

Welcome to Developing Innovation and Creativity for Business Advantage

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Psychological contract for this module

RIGHTS

- Effective and engaging lectures
- Supportive seminars
- Discussing draft assignment
- Formative feedback

RESPONSIBILITIES

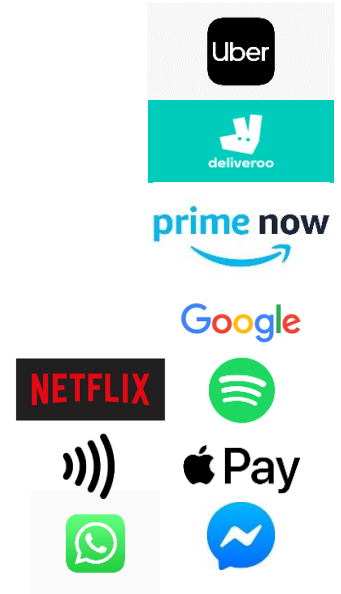
- Attendance
- Punctuality
- Silence & Phones off
- No in & out (except emergency)
- Full engagement
- Full participation)

Introduction to innovation

- Today's consumers
- The Changing Economic Eras
- Definitions
- Why "innovation"
- Dimensions
- Drivers
- Developments

Today's consumers are demanding more than ever...

- a taxi in 5 minutes
- a pizza in 20 minutes
- groceries in 60 minutes
- search results in 0.3 seconds
- content on demand
- not to stand in line at a supermarket
- not to pay cash
- immediate answer to questions



The Changing Economic Eras

Variables	Agricultural Era	Industrial Era	Post-Industrial Era	Knowledge Era
Strategic Factors of Economic Growth	Land	Capacity of Industrial Production	Information	Knowledge
Organisational Factors	Hierarchy (Land Owner)	Blue Collar Bureaucracy (Factory Owner, Trade Union Leaders)	White Collar Bureaucracy (Administrators, IT Managers	Collaboration (Communities)
Predominant Consumer Goods	Food	Agricultural Goods, House & Clothing	Information & Communications Services & Products	Intellectual Products & Services
Technology	Agricultural	Manufacturing & Engineering	Information & Communications	Technology for Learning, Innovating, Consulting, Collaborating
Predominant Resource	Workforce	Physical Sources of Energy	Information	Ideas

What is innovation?

- **Innovation** is the process and outcome of creating something new, which is also of value.
- Innovation involves the **whole process** from opportunity identification, ideation or invention to development, prototyping, production marketing and sales, while entrepreneurship only needs to involve commercialization (Schumpeter).

What is innovation?

- Today it is said to involve the **capacity to quickly adapt** by adopting new innovations (products, processes, strategies, organization, etc)
- Also, traditionally the focus has been on new products or processes, but recently new **business models** have come into focus, i.e. the way a firm delivers value and secures profits.

What is innovation?

- Schumpeter argued that innovation comes about through new combinations made by an entrepreneur, resulting in
 - a new product,
 - a new process,
 - opening of new market,
 - new way of organizing the business
 - new sources of supply

Why “innovate”

To

- Solve specific problem;
- Exploit opportunity
- Response to pressure
- Gain C.A.

Dimensions of innovation

There are several types of innovation

- Process, product/service, strategy,

which can vary in degree of newness:

- Incremental to radical,

and impact:

continuous to discontinuous

Drivers for innovation

- Financial pressures to reduce costs, increase efficiency, do more with less, etc
- Increased competition
- Shorter product life cycles
- Value migration
- Stricter regulation
- Industry & community needs for sustainable devt.
- Increased demand for accountability
- Demographic, social and market changes
- Rising customer expectations regarding service & quality
- Changing economy
- Exceeding in the competition in these technologies

What is innovation?

Market place is **hostile to incumbents**, who now needs to conduct **radical business innovation**:

- 1) Radically reconceiving products and services, not just developing new products and services
- 2) Redefining market space
- 3) Redrawing industry boundaries

New conditions for innovation

- Small start-up entrepreneurs increasingly depend on large firms:
 - as suppliers or customers
 - for venture finance,
 - for exit opportunities,
 - for knowledge (production, markets and R&D)
 - and for opening new markets.

