

Innovation, New Market and Governance Choices of Entry: The Internet Brokerage Market Case

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ABSTRACT This paper investigates the case of market entry strategies following the introduction of a disruptive innovation. Recognizing that market entry strategies have been envisioned in the literature as a discrete phenomenon, we develop an empirical framework that portrays these strategies as a capability building process. Three organizational modes are integrated into our model: acquisition, alliance and market transaction. We compare the first two with the third and test the model in the setting of the online brokerage industry by using a sample of 897 moves made by 98 firms between 1994 and 2000. We suggest that firms' entry modes can be differentiated along factors specific to market timing as well as the degree of specificity of targeted capabilities. Our findings show that acquisitions are used to access specific capabilities. This means that external sources can be used when firms face a make-or-buy decision in the aftermath of technological change. Alliances appear to play a limited role while market transactions are widely used. By suggesting that entry into a new industry is not a discrete phenomenon, our research should open the avenue to additional inquiries on this topic.

KEY WORDS: Innovation, market entry, capabilities, firm boundaries

1. Introduction

In a world of intense competition, innovative firms have an opportunity to redefine competitive rules to their own advantage. Internet-based businesses are a recent example. Market borders have become blurred. The downside for non-innovative firms is that they may suffer from market displacement through mechanisms such as competence-destroying innovation (Tushman and Anderson, 1986). An extensive body of literature has focused on specifying the characteristics of innovation in order to explain the conditions under which

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established firms or new entrants are most likely to succeed or fail (Tushman and Anderson, 1986; Henderson and Clark, 1990; Christensen and Rosenbloom, 1995; Tripsas, 1997; Thomas, 1999). A general conclusion is that new actors tend to introduce radical or architectural innovations that endanger incumbents (Christensen, 1997). Researchers have also qualified the impact of an innovation on a firm's capabilities¹ to explain why established firms experience inertia (Teece *et al.*, 1997) and, in general, find it difficult to react and regain market leadership (Henderson and Clark, 1990; Henderson and Cockburn, 1994; King and Tucci, 2002; Afuah, 2003; Hill and Rothaermel, 2003). Indeed, a dramatic change in an industry can substantially reduce the value of a company's core competencies (Hamel and Prahalad, 1994; D'Aveni, 1999; Markides, 1999).

In the face of innovation, firms confronted with the challenge of developing new competencies have to make strategic decisions. We select three of these: (i) which competencies to access, (ii) how to access them, (iii) when to access them. These choices, that engage firms' resources and impact their future, are difficult to make because of the high level of uncertainty in the environment. Since the level of demand uncertainty of different products or services can vary significantly (Knight, 1965), firms have no guarantee that the market will develop according to their expectations. The extent to which a substitution effect will occur is rarely clear. Nevertheless, managers of firms in the established, threatened industry must decide how to respond to an innovation that has the potential to alter or destroy their companies' existing business (Cooper and Smith, 1992). Firms introducing the disruptive innovation also have to develop capabilities. New firms usually enter the industry with limited competencies. Strengthening their competencies is therefore necessary to increase their chances of success. Entering a new industry can be risky, as the Internet market has once again proven, but it can also be dangerous to stay away from new business opportunities (e.g. IBM, Kodak). Because of the high level of uncertainty, firms have no guarantee that the new industry will develop according to their plan; in which case they may lose their investment.

Firms face opposing incentives to enter a new industry: they can wait until most of the uncertainty and risk have diminished or they can opt for taking a strong position, early on (Folta and O'Brien, 2004). Firms may be tempted to favor flexibility over commitment (Ghemawat, 1991), and to postpone the investments required until much of the market uncertainty is resolved. But, in dynamic environments characterized by limited windows of opportunity (Abell, 1978), firms face the risk not having the right capability at the right time. Even if the debate on the advantages and drawbacks of early moving strategies is still far from being closed (Cho *et al.*, 1998; Makadok, 1998), late-movers take the risk of being outpaced by competitors who have entered the new market earlier. Moreover, delaying commitment to resources is not always the optimal response to the problem of investment (Ghemawat and del Sol, 1998).

