The impact of attitude strength on customer-oriented priority setting by decision-makers: An empirical investigation

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Received 1 July 2000; received in revised form 30 July 2002; accepted 18 March 2003

Abstract

A key question in marketing decision-making pertains to what makes decision-makers focus on various types of information in different ways. Particularly in relation to a key marketing and management variable such as customer satisfaction this is an important issue. Costly derived customer satisfaction measures need to provide customer-oriented guidance regarding where to prioritise. Traditional research on intelligence use has mainly focused on objective research attributes, such as research quality. In this article, however, we will adopt the idea that decision-makers weigh information differently based on their perception of its relevance. With respect to crucial customer satisfaction information this represents an exciting, but nevertheless unexplored field of research. The results of latent variable modelling show that the strength of decision-makers’ attitudes toward customer satisfaction leads to a differentiated usage of satisfaction intelligence. By taking this into consideration, management and intelligence providers will be able to more effectively disseminate customer satisfaction information and facilitate a more customer-oriented perspective within firms.

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PsycINFO classification: 3900
JEL classification: M31
Keywords: Attitude strength; Priority setting; Decision-making; Customer satisfaction

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1. Introduction

Over the years, customer satisfaction has been positioned a key marketing and management variable in business research and practice. Not surprisingly, therefore, organisations spend considerable portions of their marketing budget collecting more and more data on “the voice of the customer” (Griffin & Hauser, 1993, p. 1). In business, customer satisfaction is used to predict future cash flow (see for example Bolton & Lemmon, 1999; Rust, Zahorik, & Keiningham, 1995) or to detect changes in service quality (see for example Blodgett, Granbois, & Walters, 1993; Blodgett, Hill, & Tax, 1997; Oliver & Swan, 1989). The monadic retrospective inference (Troye, 1990) embedded in the disconfirmation theory (Oliver, 1980) does not take into consideration customers’ perception of real alternatives when making decisions of future intent. There is a growing body of research indicating that relative satisfaction as opposed to monadic satisfaction is a better predictor of consumer behaviour (see for example Anderson & Fornell, 1994; Griffin & Hauser, 1993). When making decisions pertaining to which part of the total offer that will make the firm relatively more attractive, customer satisfaction measures need to provide guidance regarding where to prioritise. In order for the firm to stay ahead of competition managers need to know what will provide the highest return on quality (Rust et al., 1995).

Priority setting in a market-oriented environment is the cognitive activity that links customer satisfaction measurement to the implementation of the priorities set (Johnson, 1998). From a market orientation perspective, collecting, analysing and disseminating data precedes priority setting. Of all information available to decision-makers, one key question in this respect is related to what makes them focus on some information and neglect other types of information. The relevance of this question becomes obvious considering the economic cost of customer satisfaction research and the opportunity cost of not using satisfaction data. Following this, is a dire need for a more profound understanding of factors influencing the use of customer satisfaction information within firms. In the literature, studies on the use of marketing intelligence have typically addressed this question by focusing on objective attributes, such as research quality, actionability and acceptability of results, as well as interpersonal characteristics of the information provider (see for example Deshpandé & Zaltman, 1982, 1984, 1987; Lee, Acito, & Day, 1987; Maltz & Kohli, 1996; Moorman, Deshpandé, & Zaltman, 1993; Moorman, Zaltman, & Deshpandé, 1992; Raphael & Parket, 1991). What is missing in the extant literature is the idea that decision-makers will weigh information differently depending on their perception of its relevance. This is somewhat surprising since significant psychological investments tend to be put only into matters that are seemingly important (Boninger, Krosnick, & Berent, 1995). Whereas only a few studies (see for example Lee et al., 1987; Lee, Lindquist, & Acito, 1997; Perkins & Rao, 1990) address decision-maker attitudes leading to acceptance or rejection of marketing intelligence, few, if any, explicitly focus on customer satisfaction information for priority setting within firms. This is surprising given the importance customer satisfaction measures have for business.
Focusing on the strength of decision-makers’ attitudes toward customer satisfaction, this article contributes to current literature by explaining their customer-oriented priority setting behaviour in organisations. The article is structured as follows. First, a justification of attitude strength as the focal concept will be given. Second, a conceptual overview of attitude strength and its cognitive and behavioural consequences will follow. Third, a conceptual framework treating priority setting as the dependent variable with cognitive elaboration as a direct antecedent and attitude strength (i.e. commitment and embeddedness) as an antecedent to both cognitive elaboration and priority setting is developed. After presenting the results of an empirical study testing the framework and hypotheses, the article will conclude with a discussion of several managerial and theoretical implications.

