
Marketing research and customer analytics: interfunctional knowledge integration

Abstract: The Customer Analytics (CA) function is increasingly leveraged for Customer Relationship Management (CRM), however it may lack the value of marketing knowledge available from the Marketing Research (MR) function due to inadequate interfunctional knowledge integration. This paper develops a set of sixteen propositions from a synthesis of the marketing and knowledge management literatures relating key organisational influences on the integration of knowledge between the MR and CA functions. A range of strategic, cultural, structural and technical influences is reflected by the propositions. It is planned to test the propositions in future empirical research.

Keywords: Customer Analytics; CA; Marketing Research; MR; Customer Relationship Management; CRM; market intelligence; data warehouse; integrated marketing knowledge; technology marketing.

1 Introduction

A positive outcome of a Customer Relationship Management (CRM) system is the generation of massive quantities of Customer Analytics (CA) information. But such an outcome also creates a problem – namely how to combine this information with other sources of marketing data, especially Marketing Research (MR). This problem provides the focus of this paper. We argue that the integration of these marketing information sources is necessary for a market-oriented organisation to seize opportunities and to limit duplication and waste.

Successful market orientation is often depicted as relying on the superior integration and utilisation of marketing intelligence sources (Guenzi and Troilo, 2006; Maltz and Kohli, 2000; Menon and Varadarajan, 1992). In support of this decade-old claim, recent research on CRM advocates the value of a cross-functional integrative approach to CRM where relevant knowledge from diverse sources is coordinated and integrated (Payne and Frow, 2006). Recent thinking suggests that successful CRM is built upon pre-existing organisational capabilities including:

- the ability to integrate information and knowledge across functions (Bolton and Tarasi, 2006; Plakoyiannaki and Tzokas, 2002)
- a good fit between CRM strategy and marketing strategy (Bohling *et al.*, 2006)
- high levels of intra-organisational and inter-organisational cooperation and coordination between involved entities (Bohling *et al.*, 2006).

In sum, information and knowledge integration across functions is recognised by marketers as foundational to successful CRM and deserving of greater research attention (Bohling *et al.*, 2006).

However, marketing research knowledge is notoriously underutilised by other marketing functions when making strategic marketing decisions (Deshpandé and Zaltman, 1982; Dolnicar and Schoesser, 2003; Luck and Krum, 1981) presenting an important problem that should be addressed by scholars and practitioners. It has been claimed that the most common influences on the under-utilisation of marketing knowledge are organisational (Menon and Varadarajan, 1992). Consequently this paper explores, through a synthesis of relevant literature, potential organisational influences on the integration of MR knowledge with knowledge from the CA function. This research

question is important to address for four main reasons. Firstly, business analytics (of which analysis of customer data is a part) are critical for obtaining a competitive advantage and should be carefully managed (Davenport, 2006). Secondly, as mentioned, market research intelligence is too often ignored by marketing managers in making marketing decisions and other marketing analyses (Deshpandé and Zaltman, 1987; Dolnicar and Schoesser, 2003). Thirdly, it is important to integrate knowledge from the MR function with internal customer data for database marketing success (Evans *et al.*, 1995; Malhotra and Peterson, 2001). Fourthly, such integration is likely to reduce marketing costs on the assumption that it avoids the duplication of effort inherent in both MR and CA collecting information about current and potential customers. This last justification remains untested.

The remainder of the paper proceeds as follows. The next section develops an account of the main systems of customer information within for-profit organisations, and their interrelationship. Section 3 reviews and synthesises relevant literature on knowledge sharing, knowledge integration and marketing. Section 4 reviews organisational challenges in the integration of knowledge from MR with CA, and derives a series of propositions. Finally, a conclusion section summarises the paper and outlines ways in which the propositions might be researched.

2 Main systems of customer information

In order to see how organisations might benefit from integrating sources of customer information, we now review the main sources of this information. A summary list of key terms and their definitions is presented in Table 1. The section assists in conceptualising the relationship between MR and CA, and their wider context. It also highlights the value of integrating customer-oriented information between MR and CA.

