

Entrepreneurship in Large Enterprises

- Entrepreneurship is often seen as the process of launching new ventures. These tend to start as small organizations and either grow, die, or live a marginal existence.
- Can large enterprises demonstrate entrepreneurial behavior?
- Can General Motors, Exxon, Microsoft, Cisco, IBM, and other big corporations be entrepreneurial?
- Can the big state research university be entrepreneurial?
- Can state and federal governments be entrepreneurial?
- **Can an elephant dance?**
- The answer to all of these questions is yes?
The more interesting question is how?



How can large enterprise be entrepreneurial?

- There has been considerable research on how large corporations can act in an entrepreneurial fashion and foster entrepreneurial behavior in their employees.
- In part, how this is accomplished depends upon whether it is better to do it internally (intrapreneurship) or externally (Corporate venturing).

Intrapreneurship

- Intrapreneurship is defined as *“A person within a large corporation who takes direct responsibility for turning an idea into a profitable finished product through assertive risk-taking and innovation”*
 - First introduced in 1978 by Gifford Pinchot III and Elizabeth Pinchot
 - As Steve Jobs put it: *“The Macintosh team was what is commonly known as intrapreneurship; only a few years before the term was coined—a group of people going, in essence, back to the garage, but in a large company.”*
 - <https://en.wikipedia.org/wiki/Intrapreneurship>
- Skunk Works: widely used in business, engineering, and technical fields to describe a group within an organization given a high degree of autonomy and unhampered by bureaucracy, tasked with working on advanced or secret projects. (Originally applied to a group at Lockheed Martin aircraft company.)
 - https://en.wikipedia.org/wiki/Skunkworks_project
 - Key Points:
 - Autonomy
 - Freedom from bureaucracy
 - Working on projects that do not closely relate to existing lines of business (radical innovation)
 - Skunk works need to be adequately resourced from the parent enterprise.

Corporate Venturing

- Corporate venturing is a corporate approach to entrepreneurship which is more outward looking. Many large corporations found it difficult to innovate within the confines of the enterprise. There were fights over resource allocation, competition between leaders, and other obstacles – even when some of the best practices of entrepreneurship or “skunk works” were implemented.
- Many enterprises set up venture capital groups that were given some autonomy to invest in outside start-ups that would benefit the company or which might one day present an attractive acquisition.
- In some cases these new ventures were started by employees spinning out of the larger ventures.
 - UMass Lowell grad Charles Hof ‘66 spun an eyeglass venture out of Bausch and Lomb.
 - He has been a senior vice president of operations for Bausch & Lomb and held senior management positions with Wang Laboratories, Polaroid and Gillette. From 1983 to 1986, he was president, CEO and owner of ARL Analytical Instruments Co., which generated more than \$100 million in worldwide sales. He then became owner, chairman and CEO of Universal/Univis, Inc., a group of designer eyewear companies. Since then he founded a venture capital organization called the Hoff Family Ventures.



Why do corporate venturing?

- An excellent article in the Harvard Business Review gives an overview of corporate venturing.
 - <https://hbr.org/2013/10/corporate-venturing>
- Reasons to do this:
 - Faster Response
 - New ideas can be resisted by the established leaders in a corporation
 - A better view of threats to the existing business.
 - Easier disengagement –
 - how to cut your loses with the least damage.
 - A bigger bang
 - Many corporate venture funds teamed with traditional venture funds
 - Getting a higher return on the investment.
 - Managing a new venture may conflict with existing businesses.

More motivations to do corporate venturing include:

- Grow the business.
- Exploit underutilized resources.
- Introduce pressure on internal suppliers.
- Divest non-core activities.
- Satisfy managers' ambitions.
- Spread the risk and cost of product development.
- Combat cyclical demands of mainstream activities.
 - Boeing set up two groups, Boeing Technology Services (BTS) and Boeing Associated Products (BAP), specifically with the function of keeping engineering and laboratory resources more fully employed when its own requirements waned between major development programs.
- Learn about the process of venturing
- Diversify the business.
 - Kodak and Fuji tried to find alternatives to the declining film business.
- Develop new technological or market competencies.

