

RESEARCH NOTE

What is “The Learning Filipino Firm”?

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“The learning Filipino firm” can be classified into three types, namely the *reactive firm*, which is a *reluctant learner*; the *adaptive firm*, which is an *eager learner*; and the *generative firm*, which is a *dynamic learner*. This typology is based on the hypothesis that a firm’s learning style and its innovative capability is influenced by its organizational design. Among the key dimensions that must be considered are as follows: (a) organizational strategy, (b) organizational structure, and (c) organizational culture. These dimensions are closely intertwined, and, therefore, collectively influence a firm’s ability to constantly renew itself.

Keywords: Innovation, learning firm, organizational culture, organization design

Doing business in the Philippines has become increasingly tough. This is the realization of many Filipino firms that face strong competition by companies from countries such as China, India, and Vietnam, which are able to significantly bring down the prices of their goods because of extremely low production costs. For many Filipino firms, especially those in traditional industries such as garments, footwear, furniture, and handicrafts, competing on the basis of price alone have just become impossible, with the high cost of production inputs (i.e., labor, raw materials, and electricity, among others). Many of these firms have, in fact, decided to fold up either because margins have become too thin or because continuing business operations have become an unprofitable proposition.

Some Filipino firms, however, have remained viable in spite of stiff foreign competition. This is largely because of their ability to offer differentiated, higher-end products that are valued

both in the domestic and international markets. Those that engage in technological upgrading have also enhanced their productivity and overall efficiency, consequently improving their ability to compete. Indeed, innovation has become extremely critical in enhancing the capability of firms to adjust to rapid changes in the business environment.

However, not all firms are willing to innovate or to upgrade their technological capabilities even if they recognize the need to do so. Literature provides us with some possible explanations (summarized in Table 1). Caputo, Cucchiella, Fracocchi, Pelagagge, and Scacchia (2002), for example, in an attempt to come up with a methodological framework for innovation transfer to small and medium enterprises (SMEs), identified obstacles typically faced by firms. These are high innovation costs, low customer interest in product innovation, high risks related to innovation activities, absence of financial resources, absence of skilled workers, regulations and technical

standards, organizational constraints, absence of information technology, and absence of market information.

Beise and Licht (as cited in Audretsch, 2004) identified the following barriers to innovation: too long a gestation period required for innovative activity, legal restrictions and restrictive government policies, long drawn-out processes for obtaining government approval for a new product, shortage of financial capital, lack of competent employees, and very high levels of risk.

Recognizing the various obstacles faced by Filipino businesses, particularly SMEs, the government has introduced policies and programs aimed at enhancing the technological capabilities of local firms and industries.

An example of this is the Small Enterprises Technology Upgrading Program or *SET-UP*, which is a nationwide program designed to improve the productivity of SMEs through technology upgrading. Under *SET-UP*, various types of services/interventions are made available to identified clusters or sectors. These services include technology selection, technology acquisition, technology training, process and

equipment design, packaging, productivity improvement, quality assurance, standardization, materials identification/selection, waste management, product improvement, and intellectual property rights (IPR) protection.

SET-UP serves as the unifying platform for existing government programs such as the Manufacturing Productivity Extension for Export Modernization Program or MPEX, Consultancy for Agricultural Productivity Enhancement or CAPE, S&T Enterprise Assistance Mechanism/ DOST-Academe Technology-Based Enterprise Development Program or STEAM-DATBED, Venture Financing Program, Pilot Plant Assistance Program of the Technology Application and Promotion Institute, and the specific technology transfer programs and projects like contract research, testing and calibration and other S&T services being provided by the R&D institutes and sectoral councils (Alabastro, 2004).

