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Exploring the solution – the contextual effect on consumer dissatisfaction and innovativeness in financial service companies

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This study focuses on the context under which consumer dissatisfaction leads to consumer innovativeness as an expression of voice. This study theorises that online facility and investment consultant support leads to consumer dissatisfaction, which consequently results in consumer innovative behaviour. Data was collected from a sampling of 603 consumers and 150 investment consultants across 50 financial service companies. The results from hierarchical linear modelling analyses show that consumer dissatisfaction relates positively to consumer innovativeness when online facility and investment consultant support are present. This study suggests that given the fact that in most companies, some consumers are bound to be dissatisfied with products or services at one time or another, managers should treat such dissatisfaction as an opportunity for encouraging the generation of new and useful ideas rather than viewing it as a problem or nuisance.

Keywords: consumer dissatisfaction; consumer innovativeness; exit–voice–loyalty theory; HLM

Introduction

The perspective assumption in consumer satisfaction theorising and research is that a high level of consumer satisfaction contributes positively to organisational effectiveness, while consumer dissatisfaction or a low level of consumer satisfaction is detrimental for organisations and their members (Maxham & Netemeyer, 2002). However, in an era emphasising the need for change, creativity, and innovation in responding to consumer needs, retaining key consumers can particularly lead to sustainable competitive advantages (Frohman, 1997; Sheth & Parvatiyar, 2000). Consistent with this reasoning, a number of authors have suggested that consumer dissatisfaction may actually have a positive impact on improving competitive advantage (Maxham & Netemeyer, 2002). Particularly, these authors argue that when consumers are dissatisfied, they may voice their complaints to the company and request a better quality of products and services. In fact, they may even propose their own ideas for the improvement of these products and services. As a result, consumers are encouraged to buy new products more frequently.

Thus, it is possible that under certain conditions, consumer dissatisfaction may actually lead to consumer innovativeness, which can secure a firm's future success. However, to date, little is known about under what specific circumstances this functional

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consequence of consumer dissatisfaction may occur. In this study, we seek to identify the contexts under which consumer dissatisfaction may actually lead to consumer innovativeness. Identifying such conditions is important for two reasons. First, the company can adopt improvements through their consumers' creative ideas, but this is likely to occur only under certain circumstances, for instance, when consumers complain to the company. Second, since dissatisfaction experiences have a greater effect than satisfaction experiences on consumers (Oliver, 1999), managers should view customer dissatisfaction as an opportunity to make improvements of their products or services. The previous studies discuss the customer behaviour rarely considered the multilevel contextual factor (e.g., online facility and investment consultant support). This study stresses the importance of various contexts simultaneously to examine the effect of consumer dissatisfaction on consumer innovativeness.

In addition, this study chooses the financial services firms as the research object for two primary reasons. First, in recent decades, the financial service sector (especially banks) has experienced major changes. When the environment is undergoing rapid change and growth, understanding customer behaviours is critical (Laukkanen, 2006). Second, Coyne and Witter (2002) report that in marketing, consumer analysis of this type has long been a critical component in developing products and predicting demand, and a similar approach to investor relations can equally be valuable.

This study puts more emphasis on the description of the multilevel contextual theory. From the multilevel theory (MLT) perspective, previous studies have failed to explore contextual importance, which is certainly illogical and may give rise to an atomistic fallacy (Alker, 1969). Such a fallacy considers consumer-level dissatisfaction as the contextual variable of the relationship among online facility support, investment consultant support, and consumer innovativeness. However, this study stresses context because it is where other teams, departments, and organisations exist (Hackman, 1999), that is, context is everywhere. Jackson, Joshi, and Erhardt (2003) argued that when research is done in field settings, context is inescapable regardless of whether or not researchers pay attention to it. In contrast, if the role of contextual factors in the whole work is ignored, then all contextual effects on the individual, team, department, or organisation will be ignored. For this reason, we hope to illustrate the picture of contextual-level factors in a lower level by combining the MLT perspectives.

This research has three objectives. First, this study explores relevant literature by focusing on key variables and then deriving the hypotheses from these. Second, it uses a multilevel model to examine how context influences the relationship between consumer dissatisfaction and innovativeness. Finally, it discusses the research limitations, future research directions, and theoretical and managerial implications of the study in light of the findings.

