Essay based on
Peter F. Drucker (1993) *Innovation and Entrepreneurship*
(Harper Business edition, first edition 1986). HarperCollins Publishers; New York.

Summary

This essay references the volume "Innovation and Entrepreneurship" (IE henceforth) by Peter Drucker. Drucker (1909 – 2005) was a scholar and consultant with an exceptionally long career. He moved from Germany in early 30's to UK and during Second World War he immigrated to United States at the age 34. Drucker has made an impact on various areas of management, business strategy, organization culture and also innovation. Drucker is commonly credited for coining the term "knowledge worker". IE presents a relatively late addition among 39 other books along Drucker's extensive career, which included consultation to numerous large companies. He was known for pronounced criticism of existing control structures, including government, for a unique view of liberalism with equal rights, privatization and thoughts later on leading to formation of New Public Management theory (http://en.wikipedia.org/wiki/Peter_Drucker referenced 2.12.2009).

The book itself, IE, is built upon a philosophy that in future (or right now, considering the time perspective of the book), an entrepreneurial society will be the only one that can sustain the development of a welfare society. And the entrepreneurial society will be a product of an economy of innovative entrepreneurship combined with government facilitation, or at with government of minimal interference with this development. All through the book, Drucker presents United States as an example of successful entrepreneurial economy, in which an entrepreneur-friendly economy has in

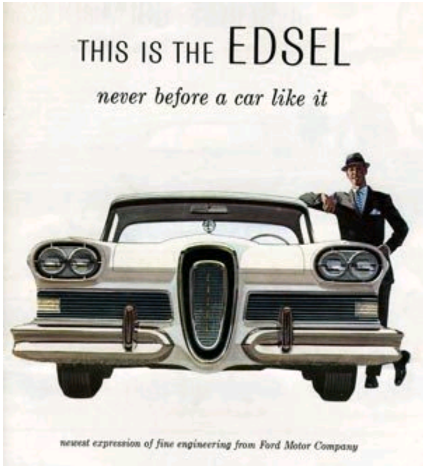
various business areas been able to counter the issues of falling “smokestack” industries in the past decades. It has provided US more jobs than the considerable growth of population would have demanded. Japan is also mentioned, which shows admirable insight even if the 2009 economic slump did again hit Japanese very hard. Another repeating motif in the book is that in all innovation talk, high tech is always exaggerated. While high tech may have potential big impact, and there are good many older and newer examples, Drucker sees it at very risky and currently mismanaged industry. Thus his examples of innovation are mainly derived from other business domains.

The book IE is designed to provide guidelines on how entrepreneurs can become innovative and not just inventive engineers and economical failures. The book is thus organized into three parts: **innovation practice, entrepreneurship practice** and **entrepreneurial strategies**. Each of these has each its own role in the innovation game and will be next reviewed separately.

Innovation practice

Successful innovation practice, according to Drucker, is based on systematic hard work. Not on luck or single insightful ideas. Drucker introduces *systematic innovation* as a framework for exploiting innovative opportunities. He introduces seven sources of innovation that can be monitored for starting up new innovations. These seven fall into two categories: *internal* and *external* to an enterprise. Four chapters in the book deal with the former, three with the latter. They will next be recapped in the order used by Drucker. He sees that the first ones are the easiest opportunities for innovation and the implementation, and risk increase towards the end of the list. The abstract source categories are not mutually exclusive, but an innovation may be related to several source categories.

Unexpected success is an event where some business area suddenly starts to boom beyond expectations. This should provide the company a chance to renew their operation and make the best of the situation, what ever the



underlying cause, and accept that the market is changing. **Unexpected failure** is a similar indicator of changes taking place in the world. Several examples are given, including Ford automobile's Edsel. This model was carefully designed to target 'upper-middle' class people. However, it turned out that during the years of design, production and launch, the market had changed. There were no more customers interested in the car, as the customer values were changed quickly in the post WWII society. Instead, Ford's Thunderbird, a very different type of car for different type of customers made a big hit and a legend of its own (http://en.wikipedia.org/wiki/Edsel).

It must be noted that at this point, Drucker is clearly wrong in providing this examples. Ford did not actually act upon the unexpected failure. The famous


Ford Thunderbird (1955)

T-bird had already been on the market three years (since 1955) before Edsel was launched in 1958. **Unexpected outside events** are also mentioned as one source of surprise. In this case, there is also a change in the market than can be exploited by a company. The important detail stressed by Drucker is that exploiting each of these unexpected changes requires only relatively small efforts from the company, *not diversification* of their business area - just embracing the opportunity by adjusting existing tools.

