The Effect of Headquarter Integration Mechanisms on Subsidiaries’ New Product Success: From Control to Coordination Mechanism

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New product launching (NPL) to the local market by subsidiary managers is a strategic activity, which requires organizational supports from MNC global network. The NPL activity is marked by high level of uncertainty, risk, and market failure. Thus, a headquarter needs to integrate the subsidiary NPL into global strategy. There are two mechanisms to integrate subsidiaries’ activities during NPL process; coordination and control process. By testing the effect of each mechanism on role clarity and functional conflict, I found that coordination mechanism increase role clarity between headquarter and subsidiaries’ managers. In contrast, exercising control mechanism reduces role clarity and functional conflict between headquarter and subsidiaries’ managers during NPL. This research shows that both role clarity and functional conflict increase new product commercial performance introduced by subsidiary in the local market.

Keywords: new product launching (NPL), coordination mechanism, control mechanism, and new product performance

Introduction

Along research tradition on the organizational factors that contribute to the new products success has started in the beginning of 60s. Studies by Burns and Stalker (1961), followed by Lawrence and Lorsch (1967) examined the effects of organizational structure on the innovation success. This domain of research is continued between the 70s and the beginning of 80s by predominant authors including Cooper (1979, 1984) and Calantone and Cooper (1981). Hereafter, various organizational factors have been analyzed during the process of new product development to commercialization. Those factors
include the interdepartmental cooperation (Zirger and Maidique, 1990), the supports of top management (Montoya-Weiss and Calantone, 1994), and the communication and training (Moenaert and Caeldries, 1996).

Curiously, only a small number of studies have been made to the particular setting of internationalization. Several scholars have attempted to analyze NPL activities in the MNC operations, but limited to activities of new product development in R&D departments (e.g. Alphonso and Ralph, 1991; McDonough et al., 2001; Cheng and Bolon, 1993). According to another study, NPL is believed to be the competitive advantage source (Friar, 1995) in obtaining and maintaining favourable position in global market. Thus, it is important to comprehensively analyze NPL process in the MNC context.

The MNC is confronted with classical problems of subsidiaries activities integration around the world (Stopford and Wells, 1972; Wilkins, 1974). From another point of view, subsidiaries need to be sufficiently differentiated to adapt to the specific local factors such as cultures, industries, government regulations, and consumers. Thus, NPL process to the local market is characterized by pressures of integration and localization (Jarillo and Martinez, 1990; Prahalad and Doz, 1981; Bartlett and Ghoshal, 1989; Roth and Morisson, 1990; Taggart, 1998). As subsidiaries require integration and localization aspects, I consider that headquarter must harmonize the necessity of standardization with adaptation at the same time during NPL process.

Literatures shows that the NPL to new and existing markets is risky and expensive (Calantone and Montoya-Weiss, 1993; Schmidt and Calantone, 2002). The NPL risk resulted when high investment is confronted with high-complexity of relations within interdependent units of an organization, which increases uncertainties of positive market responses (Firmanzah, 2005).

The subsidiary NPL is complex and expensive. The complexity resulted from the diversity of phases starting from the development to commercialization activities (Biggadike, 1979; Hultink et al., 1998; Guiltinan, 1999; Di Benedetto, 1999; Hultink et al., 2000) and the rich information provenance both from the headquarter and its local environments. The classical problem of horizontal interface (Urban and Hauser, 1980; Zirger and Maidique, 1990) highlights the challenges of vertical relation between headquarter and subsidiaries. Thus it contributes to the complexity dimension of NPL process. However, this process is known for its expensiveness. A wide array of activities - from market information gathering and treatment, laboratory activities, market testing, to commercialization campaigns - requires huge financial sources. Consequently, the headquarter endeavours to ensure that the NPL process is implemented according to the plan. Furthermore, headquarter should coordinate this activity in order to maintain the consistency and synchronization of its global strategy. The integration of the activities is designed to minimize risk failure of the new product in local market by transferring the knowledge and the experience from
other countries to local subsidiary managers. Therefore, headquarter is believed to be the integrator body in MNC networks through control and coordination instruments (Cray, 1984).