2. Why attitude strength?

Whereas an attitude is defined as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993, p. 1), strong attitudes can be described as “those attitudes that lead to selective cognitive processing and intended and actual behavior” (Bloemer & de Ruyter, 2002, p. 46). In short, strong attitudes are more consequential than evaluative, i.e. they influence people’s processing of information, decision-making (Boninger et al., 1995), and behavioural intent (see for example Kokkinaki, 1998). Given the importance of strength, it is surprising that dominant attitude theories, e.g. Theory of Reasoned Action, Theory of Planned Behavior, or Theory of Trying, do not take strength into consideration (Bagozzi, 1992). However, in more recent studies, especially in settings of socially significant and controversial issues (see for example Krosnick, Boninger, Chuang, Berent, & Carnot, 1993) in which strong attitudes evoke a tendency of acceptance or rejection, attitude strength has become a fundamental and frequently studied concept. Despite the fact that the extant literature fails to give a predominating definition of attitude strength, an overall consensus can be found: stronger attitudes result in selective cognitive processing, will be resistant to change, persistent over time, and highly predictive of behaviour (Abelson, 1988; Chaiken, Pomerantz, & Giner-Sorolla, 1995; Eagly & Chaiken, 1993, 1995; Krosnick & Petty, 1995; Krosnick et al., 1993; Olson & Zanna, 1993). In addition, Krosnick and Petty (1995) refer to the positive impact attitude strength will have on the processing of information.

In our context, attitude strength is related to what extent the decision-maker truly believes that customer satisfaction predicts future economic performance. Today, there is ample evidence in the literature documenting the link between service quality, customer satisfaction, and economic performance (see for example Blodgett et al., 1993, 1997; Bolton & Lemmon, 1999; Oliver & Swan, 1989; Rust et al., 1995). In real life, however, the effects of “return on quality investments” materialise over time. This delay between cause and effect may have the potential of reducing decision-makers’ perception of the importance of customer satisfaction data. Recent research found that only 25% of US service organisations were very confident about their
knowledge on which service areas to improve in order to improve overall satisfaction substantially (Antonevich, 2002). Consequently, for customer-oriented firms, it is important to understand the mechanism of how decision-makers’ attitudes toward customer satisfaction as a phenomenon will influence their use of expensive satisfaction intelligence to set priorities on. More specifically, in the present study, we adopt Raden’s (1985) perspective and consider attitude strength an exogenous rather than an endogenous variable. Having argued the importance of attitude strength, we will elaborate on its conceptualisation in the next section.

3. Attitude strength: A conceptual overview

In the literature, various conceptual questions have been surrounding attitude strength. One major issue focuses on whether it consists of a single or multiple constructs. Constructs used to define attitude strength vary from one study to another. Often they are highly correlated or even assumed to be completely interchangeable. Good reviews exist of explorative studies on attitude strength constructs, their correlation, and their interchangeability (see for example Abelson, 1988; Krosnick et al., 1993; Lastovika & Gardner, 1979; Raden, 1985). The main tenet in these studies is a move away from considering attitude strength as a single construct toward operationalising it into several underlying constructs. More specifically, Pomerantz, Chaiken, and Tordesillas (1995) found empirical evidence for the existence of two dimensions, i.e. commitment and embeddedness, which were similar to solutions found in other studies (see for example Abelson, 1988; Kokkinaki, 1998; Kokkinaki & Lunt, 1999; Lastovika & Gardner, 1979). Commitment can be described as the degree to which one feels secure and positive that one’s opinion concerning a certain entity is correct and one takes a strong position in defending that belief. Embeddedness, on the other hand, indicates how one is personally attached and involved with an issue, and the belief that one’s attitude position reflects an inner self-value. In keeping with this, we adopt embeddedness and commitment to conceptualise attitude strength.

Stronger attitudes tend to evoke behaviour (see for example Jaccard, 1981; Jaccard & Becker, 1985; Pomerantz et al., 1995). This is confirmed by Krosnick and Petty (1995, p. 3) who state that “Attitudes can guide behaviour, and strong attitudes should be more likely to do so than weak ones”. With regard to the behavioural implications of attitude strength a distinction must be made between mediating selective cognitive processes and resistance outcomes (Pomerantz et al., 1995). Attitude strength can directly influence (intentions of) behaviour but also have an indirect effect via selective cognitive processes evoking a resistance to change and attitude-incongruent positions (Eagly & Chaiken, 1995). Several of these cognitive processes have been identified, such as selective exposure, selective attention, selective cognitive elaboration, selective perception, and selective memory (Eagly & Chaiken, 1993). In turn, Pomerantz et al. (1995) use selective judgment and attitude polarisation measurements for assessing resistance outcomes and both issues have been the
focus of numerous other studies as well (Eagly & Chaiken, 1993; Fiske & Taylor, 1991; Lord, Ross, & Lepper, 1979; Sherman, Judd, & Park, 1989).

