Antecedents and Outcomes of Innovativeness

Sungho Lee
College of Business Administration, University of Seoul, Korea, 130-743
(E-mail: shlee@uos.ac.kr and/or shlee@metab.co.kr)

Abstract: The extent of firms’ innovativeness (i.e., capacity of innovate) has been regarded one of the critical components for the success of firms. However, relatively little is known about the drivers of innovativeness and how those drivers operate via organizational innovativeness to influence firm performances. The roles of organizations’ key strategic orientations, i.e., customer orientation, competitor orientation, technology orientation, and internal/cost orientation, were examined as antecedents of innovativeness. Additionally, the relationships from innovativeness to firm performances were investigated in order to clarify the conflicts of previous studies, i.e., from firms’ innovativeness through customer satisfaction and market adaptability to firms’ profitability. The findings showed the effects of customer orientation, competitor orientation, and technology orientation through innovativeness on firm performances. Interesting implications were presented especially regarding multiple roles of strategic orientations on organizational innovativeness and performances, along with limitations and some future research directions.

Key words: Strategic orientations; Organizational performances; Innovativeness; Antecedents; Outcomes

1 Introduction

The extent of firms’ innovativeness (hereafter, INNO) has been regarded one of the critical components for the success of firms (Hult, Hurley, and Knight 2004). It means organization’s capacity to innovate, such as introduction of new products or ideas in the organization, and has been proven to have a positive effect on various dimensions of firm performance (e.g., Burns and Stalker 1961; Hurley and Hult 1998; Porter 1990).

While it is generally agreed that innovation contributes positively to firms, relatively little effort has been done to examine the drivers of INNO and how those drivers operate via INNO to influence firm performance except for a few studies (Hult et al. 2004; Hurley and Hult 1998). We attempted to examine these issues by finding the roles of firms’ expanded set of strategic orientations as antecedents of their INNO as well as the effects of INNO and its antecedents on firm performances.

Researchers have emphasized the importance of strategic orientations such as market orientation, customer orientation (hereafter, CO), competitor orientation (hereafter, PO), technology orientation (hereafter, TO), and internal/cost orientation (hereafter, IO) in developing competitive advantage (Day 1994; Gatignon and Xuereb 1997; Jaworski and Kohli 1993; Narver and Slater 1990; Lukas and Ferrell 2000; Porter 1985). These orientations are not mutually exclusive and it is plausible for firms to engage in multiple sets of these strategic oriented behaviors simultaneously (e.g., Day and Nedungadi 1994; Gatignon and Xuereb 1997; Slater and Narver 1994).

Prior research suggests that when these orientations are embedded in organizational culture, the intensity and consistency of resultant behaviors are augmented across situations, groups, and persons within the firm. The principal question addressed in this paper is whether each of key strategic orientations is related to INNO and it enables the organization to better perform. The findings of this study may help management to better understand what types of organizational orientations may well be encouraged for the purpose of increasing the level of INNO ultimately leading organizational consequences such as customer satisfaction and profitability.

The remainder of the paper is organized as follows. First, we propose our conceptual model and the hypotheses on the relationships among our focal constructs of interest, i.e., the relationships of key strategic orientations with INNO and the relationships of INNO with organizational performance. Second, research method, data characteristics, and results are presented. We conclude by discussing the implications of our findings, limitations, and future research directions.

2 Developing Conceptual Model and Hypotheses

Figure 1 summarizes our conceptual model. We propose the relationships among four different strategic orientations and INNO with three definite directional associations. More specifically, we attempt to derive the layered relationships among strategic antecedents, INNO, and organizational performances.
performances such as customer satisfaction, market adaptability, and firm profitability.

2.1 Strategic orientations and innovativeness

Strategic orientation reflects the strategic directions implemented by a firm to guide its proper activities for continuous superior performance (Gatignon and Xuereb, 1997). Viable strategic orientations include market orientation (Kohli and Jaworski, 1990; Narver and Slater, 1990) and TO (Gatignon & Xuereb, 1997). More recent research indicates that three components of market orientation: CO, PO, and interfunctional coordination (Narver and Slater, 1990) behave differently and should be treated as distinct constructs (Gatignon and Xuereb, 1997; Lukas and Ferrell, 2000). IO also has been considered one type of strategic orientation that attempts to reduce costs in both primary and support activities to pursue operational excellence (Treacy and Wiersema, 1993).