In this article, integration mechanism exercised to subsidiaries by headquarter is considered as the fundamental organizational factor that influences the new products performance in local market. The integration mechanisms are employed by headquarters in order to harmonize subsidiary activities with global network, influence working relationship between headquarter and subsidiary managers. For example, if the headquarter imposes a high degree of integration through standardization, formalization, and mechanistic procedure, the working relationship between headquarter and subsidiaries is very formal and procedural. On the other hand, if the headquarter applies a low degree of integration, based on interactions rather than bureaucratic procedures, the working relationship between headquarter and its subsidiary managers is more informal and flexible (George and Bishop, 1971).

Hence after, this working relationship determines the new product performance in the local market. Therefore, it becomes important to analyze the effects of the integration mechanism during NPL by subsidiaries. I built a model by comparing the effect of two integration mechanisms imposed by headquarters to subsidiaries managers (coordination and control) in order to create good working relationship between headquarter and subsidiaries’ managers. The difference between control and mechanism is found on the amount of coercive power used by supervisor. When the integration mechanism uses heavily coercive mechanism, thus we can classify it as control mechanism (Etzioni, 1965; Tannebaum, 1968). If integration mechanism uses slightly coercive mechanism and emphasize more on mutual adjustment, therefore we can classify as coordination mechanism (Mintzberg, 1983).

**Between Control and Coordination**

Integrating NPL decision in the subsidiaries is an important activity for MNC, especially for subsidiaries managers because NPL decision is an expensive and a high risk decision. This decision will determine the performance not only for new brand/product which will be introduced but also the subsidiaries overall performance. The failure of managing these activities will also influence the global MNC performance. Ill-image of MNC brand could endanger the overall image of MNC brands. However, leveraging only advantage as a part of multinational company is not sufficient for subsidiaries operating in different local environment with home-based environment. Subsidiaries operate in totally different environment and it should be considered during new product launching. Therefore, subsidiaries managers’ activities during new product launching should align to guidelines given by headquarter.

However the integration of subsidiaries’ activities to headquarter operation (MNC network) depends
mainly on two processes: (1) control, and (2) coordination (Cray, 1984). Both processes are central to organizational literature and have formed, implicit or explicitly, key elements of organizational behaviour. Control is seen as a process which brings about adherence to a goal or target through the exercise of power of authority (Etzioni, 1965). The purpose of control is to minimize idiosyncratic behaviour and to hold individuals or groups to enunciated policy, thus making performance predictable (Tannenbaum, 1968). Accordingly, parents companies often find that by investing in companies that are operating in different environments they increase the level of uncertainty or risk of return on their investment (Chang and Taylor, 1999). Thus, corporate headquarters’ control of subsidiaries’ activities and performance becomes an essential integrating function in MNC. Indeed, headquarters must attempt to impose control over foreign subsidiaries in order to reduce the uncertainty of their investment, since such control ensures that the behaviours originating in separate parts of the organization are compatible and support common goals.

In contrast, coordination emerges as an alternative mechanism to integrate subsidiaries new product launching into global strategy. Coordination refers to the process of integrating activities that are dispersed across the subsidiaries in different countries (Porter, 1986). Coordination mechanism has been associated with organizational design in organization theory (Mintzberg, 1983). Organization assign roles, design procedures, and provide feedback for their members, thus facilitating the coordination of efforts, and enabling the accomplishment of collective outcomes. Coordination is fundamental to capturing cross-national scale, scope and learning economies throughout the multinational network (Roth, 1992). Coordination has been treated as an enabling process that provides the appropriate linkages units within organization (Van de Ven et al., 1976).

According Porter (1986), coordination among dispersed subsidiaries operated in different countries benefit in several factors. First, it allows the sharing and accumulation of know-how and expertise among dispersed activities. Differing countries, with their inevitably differing conditions, provide a fertile basis for comparison as well as opportunities for arbitrating knowledge. Second, coordination among dispersed activities also potentially improves the ability to reap economies of scale in activities if subtasks are allocated among location to allow some specialization. Third, coordination may also allow a firm to respond to shifting comparative advantage, where movements in exchange rates and factors costs are significant & hard to forecast.

Coordination is distinguished not by direct intervention but by situating the subsidiary in a network responsibility to others parts of MNC structure. The pattern of coordination can be imposed through an act of control, but the resulting responsibilities are rooted in coordination. Coordination is generally less costly because the communication required is minimal and routine (Cray, 1984). At the
same time it is a less precise method of integration than control in the sense that a change in any part of coordination network is likely to have reverberations throughout the network. Compared to control the coordination is less direct, less costly and has a longer time horizons.

