two of the pre-test respondents had provided an e-mail address, thereby identifying the non-respondents in aggregate. As an alternative, the findings of a separate study were drawn upon. Adam and Shaw's (2004) study of small business perceptions of online marketing research achieved a response level of 141 (41 per cent) from a sample comprising a panel of 343 small businesses developed and maintained by a major Australian marketing research firm. An e-mail invitation was sent by the research firm inviting the nominated manager to complete an online (Web) questionnaire. Panel members used a unique PIN to gain access to the online questionnaire. The Adam and Shaw (2004) study is highly relevant to the present study, for their study involved asking panel members the likelihood they would commission, and the likelihood they would respond to, each of three variants of online marketing research and a postal method.

Table 2. Pre-Test Response Level for Sample A

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>New Zealand</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>1,774</td>
<td>1,489</td>
<td>3263</td>
</tr>
<tr>
<td>Delivered postcards</td>
<td>1,721</td>
<td>1,458</td>
<td>3179</td>
</tr>
<tr>
<td>Visited questionnaire</td>
<td>n.a.</td>
<td>n.a.</td>
<td>150</td>
</tr>
<tr>
<td>website</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td>28</td>
<td>18</td>
<td>46</td>
</tr>
<tr>
<td>Response level on</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>delivered (%)</td>
<td></td>
<td></td>
<td>1.5</td>
</tr>
</tbody>
</table>

A summary of the findings concerning likelihood of responding is presented in Table 3. It is of note that Scenario One entails a hybrid commercial e-mail list of senior marketing managers where an e-mail invitation and Web form are employed. Scenario Two involves a hybrid e-mail list from a sample of 343 small businesses developed and maintained by a major Australian marketing research firm. A postcard invitation was sent by the research firm inviting the nominated manager to complete an online (Web) questionnaire. Panel members used a unique PIN to gain access to the online questionnaire. The Adam and Shaw (2004) study is highly relevant to the present study, for their study involved asking panel members the likelihood they would commission, and the likelihood they would respond to, each of three variants of online marketing research and a postal method.
likely to respond than where a researcher approaches an unknown sample. However, it is for this reason, among others, that the decision was made to use an e-mail invitation with sample B.

Table 3. Comparison of Mean Probability Scores between Scenarios

<table>
<thead>
<tr>
<th>Would you respond to such a research project?</th>
<th>n</th>
<th>Mean Probability Score</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario One</td>
<td>141</td>
<td>5.5</td>
<td>3.99</td>
<td>0.00</td>
</tr>
<tr>
<td>Scenario Four</td>
<td>141</td>
<td>4.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario Two</td>
<td>141</td>
<td>4.5</td>
<td>0.06</td>
<td>0.96</td>
</tr>
<tr>
<td>Scenario Four</td>
<td>141</td>
<td>4.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario Three</td>
<td>141</td>
<td>4.1</td>
<td>-1.87</td>
<td>0.06</td>
</tr>
<tr>
<td>Scenario Four</td>
<td>141</td>
<td>4.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


In the present study, responses were recorded in a PostgreSQL database, from which data were drawn to SPSS 11.5 undertake correlation and multiple regression analyses. Pearson correlation coefficients were calculated to determine the direction, and significance of correlations. Analysis of variance (ANOVA) is used to establish significance of the observed variance, and adjusted R$^2$ is used to establish predictiveness.

Findings and Discussion

While the aim of the overall study is to employ structural equation modelling to establish the predictiveness of the MRWI, relative to the degree to which resources are reportedly assigned to traditional and online marketing mix elements, and organisational performance, this paper is restricted to analysis of the findings of the pre-test. Structural Equation Modelling (SEM) has not been employed in this analysis, for it is suggested that at least 200 respondent cases are required to ensure that an appropriately identified model(s) is obtained (Tabachnick and Fidell, 1996).

From Tables 4, 5 and 6 it is evident that respondent organisations are primarily Australian and New Zealand small businesses engaged in the services sector, and not multinational enterprises. In support of this assertion, 60 per cent of respondent organisations employed fewer than 20 people. Another indicator of size is the fact that 20 per cent of respondent organisations have no employees engaged in marketing, while 39 per cent have no formal marketing department, but have at least one person assigned to this function. In addition, 78 per cent of organisations have been operating for 11 years, with a further 11 per cent in operation for 10 or fewer years.

Table 4. Respondent Head Office Location

<table>
<thead>
<tr>
<th>Country</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>24</td>
<td>52</td>
</tr>
<tr>
<td>Japan</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>New Zealand</td>
<td>20</td>
<td>44</td>
</tr>
<tr>
<td>North America</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5. Respondents by Industry
Perhaps not surprisingly, in 28 per cent of cases, the budget responsibility for strategy development and implementation in these relatively youthful organisations lies with the owner/proprietor. In a further 44 per cent of organisations, this responsibility rests with the CEO or Managing Director.