Also worth noting is the government's SME Unified Lending Opportunities for National Growth (SULONG) program, which is a key component of the country's SME Development Plan 2004-2010. SULONG is geared towards expanding the

Table 1
Obstacles/Barriers to Innovation

Nature of innovation	Internal constraints	External conditions
<ul style="list-style-type: none"> • High innovation costs • High levels of risks related to innovation • Long gestation period required 	<ul style="list-style-type: none"> • Absence or shortage of financial resources • Absence of skilled workers / lack of competent employees • Other organizational constraints 	<ul style="list-style-type: none"> • Low customer interest in product innovation • Absence of information on technology • Absence of market information • Restrictive government policies; legal restrictions • Bureaucratic red tape for product approvals

Source: Caputo et al. (2002); Beise and Licht (as cited in Audretsch, 2004)

enterprise base by graduating micro, small and medium enterprises to higher levels of classification by providing them with more access to government assistance. *Sulong* is a Filipino word which means “move forward”, and is an appropriate rallying call to make SMEs an even more productive sector (Leano, 2006).

SULONG is the result of collaboration among various government financial institutions (GFIs). Under the program, GFIs apply simplified and standardized lending procedures and guidelines (e.g. standardized application procedures, requirements, fees, and interest rates) to provide SMEs with greater access to capital. Participating GFIs include Land Bank of the Philippines, Development Bank of the Philippines, Small Business Corporation, Quedan and Rural Credit Corporation, Philippine Export-Import Credit Agency, and the National Livelihood Support Fund (Leano, 2006).

However, many of these technological upgrading programs and financial incentives offered by government are undersubscribed. One reason for this is that many firms have limited absorptive capacity, partly because of the lack of worker skills and partly because of deficiencies in managerial competence and capability. Some firms are not aware of these programs and incentives, while others simply refuse to go through the bureaucratic requirements of availing of these services. A distinct possibility too is that many of these programs do not consider the different needs of firms and their unique circumstances.

A clearer understanding of the motives of firms for undertaking innovation and technological upgrading would be helpful in redesigning the various government programs and services meant to help local businesses. It is likely that different firms have different requirements, different resources, and unique characteristics and circumstances that affect their receptiveness to services offered not only by government, but also by industry associations and even by other concerned groups.

This study aims to contribute to a better understanding of issues related to learning and

innovation processes that take place within local firms, and how organizational characteristics influence these processes. This study has the following specific objectives:

- To discuss the importance of organizational learning and innovation in enhancing the competitiveness of Filipino firms
- To discuss the factors that affect firms' ability to innovate
- To present a conceptual model of various types of “the learning Filipino firm”
- To identify possible areas of inquiry that will enhance our understanding of innovation and learning that takes place in Filipino firms

THEORETICAL / CONCEPTUAL FOUNDATIONS

This section begins with some basic concepts concerning innovation and the innovation process. It also contains a review of relevant literature on the factors that affect innovation, followed by some key findings about innovation in SMEs and the environmental context of innovation. There is also a discussion of concepts such as the absorptive capacity of firms, the learning organization, and the relationship of organizational culture and learning. These feed into the proposed conceptual model of “the learning Filipino firm”, which is presented later in this study.

Innovation and The Innovation Process

McAdam and Armstrong (2001) defined innovation as the harnessing of creative ability within individuals and the workforce in response to change, by doing things differently or better across products, processes or procedures. Their definition is an attempt to integrate previous definitions derived from literature (Mogee & Schact, 1980; Drucker, 1985; Mole & Elliot, 1987; Gobeli & Brown, 1994).

For other authors, ‘innovation’ must be

distinguished from ‘upgrading’. Kaplinsky and Morris (2003), for example, defined ‘innovation’ as the ability to ensure continuous improvement in product and process development and ‘upgrading’ as innovation that is placed in a relative context, that is, how fast the process is undertaken compared to competitors. Giuliani, Pietrobelli, and Rabellotti (2003), on the other hand, defined upgrading as innovating to increase value added, one that can be achieved by entering higher unit value market niches, by entering new sectors, or by undertaking new productive (or service) functions. (In spite of the distinctions made, we sometimes use the terms ‘innovation’, ‘upgrading’, and ‘technology upgrading’ interchangeably in this paper.)