Incongruities present another large group of innovation sources. They mostly refer to external operation environment and changes within. They are usually created when the "realities" of a market and company's perception of it become misaligned. As an example, a production model may become too expensive. Drucker lists old American steel industry and healthcare. In both domains new operation and production models have gained space from old ways of doing things. Drucker sees incongruity also in processes, for instance an innovation for eye surgery, an enzyme compound to prevent bleeding.

Necessity is the mother of invention, it is said. **Need** is also discussed as one source of innovation. For instance, the incongruence in eye surgery indicated an unsatisfied need. The important step is *identification* of the need. If the need can be explicated, then it often can also be satisfied. The need-based innovation is associated with a *program research* (or what might be typically called applied research). This research is specifically committed to solve the need in question. Drucker lists some conditions or features of an innovation that exploits a need:

a. weak or missing link,
b. clear definition of the objective,
c. specifications of the solution clearly definable,
d. widespread realization that there must be a better way (*receptivity* to innovation).

Industry and **market structures** can also provide a momentum for innovation. Starting from Ford car examples, Drucker lists several cases from automobile industry in which manufacturers such as Volvo, BMW, Mercedes and Rolls Royce. Each of them has established a leading position in a certain market by focusing their efforts to a certain customer segment.

As we now turn to external sources of innovation, we first encounter **demographics.** As a source, they refer to unexpected or unforeseen changes taking place in the age, gender, lifestyle and educational distribution of customers. These kinds of changes usually indicate opportunities for new enterprise. Author's examples include establishment of new kind of travel guides and Sears, Roebuck CEO's doing field research on the prospects of Middle-America as a growing area for business.

Seeing glass as a half full or half empty is a difference or a **change in perception,** another potential source of innovation. This perception can target a variety of things, for instance transition from middle-class to an outdoors person, or from eating to dining. The important signal for an entrepreneur is that once people start seeing things differently, they are receptive to act on it as well – half empty glass gives more reason to act than a glass half full. In these cases, innovation must be *timed right* as the changes to exploit the change are quickly exploited and then vanish.

Finally, innovation source called **new knowledge** is what people typically think of innovation, *new technologies, new inventions,* usually resulting in some high tech apparatus. This source is in the bottom of Drucker's list for several reasons. Knowledge-based innovation comes slow (long lead time), it has very low chances of success and it almost always requires *convergence* of multiple technologies to succeed. Business-wise this cripples the innovation before it is about to happen. As requirements for an invention to succeed, Drucker believes in careful analysis of all necessary internal and external factors (what ever they may be in each case) and focus to occupy a strategic position in the market.

Technology-based innovations have unique risks. These are mostly related to their life span. It is argued that the inventions have fairly limited *time windows* which open and then close abruptly for an indefinite time (sometimes may re-open). The failure to act in this window will mean failure. Even correct timing will inevitably show up in a strong competition as many people will try to do the same in the given time. The closing of the window is preceded by a *shakeout* in which the companies that made it through the window will be competing to hold their position in the market. Drucker's view is very skeptic, he believes that for most windows, there are can be only a couple big players left once the shakeout is over. Finally, the window may not appear at all if there is no *receptivity* for the invention. If the market is not ripe for the new idea there can be no business. Some new value must be provided for the customer to justify its existence.

Related to new knowledge-based innovations, Drucker discusses so called 'bright, new ideas'. He is very pessimistic in their regard. He argues that the great majority of bright ideas will commonly just fail and more importantly, no one can really tell why. So, the book actually warns about gambling with good ideas without proper analysis of its susceptibility as a business; adhering to Drucker's basic model of business delivering new value to a customer. Or put another way, he argues that ideas must be properly justified. The imagined added value should be based on some customer need to ensure that there is receptivity for the invention.

Drucker provides some rules of thumb on how to innovate. In his list of things to do right (pp. 134-140) he says that ideas should start by analyzing opportunity carefully and to "*go out and look at the customers, the users, to see what their expectations, their values, their needs etc. are.*" (p. 135) This is clearly very similar what modern design consultancies, for instance IDEO are doing (see Kelley, 2001, 2005) The resulting idea must be focused on ***doing one thing right*** if it wants to succeed *on a some specific customer segment.* Some actions are best avoided in the innovation game, these include: trying to be too clever, trying to diversify the business beyond own area of expertise and setting the aim for some distant future when the focus should be in here and now. Finally, he presents three conditions for innovation: *innovation is work, innovators must build upon their strengths,* and *innovation is an effect in economy and society.*

Entrepreneurship practice

Enterprises built upon inventions require management. Drucker goes long way in arguing about the importance of management, the very discipline he claims to have greatly contributed from its birth in 1950's. The second part of the book considers how innovative enterprises should be managed. He deals separately with three branches: *existing business, public-service institutions,* and *new ventures.* Each of these has certain characteristics on how to best sustain innovation.

