

**Integration of Market Research and Customer Analytics:
A Study of CRM Manager Perspectives**

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Abstract

The study examined key relationships between two overlapping customer knowledge systems, Market Research (MR) and Customer Analytics (CA). Their integration can provide valuable new marketing insights. However a survey of 286 US CRM and CA managers showed that many companies do not fully integrate MR and CA. Organisations with a Prospector strategic orientation were more likely to integrate the two and judge the CA system a success. Trust between the two functions enhanced knowledge integration. This in turn was shown to make a strong contribution to the value of CA and a modest indirect contribution to firm success.

Key words: customer analytics, marketing research, CRM, knowledge integration, marketing strategy

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Introduction

Two major parallel systems of customer information are available to organisations, Customer analytics (CA) is based on information about current and past customers drawn from the CRM data warehouse (Payne & Frow, 2005) coupled with geodemographics (Mitchell & McGoldrick, 1994) and other exographic data (Greene & Milne, 2006). Market research (MR) is based on information about past, current and future customers in addition to those belonging to competitors. To the extent that MR and CA duplicate the work of each other, they are wasteful rivals. To the extent that either complements the other by guiding data collection, modelling and customer insights, they are collaborators (Tsai, 2002; Javalgi, Martin & Young, 2006). The knowledge management (KM) industry claims that “winning companies compete with knowledge” (Nanavaty & Kops, 2009; p.7), as does academic research (Hsieh, Lai & Shi 2006; Ofek & Sarvary, 2001). Thus the effective combination of MR and CA into a KM system may be regarded as a key element of an overarching competitive strategy. This paper explores key relationships between organisational strategy, success and the integration of the MR and CA functions - using a KM theoretical lens. The paper investigates these relationships.

Strategy

Organisational strategy influences marketing effectiveness and organisational performance (Manion & Cherion, 2009). A major theory of organisational strategic types comes from Miles and Snow (1978). They believed that the classification of organisations according to strategy provides specific and appropriate guidelines for human resource, organisational structure and information requirements. They described three successful generic strategies – Prospector, Defender and Analyser. A Prospector achieves competitive advantage through being first into new markets with new products. Because of its entrepreneurial approach, such a strategy requires that senior managers seek greater confidence that planned actions are ‘on track’ because of the higher risk of major strategic error. Thus managers are likely to invest in well-developed information systems that make the best use of the customer information available (Chan, Sabherwal & Thatcher, 2006). Defenders achieve competitive advantage by becoming more efficient with older, less technologically advanced products. They are more likely to use traditional data collection approaches for marketing such as keeping independent the collection of MR and CA data. This is because Defenders have a greater need for MR or CRM to monitor current activity, to retain customer loyalty (Ngai, 2005) and to become more efficient. Co-operation between the MR and CA functions would be less critical in this environment. Analyser strategies combine elements of both Prospector and Defender. Du Toit (1998, p. 207) found differences between Prospectors, Analysers and Defenders in “...the way in which information was managed (for competitive advantage)...” Similarly, Slater and Narver (2000) believed there would be differences between Prospectors, Analysers, and Defenders in terms of market intelligence generation. These considerations lead to hypothesis *H1: Organisations with a Prospector orientation are more likely to integrate their CA and MR functions than are other strategic types.*

Organisational cultures of learning, innovation, trust, collaboration and cooperation facilitate knowledge sharing (Maltz & Kohli, 1996) while cultures of distrust, competition and the

rewarding of individual knowledge inhibit it (Gold, Malhotra & Segars, 2001). Prospector organisations will need the MR and CA functions to co-operate in order to exploit the combined value of both. The more each group trusts one another, the more likely is integration. Thus, in terms of the CA managers, *H2: The more CA managers trust their counterparts in MR, the more likely the two functions are to be integrated.* Similarly Prospector organisations should have little tolerance for competitive non-collaborative employees whose rivalries limit the exploitation of information. Prospector organisation area likely to recruit cooperative, collaborative people and set up structures that make it more likely CA and MR would trust each other. Thus, *H3: Those organisations with a Prospector orientation would be more likely to trust their MR counterparts than would organisations with other orientations.* In addition, *H4: Those organisations with a Prospector orientation would be less likely to view MR and CA as competitors.*

Organisational boundaries, decision rights, coordinating mechanisms and the presence or lack of social networks can enable or inhibit knowledge sharing (Kilduff & Tsai, 2003, Tsai, 2002). Maltz and Kohli (1996) noted the importance of proximity of marketing units for greater interaction, increased trust and increased perceptions of marketing intelligence quality. Hence *H5: The physical proximity of the MR and CA units positively influences the integration of CR and MA knowledge.* The integration or co-operation of the MR and CA functions involves more than the passing of information packages to each other but requires knowledge of how the other party operates (Hendriks, 2004), how they see their world (Dixon 2002) and what they require to do their work (Valos, Bednall & Callaghan, 2007). In addition, receivers must be able to relate incoming knowledge to their existing tacit knowledge to understand and assimilate it (Lane & Lubatkin, 1998). Jayachandran (et al., 2005) have shown that organisations that employ a CRM system to share customer information across the organisation have improved business performance. A similar outcome for sharing MR and CA would be expected. Hence *H6: Organisations which share their CA and MR activity will regard their CA function as being more useful than those who do not.* In turn, *H6: The better the CA function, the greater the organisational success.*

Method

Step One comprised the conduct of a series of in-depth interviews with marketing and customer intelligence managers in Australia (4), Canada (2) and the UK (3) to complement earlier interviews with Australian and US MR managers. The findings from these interviews will be published elsewhere. Among other insights, the interviews provided data which led to the development of a series of items to use in this study being reported here, as none existed in the literature. In Step Two - the study reported here, CA managers in the US were surveyed using the Internet. This country was targeted because the large number and size of the organisations meant there would be sufficient numbers for recruitment and that diversity of co-ordination issues was likely.