A direct consequence for existing firms is the need to react to the creative destruction initiated by new actors (Schumpeter, 1934). Dominant firms have to develop new strategies and new capabilities (Rosenberg, 1976; Nelson and Winter, 1982; Rosenbloom, 2000). In a

¹ Capabilities are defined as a firm's capacity to deploy resources, usually in combination, using organizational processes, to attain a desired end. They are information-based, tangible or intangible processes that are firm specific and are developed over time through complex interactions among the firm's resources (Yin, 1989).

dynamic environment characterized by limited windows of opportunity (Abell, 1978), firms would then face the risk of losing their competitive advantage.

The strategic management literature defines three generic modes of governance available to access new competencies: (a) developing new competencies internally; (b) building partnerships with other firms; (c) accessing new competencies through market transactions.

Responding to such changes has direct implications for the boundaries of the firm. Specifically, the mode of governance chosen depends on the timing of entry, and the availability of competencies and partners. Firms' future market position is affected by governance choices (Brousseau and Quélin, 1996; Conner and Prahalad, 1996).

Despite the amount of recent work dedicated to innovation and new industries, little effort has been made to understand the interactions between the need for new competencies under conditions of disruptive or competence-destroying innovation and the modes of governance adopted by firms to access these new competencies (Claude-Gaudillat and Quélin, 2003).

With reference to the typology of market entry opportunities developed by Helfat and Lieberman (2002), we consider a new product-market niche. Since the market is not a totally new one, firms will need to access new capabilities but we assume that some firms will be able to rely on already existing capabilities.

In this research, we do not consider innovative capabilities, that is, the capability to develop innovation but rather the type of capabilities needed to develop the new offer. For instance, in the online brokerage market, in which we test our theoretical mode, one of the capabilities is related to that of the trading technology.

The objective of this paper is to develop a framework aimed at understanding how firms face the advent of a new competitive industry and access the new competencies necessary to be competitive in a highly uncertain environment. Two dimensions are specifically highlighted in our framework: the timing of entry and the type of capabilities that firms need in order to compete into the new market.

Our aim is to compare three modes of entry, understood as governance choices; in order to access the capabilities required to be competitive in a new industry. We show that the later the timing of entry the more a firm relies on acquisitions and alliances. Acquisition is chosen to access specific capabilities, but the market transaction mode is preferred to alliances.

The paper proceeds as follows. Section 2 briefly reviews the literature on order of entry and modes for accessing new capabilities. Section 3 presents and discusses an empirical framework for better understanding market entry strategies in the context of innovation. Section 4 outlines the main features of the empirical study. Finally, new perspectives for strategic management are discussed in Section 5.

2. Literature Review and Theoretical Background

Much of the literature on market entry has focused on the order of entry and its link to firm performance. The debate has mostly centered on whether the order of entry results in a first- or late-mover advantage. Despite theoretical contributions (Gal-Or, 1985; Lieberman and Montgomery, 1988; Dutta *et al.*, 1995; Maggi, 1996) and empirical evidence (Urban *et al.*, 1986; Cho *et al.*, 1998; Shamsie *et al.*, 2004) that first-movers do not always gain

advantages, academic research predominantly advocates early market entry (Narasimhan and Zhang, 2000: 314).

Another body of research has focused on the mode of entry with a diversification perspective (Lamont and Anderson, 1985; Busija *et al.*, 1997). In this literature, the mode of entry is viewed as a stand-alone decision. One exception is Lamont and Anderson (1985) who adopted a mixed view of corporate diversification by studying the combination between internal development and acquisition. Since then, there has been no further research along this line and the literature continues to envision market entry as a stand-alone and finite decision. However, anecdotal evidence shows that entry into a new market can hardly be reduced to, for instance, one acquisition or one alliance. Firms enter a new market by developing capabilities over time and market entry strategies involve recourse to several modes.

We will therefore review the literature on three organizational choices (alliance, acquisition and market transaction) as market entry tools, with direct consequences on firm boundaries.

