



Small Firm Innovation and Strategic Competitiveness: The Role of Firm Infrastructure

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ABSTRACT

This investigation found that a firm's infrastructure--it's operating policies and procedures, human resource management practices and compensation strategy-- and the attitudes of its leadership play a critical role in determining whether or not innovation will occur in small firms. An investigation of 13 firms in the services industry indicates that leaders and other top-level managers must establish infrastructures that enable innovation and also must encourage innovation for it to exist and for the firm to be strategically competitive. Findings indicate that innovation initially was externally imposed under conditions of little to no organizational slack. By encouraging innovation with a supportive infrastructure--operating policies and procedures, human resource management practices and compensation strategy--a firm's top-level managers ensure that it continues in a self-generating mode.

Small Firm Innovation and Strategic Competitiveness: The Role of Firm Infrastructure

A firm's ability to innovate successfully is critical to its ability to achieve strategic competitiveness (Hitt, Hoskisson & Ireland, 1990). As noted by numerous researchers (e.g., Butler, 1988; Miller, 1989), the need for innovation is critical for all firms because of the rapid pace and unpredictability of technological change (Schonberger, 1996) as well as the increasing speed with which competitors often are able to bring new products, services and processes to market (Teece, 1987). Innovation also is important because it can result in competitive advantage if the innovation is difficult for competitors to imitate, provides value to customers and can be successfully exploited commercially (Franko, 1989; Lengnick-Hall, 1992).

Entrepreneurship is important to innovation and a firm's strategic competitiveness because it represents the commitments, attitudes, actions and relationships within a firm that enable it to develop, encourage and manage innovation (Dougherty, 1992; Jones & Butler, 1992). In other words, it is a firm's ability to align and manage its resources, capabilities and processes that makes innovation successful (e.g., Frontini & Richardson, 1984).

Innovation is defined to enable the broadest possible applicability of findings and to identify multiple strategies that firms might follow to achieve strategic competitiveness. For this investigation, innovation includes the introduction of new services, the development of new processes, the penetration of new markets (Schumpeter, 1934: 66) and the process of adapting ideas, processes or services from other settings in response to problems or opportunities facing the firm (Glynn, 1996).



This definition takes advantage of Stopford and Baden-Fuller's position that "...all types of entrepreneurship are based on innovations that require changes in the pattern of resource deployment and the creation of new capabilities to add new possibilities for positioning in markets" (1994: 522). As the focus of this investigation, innovation represents the successful development and introduction of services or processes that are new to the firm in both familiar and new markets. Thus, entrepreneurship and innovation are linked in this investigation.

Innovation in Small Firms

Previous research in innovation and entrepreneurial behavior indicates that small firms are more likely to be innovative than are large firms (e.g., Hitt et al., 1990). This raises interesting research questions: Are all small firms able to identify and develop the structural characteristics (e.g., the firm's infrastructure) that will enable them to encourage entrepreneurial behavior and innovation? Are some small firms innovative while others are not? If so, why?

This project investigates the effects of small firms' infrastructure--operating policies and procedures, human resource management (HR) practices and compensation strategies --as supported by the firms' leadership on a firm's ability to encourage and support an atmosphere of entrepreneurship and innovation. In other words, does how a firm is organized and managed make a difference in its ability to encourage innovation and entrepreneurial behavior?

This investigation was conducted using a qualitative research strategy and concentrated on delving deeply into the process of innovation in a limited number (13) of firms in the services industry. While on the surface, this approach may limit the generalizability of findings, it also may be appropriate because, by being more intrusive and placing oneself inside of situations to observe the flow of activities, a researcher is better able to systematically search for patterns and consistencies that may actually improve generalizability and provide better explanations for the activities and relationships that have been observed (Luthans & Davis, 1982; Mintzberg, 1979).

Firm Infrastructure: A Potential Barrier to Innovation

If internal and external entrepreneurs do not differ significantly in their individual characteristics (Brazeal, 1993; Shaver, 1995), why do traditional managers seem to be more satisfied when working in established firms than entrepreneurs? This satisfaction/dissatisfaction may be because of the existence of a firm's routines (e.g., its policies and procedures) that serve as barriers that inhibit innovative or entrepreneurial behavior (Dougherty, 1992) as firm structure and bureaucratic processes have been identified as barriers to innovation (e.g., Frontini & Richardson, 1984; Guth & Ginsberg, 1990; Lant & Mezias, 1990).

These barriers are believed to exist because of a firm's need to prevent agency problems that might occur between principals or owners and a firm's managers (Jones & Butler, 1992). Because of traditional salary-based compensation schemes, managers may infer that they should avoid excess risk. This may especially be the case if a firm's reward system effectively penalizes nontraditional risk-taking (Quelch, Farris & Olver, 1987). However, encouraging innovation does not necessarily mean that a firm must seek high levels of risk. As indicated by Stevenson and Gumpert (1985), organizations may display innovative behavior as a strategy for spreading



risk among a number of diverse activities, projects or products. In other words, following a proactive approach to innovation is not the same as taking high risks (Stopford & Baden-Fuller, 1994). In fact, innovation may be perceived by some firms as an appropriate risk-reduction strategy.