Tidd, Bessant and Pavitt (1997) offer a useful framework for determining the type of innovation adopted by firms. They said that innovation can be reckoned in terms of what is changed (i.e., product, service, or process) and of the perceived extent of change (i.e., incremental transformation and radical transformation). An alternative would be the classification scheme utilized by Kaplinsky and Morris (2003) and by Humphrey and Schmitz (2003), which identified four trajectories that firms can adopt in pursuing the objective of upgrading: process upgrading, product upgrading, functional upgrading, and chain (or inter-sectoral) upgrading.

For Virasa and Tangjitpiboon (2000), technological innovation activities are all those scientific, technological, organizational, financial and commercial steps that actually, or are intended to, lead to the implementation of new or improved products and processes. The main activities involved are the acquisition of knowledge (e.g., patents, licenses, technical services, etc.), the acquisition of machinery and equipment, and various other preparations for production delivery, including tooling up, staff training, marketing, and R&D.

According to Rothwell (as cited in Smith, 2006), there are at least five models of the innovation process, namely the technology-push model, the demand-pull model, the coupling model, the integrated model, and the network model.

Technology-push process. This model is the traditional perspective on the process of innovation, which is seen as largely driven by developments in science and technology. It assumes that more technology, brought about by traditional expenditure in R&D, will lead inexorably to more innovation. The process is linear and sequential. It virtually ignores the marketplace, which is seen simply as taking what technology has to offer.

Demand-pull process. In this model, the role of the market is central, that is, the market forms the source of ideas for new innovations. Knowledge of consumer requirements is seen as driving research and development rather than the other way around. While this model provides a useful reorientation of our understanding of the innovation process, it has its own weaknesses (Smith, 2006). There is a danger that companies that follow this model might simply devote their resources to providing innovations that offer very modest improvements in product performance to meet the apparent needs of their customers, while they ignore emerging new technologies that may later lead to radical innovations (Smith, 2006). Technological incrementalism can lead firms to lose their capacity to innovate since they could not divorce themselves from old technology, which is eventually displaced by the new.

Coupling model process. To address the weaknesses of the technology-push and demand-pull process models, the coupling model evolved. The process is still essentially linear and sequential just like the earlier models. In this model, though, both technology and the market are influential. Technology enhances the state of knowledge within the broader scientific and technological community, while the market works to express wider consumer needs and expectations. New ideas are the product of both. The crucial difference between this model and earlier ones is the presence of feedback loops (Smith, 2006).

Integrated model process. According to Smith (2006), developments in technology, both in the

computing and the communications fields, led to the introduction of IT-based manufacturing systems that shortened product life cycles. Moreover, new ideas about manufacturing management (e.g., just-in-time production) came into the picture. Among the most powerful ideas were the notions of concurrent or parallel development, which, when applied to new product development, implies an end to strictly linear and sequential processes. Project teams, for example, integrate the various functions in an organization. Under such arrangements, the functions are brought into the new product development process from the start; therefore, issues such as manufacturability are considered early in the process rather than near the end. Team-based product development, therefore, represents a much more integrated process.

Network model process. This process is described by Rothwell (1994) as a 'fifth-generation' innovation process. It reflects the way in which some organizations increasingly rely not on their own internal resources for innovation, but instead draw on external resources through alliances, agreements and contracts with third-party organizations. According to Smith (2006), the use of networks reflects continuing developments in computing and communications that have facilitated the transfer of information and have facilitated outsourcing arrangements, whereby organizations focus on their core activities and simply obtain the services of other companies for non-core activities. For example, developments in biotechnology have fostered the growth of small specialist biotechnology companies on which large pharmaceutical companies increasingly rely as a source of innovation. The use of this approach is largely driven by rising consumer expectations. Companies that are anxious to provide their customers with ever greater choice have increasingly sought to look outside their own organizations for ideas and technologies.

Factors that Affect Innovation

Damanpour (1991), who conducted a meta-analysis of previous organizational innovation

research, examined the relationships among 13 variables identified from previous studies that were theoretically identified as determinants of innovation. These included structural, cultural, resource, and process variables. Significant positive relationships were found between innovation and specialization, functional differentiation, professionalism, managerial attitude towards change, technical knowledge resources, administrative intensity, slack resources, and external and internal communication. On the other hand, a significant negative relationship was found between innovation and centralization, which is consistent with the findings of Link and Bozeman (as cited in Audretsch, 2004) and Scherer (as cited in Audretsch, 2004), who said that innovation is driven by an organizational environment free of bureaucratic constraints. The study also concluded that type of organization and scope of innovation had a significant moderating effect on the relationships between these variables and innovation.

