Book Summary:

Innovation and Entrepreneurship

By Peter Drucker (1985)
Innovation and Entrepreneurship

Author: Andre Kearns

Book Summary

PREFACE

Book rests on 3 premises:
1. **The practice of innovation** is purposeful and a discipline
2. **The practice of entrepreneurship** is the institution that is the carrier of innovation
3. **Sound entrepreneurial strategies** and management are required to successfully bring an innovation to market

INTRODUCTION

• Entrepreneurship and innovation is driving US economic growth
• Entrepreneurship is not just ‘high tech’, in reality, most economic growth driven by entrepreneurship is from no to low tech sectors
• Entrepreneurship is filling growth gaps in the Kondratieff Cycle (economic theory)
• Kondratieff Cycles are regular, sinusoidal cycles in the modern (capitalist) world economy. Fifty to sixty years in length, the cycles consist of alternating periods between high industry growth and periods of slower growth
• Technology does not have to be “high tech” either
• Technology is a vehicle of change in attitude, values and behavior
• Management is technology and is what makes possible the emergence of the entrepreneurial economy – to new enterprises (though people assume mgmt applicable to existing enterprises only), to small enterprises (though people assume for big), to non-business (though people assume for business), to activities i.e. local restaurant, to systematic innovation (the search for and exploitation of new
I: THE PRACTICE OF INNOVATION
What entrepreneurship isn’t
- Small business is not entrepreneurship
- Small ‘me too’ restaurant is an activity, not entrepreneurship

What is entrepreneurship?
- Entrepreneurship is not a personality trait
- Entrepreneur systematically searches for change, responds to it, and exploits it as an opportunity
- Systematic innovation is the purposeful and organized search for changes and the systematic analysis of opportunities such changes might offer for economic or social innovation

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<thead>
<tr>
<th>Examples</th>
<th>Innovation / Differentiation</th>
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<tbody>
<tr>
<td>McDonalds</td>
<td>- Standardized the ‘product’</td>
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<td>- Designed process and tools</td>
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<td>- Created standards and training</td>
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<tr>
<td>Post WWII “Private” and “Metropolitan”</td>
<td>- Designed for people in mid-career</td>
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<tr>
<td>Universities i.e. Pace, Golden Gate</td>
<td>- Shifted status of college degree from ‘upper class’ to ‘middle class’</td>
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The seven sources for innovative opportunity: Listed in descending order by reliability and predictability

**Within the Enterprise**

<table>
<thead>
<tr>
<th>Source</th>
<th>Take Aways / Examples</th>
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<tbody>
<tr>
<td>1. The unexpected – the unexpected success, the unexpected failure the unexpected outside event</td>
<td>The unexpected success</td>
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<td>- Macys – We don’t know how to stop the growth of appliance sales</td>
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<td>- US Steel – Rejection of the ‘mini-mill’ which was acquired by accident (offered modern technology, low labor cost, and pinpointed markets)</td>
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<td>- US maker of antibiotics – refused to use them on animals; Swiss company acquired world leadership in veterinary medicine</td>
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- Dupont – Nylon discovered because someone left the burners on too long
- IBM – Electro mechanical bookkeeping machine for accounting firms a flop; Thomas Watson started selling to public libraries clamoring for product

**The unexpected failure**
- The ‘basic house” of the 50’s– shift of ‘working class’ to ‘middle class’ required change in marketing from ‘your house’ to ‘your first house’ as a building block to the house you want
- The Edsel – shift from standard, lower middle, upper middle and upper market segments, to lifestyle segmentation

**The unexpected outside event**
- IBM- as ‘mainframe’ company, its reaction and transition to growth in personal computers

**Takeaways**
- To exploit opportunity for innovation offered by unexpected requires analysis ‘peel the onion’ to underlying phenomenon
- Key questions in analysis: What would it mean to us if we exploited? Where could this lead us? What would we have to do to convert it into an opportunity? How do we go about it?
- Also requires willingness to go out, look around, ask questions, and listen