In addition to traditional compensation schemes, other internal barriers to innovation also may exist. These include relations between departments, market definitions and product standards (Dougherty, 1992) as well as firms' processes that may effectively penalize unsuccessful innovation efforts (Frontini & Richardson, 1984; Stevenson & Jarillo, 1990).

Research also indicates that management processes may stifle innovation (e.g., Collier, 1983; Dougherty, 1979) by limiting interactions among individuals and functional areas (Dougherty, 1990). As firms evolve, they also may fail to implement an infrastructure--the operating policies and procedures, HR practices and compensation strategy and leadership styles--necessary to encourage collaboration across the firm or to integrate decision-making processes (Hlavacek & Thompson, 1976).

It also is possible that innovation may be restrained by a firm's culture or its "way of doing things." These restraints often exist when a firm's policies and procedures or operating norms set out how--as well as if and when--the firm's resources can be appropriated for innovation purposes (Starr & Macmillan, 1990). Other firm characteristics identified in previous research as having an effect on innovation are participative decision-making, staff specialization, shared performance objectives, a higher-than-average tolerance for failure, the relative priority of planning systems as opposed to control systems and the financial criteria used to assess the "value" of innovation (e.g., Jennings & Lumpkin, 1989; Lengnick-Hall, 1992). A firm's organizing capabilities and its culture might serve the firm well in many instances, but may not be appropriate when attempting to pursue innovation. Thus, it is possible that a firm's infrastructure serves either to enhance or minimize entrepreneurial behavior by serving as a barrier to innovation.

The presence (or absence) of slack or excess resources also is related to innovation (e.g., Bourgeois, 1981; Meyer, 1982). Slack has been proposed as an important attribute that can enable experimentation or innovation because it protects a firm from the downside risks that accompany the uncertain outcomes of innovation (Bourgeois, 1981). However, Nohria and Gulati (1996) indicate that slack also may effectively result in less discipline over innovative projects.

In attempts to link slack to entrepreneurship and innovation, researchers also argue that firms innovate either because it is necessary to ensure the firm's survival following a period of complacency (Tushman & Romanelli, 1985) or because alternative opportunities have been identified (Cyert & March, 1963). In other words, firms are characterized as supporting innovation only when forced to do so by external factors or when strategic choices are made to pursue innovation that enables them to take advantage of opportunities that have been identified (e.g., Hrebiniak & Joyce, 1985).



For this investigation of innovation in small firms, the broad research questions--Are all small firms able to identify and establish an infrastructure that will enable them to encourage entrepreneurial behavior and innovation? Are some small firms innovative while others are not? If so, why?--have been subdivided into four sub-questions:

1. Is innovation self-generating or perceived as imposed on the firm by the environment?
2. Is the presence of organizational slack--excess resources--perceived as providing opportunities for experimentation and creativity or does slack result in firm complacency?
3. Is innovation treated as predictable, using traditional investment and return criteria, or as a creative option for the generation of possible alternatives?
4. Do a firm's operating policies and procedures, HR practices and compensation strategy as enforced by its leadership encourage or inhibit innovation?

Sample and Methodology

This investigation of relationships between the characteristics of a firm's infrastructure and innovation was conducted by using a qualitative research methodology. A qualitative approach was selected to provide the principal researcher with an opportunity gain a better understanding of the dynamic nature of interactions among people in organizations and among the people, the organization, the situation being investigated and the environment (e.g., Luthans & Davis, 1982). The methodology employed structured interviews, a review of proprietary and publicly available information, and observation of innovation processes in 13 services-industry firms in the southwestern United States over an 18-month period, from March 1998 through August 1999.

The design of the investigation, while it does not provide for the elegance of statistical hypothesis testing, hopes to provide richer insights into how innovation in small firms might be either encouraged or discouraged by the characteristics of a firm's infrastructure. A qualitative investigation is proposed as appropriate for investigating innovation in organizations as it should enable the researcher to overcome the morphogenetic problem, that organizations and the people working in them rarely remain constant or behave consistently and generally can be observed to change over time (e.g., Kimberly, 1980).

While employing a qualitative methodology has the advantage of providing a detailed and richer account of the topic being investigated, it also must be recognized that it potentially limits the degree of the generalizability of findings (Bateman & Ferris, 1984). At the same time, it has been proposed as an appropriate strategy for investigating and reporting findings of imperfect models of organizational reality by expanding our understanding of relationships by assessing a few organizational dimensions (Daft, 1983), in the present instance, the dimensions of an organization's infrastructure and their relationship to innovation.

