



BHASKAR CHAKRAVORTI

A Note on Corporate Entrepreneurship: Challenge or Opportunity?

Entrepreneurship is frequently associated with a “small thing” -- a venture that challenges the status quo and relentlessly pursues opportunity. The large established firms, the “gods”, have forever coveted these small things -- through incubation, financial support or acquisition -- in their quest for the Next Big Thing. The problem with corporate entrepreneurship, of course, has been that the entrepreneur must deal with the challenges of securing resources and support within an organization focused on operations that are “at scale”. Entrepreneurs with miniscule, and often negative, financial contributions compete with mature businesses that are the primary revenue generators for the firm. Revenue is power and for senior management taking their eyes off the mature businesses can be extremely costly. As a result, corporate entrepreneurship languishes despite its importance to the company’s future.

Scalability is the coin of the realm in a large firm. While several approaches have been experimented with in search of a solution, an essential gap still remains: corporate entrepreneurs find it difficult to integrate bottom-up innovation with scale. While gods covet small things, as gods, their primary competitive advantage is in managing things that are not small.

This note is organized as follows. First, I offer an overview of the opportunities and key challenges of corporate entrepreneurship in developed markets and the alternative options traditionally considered by the world’s leading organizations to address the challenges. Second, I explain why these approaches are as yet incomplete: the entrepreneurial units still suffer from an inability to cross the proverbial chasm and scale-up and pose the fundamental strategic challenges for corporate entrepreneurs. In turn, those who find ways to close the gap can define competitive advantage through corporate entrepreneurship.

Why Gods Are Attracted to Small Things: The Rationale for Corporate Entrepreneurship

The competitive advantage of the established global firms is in the operation of businesses with mature products, with substantial market penetration, credibility and relationships usually spanning multiple geographic regions. It is useful, therefore, to reflect on why such firms would be interested in entrepreneurial opportunities that lie outside their zone of strength.

Senior Lecturer Bhaskar Chakravorti prepared this note as the basis for class discussion..

Copyright © 2010 President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7685, write Harvard Business School Publishing, Boston, MA 02163, or go to www.hbsp.harvard.edu/educators. This publication may not be digitized, photocopied, or otherwise reproduced, posted, or transmitted, without the permission of Harvard Business School.

There are many benefits of maintaining such interests. They create options for new growth, opportunities to monetize the firm's substantial physical and intangible assets and value from the synergies between the core and new businesses. Proactively pursuing entrepreneurial ventures has anticipation benefits: it is a hedge against competitive and disruptive threats and helps in anticipating emerging trends and cutting-edge technologies. Moreover, new ventures are a powerful mechanism for generating excitement among all stakeholders and they also help develop and retain talent.

The benefits of the association go both ways. The established firm can help create competitive advantage for a new venture at every stage of the entrepreneurial life-cycle. At the front-end, it can yield asymmetric market insight through the established firm's wide reach and access, uncover problems and provide critical resources for a solution, e.g. R&D, manufacturing, proprietary technologies or processes. The resources of a large firm can help with formulating a viable business model since the firm's core businesses can provide a subsidy for the venture's offerings. During the start-up and scale-up stages, the established firm can provide capital and business functions as well as access to supply chain and distribution networks and other critical assets. The firm can be a source of talent of all kinds and its brand can lend the venture some credibility. The firm can give the venture negotiating leverage with market participants with whom the venture needs to do business. The established firm can help in managing the risks of a venture by making the venture part of a bigger portfolio and by facilitating trials and experiments with its customer base. The proximity to the large firm also expands the venture's exit options: The established firm has many alternatives to choose from including re-cycling the venture into a different product/business, spinning-off, licensing, integrating it into an existing business unit or carving it out as a new business unit.

In summary, both the established firm and an entrepreneurial venture can mutually benefit from their association. For these reasons, it is no surprise that most established firms nurture entrepreneurial ventures in some form or the other.

Despite these positive associations, from a practical standpoint, corporate entrepreneurs must contend with many obstacles. Let us turn to these issues next.