New conditions for innovation (NPD)

- Large firms increasingly depend on small start-ups
 - for NPD,
 - as suppliers of new knowledge (which they cannot develop themselves),
 - or organizational renewal, for experimentation with business models,
 - for opening new markets, etc

Two Classes of Innovation

**Innovation, Creativity, Organizational Innovativeness,
Lateral Thinking, Out of the Box Thinking, Blue Ocean
Strategy**

- **KNOWLEDGE PUSH:**

Innovation triggered or enabled by advances in science and technology.

- **NEED PULL:**

Innovation triggered or enabled by market needs, customer needs, social needs or even latent needs or crisis needs

Sources of Innovation

- **REGULATION**: triggered or enabled by changes in legislation opening up new directions. Also entrepreneurs can take advantage of new legal restrictions.
- **DISRUPTIVE TECHNOLOGY**: triggered or enabled by developments in technologies which can disrupt current markets.
- **RECOMBINANT INNOVATION**: triggered or enabled by transferring an idea from one market or usage and apply it into another.
- **LEAD USERS**: triggered or enabled by the demands of early, sophisticated users who contribute ideas. Their requirements are ahead of the general market of other users.

Sources of Innovation

- **OPEN / USER-LED INNOVATION:** triggered or enabled by key or strategic users that create ideas – and often prototypes – for innovations rather than acting as consumers of other people's ideas.
- **OPEN COLLECTIVE INNOVATION:** triggered or enabled by co-creation amongst a wide range of users enabled by the internet and similar communication technologies.
- **BENCHMARKING:** triggered or enabled by learning from other companies by systematic comparing products, services or processes with those from competing companies
- **MASS CUSTOMIZATION:** triggered or enabled by providing innovative solutions that were typically tailored to demanding early adapters but deliver them at low cost and to a much higher number of less sophisticated users.

New developments in innovation raises new issues and problems

- Greater emphasis on **commercializing scientific discoveries**, particularly in IT and the bio-sciences
- Speed and potential value of scientific progress leads to emphasis on **solid and well-designed portfolios of research projects**
- Universities as **active** drivers of innovation: Academic entrepreneurship and the entrepreneurial university
- University-industry partnerships
- Increased search for **radical innovation** and top-line growth.

A Simple Stage-gate Model

Concept - Idea Generation

Considered against strategic fit, market need and decide which are worth exploring further.

Feasibility - Proof of Concept/Principle

Project to go into development based on market acceptability, achievability of technical requirements, risk/reward criteria, and the availability of resources