Damanpour's findings prompted Gudmundson, Tower, and Hartman (2003) to conclude that the innovation process is complex, an observation shared by other innovation scholars such as Tidd et al. (1997), who said that technological opportunities and threats are often difficult to identify, innovation strategies are difficult to define, and outcomes are difficult to predict.

Gudmundson et al. (2003) summarized several innovation models that attempted to explain the innovation process. These include the models developed by West and Farr in 1989 (as cited in Gudmundson et al., 2003), by Woodman, Sawyer, and Griffin in 1993 (as cited in Gudmundson et al., 2003), and by Hauser in 1998 (as cited in Gudmundson et al., 2003).

The model of West and Farr (as cited in Gudmundson et al., 2003) dwelt on individual innovation at work. In this model, facilitators of innovation included characteristics that were intrinsic to the job, group factors, relationships at work, and organizational factors. The relationship between these variables and innovation was moderated by individual characteristics. The model

developed by Woodman et al. (as cited in Gudmundson et al., 2003), which is referred to as an interactionist model of organizational creativity, included various individual, group, and organizational characteristics and portrayed their theoretical relationship to creativity. Finally, the conceptual model of the innovation process, as developed by Hauser (as cited in Gudmundson et al., 2003), suggested that organizational culture plays a key role in the innovation process.

The Context of Innovation

Innovations undertaken by firms do not take place in a vacuum, since firms are open systems that operate within a broader business environment. Businesses must take into consideration the industry and sector to which they belong, their relative size within their industry, the life cycle of technology, and their relative position in supply chains. Worth noting, therefore, are the studies done by Gereffi (1994, 1999, 2001) and other scholars building on his work (Schmitz & Knorrige, 2000; Bair & Gereffi, 2001; Bazan & Navas-Aleman, 2001; Humphrey & Schmitz, 2003). These studies provide empirical evidence that innovation and upgrading practices of firms are influenced by how they are inserted in global value chains and by their relationships with other productive players in the chain.

There has also been increasing awareness that innovation implies processes of change undertaken by firms that are affected by a broad set of economic, political, social, cultural, scientific and technological issues (Arocena & Sutz, 2000). It is in the general framework or 'climate' generated by these issues that firms decide and undertake innovative activities. This gave rise to the concept of national innovation system (NIS), which can be defined as a historically grown subsystem of the national economy in which various organizations and institutions interact with and influence one another in the carrying out of innovative activity (Balzat & Hanusch, 2004). This means that innovative activity must be reckoned beyond the product and process innovations of firms and industries. Factors such as learning processes,

incentive mechanisms, or the availability of skilled labor, as well as the interplay between organizations and institutions, must be highlighted as well (Balzat & Hanusch, 2004).

Absorptive Capacity of Firms

The theory of absorptive capacity integrates both the external dimension of innovation, which is concerned with the evolution of technology, and the internal dimension, which is concerned with learning and the knowledge transfer process within the innovating organization (Smith, 2006). Absorptive capacity is the ability of the firm to recognize the value of new, external information, assimilate it and apply it to commercial ends (Cohen & Levinthal, 1990). It emphasizes an organization's ability to learn, which is affected by three critical factors, namely exposure to relevant knowledge, presence of prior related knowledge, and diversity of experience (Cohen & Levinthal, as cited in Smith, 2006).

Exposure to relevant knowledge means that the organization and its staff must utilize appropriate networks that will allow them to keep abreast of developments in the field. However, the ability to recognize the value of new knowledge and to assimilate it into the organization is a function of the accumulated prior knowledge within the organization. In other words, assimilation requires that knowledge be evaluated, which, in turn, requires prior knowledge. This learning process is the reason why diversity of experience is important – the greater the range of experience within the organization, the greater the scope for recognizing external ideas and stimuli (Cohen & Levinthal, 1990; Smith, 2006).

