

Trust-Based Customer Information Management (CIM) in the Network Economy: A Strategic Approach

Working Paper

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Abstract

In the network economy, successful information management practices rely on rich, relevant and accurate information from and about firm stakeholders (Alavi and Leidner 2001; Deighton, Peppers, and Rogers 1994). Marketing scholars and practitioners have explored the development of successful stakeholder information management practices (Blattberg, Glazer, and Little 1994) and customer information management (CIM) practices have attracted particular attention. Recent research suggests that successful CIM practices are founded on the development of trust (Campbell 1997; Gengler and Popkowski 1997).

Previous research on trust-based CIM practice has approached the development of trust on different levels of abstraction. In particular, Milne and Boza (1999) adopt a strategic approach to trust-based CIM practice, while Culnan and Armstrong (1999) develop an approach of greater specificity. This research employs a network perspective in an effort to extend Milne and Boza's (1999) strategic approach to trust-based CIM practice, while integrating the work of Culnan and Armstrong (1999).

Network perspectives emphasise the influence of network members on marketing strategy. First, this study explores research on the ability of consumers to influence the shape and structure of CIM practice. Second, research on trust-based CIM practice is explored in light of the significant influence consumers may have over the depth, relevance and accuracy of information. This analysis suggests that Milne and Boza's (1999) strategic approach to trust-based CIM practice founded on the provision of knowledge and control may be extended to include protection and value. Third, a rich qualitative enquiry then explores the veracity of this extended approach to trust-based CIM practice, traversing a range of dyadic and network-based customer-firm relationships.

Introduction

Contemporary marketing exists in an era where "information or knowledge replaces matter and energy as the primary resource of society" (Blattberg et al. 1994, P.1). Responding to and perpetuating these changes in the marketing environment, firms have developed a range of business practices centred on the accurate and effective harnessing of information. Such information management practices have involved numerous information types including financial (Colgate 2000), manufacturing (St John, Cannon, and Pouder 2001), supply-chain (Lockamy, Beal, and Smith 2000), distribution (Ross 1996), product-development (Methe, Toyama, and Miyabe 1997), and customer information (Glazer 1999; Reinartz and Kumar 2000). This has produced a business environment where "almost all phases of marketing activity and thought, as well as the nature of the marketing function itself, are fundamentally being changed by the emergence of an information-based society" (Blattberg et al. 1994, P. 1).

Digital technologies dramatically extend the potential breadth and depth of market information that firms may collect and manage. Marketing strategies based on the use of such technologies require efficient and effective information management practices that maximise the depth, relevance and accuracy of information streams (Reinartz and Kumar 2000). In consumer markets, customer information management (CIM) practices drive the collection and management of information on consumers' behavioural, attitudinal and demographic characteristics (Davenport, Harris, and Kohli 2001), information that is then integrated with other information such as financial, product development and supply-chain information, in

order to actively market optimal solutions to customers' needs, wants and resources (Glazer 1999; Lehmann 1997; Sheth, Sisodia, and Sharma 2000).

Many scholars have suggested that CIM practices often fail to consider the consumer's perspective (Fournier, Dobscha, and Mick 1998; Godin 1999; Grover and Ramanlal 1999; Srivastava, Shervani, and Fahey 1999). Given that CIM practices generally aim to develop relationships between customers and firms, recent research has suggested a trust-based approach to ensuring consumer acceptance (Campbell 1997; Gengler and Popkowski 1997).

Trust-based CIM practice acknowledges the influence of consumers on the shape and structure of such practice. First, this study adopts a network perspective to explore the influence of consumers on CIM practice. Second, previous research on trust-based CIM practice is reviewed. Third, a strategic approach to trust-based CIM practice is developed that integrates and extends previous approaches. Finally, a rich qualitative enquiry explores the veracity of this approach. In addition, the authors argue that a strategic approach to trust-based CIM practice may also apply in any relationship where stakeholder information is a necessary element of smooth business operation.