Survey Instrument

The principal researcher developed a multiple-item survey instrument by revising the instrument developed by Kuratko, Montagno and Hornsby (1990) to better fit the parameters



being investigated. The survey instrument was field-tested with a five-person sample of managers of small service-industry firms. Following this field test, the instrument was revised to remove any sample-perceived ambiguity to ensure that the meaning of each question was unambiguous. The revised instrument was used by the principal researcher to record observations of the innovation process and to conduct structured interviews with 42 managers in 13 firms in six service industries in the southwestern United States. Whenever possible, meetings and interviews were tape-recorded and subsequently transcribed. When recording was inappropriate, the principal researcher relied on extensive note-taking and these notes were then transcribed.

The principal researcher then coded and interpreted these notes. To overcome potential researcher bias, two colleagues experienced in entrepreneurship and innovation-related research were instructed to code and interpret a random sample of these notes using the same coding scheme. The codings and interpretations of these colleagues agreed with each other and with the coding and interpretations of the principal researcher in 92.4% of the codings and 90.3% of the subsequent interpretations. Taken together, these checks enhance the reliability of the coding and interpretation (Weber, 1990). The survey instrument is described more fully in Table 1.

Table 1
Items Included in Structured Interview Instrument

- Organizational resources:
 - Availability of funding
 - Options for financial support
 - Firm profitability
 - Budget constraints
- Innovation perspective:
 - Top management support
 - Top management experience with innovation
 - Competitive situation
- Human resource practices:
 - Rewards and compensation
 - Promotions
- Policies, processes, structure:
 - Creativity encouraged
 - Team structure and autonomy
 - Mistakes treated as learning experience

(A copy of the complete survey instrument is available
from the principal researcher upon request.)

Industry Setting

The services industry was selected as the focus of this investigation to minimize any inconsistencies that might result from including multiple--service and manufacturing--industries



(Fiol, 1996; Wolfe, 1994) and because of the intangible nature of services. This intangibility is important because developing and delivering new services relies primarily on a firm's human resources, a set of resources that is less subject to imitation than its physical resources or tangible products (Barney, 1991; 1995). Innovations based on firms' intangible resources also should be less subject to imitation and should enable firms to achieve and maintain strategic competitiveness until competitors are able to understand and imitate the source of the innovation (e.g., Lengnick-Hall, 1992; Porter, 1985). The six service industry subgroups, number and characteristics of firms surveyed and the number of managers interviewed are presented in Table 2.

During this investigation, the principal researcher had several opportunities to observe the dynamics of the innovation process. These opportunities enabled the researcher to partially verify interview responses and learn more about how well the innovation process worked (or did not work) in practice in the 13 firms surveyed. At the same time, the researcher, by being inside of organizations is better able to use anecdotal data to support observations and is in a position to provide better explanations of the activities observed (Mintzberg, 1979).

Table 2
Characteristics of Firms and Managers Interviewed

Industry	Number of		Number of Managers Interviewed ²	Annual Revenues (millions of \$) ³
	Firms	Employees ¹		
Advertising	3	10-38	14	\$ 2.8 - 10.2
Architecture	2	22-55	7	5.0 - 12.1
Automobile Sales	2	120-135	5	10.0 - 13.3
Banking	2	132-155	8	11.5 - 13.4
Hospitals	2	500-980	4	10.1 - 14.3
Law	2	54-89	4	10.0 - 12.1
6 Industries	13 firms	10-980 employees	42 managers	\$ 2.8 -14.3 million

1. For firms participating in this investigation, the range of employment size is provided.
2. Of the 42 managers interviewed, 13 (one from each firm) were top-level or senior managers; the other 29 (no less than two from each firm) were middle managers. This resulted in a minimum of three respondents per firm. One-fourth of all managers interviewed were female; this ratio was not significantly different from the male-female ratio of managers in each of the subject firms.
3. For firms participating in this investigation, the range of annual revenues (in millions of \$) during the 1997-1998 fiscal or tax year is provided.



To assess the relative success of innovative versus non-innovative small firms, publicly available and proprietary information was examined whenever possible. However, access to proprietary archival information was limited in a number of instances. In those cases, success was determined by whether or not managers and other individuals involved in the innovation process agreed on the success or failure of the innovation process. In other words, innovation's success was self-defined by respondents in some cases and thus may be context specific.

Because of the qualitative nature of the methodology employed, findings are presented in a discussion format for each research sub-question. This has the advantage of using a story-telling approach to better explain the meanings of findings as well as to describe how effectively (or ineffectively) the innovation process worked in the organizations observed (e.g., Daft, 1983).