The theory of absorptive capacity gives us valuable insights on why some firms find it difficult to innovate even when they have access to external knowledge, and on why networks and networking can be so important to innovation. However, the theory's greatest strength is that it brings together a number of ideas (i.e., technological evolution, the learning process, and networking), thus offering a powerful tool for analyzing innovation (Smith, 2006).

Organizational Learning

Organizational learning is basically how learning takes place in a particular organization. Castaneda and Rios (2007) elaborate by saying that organizational learning is a process that institutionalizes individual learning to enable an organization to adapt to environmental changes or to proactively change the environment, depending on its level of development.

Organizational learning can be viewed from several perspectives. From a cognitive perspective, it is assumed that individual learning, taken together, will result to organizational learning. From a behavioral perspective, organizational learning is considered a process that entails application and utilization of learning and is measured through behavioral outcomes. From the technical perspective, organizational learning is defined as the processing and interpretation of information from inside or outside the organization. From the social perspective, learning is treated as inseparable from the social interaction and engagement in work practice.

Literature provides us with various definitions of organizational learning. Many of these consider organizational learning as a process that involves the transformation of information into knowledge (e.g., Argyris & Schön, 1978, 1996; Fiol & Lyles, 1985; Huber, 1991). Whether the information processing (i.e., information acquisition, interpretation, and storage in organizational memory) extends to behavioral and cognitive changes is where the differences surface. Chen (2005), for instance, says that organizational learning refers to the process in which an organization continuously adjusts and/or changes itself by utilizing and enriching organizational knowledge resources in an effort to adapt to both external and internal environmental changes to maintain a sustainable competitive advantage.

Organizational Culture and Learning

According to Rashman, Withers, and Hartley (2008), organizational culture that encourages

trust, cross-boundary networking and risk-taking can support organizational learning. This culture involves questioning of established assumptions; challenge and critique (without blame) the work of others; and sharing of knowledge and resources and freedom to make mistakes.

Organization culture consists of the shared beliefs, the ideologies, and the norms that influence organizational action-taking (Beyer, as cited by Fiol & Lyles, 1985; Pfeffer, as cited by Fiol & Lyles, 1985; Mitroff & Kilmann, as cited by Fiol & Lyles, 1985). According to Miles, Snow, Meyer, and Coleman (1978), a firm's choice of strategic posture is tied closely to its culture; likewise, broad belief systems partially determine strategy and the direction of organizational change. Clearly, these norms influence the behavioral and cognitive development that the organization can undergo. In turn, change and/or learning in organizations often involve a restructuring of those broad norms and belief systems (Argyris & Schön, 1978, 1996).

According to Mahler (1997), specific elements of an organization's culture may affect the capacity of the organization to learn and may influence what it learns and how it learns. Writers in the field of organizational learning typically assign one of three roles for organizational culture to play in learning: (a) storehouse for past history and lessons to be passed on through socialization (Levitt & March, as cited in Mahler, 1997; Walsh & Ungson, as cited in Mahler, 1997; Schein, as cited in Mahler, 1997); (b) interpretive filter through which members view events and their own actions (Shrivastava, as cited in Mahler, 1997; Hedberg, as cited in Mahler, 1997; Levitt & March, as cited in Mahler, 1997); or (c) source of strategy and action (Hedberg, as cited by Mahler, 1997).

The Learning Organization

The rationale of studies on learning organizations, as exemplified by the works of Donald Schon (1973) and Peter Senge (1990), is the need to provide models that real organizations could emulate (Easterby-Smith, Burgoyne, & Araujo, 1999), or to establish some ideal towards

which organizations have to evolve in order to be able to respond to various pressures they face (Finger & Brand, 1999).

Learning firms, in particular, are expected to engage in various forms of innovation (i.e., product innovation, process innovation, organizational innovation) that create added value for their customers, therefore enhancing their chances of survival in an increasingly competitive business environment. The link between learning and innovation is captured by Todtling and Kaufman (2002), who defined innovation as a dynamic social system based on the central activity of learning.