Theoretical background and hypotheses

In order for dissatisfaction to result in active action for purchasing process (e.g., adopting a new product/service), consumers need to respond to their dissatisfaction in a constructive manner through voice, or they will exit to purchase the product/service in the store/company.

Consumer dissatisfaction and exit–voice–loyalty theory

As Hirschman (1970) suggests, the exit–voice–loyalty (EVL) theory is mainly applicable in situations where the consumer is dissatisfied with the seller. A review of the satisfaction/

dissatisfaction literature suggests that consumers respond to dissatisfaction behaviour in one of three ways: consumers could "exit" the relationship by not purchasing again, they could "voice" their complaints to management, or they could remain "loyal" by electing to repurchase at another time (Hirschman, 1970; Huefner & Hunt, 2000). As Farrell (1983) suggested, exit and voice are active responses, whereas neglect and loyalty are passive responses. The fundamental difference between the two types of active response – exit and voice – is that exit can be destructive to an organisation, whereas voice is constructive (Van Dyne & LePine, 1998). Hirschman's EVL theory pointed out the impotent conception: the voice option is the only way in which dissatisfied customers or members can react whenever the exit option is unavailable. Therefore, the end goal of this study is to improve things or to transform consumers' negative options (e.g., dissatisfaction) into positive responses (e.g., innovativeness) through voicing out.

In addition, in order for dissatisfaction to result in functional outcomes for firms, consumers need to respond to their dissatisfaction in an active and constructive manner – through voice. Voice not only enables companies to transform consumer dissatisfaction into a positive desire for developing new product but also helps them correct existing problems and make improvements. From a practitioner's viewpoint, consumer dissatisfaction with marketplace offerings is a potential deterrent to the retention of key consumers (Oliver, 1997) or decreases consumer retention levels. Dissatisfied consumers could enable the firms to focus on their internal processes to improve the quality of their facility and employee service offerings, which may transform consumer innovativeness from routinised purchasing to dynamic behaviour (Hirschman, 1980; Steenkamp, ter Hofstede, & Wedel, 1999). Therefore, consumers were responding to the different signals by firm/organisations.

Reactions to consumer dissatisfaction and innovativeness

Consumer dissatisfaction, a state of cognitive or emotive discomfort caused by insufficient return relative to the resources invested (time, money, emotion, and so on) by the consumer at any stage in the relationship with the seller (Fornell & Wernerfelt, 1987), has been the focus of much research in recent years. However, contrary to a popular notion, customer dissatisfaction also has a positive impact in that it impels a firm to create better products and provide better services. At the same time, there is motivation on the part of consumers to search for new information as well as the willingness to adopt new products and services. Therefore, in an era that constantly emphasises the need for change, creativity, and innovation (Frohman, 1997), it is indeed a question whether consumer dissatisfaction remains to be a detriment for consumer innovation.

Consumer innovativeness is the tendency to buy new products more often and more quickly than other people (Midgley & Dowling, 1978). Roehrich (2004) reports that "It may be described as the early purchase of a new product, as well as the tendency to be attracted by new products." In a financial service context, four types of financial service innovations have been observed, namely innovations in service products, architectural innovations that bundle or un-bundle existing service products, innovations that result from the modification of an existing service product, and innovations in processes and organisation for an existing service product (Gadrey, Gallouj, & Weinstein, 1995). And Avlonitis, Papastathopoulou, and Gounaris (2001) identified six types of financial service innovations that are associated with different development processes in terms of activities: New-to-the-Market, Service Repositionings, New-to-the-Company services, New Delivery Processes, Service Modifications, and Service Line Extensions. These new needs of products/services such as advertising, notifications, and customised information are attractive to the financial service companies (especially, modern banks), while there is also the additional benefit of building knowledge about the customer activities, which provide added value for the customer and opportunities for the financial service companies (Yiu, Grant, & Edgar, 2007). For a dissatisfied consumer, they become more aware of the utility and the importance of the innovation.

According to the EVL viewpoint, voice is any attempt at all to change, rather than escape from, an objectionable state of affairs whether through individual or collective petition to the management directly in charge, through appeal to a higher authority with the intention of forcing a change in management, or through various types of actions and protests, including those that meant to mobilise public opinion (Hirschman, 1970). In this study, the definition of consumer innovativeness is similar to how it was defined in Midgley and Dowling's (1978) study, it also refers to consumers' willingness to try new products/services from an existing company. This goes without saying that a consumer dissatisfied with the product/service, in essence, is discontented with the status quo. Discontentment can trigger change when those who are dissatisfied seek to improve current conditions.

