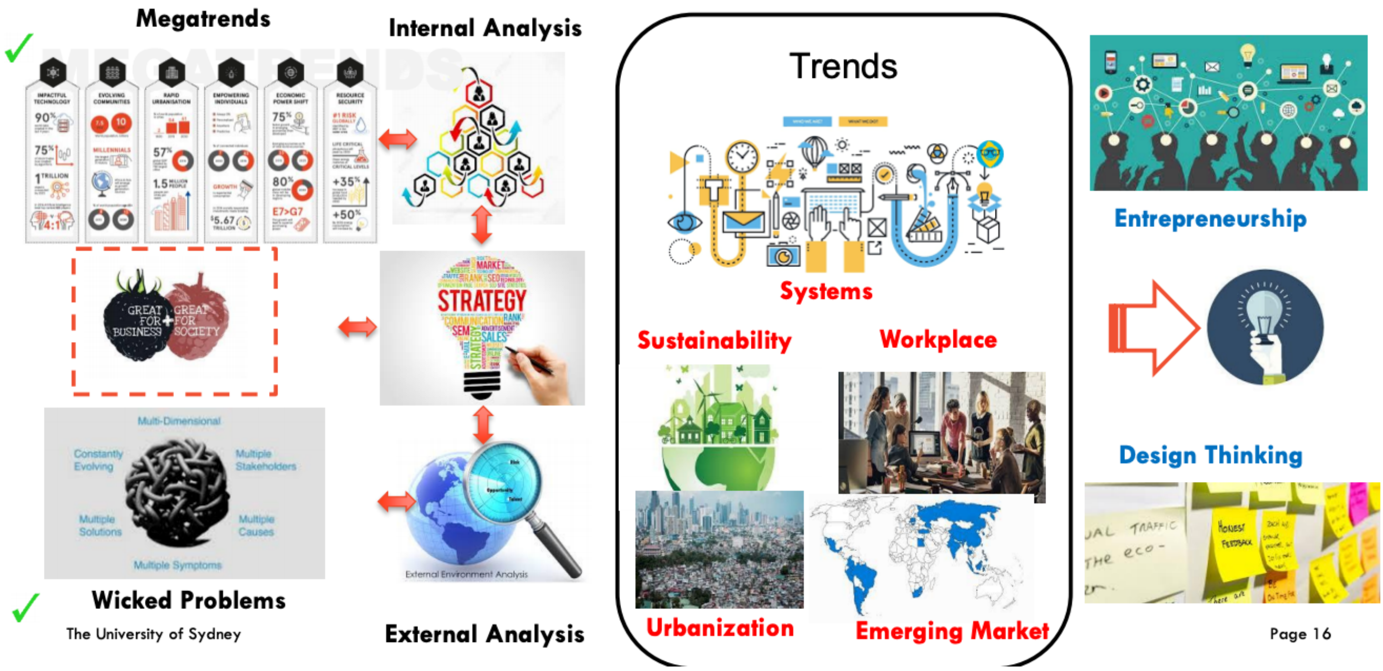
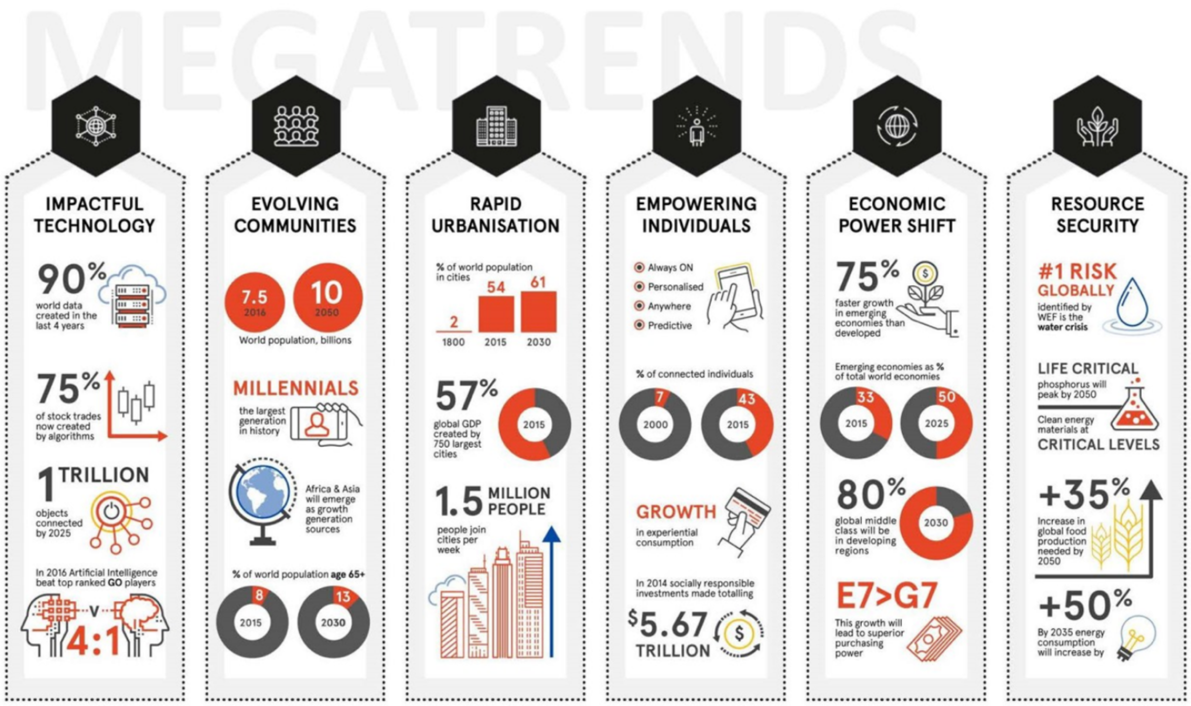
BUSS1000 NOTES



BUSS1000 Week 1 – Introduction and the Future of Business

Megatrends



- Megatrends: large transformative processes with global reach, broad scope, and a fundamental and dramatic impact → megatrends involve a significant shift in environmental, societal and economic conditions.
- These megatrends cannot be impacted by external sources e.g. individuals (they change, we adapt).
    - → Impactful technology
    - → Evolving communities
    - → Rapid Urbanisation

→ Empowered Individuals

→ Economic Power Shift

→ Resource Security

Why are we talking about Megatrends?

- For business, megatrends represent challenges and opportunities for different people.
- The world will change so rapidly over the next 50 years → megatrends will define the world, we don't know how yet.

Wicked Problems

- Wicked problems: complex social and policy issues that are highly resistant to resolution e.g. water shortage, climate change, poverty.
- They are in many ways the products of Megatrends, and in such a way cannot be solved but tamed.

Key Characteristics of Wicked Problems

- The problem involves many stakeholders with different values and priorities.
- The issues roots are complex and intertwined.
- Organisations often find it difficult to solve these problems → changes with every attempt to address it.
- The challenges have no precedent, since the changes are so big.
- There is nothing to indicate the right answer to the problem → businesses can be successful in many different ways.

Limitations of Talking about Wicked Problems

- They are complex and big, since they are the manifestation of bigger social trends and shifts → however, they have a fixed target that people and organisations work to reach.
- There needs to be a way to conceptualise these bigger social trends and shifts.

BUSS1000 Week 2 – Role of Business in Society

- Organisation: a group of people who work together in an organised way for a shared purpose.

- Company: an organisation that sells G+S in order to make money.
- Corporation: a large company or group of companies that is controlled together as a single organisation.
- Business: a particular company that buys and sells G+S.

Stakeholders

- Stakeholder: an organisation or person who is involved with an organisation, society etc. and therefore has responsibilities towards it and an interest in its success.
  - → Owners
  - → Customers
  - → Employees
  - → Industry
  - → Community
  - → Environment
  - → Government
  - → Civil society organisations
- Stockholder: a person who owns shares in a company and therefore gets part of the company's profits and the right to vote on how the company is controlled.

Identifying Stakeholders is Complex

- Who counts as a stakeholder, and when do you stop/how finely sliced and segmented should they be?
- Are stakeholders all equal in significance?
- Are the stakeholders of your stakeholders also your stakeholders?

Are Competitors Stakeholders?

- Competitors are stakeholders because they provide a point of comparison between a corporations own product → e.g. UNSW, USYD, UTS matter to each because they are used to compare with each other.

Vision, Mission, and Values

- Mission statement: short written description of the aims of a business, charity, government department, or public organisation.
- Vision statement: a statement of what a company or an organisation would like to achieve in the future.
- Values: the principles that help you to decide what is right and wrong, and how to act in various situations.

Why are they important?

- Explains why an organisation exists, what it stands for, and what the leaders want the organisation to become.
- Describes an inspiring new reality.
- Often serve to aid decision making and provides context for all decisions within the context.
- Guides the development of strategy and organisation.

Why do they matter?

- Organisational culture: the types of attitudes and agreed ways of working shared by the employees of a company or organisation.
- An opportunity for stakeholders to learn about the organisational culture of the company in a simple and understandable way.

Role of Business in Society

1) Profit Maximisation

- To use a business' resources and engage in activities designed to increase its profits whilst engaging in free competition without deception or fraud e.g. offshoring production.
  - → Embedded in what is called: Classical Economics.
- For a publicly listed company, each and every corporate decision must be for profit maximisation → every action has its foundation grounded in financial benefit.

What Changed?

- Increasing dissatisfaction and critique through the 20th century → human's impact of the world and each other was increasingly entering public consciousness e.g. global warming, ozone depletion, Great Smog, Subprime Crisis.

2) Corporate Social Responsibility

- Actions that appear to further some social good, beyond the interests of the firm and requirements of the law → Increasing societal pressure for organisations to think beyond their bottom line e.g. Gates Foundation.
  - → Donations
  - → Sponsorships
  - → Funding community projects

Critiques and Difficulties

- Operational → what and how much counts, longevity of changes, who decides.
- Organisational → ethics and legality of spending shareholders' money on ventures unrelated to an organisation's profitability and performance (where does CSR turn into poor financial management?).

3) Creating Shared Value

- Actions that create economic value in a way that also creates value for society by addressing its needs and challenges → drives the next wave of innovation and productivity growth, and reconceives the intersection between society and corporate performance.
  - → Driving mutually beneficial change (social benefit and financial management).
  - → Reconceiving products and markets (e.g. taste and quality → better nutrition, meeting unmet markets).
  - → Redefining productivity in the value chain (energy use, logistics, resource use, technology, procurement for suppliers within supply chain, deployment, employee productivity, location.)
  - → Local cluster development (supporting industries and infrastructure related to a company's own).

Strengths	Weaknesses
Successfully appeals to practitioners and scholars.	Unoriginal.
Elevates social goals to a strategic level.	Ignores tensions between social and economic goals (pipedream or reality?)
Articulates a clear role for governments in responsible behaviour.	Naïve about the challenges of business compliance – presumptions.
Adds rigour to ideas of conscious capitalism and provides an umbrella construct for loosely connected concepts.	Based on a shallow conception of the corporation's role in society.

4) Social Entrepreneurship

- SE is a type of entrepreneurship that is distinguished by three key factors:
  → Sociality: dominant social mission by addressing social problems – reduced externalities, market voids, gender empowerment, equal supply chains.
  → Innovation: creative destruction, resourcefulness, changing institutions, reconfiguring needs, wants, demands.
  → Market orientation: performance, impact measurement, stakeholder and shareholder values, market failures.
- Essentially, SE are established to respond to unmet/inadequately met social needs through business-like and innovative means → wealth creation is a secondary factor to a specific societal goal/mission related impact.
  → Profit or non-profit, more sustainable income strategies, business as a vehicle and way of thinking e.g. Grameen Bank (for profit community development bank for rural poor).
- A social enterprise cannot be a publicly listed company → legal responsibility to do the best financial decisions for its shareholders.

Definition of a Social Entrepreneur (from Reading)

Social entrepreneurs play the role of change agents in the social sector by:

- Adopting a mission to create and sustain social value.
- Recognising and pursuing new opportunities that serve that purpose.
- Engaging in continuous innovation, adaption and learning.
- Acting without being limited by resources in hand.
- Heightened accountability to stakeholders served and outcomes created.

Critiques of Social Entrepreneurship

- How do you put a boundary on doing good with society → whose social needs are unmet, where do you stop, who decides?
- How do I measure the social benefit perpetuated by the business (no tangible measurement that a market provides; correlation or causation?)
  → If you can't measure it, how does a social entrepreneur determine whether they are creating sufficient social value to justify the resources used in creating that value?
- How do existing organisations engage in social entrepreneurship?

Summary of the four perspectives

PM → CSR → CSV → SE

PM

- Value: profit maximisation
- Free-enterprise, private property system
- Bottom-line focussed
- Employee is responsible to owners, business responsible to stakeholders
- Must operate within the rules of the game, including all levels of law
- Organisation's have an moral and ethical responsibility to maximise profit
- Social responsibility is an ethical issue owned by the people, not organisations
- <u>Example:</u> Offshoring production

CSR

- Value: doing good
- Citizenship, philanthropy, sustainability
- Discretionary or in response to external pressure
- Separate from profit maximisation
- Agenda is determined by external reporting and personal preferences
- Impact limited by corporate footprint and CSR budget
- <u>Example:</u> Fair trade purchasing.

CSV

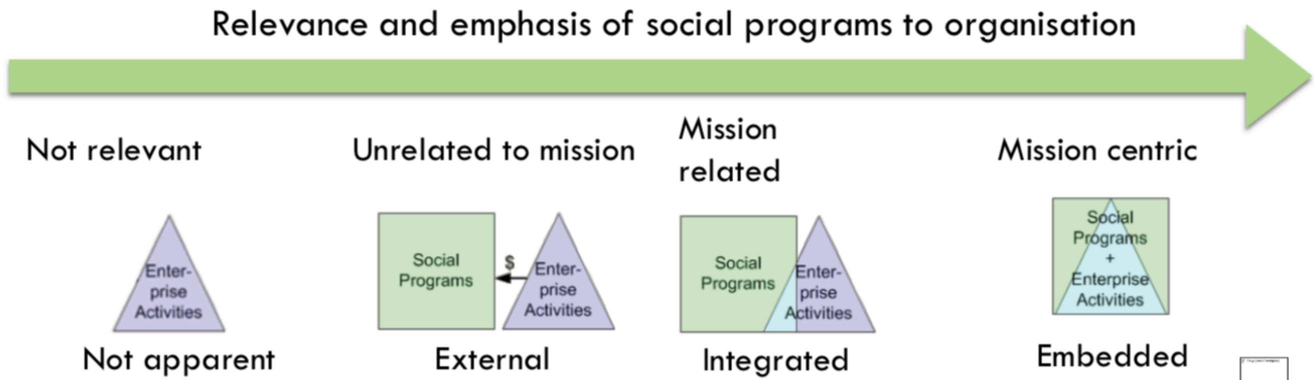
- Value: economic and societal benefits relative to cost
- Joint company and community value creation
- Integral to competing
- Integral to profit maximisation
- Agenda is company specific and internally generate
- Realigns the entire company budget
- <u>Example</u>: Transforming procurement to increase quality and yield.

SE

- Value: social change and innovation
- Sustainable blended value creation
- Integral to mission
- Integral to impact maximisation
- Agenda responds to complex social problems
- Whole of budget
- <u>Example:</u> Microfinance in remote and rural areas

Comparison of the four perspectives

PM → CSR → CSV → SE



Source: Alter (2006)

BUSS1000 Week 3 – Internal Analysis

Layers

- Layers is a way to think about the business environment → built upon and interdependent on one another (what happens in one affects the others).