**Working Relationship**

Working relationship between subsidiaries’ managers and headquarter during decision making process can be explained by social-psychology literatures. According to this literature stream, no unit in the organization exists in isolation (Katz and Kahn, 1978; Kahn et al., 1964). Each unit is linked to other units – both directly and indirectly – through several mechanisms, e.g. method of work, nature of the task, and the report mechanism. To achieve efficiency, an organization requires a cohesive structure in which sets of functions and roles are integrated into the overall organization strategies. Consequently, job performance will be determined by the quality of working relationship among units related to each others.

The working relationship refers to how the individual in an organization interprets the working condition and interact each other concerning the required roles and tasks (Hellriegel and Slocum, 1974). The integration mechanism developed by the headquarter covers two perspectives; role clarity and functional conflict. Researchers in the past have shown that role clarity has positive effect on job and organization performance (Kohli, 1985; Miles and Petty, 1975). However, literatures on decision making process demonstrated that functional conflict enhance quality of decision thus increase organization performance (Fredrickson, 1984; Fredrickson and Mitchell, 1984). Role clarity corresponds to the degree in which the individual comprehends and understands the clarity of activities required to achieve his/her tasks (Kelly and Hise, 1980). The concept of role clarity is the inverse concept of role ambiguity, which is defined as the lack of clarity in definition, finality, and means to recognize the tasks (King and King, 1990). The role ambiguity also illustrates the situation in which the actor or the individual who is unaware of required task must face multiple demands.

The second dimension of working relationship is the functional conflict defines the situation where different points of views inter exchange among organization units during the problem solving (Jehn, 1994). The functional conflict measures different levels of ideas and perspectives between headquarters and subsidiary managers during NPL process. This type of conflict is closely associated with cognitive conflicts (Amason, 1996; Amason and Mooney, 1999) and task conflict (Janssen and Veenstra, 2000; Jehn and Mannix, 2001). This conflict results in the consideration of more alternatives and the more careful evaluation of alternatives - processes that contribute to the quality of strategic decision-making. This situation is believed to improve the new product lunching decisions quality. This kind of conflict differs significantly with dysfunctional conflict. The latter conflict is highly correlates with emotional
and interpersonal conflict that diminish interpersonal cooperation and trust among organizational members. Affective conflict is the perception among group’s members that there are interpersonal clashes characterized by anger, distrust, fear, frustration, dislike and other forms of negative affect.

**Model and Hypothesis**

Researches in the past confirmed that the configuration of organizational structure plays an important role in forming and conditioning organizational working relationship (George and Bishop, 1971; Schneider and Reichers, 1983; Rousseau, 1988; Patterson et al., 1996). Previous research shows that the working relationship is a structuralism and phenomenon of interaction. According to structuralism, the working relationship is a function of structured pattern in an organization (Ashforth, 1985). The division of work, centralization or decentralization of the decisions, and formalization are the determinant factors for working relationship. Based on the interaction perspective, the working relationship is the result of interaction patterns between units and actors in an organization (Schneider and Reichers, 1983). However, integration mechanism imposed by headquarter consists both structured pattern in an organization and its interaction.

Figure 1. Research Model
The integration mechanism in subsidiary NPL process could consist of control and negotiation mechanism. Control mechanism lies on using high degree of intervention and programming of subsidiaries’ activities. Consequently, it prevents the adjustment and information exchange between headquarter and subsidiary managers. Under this mechanism, headquarter plays a major role in deciding the dispersed activities of subsidiaries worldwide. Fixation and programming activities are often conducted by headquarter. Even though subsidiary managers have the opportunity to make certain program adjustment, they will not change the general program framework decided by headquarter. Subsidiary managers are more a passive rather than active institution, as it is headquarter that plans and develops the program for harmonization in each phase of NPL process. This mechanism is realised by intervention and programming of subsidiaries activities during NPL. There is no role and task adjustment between headquarter and subsidiaries’ managers. However, it is subsidiaries’ managers who understand local environment characteristics. Under this mechanism, subsidiary managers are confronted with double pressure - often contradictory - of headquarters’ orientation and intervention as well as local pressure. Subsidiaries’ managers will have low level of role clarity whether they must take decision or not.