Primary Challenges

There are three broad sets of challenges that pose obstacles for corporate entrepreneurs:

Strategy Challenges

Lack of Integrated Decision-making: At the highest level, choices optimized for the core business are not integrated with choices that affect entrepreneurial ventures. Managers generally allocate scarce resources based on near-term margins and size of the business. New businesses that need up-front investments and have few customers get low priority. To make matters worse, the new businesses might be perceived to have the potential to cannibalize the core; balancing priorities for competing businesses is hard to do in a single organization.

Cyclicity: Budgets for entrepreneurial activities are among the first to experience cuts during economic downturns, such as the one experienced during 2008-09. During such periods, there is pressure on management to scale back or outsource non-core activities. As a result, support for new ventures follow a pattern of rise and fall, partly coinciding with economic cycles and partly with management interest and attention and budgeting.

New Businesses, Old Lenses: Established firms have a tendency to view new business opportunities through the lens of their current businesses, brand associations and product categories – often as line

extensions or near adjacencies. This can be self-limiting and makes the firm vulnerable to being blindsided by shifts in consumer preferences and unanticipated new technologies or to game-changing new entrants.

Incentives and Organizational Challenges

Risk and Failure Avoidance: Entrepreneurial ventures are risky and the chances of failure are high. One of the biggest obstacles for established firms is that the incentives and decision-making structure encourages the avoidance of risk. Senior management is held accountable for near-term performance; this keeps the focus on surer bets. Failure is often perceived as a career-ending event, which deters many from attempting to take on risk.

"Not-Invented-Here" Mentality: It is often hard for established firms to step outside their organizational boundaries for input. In addition to prevalent self-referential mindsets, such inhibitions could stem from several concerns: e.g. about sharing of intellectual property or other proprietary assets with outsiders, being perceived as a signal of weakness, sharing economic gains with others or anticipating the challenges of integrating with other cultures.

Organization Design Dilemmas: Many established firms struggle with the choice of where to house the venture – within a business unit, in a separate unit that reports to the corporate center or outside the organization altogether? Locating within a business unit leads to the venture being forced to harmonize with management practices suited for mature businesses; locating in a separate unit leads to isolation and the commercial assets of business units being out of reach; locating outside the organization may lead to misalignment of objectives.

Emphasis on Organizational Harmony: Established organizations develop efficiencies through standardization of management practices. This results in a push for organizational harmony, which in turn means that performance metrics, financial hurdles, decision rules and compensation systems in an entrepreneurial business within the company cannot stray too far from those applied to core businesses. Compensation systems generally do not offer the high upside rewards that a free-standing entrepreneur might earn for a successful outcome.

Decision Making Challenges

Rigid Application of Financial Metrics: The use of discounted cash flow and NPV analyses causes decision makers to underestimate the value of a new business. The treatment of fixed costs and sunk costs, which favors the leveraging of potentially obsolete assets and the emphasis given to earnings per share causes managers to make decisions based on horizons that are too short for successful incubation and development of new businesses.

Reliance on Traditional Market Research: Validation for new businesses or the generation of ideas is often done by traditional market research, such as focus groups or surveys, which fail to uncover truly breakthrough or disruptive ideas.

Linear Stage Gates and Cumbersome Decision-Making: The process for getting approvals for new businesses and products often involve linear stage-gate processes, which do not leave room for adaptation and experimentation. Decision-making also frequently involves layers of bureaucracies and committees.

Performance Measures and Compensation: Compensation and performance evaluation for new business builders is often managed by establishing targets and metrics, which leads to a predominance of incremental innovations and business ideas. Breakthroughs cannot easily fit into a framework with defined measures and targets.

There are several common underlying drivers behind these challenges: Short-term customer driven projects trump investments in longer term projects; money is allocated to businesses based on size and how they did last year, not based on potential; there is reluctance to kill some pet projects or, conversely, other projects are terminated prematurely. In combination, the factors outlined earlier tend to inhibit the highly talented from engaging in entrepreneurial ventures within the organization. They may gravitate towards the core business units since they see it as a more assured route to corporate success or prefer to develop ventures outside the organization as a free-standing start-up. This can create a self-fulfilling trend: entrepreneurial ventures inside the established firm are sometimes viewed as "orphan" organizations. It becomes common knowledge that the really cutting edge ventures exist on the outside, which reinforces the isolation of the internal ventures.