Description of Each Layer of the Business Environment

- Macroenvironment: highest-level layer, factors identified in this layer impact all organisations to some degree.
- Industry (or sector): constituted of all organisations that produce the same products or services.
- Competitors (or market): layer closest to the organisation within an industry or sector → some organisations will be competing closer than others.
- Organisation: the organisation itself.

Value Chain

- Developed by Porter in 1985, the value chain is a conceptual framework that helps us understand the process by which organisations take inputs, add value, and produce outputs → sequential chain of main activities the firm undertakes.
- Mapping out organisation's processes and identify opportunities to increase value → splitting the final value into individual parts, finding core competencies and focussing on those areas.

Two Core Parts of the Value Chain

Primary Activities

- Involved with the transformation of inputs and interface with the customer.
- Includes inbound and outbound logistics, operations, marketing/sales and service.

Support Activities

- Includes firm infrastructure, HR management, technology development and procurement.

Primary vs Support does not suggest that one is more or less important to the success of the organisation than the other.

Figure 1: Porter's Generic Value Chain

<u>Critiques of Value Chain</u>

- How do you measure the generated value from each component? → how do you measure the utility of a customer?
- Fails to identify the idiosyncratic capabilities that are truly distinctive and critical to an organisation's competitive advantage.
- By nature, it can deceive us into seeing an organisation as linear.
- Lends itself most easily to the manufacture of goods → how do you measure the ambience of a restaurant, the value of therapy etc.?
- It is hard to translate to smaller, more agile or nimble organisations.
- It doesn't distinguish between generic and distinct goods.
- "It was created at a time when being big and having scale was in itself a key aspect to competitive advantage and profitability."

Resource Based View (RBV)

- States that certain assets with certain characteristics will lead to sustainable competitive advantage, although they must all be required.
  → Valuable, Rare, Imperfectly Imitable, and Non-substitutable (VRIN)
  → Dynamic Capability (DC)
  → Knowledge Based View (KBV)
- Each company possesses a unique collection of resources and capabilities → the exploitation of specific strengths, that are applicable for the industry, future opportunities, and the acquisition of additional skills needed.

Value, Rareness, Imitability, and Non-Substitutability (VRIN)

- Fits within RBV → one of many theoretical frameworks that helps us conceptualise an organisation's resources and in turn, competitive advantage.

Resources & capabilities lead to competitive advantage when they are:	
Valuable	They allow the firm to exploit opportunities or neutralize threats in external environment & customers cannot substitute them
Rare	Possessed by few (if any) current or potential competitors
Imperfectly Imitable	Other firms either cannot obtain them, or must obtain them at a much higher cost
Non-substitutable	There must be no strategically equivalent valuable resources that are themselves either not rare or imitable.

Often, a VRIN analysis will produce a summary table (paired with an explanation and discussion) as below:

Resource/Capability	V	R	I	N
X	x			x
Y	x	x		
Z	x	x	x	x
A	x	x	x	
B	x		x	x
C	x		x	x

<u>Critiques and Limitations of the VRIN Framework</u>

- Fails to address and acknowledge that these resources do not exist separately and in isolation. Who actually owns the resources?
  - → Networks
  - → Cause and effect relationships
  - → Catalysts
- It also fails to address the creation and development of resources since it assumes that resources are already there.

Strengths, Weaknesses, Opportunities, and Threats (SWOT)

- Initially designed for project evaluation, it is most commonly used to examine an organisation as a whole.
- S and W are internally focussed, O and T are outwardly focused.

<u>Criticisms of SWOT</u>

- SWOT can blind us to complexity → fairly one dimensional as you simply create lists under each (difficult to actually use).
- Never critically questions the objectives in the first place (you can do an excellent SWOT analysis on a terrible idea) → however, you can do a SWOT analysis on a collection of ideas (is this a strength then?).

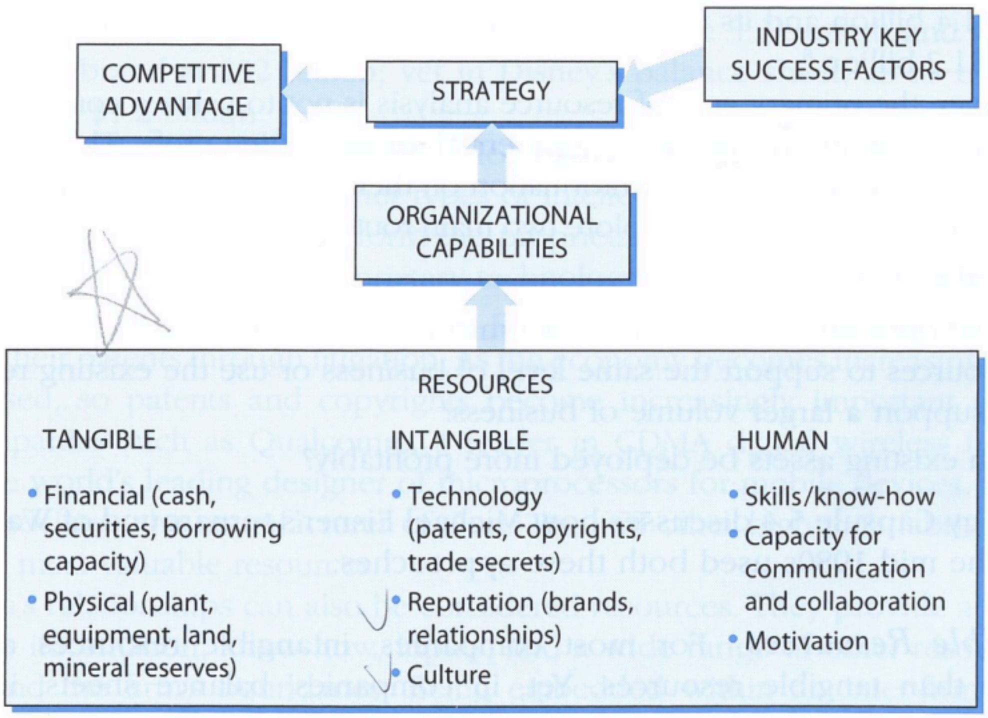
Limitations of Analysis

- Human error/humans are not omnipotent and will miss things, make mistakes, be prone to hubris → no application or spreadsheet can apply these frameworks or conduct these analyses – VERY SUBJECTIVE.

Reading Notes

- The greater the rate of change in a firm's external environment, the more likely it is that internal resources and capabilities rather than external market focus will provide a secure foundation for long term strategy.

FIGURE 5.4 The links between resources, capabilities, and competitive advantage



<u>Tangible Assets</u> – value is found in the potential for generating profit → what opportunities exist for economising their use, can they be deployed more profitably?

<u>Intangible Assets</u> – patents, proprietary technology, network resources (access to information, know-how, inputs, other resources, added legitimacy), organisational culture.

<u>Human Resources</u> – skills and productive effort offered by an organisation's employees (consider stability of employment relationships?).

<u>Related to RBV</u>

- An organisation's capabilities are not simply an outcome of the resources upon which they are based → how they are utilised is a large part.
- Organisational capability is based upon organisational process → coordinated sequences of actions where specific productive tasks are performed in appropriately designed organisational units and organised systems.

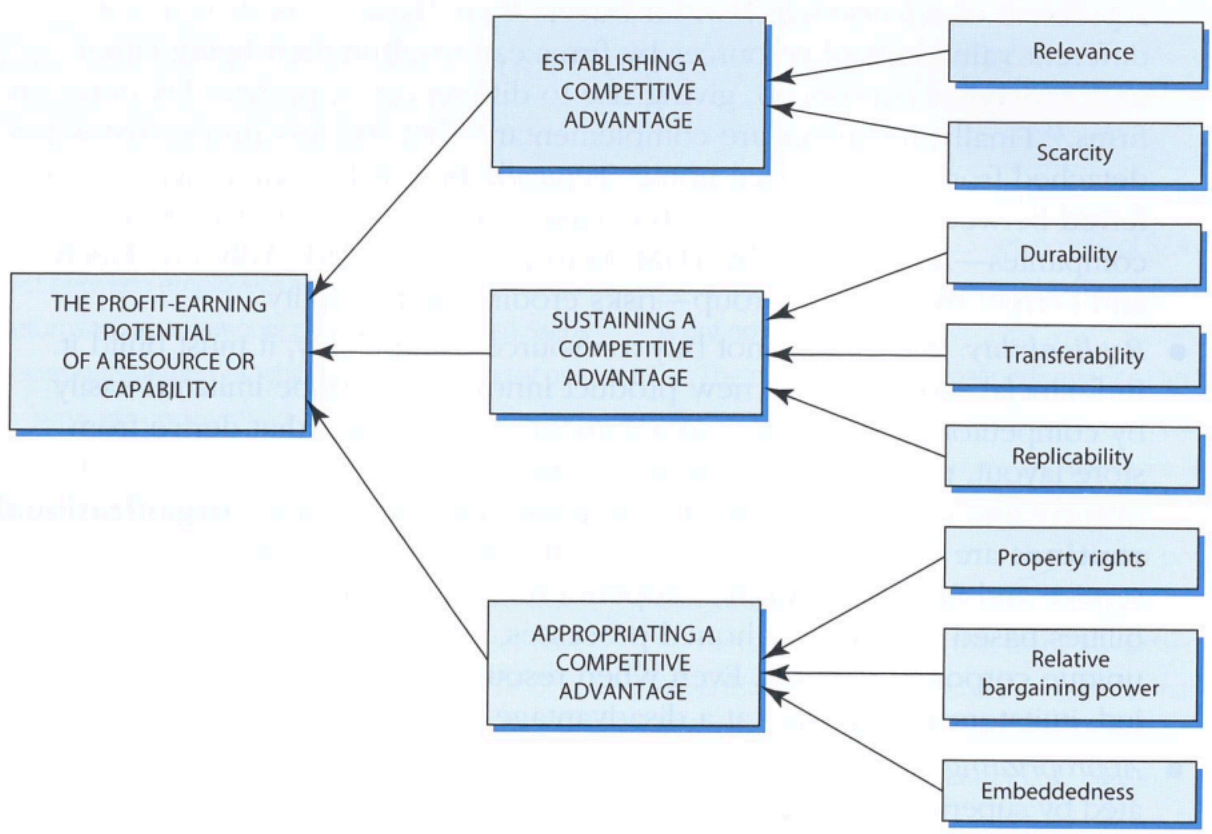
- Trade-off made between efficiency and flexibility → limited repertoire of routines performed highly efficiently with near perfect co-ordination may find it hard to respond to novel situations.

<u>Appraising Resources and Capabilities (alternative to VRIN?) – GRANT Strategic Importance Framework</u>

- Two fundamental issues: whether they are strategically important and how strong they are relative to those of its competitors'.

Strategic Importance of Resources and Capabilities

FIGURE 5.7 Appraising the strategic importance of resources and capabilities



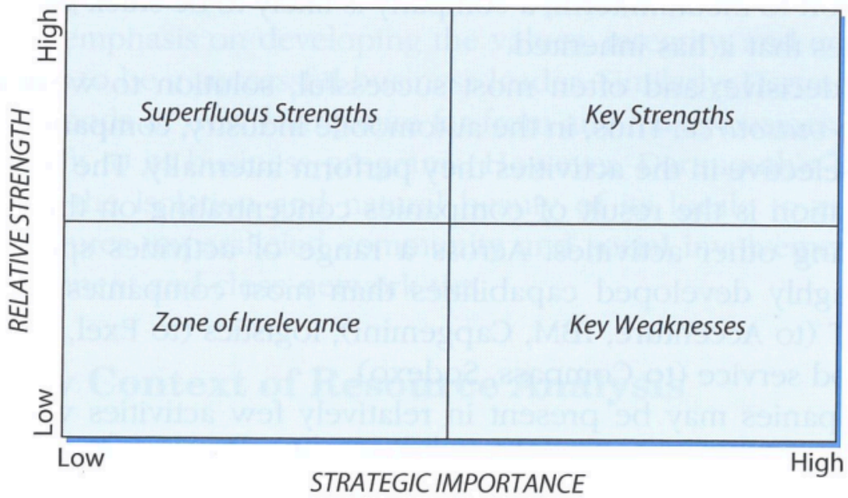
- <u>Relevance:</u> must be relevant to key success factors in the market → capability of creating value for customers.
- <u>Scarcity:</u> must not be widely available else it does not have an adequate basis for competitive advantage.
- <u>Durability:</u> the more durable a resource, the greater its ability to support a competitive advantage (technology has shortening lifespans due to innovation, brands have remarkable resilience.)
- <u>Transferability:</u> if it can be imitated by a firm, the resources competitive advantage is undermined → good resources: specific to locations and cannot be relocated, capabilities (embedded in management), limited information about it, complementary.
- <u>Replicability:</u> if a firm cannot buy a resource or capability, it must build it. The harder to build, the more advantageous → complex, interweaved organisational routines are less easy to copy e.g. next-day delivery.
- <u>Appropriating a Competitive Advantage</u> → who owns/controls/influences the resource or capability, what bargaining power do they have?

Relative Strength of Resources and Capabilities

- Benchmarking: comparing one's processes and performance to those of other companies (can be quantified).

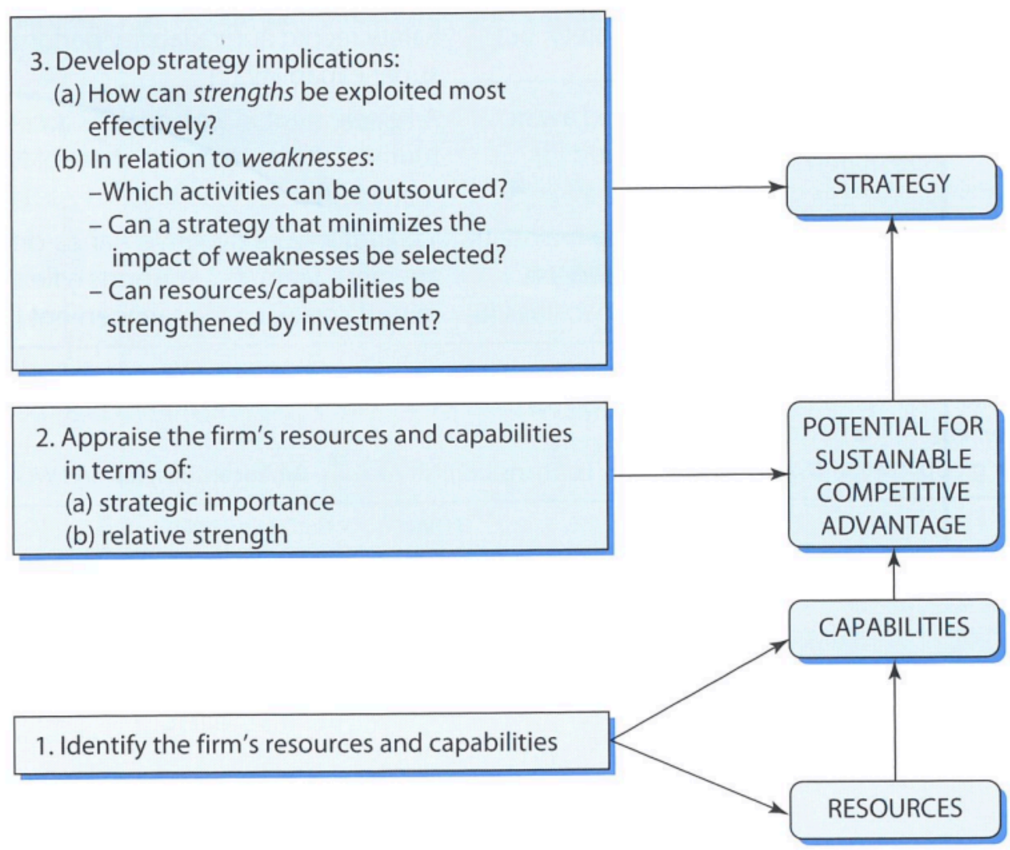
- Reflective approaches to recognising strengths and weaknesses.