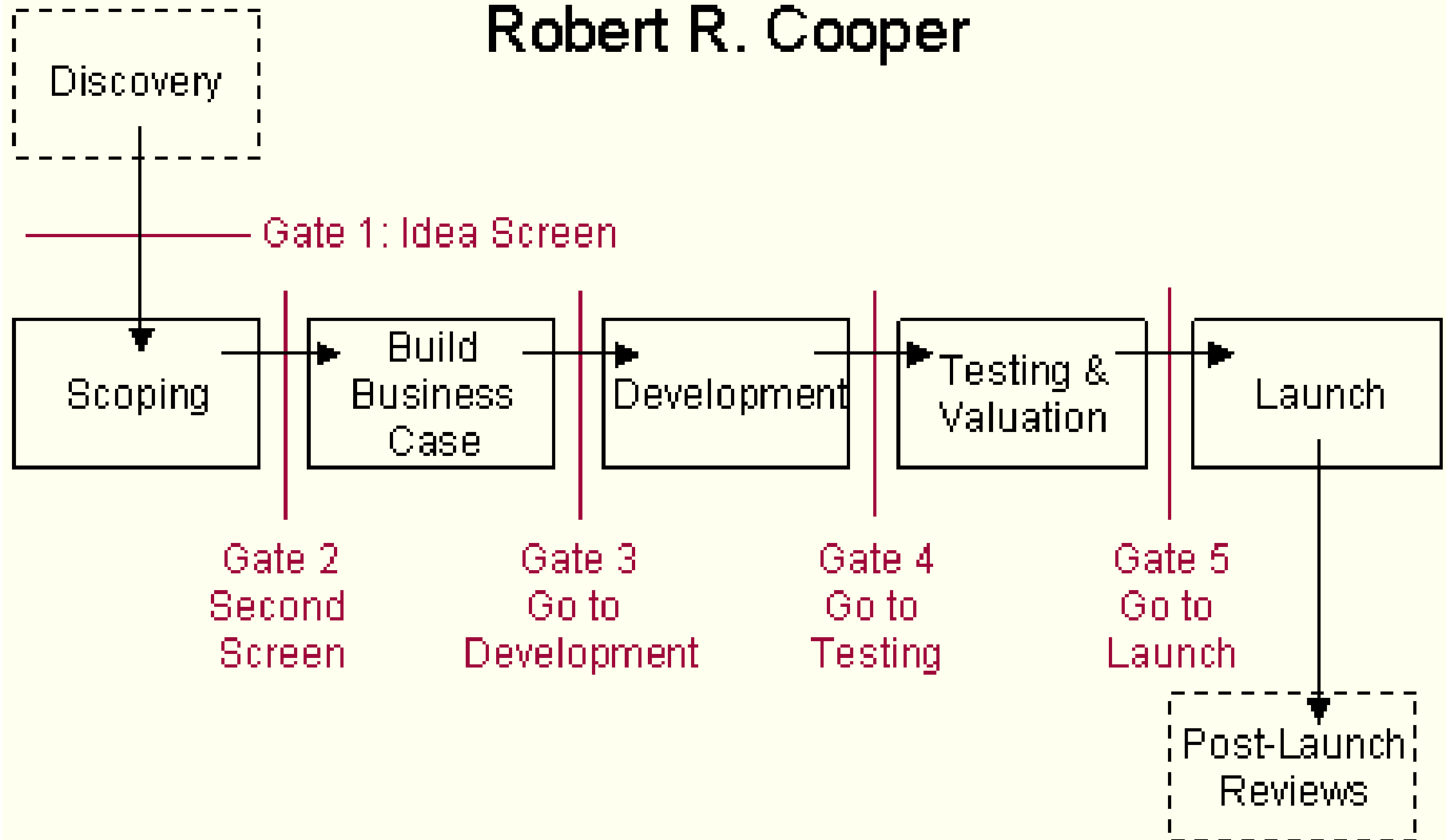
Development - Development, Prototyping and Testing

Progress to market based on the prototype, an assessment of the competitive response, and deliverable strategies on sourcing, marketing and pricing/ margins.