When will dissatisfaction result in innovativeness?

Lord and Kernan (1987) and Thomas, Au, and Ravlin (2003) pointed out that behavioural scripts are used in interactions based on contextual cues and they consist of a particular action plan for a situation, which could happen in some cases. In order for consumer dissatisfaction to result in innovativeness, consumers must have an active and constructive response to their dissatisfaction rather than an active and destructive response or passive response. On the other hand, the firm should consider consumers' interest in new products, including new information, ideas, or behaviour (Roehrich, 2004). This ensures that consumers remain with the company despite being dissatisfied or discontented. Particularly, dissatisfied consumers who willingly voice their opinions facilitate the communication of useful feedback, help, or support for the company.

More specifically, the voice literature suggests that two alternative aspects of the organisational context may channel customer dissatisfaction into innovation: first, facility support towards the customer gets new information easier and useful feedback (Hirschman, 1970). Next, organisational employee support gives the specialist advice for customer to capture the new product or services. Research on consumer innovativeness can be fostered by a supportive context that is consistent with the consumer behaviour literature. Recent research on consumer innovativeness has demonstrated the contextual factors (Cotte & Wood, 2004). Thus, it is possible that under certain conditions, consumer dissatisfaction may actually lead to creative performance. However, currently little is known about the circumstances under which this functional consequence of dissatisfaction may occur.

In this study, we focused on innovation as an expression of voice and on the specific conditions that may result in dissatisfaction being channelled into customer innovation. Based on the literature in the financial services industry, support from online facilities and from investment consultants, whom this study mentioned, are the two main contextual factors for customers using financial products/services. The former's (e.g., internet banking) potential was well recognised a decade ago (Booz, Allen, & Hamilton, 1997; Yiu et al., 2007). Meanwhile, the latter (e.g., consulting service) uses the principles of information and knowledge management, resulting in enhanced efficiency and effectiveness that will benefit consumers (Humphreys, 2000). These two contextual factors mach the situation of financial service industry. Below, we discuss in more detail how each of two contextual factors (online facility and investment consultant support) may lead consumer dissatisfaction to increase consumer innovativeness.

Contextual factor: online facility support

The company may choose to emphasise its online service quality (i.e., online facility) in order to respond to consumer dissatisfaction. This is especially true in the financial services industry, a rapidly growing industry, which is information service intensive. For example, the developments in electronic online banking have the potential to empower customers and make them more pro-active in the banker–customer relationship. The financial services sector is known to exploit the benefits of information technology the most, with a metallic products firm also innovating by incorporating data-management systems (Miller & Blais, 1993). Every piece of product and service information is highly important, and hence the relevance of the use of high technology, especially in the form of computerisation and the Internet, to deal with such information cannot be emphasised enough (Porter, 1985). Online facilities support multiple channels to serve consumers, and they deal efficiently with large volumes of information from consumers (Howcroft, Hamilton, & Hewer, 2007). Furthermore, consumers are said to highly regard the quality of online service (Lin & Wei, 1999). Therefore, they may be more willing to purchase new products when they perceive that the company can provide timely and adequate response to their needs (Lin & Wei, 1999); can facilitate independent online trading, fast trade execution, and lower commissions; and can provide easy access to research and greater control over their investments.

Under these circumstances, consumer dissatisfaction is minimised, and the perception of convenience that comes with using the service should be high. Moreover, it is worthwhile for the dissatisfied consumer to increase efforts in trying to find new and useful ways to improve the purchase situation or procedures. Thus, we propose the following hypothesis.

> *H1*: The degree of online facility support will moderate the relation between consumer dissatisfaction and consumer innovativeness in such a way that consumer dissatisfaction has the strongest, positive relationship with consumer innovativeness when the degree of online facility support is high.