FIGURE 5.8 The framework for appraising resources and capabilities



Summary

FIGURE 5.10 Summary: A framework for analyzing resources and capabilities



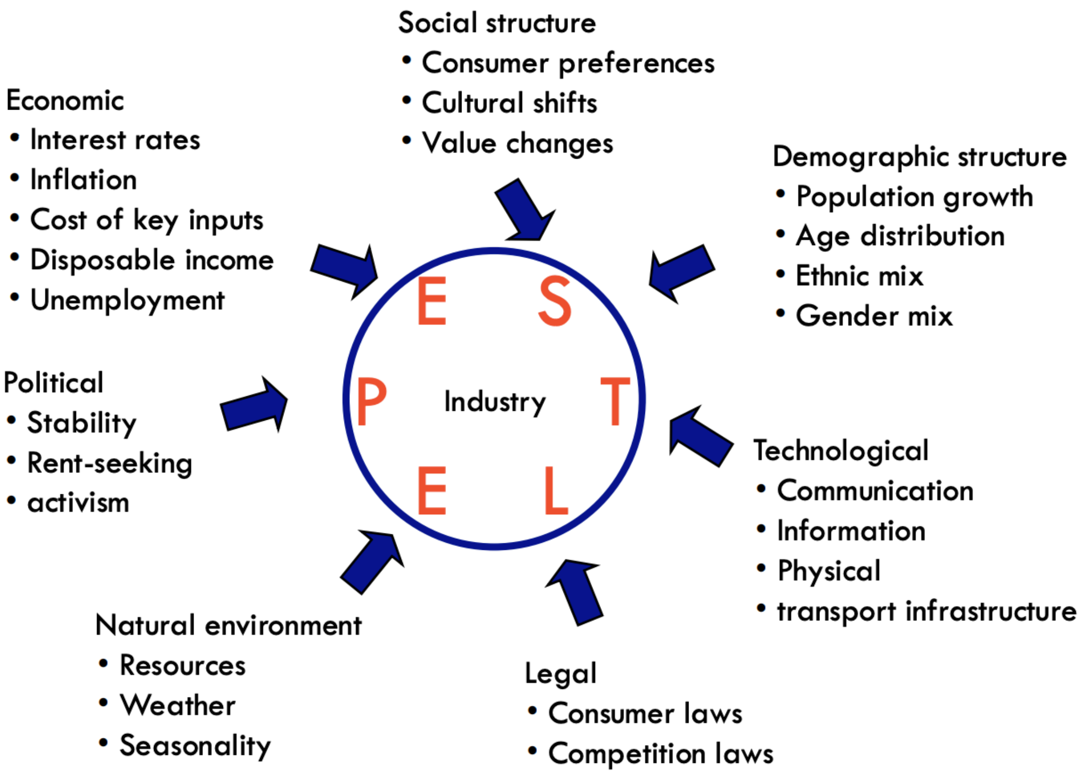
BUSS1000 Week 4 – External Analysis

PESTLE

- Political, Economic, Social, Technological, Legal, Environmental
- Macro-level focus on long-terms that takes shocks into account and is often bound within a specific context.
- PESTLE helps identify "key drivers of change" (high-impact factors likely to significantly affect the success or failure of strategy) which can be used to construct scenarios of possible futures that have strategic implications.
- Works by scanning a specific business environment, leveraging off the profitable factors, and minimising those that would harm a firm.

Key Components of a PESTLE Analysis

- Key drivers for change: factors that will likely be highly impactful.
- Scenario planning: detailed and plausible views of how the business environment of an organisation might develop in the future based on key drivers for change about which there is a high level of uncertainty.
- For it to be a PESTLE factor, it must impact all organisations in that context.



Limitations of PESTLE

- It is not industry, sector, segment or internal analysis.
- There is a lot to cover due to the scope of each factor, whilst shocks can be hard to anticipate.
- The PESTLE analysis will allow you to see where you should be as the industry changes, but not how to get there.

Porter's Five Forces

- Porter's Five Forces is an analysis of an industry.
- Originally developed as a way of assessing the attractiveness of different industries through their profit potential → five forces constitute an industry's structure and can be employed by any organisation.

Defining Your Industry

- Define industry boundaries by identifying the relevant market.
- Define boundary by its substitutability on the demand side.
- Define geographical boundaries that may apply to a market.
- Remain way of external influences such as regulation.
- Be conscious of purpose of classification.

1) Factors Affecting the Threat of New Entrants into an Industry

- Supply and demand side economies of scale: hard for new entrants to match large scale producers that have reached an economy of scale → high investment requirements, experience curve differences (efficiency).
- Switching costs
- Capital costs
- Incumbency advantage
- Unequal access to distribution channel
- Restrictive government policy: patent protection, regulation of markets, direct government action.
- High barrier to exit
- Anticipated hostile response from incumbent: price war, marketing blitz.
- Slow industry growth

2) Factors Affecting the Bargaining Power of Suppliers

- Concentration of suppliers: more suppliers, less power.
- Switching cost: greater difficulty in changing = less supplier bargaining power e.g. changing OS.
- Provide differentiated products
- Limited substitution
- Threat of forward integration: suppliers have increased power where they are able to cut out buyers who are acting as intermediaries e.g. travel agencies with the rise of online booking.
- Less dependence of the industry

3) Factors Affecting the Bargaining Power of Buyers

- Concentration of customers: how many there are (the fewer customers, the more buyer power they have)
- Low switching costs: weakly differentiated commodities allow for buyers to easily switch between one supplier and another, increasing the strength of their negotiating position.
- Undifferentiated product/service market
- Threat of backward integration
- Customers financial pressure → the more a product accounts for a buyer's total purchases, the more they will shop around.
- Industry impact on product quality

4) Factors Affecting the Threat of Substitutes

- Closeness of substitute: value of substitution concept is to force managers to look outside their own industry to consider more distant threats and constraints.
- Performance/price ratio: a substitute is still an effective threat even if more expensive, so long as it offers performance advantages that customers value.

5) Factors Affecting Rivalry Among Competitors

- Lack of differentiators
- Fixed costs are high and marginal costs are low: requires high investment in capital and initial research tend to be highly rivalrous → price wars, increase in volume.
- Capacity must expand in large increment: causes short term overcapacity in the industry, increasing competition (especially in manufacturing sectors).
- Product is perishable: if a product is perishable, rivalry among competitors is increased to get rid of stock through aggressive price slashing, differentiation etc.
- Multiple competitors of same size
- Slow industry growth: any growth is likely to be at the expense of a rival and met with fierce resistance → price competition and low profitability.
- High exit barriers: especially in declining industries, excess capacity will still persist and force competition → high redundancy costs, high investment costs in assets that others won't buy e.g. plants, equipment.
- Rival have diverse approaches

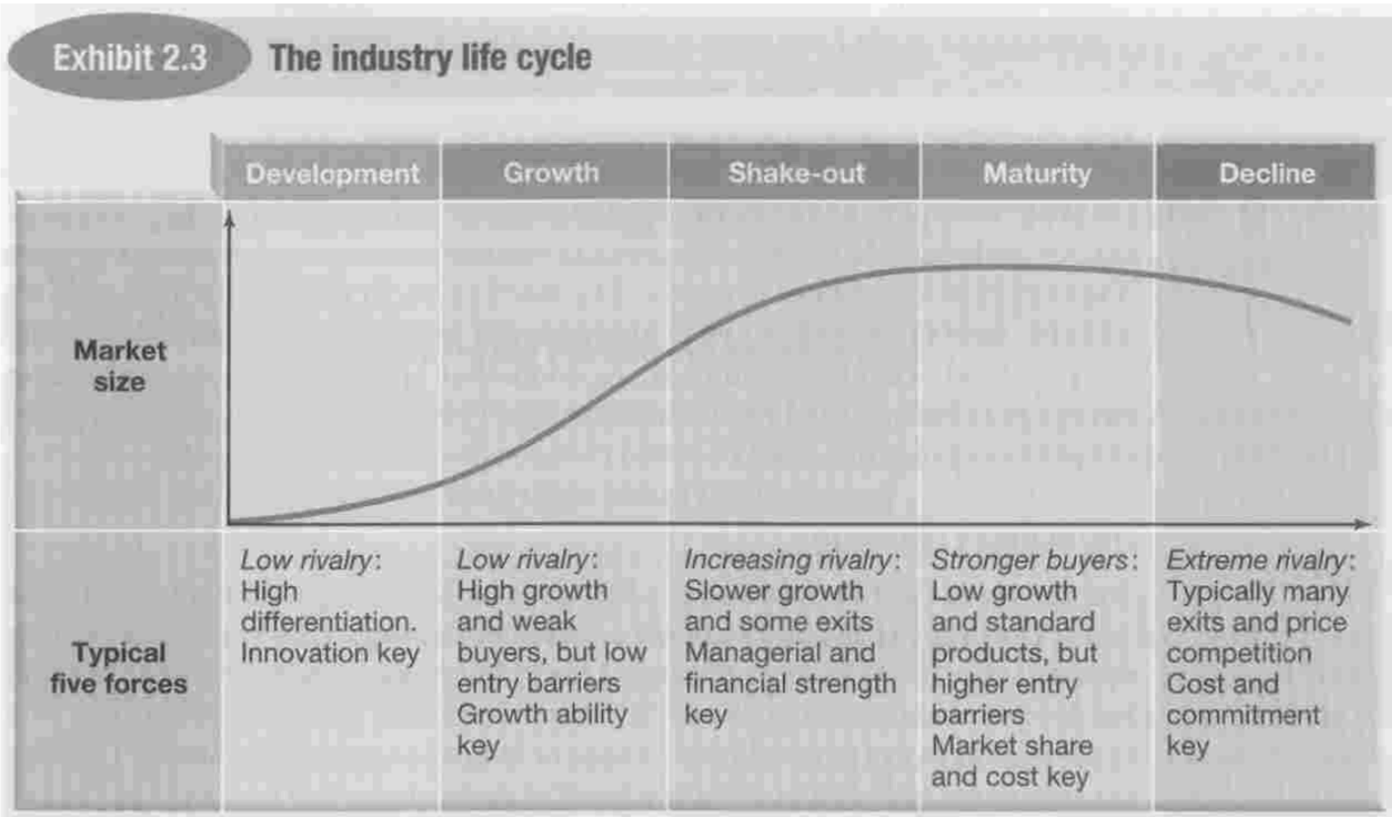
How Do I Use Porter's 5 Forces?

1) Define the industry: industry boundaries are continuously changing - high-tech arenas are converging, where separate industries begin to overlap and merge in terms of activities, technologies, products and customers e.g. mobile phones and camera industries.
2) Identify the market participants or players or stakeholders
3) Analyse the player's influence on profitability
4) Test the analysis → consider willingness to pay, price, production cost, profitability.
5) Develop a way to deal or respond with the industry environment
6) Analyse how the factors influencing profitability may change and the response required (PESTLE?)

Which industries to enter or leave? What influence can be exerted? How are competitors differently affected (small companies may not be able to keep up with increasing technological innovation, R&D spending etc.)?

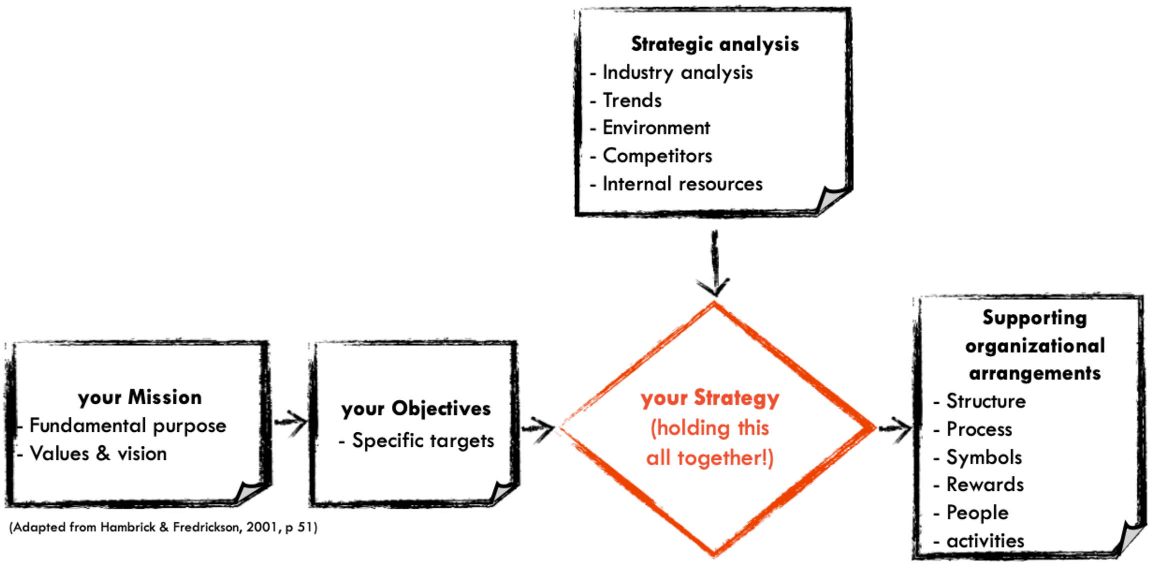
<u>Criticism of Porter's 5 Forces</u>

- Issues regarding defining the right industry.
- Based on structure-conduct-performance (or Industrial Economics) approach that has been largely replaced by game theory.
- Absence of non-market actors. → government, NGO's etc.
- Does not explain new ways of competing.
- **Missing role of complementors** → 'sixth force' where products are worth more together than separately (cooperation instead of competition?).
- 'Power' and 'threats' are not so useful for entrepreneurial firms.
- Does not explain why some firms perform better than others in the same environment → RBV.
- Imagine a company like Sydney Water? → Porters 5 Forces does not work at all.



