FARRELL CENTER THOUGHT PIECE

COLLABORATIVE ENTREPRENEURSHIP

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Introduction

Innovation is the primary driver of organic growth in a firm. Yet, not all firms benefit from their efforts at innovation. A variety of internal and external barriers prevent most firms from reaching their full potential to innovate. In today's complex global economy, significant innovations are more likely to emerge from the efforts of many firms working together. It is in this context that we propose the concept of *Collaborative Entrepreneurship* in which streams of new products, services, and businesses are created by groups of firms collaborating with each other.[1] In this thought piece, we explore what we mean by this concept and draw attention to some of the challenges in fostering collaborative entrepreneurship.

Theoretical Foundation

Our perspective builds upon foundational insights from scholars such as Schumpeter, Penrose, Nelson, and Winter.[2] Specifically, collaborative entrepreneurship builds upon the concept of networks that have been designed to locate and assemble resources wherever they might exist. An effective multi-firm network would most likely be comprised of firms that represent a variety of related technologies and markets.

The success of such networks requires a number of enabling factors. Among others, they include complementary expertise, intrinsic motivation, collective trust and risk-taking, as well as a concern among the collaborating parties for the interests and well-being of each other.

Within such networks, knowledge is the most underutilized resource in the fiercely competitive global economy. To accomplish knowledge creation and transfer, tacit knowledge possessed by the collaborating firms must be made explicit and transferred to where it has potential economic value.

[1] Miles, R.E., Miles, G., & Snow, C.C. 2005. *Collaborative Entrepreneurship: How Communities of Networked Firms Use Continuous Innovation to Create Economic Wealth*. Stanford, CA: Stanford University Press.

[2] Schumpeter, J.A. 1934. *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press. (New York: Oxford University Press, 1961.) Penrose, E.A. 1959. *The theory of the growth of the firm*. Revised edition published in 1995 with a new introduction by the author. Oxford, UK: Oxford University Press. Nelson, R.R., & Winter, S.G. 1982. *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.

Model of Collaborative Entrepreneurship

A general model of the collaborative process within the network is shown in Figure 1. We envision collaboration within the network to be a voluntary process. For this to happen, firms that work together must have common interests. There are several ways this could happen. First, some group of firms which represent related industries and markets will form a network to collaboratively conduct innovation researches. The network includes both permanent and temporary members. The organizers of the network will make significant investments in collaborative capacity and trust building. More specifically, time, trust and territory are the three basic factors to launch the innovation process.

- Time spent in exchanging ideas among firms is essential to the innovation process. Beyond the basic necessity of having time to engage in exchange, however, is the need to create time to search for sources of future conversation, listen to the views of experts and other outsiders, and engage in a host of other activities that might produce fresh ideas.
- Trust among firms needs to be developed along with the innovation collaboration. With increasing trust comes a growing willingness to expose one's views without the fear of being exploited and to probe more deeply for new insights and perspectives.
- Territory is more than a sense of belonging. It implies ownership of stakes in the outcome of present and future innovation processes. Visible stakes identifying territory may come in many forms, including stock ownership, professional awards, collegial recognition, and leadership opportunities.

Second, the lead firms in the network must invest in intangible assets to set the foundation and to pursue innovation projects. They will have to participate in research projects themselves and provide valuable services to other member firms. Such organization infrastructure for collaborative entrepreneurship allows member firms to voluntarily organize and pursue their own innovation projects. The network in which many innovation projects are being pursued simultaneously must of necessity be self-managing. Individuals, teams and even larger units that cut across firms must assume responsibility for performing most of their own managerial tasks. Innovation-oriented organizational units frequently are working towards unspecified outputs, so the exact nature of their interactions with other units, both within and outside their home firm, cannot be easily anticipated. Therefore, protocols (broad behavioral guidelines) can be used to enhance the collaborative process.

Third, network members can share product-market ideas or knowledge, and perhaps even staff and tangible assets, in order to turn potential innovation into revenue-generating products. Ideas born in one firm, for instance, may be expanded and developed in a second firm and taken to market by a third firm. For knowledge creation and sharing to be productive, networked firms must develop a rich collaborative culture across the organization. In addition, because of the shared belief that fair outcomes will always be pursued, collaboration does not require continuous cost-benefit calculations among member firms. If collaborative partners constantly assess the value of the knowledge and ideas they are sharing, they will inhibit their own ability to contribute fully and creatively. Thus, to join and continue in a collaborative relationship, one must find the process of knowledge and idea sharing satisfying in itself without major concern for the ultimate outcome.