Scholars like Kerka (1995), however, have yet to agree on a common definition of the learning organization. Senge (1990), for instance, explained that learning organizations are organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. Pedler, Burgoyne, and Boydell (1991) said that a learning company is an organization that facilitates the learning of all its members and continuously transforms itself, while Watkins and Marsick (1992) described learning organizations as being characterized by total employee involvement in a process of collaboratively conducted, collectively accountable change directed towards shared values or principles. Finally, Garvin (1993) defines the learning organization as an organisation skilled at creating, acquiring, and transferring knowledge and at modifying its behaviour to reflect new knowledge and insights.

PROPOSED CONCEPTUAL MODEL OF “THE LEARNING FILIPINO FIRM”

Drawing from the rich literature in the fields of organizational theory, organizational culture, organizational learning, business strategy, and innovation, this study proposes a typology of firms according to their learning styles: reactive firms, adaptive firms, and proactive firms (see Table 2).

Understanding the learning style of firms and their corresponding readiness to undertake innovation will be very useful to several parties, namely the *company's management*, especially those who aim to introduce new technology and other changes in their organizations; *business consultants* who are expected to introduce interventions to improve the business performance of their clients; and various institutions that promote technological upgrading among firms (including government agencies, technical training institutions, and industry associations).

The typology presented below provides a starting point for those who seek to understand the relationship of various organizational dimensions to the ability of firms to renew themselves through learning and innovation.

Reactive Firms

Reactive firms have a *non-adaptive* organizational culture. In this type of culture, according to Kotter and Heskett (1992), managers care mainly about themselves, their immediate work group, or some product (or technology) associated with that work group; they value the orderly and risk-reducing management process much more highly than leadership initiatives. As a result, managers tend to be somewhat isolated, political, and bureaucratic; they do not adjust their strategies quickly to take advantage of changes in their business environments.

In terms of organizational strategy, reactive firms are likely to adopt either the reactor or defender strategy. According to the Miles and Snow strategy typology (Miles et al., 1978), the *defender strategy* is concerned with stability. Under this strategy, a company seeks to hold onto current customers, but neither innovates nor seeks to grow. The defender is concerned primarily with internal efficiency and control to produce reliable, high-quality products for steady customers. The *reactor strategy*, on the other hand, is not really a strategy at all. Rather, reactors respond to environmental threats and opportunities in an ad hoc fashion. In a reactor strategy, top management has not defined

Table 2*Organizational Dimensions and the Learning Styles of Filipino Firms*

Organizational dimensions and other characteristics	Types of firms according to learning styles		
	Reactive firms (Reluctant learners)	Adaptive firms (Eager learners)	Generative firms (Dynamic learners)
Organizational culture (adapted from Kotter & Heskett, as cited in Daft, 2004)	• Non-adaptive	• Adaptive	• Highly adaptive
Organizational strategy (Miles et al., 1978)	• Reactor or defender	• Analyzer	• Prospector
Organizational structure (Daft, 2004)	• Largely mechanistic	• Largely organic	• Organic
Primary driver	• Profitability; survival	• Growth; customer requirements; competitive pressures	• Core values; mission
Focus	• Internal stability	• External adjustment	• Internal renewal
	• Risk reduction		• Risk taking
	• Control	• Flexibility	• Creativity
Innovation propensity	• Low to moderate	• Moderate to high	• High
Willingness to collaborate	• Low trust in outside parties	• Open to collaboration	• 'Boundaryless organization'
General attitude towards change	• Resistant to change	• Open to change	• Seeks change

a long-range plan or has not given the organization an explicit mission or goal. As a result, the organization simply acts in response to immediate needs (Daft, 2004).

In terms of organizational structure, reactive firms are typically mechanistic, meaning that they have a lot of formal rules and rigid management processes. Decision-making is also highly centralized. It should be qualified, though, that within organizations, the structure of units or departments could differ depending on the technology utilized by individual units or departments.