Example: Apple launches the iFund with Kleiner Perkins VC

- When Apple launched their iPhone OS SDK (Software Development Kit), they teamed with Kleiner Perkins Caulfield and Byer to create a \$200 million venture fund to help fund developers for apps for the iPhone.
 - <https://en.wikipedia.org/wiki/IFund>

Intel invests in ILinc (Jack M. Wilson; Memoirs; page 157-158)

The Intel Investment and working with Andy Grove

“Having Intel as an investor sent an impressive signal to the software community –ILinc LearnLinc was a serious company. It came because we were able to do something that others had failed to accomplish –and did it an area of interest to Intel -multipoint video, audio, and screen sharing on networks.. . In order to create the product we had to solve several key technical problems –including that of reliable multicasting. We also implemented some innovative ways to control bandwidth on the networks that allowed us to have very large numbers of users of live video, audio, and screen-sharing all working simultaneous. Our ability to do this while scaling bandwidth linearly (instead of the usual factorial or quadratic scale) meant that we could do nearly ten times as many simultaneous users as could Intel (with ProShare video and audio only). (To be more precise, we could actually hold bandwidth to a constant fixed term with a very small linear scaling term.)”

“At one point an Intel representative asked me how many simultaneous sites we could link up with video, audio, and screen-sharing. Since we did not have the resources to equip many sites, I really did not know for certain. The mathematics told us that we should be able to do a very large number of sites, but we had not done it. The Intel representative then asked whether we could do more than 50 sites, and I said “sure.” Under my breath I added –“probably.” Intel then cobbled together a large number of sites which was less than the 50 but more than 20 and we were asked to do a demonstration. It worked.”

“At that point Intel told us that they were willing to invest, but that we had to have a side-by-side venture capital partner that would make a matching investment –which we quickly (but not easily) accomplished.”

Intel Ventures

“We were also invited to develop a presentation for then CEO, Andy Grove, to do at a major software conference. According to many of my friends, Andy Grove was even more difficult and demanding to work with than Steve Jobs. Having worked with Jobs earlier in my career, I knew this was a high bar. They asked that I fly out to Santa Clara and meet with Grove to do a demonstration and answer his questions. I took the trip with some trepidation, but also knowing that the investment was already a done deal.

His staff set me up in a demonstration room in which we had several computer simulating multiple remote locations. I was told that “Dr. Grove will come in at 11:15 am and then you will do the demonstration for precisely 15 minutes. At 11:30 he will begin to ask you questions. At 11:45 he will promptly depart for another meeting.” They sternly instructed me not to depart from the script and not to engage in small talk. The instructions were consistent with everything I expected.”



Intel Ventures

“Sure enough, at precisely 11:15 Andy Grove came in and introduced himself. We sat down together at a computer, and I began to demonstrate the product. I did not get too far until he asked his first question about our screen sharing protocol. Then he followed up by asking how we had been able to do so many simultaneous video sites when his folks only were able to do eight or so – and that took a big fast server to pull off. I explained that it was not really all that hard. We simply recognized that only two video streams at any time were necessary and we used agent technologies to shut off those streams that were not going to be used. We shut off those streams at the source, while standard multipoint video conferencing solutions dealt with them all at the video-conferencing server level. We set up a simple protocol of hand-raising that would allow any participant to ask for the floor –much as legislators ask for the floor in congress. That prompted another question and then another. 11:45 came and went but Andy Grove was still sitting at the computer asking me to demonstrate one point after another and firing off questions like he was giving a doctoral candidate an examination. That put him on my turf, and I was enjoying myself immensely. His staff got more and more nervous, but they were quite careful not to interrupt him. They kept giving me dirty looks but Andy Grove just kept on asking questions and clicking on buttons. It was nearly 1 pm when he left with a smile and a big handshake. I could not have found him to be a nicer or more interesting guy.”

“When he delivered his speech, my partner Mark Bernstein was there to provide his support. It was one of the highpoints of our early years.”

See also: <http://www.jackmwilson.net/ILincLearnLincStory-text.htm>

How do large enterprises manage new ventures?

- Two critical dimensions for managing ventures:
 - Who owns them? (internal or external, spinoff or joint venture?)
 - Who funds them? (corporate funding, venture funding, joint venture)
- Four possible options:
 - Opportunistic- no ownership or resources for venture, but projects able to stand on their own.
 - Enabling- no ownership but provision of dedicated support and resources.
 - Advocacy –ownership is possible but mostly support resources and not financial
 - Producer –formal ownership and dedicated funding of ventures.
- Establish an environment that encourages the generation of new ideas and the identification of new opportunities, and establish a process for managing entrepreneurial activity.
- Select and evaluate opportunities for new ventures, and select managers to implement the venturing program.
- Develop a business plan for the new venture, decide the best location and organization of the venture and begin operations.