The explanatory potential of attitude strength for priority setting on the basis of satisfaction information emanates from the underlying selective cognitive processes and resistance outcomes. In addition to intentions to behave in accordance with an attitude position it can be expected that stronger attitudes result in more elaborate cognitive processes concerning the attitude entity, in this case customer satisfaction. In more simple words: if a decision-maker is strongly convinced about customer satisfaction, he or she is more likely to think about it and information on this issue is more likely to be selectively dealt with. Lee et al. (1987) refer to this phenomenon as “belief perseverance” and use it to explain their finding that research confirming prior beliefs tends to be rated higher and is more likely to be used. The previous discussion will now be transformed into a conceptual framework on the effects of attitude strength on decision-maker priority setting behaviour based on customer satisfaction information.

4. Conceptual framework and research hypotheses

When confronted with important decisions, individuals tend to reflect more on the matter they should decide upon (Jaccard, Radecki, Wilson, & Dittus, 1995). Several attitude strength variables have been found to increase the level of selective cognitive elaboration by persons (Chaiken et al., 1995; Chaiken & Yates, 1985). Pomerantz et al. (1995) found empirical evidence for a positive association between attitude commitment toward an issue and selective cognitive elaboration. Persons more committed to a specific issue seem to “know better what they are talking about and dealing with”. We expect that decision-maker commitment toward customer satisfaction, expressed as feeling secure and positive that one’s attitude concerning customer satisfaction is correct and a strong defensive position on this matter, increases the level to which one actively thinks about, i.e. cognitively elaborates on, customer satisfaction and its positive consequences for an organisation.

H₁: Decision-makers who are more committed toward customer satisfaction will be more inclined to cognitively elaborate on customer satisfaction.

The direct attitude-behaviour relationship has been supported by various other studies (see for example Jaccard, 1981; Jaccard & Becker, 1985; Pomerantz et al., 1995). In accordance with the conceptualisation of attitude strength, Pomerantz et al. (1995) found a strong positive relationship between attitude commitment and intentions to act. Information related to less important attitudes is more likely to be ignored or paid superficial attention to (Boninger et al., 1995). In this way, more resources can be spent to attend what is perceived as more relevant information. Therefore, decision-makers committed to customer satisfaction are likely to show higher intentions to act in accordance with their attitude and more likely to set customer-oriented priorities based on customer satisfaction information.
H2: Decision-makers who are more committed toward customer satisfaction will be more inclined to set customer-oriented priorities on the basis of customer satisfaction information.

The effect of attitude embeddedness on cognitive elaboration has been well documented in the psychological and marketing literatures. More specifically, in a study on persuasive messaging, Petty and Cacioppo (1979) showed that issue involvement and personal relevance (similar to what Pomerantz et al., 1995, refer to as ego involvement and personal importance) increase one’s motivation to cognitively process information. Ever since, the relationship between issue involvement and processing effort has received considerable attention and has been confirmed in various other studies (see for example Beatty & Smith, 1987; Chaiken, 1980; Greenwald & Leavitt, 1984; Maheswaran & Meyers-Levy, 1990; Petty & Cacioppo, 1986a, 1986b; Petty, Cacioppo, & Schumann, 1983). In addition, prior knowledge, next to ego involvement and personal importance the third pillar of embeddedness, positively influences the level of information processing (Maheswaran & Sternthal, 1990). Based on this review it can be expected that higher embeddedness of customer satisfaction will increase the level of decision-maker cognitive elaboration on customer satisfaction.

H3: Decision-makers with higher embeddedness of customer satisfaction will be more inclined to cognitively elaborate on customer satisfaction.

Pomerantz et al. (1995) demonstrated that attitude embeddedness strongly increases intentions to act. Furthermore, in decision-making experiments, it has been shown that prior knowledge, represented in embeddedness, stimulates behaviour of information acquisition and use (Lee, Herr, Kardes, & Kim, 1999). Correspondingly, we posit that embeddedness of customer satisfaction will directly result in increased customer-oriented priority setting on the basis of customer satisfaction information.

H4: Decision-makers with higher embeddedness of customer satisfaction will be more inclined to set customer-oriented priorities on the basis of customer satisfaction information.