Findings

Innovations found in this investigation included services, processes and how firm activities were arranged and, in some cases, managed. Firms in the advertising industry were the most innovative. However, their innovations generally were limited to the visible outcomes of the creative process: ads or commercials. In other service firms surveyed, the level of individual and firm innovation ranged from high to none.

With the exception of one automobile dealer and one bank, 11 of 13 firms surveyed were successful innovators based on self-assessment by a firm's managers as well as by the principal researcher's review of proprietary information. Regardless of the level of innovation or entrepreneurial behavior identified, all firms surveyed were profitable. However, profits of the 11 innovative firms were significantly higher than for the two non-innovative firms. A summary of innovative behavior and infrastructure characteristics by firm is presented in Table 3. The innovative behaviors and infrastructure characteristics of surveyed firms are discussed for each of the four research sub-questions.

Table 3

Summary of Innovations & Infrastructure Characteristics for Firms Surveyed

Firm ¹	<u>Human Resource Management</u>		Innovative Service	Policies, Processes & Practices	Other Infrastructure ²
	Compensation	Other			
ADV1	Q	Q	Q		Q
ADV2		Q	Q	Q	Q
ADV3					Q
ARCH1					Q
ARCH2		Q	Q	Q	Q
AUTO1	Q		Q		Q



AUTO2			Q	
BANK1				Q
BANK2		Q		
HOSP1				Q
HOSP2				Q
LAW1	Q	Q	Q	Q
LAW2		Q		

1 Firms surveyed are industry-coded as follows: ADV=Advertising, ARCH= Architecture, AUTO=Automobile sales, BANK=Banking, HOSP=Hospitals, LAW=Law firms.

2 Other Infrastructure includes the use of cross-functional teams.

Q Indicates the development and introduction of innovative services, the presence of innovative HR practices, operating policies and procedures, compensation strategies or other infrastructure characteristics.

The Impetus for Innovation

The first research sub-question examines whether or not innovation was considered self-generating or externally imposed by a firm's environment. For 12 of 13 firms investigated, innovation did not seem to have been driven by a need to do something different to enable these firms to survive in the short term. However, as comments noted further in this discussion will indicate, many managers perceived a need to innovate because of a less-than attractive outlook for the future.

Advertising

In the case of advertising agencies, the "nature of the beast" seemed to indicate that high levels of innovation should be expected. Advertising agencies are made up of highly creative individuals--artists, art directors and copy writers--as well as individuals who perform more traditional tasks such as accounting, billing and administrative or support services. The most visible activities are performed by creative groups, with the results of these activities displayed for all to see and judge the creativity of even though they may not know who is responsible. One advertising agency surveyed, ADV3, was classified as non-innovative; this is in direct contrast to the other two agencies surveyed.

Interviews with account managers and creative directors at the three agencies it appear to indicate that past successes often result in the firms continuing to follow familiar or previously successful formulas. As the creative director of a highly innovative agency, ADV1, indicated,

"We see our role in the creative department as being responsible for developing new ways to sell our clients' products and services. We may try things that other agencies



don't or won't. The most important thing in this business is to develop campaigns that get a client's products noticed. So, we go out of our way to do the unusual by using unusual graphics or copy as well as nontraditional media. Our art, copy and media departments work closely together with account managers as well as with clients."

In the case of the non-innovative advertising agency, ADV3, interviews with top-level managers as well as creative teams indicated that the firm's client base may constrain the level of innovation within the firm. As the president of ADV3 indicated,

"Our client base, even though it is diversified, is conservative. We earn over 90% of our fees by serving clients that also have conservative customers: banks, stock brokers and retailers that deal with people that 'have made it.' Their customers generally are older and set in their ways. So far it has worked well. Maybe the time is coming when we'll both have to change. But not yet."

In the case of the three advertising agencies surveyed, it appears that the level of innovation can be either internally generated by individuals in the firm or externally imposed by customers. Members of a client management team at ADV2 (an innovative agency) commented that they sometimes felt "...constrained or frustrated by clients that were afraid to be different." Even the non-innovative agency, ADV3, gave the impression that both the firm and their clients may have to become more innovative in the future.

Architecture

Interviews with architectural firms' principals seem to indicate that the external environment constrains innovation, at least in a visible sense. The managing partner of ARCH1, a firm that has gained a reputation for innovative design, indicated that, "We try to use our creative talents whenever we can. In fact, I often think that some of us are frustrated artists. In the end, it comes down to what a client thinks will sell to the public or to lenders and potential tenants. So, we often have to hold back."

In the case of ARCH2, a firm not known for innovative design work, looks may be deceiving. In a meeting of one of their design teams, the principal researcher observed that participants did not try to be flashy, but depended on the firm's architects, materials specialists and structural engineers to work together to develop innovative ways to use materials so that a structure "fits together." Thus, in the case of some firms, innovation may be process related and, as a result, less visible to a firm's competitors.