Understanding the influence of consumers' on CIM practice

Network perspectives in business-to-business relationships have long acknowledged the important role other stakeholders play in ensuring the efficiency and effectiveness of marketing initiatives (Hakansson and Snehota 1995; Turnbull, Ford, and Cunningham 1996; Achrol 1997). However, work in consumer markets has only recently begun to recognise the influence of network members on marketing strategies (Ritson and Elliott 1995; Sheth et al. 2000).

Incorporating consumers' perceptions into the myriad of work exploring the strategic applications of CIM practice is an important area for marketing scholars and practitioners (Fournier et al. 1998; Srivastava et al. 1999). For example, understanding consumers' perceptions of customised pricing strategies (Simon and Butscher 2001) or the large scale sharing of personally identifiable consumer information (Chen, Narasimhan, and Zhang 2001) would allow marketing scholars and practitioners to more accurately forecast whether markets are likely to accept such practices.

“When we talk to people about their lives as consumers, we do not hear praise for their so-called commercial partners. Instead, we hear about the confusing, stressful, insensitive, and manipulative marketplace in which they feel trapped and victimised. Companies may delight in learning more about their customers than ever before and in providing features and services to please every possible palate. But customers delight in neither. Customers cope” (Fournier et al. 1998, P.43).

As Fournier and her colleagues (1998) imply, understanding consumers is about much more than gathering information on which products and services they may be interested in. For example, each individual has a very personal sense of privacy (Hine and Eve 1998; Hollander 2001), which if violated may motivate them to reject a firm's offering even if it is ostensibly useful to them. Marketing scholars and practitioners may have developed solutions to many of the technical and economic challenges involved in collecting and managing information from and about individual consumers, however personal and socio-cultural challenges involving issues such as privacy remain to be addressed.

Privacy is important to consumers because it represents their “right to be let alone” (Deighton 1998). Indeed, research has established that violating this right can have a significant influence over the success of marketing strategies. For example, Friestad and Wright (1994) show that consumers develop their own theories of marketers’ underlying motives, and develop defences designed to mitigate any concerns they may have. Defensive tactics include attempting to accumulate unbiased information about a firm (Sheth and Sisodia 2000), providing firms with false identities (Milne 2000; Turkle 1995), withholding certain types of information (Phelps, Nowak, and Ferrell 2000), failing to complete questionnaires or registrations (Long and Hogg 1999), attempting to remove names from mailing lists (Milne 1997), and paying to have identities hidden from firms (Rust, Kannan, and Peng 2001). Such defensive tactics are a significant burden on a firm’s marketing productivity.

Consumer backlash is slowly but surely forcing firms to recognise the influence of consumers on their marketing strategies, and the need to truly consider their perspectives (Fournier et al. 1998; Srivastava et al. 1999). Increasingly, network perspectives are informing marketing strategies where senior management does not provide the market with detailed prescriptions, but loose strategic frameworks cognisant of consumer influence (Firat and Shultz 1997; Godin 1999). Recently, research has suggested that firms develop trust-based CIM practice in an effort to avoid consumer backlash and develop satisfaction and commitment (Campbell 1997; Gengler and Popkowski 1997).

This study next explores previous approaches to trust-based CIM practice, before developing an extended, strategic approach to trust-based CIM practice.

Trust-based CIM practice

“Trust directly affects consumers’ perceptions of risks/benefits. When trust is established, consumers will perceive less risk and greater benefits in providing organisations with personal information than in situations where trust does not exist” (Milne 2001, P.476).

Trust is a fluid and ambiguous concept. Doney and Cannon (1997) find that much of the marketing literature has focused on trust within networks of interacting businesses. In this context trust has been found to enhance competitiveness and reduce transaction costs (Noordewier, John, and Nevin 1990), be an integral part of collaborative and cooperative relationships (Morgan and Hunt 1994), while also reducing conflict and enhancing satisfaction (Anderson and Narus 1990). Furthermore, in buyer-seller relationships, trust often creates switching costs and enhances flexibility (Gundlach and Achrol 1993), while information received from trusted parties is used more and provides greater value to the recipients (Moorman, Zaltman, and Deshpande 1992).