On the other hand, coordination mechanism lies in the communications and feedback or adjustment from unforeseen and unexpected situations. This mechanism incites active contributions from each unit. The communication and information exchange between headquarter and subsidiary managers are considered as means of auto-adjustment of different functions and roles involved in NPL process. Thus it gives more clarity to the diverse units related to NPL. This type of integration allows the information exchange and discussions between headquarter and subsidiary managers. It enables the subsidiary managers to play important roles during NPL process problem solving as they understand the actual host country environments. Such knowledge is an important factor for launching decision-making and execution. Using coordination mechanism of integration facilitates the subsidiary managers in conveying local information and specific conditions during the decision-making process with headquarter. Discussion and debate that allow diverse perspectives will emerge and it makes NPL decisions become more comprehensive (Fredrickson, 1984; Fredrickson and Mitchel, 1984).

**H1**: Control mechanism reduces both role clarity and functional conflict between headquarter and subsidiaries’ managers during NPL process.

**H2**: Coordination mechanism increase both role clarity and functional conflict between headquarter and subsidiaries’ managers during NPL process.

The effects of role clarity on the performance have become the major problem in the psychology research field. Several researches confirmed that role clarity contributes positively
to the efficiency of work realization (Rogg et al., 2001) and to the work performance and organization goals (Lyons and Ivancevich, 1974). In the subsidiary NPL process, role clarity between headquarter and subsidiary managers is considered to positively contribute to the way subsidiary managers carry out the new product development process and commercialization. Such situation leads to the positive performance of the new product. On the other hand, unclear role between headquarter and subsidiaries’ managers creates uncomfortable and harmful situation, and most subsidiary managers’ efforts are dedicated to solve the relational problems with headquarter. Consequently, less effort will be committed to implement the new product planning and strategy, thus negatively influence to the new product performance. However, functional conflict has positive effect of decision quality (Fredrickson and Mitchell, 1984). Positive effect suggest when there are many disagreement surrounding an immediate opportunity or threat during NPL, both headquarter and subsidiaries’ managers are aware of more issues, more ways of viewing each issues, more alternative courses of action (Bantel and Jackson, 1989).

H3: Both role clarity and functional conflict between headquarter and subsidiaries’ managers increase new product commercial performance.

Data and methods

Research design

The questionnaire construction is processed based on the discriminate principle between success and failure of new products (Cooper, 1979). We asked the Respondents to differentiate two products representing success and failure cases. Therefore, each question must be answered according to these different dimensions of success and failure. Calantone and Cooper (1979) argued that this method allow analysis of responses by directly comparing factors contributing to the success or failure. This mechanism also facilitates the Respondents in cognitively differentiating between the NPL experience contributing to success and failure in the past (the NPL realized within five years).

The development of subsidiaries is divided into the following two phases: (1) to select list of subsidiaries from the existing data base (kompass and icpcredit), and (2) to gather list of subsidiaries via internet site of each MNC. Finally, I developed a sample of 1167 subsidiaries of consumer goods in 18 countries located in 2 regions, Asia and Latin America. The reason to focus on subsidiary consumer goods is that the frequency of NPL by consumer goods is more than that of industrial companies. I considered that the consumer goods companies have sufficient experience to launch new products in local market. The postal survey has been conducted twice to marketing or commercial directors of subsidiaries. Considering the diversity of subsidiaries locations as well as managers’ nationality, I developed the questionnaires in English. Such language is a standard international business language so that it could minimize the bias comprehension of different cultures and local social conception in
different countries.

For the purpose of facilitating the questionnaire answering by subsidiary managers and saving time, we constructed a special web site. Finally, some 69 subsidiaries agreed to participate in this study. About 55 Respondents (79.7%) responded online and 14 (20.3%) by mail. As each subsidiary provided two cases (products), our data base constitutes 138 products, of which 50% is successful. The product became the level of analysis as all the organizational process is reflected by the success and failure of products in market. The low participation rate of subsidiaries was due to several factors, e.g. long question, information confidentiality, and language barrier.

