Recap Lecture 5 & new lecture 6.1 Managing the NPD process

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MoT132
Technology, Strategy & Entrepreneurship



Scientific Management

Taylorism

Focus on repetition, efficiency, reduce variation, sanction failure

Resulted in

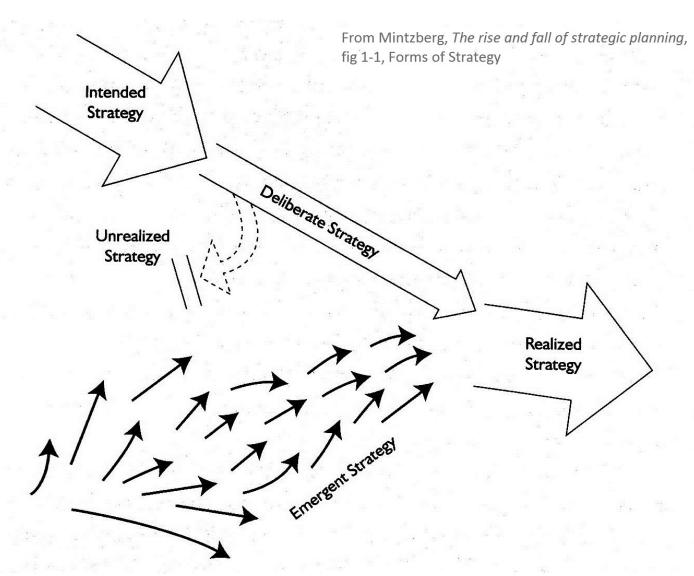
Fordism- mass production

Fast-low cost production.





Strategy schools of thought





Heart of Entrepreneurship

- Managerial/ administrative focus
 - Administrator
 - Top-down
 - Learn and apply
 - Transaction
 - Resource view
 - Stability, continuity

- Entrepreneur/ promotor focus
 - Promotor
 - Bottom up
 - Learn and unlearn
 - Transformation
 - Knowledge view
 - ► Change, adapt

GOAL SETTING

- S Specific
- Measurable
- A Achievable
- R Realistic
- T Timely







Planning for business

Paradox:

- Entrepreneurship requires considerable thought, preparation and planning, yet it is a basically unplannable event
- For creativity and innovativeness to prosper, rigor and discipline must accompany the process.
- Entrepreneurship requires a bias toward action and a sense of urgency, but also demands patience and perseverance.

"In preparing for battle, I have found that planning is essential, but plans are useless."

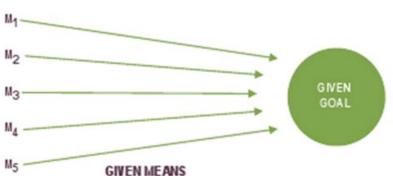
Dwight D. Eisenhower



Planning for a business: Causation or effectuation

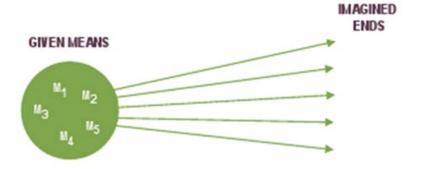
CAUSAL vs. EFFECTUAL REASONING

Managerial Thinking (Causal) Distinguishing Characteristic Selecting between given means to achieve a pre-determined goal



Entrepreneurial Thinking (Effectual)

Distinguishing Characteristic Imagining a possible new end using a given set of means





Planning for a business: Causation or effectuation

Effectual decision making logics

- Bird in hand (start with what you have)
- Lemonade (embrace surprises)
- Affordable Loss (focus on the downside)
- Crazy-quilt (co-creation)
- Pilot in the Plane (embrace uncertainty)



Two fundamental views on entrepreneurship Cheah 1990:

Kirznerian Entrepreneurship: New ventures provide products or services that are very nearly imitations of existing offerings, reproduced with minor variations (Kirzner, 1973).

Opportunnities are out there and to be identified, alertness is key

Schumpeterian Entrepreneurship: New ventures offer products or services that are truly novel and that represent new and different combinations of resources (Schumpeter, 1934).

Opportunities **are made**, developed, initiated





Kirzner entrepreneur as 'agent of adjustment' - responds to new information and adapts to circumstances dictated by external world

Entrepreneur defined by superior perception of market opportunities - defined as 'entrepreneurial alertness' (Kirzner, 1973)

Skill of the entrepreneur lies in the ability to constantly scan environment for new opportunities, utilising information in new ways to *fill* gaps in the market

According to Kirzner, environment dictates entrepreneurial behaviour

But **Schumpeter** defined entrepreneur as 'agent of change' - spontaneous, discontinuous change and destroy existing paradigms.