- "In the maturity stage, barriers to entry tend to increase, as control over distribution is established and economics of scale and experience curve benefits come into play. Products or services tend to standardise. Buyers may become more powerful as they become less avid for the industry's products or services and more confident in switching between suppliers. For major players, market share is typically key to survival, providing leverage against buyers and competitive advantage in terms of cost."
- **<u>Refer to Reading on Strategic Groups and Market Segments when writing about Competitive Rivalry/Consumer Power.</u>**

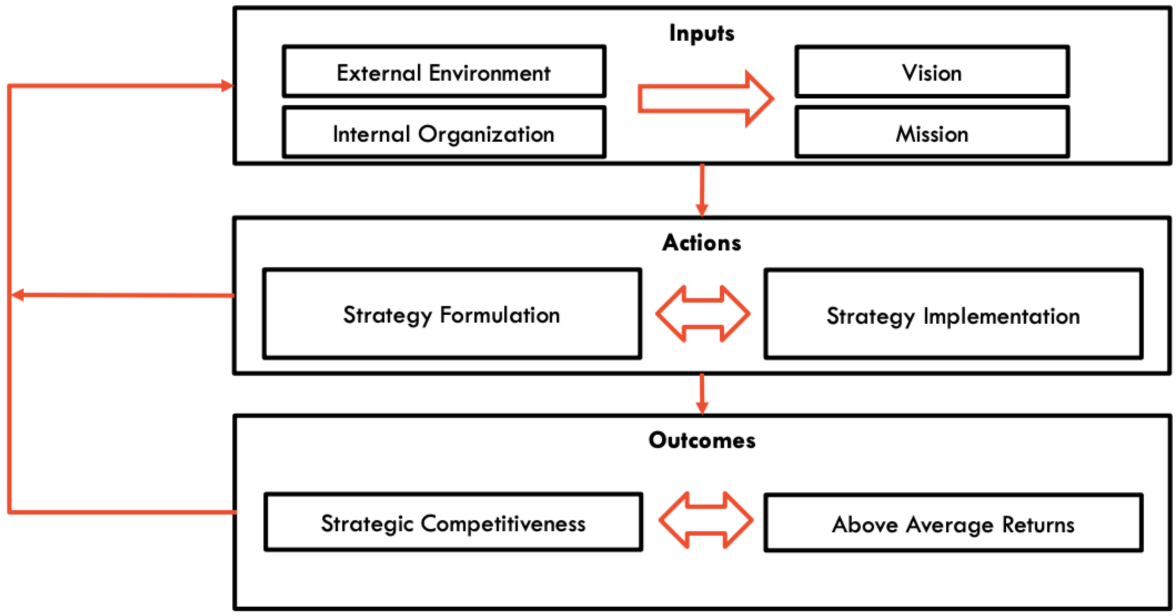
BUSS1000 Lecture 5 – Strategy



(Adapted from Hambrick & Fredrickson, 2001, p 51)

Strategy

- "Competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value."
- "An integrated, overarching concept of how the business will achieve it's objectives."
- "Strategy is the direction and scope of an organisation over the long terms, which achieves advantage in a change environment through its configuration of resources and competences with the aim of fulfilling stakeholder expectations." → taking a broad view of internal, external and trend analysis.

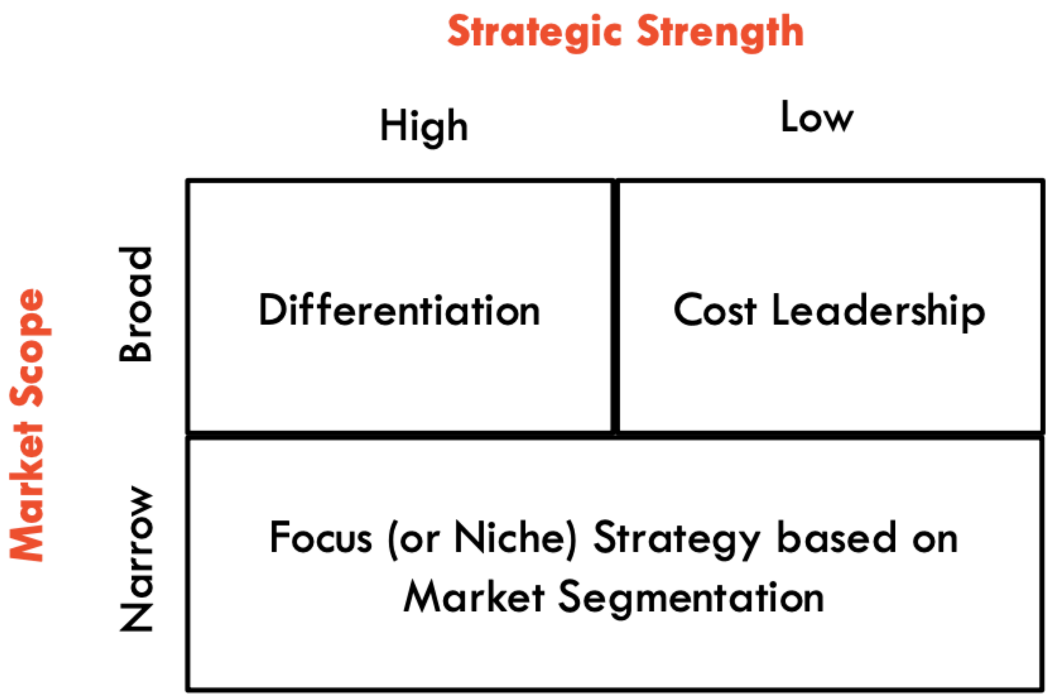


(Adapted from Hitt et al., Strategic Management : A South-Asian Perspective)

- Characteristics of strategy: complexity, uncertainty, operational decisions, integration (crossing functional and operational boundaries), external relationships and networks, change.
- Levels of strategy: corporate-level strategy (purpose and scope of an organisation, how value will be added to business units), business-level strategy (competition in particular markets), operational strategy (efficiency.)

Porter's Generic Strategies

- Draws on Five Forces
- Porter argues that there are three internally consistent generic strategies that allow an organisation to outperform competitors in the long-run.
  - → Overall Cost Leadership
  - → Differentiation
  - → Focus



<u>Cost Leadership Strategy</u>

- Aim: a firm which finds and exploits all sources of competitive advantage and aims at a sustainable cost leadership strategy → producing goods at the lowest price.

Preconditions

- Customer's price sensitivity.
- Identification of 'optimal' economy of scale.
- Preferential access to technology, raw materials, distribution channels.

Risks

- Technological changes that outdate the model.
- Risk of imitation by new entrants → risk of price wars may reduce profits without creating any value.
- Excessive concern on cost minimisation leads to lowering customer value creation.
- Vulnerable to predictable and unpredictable macro-level forces.

<u>Differentiation Strategy</u>

- Aim: a firm seeking to be unique in its industry along with some dimensions of its product or service that are widely valued by customers.

Preconditions

- Customer's price indifference.
- Possible to distinguish based on quality, reliability and service.

Risks

- Maturity of the industry and market.
- Paid cost is more than unseen cost (inconvenience, uncertainty, and potential unpleasantness associated with the purchase process).
- Easy to lag behind competitors.

Focus Strategy

- Aim: When a firm seeks a narrow competitive scope, selects a segment or a group of segments in the industry and tailors its strategy to serving them to the exclusion of others.
    → Cost Focus
    → Differentiation Focus

Preconditions

- Heterogeneous customer need.
- Lack of synergies between the value chains associated with the product offering.

Risks

- Highly susceptible to changes and moves of players at every single level.

Critiques and Limitations of Generic Strategies

- Porter suggested that organisations must select one strategy or 'be stuck in the middle'.
    → Many scholars have found that successful organisations often employ 'Hybrid Strategies' where they combine generic strategies (cheaper, and more differentiated than the average market).
    → Porter himself later accepted that Hybrid Strategies could exist.
- Doesn't talk about implementation.

Hambrick and Frederickson's (2001) Strategic Diamond

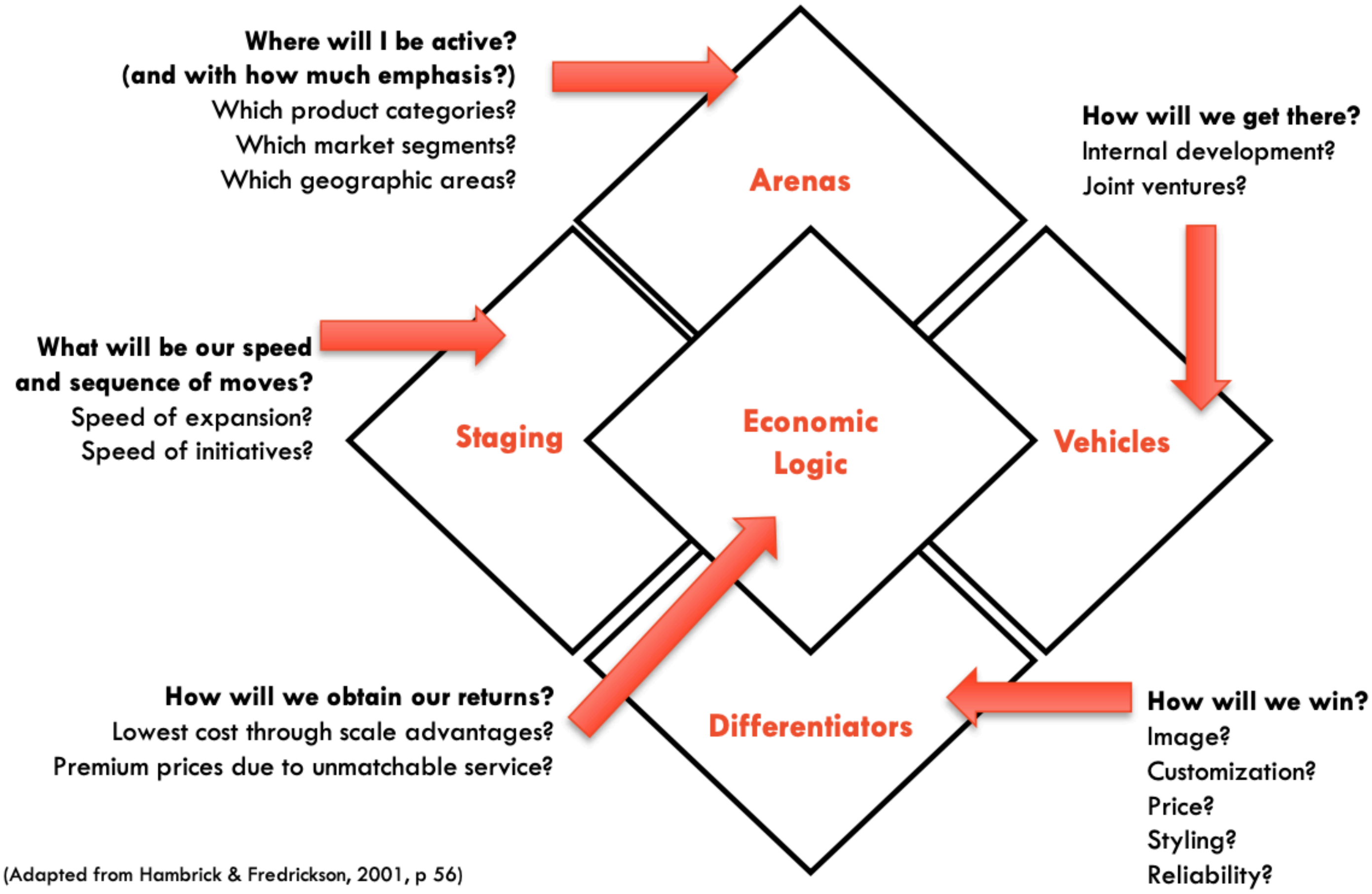
- Attempts to solve the disconnect between framework and outcome → "what the product of these tools should be."

Why Do We Use the Strategic Diamond?

- Problems of piecemeal strategies → service strategy, branding strategy, acquisition strategy – three separate strategies or one 'business strategy'.
- "When executives call everything a strategy, and end up with a collection of strategies, they create confusion and undermine their own credibility."
- Identified issues:
    → What does "we are pursuing a global strategy" mean?
    → What does "we need to develop a marketing strategy" mean?

Elements of Hambrick and Fredrickson's Strategy Diamond

- Arenas
- Vehicles
- Differentiators
- Staging
- Economic Logic



Arenas

Where will we be active?

- Which product categories?
- Which product segments?
- Which geographical areas?
- Which core technologies?
- Which value creation changes?

Vehicles

- Failure to explicitly consider and articulate the intended expansion vehicles can result in the hoped-for entry's being seriously delayed, unnecessarily costly, or totally stalled.

How will we get there?

- Organic expansion
- Licencing/franchising

- Alliances
- Joint ventures
- Acquisitions
- Greenfield start-ups

Differentiators

- Management of resources, and clear, outright choice of differentiator will provide the leaping platform for success.

How will we win?

- Image
- Customisation
- Price
- Styling
- Product reliability

Staging

What will be our speed and sequence of moves?

- Speed of expansion
- Sequence of initiatives → influenced by resources, urgency to complete elements of the strategy that have limited windows of opportunity, credibility, desire for early wins.

Economic Logic

How will we obtain our returns?

- Lowest cost through scale advantages
- Lowest costs through scope and replication advantages
- Premium price due to unmatchable service
- Premium prices due to proprietary product features

<u>The Goal of the Diamond</u>

- The diamond asks us to create a comprehensive strategy:

  → All elements are essential.

  → All elements require preparation, consideration and investment.

  → All elements align with and support each other.

- Implementation requires an understanding of all five.

Table 1
Testing the Quality of Your Strategy

Key Evaluation Criteria

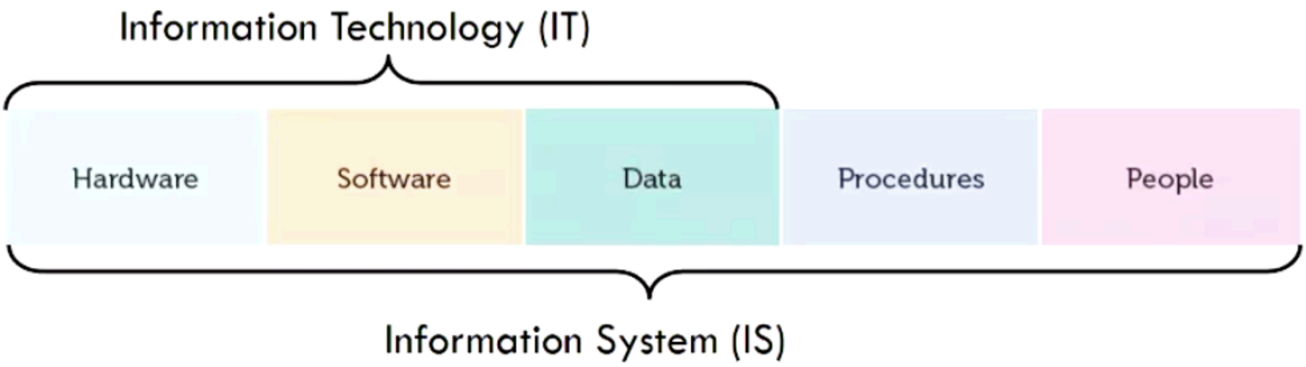
1. **Does your strategy fit with what's going on in the environment?**
   Is there healthy profit potential where you're headed? Does your strategy align with the key success factors of your chosen environment?
2. **Does your strategy exploit your key resources?**
   With your particular mix of resources, does this strategy give you a good head start on competitors? Can you pursue this strategy more economically than competitors?
3. **Will your envisioned differentiators be sustainable?**
   Will competitors have difficulty matching you? If not, does your strategy explicitly include a ceaseless regimen of innovation and opportunity creation?
4. **Are the elements of your strategy internally consistent?**
   Have you made choices of arenas, vehicles, differentiators, and staging, and economic logic? Do they all fit and mutually reinforce each other?
5. **Do you have enough resources to pursue this strategy?**
   Do you have the money, managerial time and talent, and other capabilities to do all you envision? Are you sure you're not spreading your resources too thinly, only to be left with a collection of feeble positions?
6. **Is your strategy implementable?**
   Will your key constituencies allow you to pursue this strategy? Can your organization make it through the transition? Are you and your management team able and willing to lead the required changes?