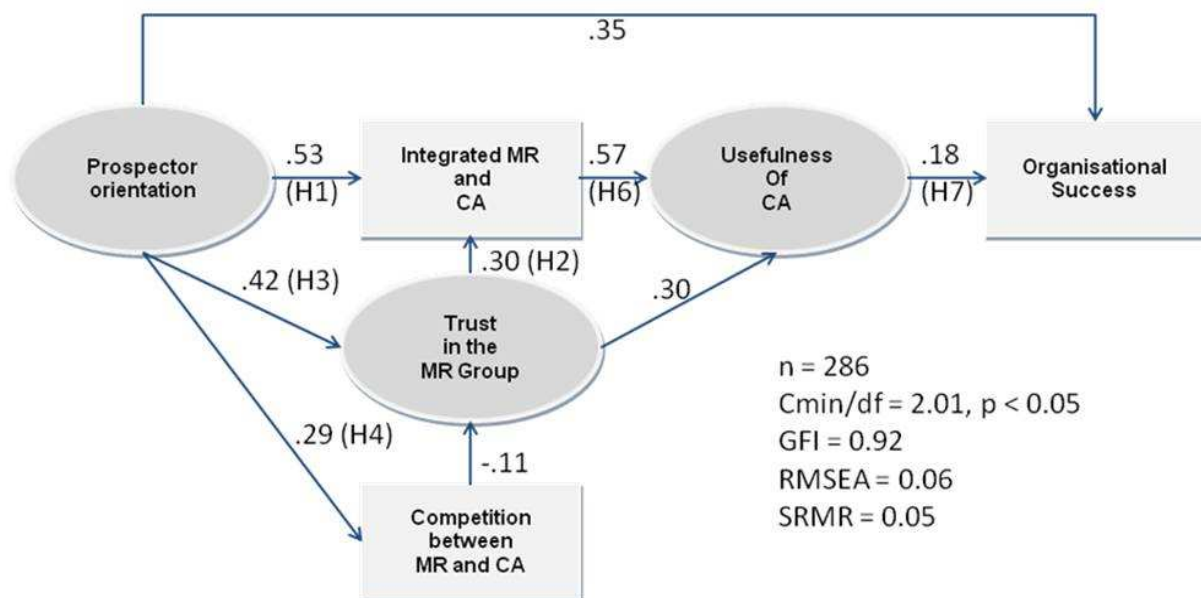
The database, recruitment and hosting of the survey were organised by Inshtrix, a Canadian based market research firm. To qualify as a participant, an organisation had to have both a CA and MR function. These terms were defined for respondents to ensure all parties were discussing the same phenomena. The people recruited were mainly in CRM, customer data warehouse or CA roles. A sample of 301 was obtained. No incentive to participate was offered. In order to overcome "speeders", the fastest five percent of respondents were eliminated from the analysis, leaving a sample size of 286. There were no missing data. New items about the integration of MR and CA were added. These talked about effectively

combining CA and MR for the purpose of identifying new markets and new segments as well as reducing churn. In addition an existing trust scale was modified for use, along with an adapted version of scale items based on the Miles & Snow strategic types (Conant, Mokwa & Varadarajan, 1990). Success was measured on several items asking respondents to compare the success of their organisation with others in their industry on measures such as profitability and new product development. Scale purification was conducted using exploratory factor analysis and reliability analysis. The main hypotheses were then tested using structural equation modelling using a mix of latent variables and composite scale items in order to reduce the number of parameters. Refinement of the measurement model was achieved by eliminating items from each latent variable. Each had at least four indicators.

Results

Figure 1 illustrates the main results for the study. The model provided a reasonable fit to the data. The main items describing organisational strategy could be regarded as reflecting a Prospector orientation and hence the latent variable has been labelled in this manner.