The four types of strategic orientations represent a firm’s relative emphasis on understanding and managing the environmental forces and may have differential effects on dimensions of firm performance (Voss and Voss, 2000). In the context of this study, we want to examine whether these orientations have differential effects on firms’ capacity to innovate, i.e., INNO. INNO is defined as the capacity to introduce new products/services, or idea in the organization (Damanpour, 1991; Hurley and Hult, 1998). In other words, an innovation is construed to be sought with a new product/service, a new process, or a new organizational structure or administrative system.

![Figure 1 Research Model](image-url)

CO emphasizes sufficient understanding of target customers so as to deliver superior values for them. Thus, customer-oriented firms show continuous and proactive disposition toward identifying to meet customers’ expressed and latent needs (Han, Kim, and Srivastava, 1998). When customer needs change rapidly, CO enables firms to recognize those changes and guides them to invest necessary resources in developing appropriate new products or services, refining production processes, and offering a flexible product line to cater to customers’ changing preferences (Slater and Narver, 1998). As a result, customer-oriented firms can effectively adapt to market changes. Moreover, it is shown that CO increases the introduction of new-to-the-world products and reduces the launching of me-too products (Lukas and Ferrell, 2000). Hence, we present our first hypothesis: H1: CO of firms is positively related to INNO.

Han et al. (1998) view INNO as one of the core value-creating capabilities that bridges the market orientation-performance relationship. Deshpande, Farley, and Webster (1993) speculated on a strong linkage between market orientation and INNO for achieving superior business performance outcomes. As one component constituting market orientation, PO focuses on understanding the strengths and weaknesses of existing and potential competitors (Narver and Slater, 1990). With a deep understanding
of rivals, a firm can assess its position, determine appropriate strategies, and respond quickly to competitors' actions by developing modified or newly enhanced products or processes. Grinstein (2008) claimed that market orientation components positively affect innovation consequences, further showing that the effect of PO depends on a minimum level of CO in his meta-analysis. On the other hand, Lukas and Ferrell (2000) argue that PO increases the introduction of me-too products and reduces the launching new-to-the-world products. Though conflicting relationships have been presented, we think that PO can facilitate firms’ capability to adapt to the changing environments because the objective of competitor-centered approach is to keep pace with or remain ahead of competitors (Han et al. 1998). Additionally, PO of modern firms helps firms to configure or reconfigure their resources to provide advanced customer values by exhibiting new products and services or enhanced processes (Grinstein 2008). Hence, we present our second hypothesis.

H2: PO of firms is positively related to INNO.

TO holds that consumers prefer products and services with technological superiority, leading to the development of more innovative and technologically superior products compared to those offered by competitors (Gatignon and Xuereb, 1997). Prior research has identified that technology capability is important to new product development (Cooper and Kleinschmidt 1994; Song and Parry, 1997). After a meta-analysis of over 40 studies, Montoya-Weiss and Calantone (1994) find technical proficiency to be a critical factor in new product success. Such technological superiority gives firms the potential for greater competitive advantage which cannot be easily imitated by competition (Cooper 1985; Gatignon and Xuereb 1997; Song and Parry 1997). We need to keep in mind that INNO is distinguished from TO since it in itself does not always require technological aspects or superiority. Therefore, with high TO level, INNO can be enhanced. Hence, we show our third hypothesis.

H3: TO of firms is positively related to INNO.

Internally-oriented firms pursue efficiency in all parts of their value chain activities (Porter 1985). These organizations attempt to reduce costs not only in primary activities, such as logistics, operations, and sales and marketing, but also in support activities, such as research and development (R&D) and administrative functions. In addition, Olson, Slater, and Hult (2005) claim that IO emphasizes efficiency through standardized practices for low cost instead of effectiveness. Accordingly, firms with high level of IO are expected to rely on centralized decision making and formal organization structures, ensuring that risk and administrative expenses are held to a minimum (Ruekert, Walker, and Roering 1985; Walker and Ruekert 1987). Thus, firms of IO-embedded culture are expected to be reluctant to INNO which may cause high level of transformation and changes accompanied with enormous expenses.