Limitations and Critiques of the Strategic Diamond

- Correct usage of the strategic diamond requires correct use of each and every other analysis.
- Like every other framework – we produce only a snapshot:
  - → The only constant is change.
  - → Strategy must evolve and be dynamic.
- Can lead to excessive rigidity – how long is the strategy valuable for?
- Industry dependent.
- Feedback loops and revision not embedded in the model.

BUSS1000 Lecture 6 – Information, Communication, and Technology

- A business system is comprised of an activity system (business processes) and an information system.



- They are used to make business more efficient, to reorganise the way that businesses do business, and to disrupt the way that industries operate → applications of technology in business.
  → Such as in banking, retail, health records and management decision making.

Business Process

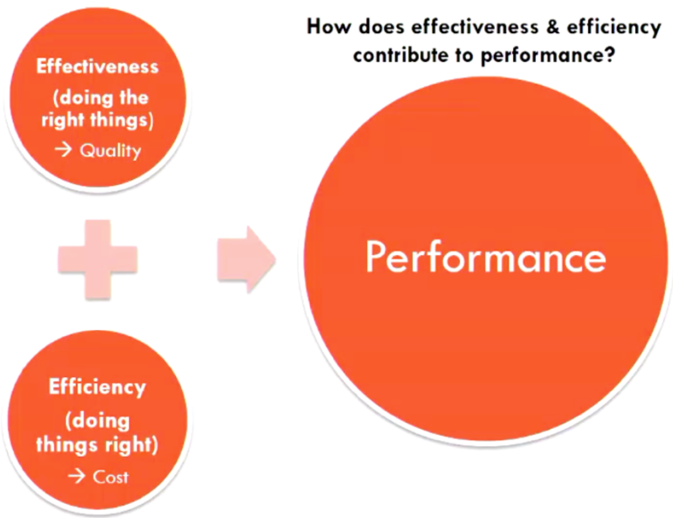
- A structured network of activities supported by resources (human and non-human) and information that interact to achieve some business goal → network of an organisations business processes is known as the Activity System.

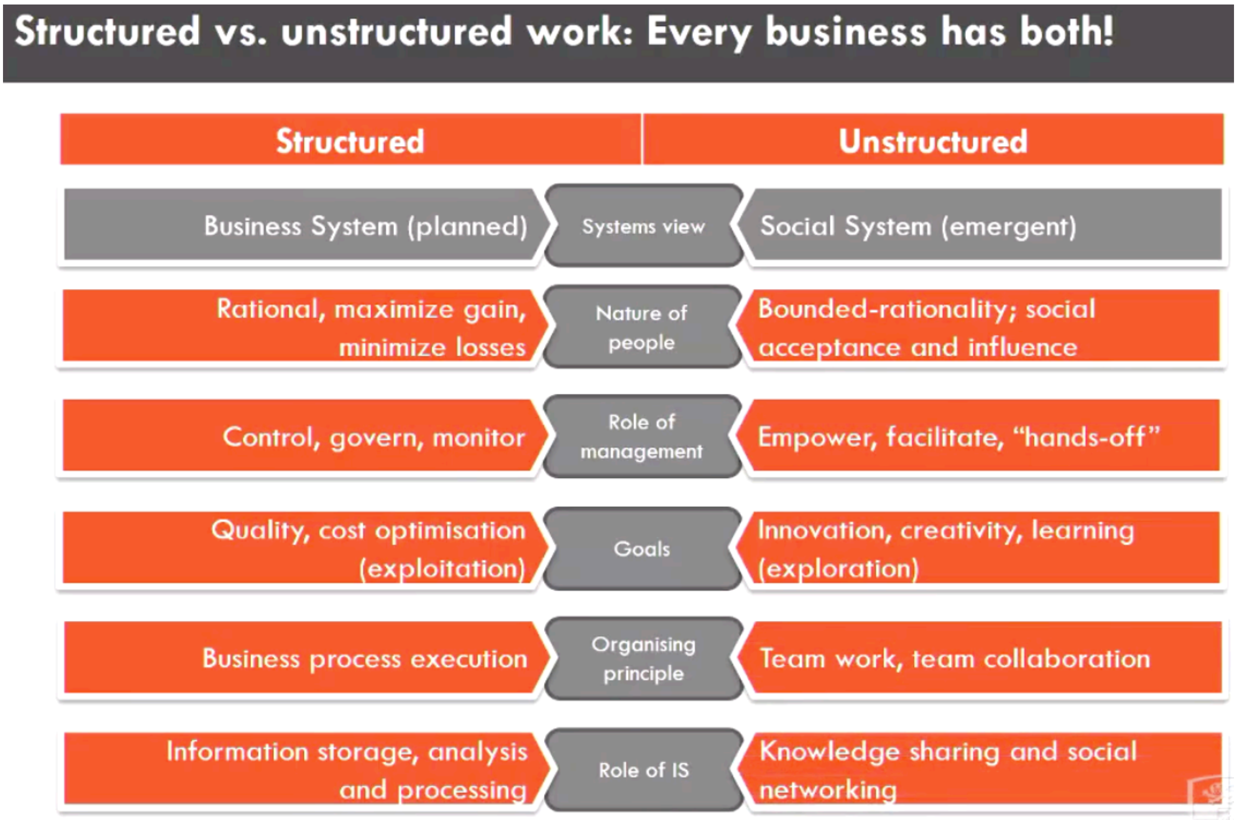
Characteristics of Well-Designed Business Processes

1) Complete
- Includes all activities necessary to achieve the business goal.
2) Minimal
- Do not include unnecessary activities (cost efficiency).
3) Well-structured
- Activities are structured in a logical sequence.
4) Embedded
- They connect and interact with other business processes in an organisation in effective and efficient ways (through the use of databases).

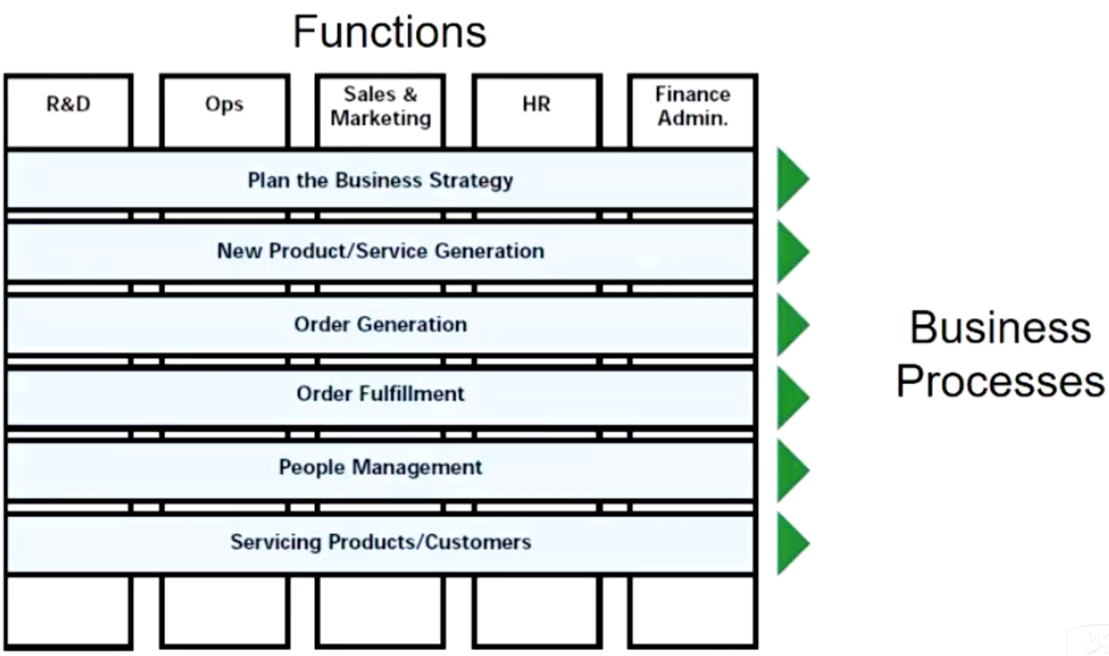
The outcome of a well-designed business process is:
- Increased effectiveness
- Increased efficiency

- Business process modelling is the improvement of a process (small improvements with high repetition rates leads to large cost savings).





- Innovators, consultants, managers have much more creative and problem-solving related jobs (unstructured work) whilst structured work could include accounting, or being a checkout assistant.
- Comparatively, structured work focusses on which person can fulfil a role, whilst unstructured work focuses on the best person that can produce results.



- However, the relationships between all of these functions are reliant on informal relationships, collaboration, communities, relationships and teams.

BUSS1000 Lecture 7 – Sustainability

- Ensuring a practice is sustainable into the future → sustainable development is development that meets the needs of current generations without compromising the ability of future generations to meet their needs.

Why is Sustainability Important?

- Stakeholders across the board across are concerned with sustainability.
- Resource security is one of the six Megatrends driving change in society (statistics in lecture slides).
- There is an ethical or humanitarian rationale → the level which you believe organisations are responsible for this will likely have a lot to do with what you believe is the role of business in society/mission, vision, values.
- Increasing societal pressure for organisations to act sustainability:

  → Increasing dissatisfaction and critiques throughout the 20th century about the role of business.

  → An organisation's impact directly on the lives of individuals and the world increasing entered public consciousness.
- Sustainable investment is growing rapidly, with top investment and finance firms are putting an increasing amount of public emphasis on these endeavours.

Ernst and Young

- Wealth and assets managers have seen sustainable investment strategies grow 107.4% annually since 2012.
- Sustainable investing represents 18% of assets under management.
- "Providing sustainable investing opportunities enables firms to not only capture financial returns for clients, but also to realise intrinsic returns not replicated elsewhere. These intrinsic returns lead to deeper connections between the clients and their investing habits, creating long-term customer appetite."

Sustainable Investing

- Between 2012 and 2016, there was an increase in $9.6 trillion USD in sustainable investing to $22.89 trillion USD.
- In 2016, China's GDP was $11.2 trillion USD, USA's GDP was $18.57 trillion USD.
- Sustainable investing represents 26-30% of the world's GDP with biennial growth of 26%.

Types of Sustainable Investing

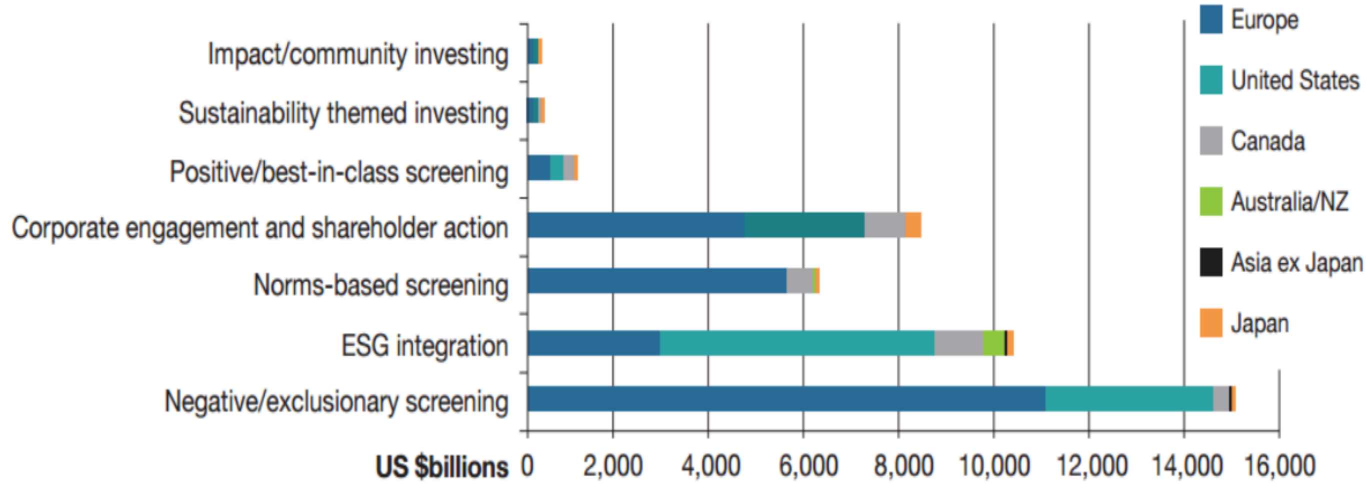
- Integrated: systematic and explicit inclusion of ESG factors in investment decision making (drivers of risk and return).
- Screening:

  → exclusionary/negative – avoiding sectors e.g. gambling, tobacco, alcohol, fossil fuels etc. (most common since it is the most tangible).

  → positive/best-in-class – positive ESG, sustainability performance.

  → norms-based – minimum standards.
- Sustainability themed: clean energy, green tech, sustainability agriculture, green property.
- Impact/community investing: targeted investments aimed at solving social and environment problems.
- Corporate advocacy and shareholder action: shareholder power to directly influence corporate behaviour (corporate, engagement, proposals, proxy voting).

Global Sustainable Investments by **strategy** and **region** in **2016**:



Strategic View of Sustainability

Strategy 1: Eco-Efficiency

- Strategic Focus

  → Competitive Advantage: Low costs

  → Competitive Focus: Organisational process

- Core theme

  → Enhance resource productivity of the same product or service by tweaking the processes (increasing efficiency, and minimising waste of resources).

  → Shifting to biologically inspired product model

  → Adoption of 'Natural Capitalism' – regulatory and market mechanisms eventually succeed in making organisations internalise environmental costs.

- Pre-requisite

  → Try to leverage supplier's LOW opportunity cost.

Three Outputs are Being Produced by Suppliers:

1) Output being consumed by another company (maximum benefit to be reaped from this)
2) Output being sold to another company
3) Waste produced by the supplier (instead of e.g. dumping it, this waste product can be resold to another company and thus reduce costs by completing monetising all outputs)

→ Individual manufacturing processes are seen as parts of broader industrial systems, creating a 'closed-loop system'.

→ Complexities surrounding this system require open cooperation and overcoming many challenges.

Strategy 2: Beyond Compliance Leadership

- Creating a differentiation through the processes that a business adopts/complies with rather than the product which they sell.
- High imitability means that this strategy cannot be solely adopted since it only gives a short-term competitive advantage.
- Strategic Focus

  → Competitive advantage: Differentiation

  → Competitive Focus: Organisational process
- Core Theme

  → Wants to inform customers (even public) about their initiative
- Adoption of accepted process for EMS (Environmental Management System)

  → CERES Principle

  → UN Global Compact

  → Global Reporting Initiative – comprehensive global sustainability reporting framework widely used around the world that considers economic, environmental, and social sustainability with 95% of the world's 250 largest companies complying.

Strategy 3: Eco-Branding

- Positioning yourself in such a way that you can charge more for the product or service e.g. organic, GF etc.
- Strategic Focus

  → Competitive Advantage: Differentiation

  → Competitive Focus: Product and Services
- Core Theme

  → Creation of niche through ecology-orientated products and services.
- Pre-requisite

  → Availability of reliable information.

  → Difficult to be imitated by competitors.

  → Consumer's acceptance to push willingness to pay upward – industrial market (less energy usage leads to reduction in operational costs), consumer market (charge higher price for eco-branded product).