Potential Resolutions

Despite the many challenges to sustaining corporate entrepreneurship, it is clear that there are strong reasons for established firms to persist in finding solutions to make the association work. In response to the challenges outlined earlier, there are three principal considerations that have defined the solution space in most global companies that persist with an entrepreneurship and innovation agenda:

Adapting Management Practices: Adaptation of management practices to blend core business management techniques with those used by VCs.

Selectively Insulating Venture: Techniques for separating the entrepreneurial venture from the core while preserving essential linkages.

Alternative Support Models: Modes of support adopted by the established firm to back the entrepreneurial venture.

Consider each of these in turn.

Adapting Management Practices

Management practices used for corporate entrepreneurs typically involve a combination of approaches and variations on the core management style. These include doing limited, staged investments, measuring performance against set targets and adopting new approaches to strategic planning, such as discovery driven planning.

Several of these adaptations represent a blending of practices used by the venture capitalists and those drawn from their core businesses. From the venture capital industry, the companies have adapted models of making milestone-based, limited bets on multiple experiments and trials that can be scaled up or down. This creates a funneling of new business opportunities from ideation through to launch.

General Mills, for example, had a practice of committing \$10K-20K each to hundreds of concepts at the front end of a funnel, which steadily narrowed to \$100K – 200K commitments each to one or two that were launched. The approach involved testing and iteration. The early part of the funnel focused on articulation and testing of assumptions, while hard financial measures were applied only towards the end.

Established companies typically manage core businesses by setting targets and measuring performance against them and compensating managers on the basis of performance. Many

companies have extended such practices to their management of new ventures. For example, 3M had declared the objective of getting 35% of their revenues from products introduced in the past 4 years; Pfizer and Nokia set specific time-to-market goals, which drove manager compensation

Once a target is set, the established firm typically makes resource allocation decisions based on a planning process. However, the planning must be done differently from the process used to manage the core. Planning for the core business draws upon the data and models that build on the prevailing market and past experience. Some firms have used a "discovery-driven" planning approach. Once a target is set, the planner asks: what measurable outcomes are needed to accomplish the target and what actions need to be taken. This leads to questions about what assumptions are being made about revenue and cost drivers. When the assumptions are challenged, they are tested, which define checkpoints for whether the venture should continue to get funding. Several firms have applied such discovery driven planning techniques: examples include Air Products, the industrial gases company, which explored a new business applying its telemetry capabilities to monitor patients with chronic illnesses and Dow Corning, which launched an e-commerce unit, Xiameter.

Selectively Insulating Ventures

As observed earlier, one of the most significant challenges to corporate entrepreneurship has to do with incentives and organization design: organizations optimized for operating a mature core business are at odds with an entrepreneurial environment.

Clearly, some form of insulation from the core business is necessary for a venture to achieve its full potential. Studies suggest that an "ambidextrous" organization may be ideal: Exploitative ventures (i.e. involving small improvements in existing products and markets) are pursued by the core units, while exploratory innovation (i.e. involving fundamental changes that lead to breakthroughs) is led by a separate part of the organization with independent processes, structures and cultures.¹

The classic model of a separate organization was the Skunk Works, an elite group assembled by the company now known as Lockheed Martin to develop the P-80 Shooting Star, the first production jet aircraft in the US. A similar model was employed by EMC to build a storage product, LifeLine, aimed at the fast-growing consumer and small business market segment and by Motorola to develop the ultrathin RAZR phone. In all these instances, the senior managers responsible anticipated that the core business practices would throttle the ventures and there would be resistance to them. Also, using processes harmonized with the core would likely result in a compromised product.