Table 1 Key terms and their origins

<i>Term</i>	<i>Definition</i>	<i>Primary source</i>
Business analytics	Systems designed to analyse the data contained in the data warehouse	This paper
Customer Analytics (CA)	That part of the CRM system that involves the systematic collection, warehousing, analysis and deployment of customer data	Following Marsella <i>et al.</i> (2005)
Customer Relationship Management (CRM)	CRM is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments	Payne and Frow (2004, p.168)
Data warehouse	An organised repository of the codified data, information and knowledge held by an organisation	This paper
Database middleware systems	Software that assists in the interface between multiple relational databases	Haas <i>et al.</i> (1999)
Exographics	Data items beyond a customer's immediate surroundings	Greene and Milne (2006)

Table 1 Key terms and their origins (continued)

<i>Term</i>	<i>Definition</i>	<i>Primary source</i>
Integrated marketing knowledge	The applied outcome of a contextual analysis of a network of marketing data objects and their related attributes	This paper
Market Knowledge (MK) (aka market information)	A broader concept than customers' verbalised needs and preferences in that it includes an analysis of exogenous factors that influence those needs and preferences. Market knowledge includes monitoring competitor strategy and implementation	Kohli and Jaworski (1990, pp.4–5)
Market orientation	The generation of marketing knowledge, its dissemination, and organisational response to it, are seen as key aspects of an organisation's market orientation, which may, in some circumstances, be a moderator of organisational performance	Kohli and Jaworski (1990) A complementary, but different, view is proffered by Narver and Slater (1990)
Marketing Insights (MI)	The function of collecting and analysing all market relevant data, including the output from CA together with MR and other external information	This paper
Marketing knowledge integration	The applied outcome of a contextual analysis of a network of marketing data objects and their related attributes	This paper
Marketing Research (MR)	The function that links the consumer, customer, and public to the marketer through information –information used to identify and define marketing opportunities and problems; generate, refine, and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process	AMA (2007)
Touch points	Situations where the customer and the organisation interact	Schultz <i>et al.</i> (2004)

2.1 *Marketing perspective of CRM*

CRM is a term that has been poorly or variously defined, depending on author focus. From our perspective, CRM refers to a systematic approach to integrate the activities of an organisation around the building and maintaining of customer (and other) relationships. Using this perspective, we adopt the increasingly recognised definition of Payne and Frow (2005):

“CRM is a strategic approach that is concerned with creating improved shareholder value through the development of appropriate relationships with key customers and customer segments. CRM unites the potential of relationship marketing strategies and IT [information technology] to create profitable, long-term relationships with customers and other key stakeholders. CRM provides enhanced opportunities to use data and information to both understand customers and co-create value with them. This requires a cross-functional integration of processes, people, operations, and marketing capabilities that is enabled through information, technology, and applications.” (p.168)

This definition is strongly aligned with the marketing functions of the organisation, given that the definition emphasises long-term profitable relationships with customers. The adoption of a CRM approach requires that various internal and external relationships are managed (Gummesson, 1994) in a coordinated fashion. To build and manage customer relationships, there are many touch points to consider – such as retail sales outlets, call centres and billing (Schultz *et al.*, 2004) – to best serve customers. Data from each customer interaction at any touch point should be integrated with previously captured customer-oriented information (Chan, 2005) to manage on-going contacts. Some such interactions are managed by people – for example, sales or call centre staff – and others by information systems such as Interactive Voice Response (IVR) systems and self-service systems (Salomann *et al.*, 2006).

Whenever customers make contact, customer data should be collected. The type of data collected will vary by organisational type and customer base. In particular, organisations where customers take out a subscription (*e.g.*, a one-year insurance policy) are likely to be known by name, as are customers for expensive or important items (such as a new car) or where there is direct marketing from a catalogue. In a mass transaction organisation, such as a supermarket, or organisations where customers are not apt to return (*e.g.*, a street vendor in a tourist location), more traditional sales data is likely to be collected. Loyalty programmes involving store cards have increased the likelihood that these transaction-based organisations collect this information and attribute it to individuals.

