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Relationship Management, the Web and Organisational Performance in Australasia

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Abstract
Relationship management practices, both traditional and employing the Web, were investigated and hypotheses tested concerning the influence of such practices on organisational performance. The reported study, conducted with a sample of Australasian organisations, finds that traditional and online relationship management constructs are discrete, and finds no significant direct influence of the use of relationship management on organisational performance, regardless of whether traditional means of relationship management are employed or the Web is used. It is also reported that environmental turbulence does not moderate this relationship.

Keywords: Relationship management, marketing, environmental turbulence, organisational performance.

Background
In an antecedent study by Adam & Deans (2000), it was established that the three major roles for the Web in marketing were in marketing communication, marketing logistics network activities and in relationship management. It was decided to conduct a follow-on study to examine the possible mediation effects of both traditional and online marketing (whether integrated or not) on the relationship between market orientation and organisational performance as conceptualised in Adam (2002). While it is acknowledged that traditional marketing is more than the sum of these three activities, these same roles were also examined in the more traditional environment. This led to the formation of traditional and online marketing mix constructs, where each is the sum of marketing communication use, marketing logistics competency and relationship management use, and where different items, drawn from the literature, were used as measures of each construct, i.e., no cross-loading of items.

The present paper focuses on an examination of the influence of relationship management practices (independent variable) on organisational performance (dependent variable) in the Australasian context. The paper commences with a discussion of the pertinent literature from whence the underlying theory and multi-item inventories were drawn. The paper proceeds by describing the analysis undertaken, and discusses the findings, before concluding with discussion on the limitations of this study, and possible future research directions.

Relationship management and the Web
In examining the role of relationships in marketing, there needs to be recognition of the contribution by those studying services marketing (Cronin and Taylor, 1992; Zeithaml, Berry and Parasuraman, 1996), particularly to a business clientele where relationships have proven to be important (Grönroos, 1994; Selnes, 1998). So too must the arguably greater complexities involved in the marketing of experiential products be accounted for, where trust and commitment play a part in continuation of subscriptions, and continuity in organisational performance (Pine II and Gilmore, 1998; Garbarino and Johnson, 1999).
Much is made of the evolution of new paradigms and the emergence of customer relationships in the marketing discipline (e.g., Grönroos, 1994; Brodie, Coviello, Brookes and Little, 1997), and in business information systems when referring to customer relationship management in e-Commerce. The position taken in this study is that both single exchange and relationship paradigms can, and do, co-exist (Dwyer, Schurr and Oh, 1987; Brodie et al., 1997) and that this extends to use of the Web in the context of relationship management. However, there are mixed results from studies of the link between relationship management and performance. Colgate and Danaher (2000) found a negative or no influence when examining the relationship in a New Zealand sample. Palmatier and Gopalakrishna (2005) found mainly positive associations between social and structural investments in relationship management, and that financial relationship management investment and performance are associated in specific situations.

The present study utilised the items Selnes (1998) employed, due, in part, to the reported reliability coefficients of the scales and the indicated discriminant validity. The items were adapted to enable self-reporting of known business customer and/or consumer views of the respondents’ organisations, rather than responses which concerned the business suppliers to the organisation.

It is to be noted that the term e-Commerce represents the transaction element of online, or electronic, business (Turban, King, Lee, Warkentin and Chung, 2002). Aspects such as customer addressability (Blattberg and Deighton, 1991), interactivity, “share of customer” (Peppers and Rogers, 1995, p. 48) and arguable differences in the marketing of almost pure services over almost pure goods are among the more salient when discussing the use of the Web in relationship management. Direct and online marketing with reliance on database technology is a feature of dealing with subscriber markets with notable differences in the way that relationship management features in business use of the Web between countries, e.g., UK use in this context is much higher than in Australia and in New Zealand (the latter two were found to be almost identical) (Adam, Mulye, Deans and Palihawadana, 2002).