2.1. *Acquisition of Firms for Controlling Competencies*

Acquisitions serve as substitute for innovations (Hitt *et al.*, 1990) and allow firms to undertake substantial expansions of resources that might be difficult to develop internally (Karim and Mitchell, 2000). They can also allow quick entry into a market (Biggadike, 1979; Hennart and Park, 1993).

However, firms that make acquisitions have to integrate the acquired capabilities into the firm, which also takes time and can be hazardous (Capron, 1999). Using acquisitions to access capabilities can be costly, for reasons ranging from legal constraints to the necessity of leveraging the acquired capabilities (Hennart, 1988; Kogut, 1988, 1991; Quélin, 1997). In rapidly evolving industries, this cost can be particularly high and acquisitions constrain a firm's options in a costly-to-reverse way.

Acquisitions are not exempt from moral hazard issues since the acquirer can find it difficult to assess the value of the acquired resources and may encounter a performance downturn of the acquired personnel (Chi, 1994).

Another disadvantage of the acquisition mode is that it involves a high level of commitment from the acquiring firm (Roberts and Berry, 1985).

Overall, there is no empirical consensus on the expected returns from acquisition (Quélin, 1997; Karim and Mitchell, 2000). Nevertheless, one can argue that reselling an acquired firm whose capabilities do not meet expectations can be a reasonable opt-out option.

2.2. *Alliances: Accessing Capabilities and Combining Resources*

An alliance is another way of accessing lacking capabilities or combining resources in order to create new capabilities (Prahalad and Hamel, 1990; Hamel, 1991). Alliances are often used to access resources possessed by other firms (Ring and Van de Ven, 1992; Hamel and Prahalad, 1994).

Alliances can strengthen the capability base of a firm (Kogut, 1988, 1998; Hamel, 1991). They have been proven to be a way to access capabilities more quickly than through in-house

development. They are also a way to share the risk, to diminish uncertainty and to benefit from reversibility (Balakrishnan and Wernerfelt, 1986; Hagedoom, 1993; Parkhe, 1993). Firms can also use alliances as a vehicle to gain an early window on emerging opportunities that they may decide to commit to more fully in the future (Mitchell and Singh, 1993).

Organizing transactions through hybrid forms alleviates some of the bureaucratic and shirking costs associated with a more hierarchical mode (Williamson, 1991). On the other hand, hybrid forms can be less useful because adaptations cannot be made unilaterally or by fiat (Williamson, 1991). Moreover, weak regimes of appropriability (Teece, 1986) increase the cost of hybrid contracting compared to hierarchy (Williamson, 1991).

Reversing an alliance that does not satisfy the partners' expectations or is not aligned with market evolution is a reasonable option. However, one downside of alliances is that the firm is not able to fully control jointly developed capabilities. The economic rent has to be shared between the partners.

The success of an alliance is linked to the absorptive capacity developed over time (Cohen and Levinthal, 1990), which is itself a function of the knowledge possessed by the firm (Klavans and Deeds, 1997).

2.3. Market Transactions: Facing Suppliers and Service Providers

Since some existing capabilities may be leveraged into the new market, we cannot ignore the fact that firms may decide to rely on market transactions to access capabilities.

Market transactions and their contrast with the choice of hierarchy have been thoroughly studied. Transaction cost economics assumes that the market solution is more costly than the hierarchy when exchanges are surrounded by a high level of uncertainty and specific assets are involved (Williamson, 1975).

Although market failure for knowledge-related transactions is widely documented, researchers have also highlighted that new skills can be accessed through the market (Pisano, 1990; Steensma and Fairbank, 1999; Van den Ende, 2003). Accessing external capabilities through a market transaction is quicker than through other modes. However, since knowledge remains outside the boundaries of the firm, using that mode does not allow the appropriation of new capabilities. One advantage of market transactions is their high degree of flexibility, but opportunism has been proven to be a downside of this mode (Williamson, 1975).

3. Mode and Timing of Entry: Defining the Governance Choice

This section sets out the theoretical framework for predicting the choices made between alliances, acquisitions and market transactions. When faced with an innovation, firms have to evaluate the efficiency of each mode. Here we consider more specifically the timing of entry and the type of capabilities needed. We compare the alliance and the acquisition modes with the market transaction mode.