Internal coordination concerning customers (such as for internal marketing, management of front-line service employees, capture of customer information, delivery of goods and services) is accompanied by internal interactions represented by data, information and knowledge flows (Gebert *et al.*, 2003). CRM systems assist with integrating functions by coordinating such flows with data and information previously captured. For example, if a call centre employee provides product support to a current customer, she/he will need to know the customer's previous contact history, especially sales and complaints in order to effectively support the customer.

2.2 Customer analytics

The central function of a CRM system – to organise the collection and use of customer information – is termed CA. The concept of CA is not well defined in the marketing literature since most of its use is in the business practitioner literature (*e.g.*, Aberdeen Group, 2007). Thus the term CA is commonly equated only with the analysis of customer data. Adopting a holistic definition, however, following the activities described by Marsella *et al.* (2005) we define CA as, “that part of the CRM system that involves the systematic collection, warehousing, analysis and deployment of customer data”.

The focus of CA is on customers – understanding and modelling their past behaviour and predicting their future behaviour. CA includes elements of CRM, Business Intelligence and Marketing Insights (MI). CA's primary data comes from contacts with customers. These data are stored in a Data Warehouse, which we define as, “an organized repository of the codified data, information and knowledge held by an organization”.

Analysis of the data is performed by the business analytics function that includes the customer analysis and modelling part of CA. Typically, complex analytical software applies data mining and multivariate analysis, yielding potentially valuable insights into customer behaviour. These outputs are then disseminated.

2.3 Customer analytics within business intelligence

The CA function may be seen as merely one, albeit highly important, element of a general stock of business intelligence functions (CIO Insights, 2005) in the firm. Business Intelligence is more generally concerned with all strategic information relevant to an organisation. Such information may include internal data within the CRM system (accounting, personnel and logistics), other internal data (intellectual property and the library function), external logistics data from the supply chain, external market data (competitor information, exographics and geodemographics) and marketing research.

Exographics can be described as “data items beyond the spatial being of a person’s immediate surroundings. The outer boundary of immediate surroundings is defined as household neighbourhoods, small, geographically contiguous sets of homes” (Greene and Milne, 2006, p.34). Examples of exographics include the climate, topography of a region or the nearness to a large city or border. Geodemographics assign each person or household to a small market segment, characterised by location, lifestyle and values (Mitchell and McGoldrick, 1994).

2.4 CA and marketing research

MR is major source of information about the marketplace. MR functions to link the marketer to customers and other stakeholders through the systematic collection of information. Marketers use this information to identify market opportunities and to monitor marketing performance (AMA, 2007).

Usually MR information is not collected by a CRM system unless it is linked to surveys of existing, identified customers. However, both systems are capable of collecting overlapping data in such areas as purchase behaviour, complaints, service quality, demographics and lifestyle. Thus the potential for duplication is vast. Alternatively, if the information can be effectively integrated, a richer understanding of customers is a likely result.

MR is capable of measuring some variables that the CRM system cannot – for example, tracking advertising exposure, examining usage in relation to attitudes, and questioning future behavioural intentions. On the other hand, it is traditionally weaker in accurately recording behavioural data (Cook, 1987), which is an advantage of CRM-based systems.

Broadly speaking, MR may be split into its knowledge-enhancing and action-oriented (decision-making) functions (Bednall and Valos, 2005). Since it also has the ability to collect information relevant to non-customers, MR is potentially capable of tapping into more sources of information than any CRM system. We argue that MR has a major role in assisting the CA function at the analysis stage, as it can bring unique insights, such as information about competitors and their customers, into the analysis.

2.5 MR, CA and the market insights functions

To reinforce an important point for our conceptualisation of the relationship between CRM, MR and CA, MR can contribute to the Data Warehouse and hence can be used to help analyse and model customer data. However, since MR is normally commissioned by the marketing function, it may be disseminated directly to marketing management. There

it comprises a key information source for a function found in industry but not identified in the literature so far, namely the MI function, “the collection and analysis of all market relevant data, including the output from CA as well as marketing research, competitor, tacit and other data”.