The online relationship management items used in the present study were drawn from Adam and Deans (2000) and from whose studies the following hypothesis was developed:

\[
H_1 \text{ Traditional relationship management and online relationship management are discrete aspects of marketing.}
\]

**Organisational performance**

Arguably, organisations which hold a market orientation, particularly those catering to subscriber markets (at the opposite end of this spectrum lie repertoire markets as in the case of most consumer goods), must consider the influence of relationship management on organisational performance (Selnes, 1998). The question arises as to which performance measures to use in empirical studies such as the present study, just as practitioners must decide which performance measures are most relevant to particular industries (Ambler and Kokkinaki, 1997; Ittner and Larker, 1998a; Ittner and Larker, 1998b; Ambler, Kokkinaki, Puntoni and Riley, 2001; Ambler, 2003; Ambler, Kokkinaki and Puntoni, 2004; Barwise and Farley, 2004). In addition, there arises the issue of the objectivity of the performance measures selected, or in other words, “the independence of the measure from the respondent rather than the
selection of criteria” (Ambler and Kokkinaki, 1997, p. 667). In examining this matter, academic researchers have found that they needed to consider whether to use objective measures (independently verified) and/or subjective measures (self-reported). Most, it seems, use subjective measures despite some inherent risks in doing so, e.g., false positive readings (Dawes, 1999). Harris’ (2001) study, which examined both subjective and objective measures found that for UK industry, and regardless of whether objective or subjective performance measures are used, market orientation did not directly affect sales growth or profitability.

The use of multiple performance indicators is an issue due to the complexity of organisational activities, and the fact that there are increasing numbers of industry types (Shaw, 1999). Another issue to receive attention is that of cross-national equivalence of performance measures (Mateer, Cadogan and Hooley, 2003). Improved financial measures have received attention from the viewpoint of including non-financial measures (Ittner and Larker, 1998b; Clark, 1999). The contribution by Kaplan and Norton (1992; 1996a; 1996b) to applying a small set of dimensions, the Balanced Scorecard, to make an active link between strategy and short-term action planning outcomes, while not short of advocates, is not without its problems, both conceptually and in its implementation (Ahn, 2001; Ittner and Larker, 2003). Wide adoption has been reported (Kennerley and Neely, 2003), however, the issue of applicability to all organisations remains.

The present study employed Ambler et al’s. (2001) measures of organisational performance (Also see Ambler, Kokkinaki and Putoni, 2004 in this regard). Ambler et al. (2001) undertook a three-stage UK study which sampled marketing and financial management from various industry sectors that included retail, consumer goods, consumer services, business-to-business goods, and business-to-business services companies. The important measures they identified, which included financial measures (e.g., sales revenue, gross margin and market share) and marketing metrics (e.g., brand attitudes, innovation and perceived quality), were included in the present study.

From the aforementioned studies of the influence of market orientation on organisational performance, the following hypothesis concerning a major element of holding a market orientation was developed:

**H2** Relationship management effort predicts organisational performance.

Harris (2001), Greenley (1995), Slater and Narver (1994) and Appiah-Adu (1998) each found that the degree of market turbulence moderates the relationship between market orientation and profitability, when subjective measures of profitability were adopted. Jaworski & Kohli’s (1993) measures of environmental turbulence were employed in the present study, viz. customer base volatility, technological change in the respondents’ industries, support for innovation and an additional item, Web use to counter competitor activity. From this literature, the following hypothesis was developed for testing:

**H3** Environmental turbulence moderates the relationship management – organisational performance relationship.

**Methodology**

The unit of analysis in this study is the marketing organisation. Invitations to respond were delivered to senior managers via a two-sided postcard to a sample of 3,500 high
network traffic Australasian organisations, and delivered via personally addressed e-mail to a sample of 8,500 Australian organisations. The same online questionnaire, secured by individual username and password was employed with each sample. Eleven-point Likert type scales, and modified Juster scales (Day, Gan, Gendall and Esslemont, 1991), were used with the multi-item inventories involved. This decision was based on previous experience with respondents who are dependent on monitor resolution to discriminate scales in online questionnaires (e.g., McDonald and Adam, 2003), and due to the desire to maintain consistency with modified Juster scales which were also employed. Data from 167 completed questionnaires was used in the analysis (See Adam & Shaw (2004) for commentary on this response level). T-tests on a comparison of demographic items and major variables for day one respondents (67 per cent) with later respondents, found no significant differences, thereby suggesting that there was insignificant non-response bias (Armstrong and Overton, 1977).

JavaScript was employed to prevent item-skipping on nearly all multi-item inventories. Little's MCAR test showed that any missing data was missing completely at random (MCAR): Organisational Performance – Three year change ($\chi^2 = 208.24, \text{df} = 237, p = 0.91$); Organisational Performance – Change last year ($\chi^2 = 544.48, \text{df} = 637, p = 0.99$) (Hair, Anderson, Tatham and Black, 1998). Estimated means (EM) imputation was employed given the small amount of missing data.

