

## Entrepreneurship and Innovation

How do new things come about and how can you make money from them?

Entrepreneurship - Any new business or new venture creation - the act of creating new goods or services or serving new markets

Invention - Act of creating or developing a new product or process

Innovation - Act of creating a commercial product or process from an invention

Innovation is much more common than invention. We discussed two types: process innovation and product innovation. Innovations also have two effects on existing firms; they can be either competence enhancing or competence destroying. Competence enhancing innovations help firms further extend their resources and capabilities. For example, Philip Morris introducing a new brand of cigarettes would be a competence enhancing innovation because all of its marketing and distribution resources are extended. Competence destroying innovations undermine existing firm resources and capabilities. Generally the more radical the innovation the more competence destroying it is. For example, the 707 airliner against Trans-Atlantic ships would be competence destroying for the liner firms. Keep in mind too that most new innovations fail! For example, something like 80% of new products fail and most new product ideas don't even make it to commercial introduction! (So ironically, ideas are very cheap.)

The economic basis for innovation comes from Joseph Schumpeter and the metaphor of creative destruction. Schumpeter saw industries being reconfigured by the results of invention and innovation. He speculated that only large companies would be able to profitably innovate because only they would have the resources to capture the returns from innovation. However, Schumpeter was wrong, most innovation comes from small companies or individual entrepreneurs. Why?

People, NOT firms are the ones who engage in creative activity that can lead to invention and innovation. Firms can only enable creative activity by providing incentives and resources.

Recall that the simplest model for motivation is the expectancy theory model:

Motivation = valence X instrumentality, valence is the attractiveness of some reward (extrinsic and/or intrinsic) while instrumentality is the clarity between actions and reward.

Firms generally require employees to sign intellectual property agreements that state that everything they think up belongs to the firm and non-compete agreements that they will not compete with the firm. While the latter are usually unenforceable (especially in some states such as California) the former have been routinely upheld. How do you think the existence of these restraints affects motivation?

Therefore, it is no surprise that most innovation occurs from smaller firms, including groups of people leaving a large firm to start their own.

Therefore, the challenge for existing firms, especially those in a technologically driven industry, is how to encourage their employees to invent and innovate while meeting the challenges from

new entrants with superior technology. This is extremely difficult and why you don't see firms dominating markets for more than about 20 years or so. (IBM went for about 30 years, AT&T for a bit longer, but those were exceptions and were successfully challenged.)

Corporate Entrepreneurship - get existing workers to innovate

Product Champion - someone in the firm who champions a product

Strategic Alliances - ally with a more innovative firm

M&A - buy an innovative firm, rarely works well, why?

Skunk Works - set up an autonomous unit for innovation, helps avoid stigma of "failure" and can encourage employees to take risks

How do each of these address the motivation problem?

Once you come up with an invention or innovation you have to make sure you capture the benefits from doing so. This is helped in the U.S. by patents, a 17-year monopoly on your invention. However, patents can be invented around and reverse engineered so don't expect the full 17 years or even any. Furthermore, most other countries do not have the same level of intellectual property protection that the U.S. does.

**Strategic Change.** The evil brother of innovation is strategic change. In order to take advantage of an innovation or inventions organizations often need to adopt different internal structures or roles. Humans are emotional creatures and find change very difficult, even when it is not very significant. Politics, or who gets what, is important in organizations, especially those engaged in significant change. Politics has an undeserved negative stigma. One of the reasons change is so difficult is that it challenges the understood ways of allocating rewards in an organization. Therefore, change without explanation of definite benefits tends to breed cynicism (e.g. BOHICA). Therefore, in order to facilitate change, share information about the change and power. Information and politics both tie back into instrumentality in the motivation model above.

**Power.** As we have already discussed, power is the ability to absorb others uncertainty. It can be either formal or informal and has its basis in reliance, controlling information, or allocating or generating resources. Authority is legitimate power.

One new issue:

(Warning: Personal opinion!)

**Business Method Patents.** In what can only be considered a lapse of judgement of galactic proportions the patent office has allowed what are called "business method patents" on activities over the Internet. While beyond the scope of the class, you will hear a lot about these over the next few years and they may severely restrain commercial activity over the Internet in the near future.