Of note is the finding that when asked in which area of marketing (marketing communication, price discounts, marketing research, marketing channels, relationship management, direct and online marketing) they would spend an additional $100,000, if available, 87 per cent indicated they would not apply the resources to price discounts. Marketing communication and marketing research were reportedly the likely areas to be targeted with the most funds.

Table 6. Organisation Revenue in the Past Financial Year

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $1 million</td>
<td>19</td>
</tr>
<tr>
<td>$1 to 4.9 million</td>
<td>13</td>
</tr>
<tr>
<td>$5 to 24.9 million</td>
<td>5</td>
</tr>
<tr>
<td>$25 to 49.9 million</td>
<td>3</td>
</tr>
<tr>
<td>$50 to 99.9 million</td>
<td>1</td>
</tr>
<tr>
<td>$100 to 199.9 million</td>
<td>1</td>
</tr>
<tr>
<td>$200 to 299.9 million</td>
<td>1</td>
</tr>
<tr>
<td>$300 million and over</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
</tr>
</tbody>
</table>

Respondents did not view their customer base as particularly changed in the past three years. However, as Table 7 illustrates, they viewed the marketplace as becoming more competitive, and were particularly cognisant of rapid technological change. Also of note is the reported proportional expenditure on marketing communication elements, viz., mass communication (Mean, 29 per cent), targeted (28 per cent), and one-to-one communication (24 per cent).

Table 7. Environmental Change

<table>
<thead>
<tr>
<th>Customer base</th>
<th>Competition</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>changed little</td>
<td>is cut throat</td>
<td>is changing rapidly</td>
</tr>
<tr>
<td>Mean</td>
<td>5.6</td>
<td>5.9</td>
</tr>
<tr>
<td>Median</td>
<td>5.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Mode</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Std. deviation</td>
<td>3.4</td>
<td>2.8</td>
</tr>
</tbody>
</table>

There is no statistically significant correlation between the strategic use of traditional marketing mix elements and any of the
indicators of organisational performance. However, this is not the case when individual marketing mix variables are analysed. There is a positive relationship between relationship management and consumer attitudes (Pearson r = 0.52, p < 0.01), a positive relationship between online marketing communication and consumer attitudes (Pearson r = 0.66, p = 0.00), between online marketing logistics and consumer attitudes (Pearson r = 0.31, p < 0.05) and between online relationship management and consumer attitudes (Pearson r = 0.41, p < 0.01). Multiple regression does not support H1, in that use of only the online marketing mix (online marketing communication, online marketing logistics networks, or channels, and online relationship management) use ($R^2 = 12.96, p < 0.01$) explains some of the variance in consumer attitudes ($R^2 = 0.24$).

Turning next to the consumer behaviour measure of organisational behaviour, while there is no statistically significant correlation between the strategic use of any of the traditional marketing mix variables, there is a positive relationship between the use of online marketing communication and consumer behaviour (Pearson r = 0.35, p = 0.00). Multiple regression does not support H2, given that only online marketing mix use ($F = 4.08, p < 0.05$) explains any, albeit very little, of the variance in consumer behaviour ($R^2 = 0.09$).

In the case of the trade customer performance measure (e.g., distribution level changes), there is a positive correlation between relationship management (Pearson r = 0.41, p < 0.05), and each of the three online marketing mix variables, i.e., online marketing communication (Pearson r = 0.66, p = 0.00), online marketing logistics (Pearson r = 0.44, p < 0.01), and online relationship management (Pearson r = 0.57, p = 0.00). Multiple regression does not support H3, in that only online marketing mix use ($F = 23.29, p = 0.00$) explains some of the variance in trade customer performance ($R^2 = 0.39$).

When the innovation performance measure is analysed, no correlation is found between any of the traditional marketing mix elements and this performance measure. There is a positive correlation between online marketing communication and innovation performance (Pearson r = 0.57, p = 0.00), and between online relationship management and this performance measure (Pearson r = 0.36, p < 0.05). There is no support for H3 from multiple regression analysis in that only online marketing mix use ($F = 8.28, p < 0.01$) explains any of the variance in the innovation performance measure ($R^2 = 0.18$). In this case, it is clear that the more traditional marketing does not contribute to organisational performance on this measure.

Financial measures are important in monitoring organisational performance (Ambler et al., 2001). Only online marketing communication use correlates with this almost universal performance measure (Pearson r = 0.59, p = 0.00). There is no support for H6, as neither the use of more traditional marketing, nor use of online marketing mix elements, explains the variance in financial performance.