Fourth, the identification of new applications and organizing for production and sales, as indicated in Figure 1, must occur during the collaborative entrepreneurship process. Entrepreneurial activity across firms in a collaborative network benefits from two factors that are normally unavailable to the atomistic firm. First, the collaboration process increases the likelihood of identifying and commercializing new ideas when member firms focus on multiple complementary markets. Second, innovation-focused collaboration among firms facilitates the flow of innovative products and service to the market. The collaborative network extends the reach of individual firms and increases the creative utilization of knowledge.

Looking forward, we believe that multi-firm collaborative organizations will eventually be commonplace. We predict that some group of pioneering firms will see the value of this new network for pursuing continuous innovation across industries. The pioneering firms will undertake the risky investments to set up the initial network. Once the collaborative entrepreneurship model has been demonstrated to work in a particular economic space, it will be imitated by other companies.

Examples

PBR International[3] is an Australia-based manufacturer of brake and clutch products to OEMs in Asia Pacific and North America, and to replacement markets in 45 countries. It competes effectively and internationally in the highly competitive automotive component sector by establishing joint development partnerships with universities and related industrial component manufacturers such as the makers of bearings and motors.

The partnership, or what PBR calls "Joint Development Agreements," enables the company to access "best of breed" complementary technologies and resources for rapid product development. PBR views this ability to manage such collaborative innovation projects as key to its business success. "While our competitors are putting a development project team together in-house, we have completed the task with our partners," said the company executive.

For instance, PBR and SKF, a global rolling bearing supplier, agreed to jointly develop an electric version of PBR's Banksia parking brake in 2002. The alliance brings together SKF's expertise in automotive mechatronics with PBR's know-how in park-brake solutions. With parking brake-by-wire technology, the driver will be able to actuate the parking brake using a switch in the car.

PBR's major customers include Ford, Toyota, Mitsubishi and Bosch. Around 60 percent of General Motors vehicles in North America are fitted with PBR brakes.

Another example of collaborative entrepreneurship is Syndicom.[4] Started in 2005 and based on the principles of collaborative entrepreneurship described in our book, Syndicom focused initially on the community of spine surgeons in the U.S. Spine surgeons frequently work on very difficult and risky cases, and it is clearly in the patient's as well as the physician's interest to have as much medical knowledge as possible brought to bear on such cases. Syndicom's first product was an easy-to-use piece of software that would allow all the doctors who were connected electronically by it to comment anonymously on each other's most unusual or difficult cases. Prior to the availability of this product, an individual spine doctor typically brought difficult cases to the attention of a few well-trusted colleagues who would comment by telephone or e-mail after viewing a faxed picture or a mailed set of X-rays – a limited and cumbersome process.

Although Syndicom is less than two years old, it has been successful in at least two ways. First, its initial product is very valuable, and interest and subscriptions among spine surgeons have grown rapidly. It appears that this product, and any follow-on products that might ensue, will give

[3] www.pbr.com.au
[4] Miles, R.E., Miles, G., & Snow, C.C. 2006. "Collaborative Entrepreneurship: A Business Model for Continuous Innovation," *Organizational Dynamics*, 35: 1-11.

Syndicom the financial returns it needs to survive. Second, and even more important, Syndicom understands how the process of collaborative entrepreneurship works and how to manage the kind of organization in which collaboration can be used to create innovative products and services. Presently, Syndicom is attempting to extend its collaborative approach into other medical communities, and it has incorporated a set of trusted medical device manufacturers into the network in order to have the capability to manufacture new medical products as they emerge.

Conclusion

Collaborative entrepreneurship increases each member's access to knowledge about the design of new products/services as well as about market information. Across firms, opportunities for innovation increase as new applications are envisioned and alternative resource bundles are developed. This is precisely what successful entrepreneurs do – they see a new use beyond current applications and organize to pursue it. Entrepreneurship simply becomes easier when firms jointly engage with one another through collaboration.

Questions for Discussion

1. What are the difficulties in starting and sustaining collaborative entrepreneurship?
2. How might member firms benefit from such efforts without losing the core capabilities they possess to others?
3. How might one measure the returns on investments in intangible assets to establish collaborative network? (Without an ability to calculate returns, entrepreneurial firms have difficulty justifying large investments in intangible assets or rewarding organization members.)
4. Can a firm's role and position in the network change during the innovation journey? What is the governance process whereby such changes are managed?

Table 1: Elements of a Multi-Firm Collaborative Organization

	Business Strategy	Capability	Structure	Management Processes
Community of Firms	Continuous Innovation	Inter-Firm Collaboration	Multi-Firm Network	Operating Protocols Central Services Unit
Individual Member Firm	Continuous innovation within the community. May use the same or different strategy outside the community.	Intra-Firm Collaboration	Innovation Teams	Self-Management

Figure 1: A Model of the Collaborative Entrepreneurship Process