Other external data, such as competitor intelligence, may also contribute directly to MI. A final component of MI is the tacit knowledge of experienced marketing experts (Cavusgil *et al.*, 2003) which is applied to the development of marketing strategies and tactics. This occurs within the broader context of organisational barriers (*e.g.*, budgets) and facilitators (*e.g.*, an entrepreneurial strategy).

Given that MR can be a major input into CA, but also has a separate path of communication direct to marketers, it necessary to conceptualise how these two functions could be organised to produce integrated marketing knowledge.

3 Knowledge sharing and knowledge integration in organisations

The previous section reviewed and conceptualised our understanding of the context and relationship of MR and CA. It also highlighted the importance of integrating customer-oriented knowledge between the MR and CA functions. This section reviews knowledge integration in organisations and discusses the integration of knowledge from MR with CA.

Firstly we define knowledge. For this paper, we have adopted a transformational perspective of knowledge. Codified observations from a marketplace of *data*, when placed in a decision context, are transformed into *information* (Barabba and Zaltman, 1991). In the analysis of this information, *intelligence* is created. When high levels of confidence are developed in a body of intelligence, *knowledge* is created. Tacit knowledge is the knowledge internalised by humans that cannot be shared (Polanyi, 1997) while explicit knowledge can be articulated (Nonaka and Takeuchi, 1995).

The sharing of knowledge is an important aspect of knowledge integration. Broadly, there are three main approaches to knowledge sharing (Hansen *et al.*, 1999; Wenger *et al.*, 2002). First, knowledge can be articulated, codified and stored in repositories (or data warehouses as we term them) for later retrieval and application. Formal knowledge is typically shared this way. Second, knowledge sharing can take place during interpersonal communication leading to meaning making and learning. Knowledge exchange approaches using technologies such as e-mail or the creation of virtual communities enable communication and collaboration. Informal knowledge is typically shared this way. Third, community-based sharing may lead to shared understandings that are useful for knowledge integration (Wenger *et al.*, 2002). Web-based technologies, especially intranets, are popular supporting mechanisms for such communities.

The process of interest in this paper is knowledge integration, which relies on strategies of knowledge sharing (Grant, 1996). Knowledge integration has been defined as the synthesis of knowledge into situation-specific systemic knowledge *for the purposes of application* (Alavi and Tiwana, 2002). Shared knowledge is combined using various integrative mechanisms such as rules, coordinative routines, virtual teams, cross-functional projects, and communities of practice (Alavi and Tiwana, 2002; Grant, 1996; Huang and Newell, 2003). Knowledge integration by collective human activity is often linked to decision-making processes. Knowledge must be assembled from different

human sources to solve problems and make decisions because the likelihood that one person will contain all the relevant knowledge is small given organisational structures centred on specialisation and the limitations (bounded rationality) of the human mind (Jensen and Meckling, 1992). The ultimate aim in fostering such integration is to improve business performance. Empirical research has shown an enhanced association between sharing customer information across the organisation and business performance when a CRM system enables such sharing (Jayachandran *et al.*, 2005).

The concept of integrated marketing knowledge in firms requires re-definition. A decade ago, market knowledge integration was understood as a marketer using marketing to improve his/her market understanding or to make or implement a marketing decision (Maltz and Kohli, 1996). However there is a need for a more technically based definition to enable better insights regarding the integration of MR and CA knowledge. We therefore present our understandings of marketing knowledge integration next.

3.1 Integrating knowledge from marketing research with customer analytics

CA is enabled by a knowledge management system centred on a data warehouse and a business analytics function comprised of marketing data objects and associated attributes, among other information. An example of a data object is a household, which may be associated with attributes such as size, income and social class. Ideally, all data related to a marketing object is stored in a data warehouse and conceptually related to that object. As some data is qualitative (*e.g.*, a salesperson's reports on a competitor), integrating heterogeneous data in a decision context is no simple matter. Database middleware systems can assist in integrating data from multiple sources (Haas *et al.*, 1999). Regardless, the eventual knowledge management system is intended to yield useful market knowledge. Data in the warehouse should therefore be linked on many levels; in this sense the system should resemble a semantic network (Huang *et al.*, 2007). For example, a competitor data object may be conceptually related both to (1) information about customer use of competitor products and (2) information about competitor product range. Knowledge developed from the knowledge management system (based on the data warehouse) is based on an interpretation and analysis of the data.