Contextual factor: investment consultant support

In the financial services industry especially, investment consultants play an important role because they are the key people who facilitate a conducive setting for consumer innovativeness through their helping and supportive behaviour. Prior studies indicate the importance of relevant quality assessments in the service environment (e.g., Paulin & Perrien, 1996). Gupta and Torkzadeh (1988) and Storbaka (1994) developed this analysis further by introducing an additional customer need, namely, the need for specialist advice prior to purchasing more complicated financial products, for example, an investment consultant can help a client by explaining to him/her through e-mail the necessary information he/she needs to know for him/her to be able to manage his/her assets efficiently. The acceptance rate of new financial management instruments may be positively related to the extent that consumers view the benefits as clear and immediate (Hirschman, 1981; Meeks & Sweaney, 1992).

Thus, the present study proposes that investment consultants can provide help and support consumers because these consultants assist in clients' investment decisions through sharing their knowledge and expertise in the field. With this supportive environment in which there is high service quality, there is a good chance that consumers will avail themselves of the company's services or purchase their products frequently. Thus, we propose the following hypothesis.

> *H2*: The degree of investment consultants' support will moderate the relation between consumer dissatisfaction and consumer innovativeness in such a way that consumer dissatisfaction has the strongest, positive relationship with consumer innovativeness when the degree of investment consultants' support is high.

Methodology

This study sample was randomly drawn from financial service companies in Taiwan. A personal letter provided a brief introduction and a general explanation of the study's objectives. The survey was pre-tested with 20 individuals who are working in financial service companies. They were specifically asked to comment on the clarity and relevance of the items. Consequently, the wordings of some statements were modified. In the data collection process, the current study followed Huber and Power's (1985) guidelines on how to obtain high-quality data from key informants. Using the key informant design is a common practice in studies on marketing (Moorman & Rust, 1999).

Fifty companies were selected as our research targets, and each company completed 20 copies of the investors' and 1 copy of the investment consultant's questionnaires. The investors filled out a questionnaire that included items soliciting demographic data and measuring the individual-level variables (consumer dissatisfaction and consumer innovativeness) which were used in the present study. On a separate form, a questionnaire was distributed to investment consultants that included items measuring the contextual variables (online facility and investment consultant support).

The present study gathered data from two sources – consumers and investment consultants. The consumers filled out the questionnaire that included items soliciting demographic data and measuring individual-level variables (consumer dissatisfaction and consumer innovativeness). A total of 634 responses were collected, and there were 603 investors and 136 investment consultants across 50 financial service companies. The average age of the respondents was 32.66 years (ranging from 23 to 59 years), and the average years of existence of the financial service companies was 10.64 years (ranging from 3 to 21 years).

Because non-response bias has always been a concern in survey research, the researchers used *t*-test on the major constructs to confirm if there were significant differences between early and late respondents (Armstrong & Overton, 1977). With the collected samples, no significant differences were found between early and late respondents on all measures in this study.

Measures

The measures for all constructs were tested for their validity and reliability. First, the internal consistency was examined, and in Table 1 the reliability coefficients and descriptive statistics for all constructs were represented. All major constructs show reliabilities ranging from 0.88 to 0.94, which are higher than Nunnally's (1978) criterion. Additionally, the aggregation of responses was justified by testing inter-rater

Table 1. Descriptive statistics and correlations.

Variable	Means	Standard deviation	1	2	3	4
1. Consumer dissatisfaction	4.02	0.63	(0.89)			
2. Consumer innovativeness	3.64	1.12	0.03	(0.92)		
3. Online facility	3.58	0.87	0.09	0.24*	(0.94)	
4. Investment consultants support	4.19	0.45	0.11	0.28**	0.16	(0.88)

Note: $n = 603$ consumers, 150 investment consultants across 50 companies. Values in parentheses are reliability coefficients.
*$p < 0.05$.
**$p < 0.01$.

agreement (r_{wg}; James, Demaree, & Wolf, 1984) and using intraclass correction coefficients (ICCs) to test whether or not between-group variance was sufficient to warrant team-level modelling. This study includes examining convergent validity as Bagozzi, Yi, and Phillips (1991) recommend by using a confirmatory measurement model. The results suggest that all indictors are significantly and positively loaded on the subjective latent constructs, which indicates that all measures have good convergent validity with all indictors. Moreover, Chi-square tests were also conducted to confirm discriminant validity. The significant results of the tests were in favour of the unrestricted models over the restricted ones, and this meant that all constructs had sufficient discriminant validity.

Consumer dissatisfaction

To record consumer dissatisfaction Zeelenberg and Pieters's (2004) measure is used, which consisted of the questions: "Overall, how dissatisfied were you with the delivery of the service in this store" and "Overall, how good or bad did you feel after this experience in this store." Each respondent's response options ranged from 1 (not at all dissatisfied) to 5 (very much dissatisfied).