In line with the phenomenon that significant psychological investments tend to be put only into important matters (Boninger et al., 1995), the cognitive resources spent on “thinking about how to better serve customers” can also be expected to drive the behavioural intentions of using satisfaction information to set customer-oriented priorities on. We posit that decision-makers who cognitively elaborate on customer satisfaction and its importance for the organisation are more likely to act in accordance with the way they think and to set customer-oriented priorities on the basis of customer satisfaction information. Therefore, our final hypothesis will be:

H5: Decision-makers who cognitively elaborate on customer satisfaction are more inclined to set customer-oriented priorities on the basis of customer satisfaction information.
The hypotheses can be summarised by the conceptual model presented in Fig. 1. The next section will elaborate on an empirical study conducted to test our theoretical framework.

5. Testing the conceptual framework on attitude strength

5.1. Research design and data collection

The empirical study for this article was conducted among marketing decision-makers of a multinational office equipment manufacturer. The data collection actually took place at a time where a commercial Dutch service research centre was conducting a large-scale international customer satisfaction survey for the specific manufacturer. The commercial survey focused on customer satisfaction with the manufacturer’s after-sales services, such as product delivery, installation, customer support, service visits, and complaint handling. As such, it set the stage for our study due to the fact that the information generated was supposed to be used for setting priorities on within the firm and increase its level of customer orientation. Respondents for our study should be in marketing decision-making positions in which they would come into contact with customer satisfaction-related information produced by the commercial research project. These marketing decision-makers were selected based on their job titles for which descriptions were made available by the manufacturer’s management.

Thoroughly instructed students who were active as interns in the organisation distributed the questionnaires personally to the marketing decision-makers. This allowed us to exercise a certain degree of control over the composition of the sample in terms of validity and the final response rate. In total, 174 questionnaires were handed out. Ultimately, the response totalled 123 respondents meeting the required criterion of being actively involved in marketing decision-making processes within the manufacturer’s organisation. This represents a response rate of 71%, which is likely to be that high due to the personal approach in the sampling procedure. Respondents were active in various fields of expertise, such as product management.
(14%), sales management (26%), quality control (11%), and service management (9%).

5.2. Questionnaire development

The questionnaire for our study was developed by reviewing the measurement instruments of attitude strength and related constructs in previous research. The items were adapted to the specific decision-making situation focusing on customer satisfaction and its importance to a business organisation. The questionnaire was extensively pre-tested and refined prior to actual data collection by administering it to several members of the target population. In in-depth interviews these commented on potential misunderstandings and misconceptions in the questionnaire. In order to avoid test-retest biases, participants involved in the pre-testing of the questionnaire were not included in our final sample. On the basis of the pre-test several items were adapted before including them in the final questionnaire, which was of a structured undisguised format. Since the main focus was on determining a decision-maker’s predisposition toward customer orientation, an issue that is likely to be considered a socially desirable business value, complete anonymity was explicitly stressed in the accompanying letter. This increases the likelihood of evoking true attitudes toward customer satisfaction and its importance. All items in the questionnaire were stated in a 9-point Likert-type format ranging from (1) totally disagree to (9) totally agree.

In order to capture the essence of the constructs to be measured, the items for commitment and embeddedness were based on the study by Pomerantz et al. (1995). More specifically, previous exploratory factor analyses revealed that attitude commitment was operationalised by items relating to attitude certainty as well as extremity of one’s attitude position toward an issue (Pomerantz et al., 1995). Both characteristics are well established within the economic psychology and marketing literatures (e.g., Davidson, Yantis, Norwood, & Montano, 1985; Marks & Kamins, 1988; Van der Pligt, Ester, & van der Linden, 1983). Certainty is defined as “...the degree to which an individual is confident that his or her attitude toward an object is correct...” (Krosnick et al., 1993, p. 1132) and extremity relates to “...the extent to which an individual’s attitude deviates from the midpoint of the favorable–unfavorable dimension...” (Krosnick et al., 1993, p. 1132). Decision-maker commitment toward the importance of customer satisfaction was measured by four items.

Embeddedness was shown to be related to personal importance, ego involvement, and knowledgeability concerning the attitude entity (Pomerantz et al., 1995). These characteristics also have a considerable foundation in the academic literature (e.g., Jaccard & Becker, 1985; Krosnick, 1988, 1990; Wood & Kallgren, 1988). Personal importance is defined as “...the extent to which an individual cares deeply about and is personally invested in an attitude...” (Krosnick et al., 1993, p. 1132). According to Pomerantz et al. (1995) ego involvement measures the centrality of one’s attitude to the self-concept and value system. Finally, Krosnick et al. (1993, p. 1133) refer to knowledgeability as “...the amount of information about an object that accompanies one’s attitude toward it in memory...”. Three items were used to operationalise the level of embeddedness of customer satisfaction.
The respondent initiated free response procedure used by Pomerantz et al. (1995) to assess cognitive elaboration could not be used in this survey-based study. Therefore, the four items measuring decision-maker cognitive elaboration on customer satisfaction were developed specifically for this study. However, the basic ideas of Pomerantz et al. (1995) were left intact. Finally, decision-maker priority setting on the basis of customer satisfaction intelligence was operationalised by four items, which are based on a study on market intelligence use by Maltz and Kohli (1996). These items pertained to actions at the decision-maker as well as the organisational level. Table 1 presents the measurement items for each of the constructs.