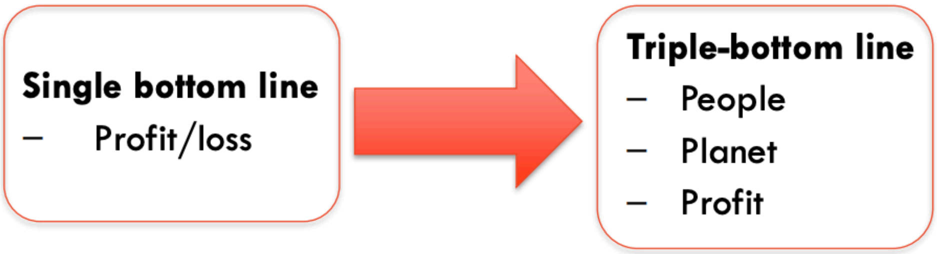
→ Difficult to be imitated by competitors – high switching costs.

Strategy 4: Environmental Cost Leadership

- Strategic Focus
  - → Competitive Advantage: Low costs
  - → Competitive Focus: Product and Services
- Core Theme
  - → When operating in a market with lower scope of differentiation, you have to focus on the cost.
  - → Create a first-mover advantage – value for money and sustainability advantage.
  - → Builds a high customer switching costs to (eventually) leverage change in regulations.

Triple Bottom Line

- Triple Bottom Line suggests that organisations need to focus not just on how much money they are making, but also on how they are impacting the world around them.
  - → New way of doing business, and reporting it.
  - → Moving away from profit and loss as the single 'yardstick' for measuring a company's success.
- Part of this broader societal shift and demand towards organisations acting sustainably → synonymous with corporate sustainability.



– **Drivers:**

	Old Paradigm	→	New Paradigm
1 Markets	Compliance	→	Competition
2 Values	Hard	→	Soft
3 Transparency	Closed	→	Open
4 Life-cycle technology	Product	→	Function
5 Partnerships	Subversion	→	Symbiosis
6 Time	Wider	→	Longer
7 Corporate governance	Exclusive	→	Inclusive

Does the TBL Work?

- Offers little challenge to business as usual in which businesses can talk about themselves in new and different terms but underlying assumptions, beliefs and values remain unchanged.
- Promoting change-but-no-change rhetoric.
- Paradoxically may reinforce business-as-usual and greater levels of unsustainability.

Issues with TBL

Small

- Cover few stakeholders

- Cherry pick elements of news
- Ignores major social issues such as lobbying, advertising, increased consumption, distribution of wealth.
- Scale of development and future generations unaddressed.

Big

- This calls into question what business are actually supposed to be doing and what they are responsible for → laws regarding management of funds.
- The demands of growing the business, making increased profits, and securing the financial viability of the business and the recognition that they might come at the expense of the environment or social equity is largely avoided.
- Confuse narrow and incomplete, partial reporting with claims to be reporting on being sustainable, actually being sustainable, or with claims to be moving towards sustainability.

Communicating Sustainability: Critiques and Concerns

- Many people are quite critical of what, how, when, where, and why organisations communicate sustainability.
- Often, many people see efforts are somewhat transparent.
- The 'rhetoric' is often widely criticised.

Greenwashing

- Greenwashing is to make people believe that your company is doing more to protect the environment than it actually is → increasing apprehension that at least some corporations creatively manage their reputations.
- Leads people to believe that companies are doing more than they are, or even doing good, when in fac the opposite might be true.

Critiquing the Notion of 'Greenwashing'

- Greenwashing makes it seem that organisations are bad, and that society are being duped and mislead.
- People aren't stupid at a basic level e.g. people know that plastic is made out oil which is unsustainable.
- Greenwashing meets its match with armchair activism or slacktivism → a pejorative term that describes 'feel-good' measures, in support of an issue or social cause, that have little physical or practical effort other than to make the person doing it feel satisfied that they have contributed.

Other Considerations

- Corporations are not evil → made up of people themselves, but sacrifices are made with conflicting stakeholder needs.
- People are not evil → desire to do something, although they may feel as if their contributions aren't significant.
- Sustainability should not be an exercise of blaming and criticising, but a process of figuring out how to greater incorporate it into business practice.
- Greenwashing is a subjective term that has no definitive quantifiable guidelines e.g. how many trees will Apple have to plant to not be greenwashing?

Communicating Sustainability

- Sustainability is a key consideration in the contemporary business environment.

- Rules regarding compliance and reporting are slowly being created, but not everyone is convinced.
- Sustainability represents an opportunity for everyone given its an emerging market.
- How strategy is communicated is essential.

Further Implications of Climate Change for Organisations and Management

Reshaping Value Chains

- One key concern with climate change response will inevitably be energy use.

  → Mix of energy sources that underpin the economy

  → The distribution of this energy consumption and production.

  → The efficiency of its use in transport (which disproportionally relies on fossil fuels), components, raw materials and by people.
- Large-scale changes are likely in the geography and functioning of production system, by seeking to produce closer to the point of consumption e.g. food.
- The market for certain goods may be supplanted by a market for services in which new market actors will dominate e.g. mobility/Uber vs automobile sale.

Organisational Resilience and Adaptation

- Fundamental changes are needed in how land and water are used, although responses to climate change are difficult to manage in conjunction with prudent short-term management decisions → specific impacts in specific times and places are hard to predict.
- Climate change will require proactive adaptability as opposed to punctual reactive change.
- A second area which will result in change is the development of technology, with a fundamental alteration in energy provision infrastructure

Shifts in Work and Life

- Climate change and increasing urbanisation will demand cities be more resource efficient, and may impact how individuals live, work, and move about → impacts how work is distributed, how employees interact, and how physical assets are used.
- For example, to promote more efficient energy and infrastructure use, employees may be asked to work from home.

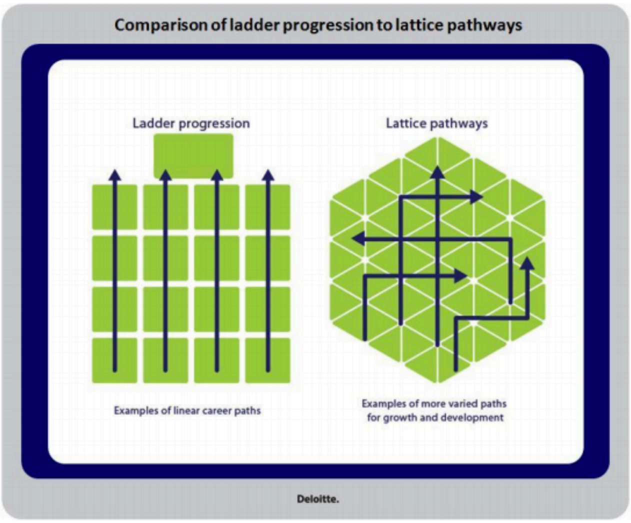
Societal Shifts

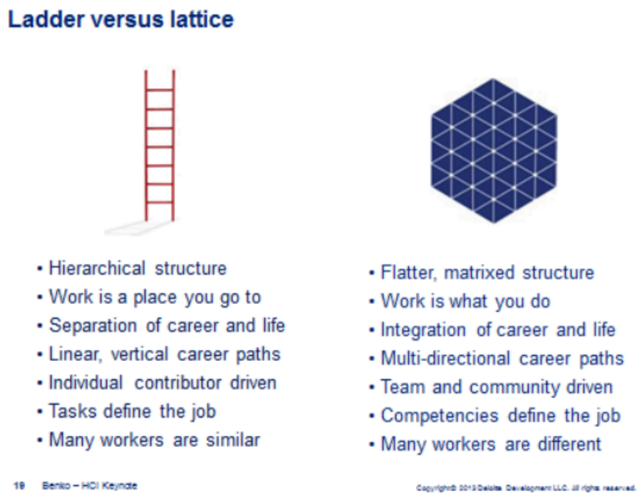
- Climate change will usher in infrastructure changes that anticipate and respond to changing conditions e.g. development of onshore wind turbines.
- Questions, concerning mobilisation, organisation and coordination of large-scale change, surround how societies will respond to ‘climate migrants’, who have been displaced from their homes and livelihoods by rising sea levels, persistent drought and devastating storms.

BUSS1000 Lecture 8 – Evolving Workplace

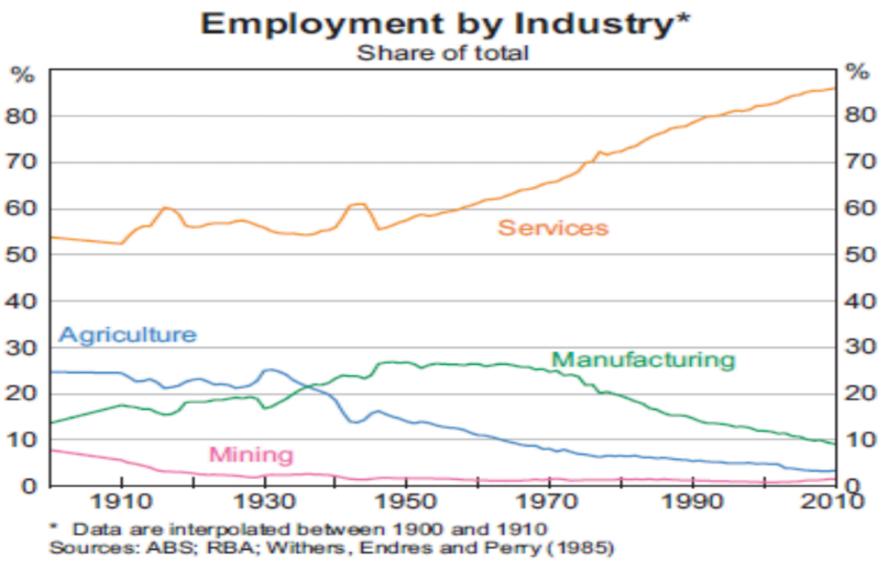
- Millennials are the largest generation in history in an increasingly populous, and aging world with growth generation from Asia to Africa.

Change in Career Progression

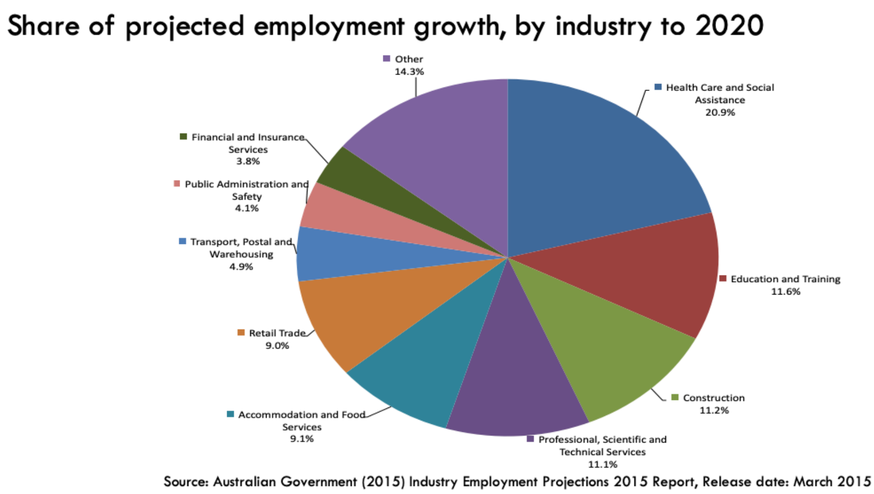




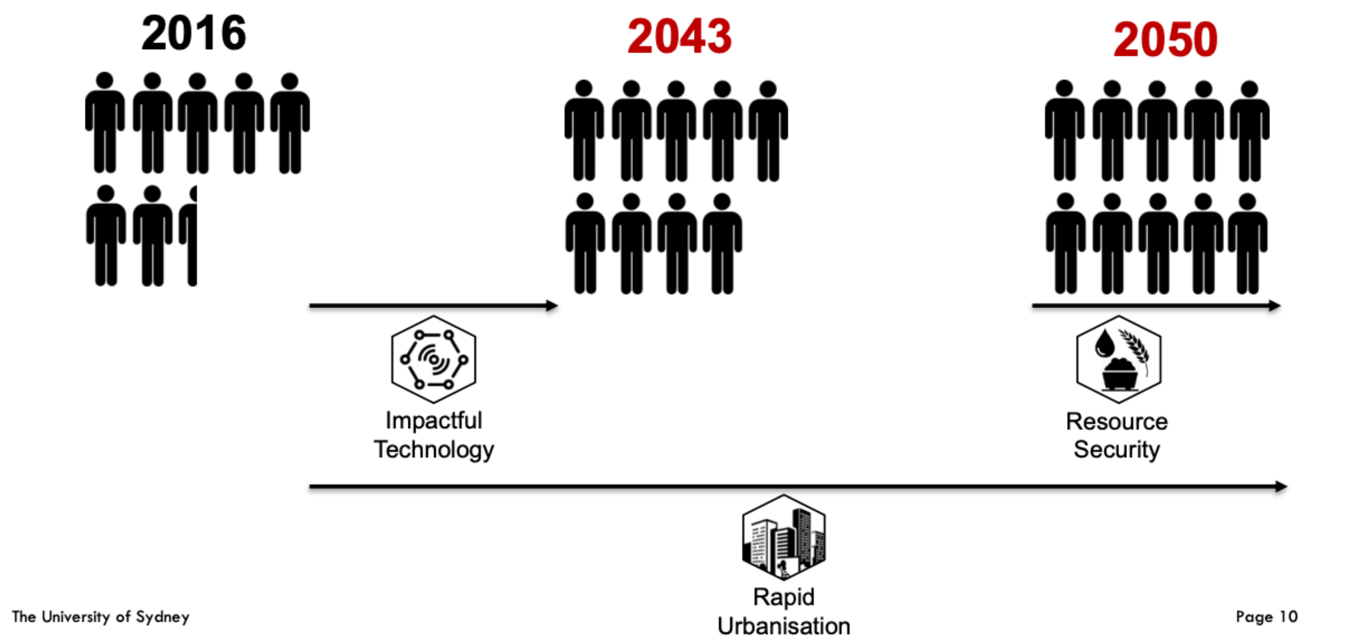
Change in Industries



Change in Focus Areas



Change in Population



Changes in Labour-Machine Interface: Artificial Intelligence

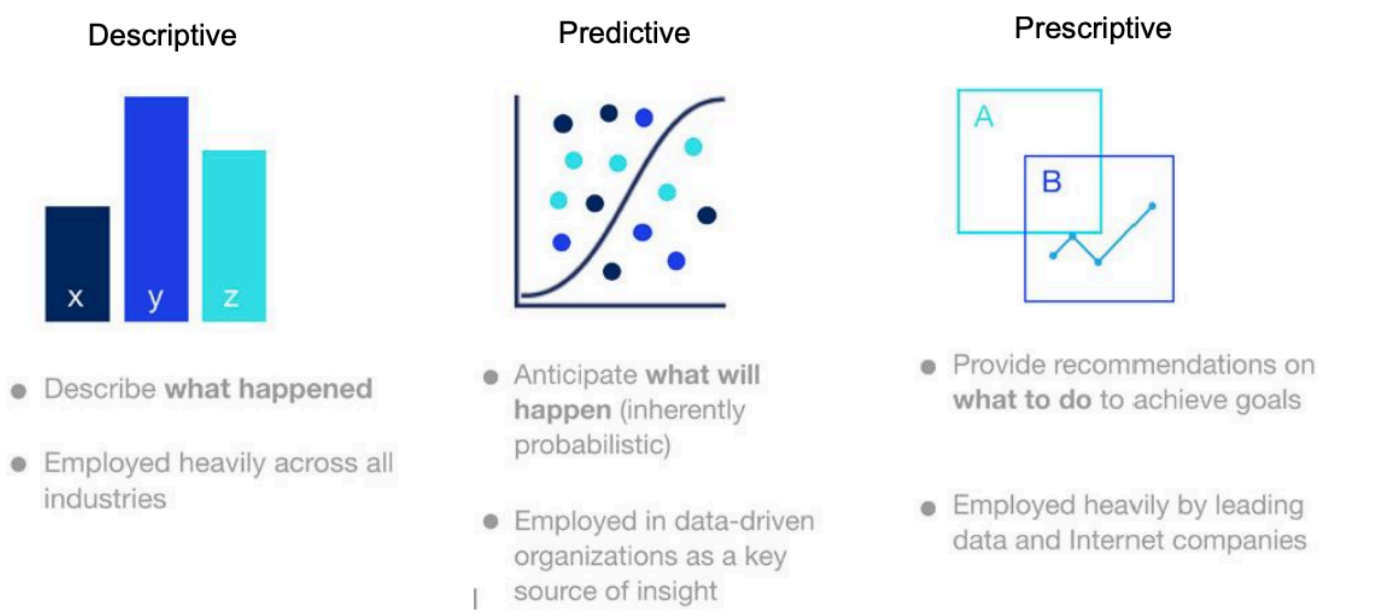
Artificial Intelligence

- AI is typically defined as the ability of a machine to perform cognitive functions we associate with human minds, such as perceiving, reasoning, learning, and problem solving.