However, skunk works are at the extreme end of the organization design spectrum. They are used in extreme circumstances when truly radical products are being considered. Typically, there are gradations of separation of the venture from the core. One version is the corporate R&D lab that focuses on long-term opportunities, used in Samsung, 3M, L'Oreal, among others. These units have linkages with the business units to varying degrees. Most of them focus mainly on technical questions, while some have a mandate for business-building.

A less insulated approach was one adopted by Nokia, when it had a New Venture Organization (NVO). It was separated from the core business units and operated under a very different set of rules. NVO encompassed several subunits within it: Nokia Venture Partners, a VC fund that participated in A-B series rounds on ideas that core businesses could scale and take to market; a team focusing on identifying disruptive technologies and business model developments; Innovent, which explored

¹ See Charles O'Reilly and Michael Tushman, "The Ambidextrous Organization," *Harvard Business Review*, April 2004.

joint operations with external entrepreneurs; a New Growth business unit and a Greenhouse, an internal incubator for idea generation and support for engineers.

The separate organizational model for ventures breed their own problems – as Nokia discovered and subsequently re-organized itself. Such problems include:

A separate unit run by different rules often create resentment. Fears of cannibalization of the core products may lead to rejection by the sales force.

Separation can send a signal that entrepreneurship and execution are responsibilities of different groups and can discourage core unit employees from acting on their own entrepreneurial ideas.

The separate unit may perennially remain a backwater. Its lack of revenues may erode resources and respect within the organization. There is too much corporate bureaucracy and compensation structures do not offer sufficient upside reward; the ventures, therefore, do not attract the best entrepreneurial talent. Managers of these units are not privy to the same high quality deal flow as the top VCs. These factors in combination could conspire to make the entrepreneurial initiatives prone to “adverse selection” – where all the promising ideas go elsewhere.

Thus, insulating the corporate entrepreneur is not a panacea. Alternative designs have attempted to address these concerns in three directions: by engaging the core business units in developing entrepreneurial businesses, by making entrepreneurship everybody’s business or by stepping away from the organization altogether and reaching outside the firm’s boundaries for entrepreneurial ventures.

Consider some examples:

Special Initiatives Involving Core Businesses: IBM’s Emerging Business Opportunities (EBO) units encourage cooperation across multiple groups within the company, including Research, Sales and Distribution and core business units. The EBO units are housed in the appropriate business unit or group within IBM but were given special support structures, active sponsorship by a Senior VP, protected funding with incentives for cross-company alignment. Managers are measured differently from in the core businesses. EBO units use assets owned by the business units but also have access to senior leadership oversight and issue resolution. There are several other forms of special initiatives, such as GE’s Imagination Breakthroughs, where business unit leaders submit proposals to be reviewed by the CEO for new business ideas with a potential of over \$100M in 3 years. Shell’s Game Changer program involves a panel of professionals within each business unit that reviews proposals for new business ideas and has access to dedicated funds to support certain projects with game-changing potential.

Everyday Entrepreneurism: Some firms encourage employees to pursue projects of their own choosing, as at 3M, Google and Genentech by protecting a percentage of their time for such projects. A related but different approach is practiced at W.L. Gore that encourages its associates to develop great ideas and convince others to work on them; leadership, teams and hierarchies are created on-demand. In this way the entrepreneurial unit is embedded within the core and dispersed throughout the organization.

Externalization: At the opposite end of the spectrum of embedding entrepreneurship within the core business units, some firms have chosen to seek entrepreneurs outside their organizations. Consider the example of Cisco. It had pre-defined priority technology markets and assigned key executives and other employees the task of cultivating promising ventures in these markets. Cisco’s

modus operandi was as follows: It would generally begin by providing seed funding to a venture and would increase its ownership if the venture were to cross certain milestones. Several oversight groups were involved -- the CEO outlined the key overarching technology platforms to be pursued, a Corporate Development steering committee formalized the deal making process and Sector Councils ensured alignment with business unit needs and gave the go-ahead on deal terms.