Next steps in development

- Monitor the development of the venture and venturing process.
- Champion the new venture as it grows and becomes institutionalized within the corporation.
- Learn from experience in order to improve the overall venturing process.

- Rely on R&D personnel to identify new business opportunities based on their technological developments (i.e. essentially a 'technology-push' approach).
- Rely on marketing managers to identify opportunities, and direct the R&D staff into the appropriate development work (i.e. essentially a 'market-pull' approach).
- Encourage marketing and R&D personnel to work together to identify opportunities

Challenges to face

- They must establish their legitimacy within the firm by convincing others of the importance and viability of the venture.
- They are likely to be short of resources, but will have to compete internally against established and powerful departments and managers.
- As advocates of change and innovation, they are likely to face at best organizational indifference and at worst hostile attacks.

Thus new venture leaders must have social and political skills as well as a viable business plan and skilled and experienced team members. Dedication, flexibility, and luck can help!

Key Team Members

- **Technical innovator** – responsible for the main technological development
- **Business innovator** or venture manager – responsible for the overall progress of the venture
- **Product champion** – promotes the venture through the early critical stages
- **Executive champion** or organizational champion – acts as a protector and buffer between the corporation and venture
- **High-level executive** – responsible for evaluating, monitoring and authorizing resources for the venture, but not the operation of specific ventures.
 - The last two are usually inside the larger enterprise, but charged with managing the relationship to the new venture.

Questions to ask at the beginning.

- What are the key capabilities required for the venture?
 - Where, how and when is the firm going to acquire the capabilities, and at what cost?
 - How will these new capabilities affect current capabilities?
 - Where else could they be exploited?
 - Who else would be able to do this, perhaps better?
- Answering these question will help the enterprise decide on the best structure for the new venture.

Potential Structures

- **Direct integration with existing business**
 - Best when the new venture is strategic and linked to existing competencies and does not threaten existing lines of business. Innovations, however, are likely to influence existing product lines.
- **Integrated business teams**
 - Also for ventures that are strategic but that will benefit from a separate profit center approach.
- **A dedicated staff function to support efforts company-wide**
 - This is usually an internal unit designed to encourage intrapreneurship and innovation that is more frequent and incremental.
- **A separate corporate venturing unit, department or division**
 - This allows a new venture to develop with less interference from established lines of business and established leaders. It also limits distractions to the existing lines of business and leaders.
- **Divestment and spin-off.**
 - Independent business units provide more autonomy and are covered in the next slide.

Independent business units

- Independent approaches include:
 - Nurtured Divestment
 - Complete Spin-Off

- Advantages of independence include:
 - Defrayed risk for parent, greater freedom for venture.
 - Less supervisory requirement for parent, less interference for venture.
 - Reduced management distraction for parent, and greater focus for venture.
 - Continued share of financial returns for parent, greater commitment from managers of the venture.
 - Potential for flow-back, process improvements or product developments for parent, and learning for the venture.

Xerox spin offs

- The good the bad and the ugly.
- The Role of the Business Model in Capturing Value from Innovation:
- “Evidence from Xerox Corporation’s Technology Spinoff Companies;”
 - By Henry Chesbrough and Richard S. Rosenbloom; Harvard Business School
 - http://www.hbs.edu/faculty/Publication%20Files/01-002_07351ae8-58be-44e5-a6d8-205cbf5b4424.pdf
 - *“The raw material for our exploration was provided by a recent comprehensive survey of 35 spinoff companies that commercialized technology emanating from Xerox’s research laboratories over a 20 year period beginning in 1979 (Chesbrough, 2000b). Chesbrough defined a spinoff to be a specific organizational entity newly created for the purpose of commercializing one or more technologies developed within the corporate research laboratories of Xerox”*
- By 2001, the value of the Xerox spin-offs exceeded that of Xerox. It was roughly double. Since then it has only gotten worse.
- In the end, the value to the enterprise will depend upon how well these spin-offs are exploited, and Xerox did not do it well.