### 5.3. Construct validation

In the first stage of construct validation we assessed the normality assumption underlying structural equation modelling for the indicators in our study. Using

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<th>Construct</th>
<th>Measurement items</th>
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| Commitment                       | I am convinced that I have a good notion of what after-sales service elements satisfy our customers  
|                                  | My opinion on the importance of customer satisfaction is not likely to change  
|                                  | Our customers should be satisfied with our after-sales service at all times  
|                                  | Striving for satisfaction with our after-sales service should be one of the top priorities at this company  
| Embeddedness                     | Satisfying customers through the delivery of quality after-sales service is a business value with which I associate myself  
|                                  | Personally I find satisfying customers very important  
|                                  | I have a good understanding as to what should happen to prevent our customers from becoming dissatisfied with our after-sales service  
| Cognitive elaboration            | I regularly think about how this organisation can satisfy customers through the delivery of value-adding after-sales services  
|                                  | I often contemplate about the benefits of satisfying our customers through service excellence (e.g., increased loyalty, positive word-of-mouth communication, etc.)  
|                                  | When decisions need to be taken concerning the wellbeing of our customers, I carefully take my time to think it over  
|                                  | I pay close attention to information regarding customer satisfaction  
| Customer-oriented priority setting| Information showing us what can be done to increase customer satisfaction with our after-sales service helps me to formulate new service policies  
|                                  | Customer satisfaction information improves my understanding of how customers perceive our after-sales service quality  
|                                  | I will take concrete actions on the basis of information relating to how satisfied our customers are with our after-sales services  
|                                  | Customer satisfaction information will improve the organisation’s productivity  

\*1 = strongly disagree, 9 = strongly agree.  

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PRELIS 2 (LISREL 8 pre-processing program) we found a minor deviation from univariate normality for two indicators (one indicator pertaining to embeddedness and one indicator pertaining to priority setting, the latter was later omitted from the analysis) reflecting significant, negative skewness (Jöreskog & Sörbom, 1993). However, given the sample size a visual inspection of the distributional properties might be more insightful than formal statistical testing. A visual inspection of the expected normal probability plot showed no substantial deviations. Finally, several authors suggest that maximum likelihood estimation, which is employed in this study as estimation method, is fairly robust to violations of normality (Bollen, 1989; Chou & Bentler, 1995; Kline, 1998; Rigdon, 1998).

For construct validation purposes we relied on the two-step approach suggested by Anderson and Gerbing (1988). In the first stage we used the structural equation modelling program LISREL 8 (Jöreskog & Sörbom, 1993) to evaluate unidimensionality, reliability, convergent validity and discriminant validity of the measurement instruments (Anderson & Gerbing, 1988; Bagozzi, 1980; Bollen, 1989; Gerbing & Anderson, 1988; Kumar & Dillon, 1987; Steenkamp & van Trijp, 1991). The variance–covariance matrix of the indicators is included in Table 2.

The proposed measurement model with four constructs and 15 indicators showed an adequate fit to the data: $\chi^2(84) = 183.78$ ($p < 0.001$), RMSEA = 0.08, GFI = 0.86, AGFI = 0.80, TLI = 0.90, CFI = 0.92 (Bagozzi & Yi, 1988; Bentler, 1990; Bollen, 1989; Hoelter, 1983; Marsh & Hocevar, 1985; Steenkamp & van Trijp, 1991). However, after inspection of the $t$-values, the pattern of standardised residuals (Q-Plot) and the modification indices ($\Delta \chi^2$), one item for priority setting was deleted (Anderson & Gerbing, 1988; Steenkamp & van Trijp, 1991). Subsequently, we obtained an even better fit: $\chi^2(71) = 125.42$ ($p < 0.001$), $\Delta \chi^2(13) = 58.36$ ($p < 0.001$), RMSEA = 0.068, GFI = 0.89, AGFI = 0.83, TLI = 0.94, CFI = 0.96. Among these the Tucker–Lewis index (TLI; Bentler & Bonett, 1980; Tucker & Lewis, 1973) and the comparative fit index (CFI; Bentler, 1990) seem to be relatively unaffected by sample size and model complexity (Marsh, Balla, & McDonald, 1988; Marsh, Balla, & Tai, 1996). The root mean square error of approximation (RMSEA) might provide even a better indication of goodness-of-fit (Steiger, 1990). The value of the RMSEA equals 0.068 and is below the recommended cut-off value of 0.08. The Q-Plot of standardised residuals confirmed that there are no serious deviations from the normality assumption.