Automobile Sales

At the automobile dealers surveyed, managers at AUTO1 and AUTO2 agreed that showing initiative is sometimes the firm's role, but that most often it may be an individual salesperson that displays entrepreneurial behavior in how they develop prospects and sell cars. Respondents at both firms indicated that, "...cars are provided to us. So, there's little we can do about the product. Its how we sell and service cars that will make a difference because we all have the same basic product."



AUTO1 has developed an interactive web site that lists all new and used vehicles in their inventory and financing options. Interested buyers can search for vehicles that meet their specific needs (including colors, body styles, mileage and price ranges), select a vehicle, select a financing option and purchase the vehicle on line.

AUTO2, on the other hand, continues to use traditional media approaches to selling vehicles, but adopted a sales strategy that many would say was copied from Saturn dealers: non-negotiable or standard pricing. While this pricing approach is not innovative in itself, it is a significant change from how vehicles previously were sold at AUTO2. Members of the sales staff and managers indicate that, even though it seems simple, it works because "...or customers say that they like not having to put up with the hassles of negotiating and trying to get better deals."

Banking

In the banking industry, innovation seemed to be out of favor. The president of BANK1 indicated that this conservatism is probably a result of industry and regulatory (over)reaction to the disastrous ending to the go-go years of the 1980s. Despite this conservatism, BANK1 displays innovative behavior by continuing to improve on and continuously develop and introduce new services and delivery mechanisms. In addition to traditional brick-and-mortar branches, BANK1 also is experimenting with supermarket kiosks that are open seven-days-a-week and has developed an interactive web site. As one top-level manager said, "We can't afford to sit still or the big banks will eat us alive. We need to cater to new markets that not only make deposits but also borrow money. Our future success demands that we be innovative, that we continue to try new things."

In contrast, the president of BANK2 commented that, "We just offer basic banking services. Nothing fancy about any of them. In fact, I guess the last innovative thing we did was install a few ATMs (automated teller machines) and then give our customers free access to all the other networks. It's cheaper than building branches." In the case of the banking industry, the drive for innovation--at BANK1--is both internally and externally driven. BANK2's managers indicated that they perceived neither internal nor external pressures for innovation.

Hospitals

In the hospital industry, the primary driver of innovation was external. In fact, the CEO of HOSP1--a hospital holding company--indicated that a desire to find new ways to control costs and take advantage of potential synergies made them decide to bring a number of hospitals under common ownership and control. As a result, HOSP1 developed an innovative (at-the-time) approach to ownership and management. Conversely, HOSP2 elected to, as its CEO phrased it, "...tighten our belts and provide the best service possible. We don't want to affiliate with anyone. We want to be the masters of our future."

Faced with external pressures from Medicare (for lower reimbursements) and from HMOs and insurers to reduce costs or operate more efficiently, HOSP1 has been innovative while HOSP2 has not. Both hospitals were profitable during the most recent reporting periods.



However, HOSP2 continues to feel externally imposed pressures to continue to reduce costs. As a result, HOSP2 has responded with a series of staff reductions while HOSP1 generally has been

Legal Services

The legal industry also faces cost pressures from external sources. These pressures were described as coming from clients who “...balked at paying triple-digit hourly fees for work done by new associates” and from higher costs and a result of increasing the number of attorneys on staff. While firms such as LAW2 reacted by implementing a downsizing strategy to reduce overhead, LAW1 adopted innovative ways to develop new business. These strategies will be discussed further in the section on operating policies and processes.

Organizational Slack

The second research sub-question--Does organizational slack provide resources for innovation or does slack result in firm complacency?--produced interesting findings. None of the firms surveyed or a review of archival information provided any indication that excess resources enabled the firms to try different things.

ADV1, ARCH1, AUTO1 and BANK1 indicated that their innovative behaviors were attempts to “find formulas that worked” because they needed to increase business and either gain or maintain a level of strategic competitiveness. Thus, a perceived lack of slack seems to have been a primary catalyst for innovation in these firms.

None of the firms surveyed, regardless of industry, indicated that they could afford to make many mistakes as they tried to do something different. The other side of the slack argument is that some of these firms were complacent as long as business was good. It was only when the outlook for the future became less favorable that innovation was encouraged and more innovative strategies were adopted.

A review of available financial information indicated that while all of the firms surveyed were profitable, each was experiencing shrinking margins or declining revenues. The most negative financial performance-related results were observed for the less-innovative firms.

Innovation as Predictable or as an Option

The third research sub-question investigated whether or not managers treated “...innovation as predictable, using traditional investment and return criteria or as a creative option for generating possible alternatives.”