According to Schumpeter, knowledge and attitude towards change dictates entrepreneurial behaviour

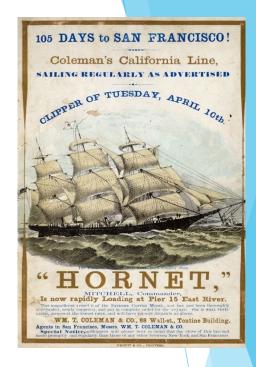


Kirzner

- Alertness, and perceive opportunities before others do
- Establish equilibrium
- Opportunities as combinations of existing knowledge
- Incrementalism

Schumpeter:

- Reform and revolutionize
- Creative destruction
- Reorganizing industry
- Disturb existing economic equilibrium



Registration of British merchant shipping fleet (1000 net tons)

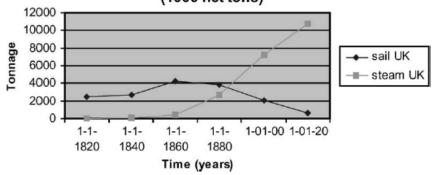


Fig. 6. British fleets of steamships and sailing ships (data are based on Ville, 1990, 68-71).



Opportunity recognition

1. **sensing** or perceiving market **needs** and/ or under employed **resources**

identifying an information asymmetry

- 2. recognizing a **fit between needs and resources** closing the information asymmetry
- 3. creating a fit through a **business concept** exploiting the opportunity



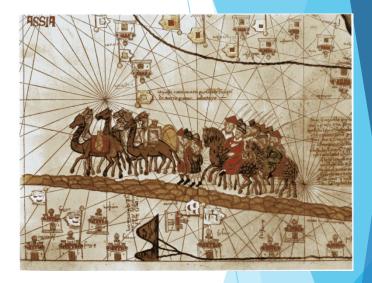
Example of Marco Polo

Information asymmetry

- knowledge, experience
- access to networks, contacts

Dynamism in the economy: source of information asymmetry

- Technology development (expert skills, research findings)
- Changing customer preferences (new habits)
- Changing demographics (aging population, urbanization)



Entrepreneurship as the process of learning

Investigates the process of recognizing needs, identifying opportunities and designing organizations and business models, to create value through technology and capture that value

Someone who exercises business judgement in the face of uncertainty

Goes beyond being self-employed; independent business person but also to 'dependent' employees of organisations.

What is entrepreneurial behaviour?

- Innovation
- Proactive
- Bearing risk



The development process to come from idea to opportunity



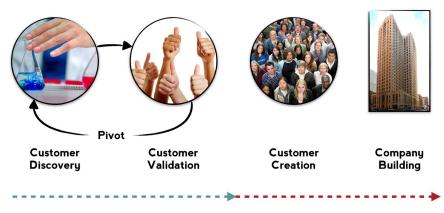
- Identify opportunities
- Opportunity discovery and evaluation
- Opportunity exploitation
- Factors affecting the process
 - Entrepreneurial (Personality) traits
 - Social networks
 - Prior knowledge
 - → Information asymmetry

What is a startup?

Startups are in search of a viable business opportunity and the success of that search is highly dependent on learning and entrepreneurial activity.

Startup is a temporary organization that is in search of a repeatable and scalable business model

Entrepreneurial activity can be conceptualized as



SEARCH

- a function of opportunity
 - How opportunities do evolve

EXECUTE

motivation to start Commitment of individual to act on or search for an opportunity



What is entrepreneurship?

Firm founding: startup

Entrepreneurship is the process of opportunity search

Dependent on Motivation and willingness

- ► Motivation: Opportunity cost
 - Loss or the benefit that *could* have been enjoyed if the alternative choice was chosen
 - ▶ When pursuing: loss of well paid job, loss of using the money more wisely
 - ▶ Not or late pursuing: loss of good innovation, timely market entry
- Willingness: One beliefs can do
 - Self efficacy / perceived behavioural control
 - Availability of financial means
 - Convince investors / customers/ people
 - Career experience, expectations





self confidence in one's ability to accomplish and succeed in organizational tasks





What is entrepreneurship?

Self efficacy is influenced by

- Experience (prior experience/ education)
 - Education/ industry/ social networks (friends)
- Vicarious experience,
 - ► Comparison to others: if they can do it I can do it as well
 - ► Role models/ parents
- Social persuasions/ subjective norm
 - Encouragement/ expectations of others closely related
- Perceived behaviour
 - ► Having the feeling one can do



What is entrepreneurship?

Willingness and risk

- Willingness to bear risk
 - Dealing and interpreting information that is incomplete, uncertain, probable,
 - Options are unclear
- ► Tolerance for **ambiguity**
 - ▶ Dealing and interpreting information that is vague, fragmented, multiple, unstructured, inconsistent, contrary, contradictory, or has unclear meanings
 - Multiple options exist



- Video 1: Michael Tushman
- In the interview Michael Tushman mentions that managers in large corporations have to deal with inconsistent tasks simultaneously. Discuss in your team what Michael means by that?
- What did you find?
- Inconsistent tasks are
 - Focus on current markets and maintain happy customers
 - Develop new products, sometimes for new customers and it is highly uncertain



- Video 1: Michael Tushman
- Michael continues that 'instead of flipping the organization from mechanistic into organic, Michael suggest that organizations should become ambidextrous organizations.

What is meant by ambidexterity?





- Video 1: Michael Tushman
- Can you discuss what Michael refers to when talks about a structural ambidextrous architecture to an organization?
- Give examples of how such architecture would look like.







- Video 2: Social network structures
- Based on the video on social network structures, can you give suggestions on what network structure would be more conducive to support structural ambidexterity?
- Closed network structure where people know each other well and know what can be expected from each other
- Open network structure where people are less familiar to working with each other and do not always know what to expect from the other.