Alternative Support Models

A third important dimension of choice for the established firm is the kind of resources it offers to support the entrepreneurial venture. The decision depends heavily on its objectives with the venture and nature of corporate assets it can bring to bear. Of the formal support models available to the established firm, there are three primary alternatives:

Corporate incubation: The typical purpose of such initiatives is to monetize ideas, usually developed within the established firm, and to take advantage of its assets. The company provides infrastructure, seed capital, managerial talent and other staff and additional inputs needed to graduate the early-stage venture to a point where it attracts funding from a business unit or external investors.

There are two major purposes of such incubators: they could be set up to enable internal entrepreneurs, as was the case with British Telecom's Brightstar and Yahoo!'s Brickhouse; alternatively, they could be set up to enable collaborations with external parties, as was the case with the Pfizer Incubator and Panasonic/Matsushita's Digital Concept Center. Others such as Monsanto, for example, established the Nidus Center for Scientific Enterprise to encourage a cluster of plant sciences research in the St. Louis area.

These incubators are conceived as ways to attract entrepreneurial talent. Ideally, the leaders of such units are "heavyweights" and have enough credibility inside and outside the firm to negotiate for resources and access and act as champions for their ventures. For example, when the News Corporation formed its incubator, Slingshot Labs, focused on web 2.0 business ideas, it hired the founders of MySpace, Josh Berman and Colin Digiario as co-Presidents.

Corporate venture funds: This approach focuses on financing as the primary linkage between the established firm and the entrepreneur. The firm makes investments in ventures that have obtained some seed and first round funding from elsewhere. There are several possible objectives, both strategic and financial, for such funds. The strategic objectives include: to tap into emerging technologies, products and trends and gain insight into forthcoming changes in the market; to test future demand and pre-empt disruptions; to invest in a venture with the potential to become a full-fledged business or part of a business unit within the established firm. There are also strong financial objectives motivated by the potential to generate superior returns from advantages provided to the venture by proprietary assets of the established firm.

The various venture investments in entrepreneurial opportunities can be organized into different categories: investments that complement the strategy of the firm's core businesses (e.g. Intel Capital made several investments of this form in ventures whose products would boost sales of the Intel Pentium processor); investments that advance the core business and involve ventures tightly linked to these businesses (e.g. Microsoft invested in companies that supported its .Net Internet services architecture); investments in exploratory ventures (e.g. venture funds at Novartis, UPS and Cisco invest in the next generation of products in their areas of interest).

In keeping with the differences in objectives, the investment approaches have ranged widely -- from a pooled fund in which multiple VCs participate (e.g. Siemens) to having a fund managed by a VC (e.g. Novartis) and direct investments (e.g. BlueRun Ventures, originally Nokia Venture Partners).

The stage and size of the investments tend to be heavily weighted towards the early-stage and less than \$5M, but there were several funds, such as Amgen Ventures, Pfizer Strategic Investments and Cisco, with investments of larger amounts and in later stages in the venture life-cycle.

Co-creation: Several drivers -- such as productivity, cost and risk management, speed-to-market, access to specialized capabilities, along with the growth of Web 2.0-enabled collaboration tools -- have contributed to many established firms establishing a strategy for co-creating value with external entrepreneurs. Usually the established firm provides a mechanism for collaboration with entrepreneurs through its technologies or products. There are several variants of this approach:

Standards and Platforms: Some established firms invent and license standards that allow multiple new businesses to develop new products that can inter-operate. Qualcomm as the creator of the widely used CDMA wireless cellular telecommunications standards and of 3G technology is an ideal example. In addition, other established firms provide a "platform", which is, in essence, a technology or a product reaches a wide audience and enables the development of several additional technologies or products aimed at alternative applications or at alternative market segments. Apple's iPhone is a highly effective platform that has allowed developers to write over 50,000 applications within two years of the debut of the iPhone.

Open Innovation: Many established firms have engaged with outside parties, including customers, partners, third-parties, as well as their own employees, to develop new products and services. Procter and Gamble, for example, has a program called "Connect + Develop" whose purpose is to tap into global talent by enabling inventors, scientists, partners and others to submit product ideas for P&G and create opportunities to earn money for their contributions.