On the other hand, internally-oriented firms also pursue operational excellence that they can translate into higher sales through lower prices or higher margins, utilizing creative and new approaches to efficiency (Treacy and Wiersema 1993). That is, internally-oriented firms may well be motivated to search for innovative approach to efficiency. Moreover, the ambidexterity proposal in innovation research suggests that INNO includes both exploration and exploitation (March 1991). According to this proposal, whereas experimentation is the hallmark of firms with an INNO, exploitation is that of internally-oriented firms. Exploitation enables the firm to realize improvements as it drives down the learning curve creating better outcomes (Alberts 1989). This internal orientation may result in better and newly enhanced mid-outcome, i.e., one dimension of INNO: exploitation, leading to higher level of firm performance. Studies directly investigating the relationship between IO and INNO are seldom and we judge that the relationship of interest may be either positive or negative. Hence, we propose the fourth hypothesis as alternative hypotheses at this stage.

H4a: IO of firms is positively related to INNO.
H4b: IO of firms is negatively related to INNO.

2.2 Innovativeness and organizational performances

Organizations with the low level of innovative capacity may invest time and resources in studying markets but can hardly translate this market study into practice. Thus, the capacity to innovate is one of very important factors that impact on firm performances (e.g., Burns and Stalker 1961, Hurley and Hult 1998, Porter 1990). The resource-based view helps to explain how firms derive competitive advantages by channeling resources into the development of new products, processes, and so forth (Wernerfelt 1984). Innovation is a means for changing an organization to achieve desired outcomes, whether it is pursued as a response to changes that occur in its internal or external environment or as a preemptive move taken to influence an environment.

However, the previous studies have shown mixed results on the relationship between INNO and
Two conceptualizations of CS: cumulative CS vs. transaction-specific CS. Cumulative CS is an overall product and service performance (e.g., Anderson, Fornell, and Lehmann 1994; Kotler 2006). This is the best indicator of a firm's future profit and firms increasingly use CS as a criterion for diagnosing expected to fulfill that need. The high level of customer satisfaction ratings is widely believed to be the need for examining the role of mediating or contingent variables. Our hypotheses 5 and 6 are expected to fulfill customer demand in the best possible way, both innovation and process efficiency need to evolve together. Therefore, customer satisfaction (hereafter, CS) is expected to act as a strong mediator to FP from INNO.

H5: INNO of firms is positively related to CS.

The creation of new products is a multidisciplinary process which demands the necessary involvement of different functional units ( Olson, Walker, Ruekert, and Bonner 2001). Although INNO is high, it may take a lot of time for INNO to be realized into firm profitability because of coordinating a lot of conflicts among different functional units. Whereas it is difficult to judge the right timing of new product introduction, it would be helpful to firms if we provide a fundamental principle that firms' efforts toward innovation be adaptive to market requirements. Thus, to have positional advantage and improved FP requires timely adaptation of new products to the market demand. Accordingly, INNO may well be adaptive to the changes in the market needs, resulting in achieving market share relatively earlier and larger than competitors. This assertion is consistent with the marketing literature indicating that successful firms are distinguished not only by well-conceived marketing capability such as new product development ability but also by their ability to actualize the success of new products/services in timely manners (e.g., Vorhies, Harker, and Rao 1999). Therefore, market adaptability (hereafter, ADPT) is expected to act as a strong mediator to FP from INNO.

H6: INNO of firms is positively related to ADPT.

Despite the strong conceptual association, previous studies that investigated the direct relationship between INNO and firm performance (hereafter, FP), were replete with conflicting results, illuminating the need for examining the role of mediating or contingent variables. Our hypotheses 5 and 6 are expected to fulfill that need. The high level of customer satisfaction ratings is widely believed to be the best indicator of a firm's future profit and firms increasingly use CS as a criterion for diagnosing product and service performance (e.g., Anderson, Fornell, and Lehmann 1994; Kotler 2006). There are two conceptualizations of CS: cumulative CS vs. transaction-specific CS. Cumulative CS is an overall evaluation based on the total purchase and consumption experience with a good or service over time, whereas transaction-specific CS may provide specific diagnostic information about a particular product or service encounter (Fornell 1992; Johnson and Fornell 1991). Thus, cumulative CS is a more fundamental indicator of the firm's past, current, and future performance. Since the focus of our study is on the relationship between CS and FP, our theoretical framework treats CS as cumulative.

Fornell (1992) and Anderson et al. (1994) have proven that there are several key benefits of high CS such as increased loyalty for current customers, reduced price elasticities, lower costs of future transactions, lower costs of attracting new customers, and an enhanced reputation for the firm. Increased loyalty of current customers means more customers will repurchase in the future. Hence, a firm with strong customer loyalty should have the high level of firm's economic returns because it ensures a steady stream of future cash flow (Reichheld and Sasser 1990). Moreover, reputation also can be beneficial in establishing and maintaining relationships with key suppliers, distributors, and potential allies (Anderson and Weitz 1989; Montgomery 1975). These findings naturally imply that CS is positively related to firms' profitability.