Adaptive Firms

Adaptive firms, as the term suggests, have an *adaptive* organizational culture. In this type of culture, managers care about customers, stockholders, and employees. They also strongly value people and processes that can create useful change. Managers, thus, initiate the necessary change to serve the legitimate interests of their customers, even if it entails taking some risks (Kotter and Heskett, as cited by Daft, 2004).

In terms of organizational strategy, adaptive firms are likely to adopt the *analyzer strategy*. Under the Miles and Snow typology, analyzers try to maintain a stable business while innovating on the periphery. Some products will be targeted toward stable environments, while others will be targeted toward new, more dynamic environments, where growth is possible. Analyzers will attempt to balance efficient production for current product lines with the creative development of new product lines (Daft, 2004).

In terms of organizational structure, adaptive firms are likely to be largely organic, meaning that the structure is less formal and less standardized; decision making is also more decentralized compared to mechanistic structures.

Generative Firms

Generative firms have an extremely adaptive organizational culture, where risk taking and creativity are highly valued. These firms are driven strongly by their core values, and are probably best exemplified by what Collins and Porras (2002) have identified as ‘visionary companies.’

In terms of organizational strategy, proactive firms are likely to adopt the *prospector strategy*. Under the Miles and Snow typology, prospectors innovate, take risks, and seek out new opportunities for growth. This strategy is suited to a dynamic, growing environment, where creativity is more important than efficiency. In terms of organizational structure, generative firms are organic, meaning that it is flexible, fluid, and highly decentralized (Daft, 2004).

Other characteristics of these three types of firms are summarized in Table 2. Reactive firms may also be referred to as reluctant learners; adaptive firms may be referred to as eager learners; while generative firms may be referred to as dynamic learners.

POSSIBLE AREAS OF INQUIRY ON “THE LEARNING FILIPINO FIRM”

The typology presented in the previous section serves as a useful framework for identifying areas that could be further examined to enhance our understanding of learning processes and innovation processes that take place within Filipino organizations. This is summarized in Table 3.

The insights gained from these studies will be particularly useful to policymakers and to government agencies, who could now redesign existing programs and incentives (or introduce new ones) to fit the specific requirements of local firms. Business professors, business consultants, and other organizational development (OD) practitioners can utilize the findings derived from these studies to design modules that can be used for classroom activities and for managerial development programs.

Table 3*Proposed Studies on “The Learning Filipino Firm”*

Areas of inquiry	Proposed studies
Organizational strategy	<ul style="list-style-type: none"> • The external adaptability of Filipino firms and their innovation activities • Innovation strategies of Filipino firms in selected industries
Organizational structure	<ul style="list-style-type: none"> • Structural characteristics of Filipino firms and their effects on organizational learning • Effects of ownership and management structures of Filipino family businesses on organizational learning
Organizational technologies	<ul style="list-style-type: none"> • Effect of technological upgrading on the organization design of Filipino firms • Case studies of successful commercialization of technology in Filipino firms
Organizational culture	<ul style="list-style-type: none"> • Organizational culture, learning, and innovation in Filipino firms • Case studies of entrepreneurial Filipino firms in selected industries • Innovation and the sustainability of Filipino family businesses
Organizational learning and change	<ul style="list-style-type: none"> • Innovation processes and activities of Filipino firms in selected industries • Human resource development strategies of SMEs and organizational change • Worker empowerment and organizational learning in Filipino firms
Interorganizational relationships	<ul style="list-style-type: none"> • Innovation of SMEs engaged in subcontracting arrangements with large firms • Knowledge transfusion and technology transfer in Philippine supply chains • Innovation of Filipino SMEs inserted in global value chains

CONCLUSION

To conclude, it must be emphasized that each firm is distinct and has unique organizational characteristics that are a product of its organizational history. A firm develops a certain organizational structure in an attempt to integrate its various functions and in response to pressures in the business environment. Consequently, the resulting organizational culture affects its ability to undertake needed organizational change, including its ability to adopt new technology, to upgrade its processes, and to introduce new products and services that are of value to its customers. Recognizing this fact is essential if we are to succeed in helping local firms in their attempt to renew themselves and to ensure their viability and commercial success in a highly competitive world.

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