Analysis, Findings and Discussion

The study adopted a two-step approach suggested by Anderson and Gerbing (1988) and Kline (2005), whereby each multi-item inventory (relationship management (RM), online relationship management (ORM), organisational performance – direct (OPD), and organisational performance – indirect (OPI)), was subjected to confirmatory factor analysis, followed by testing of the relationship between pairs of constructs, before proceeding to analysis of all constructs involved. The measurement models for RM, ORM, OPD and OPI, following trimming, were examined and in each case, the goodness of fit indices showed a good fit of the models to the data (see Table 1) and acceptable reliability and validity.

In order to determine the discriminant validity of the measures associated with traditional relationship management and online relationship management utilising the Web, a test employed by Harris (2001) was utilised. A comparison of the zero order correlation coefficients with alpha coefficients found that the correlation coefficients between the traditional and online variables is not greater than their respective alpha coefficients, i.e., $\text{RM} – \text{ORM} (r = 0.17, p < 0.05)$ is less than the alphas for RM (0.83) and ORM (0.89). It is therefore suggested that the traditional and online variables are discrete rather than there being one integrated construct. It is also suggested, but untested in this study, that there may integration of the two constructs in other countries, and that there would be a difference over time. Therefore, $H_1$ is supported, as RM and ORM do not give evidence of being the one integrated construct, thereby supporting Adam & Deans’ (2000) findings.
Table 1. Summary of goodness of fit from confirmatory factor analysis and SEM

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>CMIN/DF</th>
<th>P</th>
<th>GFI</th>
<th>AGFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM</td>
<td>6</td>
<td>0.73</td>
<td>0.74</td>
<td>0.98</td>
<td>0.97</td>
<td>1.01</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ENV</td>
<td>4</td>
<td>0.10</td>
<td>0.90</td>
<td>1.00</td>
<td>1.00</td>
<td>1.19</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ORM</td>
<td>4</td>
<td>1.48</td>
<td>0.23</td>
<td>0.99</td>
<td>0.96</td>
<td>0.99</td>
<td>1.00</td>
<td>0.05</td>
</tr>
<tr>
<td>OPD</td>
<td>5</td>
<td>1.16</td>
<td>0.33</td>
<td>0.99</td>
<td>0.96</td>
<td>1.00</td>
<td>1.00</td>
<td>0.03</td>
</tr>
<tr>
<td>OPI</td>
<td>7</td>
<td>0.94</td>
<td>0.50</td>
<td>0.98</td>
<td>0.96</td>
<td>1.00</td>
<td>1.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The structural equation model inter-relating RM and OP shows a good fit of the model to the data (CMIN/DF = 0.69, P = 0.78, GFI = 0.99, AGFI = 0.97, TLI = 1.02, CFI = 1.00, RMSEA = 0.00). When the regression weights are examined, however, there is an insignificant relationship between RM and OP, i.e., OP <-- RM: C.R. 0.74, p = 0.46. Similarly, the structural equation model concerning ORM and OP shows an acceptable fit of the model to the data (CMIN/DF = 1.17, P = 0.31; GFI = 0.98, AGFI = 0.95, TLI = 0.99, CFI = 0.99; RMSEA = 0.03). However, when the regression weights are examined, there is an insignificant relationship between ORM and OP, i.e., OP <-- ORM: C.R. 1.10, p = 0.27. It is therefore concluded that H2 is not supported, thereby supporting Colgate and Danaher’s (2005) findings, but not supporting Palmatier and Gopalakrishna’s (2005) findings.

Using factor loading index weighted composite variables for RM, ORM and Organisational Performance (OP) in order to ensure the case to free parameter relationship did not fall below 5:1 with groups (Kline, 2005), environmental turbulence was introduced as a control condition employing a path model. It was found that environmental turbulence did not moderate the relationship between either relationship management construct and OP. It had been anticipated that when there is a low turbulence, relationship management effort would come to the fore in attempting to hold customers; hopefully the most profitable customers. H3 is therefore not supported.

Concluding remarks

Arguably, the findings in the present study are situational, as Colgate and Danaher (2000) found. The same scenario has been found in studies of the market orientation and organisational performance relationship, e.g., Appiah-Adu (1998), where in addition to economic circumstances having an effect, industry type also played a part. It is suggested that further research is needed across various industry types. In the first instance it would be desirable to reach agreement concerning the multi-item inventories involved, although these too may vary by industry sector, perhaps making it almost impossible to reach the agreement that some suggest is needed (e.g., Rossiter, 2002).
References