None of the firms surveyed or managers interviewed indicated that the outcomes of innovation were predictable. All respondents indicated that they hoped that new ways of thinking and acting might be successful, but little-to-no financial analysis generally was conducted by 12 of the 13 firms surveyed to determine if this was likely to be the case. However, managers in BANK1 indicated that,



“As part of our approval process for new services or new processes, there have been several attempts to examine the financial impact of innovative services or activities. This is especially true when innovation requires investments in technology, equipment or facilities. Sometimes, we go ahead even if the numbers aren’t good. But, they generally have been perceived to be better than the alternative of doing nothing.”

As several managers observed, the primary impetus for pursuing innovation was a perceived need “...to do something...to break out of the pack.” Thus, innovation was viewed by the firms surveyed as a way to try out different options in a search for formulas that might help the firm maintain or achieve strategic competitiveness.

Perhaps this is a further implication of low levels of organizational slack. When the old ways no longer work, it is seen as the time to try something different. As the CEOs of ARCH1, AUTO1 and LAW1 indicated, “...it was time for a change. We never knew for sure that any of it would work. But, we had to try.”

Firm Infrastructure: Operating Policies and Procedures, HR Practices and Compensation Strategy and the Role of Leadership

Responses to the final research sub-question--Do a firm’s operating policies and procedures, HR practices and compensation strategy as enforced by its leadership encourage or inhibit innovation?--confirmed the importance of a firm’s leadership and the role it plays in shaping the firm’s way of doing things for all firms surveyed.

Operating Policies and Procedures

Respondents indicated that operating policies and procedures were closely related to how things were done in their firms. This implies that a firm’s way of doing things is an important factor in determining whether or not innovation is perceived as desirable behavior by its human resources. The factor that differentiated the innovative firms from non-innovative firms was the use of cross-functional teams by innovative firms.

All respondents indicated that their firms’ operating policies and procedures often represent unwritten--yet understood--ground rules that all members of the firm followed. As a senior manager in BANK2--a non-innovative firm--indicated, “We know that maintaining the status quo is what’s important to our CEO and board of directors. So, we just keep on doing ‘business as usual.’ No one ever tries anything new.” In the more innovative firms, the opposite was true. In fact, managers and members of various service, project and creative teams indicated that they were “expected to come up with new ideas.”

During observations at a number of meetings, discussions among attendees often were very lively as new ideas were discussed. During many meetings, it also was observed that no punches were pulled. People were willing to propose innovative solutions to problems or opportunities facing the firm with no apparent fear of having their proposals discussed in an open forum and possibly rejected. In fact, several members commented that the open nature of the



discussion was perceived as healthy “because no one felt their proposal was the only viable alternative.”

However, by observing a number of teams evaluate proposals, it was apparent that idea champions were present in several instances. It was when these champions were present that emotion rather than rational or logical arguments sometimes surfaced. Even then, however, there was no indication that reason would not prevail in the end. By the time decisions were made, consensus had been reached, both through a combination of persuasive arguments made by idea champions and through a logical debate of strengths and weaknesses by all attendees relative to the innovations being reviewed.

Six of the 13 firms surveyed used cross-functional teams to determine whether or not to adopt an innovation. It was insightful that, during a debate at ARCH1, the most prominent supporter of an innovative design was a structural engineer rather than the architect that had proposed the design. As she stated during a discussion of the design’s merits, “This idea is interesting, but it appeals to me for another reason. I’ve often thought we could do more from a design perspective to take advantage of what we’ve learned about materials and how they can be used to reinforce each other. I’m just glad to see others have reached the same conclusion.”

AUTO1 formed cross-functional teams made up of the firm’s sales and service staffs. The firm’s sales and service managers indicated that, “...now, customer satisfaction is at an all-time high. Things get fixed right the first time. Sales gets more referrals and repeat business. This is more than we hoped for in a business where price always has been the determining factor.”

In architecture and advertising firms surveyed, managers indicated that cross-functional teams have been the norm for years. In advertising, creative teams always have included media buyers, graphic artists, copywriters, art directors and client service depending on what the advertising campaign dictated. As noted by a client service manager at ADV2, “We know we have to work together to ensure that a campaign is coordinated. Even when we know the industry, you’d be amazed how many times we can tell that a campaign is either well-coordinated or badly done. The team concept makes a difference.”

In architecture, the same is true, except perhaps to an even greater extent. Using cross-functional teams in architecture is nothing new as project teams represent, as one firm CEO indicated, “the only way to get it done right, on time, at the lowest cost.” A senior architect in active practice for 25 years indicated that, “Given the complexity of most projects, it’s not unusual to find architects, structural engineers, contractors and interior designers, as well as an owner’s representative at every meeting. There’s too much coordination to be done and too many decisions to be made to function any other way.” Thus, at least in some industries and firms, cross-functional teams have been utilized to ensure organizational effectiveness and to manage the innovation process for many years.