Prizes and Contests: Several potential entrepreneurial opportunities are missed because of market failure and there is insufficient incentive for exerting focused effort. Some firms have instituted prizes as a way to fill the gap. Consider the Netflix prize: the DVD by mail company has announced a \$1 million prize for contestants to improve the accuracy of its DVD recommendation algorithm by 10%.

Unbundled Assets: Many established firms have discovered that several of their assets can be offered to external parties to build entrepreneurial ventures without compromising the host's own productivity. For example, the online bookseller, Amazon.com unbundles its e-commerce and logistics capabilities to allow third party retailers to set up on-line storefronts using Amazon's e-commerce infrastructure, including its world-class storage, computing, security and database power.

The Gap That Remains

The purpose of highlighting the various alternatives that have been considered to address the challenges with the association between the established firm and the entrepreneur is to underscore the lengths that firms have gone to succeed as corporate entrepreneurs. However, despite the vast solution space that they have explored, and all the examples that I have offered in the earlier sections, the overall track record is rather sobering.

Consider, first, the record on growth, identified earlier as a key motivation for the pursuit of entrepreneurship in established firms. A study of Fortune 100/Global 100 companies shows that 87% of the companies experienced a "stall" during 1955-2006. Fewer than half of those (46%) were able to

return to moderate or high growth within 10 years after the stall. When slow growth persisted for 10 years, only 7% were able to turn it around.²

Additional evidence comes from the study of corporate venturing. Thirty years of systematic study reveal that the resources committed to such activity follows a cycle – and severely undermine their effectiveness. Periods of intense activity are followed by periods of shutting down such activities until a new environment for re-investment starts up again.³ Furthermore, even though breakthrough business ideas are far more significant drivers of growth than incremental ones, most established firms shy away from breakthrough business-building. Their inclination is to make close-in changes to existing products or technologies. Larger firms are less inclined to pursue growth through truly disruptive innovation. Most prominently, the work of Clay Christensen suggests that established firms ignore or proactively fail to establish innovations that are inherently disruptive in nature.⁴ These constitute products that are aimed at a segment of the market that has been “over-shot” by the established firm (and its competitors); simpler, cheaper products tailored to be good enough for these segments become the entry points for the disruptors who can then proceed to move up the food chain and move into adjacent market segments.

The irony is that the managers of established firms know these facts – and yet, despite their best efforts, they fail to sustain corporate entrepreneurship. The biggest reason for why the track record is so poor can be reduced to a single factor: *scale* – or its lack thereof. None of the options discussed earlier address a fundamental issue. By definition, an entrepreneurial venture addresses a small market initially. But it needs sustained corporate commitment and priority to grow. The lack of scale and the potential for it to cannibalize or take resources away from the all-important core pushes the venture lower on the list of priorities. As a result, it does not grow, which further compounds the problem. There is no organizational architecture that seems to have worked consistently in resolving the problem; growing ventures in-house causes them to get stifled because of conflicts with the core and relying on external ventures involves many costs such as over-paying for acquisitions, integration costs and eventual mis-alignment with the core.

In other words, a vexing problem remains. How does the established firm avoid this vicious cycle and create a venture that serves a large market -- at scale?

Solving this problem, as some firms have managed to do, creates the basis for deriving competitive advantage through corporate entrepreneurship. The examples of Apple, Google or Amazon come to mind.

Conclusion

I have offered an overview of corporate entrepreneurship and have highlighted both why it is of utmost importance for firms to persist with a corporate entrepreneurship strategy and why they have found it challenging to do so. I have also argued that there is a gap in the approaches used currently. This gap can be viewed as the starting point for a strategic approach to deriving competitive advantage through corporate entrepreneurship. Clearly, a god of small things stands to unlock a godly amount of value.

² See Matthew Olson, Derek van Bever and Seth Verry, “When Growth Stalls,” *Harvard Business Review*, March 2008..

³ See Robert Burgelman and Liisa Valinkangas, “Internal Corporate Venturing Cycles” Stanford University GSB Research Paper, 2005.

⁴ See Clay Christensen, “The Innovator’s Dilemma”, Harper Paperbacks, 2003.