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<table>
<thead>
<tr>
<th>2. The incongruity – between reality as it actually is and reality as it is assumed to be or as it ‘ought’ to be</th>
<th>Sources of incongruity – between the:</th>
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<tbody>
<tr>
<td>- Steel mini-mill – lower cost, minimizes capacity problem</td>
<td>a. economic realities of an industry</td>
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<td>- Rising cost of health care creates – ‘private health insurance’ in Britain and unbundling of health services from hospital in US</td>
<td>b. reality of an industry and the assumption about it</td>
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<tr>
<td>- Cargo vessel – uncouple loading from stowing to address cost of not working</td>
<td>c. efforts of an industry</td>
</tr>
<tr>
<td>- Alcon Labs – enzyme eliminated a risky procedure eye doctors had to perform in a standard cataract surgery</td>
<td>d. internal incongruity within the rhythm or logic of a process</td>
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<td>- Scott lawn – invention of the spreader for even distribution of seed, fertilizer to lawn</td>
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3. **Innovation based on process need**

| Requires that you find the ‘weak link’ in a process, but to fill the gap, requires considerable new knowledge to be produced. |
| Program research required to convert process from potential to reality - but program research doesn’t have to be big. |
| Examples |
| - Alcon Labs – enzyme eliminated a risky procedure eye doctors had to perform in a standard cataract surgery |
| - Linotype for typesetting – to go along with high speed printing and high speed paper driving proliferation of newspapers, magazines, books |
| - Photography – George Eastman replacement of heavy glass plates with cellulose film made technology widely available; drove Kodak to world leadership |
| - ‘little innovation’ Japanese re-design of traditional highway reflector – drove drastic reduction in auto accident rate in Japan |
| Criteria for process need-based innovations |
| a. a self-contained process |
| b. one ‘weak’ or ‘missing’ link |
| c. a clear definition of objective |
| d. that spec for solution can be defined clearly |
| e. widespread realization that ‘there ought to be a better way’ |
| Important caveats |
| f. need must be understood, not just felt i.e. student difficulty in math and how to resolve |
| g. may understand but not have knowledge to solve |
| h. solve must fit the way people do work and want to i.e. photographers had no investment in early complex photo process |

4. **Changes in industry structure or market structure** that catch everyone unaware |

| Rolls Royce – autos becoming plentiful so they positioned their car with ‘cache of royalty’ |
| Ford - autos no longer rich man’s toy so he designed a car that could be mass produced |
| Japanese cars – world exporters of American style cars but smaller with better fuel consumption and rigorous quality control |
- Porsche – positioned itself as the sports car
- DLJ – targeted a new, emerging group of pension fund administrators

Indicators of industry structure changing
a. Rapid growth of an industry
b. By the time a fast growth industry has doubled in volume, the way it perceives and services its market is inappropriate – example Post WWII art museums marketing to the mainstream
c. Convergence of technology that were seen as distinctly separate
d. If the way it does business is changing rapidly – example physicians practicing on their own trending to practicing in a group, partnership, HMO

Examples of non-reaction to changes
- Aspirin makers toward non-aspirin pain reliever trend
- USPS non-reaction to UPS and Fedex move into overnight

Outside of the Enterprise:

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<th>Demographics (population changes)</th>
<th>These shifts are clearest, easiest to predict</th>
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<td>- American teenagers demand for sneakers</td>
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<td>- Baby boomers retiring and taking vacations</td>
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<td>- Post WWII “Private” and “Metropolitan” Universities i.e. Pace, Golden Gate Designed for people in mid-career - Shifted status of college degree from ‘upper class’ to ‘middle class’</td>
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<td>- Citibank – expansion based on realization of movement of educated women into the workforce</td>
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<td>- Sears move to Latin America with booming populations</td>
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<th>Changes in perception, mood, and meaning</th>
<th>Glass is Half Full vs. Glass is Half Empty</th>
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<td>- ‘Eating’ vs. ‘dining’ driving high end restaurants</td>
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<td>- Jesse Jackson taking advantage glass half empty perception in black America despite significant gains to become president of black America</td>
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<tr>
<td>- Feminist perception of ’30s and 40’s as glass half empty though significant</td>
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Timing must be right