On the other hand, it was somewhat interesting--yet disconcerting given the industry--to discover that none of the advertising agencies surveyed used innovative approaches to develop new business. All of them relied on continuous contact between the firms’ client management



team and client representatives to ensure that accounts were retained. New client development activities were implemented only when specific opportunities were identified.

However, other firms were becoming more proactive and more innovative in their approaches to developing new business. These approaches ranged from using direct mail, the Internet/www and other innovative--for the firms surveyed--approaches by BANK1, HOSP1 and AUTO1 to an innovative niche-marketing approach by ARCH1.

As a result of the over-built situation found in many cities in the southwestern U.S. in the late 1980s, ARCH1 managers determined that they had to take a new approach to developing new business. Unlike many other businesses, in architecture, once a project has been completed, a firm must find new clients for which projects will be designed. After reviewing what it knew--or could discover--about competitors and the potential for business, ARCH1 decided to target the public and not-for-profit sectors, especially government entities and universities/colleges. They spent a great deal of time and effort developing a profile of all of the entities in their marketing region and developed a combination of direct mail, lobbying efforts and direct sales calls to penetrate these markets successfully. The managing partner of ARCH1 indicated that,

“Our decision to work actively to establish a presence in this market has paid off. We gained an advantage by being the first firm in our area to see the potential in these markets and have established a presence that others are finding it hard to dislodge us from. We’ve gained a reputation and a lot of experience that most of our competitors don’t have. In hindsight, you might say we did our homework and were rewarded, but it also was somewhat risky because we’d never tried anything like this before.”

Human Resource Management Practices and Compensation Strategies

The HR practices in 6 of the 13 firms surveyed were changed to reflect an increased reliance on innovation and to encourage entrepreneurial behavior. However, 8 of 13 firms surveyed displayed some innovative behavior from either a service, process or infrastructure perspective. As a result, the two anomalies were investigated more thoroughly to determine if there was any relationship between the successful (or unsuccessful) pursuit of innovation and a firm’s HR practices.

Four of the innovative firms--ADV1, ADV2, AUTO1 and LAW1--relied only on compensation-based incentives to encourage innovation, while ARCH1 and LAW2 utilized non-compensation-based incentives. Only LAW1 used a combination of incentives. For the four firms that utilized only compensation-based incentives to encourage innovation, the primary strategy was to award bonuses when innovation efforts were successful. Managers at both ADV1 and LAW1 indicated, it was likely that, “...the potential for bonuses gave people an incentive to go out and try new things.”

For entrepreneurs at ARCH1, LAW1 and LAW2, the rewards appear to be more satisfying. Rather than directly providing additional compensation for innovative behavior, these firms use promotion strategies. To recognize innovations that make a difference to the firm, these firms offered and, in many cases, awarded partnership status to individuals judged most



innovative. This is important because of firm and industry status that partnership signifies and also provides the potential for increased long-term compensation based on firm performance.

However, this can be an uncertain process. ARCH1's management team indicated that "We want to recognize people who really are doing innovative things. But, being organized in teams makes that hard. Who should be rewarded at what level? The person who first suggests it? Or, the team members that make it happen?" This dilemma is echoed by comments from newly elected partners at both ARCH1 and LAW1. Both individuals were rewarded with partnerships but also wonder if others in their firms also should have received this recognition. They indicated that many individuals who they perceive as innovative but receive no tangible recognition "...slow down when recognition goes to someone else. In fact, it seems like they contribute a lot less than they used to."

ARCH1 also provided individuals identified as having innovative potential with something that might be more valuable than cash compensation: time to work on new ideas. As an architect at ARCH1 commented, "Around here, time's our biggest enemy. There's never enough of it because there are always changes and deadlines. But, I get some free time that I don't have to account for to experiment with new design ideas. And, that's important. At least it is to me."

In an interesting contrast, top-level managers at BANK1 indicated that they did nothing different from an HR perspective because, "We feel people shouldn't receive additional compensation for doing what's expected of them...it's part of their job and they're already paid for that." A service-development team member at BANK1 indicated that this practice potentially can be counterproductive. As this individual noted,

"Our team's members sometimes wonder if anybody really notices what we're doing. Of course, our contributions are mentioned when they get around to our annual reviews, but it's hard to see that they make any real difference in the level of any raises. No one gets a bonus. Sometimes that's frustrating. But, we know that if we're successful we'll be given more opportunities to try new ideas. And, that motivates many of our team members"

It was not surprising to discover that, in firms that provided no incentives for innovation or entrepreneurial behavior, little to none was exhibited. However, in all firms surveyed, it was interesting to find that a lack of success in attempts at innovation were not penalized severely.

The Critical Role of Leadership

In all firms surveyed, the support--or lack of support--by top-level managers was cited as a primary reason for innovation or entrepreneurial behavior (or lack thereof). A valuable lesson is provided by contrasting the attitudes toward innovation by top-level managers at BANK1 and BANK2.