At least two previous studies in the marketing literature have developed models of trust-based CIM practice. First, Milne and Boza’s (1999) strategic analysis of CIM practices found that the provision of knowledge and control develops trust. Their model was based on traditional strategic approaches to privacy protection (Culnan 1995; Goodwin 1991). Second, Culnan and Armstrong (1999) developed a model of greater specificity, where compliance with the principles of fair information practice leads to the development of trust (see Table 1).

Table 1: The principles of fair information practice (Culnan 2000, pp. 20-21) .

Security/integrity, which requires the organisation to take reasonable steps to ensure that personal information is secure during transmission and storage and that it is accurate and timely; and

Enforcement/redress, which means there must be mechanisms to ensure that organisations comply with fair information practices and that meaningful sanctions apply for non-compliance

Notice of the firm's information practices regarding what personal information it collects and how the information is used;

Choice regarding subsequent uses of the information, particularly when the information is used by an organisation for purposes other than those for which the information was collected, such as marketing;

Access, or the ability of users to view the data about themselves the organisation has collected and to contest the data's accuracy and completeness;

Both Milne and Boza (1999) and Culnan and Armstrong (1999) argue that trust-based CIM practice should become a fundamental part of marketing strategies due to the relationship between trust and key marketing outcomes such as customer satisfaction and commitment. It is the intention of this study to develop a strategic approach to trust-based CIM practice that incorporates consumer perceptions.

Developing a strategic approach to trust-based CIM practice

To reiterate, this study seeks to develop a strategic approach to trust-based CIM practices that builds on previous frameworks while emphasising the influence of consumers on the shape and structure of such practices. Two previous approaches to trust-based CIM practice have been identified. First, we integrate these two approaches, before developing a strategic approach to trust-based CIM practice founded on a network perspective.

Culnan and Armstrong (1999) and Milne and Boza (1999) approach trust-based CIM practice on different levels of abstraction. Milne and Boza (1999) adopt a higher-order strategic approach, while Culnan and Armstrong's (1999) approach, based on the principles of fair information practice is of greater specificity.

Milne and Boza (1999) argue that, on a strategic level, trust is developed by the provision of knowledge and control in CIM practice. Knowledge provision involves communicating to consumers information about what information a firm collects, and how it is collected. Control involves explicitly affording consumers the ability to influence CIM practice.

Culnan and Armstrong (1999) contend that compliance with fair information practice builds trust. Five core principles guide the development of fair information practice: information security/integrity, enforcement/redress, notice, choice and access (Culnan 2000).

Research has yet to fully explore the linkages between the approaches of Milne and Boza (1999) and Culnan and Armstrong (1999). In the context of privacy protection Milne and Rohm (2000) find some linkages between the principles of fair information practice and the strategic provision of knowledge and control. They find that the principle of notice relates directly to

knowledge, while the principles of choice and access relate to control. Information security/integrity and enforcement/redress do not feature in the analysis of Milne and Rohm (2000).

The principles of fair information practice have gained widespread acceptance among legislators, scholars and consumers (Milberg, Smith, and Burke 2000). Indeed, the open nature of digital technologies requires firms to assure consumers of information security/integrity, and any avenues of enforcement/redress (Culnan 2000; Sherrard, Buchanan-Oliver, and Yeung 2000). Here we posit that each of these principles relate to the protection of consumers in CIM practice, producing an integrated view of Milne and Boza (1999) and Culnan and Armstrong (1999) (see Table 2).

Table 2: Integrating Milne and Boza (1999) and Culnan and Armstrong (1999).	
Protection	<p>Security/integrity, which requires the organisation to take reasonable steps to ensure that personal information is secure during transmission and storage and that it is accurate and timely; and</p> <p>Enforcement/redress, which means there must be mechanisms to ensure that organisations comply with fair information practices and that meaningful sanctions apply for non-compliance</p>
Knowledge	Notice of the firm’s information practices regarding what personal information it collects and how the information is used;
Control	<p>Choice regarding subsequent uses of the information, particularly when the information is used by an organisation for purposes other than those for which the information was collected, such as marketing;</p> <p>Access, or the ability of users to view the data about themselves the organisation has collected and to contest the data’s accuracy and completeness;</p>

By actively considering the perceptions of consumers, network perspectives would argue for the provision of protection, knowledge and control. Collectively Milne and Boza (1999) and Culnan and Armstrong (1999) establish the relationship between protection, knowledge, control, and trust, which in turn influences key marketing outcomes such as satisfaction and commitment. However, a growing body of research suggests that in CIM practice, satisfaction and commitment are very often determined by the value provided to consumers through the use of their information (Fournier et al. 1998; Godin 1999).