We thus define integrated marketing knowledge as, "the applied outcome of a contextual analysis of a network of marketing data objects and their related attributes". As marketing knowledge management systems only capture and share explicit knowledge, the tacit knowledge of expert marketers should also be sought. The MI function is where expert marketers analyse, both formally (by a knowledge management system as outlined above) and informally (for example, by face-to-face conversation), available organised and *ad hoc* sources of market information. In this paper we are interested in how marketers from MR contribute their knowledge to this process, and the enablers of this contribution.

4 Organisational factors motivating MR and CA knowledge integration

In this section, we review organisational challenges for the integration of knowledge, focusing on the integration of marketing knowledge. The section develops 16 propositions relating to the integration of MR knowledge with CA.

Many organisational factors can significantly affect the knowledge sharing and integration processes. Organisational boundaries, decision rights, coordinating mechanisms and the presence or lack of social networks can enable or inhibit knowledge sharing (Kilduff and Tsai, 2003; Tsai, 2002). Reward systems and other incentives may motivate knowledge sharing (Hall, 2001) although some research suggests otherwise (Bock and Kim, 2002).

When two business information functions compete with one another for resources, less marketing intelligence is shared or integrated (Cadogan *et al.*, 2005; Maltz and Kohli, 1996; Maltz *et al.*, 2001). Directors of marketing research must become more proficient at gaining resources (Adams *et al.*, 1998), however this may lead to increased rivalry and reduced knowledge integration. The greater the power and influence of one of the functions over the other, the less likely personnel will be motivated to share knowledge across functions. Equality can be partly obtained through equal remuneration and equal promotion opportunities between employees in marketing and other functions, leading to improved knowledge integration (Leenders and Wierenga, 2002). Hence we propose:

P1 The greater the mismatch of resources (remuneration, promotion and influence) between CA and MR, the greater the rivalry and ultimately the less knowledge integration.

When marketing managers are more involved in marketing research activities (Malhotra and Peterson, 2001) rivalry may be reduced. Such involvement may stem from cross-functional governance of the functions. Where this occurs, resources are more likely to be evenly distributed. Thus we propose:

P2 Where there is cross-functional governance of the two functions, resources are more likely to be evenly distributed.

A cross-functional review board has been shown influential in integrating the marketing function with R&D (Leenders and Wierenga, 2002). This suggests a similar relationship between MR and CA should exist. Hence we propose:

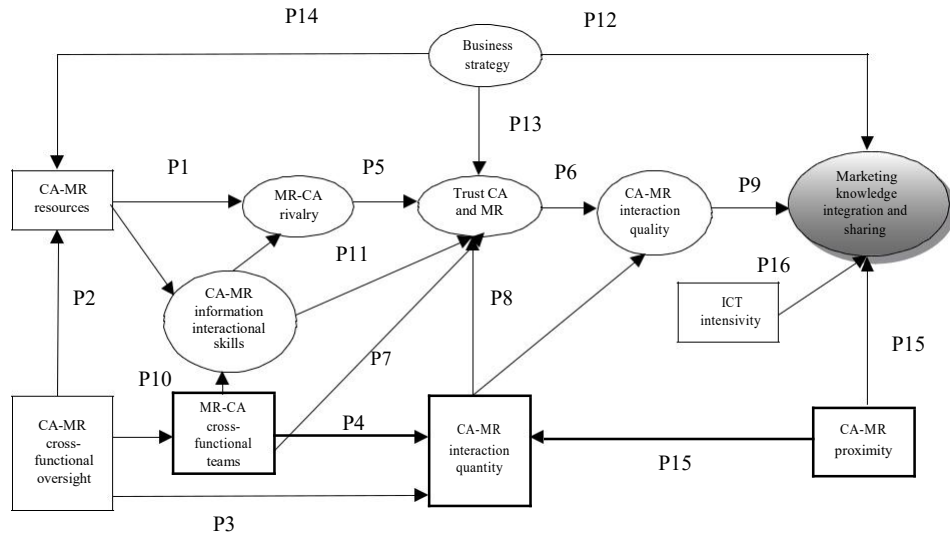
P3 Cross-functional oversight of MR and CA positively influences the quantity of interaction.