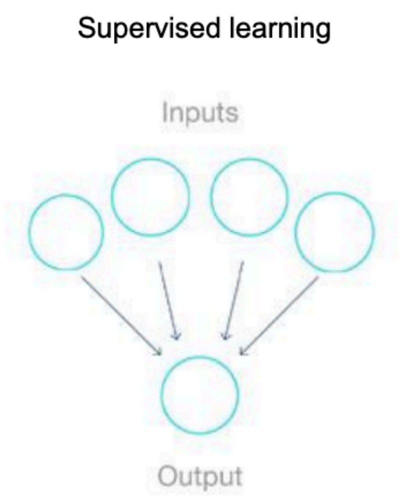
Machine Learning

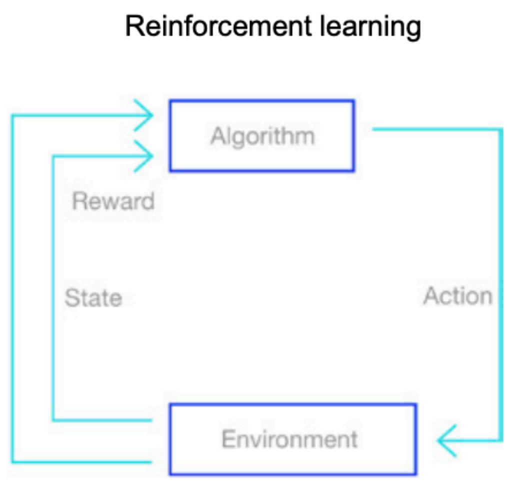
- Machine-learning algorithms detect patterns and learn how to make predictions and recommendations by processing very large data sets and experiences, rather than receiving explicit programming instruction.
- These algorithms also adapt to improve efficacy over time.

Types of Analytics – Descriptive, Predictive, Prescriptive



Major Types of Machine Learning





Supervised Learning

How it Works:

- A human labels every element of the input data e.g. in predicting housing prices, a person will label the input data as 'time of year', 'interest rates' etc. and defines the output variable 'housing prices'.
- The algorithm is trained on the data to find the connection between the input variables and the output.
- Once training is complete – typically when the algorithm is sufficiently accurate – the algorithm is applied to new data.

Linear Regression

- Highly interpretable, standard method for modelling the past relationship between independent input variables and dependent output variables (which can have an infinite number of values) to help predict future values of the output variables.

Business Use Cases

- Understand product-sales drivers such as competition prices, distribution, advertising etc.
- Optimise price points and estimate product price elasticities.

Naïve Bayes

- Classification technique that applies Bayes theorem, which allows the probability of an event to be calculated based on knowledge of factors that might affect that event (e.g. if an email contains the word 'money', then the probability of it being spam is high.)

Business Use Cases

- Analyse sentiment to assess product perception in the market.
- Create classifiers to filter spam emails.

Unsupervised Learning

What it is

- An algorithm explores input data without being given an explicit output variable e.g. explores customer demographic data to identify patterns.

When to Use it

- You do not know how to classify the data, and you want the algorithm to find patterns and classify the data for you.

How it Works

- The algorithm receives unlabelled data (e.g. set of data describing customer journeys on a website), infers a structure from the data, and then identifies groups of data that exhibit similar behaviour (e.g. clusters of customers that exhibit similar buying behaviours).

K-Means Clustering

- Puts data into a number of groups (k) that each contain data with similar characteristics (as determined by the model).

Business Use Cases

- Segment customers into groups by distinct characteristics (e.g. age group) for instance, to better assign marketing campaigns or prevent churn.

Reinforcement Learning

What it is

- An algorithm learns to perform a task simply by trying to maximise rewards it receives for its actions e.g. maximise points it receives by increasing returns on an investment portfolio.

When to Use it

- You don't have a lot of training data
- You cannot clearly define the ideal end state
- The only way to learn about the environment is the interact with it.

How it Works

- The algorithm takes an action on the environment (makes a trade in a financial portfolio), receives a reward if the action brings the machine a step closer to maximising the total rewards available (e.g. the highest total return on the portfolio), and optimises for the best series of actions by correcting itself over time.

Business Use Cases

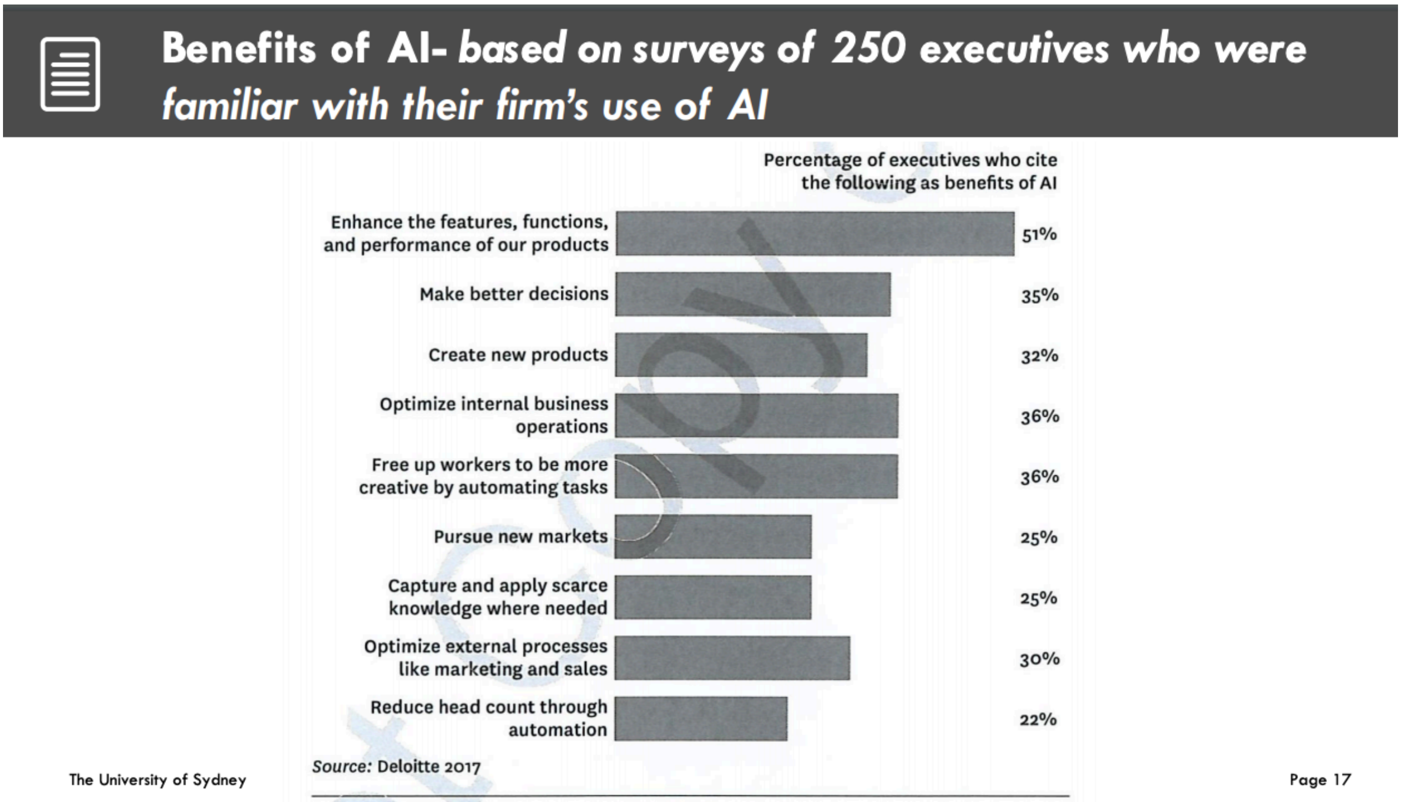
- Optimise the trading strategy for an options- trading portfolio.
- Balance the load of electricity grids in varying demand cycles.
- Stock and pick inventory using robots.
- Optimise the driving behaviour of self-driving cars.
- Optimise pricing in real time for an outline auction of a product with limited supply.

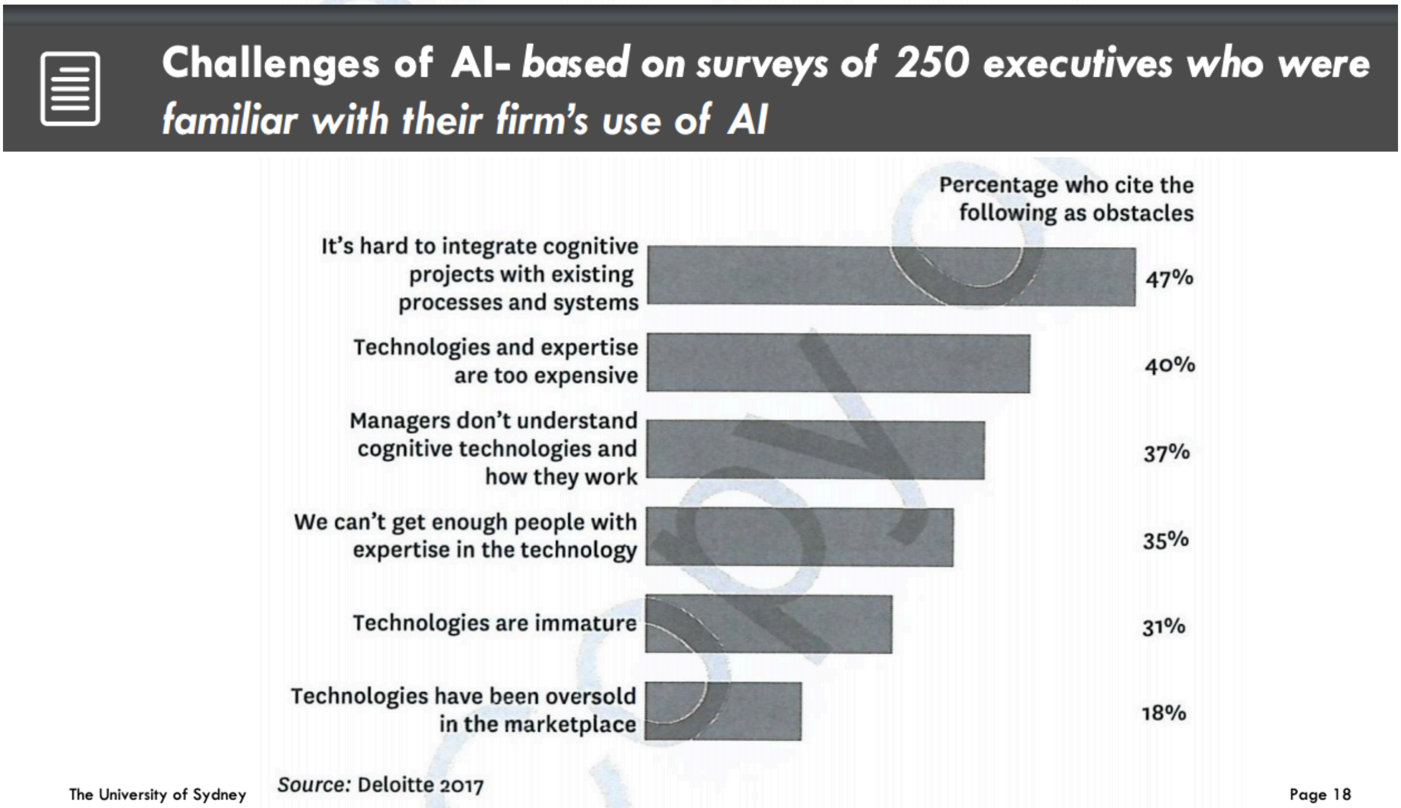
Deep Learning

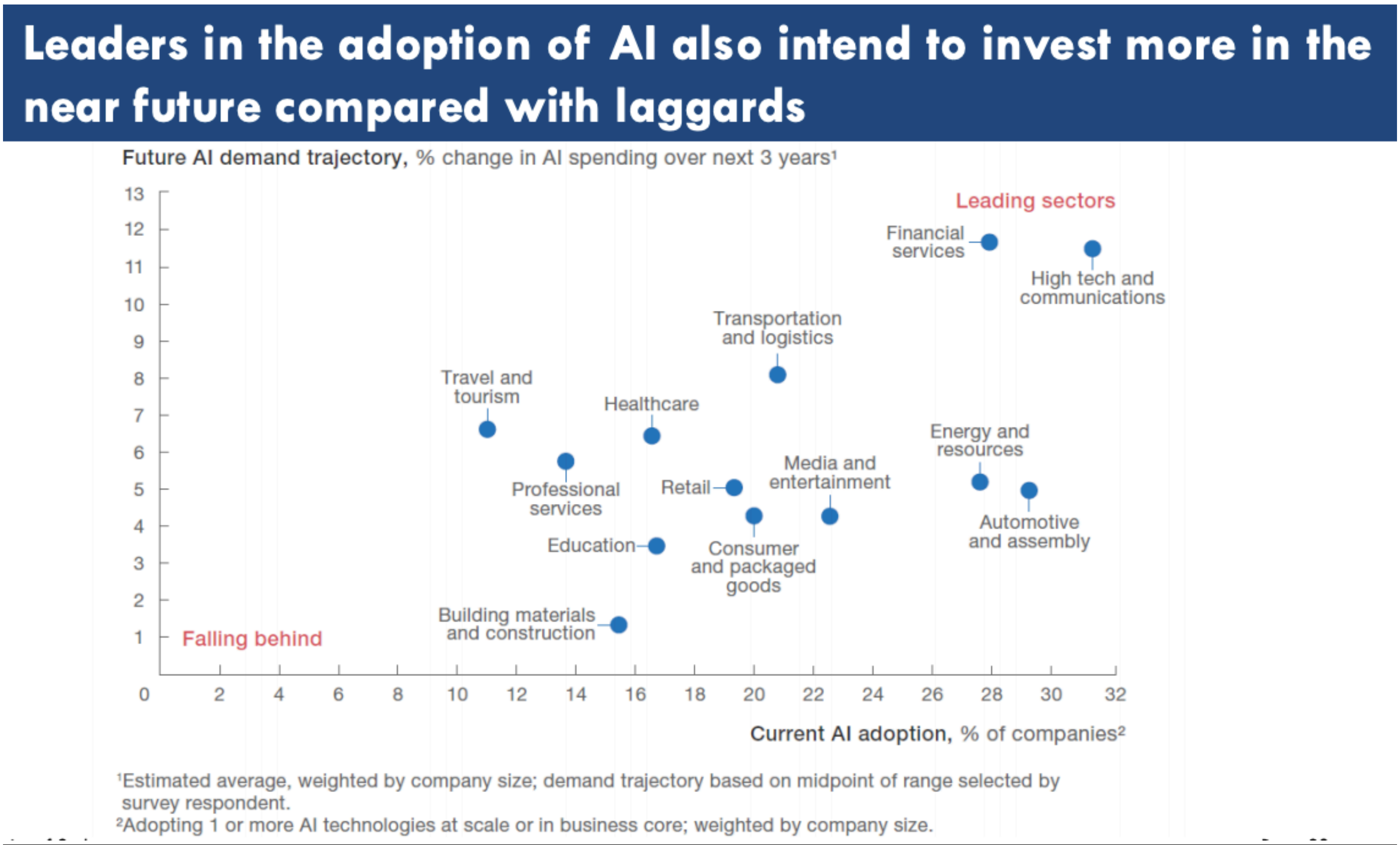
- Deep learning is a type of machine learning that can process a wider range of data resources, requires less data pre-processing by humans, and can often produce more accurate results than traditional machine-learning approaches.
- In deep learning, interconnected layers of software-based calculators known as 'neurons' form a neural network.