Figure 1: Resolved Structural Model Results



Hypothesis 1 was supported. Those with a high Prospector orientation were much more likely to depict market research and customer analytics as being integrated in the sense of combining the two types of information to identify new market segments, to reduce customer churn and to identify prospective customers. Hypothesis 3 was well supported. Organisations with a high Prospector orientation were much more likely to display trust in the MR function than were those lower in this orientation. In contrast to Hypothesis 4, those with a Prospector orientation were more likely to perceive competition between the two functions. The Prospector orientation had a direct and significant relationship with perceived organisation success. This relationship was much stronger than the direct contribution of CA's usefulness to success. In general respondents reported very high levels of trust for the MR function. There was some support for Hypothesis 2 - that is, where the MR group was trusted, MR and CA were more likely to be integrated. Hypothesis 6 was well supported, with the perceived success of the CA function being higher among those who reported that CA and MR were integrated. Hypothesis 7 was supported, but only very weakly. Those reporting better CA MR

integration were somewhat more likely to regard their organisation as successful relative to competitors. The results also showed trust in the MR group contributed to the success of the CA function. A high level of competition between the two functions led to a tiny, though significant negative relationship with trusting MR people. There was no relationship between physical proximity and perceived integration of MR and CA, contrary to Hypothesis 5 ($t(284) = 1.86$, ns) when comparing those organisations where the MR and CA people worked in the same area or within one minute's walk with organisations where the groups were further apart. However, physical separation did affect trust in the MR function on a number of issues, as Table 1 shows.

Discussion

The results showed that those organisations highest on the Prospector orientation appeared to be highly motivated in a number of domains. This was reflected not only in the direct relationship with overall organisational success but also on the intermediate activities regarding the CA functions. Thus this group appeared willing to invest in infrastructure, including an integrated MR and CA approach. These organisations were also more likely to hold high levels of trust of the MR function. Speculatively, in this entrepreneurial climate a culture is created in which every available asset needs to be leveraged. Groups or individuals which resist this approach are likely to find little support. An earlier Australian study of MR managers (Bednall & Valos, 2005) confirmed that Prospector organisations were less likely to use MR for internal political research or merely to confirm what is already known. They are too busy seeking new customers and new markets to be preoccupied with internal conflicts and self-justification. One curious finding was that the high Prospectors were more likely to perceive competition between the CA and MR groups. This finding conflicts with traditional KM theory reviewed earlier, where it is believed that cultures of trust, collaboration and cooperation facilitate knowledge sharing (Maltz & Kohli, 1996) whereas cultures of distrust and competition inhibit knowledge sharing (Gold, Malhotra & Segars, 2001). Models were tested with a pathway to determine whether CA-MR competitiveness had an impact on the perceived usefulness of CA or whether this competitiveness affected organisational success. The relationships were not significant and little effect on model fit was observed. One possible explanation is that in a Prospector environment, each function is encouraged to do its best, to promote its activities and aggressively demonstrate how it can best advance the organisation. Another possibility is that incentives were offered to encourage collaboration – for example, awards. Such incentives are known to motivate knowledge sharing (Hinds & Pfeffer, 2003). Finally, Tsai (2002) among others has observed that business units can compete and cooperate simultaneously. Given the overlap in functions (Lichtenstein, Bednall & Adam, 2007) some redundancy may certainly occur, but if both parties are seeking to best exploit their value, opportunities will be found to leverage the synergies.

Table 1 Relationship Between Trust Items and Co-Location

Item (Scored 0 -10)	Group	Mean	t	df (Equal variances not assumed)
MR people are truthful in their dealings with CA people	a	9.0	3.08	131
	b	8.2		
I would characterize MR people as honest	a	9.1	2.62	134
	b	8.4		
MR people keep their commitments to CA people	a	8.9	2.64	131
	b	8.2		
MR people are genuine and sincere in their dealings with CA people	a	8.9	2.26	129
	b	8.3		
The CA people trust the MR people	a	8.8	2.25	124
	b	8.2		

a = co-located or within one minute's walk, b = further away (including in separate countries)

For the managers in this study, the integration of CA and MR delivered important advantages by leveraging the value of CA. This was especially valuable to prospectors trying to increase their customer insights. As shown in the preliminary interviews (Step One of the project) and this survey, the co-location of MR and CA was also useful. Further, when CA and MR reported to the same manager, knowledge integration was facilitated. However there is still much more to learn about the various types of integration. At a base level, the exchange of reports between MR and CA, both regular and *ad hoc*, was noted in the preliminary interviews. Joint taskforces or working parties where both CA and MR groups were actively involved in generating marketing insights strategy were also suggested. However such broad approaches are a long way from an integrated system of data objects that can all be stored in a single cohesive data warehouse. Whether such base level integration is possible or even desirable is unknown. Similarly the more complex models of customer behaviour being produced by both knowledge functions suggest there may be a role for each function to help the other to model their data, thus extracting greater value from it. Research is also needed to explore the perceived barriers limiting greater integration.

Our model shows that CA is likely to make a modest direct contribution to organisational success. This finding may be welcomed by those in the industry who have questioned whether most organisations are using their CA effectively (Nanavaty & Kops 2009). The focus of this study was on the integration of MR and CA, not on the broader role played by CA in the organisation. Clearly there is more to investigate in terms of the role played by analytics in the marketing process. The pre-occupation to this point has been on those organisations with a Prospector orientation. The research would indicate that less dynamic organisations would be even less likely to integrate their knowledge management systems, less likely to capture the value from their CA function and more likely to leave MR and CA in their existing knowledge silos with little interaction, aimed more often at preservation than organisational success. More research is needed into these organisations and how they function. In an era of global financial woes, they may struggle to survive against their more dynamic, motivated competitors.

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