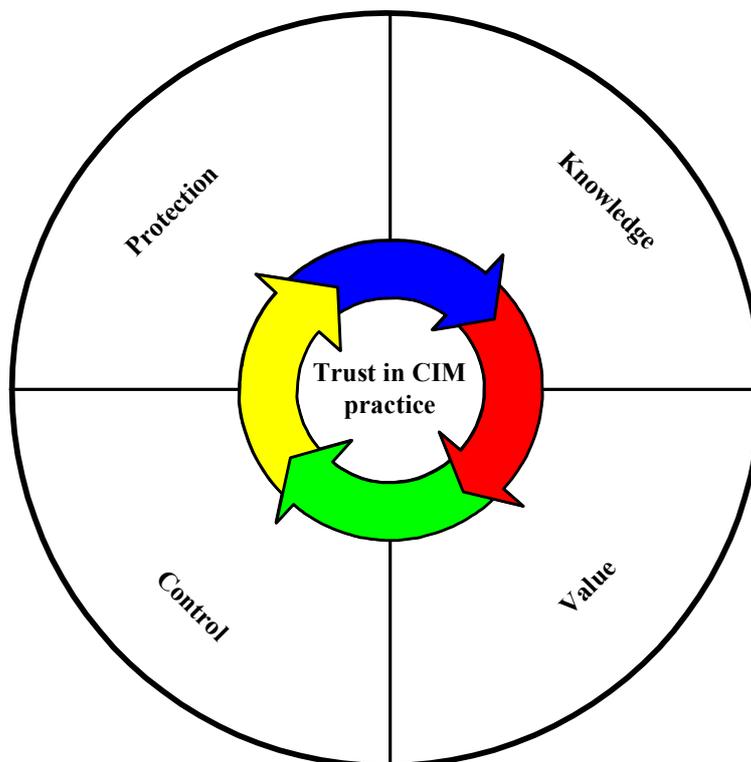
Sirdeshmukh, Singh and Sabol (2002) define value in consumer markets as “the consumer’s perception of the benefits minus the costs of maintaining an ongoing relationship with a firm. Relational benefits include the intrinsic and extrinsic utility provided by the relationship, while associated costs include monetary and nonmonetary sacrifices (e.g. time and effort) that are needed within the relationship” (P.14). Through the provision of protection, knowledge and control firms may communicate fair CIM practices and work to develop trust, however, without value, such practices provide consumers with little incentive to engage in this type of relational exchange.

For example, consider the practice of text message advertising and promotion. If such advertisements or promotions offer no obvious value to consumers, they may very well believe

that their privacy has been violated. However, if text messages are well targeted, offering some substantive benefit, then consumers may deem the same underlying use of personal information perfectly acceptable.

Synthesising the perspectives of Milne and Boza (1999), Culnan and Armstrong (1999) and the previously referred research on value in consumer markets, we propose an integrative model of trust-based CIM practice where trust is developed through the provision of protected informed consent and value (see Figure 1). To garner an initial feel for the veracity of this model and establish a deeper insight into the constructs proposed, a series of in-depth qualitative interviews were undertaken exploring consumers' perceptions of CIM practices in general and their trust in such practices.

Figure 1: An integrative model of the antecedents of trust in CIM practice



Methodology

An interpretivist epistemology founded on a hermeneutic philosophy motivated an exploratory inquiry into consumers' perceptions of current and potential CIM practices. Interpretivist research is common in many areas of consumer research (Holt 1997; Mick and Buhl 1992; Thompson, Pollio, and Locander 1994). Such approaches to research aim to "understand the subjective meaning of action (grasping the actor's beliefs, desires, and so on) yet do so in an objective manner" (Schwandt 2000, P.193).

The sampling frame comprised ten respondents of which half were male and half female. Five of the respondents were employed in business contexts where customer information is regularly employed.