To construct the integration mechanism, the respondents were asked to think about their relationship with headquarter and internal cross-functional coordination within subsidiaries using series of statements on a scale ranging from 1 (‘very low’) to 5 (‘very high’). The main objective of this block of question is to analyze the degree of coordination and control during NPL process. The production role clarity and functional variable are developed by questioning the relations climate of headquarter and subsidiary managers, ranging from 1 (‘very poor’) to 5 (‘excellent’). Finally, the new product commercial performance is built by questioning the degree of new product performance achievement compared to the Respondents’ initial expectation, ranging from 1 (‘far less’) to 5 (‘far exceeded’).

**Assessment of the measurement model**

To test the hypotheses proposed, I used the analysis of structural equations modelling (SEM). There are several techniques which allow the application of the structural equation method; with the well known being those based on adjustment covariance (using the programs such as AMOS or LISREL). Recently, another technique, even less widely promulgated, is gradually becoming more used. This technique of analysis is known as Partial Least Square (PLS), of which it has been stated that it could become a powerful and robust method of analysis (Chin et al., 1996).

PLS method is an appropriate approach when one or more the characteristic next one is present: (1) the model includes formative constructions, (2) the sample size is relatively small, and (3) assumptions of normality are not satisfied (Chin and Newstead, 1999). Among the existed software, I use SmartPLS version 2.0 to analyze and to test the hypotheses. PLS is a technique to the basis of regression technique, founded on path of analysis (path analysis) that can estimate and calculate the reports among constructs. It produces loading between items and constructs and estimates standardization regression coefficients (e.g. beta coefficient) for the paths between constructs. The outputs from the SmartPLS software are used first to test the measurement model and then to test the fit and performance of the structural model. The results for the two stages of analysis now follow:
The model measurement

Generally, the model analysis consists of four assessments: (1) individual reliability, (2) composite reliability, (3) convergent validity, and (4) discriminative validity (Chin, 1998a, 1998b; Fornell and Larcker, 1981; Hulland, 1999). The individual reliability of every item is evaluated by examining the loadings or simple correlations of the indicators with their respective constructs. The results shown by Table 1 indicates that all indicators exceed the 0.55 threshold proposed by Falk and Miller (1992) during the initial development of scales. Composite reliability was used to analyze the reliability of the constructs since this has been considered more exacting measurement than Cronbach’s α (Fornell and Larcker, 1981). Table 1 indicates that all constructs are reliable since the composite reliability values exceed the threshold of 0.7 and even the strictest one of 0.8 (Nunnally, 1978). The evaluation of convergent validity was performed by using the measurement developed by Fornell & Larcker (1981) known as the average variance extracted (AVE). This measurement must exceed the value of 0.50, demonstrating that more than 50% of the variance of the construct is due to its indicators. As shown by Table 1, all AVE value of the constructs exceeds 0.50.