The commentary so far has involved reported strategic use of traditional and online marketing mix variables and the degree to which such use predicts organisational performance. The skewed results in favour of online marketing mix use as an influence on the organisational performance measures indicated may be a consequence of a small sample. However, it is more likely that the results are indicative of the fact that the organisations sampled are indeed online organisations, and because of the adoption of computer-mediation in their business processes, they are attuned to direct and online, or one-to-one, marketing approaches.

At this point, the analysis turns to the findings of content analysis of the organisations’ websites and the MRWI scores arrived at by a single researcher. The only correlation found is a weak negative correlation between the new media (marketing communication) score and the financial performance measure (Pearson r = -0.31, p < 0.05). Hypotheses seven to 12 are not supported, for multiple regression analysis is unable to provide guidance as to the lack of predictiveness of the MRWI for the small sample of high network traffic organisations.

It is clear though that little has changed in terms of how even relatively sophisticated online organisations use the Web. Table 8 presents a summary of MRWI scores on each of the three indicator groups relating to the marketing mix elements identified by Adam and Deans (2000). The capability of organisational websites for marketing communication continues to overshadow website capability for e-commerce transactions, and for relationship management in the sample analysed.

However, this is not to say that use of organisational websites for marketing communication is well developed, given the finding of a mean score of 24.4 out of a possible score of 50.

Table 8. MRWI Rating by Mix Element

<table>
<thead>
<tr>
<th>n=46</th>
<th>Sub-total Marketing Channels</th>
<th>Sub-total Relationship Management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Media</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>24.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Median</td>
<td>25.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Mode</td>
<td>27.0(a)</td>
<td>3.0</td>
</tr>
<tr>
<td>Max. possible</td>
<td>50.0</td>
<td>25.0</td>
</tr>
</tbody>
</table>

*Multiple modes exit. The smallest value is shown.*

In addition, Table 9 presents the use of 10 selected information cues as developed by Resnik and Stern (1976), and used in over 60 marketing communication studies (Abernethy and Franke, 1996). From an analysis of use of the 10 information cues employed in the MRWI (from the 14 originally conceived by Resnik and Stern), only 41.3 per cent of sites mentioned price, while 32.3 per cent mentioned price, only 22.5 per cent mentioned special offers, and only 6.5 per cent mentioned warranties. Table 7 indicates that while all 10 cues were used, the proportion employing company or independent research findings on their website is small.

Table 9. MRWI: Resnik and Stern Information Cue Use

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<table>
<thead>
<tr>
<th>Feature</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>19</td>
<td>41</td>
</tr>
<tr>
<td>Quality</td>
<td>19</td>
<td>41</td>
</tr>
<tr>
<td>Performance</td>
<td>34</td>
<td>74</td>
</tr>
<tr>
<td>Components / Parts</td>
<td>25</td>
<td>54</td>
</tr>
<tr>
<td>Available from</td>
<td>34</td>
<td>74</td>
</tr>
<tr>
<td>Special offers</td>
<td>13</td>
<td>28</td>
</tr>
<tr>
<td>Warranties</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Safety of use</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Independent research reported</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Company research reported</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Concluding Remarks**

The pre-test findings discussed in this paper are but one step in the process of establishing the connection between the market orientation of organisations using the Web, and organisational performance. Marketing studies have rarely been able to identify, unequivocally, the influence that strategic use of traditional marketing elements has on organisational performance. The present study has attempted to identify the extent to which integration of online marketing mix elements and more traditional elements has occurred, and the influence of these on organisational performance. In addition, content analysis has been employed using a tool that seeks to identify the marketing readiness of organisational websites, and ascertain the predictiveness of this tool in performance terms.

The small pre-test sample has prevented as meaningful an analysis as might have been desired. Given the response level achieved, it is not possible to make the contribution to marketing practice that the fuller study should make. The stages which follow in this study aim to remedy the sample size issue, and also to compare heavy network and lighter network traffic organisations.

The present study does, however, indicate areas where further research might be undertaken, particularly inter-country comparisons between high broadband penetration countries such as Korea and the United States, and Australia.

**Acknowledgement**. The Marketing Readiness of Website Indicator (MRWI) is copyright Fontech Pty Ltd, © 2003-2004. The Authors thank Fontech Pty Ltd for permission to use the instrument in this study.

**Hypertext References**

1. HREF1
   http://www.stevrartslaw.com/

2. HREF2
   http://www.deslin.edu.au/db2/

3. HREF3

4. HREF4

5. HREF5

6. HREF6

7. HREF7

8. HREF8

9. HREF9
   http://www.amazon.com

10. HREF10

11. HREF11
    http://www.friendsreunited.com

12. HREF12
    http://www.australiangreunited.com.au
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Colliton, J. E. (1948), *The Management of Marketing Costs*. Division of Research, Graduate School of Business Administration, Harvard University, Boston.


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