3.1. Timing of Entry

First-entrants in a new industry possess unique capabilities. In our framework, we assume that all actors need to access new capabilities. Because high growth potential markets tend

to encourage market entry (Aaker and Day, 1986; Day and Schoemaker, 2000), other entries are very likely. Anticipating that other actors will enter the market, first-movers try to develop first-mover advantages (Lieberman and Montgomery, 1988) by reinforcing the uniqueness of their offers. One advantage of developing capabilities internally is the higher appropriability of such capabilities. Accumulating imperfectly substitutable assets and hard to imitate competencies (Markides and Williamson, 1994) allows firms to strengthen their strategic advantage.

During the initial stage of a new industry, alliances also provide a means to share risks and to diminish uncertainty. Many first-entrants are new actors lacking key complementary assets (Teece, 1986). A willingness to share risks combined with a lack of capabilities should lead new entrants to engage in partnerships. In addition, partnerships help new actors increase their subsequent performance (Baum *et al.*, 2000).

The newness of an industry limits the availability of potential targets for acquisition (Robinson *et al.*, 1992), thus making acquisitions a limited option for first-movers. Moreover, there will probably be few suppliers possessing the relevant knowledge with whom to engage in market transactions.

Whatever the reasons leading to their late move, firms in this category face specific challenges. Even if late-movers can manage to obtain a superior strategic advantage (Lieberman and Montgomery, 1988), they have to compete with existing offers. Indeed, an innovative offer has already been introduced onto the new market and first-movers have dedicated time and resources to building new capabilities. Consequently, the time necessary to access new capabilities within a reasonable timeframe represents a key challenge for late-movers. Because time-compression diseconomies, asset mass efficiencies, asset interconnectedness and causal ambiguity tend to impede a rapid accumulation of assets (Dierickx and Cool, 1989), internal development is a lengthy option. Therefore, firms that are late-movers should not make internal development their primary choice.

Alliances should be considered a viable option for late-movers because they accelerate the time needed to access new capabilities and allow access to missing capabilities. Contrary to first-movers for whom acquisitions are not an option, late-movers can expect the number of potential targets for acquisition to have increased. Potential acquisition targets may be new entrants who have participated in the introduction of new offers but lack the capabilities and complementary assets to further develop their advantage (Teece, 1986).

This discussion suggests the following hypotheses:

Hypothesis 1a (H1a): *In an emerging industry, the later the timing of the move the less the alliance mode is favored over the market transaction mode.*

Hypothesis 1b (H1b): *In an emerging industry, the later the timing of the move the more the acquisition mode is favored over the market transaction mode.*

3.2. *Specificity of Capabilities*

As discussed above, participating in an innovative market requires the acquisition of different capabilities. Not all capabilities are equal in terms of specificity. For instance, in the

online brokerage market—the setting of our empirical study—the degree of specificity of online brokerage technology is high whereas assets related to, for example, Customer Relationship Management (CRM) are much less specific. The degree of specificity of the capabilities can be envisioned as a continuum influencing the governance choice.

General predictions of scholars stipulate that the higher the degree of asset specificity the more a firm will favor the hierarchy, whereas non-specific assets will be managed through market transactions (Williamson, 1975, 1991; Pisano, 1990; Brouthers *et al.*, 2003).

Here, taking account of high technological uncertainty (Balakrishnan and Wernerfelt, 1986) and high growth markets (Robertson and Gatignon, 1998), we hypothesize that the more specific the capabilities required the more the acquisition mode or the alliance mode will be favored.

Hypothesis 2a (H2a): *In an emerging industry, the higher the specificity of the required capabilities, the more a firm will favor an acquisition over a market transaction.*

Hypothesis 2b (H2b): *In an emerging industry, the higher the specificity of the required capabilities, the more a firm will favor an alliance over a market transaction.*

4. The Empirical Study

4.1. The Online Brokerage Industry

The empirical setting is the US online brokerage industry. This industry presents several characteristics that make it a good candidate for empirical analysis of our research question: the introduction of innovative offers, a need for new competencies, a high level of uncertainty—notably in terms of government regulation, and the anecdotal evidence that firms have made differentiated choices in terms of competencies and modes of governance. Another argument for choosing this industry, and not the least when studying competencies, is that the frontiers of competencies are rather well delineated and well understood by industry players. Furthermore, the newness of online brokerage allows tracing fairly meticulously what occurred within the emerging phase of the industry (Claude-Gaudillat and Quélin, 2004).