Table 1. Reliability and Average-Convergent-Validity (AVE) Values

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean</th>
<th>S.D.</th>
<th>Loading</th>
<th>T-Value</th>
<th>Composite reliability</th>
<th>AVE</th>
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<tbody>
<tr>
<td><strong>Coordination</strong></td>
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<tr>
<td>1. Vertical coordination with headquarter (HQ)</td>
<td>3.43</td>
<td>1.046</td>
<td>0.85</td>
<td>14.211</td>
<td>0.84</td>
<td>0.56</td>
</tr>
<tr>
<td>2. The overall time needed to prepare commercialization process with headquarter/regional officer</td>
<td>3.18</td>
<td>0.986</td>
<td>0.66</td>
<td>4.823</td>
<td></td>
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<tr>
<td>3. Cross-functional cooperation among departments within your subsidiary</td>
<td>3.72</td>
<td>0.974</td>
<td>0.82</td>
<td>21.190</td>
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<tr>
<td>4. The overall time needed to prepare commercialization process with other department in this subsidiary</td>
<td>3.50</td>
<td>0.976</td>
<td>0.70</td>
<td>10.652</td>
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<td><strong>Control</strong></td>
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<td>0.87</td>
<td>0.77</td>
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<tr>
<td>1. Utilization of headquarter/regional officer st&amp;ard guidelines</td>
<td>3.07</td>
<td>1.206</td>
<td>0.85</td>
<td>16.457</td>
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<tr>
<td>2. Headquarter intervention to marketing decision</td>
<td>3.10</td>
<td>1.204</td>
<td>0.91</td>
<td>36.132</td>
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<td><strong>Role Clarity</strong></td>
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<td>0.85</td>
<td>0.59</td>
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<tr>
<td>1. The clarity and certainty of headquarter/regional office’s</td>
<td>3.51</td>
<td>0.98</td>
<td>0.75</td>
<td>12.647</td>
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<tr>
<td>role/job related to this product</td>
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<td>2. The clarity and certainty of your authority in your present</td>
<td>3.64</td>
<td>0.89</td>
<td>0.75</td>
<td>13.877</td>
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<td>job related to this product</td>
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<td>3. The clarity of the rules, policies, and procedures of the</td>
<td>3.62</td>
<td>0.94</td>
<td>0.82</td>
<td>19.145</td>
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<td>company that affect your job related to this product</td>
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<td>4. The clarity and certainty of other department role/job</td>
<td>3.31</td>
<td>0.98</td>
<td>0.76</td>
<td>15.273</td>
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<td>related to this product</td>
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<td><strong>Functional Conflict</strong></td>
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<td>1. I found that my idea of what marketing concept/activities</td>
<td>3.02</td>
<td>1.14</td>
<td>0.84</td>
<td>20.642</td>
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<td>should be very different with what headquarter/regional</td>
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<td>office expected</td>
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<td>2. I found there was contradictory between headquarter/</td>
<td>3.07</td>
<td>1.01</td>
<td>0.82</td>
<td>13.799</td>
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<td>regional office instruction and the reality</td>
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<td>3. I found that my idea of marketing concept/activities was</td>
<td>2.92</td>
<td>1.07</td>
<td>0.78</td>
<td>13.332</td>
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<td>very different with what other departments expected</td>
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<td><strong>Commercial Performance</strong></td>
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<td>1. Actual customer satisfaction compared to initial expectation</td>
<td>3.19</td>
<td>1.13</td>
<td>0.84</td>
<td>35.054</td>
<td></td>
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<tr>
<td>2. Actual customer acceptance compared to initial expectation</td>
<td>3.14</td>
<td>1.08</td>
<td>0.81</td>
<td>28.371</td>
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<tr>
<td>3. Profitability achievement compared to initial expectation</td>
<td>3.08</td>
<td>1.16</td>
<td>0.86</td>
<td>31.332</td>
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<tr>
<td>4. Margin realization compared to initial expectation</td>
<td>3.10</td>
<td>1.11</td>
<td>0.84</td>
<td>29.059</td>
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<tr>
<td>5. Market share realization compared to initial expectation</td>
<td>3.17</td>
<td>1.24</td>
<td>0.88</td>
<td>42.425</td>
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<tr>
<td>6. Sales volume realization compared to initial expectation</td>
<td>3.25</td>
<td>1.27</td>
<td>0.90</td>
<td>58.096</td>
<td></td>
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<tr>
<td>7. Product revenue realization compared to initial expectation</td>
<td>3.01</td>
<td>1.15</td>
<td>0.87</td>
<td>15.754</td>
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</table>
However, to assess discriminant validity, Fornell and Larcker (1981) propose comparing the AVE of each construct with the variance shared between each construct and the other construct of the model such the former exceeds the latter. Thus, discriminant validity will be analyzed based on latent variable correlation matrix. This matrix has the square root of AVE for the measures on the diagonal and the correlations among the measures as the off-diagonal elements. To achieve the discriminant validity of a construct, the square root of the AVE (principal diagonal) must exceed the correlations of each construct with the other constructs. In other words, should the diagonal elements be larger than off-diagonal elements, discriminant validity is deemed satisfactory.

**Structural model fit**

The evaluation of the structural model employs a measurement of the predictive power of the dependent latent variables, such as the amount of variance in the construct by the model (R²), which ought to be greater than or equal to 0.1 (Falk and Miller, 1992). From Figure 3 we can see that the value of R² for Role Clarity (R² = 0.427), Functional Conflict (R² = 0.230), and Commercial Performance (R² = 0.495) are greater than threshold 0.1. Additionally, the contribution of the predictor variables to the explained variance of the endogenous variables is evaluated with the help of the path coefficients (β), which, in order to be constrained significant, must explained at least 1.5% of the variance of a predetermined variables (Falk and Miller, 1992). The majority of the path variance values exceed this criterion (Table 3). Finally, the significance of the path coefficients is examined by analyzing t values of the parameters obtained using the bootstrap non-parametric resampling technique, following the indicators given by Chin (1998a). Instead, in order to evaluate the accuracy and stability of the estimations, it is necessary to use Bootstrap non-parametric resampling technique. Thus, 137 sub-samples were generated using a t-student distribution with two tails and 137 degree of freedom (n-1, where n represents the number of sub-samples) to calculate the significance of the path coefficients (β), obtaining the values: t(0.001;137) = 3.363; t(0.01;137) = 2.612. Moreover, the path coefficient between two constructs is significant for values above 0.2 and ideally above 0.3 according to Chin (1998b). However the result of t values and path coefficient standardized (β) could be seen on Table 3 and Figure 2.