Within method-convergent validity was assessed testing the significance and magnitude of the elements of the matrix $\Lambda^3$. All indicator loadings were significant at $\alpha = 0.05$ and $t$-values ranged from 5.71 to 15.51. The standardised indicator loadings all exceeded 0.50; the average indicator loading is 0.78 for the exogenous constructs (pertaining to commitment and embeddedness) and 0.88 for the endogenous constructs (pertaining to cognitive elaboration and priority setting). Unidimensionality and discriminant validity was further evaluated comparing two nested models, the one-factor model and the group-factor model with two factors for the six pairs of constructs in the study (Byrne & Worth Gavin, 1996). It can be demonstrated that if the appropriate restrictions are applied (the correlation between the two factors is set equal to unity) the group-factor model is equivalent to the one-factor model.
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<td>1.62</td>
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<td>1.52</td>
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<td>1.56</td>
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Prefixes: CE = cognitive elaboration, PS = priority setting, EM = embeddedness, COM = commitment.

b Omitted from the analysis after construct validation.
We used a $\Delta \chi^2$ with one degree of freedom for each comparison to test for unity between the constructs. All tests were significant at $\alpha = 0.01$. Moreover, the reliability of the constructs in the model was evaluated using composite reliability and variance extracted measures (Fornell & Larcker, 1981; Jöreskog, 1971). Composite reliability ranged from 0.83 to 0.94 and variance extracted from 0.56 to 0.97. The composite reliability measure for all constructs exceeded the threshold value of 0.70 as proposed by Nunnally and Bernstein (1994) and the variance extracted measures exceeded the threshold value of 0.50 as proposed by Fornell and Larcker (1981). After assessing the construct validity we proceed with testing the hypothesised framework.

5.4. Hypothesis testing

With the variance–covariance matrix of the indicator variables as input, the parameters in the latent variable model were estimated using structural equation modelling with maximum likelihood estimation (Bentler & Chou, 1987; Bollen, 1989; Hayduk, 1987; Loehlin, 1998). Three different nested models were estimated in order to arrive at an overall test of the hypothesised framework: a direct effect model, a partial mediation model, and a full mediation model (Bollen, 1989; Rigdon, 1998). The first model considers decision-maker priority setting to be directly determined by attitude commitment, embeddedness, and cognitive elaboration. The second model also takes a mediating effect of cognitive elaboration into consideration. Finally, the full mediation model is estimated to test whether or not priority setting is fully determined through the mediating effect of cognitive elaboration. Model fit is compared by inspecting various fit indices and determination of hypothesis rejection (or failure to reject) is based on the significance tests for the path coefficients ($\beta$ and $I$). Apart from the already introduced fit indices we provide the expected cross-validation index (ECVI; Brown & Cudeck, 1989). The ECVI measures the discrepancy between the fitted covariance matrix in the analysed sample and the expected covariance matrix that would have been obtained in another sample of equivalent size. A smaller value of the ECVI in a series of nested models indicates that the model having the smallest value exhibits the greatest potential for replication. The results of the respective path analyses are visualised in Fig. 2.

The direct effect model shows a satisfactory fit to the data: $\chi^2(73) = 193.69$ ($p < 0.001$), RMSEA = 0.098, GFI = 0.84, AGFI = 0.78, TLI = 0.88, CFI = 0.90, ECVI = 1.82. However, the partial mediation model shows a significantly better fit: $\chi^2(71) = 125.42$ ($p < 0.001$), $\Delta \chi^2(2) = 68.27$ ($p < 0.001$), RMSEA = 0.068, GFI = 0.89, AGFI = 0.83, TLI = 0.94, CFI = 0.96, ECVI = 1.47. Finally, compared to the previous model, the full mediation model shows a slightly worse fit to the data: $\chi^2(73) = 134.92$ ($p < 0.001$), $\Delta \chi^2(2) = 9.50$ ($p < 0.01$), RMSEA = 0.07, GFI = 0.88, AGFI = 0.83, TLI = 0.94, CFI = 0.95, ECVI = 1.48.

As can be observed from the results of our analyses, the direct effects model shows the worst fit to the data. If we compare the direct effect model to the partial mediation model we can conclude that the partial mediation model significantly fits the data better than the direct effect model ($\Delta \chi^2(2) = 68.27, p < 0.001$). This is also re-
Reflected in the incremental fit indices such as the TLI (0.88 vs. 0.94), the CFI (0.90 vs. 0.96), and the ECVI (1.82 vs. 1.47). The full mediation model shows a significantly worse fit to the data \( \Delta \chi^2(2) = 9.50, p < 0.01 \). In terms of TLI, CFI and ECVI the fit is marginally worse. Consequently, for explaining the influence of attitude strength
on priority setting and testing our hypotheses, we focus on the model with the best-fit, i.e. the partial mediation model. These results are presented in Table 3.