While CS represents the effectiveness of the organization in delivering value to its customers (Day and Wensley 1988; Kaplan and Norton 1996), ADPT represents the ability of the firm to respond to changes in its environment (Ruekert, Walker, and Roering 1985). ADPT is ultimately reflected in the market success of an organization's new products and/or services (Kaplan and Norton 1996; Ruekert, Walker, and Roering 1985). Therefore, ADPT is expected to successfully connect INNO with ultimate organizational consequence, FP, by transforming 'intension' of INNO to 'realization.' This reasoning accordingly suggests that ADPT is positively related to firms' profitability. Hence, we hypothesize...
that:
H7: CS of firms is positively related to FP.
H8: ADPT of firms is positively related to FP.

3 Method and Sample Characteristics

The location context of the study is the metropolitan area of Seoul, Korea. Given that its global reputation as an advanced emerging country is tremendously growing, we think that Seoul is a reasonable context in that it possesses unique mixtures of modern business values like market orientation and cost concerns. The data were collected from various commerce including manufacturing and service industries not to be idiosyncratic to any specific industry domain. Using a list of Korean top 500 firms in terms of sales, we developed a contact list of strategy and/or marketing department managers. Questionnaires were sent to key informants included in the contact list by email. Data collection occurred over six weeks and resulted in a usable sample of 98. The response rate of 19.6% was acceptable but rather low, so additional 79 questionnaires were collected from EMBA students at one of the leading universities in Seoul, Korea. After discarding 5 unusable questionnaires, total 177 were judged to be usable. Of the total responses, 104 (58.8%) were answered by mail and the rest was collected by email. About seventy nine percent of the respondents are general managers or higher-ranked managers and 63.2% are in the related functions such as marketing, strategy, or planning. The average working year in the current organization was 7.57.

We compared the three types of responses to check the response/non-response biases: 1) response medium: mail vs. email, 2) response time: first three weeks vs. last three weeks, and 3) response source: from Korean top 500 company managers vs. EMBA students. The result showed that means of study variables did not differ significantly between mail- and email- based respondents. In addition, comparisons of early and late responders as well as of data sources indicated no significant differences in means of the major constructs, leading us to conclude that the likelihood of non-response bias is minimal (Armstrong and Overton 1977). Consistent with Narver and Slater (1990), the unit of analysis in our study is the respondent's 'business unit' as it operates in its 'principal served market.'

3.1 Measures

Customer Orientation, Competitor Orientation and Technology Orientation. CO, PO, and TO were all measured in the respective sets of four items. These measures were developed based on the original items of the previous studies (Gatignon and Xuereb 1997; Narver and Salter 1990).

Internal/Cost Orientation. IO was measured in three items. The items were trimmed and used based on the previous studies (Homburg, Workman, and Krohmer 1999; Olson, Slater, and Hult 2005).

Innovativeness. INNO was asked in four items. These four items were adopted from the previous study Hurley and Hult (1998).

Adaptability. ADPT was asked in three items. The original items were revised to be used, of the previous studies by Walker and Ruekert (1987) and Morgan, Zou, Vorhies, and Katsikeas (2003).

Customer Satisfaction and Firm Profitability. CS was measured through respondents’ subjective assessments of their customers’ satisfaction, using a synthesis of previous measures (e.g., Fornell, Johnson, Anderson, Cha, and Bryant 1996; Vorhies and Morgan 2005). FP was also measured by respondents’ perceptions, using perceptual scales related to profitability over the past twelve months (e.g., Morgan, Clark, and Gooner 2002). Total seven subjective measures were used: four items for CS and three items for FP. Although our measure of FP is not objective, Naman and Slevin (1993) indicate that managerial subjective assessment of FP is consistent with objective performance.

We measure all constructs in terms of a Likert-type scale rating from 1 to 7 with the following equivalences (“1: strongly disagree”; “4: neutral”; and “7: strongly agree”).

3.2 Data purification & checking common method Bias

Figure 1 illustrates the proposed latent variable model, showing all structural paths. Before testing this model, a series of tests were performed to establish the unidimensionality of the constructs. All constructs and FP are the first-order constructs. The validity was initially assessed by examining the reliability of the constructs and item-to-total correlations. Items of low item-to-total correlation and/or those items loaded into multiple constructs were deleted. Therefore, one item from INNO was eliminated due to being crossly loaded.