For big, **established businesses** innovation is necessary for keeping them in the market and ahead of competitors. The lesson starts from repeating that innovation is work. This work requires policies and practices that make innovation possible. These rules should govern four areas of enterprise's operation:

a) *Receptivity* for innovation (*rerum novarum cupidus*; eager…)
b) *Measurement* of company's performance as a entrepreneur
c) *Managing* for innovation: staffing, structure, incentives and rewards
d) *Avoiding* pit falls: mixing entrepreneurial and non-entrepreneurial units, diversifying business, buying in entrepreneurial spirit through acquisition

Each of these points is elaborated in the book. I consider that the important messages are the following. For the management, it is suggested to keep the new entrepreneurial units distinct from established ones. In the organization, there should be dedicated innovation managers adequately high up in the administrative hierarchy. They should perceive the priorities of innovative efforts in relation to existing business structures. The existing units have their own demands that can override all initially unprofitable entrepreneurial activities. This is important also because Drucker thinks that the lead time for innovation tends to be long, so that first three years are likely to be unprofitable and only years 4-5 can be expected pay off the investment.

In big companies, the special focus on management is necessary. There seems to be some special entrepreneurial spirit commonly associated with the founders of the companies whose role usually gets smaller and smaller as the size of the company goes up. If the innovation is not actively managed by the time this innovative force leaves the building, the company is bound to lose its entrepreneurial spirit altogether.

Drucker also consider managing innovations in **public-service settings.** His views are quite extreme. He believes that public services should be produced according to the same principles as entrepreneurs work with. He believes in privatization and the necessity of measuring the attainment of these organizations. Instead of thinking services as producing moral good, which is in his point of view immeasurable quantity, they need to *measure up in quantity*, or better yet, *in currency*. Once monetary value for the services is established, their functioning can be *optimized* per funding dollar and the goals set accordingly. While the goal is moral good is kept as the goal, it suggests the principle of *maximization* (in contrast to optimization), which in reality is often impossible (removing poverty, improving employee rights, etc.). Drucker believes that this optimization will improve services (p. 184). He thinks that only by changing the structure of the public-service organization can they be made flexible to adapt to the continuous change of the environment. It cannot otherwise handle the change and respond to transformed needs of the audience.

The part of **new ventures** follows largely what has been said before. Four requirements are stated: *market focus, financial foresight, top management team* and *entrepreneur deciding on her own role for the future.* The new wisdom about management is that every new venture should plan for future early on. The planning should include financing (how to grow sustainably) and management, creating a top management team to share the key decision making responsibility according to capability and interest.

Entrepreneurial strategies

The final part of the books deals with how the innovative company can proceed in order to really attain success. Four strategies are considered:

I. Being *"Fustest with the Mostest"*
II. *"Hitting Them Where They Ain't"*
III. *Finding and* occupying an "ecological niche"
IV. Changing the market, product or an industry

Being **Fustest with the Mostest** is Ducker's quotation from Nathan Bedford

Forrest (1821 –1877) who was a lieutenant general in the Confederate Army. However, Ducker has picked up a wrong detail, as the phrase has been transformed and coined much later, in a 1917 issue of New York Times (http://en.wikipedia.org/wiki/Nathan_Bedford_Forrest). Never mind the quotation, the principle of this strategy is to quickly obtain a dominion in a (new) market segment. After this move, the company then can start battling to maintain its position, but it will probably be easier than the other way around. This strategy is risky and requires lot of effort. Eventually it may turn out that there is no adequate receptivity or demand to support this tactic.

Hitting them where they ain't is another old proverb and translates into two distinct entrepreneurial strategies: *creative imitation* and *entrepreneurial judo*. The former strategy refer to a selection of a successful, existing market and overtaking it by offering customers some superior product or service. This requires a strong user focus, or seeing what user need might be better served. This makes it creative imitation, exploitation the success of others. Several examples are provided, for instance IBM is credited for overtaking Apple in late 70's in the personal computer business (p. 223). Very interesting quotation observed 30 years later.

The entrepreneurial judo is similar to this, a market-driven and market-focused strategy. Drucker emphasizes the power of judo in exploiting the weaknesses and the bad moves of the opponent. These moves can include:

a) Arrogance, minding only our own business and ideas
b) "Creaming" the market (high-end focus)
c) False impression of quality ("*we invested a lot*")
d) Selling premium with high profit margins
e) Maximizing product features to satisfy all (consequentially degrading usability and usefulness)

As an example, Swiss Swatch overlooked the introduction of quartz oscillators and electronic clock leaving it to the Japanese. Bell laboratories did not see any need for improving the tube radios. Again Sony Japanese tackled them only some years later.