First subjects' perceptions of their experiences with CIM practices were explored before four scenarios were presented to elicit detailed perceptions of current and potential CIM practices in

digital environments (see Table 3). These scenarios were based on the recent research exploring the collection and use of digital transaction (Bitner, Brown, and Meuter 2000; Blattberg and Deighton 1991), internet (Hoffman, Novak, and Peralta 1999; Stewart and Zhao 2000), and person tracking and location (Clarke 2001; Marx 1998) information using established internet and wireless technologies.

Table 3: Scenarios depicting current and potential CIM practice

- **Banking scenario:** As you are probably aware, many banks have record of every purchase that their customers make on eftpos, or credit cards, including the time, location and amount. Imagine that your bank collects and stores your purchase information to compile a profile of your tastes, as well as where and when you like to shop.
- **Internet scenario:** Now I want to ask for your perceptions of your internet service provider collecting and storing information on the types of websites you like to go to, and when, how often and how long you go for so they can compile a profile of your tastes and preferences on the web.
- **Mobile phone scenario:** Finally, you may also be aware that some mobile phones have the ability to tell you where you are at any one time. Imagine that your mobile phone company actively records where you are whenever your phone is turned on, and compiles a profile of when and where you like go, and how long for.
- **Network scenario:** Having heard all these scenarios. How would you feel if a firm you did business with had access to information on things like your transactions, daily whereabouts, and tastes and preferences and used this information in their marketing efforts?

Note that the first three scenarios lead to the fourth, which depicts the breadth and richness of information increasingly available across diverse business networks. This network scenario was designed to expose respondents to the possibilities that arise where firms employ previously disparate personal information in fluid and open business networks.

Standard qualitative data analysis procedures described by Dey (1999), Miles and Huberman (1994) and Spiggle (1994) were employed utilising Klein and Myers' (1999) principles of interpretive research. Although current theory guided the analysis process, an open critical approach to qualitative research sought to elicit any data that may refute current theoretical perspectives.

Results

To reiterate, this paper synthesises and develops prior perspectives in a strategic approach to trust-based CIM practice in the network economy. Under this approach trust in CIM practices is developed through the provision of protection, knowledge, control and value. First, we consider the evidence supporting protection, knowledge and control as antecedents of trust in CIM practice, before exploring the role of value.

Milne and Boza's (1999) model of trust-based CIM practice suggests that knowledge and control are the key antecedents of trust. Indeed evidence of the importance of knowledge and control in perceptions of trust was very apparent.

[in response to network scenario] Respondent: "That would depend on my trust of the company and since I'd have a great deal of difficulty establishing that, then I wouldn't want them to have that information... I mean, I don't want a company having any information that I haven't expressly given them basically... by virtue of that fact that they have my information without asking for it generally rules out the chances of building trust."

[in response to the internet scenario] Respondent: "I think that that's a big issue with the internet at the moment, what they're doing with all this information that they can track and whether or not you can stop them from tracking you and all that sort of stuff...Do I think they're using it fairly?...I don't really know what they're using it for so I can't say whether or not I think they're using it fairly...I mean, realistically, you don't know what anyone's doing with any of your information. Once you've given it to them they have it, and it doesn't belong to you anymore."

These vignettes provide evidence to support Milne and Boza's (1999) assertion that knowledge and control are antecedents of trust in CIM practice. Of particular note is the interrelated nature of knowledge and control in respondents' perceptions. This study also employs Culnan and Armstrong's (1999) approach to trust-based CIM practice to extend Milne and Boza's (1999) strategic approach. Specifically, we argue that the work of Culnan and Armstrong (1999) suggests that protection, provided through information, security/integrity and enforcement/redress, should be included with knowledge and control in trust-based CIM practice. Interestingly, when one considers respondents' perceptions of protection in CIM practice, the interrelatedness of knowledge and control is further reflected in the relationship between knowledge, control and protection. That is, some respondents suggest that they have a responsibility to protect themselves as long as firms provide them with knowledge and control.