With respect to the explained variance of the endogenous variable (R²), the model shows an adequate predictive power, since all of the endogenous constructs achieve an explained variance greater than 0.1, the reference value established by Falk and Miller (1992). Regarding the coefficient standardized (β) and the t test value, I can draw a conclusion that there is a strong causality between coordination and role clarity (β = 0.512; t value = 7.185). It shows us that coordination mechanism has a positive effect to build role clarity between headquarter and subsidiaries’ managers during NPL process. However, my model does not show any significant effect of coordination
mechanism on functional conflict. Interestingly, the results concerning control mechanism justifies the hypothesis constructions. Control mechanism has negative effect on both role clarity (\( = -0.274; \text{t value} = 3.284 \)) and functional conflict (\( = -0.459; \text{t value} = 5.138 \)). This result confirms that integration mechanism by intervention will reduce both role clarity and functional conflict. Finally, two last hypotheses testing are also confirms the researches in the past that both role clarity and functional conflict increase job performance. First, role clarity has a positive effect on new product commercial performance (\( = 0.550; \text{t value} = 8.615 \)). Second, functional conflict has the same effect that increase new product commercial performance (\( = 0.344; \text{t value} = 3.909 \)). The discriminant analysis upholds the distinction between role clarity and role conflict by showing that these are two different constructs.

**Discussion and Limitation**

Subsidiary managers play important roles during NPL because they create the tie between global network and local environment. In the position of boundary spanner, subsidiary managers must harmonize the pressures of standardization and adaptation. In other words, the working relationship in which subsidiary managers decide and bring new product to local market is believed to be an important factor for new product success. Our study stresses the importance of subsidiary managers’ role as boundary spanners during NPL.

The subsidiaries working relationship determines the NPL success in local market. The hypothesis testing illustrates that working relationship is more significant in influencing new product performance rather than the locus of decisions and marketing strategy. Two measures of working relationship have been analyzed, i.e. role clarity and functional conflict. The role clarity is vital for subsidiary managers because they need the clarities of roles, task, and job in interactions with headquarter. Many authors in the past showed that this situation allows the implementation quality, motivation, and engagement of the actors (Miles and Petty, 1975; Teas et al., 1979; Kelly and Hise, 1980). My research also supports the findings in the past by indicating that the role clarity has a positive relation with new product commercial

<table>
<thead>
<tr>
<th></th>
<th>Coordination</th>
<th>Control</th>
<th>Roleclarity</th>
<th>Functional Conflict</th>
<th>Commercial Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>0.75*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>-0.11</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Clarity</td>
<td>0.59</td>
<td>-0.34</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional Conflict</td>
<td>0.15</td>
<td>-0.47</td>
<td>0.19</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Commercial Performance</td>
<td>0.47</td>
<td>-0.45</td>
<td>0.62</td>
<td>0.45</td>
<td>0.86</td>
</tr>
</tbody>
</table>

* The principal diagonal elements correspond to the square root of AVE of each construct; the other figures correspond to the correlations between the constructs.

Table 2. The latent variable correlation matrix: discriminant validity
performance. Another finding also supports the decision-making process literatures. This article demonstrates that the functional conflict positively influences new product commercial performance. The decision quality requires various reflections, ideas, and information exchange of the different units in an organization (Hambrick and Mason, 1984) to analyze and more comprehensively develop NPL program. This situation could facilitate the commercialization, thus increase performance (Rogg et al., 2001; Harborne and Johne, 2003). A good working climate facilitates the actors of an organization in developing mutual respect, information sharing, and interdepartmental cooperation.