Ecological niche strategy is aimed at market control, not leadership as the previous ones. It includes three approaches: *toll-gate*, *specialty skill* and *specialty market* strategies. The toll gate is based on unique product, unique market. This enables one business to hold the whole area, although being highly dependent on the need. Specialty skill is not far from this, it refers to acquiring a dominant position when the needs remain stable. This is also very sensitive to changes in external environment and easily induces tunnel vision, incapability to reach beyond one established niche. For instance, Bosch solely dominates car ignition manufacturing in Germany, but is out of airplane electronics. The same goes for specialty market, which is a clear counterpart of the skill, the right piece for the right puzzle.

Conclusion

By the end of the book, Drucker ends up discussion how the system of values, needs and pricing works. He believes that ultimately everything is about the value that is offered to a customer. Pricing is important determining who can pay the product, regardless of how important it seems.

IE is full of fascinating business cases and strong arguments. However, the literary style of the author is quite awful. Although he likes to put a lot of confidence in the need and skill for analysis, his writing and argumentation would also need much of that. Even though the amount of verbatim repetition is minimal, the writing feels as if the book had been dictated from speech and barely saved by editing. The logical structure of the arguments is quite flawed and categorization of various matters is badly lagging behind. Having expressed this opinion, it noteworthy to see that similar concerns have been raised by others:

> The Wall Street Journal researched several of his lectures in 1987 and reported that he was sometimes loose with the facts. Drucker was off the mark, for example, when he told an audience that English was the official language for all employees at Japan's Mitsui trading company. (Drucker's defense: "I use anecdotes to make a point, not to write history.") And while he was known for his prescience, he wasn't always correct in his forecasts. He anticipated, for instance, that the nation's financial center would shift from New York to Washington.
> (http://en.wikipedia.org/wiki/Peter_Drucker#Criticism referenced 2.12.2009).

This clearly states the generic problem underlying many of the arguments. The causality of the factors leading to certain events as a consequence of following a strategy or making some decisions is never explicated. Neither are there are solid statistics to support nearly any of his business-related insights. While some of his many ideas are intuitive and immediately make sense, it is hard to distinguish between credible and susceptible arguments by relying only on readers' intuition. Although the author clearly has credibility and insight gained through numerous business examples, it remains impossible to say which parts of his theory really are significant claims about innovative industry and which are not. This generally undermines the usefulness of the book as a handbook to innovation, which it still tries to be. It might better be titled 1001 anecdotes on innovation. This is ironic given that the bibliography (or Suggested Reading title found at the end of the book) opens with the phrase "*Most of the literate on entrepreneurship is anecdotal and of the 'Look, Ma, no hands' variety*." So why did not Drucker not attempt to do better than that? With a systematic analysis or meta-analysis and logical argumentation all his cases would have had made a much durable and convincing contribution.

There are few examples of problematic arguments in addition to those already introduced within the review. The all seven introduced innovation sources remain quite passive. As described, they consist mostly of **reacting to** environmental changes rather than forecasting or creating change. Maybe this is partially because of the authors' disillusion in high tech innovation that often creates the biggest changes. The analyses of the seven sources are in many regards very difficult to follow. The presented cases are overlapping but to my mind, they could be categorized in very different ways, and many of those might be more insightful than those now presented by Drucker. For instance, the dichotomy of external and internal sources of innovation is incomprehensible if not fully implausible. Although it is said that the sources are not mutually exclusive, their grouping is still very unintuitive.

Finally, Drucker's point of view of "entrepreneurial personality" is very contradictory. On one hand, he seems to hold a belief that there are more entrepreneurial spirits who go on do business (p. 169), and on the other hand, he completely dismisses psychologists in their attempts to describe what these people are alike (pp. 139-140).

I believe Drucker's problem is to believe that people are deep down righteous and fair. As demonstrated in Stanford prison experiment, *homo homini lupus*, there is no inherent justice. If economical success (of an individual or company's) is the only viable measurement, then all other values, such as ethics, morale, humanism, animal rights, will be eventually ignored. It does not take more than 5% of all actors to act immorally and unethically and the game changes. This means, that after the shakeout, a small quantity of leaders of their own market will prevail and enjoy disproportional economic wealth while a large portion of population will be dealing with the down side of their success, poverty, unemployment, unjust working conditions and global ecological disasters. Of course this view is extreme and in reality the continued existence of middle-class will balance things out, as the situation would otherwise lead to a certain revolution or acts against structures maintaining the economic structures. Fine examples of the activism can be found from Hollywood scripts, such as *Fight Club* or *The Dark Knight*.

References

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