[Respondent] "I think it's fair enough...I mean if it was in the contract then I take that to mean that I should have read the contract, so as long as it's not hidden away there. I've read MOBILE PHONE COMPANY A contracts before...in that sort of contract, if you don't read it then you've only got yourself to blame."

However, although protection appears to be heavily related to the provision of knowledge and control, many respondents referred to protection alone in relation to trust in CIM practices.

Respondent [who does not trust firms' CIM practices]: "Firstly, I think that it's just very difficult for any company to keep information really confidential just by virtue of its size. Just how easy it is to, I mean, just like accidental things, or malicious, like

hackers or something [laughs] although that sounds a little paranoid. But, generally, no. I just, I think, I don't know the sort of people that have access to my information, so I assume the worst."

Following Culnan and Armstrong (1999) this respondent "assume[s] the worst" and does not trust the CIM practices of the firms she does business with since she perceives that her data is not secure. In this case, providing the consumer simply with knowledge of and control over CIM practices will not ensure that their personal information will be protected unless they use their control to completely withdraw the firm's access to their personal information. If this occurred the consumer would have access to none of the benefits of CIM practice. Therefore, in order to benefit from such practices knowledge and control would not be enough to develop trust. Rather, following fair information practice, the consumer would have to be assured of the security/integrity of their personal information.

[in response to network scenario] Respondent: [who does not trust the firm in this scenario] "It's every company's prerogative to do the best they can in terms of getting as much information as they can about a customer, that's just corporate mentality, that's just what corporates do, organisations do. But I think the government should actually stop it... If a company like MOBILE PHONE COMPANY C or MOBILE PHONE COMPANY A really, really wants to do well, then they do need this information. But it's wrong."

This text unit demonstrates the importance of the second element of protection described in fair information practices, enforcement/redress. The respondent's reference to legislative intervention on the side of consumers further demonstrates the relationship for some consumers between trust and protection in CIM practice.

In sum, this research provides evidence to support knowledge, control and protection as antecedents of trust in CIM practice. Indeed, this evidence advances the theoretical case supporting our integrated view of Milne and Boza (1999) and Culnan and Armstrong (1999) where trust-based CIM practice is founded on the provision of protection, knowledge and control. However, other evidence supports the inclusion of value as an additional antecedent of trust in CIM practice.

[Respondent] "I think that I'm giving them information, you know, like I said before, like providing a service and I have to give them all this information and then still pay for their service [laughs]. And so sometimes I don't, 'cause sort of it's just for them, like often to see how they market to people and stuff like that. So, often it helps for them to give an incentive back. Like if I've given information they give me... catalogues...I feel that it is for me, because I get sent catalogues and information.."

Opinions such as this illustrate the assertion that consumers' perceptions of CIM practice are often influenced by their perceptions of value. Hence, it is important to understand the elements of CIM practice that are perceived as valuable to consumers. For example, a number of scholars have advocated payments to consumers in exchange for their personal information (Milne and Gordon 1993; Sheehan and Hoy 2000).

Respondent: [in response to mobile phone scenario] "Yeah, I guess it comes down to the whole sort of if you want to use my information for commercial benefit, I should

a) know about it, and b) there should be some sort of recompense. I mean I don't feel happy about providing them with that information just for their own personal gain."

Financial recompense is just one benefit consumers may accrue from contemporary CIM practices. Phelps, Nowak and Ferrell (2000) find evidence to suggest that providing consumers with future shopping time and effort savings, and less advertising and mail outs through CIM practice increases their willingness to provide information. This study explored some of these purported benefits with respondents.

Interviewer: "Imagine that you subscribe to a magazine and you found out this magazine had used various information about you to tailor their advertisements so that each was relevant to you. So, say you subscribe to MAGAZINE A or MAGAZINE B or something like that, and you got a MAGAZINE B that was different to your neighbours because the publisher had tailored every advert... How would you feel about that?"

Respondent: "I think in one way I'd think that was good, because you'd have these advertisements that were relevant to you, in another sense you're missing out on something else that your neighbour might have. 'Cause I think that, yeah, you do have all these preferences and, yeah, they can create a profile about you, but at the end of the day you might feel like something different, you might want to change. Like I watch heaps of weird things, I often feel like a change. You're not always going to fit into your neat little profile, if you know what I mean."