Such a cross-functional oversight is likely to lead to cross-functional teams and improved integration (Leenders and Wierenga, 2002) with marketing:

P4 The presence of cross-functional teams incorporating the MR and CA units positively influences the quantity of interaction of MR with CA.

People who work together are more likely to learn the others' perspectives and be better motivated to work together.

The relationships proposed here and others that follow are shown in Figure 1.

Figure 1 Propositions developed in this paper

4.1 Trust

Trust in a sharer's knowledge appears as a key factor in marketing knowledge integration in several studies. In one study, the frequency with which a sender and receiver from different marketing units informally communicate appears to have no effect on the perceived quality of the intelligence shared, however after 125 communications per month there is increased confidence, or trust, in such intelligence (Maltz and Kohli, 1996). Interestingly, after a certain threshold the value of the additional communication may damage trust in the sender and confidence in the quality of his/her intelligence, although reasons for this mistrust are unclear (Maltz and Kohli, 1996). There are many definitions of trust in both marketing and knowledge management literatures. In the marketing literature, trust has been defined as a receiver's perception that a sender has the ability and motivation to provide good intelligence (Maltz and Kohli, 1996). Trust has also been shown to influence the uptake of marketing research by other functions (Maltz and Kohli, 1996; Moorman *et al.*, 1993).

The role of communication and collaboration in interdepartmental knowledge integration has been previously noted (Kahn *et al.*, 1997). Communication in the form of timely and honest information influences both trust and satisfaction in business-to-business networks (Selnes, 1998). Organisational cultures of learning, innovation, trust, collaboration and cooperation facilitate knowledge sharing while cultures of distrust, competition and the rewarding of individual knowledge inhibit knowledge sharing (Gold *et al.*, 2001). We propose that:

P5 Rivalry between the two groups weakens trust.

P6 The presence of trust between personnel in MR and CA positively influences MR and CA interaction quality.

Lack of trust is likely to lead to duplicated communication to marketing managers and less synthesis of vital information.

4.2 Organisational structures

Cross-functional teams are likely to have people working closely together, thus influencing trust between the parties. Hence we propose:

P7 Working in cross-functional teams improves trust.

Not only the quantity of interactions but also the perceived quality of interaction may influence the uptake of MR by other business functions (Moorman *et al.*, 1993). Maltz and Kohli (1996) found that the perceived quantity of interaction between marketing personnel influences trust which in turn influences the perceived quality of marketing intelligence shared. Therefore we propose that:

P8 The quantity of interactions between MR and CA positively influences trust between personnel in MR and CA up to a certain threshold.

P9 Perceived quality of interaction between personnel in each function positively influences knowledge sharing and integration of knowledge from MR with knowledge in CA.

These propositions assume that the more people have contact with each other, up to a certain level, the better able they are able to work together.

4.3 Interaction skills

In addition to organisational influences on knowledge sharing there are theories which consider individuals – sharers and receivers of knowledge – and their beliefs, attitudes and behaviours in knowledge sharing. When there are positive relationships between sharers and potential receivers, and a healthy level of trust, sharers are more inclined to share knowledge (Andrews and Delahaye, 2000).