As can be concluded from Fig. 2 and Table 3, we fail to reject Hypothesis 1–3 and 5 at a 5% significance level and thus Hypothesis 4 is rejected: the respective path coefficient is not significant. More specifically, we found that decision-maker commitment toward customer satisfaction has a relatively strong significant and positive effect ($c_{11} = 0.69$) on cognitive elaboration on customer satisfaction and its consequences for the organisation. In addition, a direct positive relationship ($c_{21} = 0.40$) between commitment and priority setting on the basis of customer satisfaction-related information was found: decision-makers who are committed toward satisfying their customers are more likely to set priorities based on attitude-congruent information, indicating for example what the organisation can do to increase its customers’ satisfaction level. For embeddedness of customer satisfaction, the second dimension of attitude strength, we also found a significant positive effect ($c_{12} = 0.18$) on cognitive elaboration on customer satisfaction. However, no direct relationship was found between attitude embeddedness and priority setting. This indicates that embeddedness of customer satisfaction, involving a deeper linkage of the attitude to one’s self-concept, value system, and knowledge structure (Pomerantz et al., 1995), influences decision-maker intentions to act on this attitude only indirectly through mediating cognitive processes. In contrast, commitment toward the importance of satisfying customers directly triggers priority setting on the basis of customer satisfaction-related information. Finally, it was found that higher cognitive elaboration on customer satisfaction directly contributes to a decision-maker’s intention to act in accordance with the attitude ($c_{21} = 0.25$): he or she will be more inclined to set priorities on the basis of customer satisfaction information.

6. Conclusion

6.1. Discussion

Our study offers a complementary view to previous research on the use of marketing intelligence, which mainly focused on how instrumental variables, such as the quality
of research contents or the presentation of research results, influence marketing intelligence use. It becomes clear, however, that these variables represent only one flipside of the coin. Acceptance and use of information is also determined by subjectivity following from the strength with which relevant attitudes are being held. In this respect, subjectivity can have great influence, no matter how adequate the quality of the research conducted or the intelligence provided. More specifically, the results of our study have enriched the understanding of the psychological mechanisms at work in marketing decision-making by showing how the concept of attitude strength influences decision-maker priority setting behaviour in customer-oriented firms. The strength of one's attitude toward customer satisfaction leads to a differentiated usage of satisfaction intelligence.

First, we find a sequential flow from the attitude strength commitment construct to customer-oriented priority setting behaviour. Commitment, manifesting itself as the certainty that one's opinion concerning customer satisfaction is correct and the extremity of taking a strong position in defending that belief, evokes thinking processes on customer satisfaction-related issues. This could, for example, be on the positive consequences of satisfying customers for one's organisation, such as an increase in sales, customer loyalty, and positive word-of-mouth communications. Then, our results show that decision-makers who are more inclined to think about customer satisfaction are also more likely to take satisfaction-related marketing information into consideration and set their priorities on the basis of this information. The relevance of commitment toward customer satisfaction is further exemplified by its direct effect on priority setting. Decision-makers who take on a strong standpoint on customer satisfaction are more inclined to act accordingly and use satisfaction information to set their priorities on. Overall, therefore, it can be concluded that commitment toward customer satisfaction has a positive impact on the acceptance and use of customer satisfaction information for the purpose of customer-oriented priority setting.

Embeddedness of customer satisfaction, pertaining to one's personal attachment and involvement with customer satisfaction and the belief that the position concerning this issue is reflecting an inner value, was also found to increase cognitive elaboration on customer satisfaction. A decision-maker's level of involvement with customer satisfaction, the personal importance being attached to it, and prior knowledge on customer satisfaction will increase the level to which one thinks about satisfying customers and what the benefits for the firm are. An underlying explanation for the insignificant direct relationship between embeddedness and priority setting can be sought in the deeper, internally directed nature of embeddedness. In contrast to attitude commitment, represented as a strong, externally oriented standpoint held by a decision-maker, a deeper personal attachment with customer satisfaction is not likely to directly evoke intentions to act. It is first transferred to a higher level through thinking about customer satisfaction and then these cognitions influence customer-oriented priority setting behaviour.