A Harman one-factor test serves to assess the potential for common method bias in the data (Podsakoff and Organ 1986). After careful item purification, a factor analysis of the dependent and independent variables results in a solution that accounts for 72.2% of the total variance, and the first
factor accounts for 34.6% of the variance, with total six unrotated factors presented. Therefore, common method bias is not likely to be a concern.

In addition, the processes of data collection were very carefully designed. To prevent potential common method bias, we varied the medium of collecting data, i.e., paper-and-pencil survey and computer aided questionnaire by email since this issue has frequently been argued as a strong potential cause from the measurement context. Furthermore, we allowed the respondents’ answers to be anonymous such that this procedure should reduce their evaluation apprehension and the tendency of being socially desirable, which are sources of common method effects obtained by a common rater (Padsakoff, MacKenzie, Lee and Padsakoff 2003).

4 Analysis and Results
4.1 Basic analysis
We used LISREL 8.50 to test the estimated measurement model. The results showed that our selected items provide good explanations for each construct. A test of reliability, using Cronbach’s coefficient alpha, showed that the measures for CS, ADPT and FP exceeded Nunnally’s (1978) standard of 0.70 (CS - 0.947; ADPT - 0.902; FP - 0.919; INNO - 0.767; CO - 0.890; PO - 0.813; IO - 0.822; and TO - 0.888). Therefore, we established the support for convergent validity with a high level of internal consistency (Baggozzi and Yi 1988). We have used the measured values for all constructs for the consistent level of the model analysis.

The overall fit of the model in Figure 1 was good. The $\chi^2$ ($\chi^2 = 616.01$ with 336 degrees of freedom) and the CFI was 0.923. In addition, other goodness of fit indexes were also acceptable (GFI=0.800; NFI= 0.850; RMR=0.120; RMSEA= 0.069). All of these results confirm that the data successfully fit the proposed model.

4.2 Analysis of hypotheses

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Model Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INNO</td>
</tr>
<tr>
<td>CO</td>
<td>0.38 (4.63)</td>
</tr>
<tr>
<td>PO</td>
<td>0.35 (3.64)</td>
</tr>
<tr>
<td>TO</td>
<td>0.28 (3.32)</td>
</tr>
<tr>
<td>IO</td>
<td>0.01 (0.09)</td>
</tr>
<tr>
<td>INNO</td>
<td>-</td>
</tr>
<tr>
<td>CS</td>
<td>-</td>
</tr>
<tr>
<td>ADPT</td>
<td>-</td>
</tr>
</tbody>
</table>

Chi-Square = 616.012; D.F. = 336
RMR = 0.12; RMSEA = 0.09; GFI = 0.80; NFI = 0.85; CFI = 0.92
* $\beta$ (t)

In H1, H2, H3, and H4, we proposed the relationships between various types of strategic orientations and INNO. The positive relationships between CO and INNO ($\beta$= 0.38, t= 4.83), PO and INNO ($\beta$= 0.35, t= 3.64), and TO and INNO ($\beta$ = 0.28, t= 3.32) were identified. However, the relationship between IO and INNO failed to be proven with the effect of 0.01 (t= 0.09). The possible reasons are presented later with future research directions.

In H5 and H6, the positive relationships between INNO and CS and between INNO and ADPT were found. The effect of INNO on CS is 0.83 (t= 10.01) and that of INNO on ADPT is 0.60 (t= 9.15). This supports H5 and H6. In H7 and H8, the relationships between CS and FP and between ADPT and FP were identified ($\beta$ = 0.31, t= 3.79 for the effect of CS on FP; $\beta$ = 0.52, t= 6.00 for the effect of ADPT on FP). This supports H7 and H8.

The results of our hypotheses analysis have also been presented with standard estimates and t-value of each hypothesized path in Table 1.

4.3 Additional analysis
To provide further understanding, we report on the total (standardized) effects of all the antecedent constructs on each of performance consequences: CS, ADPT, and FP (Please see Figure 2). This additional analysis provides some interesting results. Consistent with the analysis of hypotheses, the respective effects of CO, PO, and TO on CS are significant, but that of IO on CS is insignificant. With ADPT as a consequence variable, only PO and TO show significant direct relationships with ADPT yet the effect of CO on ADPT is not shown to be statistically supported. Thus, CO may be mediated by
some other construct, such as INNO, in order to have an effect on ADPT. With FP as a consequence
variable, CO and TO are related to FP in a positive way, indicating that PO needs INNO to stretch to FP.
This analysis implies that each of strategic orientations has very different paths and mechanisms to
reach each of three consequences. We present possible systematic paths in Figure 2 and discuss this in
more detail in the following section.