For all 603 samples, the ratings were collected, and the scores per store were averaged, which showed high agreements on their rating of consumer dissatisfaction (median $r_{wg} = 0.96$). Thus, their responses were averaged, and all consumer samples also exhibited sufficient between-company variances for testing our hypotheses [ICC (1) = 0.19; ICC (2) = 0.68].

Consumer innovativeness

To operationalise this construct, we use the Le Louarn's scale (Le Louarn, 1997) and it applied at product consumption level. Roehrich (2004) report that the Le Louarn's scale is revealed to be independent of the "attraction to newness" dimension of the scale and of possession of new products, and it consists of a battery of items asking participants to evaluate whether it is easy or hard to describe their self-images by each item on five-point scales (1 = very easy to respondent's image to 5 = very hard to respondent's image). For all 603 samples, the ratings were collected, and the scores per company were averaged, which showed high agreements on their rating of consumer innovativeness (median $r_{wg} = 0.94$). Thus, their responses were averaged, and all consumer samples also exhibited sufficient between-company variances for testing our hypotheses (ICC (1) = 0.21; ICC (2) = 0.71).

Contextual variables: online facility and investment consultant support

Investment consultant support was revised and adapted from Parasuraman, Berry, and Zeithaml's (1988) scale, and we assessed investment consultants in an organisation reliability, responsibility, assurance, and empathy. *Online facility support* was measured using an e-SERVQUAL scale adapted from Zeithaml, Parasuraman, and Malhotra (2001) development scale. They have identified 11 dimensions of online facility: access, ease of navigation, efficiency, flexibility, reliability, personalisation, security/privacy, responsiveness, assurance/trust, site aesthetics, and price knowledge. These two dimensions of contextual variables were ranked on a five-point scale from 1 (not agreeable) to 5 (extremely agreeable).

Hierarchical linear modelling

As argued earlier, using hierarchical linear modelling (HLM) (Bryk & Raudenbus, 1992) in multilevel analysis provides an advantage as compared to only one respondent identifying various perceived measures from different analysis levels. Hofmann, Griffin, and Gavin (2000) point out that HLM provides a more statistically appropriate analysis than traditional calculation of interaction effects by OLS regression for three reasons. First, HLM explicitly partitions the variance in the outcome variable and provides information about the magnitude (and significance) of these variance components. Second, separate regression analyses are performed for each group, relating the lower-level predictor(s) to the lower-level outcome. Because this is done, the level 1 intercepts and slopes are allowed to vary between level 2 units. In contrast, OLS regression conducts a single regression analysis, pooling the lower-level units across groups, and subsequently not allowing the intercepts and slopes to vary. Finally, as a result of the partitioning of the variance in the outcome into its within-group and between-group components, HLM yields a more complex error term than its OLS counterpart. Specifically, the lower-level and high-level errors are separately estimated, whereas the OLS regression approach combines them into a single term.

Results

Table 1 shows the means, standard deviations, and intercorrelations among all the variables. As these relationships were largely consistent with theories and empirical evidence on consumer innovativeness, the results provided criterion-related validity evidence for consumer dissatisfaction, consumer innovativeness, online facility, and investment consultants.

This study, using HLM, first estimates a null model in which no predictors are specified for either level 1 or level 2 functions to test the significant level of the level 2 residual variances of the intercept ($\tau = 4.46, p < 0.001$). The ICC (1) was .19, indicating that 19% of the variance in consumer innovativeness resided between companies, and that 81% of the variance resided within companies.

Next, this study tests the cross-level interaction using the slopes-as-outcomes models. The results for this model indicate that consumer innovativeness had significant random variances ($\tau = 0.36$, $p < 0.01$). This finding suggests that significant variability occurs in the level 1 consumer dissatisfaction–innovativeness link relationship across companies. This study then examined whether this variance could be explained by contextual factors. Online facility ($\gamma_{11} = 0.24$, se $= 0.31$, $t = 2.58$, $p < 0.01$) and investment consultants support ($\gamma_{21} = 0.31$, se $= 0.30$, $t = 7.66$, $p < 0.001$) are all significantly predicted the

Table 2. HLM results of the level 2 analyses for consumer innovativeness.