Traditionally characterized by robust growth, and generous profit margins, the brokerage industry has been revolutionized by the widespread use of the Internet. Until the online trading revolution, competition in this industry was divided between full-service brokers (e.g. Merrill Lynch, Morgan Stanley) and discount brokers (e.g. Charles Schwab, Quick & Reilly). The emergence of purely online brokers (e.g. E*Trade, WebStreet) served to blur the frontiers between full-service and discount offers. Online equity trading by individuals jumped to 27 percent in 2000. Full-service brokers have been laggards in their response to the emergence of online offers. For instance, the online trading market share of Charles Schwab, E*Trade, Ameritrade and Datek amounted to 57.2 percent during the second quarter of 2000 while the market share of Merrill Lynch was 3.3 percent. In 1990, leading full-service brokers controlled 84 percent of US investment accounts. By the end of 1999, their market share had dropped to 55 percent.

Table 1. Online brokerage: businesses and capabilities

Brokerage capability	Trading technology capability	Investment decision capability	Investment products capability	CRM/facilitation capability	Marketing capability
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4.2. *Data Collection and Data-set*

First, we interviewed 10 managers of online brokers in San Francisco during the spring of 2002. This first step allowed us to establish the profile of six capabilities needed to operate in this new industry and the degree of specificity of the required capabilities (Table 1).

The second step of our data collection process was centered on the construction of a database identifying the moves online brokers made to access capabilities taking place between 1994 and 2000. Our starting point for identifying the actors who had entered the industry was the list established by the Security and Exchange Commission (SEC) at the end of 1999.

Secondary data were collected by using company reports, company websites, newspapers, professional newsletters, online databases and financial reports such as ABI/Inform Global, Factiva, Forrester Research, Hoovers, Investext, Lexis-Nexis, MultexNet, NASDR, Reuters Business Insight and OneSource. In total, several thousand articles were analyzed. Our data-set includes 897 moves made by 98 firms. A few examples of the strategic moves identified are given in Table 2.

4.3. *Operationalization and Measures of Variables*

Dependent variable. The dependent variable of our model is the Mode of Access to complementary competencies. It takes the value Acquisition, Alliance or Market transaction.

Independent variables. The variable *Year of move* is a numerical variable.

The variable *Degree of specificity* is an ordinal variable taking the following values: 6 for Brokerage capability, 5 for Trading technology, 4 for Investment decision, 3 for Investment products, 2 for CRM/Facilitation, 1 for Marketing, 0 for Others.

Table 2. Examples of strategic moves

Company A	Date	Company B	Type of move	Capability
Ameritrade	08/1999	R. J. Forbes Group Inc.	Acquisition	Online brokerage
Ameritrade	11/1997	Pointcast	Alliance	Financial services
Brown & Co.	08/1998	NexTrade	Market transaction	Trading technology
Charles Schwab	11/1996	Washington Research Group	Acquisition	Financial services
Charles Schwab	12/1998	Genesys Telecommunications Laboratories	Market transaction	CRM application
E*Trade	04/1999	ClearStation	Acquisition	Financial services
E*Trade	11/1998	Warburg Pincus	Alliance	Financial products

Control variables. We control for several effects, the first of which is Market opportunity. Market opportunity is measured each year by the value of the NASDAQ market at the end of the previous year. Also, we assume that the ownership status of firms entering the new market may impact governance choices. Publicly traded firms, in contrast to private firms, are more likely to engage into alliances and acquisitions. The Ownership Status dummy variable is used to identify this effect. The third control variable is the Age of the firm. Indeed, the older the firm the more embedded its organizational routines and hence, the lesser its flexibility vis-à-vis the new market.