Interviewer: "Well, it could get to the stage where you're running out of olive oil in your kitchen, and just as you're about to run out, a new one [bottle] arrives."

Respondent: "So I'm a critical thinker, so I plan and the next time I do the groceries I make sure I buy olive oil, and that's a good thinking process. You know? Or I learn to be resourceful and substitute my olive oil with something else when it runs out."

The variable reactions of these respondents to proposed shopping time and effort savings, and more targeted mail outs and advertising suggests that many consumers will not actively welcome the purported benefits of CIM practice. However, many also saw aspects of value in such practices. Hence, the sorts of aggregate recommendations made by Phelps and his colleagues (2000) may not serve significant portions of a given customer base; value in CIM practice, it seems, may be a personal perception.

In sum, the results of this initial qualitative inquiry into the veracity of our integrative model of the antecedents of trust in CIM practice provides compelling evidence to support its theoretical foundations. That is, the provision of protection, knowledge and control as depicted in fair information practices appears to work in tandem with value to develop trust in CIM practices. However, marked diversity in respondents' perceptions indicates that protection, knowledge, control and value are individually held perceptions that marketing strategies based on the individual would have to incorporate.

Discussion

“We must think about the way we solicit and handle our customers’ personal information...we need to remember a forgotten rule: that intimacy and vulnerability are entwined” (Fournier et al. 1998, P.49).

Current marketing theory and practice is moving toward an era of technology-driven marketing centred not on the mass but on the individual (Leeflang and Wittink 2000; Sheth et al. 2000). An increasing body of research has set about developing marketing strategies that leverage rich customer information, improving marketing productivity and profitability through the optimal satisfaction of individual needs, wants and resources. However, the collection of vast quantities of information from and about individual consumers presents a range of challenges to firms. In particular, evidence suggests that consumers who do not trust the CIM practices of firms develop defence mechanisms that seriously threaten the efficiency and effectiveness of such practices (Campbell 1997; Milne 2001). Indeed, this study indicates that firms in consumer markets should be aware of the important influence consumers’ perceptions have on the success or failure of information-based marketing strategies.

Four key facets of CIM practice appear to influence consumers’ perceptions of trust: (1) the level of protection seen in the security and accuracy of information collection and storage, (2) consumers’ knowledge of and (3) control over the nature and extent of information collection and use, and (4) the value they garner from such practices. Each of these antecedents of trust is interdependent, and varies in salience across contexts and individual consumers. For example, protection in the collection and use of internet information may be particularly important to a consumer with little knowledge of a firm’s security infrastructure and insurance policies, while the knowledgeable consumer may trust the firm since they are aware of such policies.

Though this study is exploratory in nature, it provides compelling evidence to support the veracity of the proposed strategic approach. Future research is important as firms continue to develop marketing strategies centred on the individual, particularly where such information is employed across a network of other businesses each with their own customer information streams. For example, future research could explore the potential mechanisms firms can employ to establish conditions of protection, knowledge, control and value in CIM practice. This research option poses interesting questions, given the individual nature of CIM practice.

Economic, technical and social challenges confront firms wherever they collect information from and about other network members. Although this study explores trust-based CIM practices in consumer markets, there is no conceptual reason why protection, knowledge, control and value do not operate as higher-order constructs for each and every firm-stakeholder relationship. For example, firms that develop transparent supply chains may entrust their suppliers with market-sensitive information about various systems and methodologies. Under these conditions protection, knowledge, control and value are all expected to operate as antecedents of trust. Future research in this area seems particularly pertinent as firms move to maximise the value of the information garnered and distributed across business networks (Tomkins 2001).

In conclusion, as the long-standing relational focus of the business-to-business literature continues to influence and integrate with research on consumer markets, firms should be aware of the role and influence consumers increasingly have as their relationships with firms develop. Marketing strategies based on sophisticated CIM practices must consider consumers’ perspectives, or face consumer defence mechanisms that can severely hamper the success of

such strategies. Following previous research, this study argues that CIM practices should endeavour to establish trust in order to leverage the full potential of marketing strategies centred on the individual.

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