The author’s hypotheses testing reinforced the finding showed by Schneider and Reichers (1983). According to them, working relationship is influenced by organizational structure (formalization, specialization, centralization, etc) and the perception construction of the actors. In this context, the working relationship has both an objective (the organization structure) and subjective aspects (the actors’ perceptions). Subsidiary managers establish the sense and roles of signification based on the

### Table 3. Result of the structural model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path Coefficient Standardized (β)</th>
<th>Path Variances***</th>
<th>T value (Bootstrap)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination Role Clarity</td>
<td>0.563**</td>
<td>0.332</td>
<td>7.185</td>
<td>Accepted</td>
</tr>
<tr>
<td>Coordination Functional Conflict</td>
<td>0.096</td>
<td>0.014</td>
<td>0.707</td>
<td>Rejected</td>
</tr>
<tr>
<td>Control Role Clarity</td>
<td>-0.274*</td>
<td>0.093</td>
<td>3.284</td>
<td>Accepted</td>
</tr>
<tr>
<td>Control Functional Conflict</td>
<td>-0.459**</td>
<td>0.216</td>
<td>5.138</td>
<td>Accepted</td>
</tr>
<tr>
<td>Role Clarity Commercial Performance</td>
<td>0.550**</td>
<td>0.341</td>
<td>8.615</td>
<td>Accepted</td>
</tr>
<tr>
<td>Functional Conflict Commercial Performance</td>
<td>0.344**</td>
<td>0.155</td>
<td>3.909</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

* When the t value obtained using the Bootstrap technique exceeds the t-Students value t(0.01;137) = 2.612 the hypothesis is accepted (p<0.01).
** When the t value obtained using the Bootstrap technique exceeds the t-Student value t(0.001;137) = 3.363 the hypothesis is accepted (p<0.001)
*** Variance in an endogenous construct explained by another variable, which is the absolute value of multiplying the path coefficient by the correlation between both variables (Falk and Miller, 1992). Its values are supposed to be greater than 1.5%(0.0015).
integration mode developed by headquarter. If the headquarter applies high levels of control and coordination, this would minimize the roles of subsidiary managers. If the headquarter allows more autonomy to subsidiaries, the managers will have more strategic roles during NPL process.

However, I consider that at the same time subsidiary NPL process requires a combination between standardization and adaptation. The question is not anymore on what to choose, i.e. when we must standardize and when we should adapt to local environments. This is because each host country has its own characteristics, while headquarter needs certain aspects of standardization. I consider that standardization and adaptation are not contradictory, but more complementary logic. Headquarter needs local market knowledge supplied by subsidiary managers, and adversely, subsidiary managers need global knowledge and experience to launch new product into local market. Therefore, it becomes necessary to analyze the integration mechanism that facilitates the combination between local and global knowledge during NPL process.

Coordination is an integration mechanism to manage headquarter and subsidiary cooperation. The results of hypothesis testing show that coordination increases the subsidiary managers’ role clarity. This integration mechanism allows clarification of subsidiary managers’ roles through mutual adjustment with headquarter. In this context, subsidiary managers are not merely implementing bodies of global strategy. More than that, they make their own decisions and have ideas and interests concerning the required tasks. Thus, negotiation coordination is important, as it facilitates the adjustment and idea exchange, which enables the clear roles between headquarter and subsidiary.
managers. In contrast, control mechanism impedes the discussions, information and idea exchange, and the problem-solving in NPL decision-making involving headquarter and subsidiaries. It reduces the idea and information exchange due to the subsidiaries activities programming during the process. Control also leads passive behaviour of subsidiary managers because all have been decided by headquarter. The subsidiary managers’ role is limited to an implementing body of strategic decision made by headquarter. Therefore, this type of coordination negatively influences the functional conflict during subsidiary NPL.

This research has certain amount of limitations. First, I did not take into considerations the distinction of subsidiaries. In reality, a subsidiary could establish a joint venture with local partner (Killing, 1983; Yan and Gray, 1994), and this structure can influence the decision configuration with parent companies. Subsidiary managers are not only dealing with headquarter but also for the interest of the local parent company. Not considering this situation will reduce pertinence of conclusion in the research. Secondly, I did not distinguish several types of new products. New product literatures distinguish several types of new products (Booz Allen Hamilton, 1982; Garcia and Calanton, 2002; Song and Montoya-Weiss, 1998; Kleinschmidt and Cooper, 1991). Therefore, different new product types need to be analyzed separately.

References


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