Top-level managers at BANK1 are perceived by other managers as forward-thinking and not afraid to try something new. In fact, as noted previously, BANK1 operates from a perspective that innovation is necessary, not just to get ahead, but also to maintain customers and



capture new customers in the face of increased competition from larger banks. As a result, BANK1's leadership is perceived as supporting and, in fact, encouraging innovation by implementing supportive HR policies and critical resources such as time.

In contrast to the atmosphere at BANK1, BANK2 operates from a mindset described by one senior manager as “don't mess up something that works.” Time and time again, BANK2's managers cited examples of ideas that died a natural death as they were ignored by the firm's CEO. In fact, as one manager indicated,

“His idea of innovation has always been about 20 years behind the times. We laugh whenever a new manager complains that they can't get a hearing on a new idea. Our CEO's way of handling innovation is to ‘ignore it until you forget about it or get tired of waiting for a decision.’ His way of thinking goes all the way through top management.”

In other firms surveyed, comments were much the same as those from banking industry respondents. When the firm pursued innovation, it was not unusual to find leaders or other top-level managers who were openly supportive of such activities. In firms that did not pursue innovation, the firms' leadership was not openly supportive of such practices and, in cases such as that at BANK2, discouraged it.

Conclusions, Recommendations and Limitations

As proposed, this investigation provides researchers and managers with an understanding of relationships between a firm's leadership, the characteristics of its infrastructure and innovation in 13 small firms in six service industry subgroups from the dual perspectives of the principal researcher's observations and interviews with 42 managers.

The Impetus for Innovation

In the most innovative firms, innovation generally was perceived as externally imposed by the environment rather than internally generated. However, as time passed, those firms moved in a direction that enabled innovation and entrepreneurial behavior to continue as matter of habit. In other words, innovation encouraged more innovation so that it became self-generating. This implies that it may be incumbent on firms that are interested in innovation to take the first step by encouraging employees and managers to “try something new.”

Timing and Slack Resources

In all firms surveyed, it appears that innovative behavior initially was triggered by a less-than-positive outlook of the future. However, in the absence of slack resources, there was little if any room for mistakes. This implies that the best time to encourage innovative behavior may be when the firm has excess slack.

When excess resources are available, it is possible that more innovative approaches will be proposed because the firm can better afford to make mistakes. It is when an idea, service or process is truly innovative--not just for a firm but for the industry as well--that competitors may



be less able to imitate the innovation. This may enable a small firm to establish or enhance its strategic competitiveness.

Operating Policies and Procedures

To ensure that all ideas receive a fair hearing and are fully appraised, firms not only must find ways to provide entrepreneurs with time to pursue innovation, but also must leverage the firm's capabilities by encouraging cross-functional teams. The alternative is to consider how bureaucratic processes can retard approval processes for the development and commercialization of new service configurations or for changing a manufacturing or administrative process.

Another argument in favor of cross-functional teams is the extra expense that often will be incurred if product and/or service design, engineering, marketing and delivery are not brought together in cross-functional teams in the beginning of the innovation or development process because of the potential for lack of coordination and miss-communication if they remain separated.

HR Practices and Compensation Strategies

It also is important that, in order to sustain innovation, firms must develop and implement HR practices that encourage innovation and entrepreneurial behavior. This could be as simple as providing plaques or other non-monetary rewards or as complex as determining how to best assess individual performance in a team-based environment.

The Role of Leadership

Support for innovation must permeate the firm. This means that a firm's leadership must develop and implement an infrastructure that actively encourages and supports innovation. A firm's leadership, partially evidenced by the operating policies and procedures that it develops, implements and enforces, as well as its attitude, must not be perceived as a barrier to innovation.

Limitations

While this investigation describes the critical role of a firm's infrastructure in encouraging innovation, it has its limitations. Of course, the first is that many will say that there is no empirical testing, so validity and generalizability are questionable. While this may be true, it has the advantage of viewing the process of innovation from a richer perspective: from the perspectives of multiple firms as well as multiple individuals within these firms (Daft, 1983).

While this investigation is concerned only with small firms competing in the services industry, many of its findings also may be applicable to other industry settings. Despite the shortcomings of qualitative research, more insights into the innovation process in firms of all sizes might be gained by increasing the frequency of in-depth studies of a limited number of firms. As noted by Mintzberg (1979), this approach lends itself to the search for patterns and consistently to enable the researcher to generalize beyond data itself, enables researchers to measure data in real organizational terms which better reflects the reality that organizations are



complex entities and is appropriate when the researcher seeks to synthesize or integrate diverse activities into a configuration of activities and relationships. The innovation process--as well as other organizational processes--also should continue to be studied longitudinally (Burgelman, 1983; Burgelman & Sayles, 1986).



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