5 Discussions and Implications
5.1 Summary and implications
This study delivers several meaningful substantive contributions. First, we show an interesting
finding that INNO affects FP through CS and ADPT, suggesting a solution to the mixed results of
previous studies on the relationship between INNO and FP. Further, our finding suggests that strategic
orientations CO, PO, and TO influence INNO leading better business performance. Third, CO and PO
are proven to play the role of impactful antecedents to INNO, while IO shows no effect on INNO. This
might mean that market-based innovation searching for unique solutions to meet customer needs as well
as preemptive actions against major competitors outweigh cost-driven innovations. Fourth,
interestingly ADPT links to FP more strongly than CS yet the relationship between INNO and CS is
stronger than INNO and ADPT. This may be interpreted such that INNO leads to higher CS than to
ADPT yet financial performance is more generated by ADPT than CS. This interpretation implies, for
INNO to relate to firm profitability, not only a necessary condition that INNO bring about customer
satisfaction but also a sufficient condition that INNO fit with market needs.

Lastly, it was found that the respective strategic antecedents have very different paths to
organizational performances. CO failed to prove a direct relationship with ADPT and PO shows no
direct link to FP, indicating that there should be a role of a mediator like INNO. Meanwhile, TO shows
not only an indirect impact on FP through INNO but also direct relationships with all consequences CS,
ADPT, and FP. These results suggest hierarchical patterns of relationships between firms’ strategic
orientations and organizational performances. For example, TO may be construed as a fundamental
orientation required of firms; CO may be facilitated to guide firms’ efforts of INNO from the perspective
of providing value for customers; and PO may be induced to guide firms’ INNO efforts from the
perspective of providing value for firms. In other words, multiple orientations may be needed for firms
in achieving superior performance in a modern environment of ever-intensifying competition.

By the way, it is worth taking a careful look at the result that one of important organizational
orientations, i.e., IO has failed to have the relationship with INNO. The plausible reason for this result
might be that both positive and negative effects get balanced out and show no effect. It is also possible
that we miss out some important moderators or mediators between IO and INNO. Further examination
requires systematic access on the deeper nature of this relationship.
We also believe that our findings provide a few insights to marketing and/or management executives who are in search for a way-out from harsh competitive environments. First, a company may well understand how its orientations of CO, PO, TO, and IO ultimately affect FP. It is very important not only to have a shared understanding of organizational orientation(s) but also to possess the ‘real’ capacity to innovate, i.e., INNO: let the organizational members see and experience the tangible outcomes such as new products or services, which link to firms’ profitability.

It is also critical to understand that three essential strategic orientations have different impacts on INNO and firm consequences. To obtain better FP efficiently, companies may need multiple orientations: TO, first, CO and PO the next. Furthermore, when we regard these orientations as resources to be obtained or developed, depending on which objective a firm chases, specific paths of development can be selected. For example, when CS is a prior objective, a firm may efficiently obtain its goal by focusing on developing CO and then INNO based on CO. As an additional example, when ADPT is the most critical end, PO and TO may well be fostered to obtain the goal more productively. Therefore, it is conceived that some possible answers can be provided to the managers as to why organizations with similar amount of resources still differ from each other in terms of their performances. All possible systematic paths for each predictor are shown in Table 2.

### 5.2 Limitations and future research directions

Despite the insights gained, there must be several limitations of the study. The first reflects the issues of external validity, namely the ability to generalize the results outside of this study context. Another limitation is that this research was conducted with the survey responses provided by one key informant per firm or strategic business unit. Although such an approach has long been used in strategy research (Hult, Ketchen, and Slater 2005), using multiple informants might be recommended for further research.

Additional future studies might take some of the following directions. First, it would be valuable to use the objective measures of FP such as ROI. Second, it may also be worthwhile to further elaborate more concrete definitions and multidimensionality of INNO and examine its relationships with other essential constructs. Third, possible moderators or mediators between IO and INNO had better be explored. Lastly, it may well be needed to more thoroughly conceptualize and empirically test multiple roles of firms’ strategic orientations and then the relationships of strategic orientations with INNO and organizational performances in the respective roles.
References