Examples
Innovation and Entrepreneurship

| New knowledge, both scientific and nonscientific | advancements were accomplished
|                                               | - Encyclopedia Britannica – perception that your child has to have it to do well in school
|                                               | - Success of Thunderbird vs. Edsel due to shit to lifestyle segmentation
|                                               | - Celestial Seasonings due to shift toward more healthy lifestyles
| Knowledge based innovation has longest lead time of all innovations | Usually takes 25 years from breakthrough innovation to adoption
|                                               | - Computer = binary theorem + punch card + audion tub
|                                               | External crisis can shorten lead time
|                                               | - Development of penicillium quickened by need to have potent drug to fight WWII infection
|                                               | Never based on one factor but convergence of several
|                                               | - Wright brother airplane = gas engine + aerodynamics
|                                               | - Newspaper = telegraph and high speed printing + high speed typesetting + mass literacy + mass advertising
|                                               | - Plastics = organic chemistry + x-ray diffraction + understanding of crystals + high vacuum technology + WWI shortages in rubber
|                                               | What knowledge based innovation requires
|                                               | a. Careful analysis of all necessary factors
|                                               | b. Clear focus on strategic position
|                                               | c. Learn to practice entrepreneurial management
|                                               | The Innovation “window”
|                                               | d. Science and technology-based innovation find time working against them creating a brief ‘window’
|                                               | e. Because the ‘window’ is crowded, any one innovator has less chance of survival
|                                               | f. ‘shakeout’ sets in once ‘window’ closes
The Do’s and Don’ts of innovation

The Do’s
- Purposeful, systematic innovation begins with analysis of opportunities
- Innovation is both conceptual and perceptual
- Innovation has to be simple and focused
- Effective innovation starts small
- Successful innovation aims at leadership

The Don’ts
- Don’t try to be too clever
- Don’t diversify, don’t splinter, don’t try too many things at once
- Don’t try to innovate for the future...innovate for the present

The conditions
- Innovation is work
- To succeed, innovators must build on their strengths
- Innovation is an effect in economy and society
II: THE PRACTICE OF ENTREPRENEURSHIP
- Big businesses can innovate
- Most entrepreneurial businesses are the larger middle sized ones

Entrepreneurial Policies
1. Innovation must be made attractive and beneficial to managers.
2. Importance of the need for innovation and dimensions of its time frame must be both defined and spelled out
3. There needs to be an innovation plan
   a. There is only one way to make innovation attractive to managers – a systematic policy of abandoning what is outworn, obsolete, no longer productive. Every few years, the enterprise must put its businesses on trial for their lives
   b. All existing products, services, markets, etc. have limited health and life expectancies
   c. The business X-ray (analysis and diagnosis of current businesses) furnishes the information needed to define how much innovation a given business requires

Entrepreneurial Practices
Entrepreneurship in the existing business also requires managerial practices
1. Must focus managerial vision on opportunity i.e. monthly performance report should include opportunities as well as problems
2. Generate entrepreneurial spirit throughout its entire management group
3. Top mgmt should sit down with junior people from research, engineering, manufacturing, marketing to ‘listen’

Measuring Innovative Performance
1. The first step builds into each innovative project feedback from results to expectations. This indicates the quality and reliability of innovative plans and efforts.
2. Develop systematic review of innovative efforts all together
3. Entrepreneurial management entails judging the company’s total innovative performance against the company’s innovative objectives, against its performance and standing in the market and against its performance as a business
Structures
1. The new has to be organized separately from the old and existing
2. There has to be a special focus for the new venture within the organization and it has to be pretty high up
3. There is another reason why a new innovative effort is best set up separately; to keep away from it the burdens it cannot yet carry
4. The returns on innovation will be quite different from those existing business and have to be measured differently, and managers compensated differently
5. A person or a component group of a new venture should be held clearly accountable

The Don’ts
1. Do not mix managerial units and entrepreneurial ones
2. Innovative efforts that take the existing business out of its own field are rarely successful
3. Hard and rarely successful to ‘buy in’ to entrepreneurial culture and spirit

The New Venture
Financial foresight
- The new venture needs cash flow analysis, cash flow forecasts and cash management
- Old bankers rule of thumb – forecasting cash income and cash outlays one assumes that bills will have to be paid 60 days earlier than expected and receivables 60 days later
- A new venture should know 12 months ahead of time how much cash it will need, when and for what purposes
- The successful new venture will outgrow its capital structure
- The new venture needs to plan the financial system it requires to manage growth
III: ENTREPRENEURIAL STRATEGIES

Entrepreneurial strategies:
1. Being Fustest with the Mostest – aim at leadership or dominance of a new market or a new industry
2. Hitting them where they aint
   o Creative imitation
   o Entrepreneurial judo
3. Finding and occupying a specialized ecological niche
   o The toll-gate strategy
   o The specialty skill strategy
   o The specialty market strategy
4. Changing the economic characteristics of a product, a market or industry
   o Gillette razors and blades

CONCLUSION

Two areas in which an entrepreneurial society requires substantial social innovation
1. The first is a policy to take care of redundant workers.
2. The other social innovation needed is both more radical and more difficult and unprecedented: to organize the systematic abandonment of outworn social policies and obsolete public-service institutions