4.4. *Statistical Method*

For the statistical test, we use the multinomial logit (MNL), which is the most commonly used method for testing our category of dependent variable, that is, an unordered and categorical dependent variable (Long and Freese, 2003).

4.5. *Results*

The means and standard deviation bi-variate correlations for key variables are shown in Table 3. Bi-variate correlations are reported in Table 4.

Results of the MNL are reported in Table 5.

Our results indicate that the later the timing of the entry move, the more the firm will rely on acquisitions and alliances to access new competencies vis-à-vis the market transaction

Table 3. Descriptive statistics

Variable	Obs.	Mean	Std. dev.	Min.	Max.
MODE ACC	917	3.562704	0.6248533	2	4
TIMING	917	1,998.646	1.239724	1,994	2,000
DEGREE SPEC	917	2.909487	1.83414	0	6
NASDAQ	917	2,373.157	168.986	752	4,069
OWNERSHIP	915	0.6229508	0.530181	0	7
AGE	899	15.46607	12.96345	0	182

Table 4. Bi-variate correlations

	MODE ACC	TIMING	DEGREE SPEC	NASDAQ	OWNERSHIP	AGE
MODE ACC	1.0000					
TIMING	-0.0312	1.0000				
DEGREE SPEC	0.0588	-0.0828	1.0000			
NASDAQ	0.0133	0.7990	-0.0751	1.0000		
OWNERSHIP	-0.0754	-0.0242	-0.1393	-0.0234	1.0000	
AGE	-0.0645	-0.0754	0.0338	-0.0616	0.1204	1.0000

Table 5. Results of the multinomial logit

	Acquisition // market transaction	Alliance // market transaction
<i>Independent variables</i>		
Timing	0.17 (0.17)	0.19* (0.11)
Degree of specificity	0.42*** (0.09)	-0.38*** (0.047)
<i>Control variables</i>		
Age of the firm	0.01 (0.01)	-0.013* (0.008)
Ownership	-0.03* (0.17)	-0.03 (0.16)
Nasdaq index	-0.001 (0.001)	-0.0002* (0.001)
Constant	-349.08 (350.37)	-378.97* (218.91)
Pseudo R^2	0.087	
Log likelihood	-686.705	
No. observations	897	

Values in parentheses are standard errors.

* $p > 0.9$; ** $p > 0.95$; *** $p > 0.99$.

mode. The coefficient of the variable Year of move is not significant for the Acquisition category. This result provides no support for Hypothesis 1a. Hypothesis 1b is fully supported ($p < 0.01$).

The coefficient of the variable Type of capability is positive and significant ($p < 0.001$) for the Acquisition category. Hypothesis 2a, which predicted that the more specific the type of capability the more a firm would rely on an acquisition, is fully supported.

The coefficient of the variable Type of capability is negative and significant ($p < 0.001$) for the Alliance category. This result is therefore contradictory to Hypothesis 2b, which predicted that the more specific the type of capability the more a firm will rely on an alliance rather than a market transaction.

Results for control variables are mixed. Being a publicly traded firm has a positive and significant impact ($p < 0.1$) on the propensity towards making an Acquisition while the effect on the Alliance mode is negative but insignificant. The Age of the firm has a positive but non-significant impact on the propensity towards making an Acquisition, while the effect on the Alliance mode is negative and significant ($p < 0.1$). The evolution of the Nasdaq index has a negative effect both on acquisitions and alliances but this effect is significant only for the latter mode ($p < 0.1$).

5. Discussion and Perspectives for Strategic Management

This paper has sought to develop a framework and an empirical study aimed at better understanding the strategies adopted by firms entering a new market. Our wish is to enrich

the existing knowledge on entry market strategies by adopting a less static and binary view than that which has prevailed up to now.

We have drawn upon several bodies of knowledge, using market entry, resource-based view and transaction cost arguments to develop a model integrating three dimensions: the type of move, the timing of the move and the degree of specificity of the capabilities to be accessed. We tested these hypotheses by using original data from the online brokerage market for the time period 1994–2000. Our sample comprised 897 observations split between acquisitions, alliances and market transactions.