Fixed effects	Gamma coefficients	Standard error
Consumer dissatisfaction		
Online facility, γ_{11}	0.24*	0.31
Consumer dissatisfaction		
Investment consultants support, γ_{21}	0.31***	0.30

Note: $n = 603$ consumers, 150 investment consultants across 50 companies.
*$p < 0.05$.
***$p < 0.001$.

consumer dissatisfaction–innovativeness link relationship slopes (see Table 2). Therefore, the findings support all hypotheses.

Discussion and conclusions

The results of our study show that consumers were dissatisfied with their financial service company because of the investment consultants and the quality of the online service provided. Due to the individual contextual effect, which is significant, this study further examines whether the consumer dissatisfaction–innovativeness link is significantly high under both online facility and investment consultant support. The finding shows that when there is a combination of factors arising from online facility and investment consultant support a better result is obtained ($\gamma = 0.36$, se $= 0.21$, $t = 7.26$, $p < 0.001$). This experience may provide a useful feedback that will enable companies to adopt innovative behaviour. We reason that such feedback might have contributed to the consumer belief that their investment actions would be effective and costly. Additionally, the results show that dissatisfied consumers who have a high regard for their investment consultants were more likely to be helpful and support dissatisfied consumers by adopting innovative behaviours. On the other hand, consumers who are dissatisfied with their investment consultants will not avail themselves of new financial products and services, and thus these consumers are considered to respond to their dissatisfaction in a passive manner. As such, it can be said that when investment consultants are helpful and supportive, their consumers know that they will receive assistance when problems arise through the knowledge and expertise of these consultants.

As for practical implications, these results are consistent with the conceptual framework (Figure 1) that we developed on the basis of the literature concerning individual responses to product dissatisfaction. According to this framework, contextual variables influence whether or not individuals choose to engage in investment performance as a response to product dissatisfaction by influencing individuals' perception of the extent to which innovative behaviours can be effective in changing an undesirable or unattractive investment situation. For the financial service industry we especially suggest that given the fact that in most companies, some consumers are bound to be dissatisfied with products or services at one time or another, managers should treat such dissatisfaction as an opportunity for encouraging the generation of new and useful ideas rather than viewing it as a problem or nuisance. By doing so, managers will be able to determine which aspects of the products and services consumers are not contented with, and from this, they can initiate corresponding actions to improve what the company can offer to its consumers.

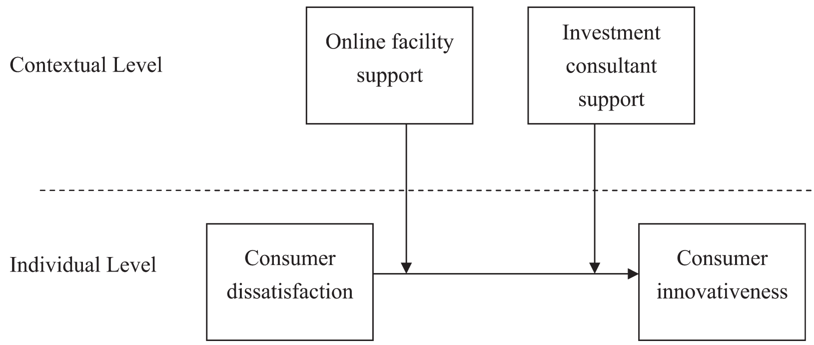

Figure 1. Conceptual framework.

Moreover, the longer a key consumer can be retained, the greater the opportunity for a close and profitable relationship to develop with that consumer (Bolton & Lemon, 1999). The importance of identifying and dealing with consumer dissatisfaction may provide a competitive advantage over firms. Our study's results therefore suggest that in order to take advantage of this potential resource, managers need to ensure that contextual factors should support the development of consumer innovative behaviour.

Although our results are consistent with the theoretical predictions, the present study is not without limitations. First, the cross-sectional nature of our study precludes our being able to unequivocally determine the direction of causality, and second, we were not able to assess what happened next after consumers engaged in innovative behaviour and subsequently patronised the company. Finally, we were also not able to measure whether or not consumer dissatisfaction was really decreased.

This study provides interesting implications for rethinking consumer disaffection. By ensuring these two contextual factors (online facility support and investment consultant support), useful ideas and practices will help marketing scholars and managers respond the dissatisfaction voicing form consumers.

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