Implementation - Marketing and Launch

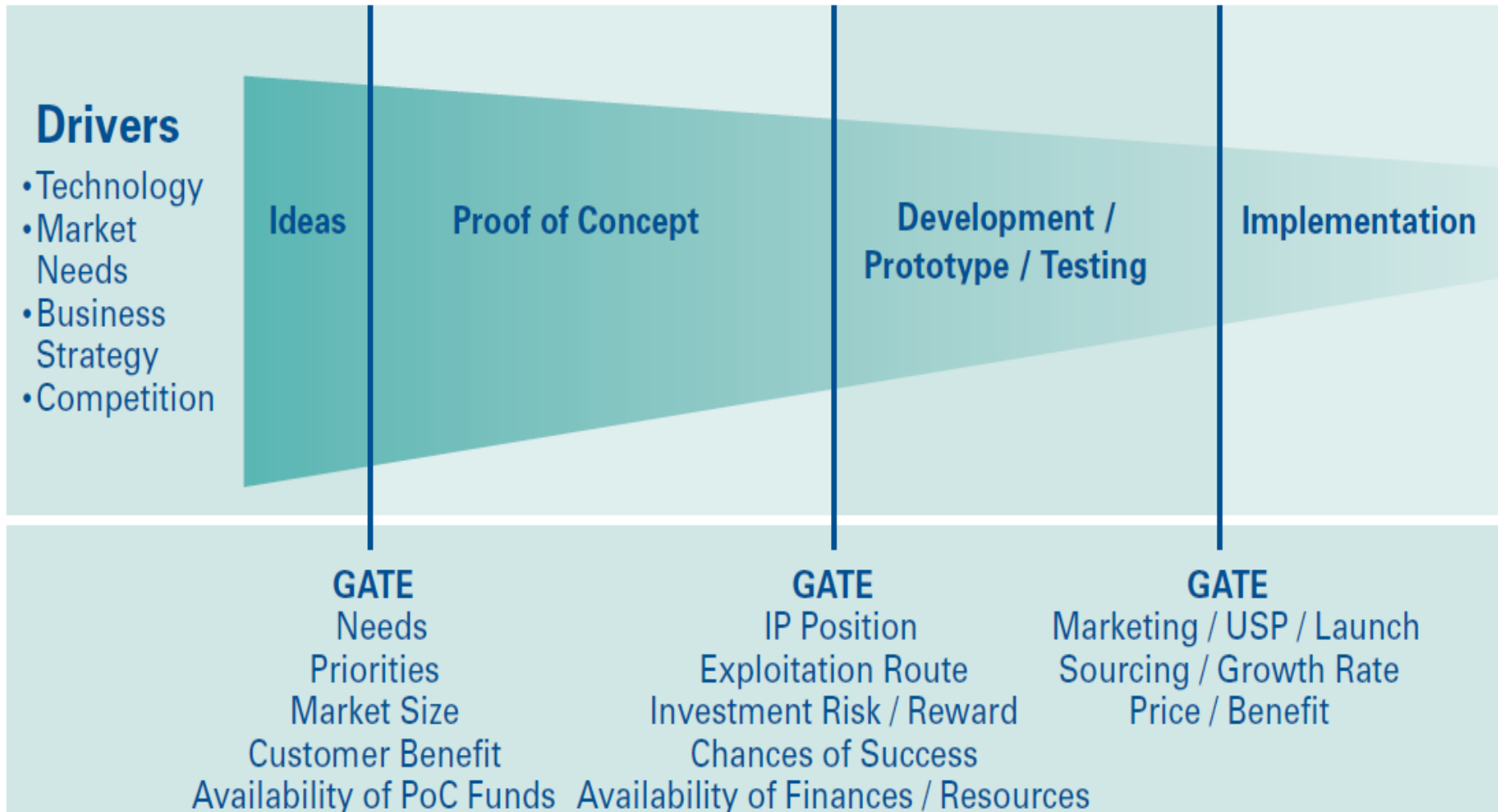
Stagegate Model Cooper, R.G. (2011)