The first insight supported by our data is that firms make choices based on the timing of the move: the later the move the more firms will favor non-market modes to access new competencies. Indeed, our empirical test indicated that firms would favor acquisitions and alliances to the detriment of market transactions. One explanation might be that, contrary to what is expected, environmental uncertainty, which is a key characteristic of new markets, leads firms to favor hierarchical or hybrid modes. By reducing the level of environmental uncertainty, the development of the market might reduce transaction costs associated with hierarchy. The diminishing reliance on market transactions might be a consequence of increasing reliance on hierarchical and hybrid modes.

The second major insight, and certainly the most striking one, is that market transactions are used to access specific capabilities. This is counter-intuitive both for the resource-based and the transaction cost economics paradigms. Among the modes available for accessing new competencies, market transaction is still the most flexible. By adopting market transactions, firms might therefore be leaning more towards flexibility than towards commitment. This explanation is in line with Pisano (1990) who showed that external sources could be used when firms face a make-or-buy decision in the aftermath of technological change.

A complementary explanation would be that suppliers or service providers with good control of some capabilities and competencies might enjoy a competitive position (Barney, 1986, 1991; Afuah, 2003), which makes signing market transactions with them an efficient solution for firms entering the new market.

To explain the limited recourse to alliances, another argument could be the diminishing interest of signing an alliance over time because of the decreasing number of partners available.

An alternative view might be that some firms entering the new online brokerage market did not possess enough internal resources to engage in alliances or acquisitions (or even internal development). Market transactions, even if considered less attractive from an efficiency standpoint, might therefore have been chosen as a default mode.

This research suffers from several limitations. Firstly, we caution against over-generalizing from our results. Only three governance choices for entry were observed. Also the small number of alliances observed limits our ability to discriminate with statistical power. Moreover, the Internet brokerage industry studied is not representative of all service industries.

Secondly, only three governance choices were studied and, as explained earlier, the internal development mode was not examined. Our data collection process—secondary data—did not allow us to observe directly the role of the internal development mode in market entry strategies. This is true even if we acknowledge the established role of internal growth for developing competencies, skills and capabilities to cope with innovation.

A third limitation is that the statistical method used constrains our analysis to having a category of reference, that is, the market transaction mode. The research used simple tests to see whether contrasts between selected dimensions and choices of governance occurred in the anticipated direction. Empirical support for our hypotheses indicates that the governance choice model for entry helps to explain some non-obvious predictions. However, an adequate test might require more complex modeling.

Moreover, in this study, we did not undertake a separate analysis for different sizes and categories of companies. Small and large firms, incumbents, startups or new entrants might very well adopt different strategies for entering a new market.

Finally, we want to conclude by identifying additional directions for future research that might prove fruitful. Indeed, much remains to be done to increase our knowledge of market entry strategies. Until now, market entry has mostly been seen as a static and finite process. Through this research, we advocate a more dynamic view of market entry over a continuum that better takes into account the tendency of current innovations to be complex and disruptive.

We do not account for the firm-specific characteristics that Mitchell (1989) and Schoenecker and Cooper (1998) found to be determinants of entry timing for incumbents moving into new subfields. In keeping with the resource-based view of the firm, future empirical research could use proxies such as entrepreneur's capabilities and/or past entry experience to explore determinants of entry timing for both incumbents and new entrants (Nelson and Winter, 1982; Teece *et al.*, 1997: 520–521).

Also we make no reference to learning dynamics and competitive implication. Indeed, entering through a particular governance form might very well have competitive consequences. For instance, entering through internal development will certainly help to establish certain routines that ease the further development of capabilities within the new market and hence give a competitive edge to firms entering through that mode.

Another area of research is related to service innovation. Technological innovation has received most of the attention of researchers but there is a deficit of studies on service innovation (Pennings and Harianto, 1992; Brouthers *et al.*, 2003).

Finally, incumbents are less likely to enter earlier than startups if for example the underlying knowledge is very different from the existing incumbent knowledge base. It would therefore be interesting to go deeper into the details of capabilities and co-specialized assets both for incumbents and *de novo* firms. Further research could also be done to test the impact of a high growth market on alternative strategic conducts.

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