However, for receivers to access, retrieve, comprehend and assimilate a sharer's knowledge, sharers must not only be aware and motivated, but must share in skilled ways that meet receiver needs (Dixon, 2002). Hendriks (2004) cautioned that "knowledge sharing is not seen as pushing packages of existing knowledge back and forth, but as a process that requires not only knowledge of the bringing party but also of the obtaining party" (p.6). Thus a sharer's perceptions of a receiver's knowledge needs and behaviours may influence sharer beliefs, attitudes and behaviours in knowledge sharing (Lichtenstein and Hunter, 2006). In addition, a receiver must be able to relate incoming knowledge to existing tacit knowledge in order to understand and assimilate it (Dixon, 2002). This can be more difficult when sharers and believers have different perspectives or cognition (Lane and Lubatkin, 1998). A common example is when the sharer and receiver belong to different workgroups and experience difficulties relating to each other's specialised knowledge. Thus organisational structure can impact on even micro-level knowledge sharing between individuals.

P10 The presence of cross-functional teams involving MR and CA people influences their interactional skills.

P11 These interaction skills influence both rivalry and trust.

These propositions suggest there is an experience curve in terms of groups working together effectively. Cross-functional teams accelerate this learning.

4.4 Strategy as a motivator of integration

For-profit organisations vary markedly in the broad strategies they apply to maintaining or growing their businesses. One useful typology identifies three main organisational types (Miles and Snow, 1978). The *Prospector* types are dedicated to scanning both the internal and external environments for new entrepreneurial opportunities. *Defenders* are likely to operate successfully in relatively stable markets where they look for greater efficiencies and quality to improve their prospects. The *Analysers* have a strategy that combines elements of both. Prospectors are more likely to seek and use all types of MR effectively and less likely to use it for internal political processes (Bednall and Valos, 2005). In contrast, Defenders were less likely to make effective use of MR information. It is likely that these differences in orientation would also apply to an interest in and use of CA, assuming it can deliver new insights or an expanded market. If even greater insights can be gained by integrating MR and CA, it is likely that Prospectors would be more likely and Defenders least likely to favour this. Hence, we propose:

P12 When the business strategy of an organisation is that of a Prospector, the integration of market research with CA information is more likely to be favoured than it is by Defenders.

P13 Prospector organisations are more likely to foster trust between the groups than are the other strategy types.

P14 Prospector organisations are more likely to provide resources for both the MR and CA functions than are the other strategy types.

Entrepreneurial organisations (Prospectors) depend on quality market insights and hence have are more willing to invest in acquiring them.

4.5 Contextual factors

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 we propose:

P15 The proximity of the MR and CA units positively influences the integration of knowledge from MR with knowledge in CA and the amount of interaction between MR and CA.

Recent developments in technology suggest a number of additional factors. The degree of Information and Communication Technology (ICT) intensity between the marketing function and R&D has been found to correlate with the integration of the two functions (Leenders and Wierenga, 2002). Another technological issue relates to information system design. Separate information systems can lead to a lack of integration across business units (Chan, 2005). Similarly, a lack of alignment of organisational processes with CA reduces integration and organisational performance (Davenport, 2006). Therefore we propose that:

P16 The degree of ICT intensity positively influences the integration of MR with CA.

In practical terms, people who work nearby to one another are more likely to interact informally, assisting the building trust and tacit knowledge. Firms who invest heavily in ICT are more likely to value customer insights produced by using integrated marketing information systems.

5 Conclusion

In this paper we have argued that organisations, particularly those with a Prospector orientation, have a vested interest in integrating marketing knowledge flowing from MR and CA. Primarily this is to leverage opportunities, but it may also help reduce waste. The paper has highlighted the important role of MR in CRM by depicting the relationship between CRM, CA, business intelligence and marketing insights.

As a key theoretical contribution, the paper presents a synthesis of a wide range of representative relevant marketing literature to develop a set of sixteen key propositions relating potential organisational influences on the integration of knowledge between the MR function and CA. The propositions include a range of structural, cultural, technical and strategic factors, suggesting that an organisational solution to knowledge integration will require a multifaceted approach. The propositions also strongly suggest that a technical solution such as a CRM system is insufficient on its own for inter-functional knowledge integration between MR and CA.

The set of propositions developed in this paper represents a strong foundation for empirical research. Ultimately a model like the one in Figure 1 can be tested quantitatively, though more than one key informant per organisation is likely to be required in order to test the comprehensive picture developed in this paper.