Stage-Gate model® Robert R. Cooper

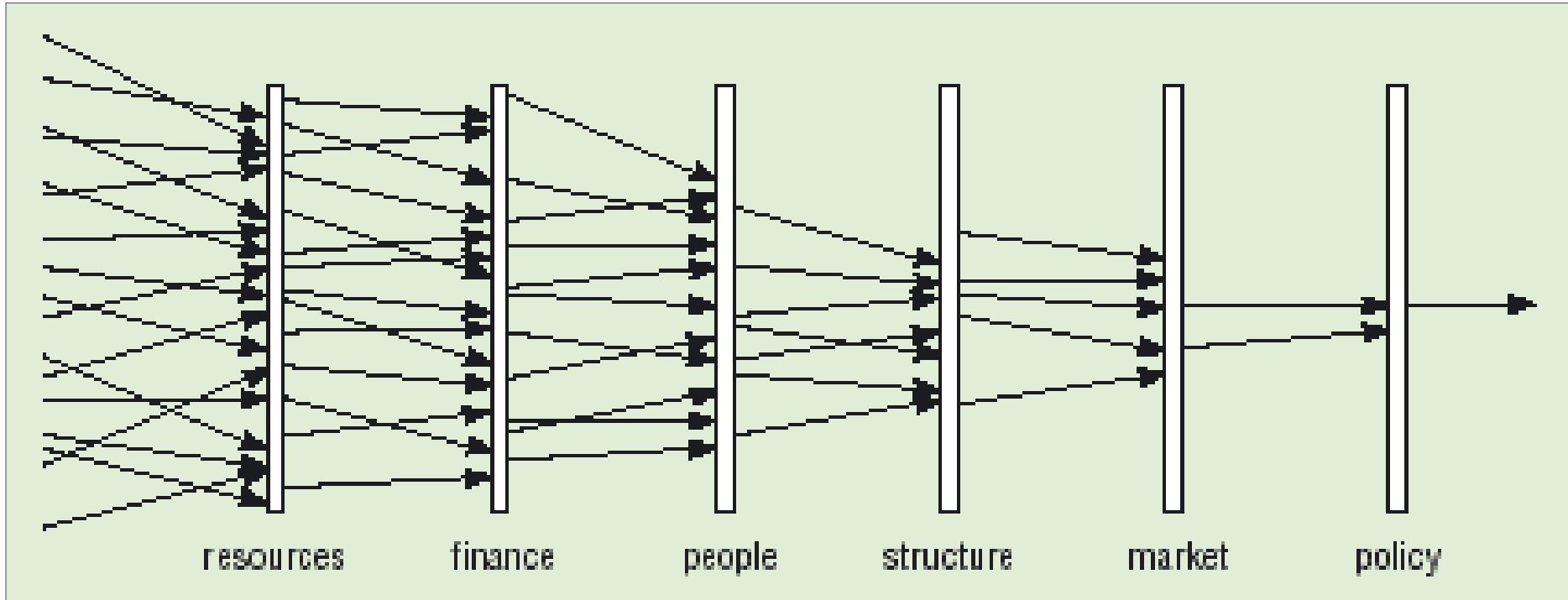


Innovation Pipeline (Funnel) Stagegate Model

D. Innovation Pipeline (Funnel) - Stagegate Model



Idea Screening



- A good idea is not enough; **it needs some degree of fit with the organisation in terms of resources, capabilities, finances, structure and values.** It must also fit with the external environment – the market, the needs of customers, relevant regulations and sundry other stakeholders.
- Ideas need screening to ensure resources, finance, people structure, market demand and policies are existent

Idea Screening

Out of 100 ideas or more, there may be 1 or 2 opportunities.

Superior business *ideas* that have the potential to become *opportunities* have 4 anchors:

- 1) They create / add significant value to a customer;
- 2) They do so by solving a significant problem, or meeting a significant want or need, for which someone is willing to pay a premium.
- 3) They therefore have a robust market, profit margin, and moneymaking characteristics.
- 4) They are a good fit with the founder(s) and management team at the time and in the marketplace with a risk/reward balance.

Idea Screening: Offices of Innovation

- They tend to be **established in order to stimulate innovative ideas** and are created in large organisations. They are sometimes known as aviary, discovery or innovation networks
- An Office of Innovation **usually comprises a decentralised network of innovation facilitators** who seek out and attract other employees to offer ideas for innovations.

Idea Screening: Patents and Suggestion Schemes

Patents / Intellectual Property Rights

- Used to protect innovative ideas so that there is no commercial loss for the innovator.
- Used to 'ward off' competitors

Suggestion Schemes & Customer Involvement

- Means of tapping employers' ideas
- Customer involvement and feedback
- Incentive schemes

Key Features of Innovative Organisations

- 1) Flatter in structure and make use of multi-disciplinary workforce / project teams;
- 2) Faster and more flexible in terms of its responsiveness to business and change;
- 3) Constantly looking for incremental improvement;
- 4) Actively developing partnerships with customers, suppliers and competitors;
- 5) Advocates of parallel product development;
- 6) Patience with failure;
- 7) Keen to promote systems of incentives;
- 8) Advocates of R&D investment

Key Features of Innovative Organisations

- **Berger** - emphasis on the **importance of human capital**;
- **Pfeffer** - also advocates the development of human capital and the importance of **nurturing and involving people**;
- **Somerville and Mroz** - also identify the importance of the **workforce**. **knowledge sharing** and embracing change but highlight the qualities required of the manager. They focus on the following seven:
 - higher purpose,
 - responsible leadership,
 - Multi-disciplinary team working,
 - partnership,
 - knowledge networking,
 - global search (for staff with the right skills); and
 - change.
- **Quinn et al** - focus on the **importance of retaining the best managers** (whilst weeding out those who do not make the grade) and their ability to lead and share knowledge.

Creative Swiping

Adopting and copying the best features and aspects of competitor products or services.

Five major categories of potential competitive threat:

- 1) Foreign firms** - especially those newly entering into a small niche within your market.
- 2) Tiny domestic operations which also start by concentrating on small niche markets** - These people are unlikely to be able to afford some of your more bureaucratic systems.
- 3) Major players diversifying into your market** - These will have a rather different mindset to you.
- 4) Local players who confine themselves to particular geographical territories** - These may be spectacularly successful in their own locale but too small to appear on your corporate radar.
- 5) New entrants using different business models** - Think not just Amazon as an alternative to your local bookstore, but Apple's iTunes Music Store as an alternative to your local record store.