6.2. Managerial implications

The results of this study can be translated into several managerial implications, both from a management as well as a marketing intelligence provider perspective.
Concerning a crucial topic such as customer satisfaction, managers as well as researchers need to be aware of the fact that the strength of decision-makers’ attitudes influences their evaluation of and priority setting behaviour based on costly satisfaction-related information. Therefore, developing deeper insight into decision-maker attitude strength and, perhaps more important, knowing how to influence it seems important when trying to increase the level of customer orientation within an organization. Most preferably, negative attitudes toward customer satisfaction need to be turned into positive ones and positive attitudes need to be strengthened.

A strategy to change people’s attitudes is through means of persuasion (Petty & Wegener, 1998). People tend to base their decisions on the dynamical mental schemas they have in mind (Rothbart, 1981). Through changing the knowledge on which these schemas are based they become richer over time and ultimately this will influence people’s attitudes and behavioural intent. Increasing the knowledge levels on the benefits of satisfying one’s customers leads to increased embeddedness of customer satisfaction in the decision-maker’s mindset. This can, for example, be achieved by organizing training sessions or publishing periodicals and research reports that contain useful information on this issue. This will create more expert-like decision-makers who have been found to make more accurate judgments than novices (Spence & Brucks, 1997). Furthermore, by focusing on the other underlying characteristics of commitment and embeddedness, decision-maker attitudes toward customer satisfaction can be strengthened as well. Strategies to do so include making decision-makers more certain and aware of the personal as well as the organisational importance of satisfying one’s customers and get them more involved in this issue by inviting them to actively participate in discussions on customer satisfaction.

Our results also offer insight into organisational resistance processes that might occur in case of major structural changes proposed on the basis of marketing research results. Oftentimes, these do not only affect the position or quality of an organisation’s product or service offering, but have substantive organisational consequences as well. In order to facilitate such transition process, senior management could focus on the strength with which its organisational members hold relevant attitudes. For example, if the outcome of a satisfaction survey is that the organisation is too product-focused and the organisation is lacking customer orientation massive organisational changes at the deeper, cultural level are likely to be necessary. When striving for 100% customer satisfaction, changing attitudes toward customer satisfaction will lower resistance against measures that need to be taken. Company-wide campaigns might be run in which the importance of satisfying customers and its effects on the bottom line are being stressed. Knowledge and involvement with the issue should be raised, which will embed a stronger customer orientation into the organisation. In addition, increasing decision-maker commitment will facilitate cognitive processes and the acceptance of customer satisfaction-related marketing information.

6.3. Theoretical implications

Some theoretical implications of our study need to be acknowledged as well. First, conventional attitude strength research has focused primarily on more con-
troversial issues, such as capital punishment, legalised abortion, and environmental preservation (see for example Pomerantz et al., 1995). Customer satisfaction might not be perceived as particularly controversial and could even be denominated as a socially desirable business value. As a consequence, attitudes toward customer satisfaction might not elicit such extreme bi-polar reactions compared to social significant and controversial matters. Future research should also focus on marketing issues likely to elicit more extreme attitudes in both directions, such as the allocation of marketing budgets where decisions can have huge effects on the parties involved.

Second, decision-maker attitude strength is only one of many factors that impact the utilization of marketing intelligence. It represents a subjective characteristic of information receivers. Prior research, however, has already proven the impact of instrumental issues (e.g., quality of contents, quality of form, actionability and acceptability of results) on market research intelligence use (see for example Deshpandé & Zaltman, 1982, 1984). Attitude strength should not be seen as a substitute for the explanations offered by these studies; it rather facilitates and complements them by offering a better understanding of the psychological processes occurring in managerial decision-making. Future research should combine the concept of attitude strength with instrumental variables and study priority setting in decision-making simultaneously and from different perspectives. Furthermore, the model should also be extended at its front-end by incorporating drivers of attitude strength such as decision-maker experience (Perkins & Rao, 1990).

A final suggestion for future research pertains to our research design. The present study was cross-sectional by administering questionnaires to marketing decision-makers. Through Likert-type items focusing on the issue of customer satisfaction respondents self-reported on their level of attitude strength. Traditional attitude strength research, however, is mostly experimental in nature and confronts subjects with actual attitude-congruent or -incongruent materials (cf. Pomerantz et al., 1995). Indices are then calculated that mathematically express one’s tendency to selectively think about an issue or to judge information on it. The main advantage of such a procedure covering “both sides of the story” is a more explicit and real-life assessment of selectivity. Future research efforts should adopt an experimental approach by simultaneously confronting respondents with actual material stressing the importance of satisfying customers and with information giving counter-arguments. In doing so, the conclusions we draw from this cross-sectional study can be further validated.

Acknowledgements

The authors sincerely would like to thank T.W. Andreassen, as well as JEP-Associate Editor Professor H.S.J. Robben, and the two anonymous reviewers for their very helpful comments and input.
References