- The network ingests vast amounts of input data and processes them through multiple layers that learn increasingly complex features of the data at each data.
- The network can then make a determination about the data, learn if its determination is correct, and use what it has learned to make determinations about new data.
- For example, once it learns what an object looks like, it can recognise the object in a new image.

Implications of AI for Businesses







<u>What is Missing?</u>

- Looking at AI through the lenses of business capabilities rather than technologies → whether the technology will genuinely improve the business, rather than being inherently complex and powerful.

How are Businesses Adopting Cognitive Technology?

1. Robotics and Cognitive Automation
- Automation of business process or using Robotic Process Automation (RPA).
2. Cognitive Insight
- Gaining insight through data processing
3. Cognitive Engagement
- Engaging with customers and employees

<u>Robotic Process Automation</u>

<u>Pros</u>

- Least expensive
- Easiest to implement
- Brings quick and high return on investment
- Particularly suited to working across multiple back-end systems

<u>Cons</u>

- Least 'smart'

- Aren't programmed to learn and improve

Impact on the Job Market

- Replacing administrative employees was neither the primary objective nor a common outcome → 47% of RPA projects.
- RPA will lead to some job loss in the future.
- Mostly will impact offshoring business process outsourcing.

Examples of RPA

- 86% of applications to NASA are completed without any human intervention.
- Transferring data from email and call centre systems into a system of record e.g. updating customer files with address changes or service additions.
- Replacing lost credit/ATM cards, reaching into multiple systems to update records and handle customer communications.
- Reconciling failures to charge for services across billing systems by extracting information from multiple document types.
- 'Reading' legal and contractual documents to extract provisions using natural language processing.

Cognitive Insight

- Using algorithm to detect patterns in vast volumes of data and interpret their meaning.

Typical Usage

- Predict what a particular customer is likely to buy.
- Identify credit fraud in real time.
- Detect insurance claims fraud.
- Analyse warranty data to identify safety or quality problems in automobiles and manufactures products.
- Automate personalised targeting of digital ads.
- Provide insurance with more accurate and detailed actuarial modelling.

How it is Different from Traditional Analytics?

- More data intensive and detailed.
- Models typically trained on some part of the data set.
- Eventually models get better – ability to use new data to make predictions or put things into categories improves over time.

Impact on the Job Market

- Mostly applied to improve the jobs that only machines can do.
- To illustrate:
  - → Programmatic advertisement buying involves high-speed data crunching and automation.
  - → They have long been beyond human ability.
- Cognitive Insight improves our ability to strategically apply technological advancement.

Examples of Cognitive Insight

- Probabilistic match

  → Data that is likely to be associated with the same person or company but that appears in slightly different formats.
- GE used machine learning and applied 'probabilistic match' to integrate supplier data.
- Eliminated redundancy and negotiated contracts that were previously managed at a business unit level, saving $80 million in one year!

Cognitive Engagement

- Engage employees and customers using natural language processing chatbots, intelligent agents, and machine learning.

Typical Usage

- 24/7 customer service in the customer's natural language to address issues e.g. password problem, technical support questions.
- Answering employee's queries on IT, employee benefits, HR policy etc.
- Product and service recommendation for retailers that increase personalisation, engagement and sales.
- Health treatment recommendation systems that help providers create customised care plans that take into account individual patient's health status and previous treatment.

Impact on the Job Market

- Currently not threatening customer service or sales rep jobs.
- Long term plan is to shift routine communication to machine.
- Customer support professionals will be used for more complex activities e.g. handling customer escalation, conducting extended unstructured dialogues, or reaching out to customers before they call in with problems.

Changes in the Labour Market

- In 2016, there were approximately 10 million in a main job, with 25% without paid leave.
- Changes in the landscape of employment and work has been caused by the deindustrialisation of western economies, emergence of new economic powerhouses, global-entrenchment of neo-liberalism and shakeup of capital-labour contract.

Increases in:

- Underemployment rate (9% and diverging).
- Female participation rate (60% in 2014), over a wider age group vs 73% male.
- Year 12 retention rates.
- 15-64-year olds with a bachelor's degrees or higher qualifications.
- 15-24-year olds enrolled in study (about 80% 15-19, 40% 20-24).
- Percentage of Australia's population born overseas (around 30% in 2015).

Gig Economy

- '…an economy in which more and more people either choose to, or are forced to, earn their livelihood working on lots of small 'gigs' rather than being employed full or part time."

Options for Extending Regulation

1. Confirm and enforce existing laws → expand reach of existing legal frameworks.
2. Clarify or expand definitions of employment/activities classified as employment.
3. Create a new category of 'independent worker'.
4. Create rights for workers, not employees → abandon employment status and apply protections to anyone performing 'work' (most radical).
5. Reconsider the concept of an employer.

Microwork

Characteristics of Microwork

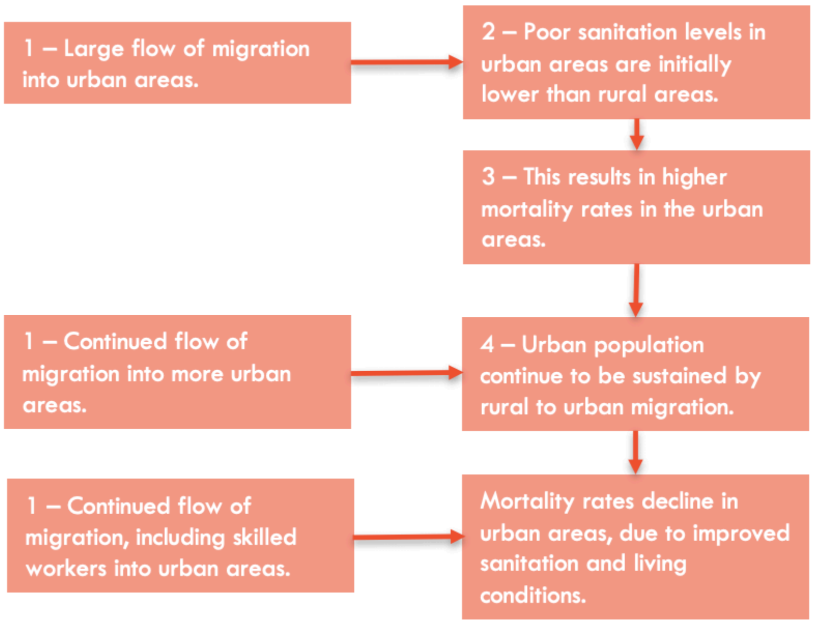
- 'Crowdsourcing' of small work tasks in a global market, where workers bid for work on 'sharing economy platforms' → technology used to coordinate, manage and compensate work.
- Fractured form of work, where complex tasks are broken down into extremely small tasks that require few skills and little time e.g. entering data, tagging images etc.
- Notoriously low paid on a piecemeal basis→ "remuneration for ninety percent of tasks on Amazon Mechanical Turk is less than 10c a task."
- Triangle of relations between workers, digital intermediaries and final end-users.
- No traditional employment relationship.
- Work is temporary, lasting only for the time needed to accomplish the task.
- Irregular work schedules driven by fluctuations for their services.

Impacts of Microwork

- Bolsters generalised shift towards the individualisation of work → normalises solitary work.
- Provides no opportunity for professional development since it becomes impossible for workers to gain an overview of the total work process beyond their tedious, fragmented work.
- Increases the spread of precarious employment contracts and freelance work by disrupting conventional employment relations → no job security, in-work benefits, and labour rights e.g. minimum wages, collective bargaining.
- Allows paid work to encroach into places and times previously off-limit.
- Leads to many gig works experiencing acute feelings of anxiety and guilt about their inability to meet the demands on them.

BUSS1000 Lecture 9 – Urbanisation

- The migration of population from rural areas to urban areas, in which the absolute growth in the urban population is faster than rural growth → creating centres of power and influence.
- Urbanisation and population density are separate concepts e.g. Australia has 89% urbanisation (UK, 81%) but a population density of 2/km^2 (UK, 650/km^2).
- In 1950, around 30% of people worldwide lived in rural settlements → in 2017, 54.8% of the world's population is urban (66% by 2030).



What are Urban Areas?

- Urban areas can be gleaming cities with skyscrapers, or vast shanty towns housing millions of urban dwellers (e.g. Rocinha, Brazil – favela).
- Different countries have different definitions:

  → India: Towns having 5,000 or more inhabitants, a density of not less than 1,000 persons per square mile, pronounced urban characteristics and at least 75% of the adult male population employed in pursuits other than agriculture.

What is the Relationship Between Urbanisation and the Other Megatrends?

Reasons for Urbanisation

- Education and training opportunities
- Employment opportunities
- Economies of scale result in better infrastructure in urban settings
- Generally better health and social services in urban settings
- Generally lower poverty levels in urban settings

Impacts of Rapid Urbanisation Megatrend

- 85% of the global GDP is generated in cities, with 61% generated by the top 750 largest cities.
- Over 1.5 million people are moving to cities every week.

- Over 90% of future growth in urbanisation is estimated to occur in African, Asian and South American countries.
- As urbanisation levels increase, economic activity will tend to shift towards the services sector.
- Regions are being connected by a surge in cross data flows, with internet penetration increasing with urbanisation.

Challenges with Urbanisation

- Infrastructure: growth in urban population generates tremendous demands on infrastructure and the environment → congestion and pollution.
- Demand: more demand for the provision of services and job creation.
- Resources: as cities continue to grow, so does consumption of the world's natural resources (3/4 of resources consumed in cities).
- Ageing: demographic changes, with ageing population, will cause over 100 of the world's top cities to shrink over the next 10 years.

Technology and Urbanisation

- Smart cities are innovative cities that use ICT and other means to improve quality of life, efficiency of urban operation and services and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, and environmental aspects.

Sustainability and Urbanisation

- Cities are responsible for over 70% of total global carbon dioxide emissions.
- Between 1950 and 2005, the level of urbanisation increased from 29% to 49%, while global carbon emissions from fossil fuel burning increased by almost 500%.
- A majority of city dwellers live in cities that face high risk of disaster related mortality or economic losses e.g. China, west coast of America.

World Bank Classification of Urban Hazards

Natural	Technological	Socioeconomic
– Drought – Earthquake – Epidemic/pandemic – Extreme temperature – Flooding – Insect infestation – Severe storm – Tsunami – Volcanic eruption – Wildfire	– Building collapse – Chemical spills – Cyber threats – Explosion – Fire – Gas leak – Industrial accident – Oil spill – Pollution event – Poisoning – Radiation – Transport accident – System breakdown (ICT, energy)	– Business discontinuity – Corruption – Demographic shifts – Economic crisis – High unemployment – Labour strike/unrest – Massacre – Political conflict – Social conflict – Supply crises (food, water, housing, etc.) – Terrorism War

Urbanisation and Business

- "No country has grown to middle income without industrialising and urbanising. None has grown to high income without vibrant cities. The rush to cities seem chaotic, but it is necessary."

- Potential customers: urban customers exist within a 10km shopping radius of physical stores → population density impacts the potential of customer numbers.
- Freight costs: dense urban populations decrease the cost and environmental impact of product freight.
- Higher revenue for the same floor space: denser cities result in higher foot traffic that leads to higher sales and higher gross margins (although rent can be more expensive).

BUSS1000 Lecture 10 – Emerging and Growing Markets

- Emerging economies are a sub-set of developing economies → have some characteristics of a developed market, but do not meet all of the standards of developed markets.

Characteristics of Emerging Economies

- Lower-than-average per capita income
- Rapid growth (75% fast than developed economies) → largest economic potential
- High volatility (EEs are in the process of implementing socio-economic systems which are often radically different from the past)
- Interest to investors.

We will consider the E7 (Emerging 7) countries.

– China
– India
– Brazil
– Mexico
– Russia
– Indonesia
– Turkey

(Thornton, 2006)

– The term "E7" is invented in 2006 by two economists: John Hawksworth and Gordon Cookson (PWC, 2006)

Why are EEs Important to Business?

- Infrastructure is needed to support population increase, where demand for residential floor space is expected to increase by 90% by 2025.

    → The demand for dwellings is increasing due to both populations increase and smaller average household size (as incomes rise, household size decreases).

- As economies and populations expand, the provision of water treatment infrastructure for drinking and sanitation also increases.
- Increased GDP requires increased transportation of goods, with emerging markets generating 85% of the increase in the demand for containerised transport.

What does this mean?

- Infrastructure → Increased demand for coal, iron, copper, silica, timber etc.
- Transportation → increased demand for oil and petroleum.

HOWEVER:

- Increased demand leads to increased prices globally, including energy.
- Often unsustainable level of natural resource usage.

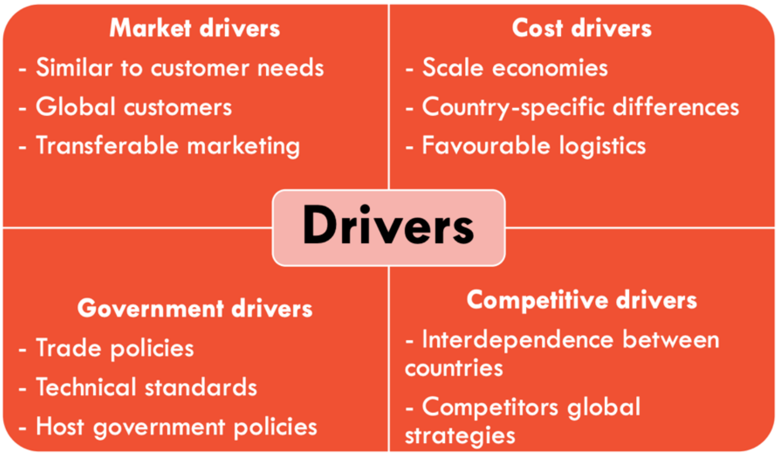
Rise of the New Middle Class

- Increasing income and spending power from increased GDP has led to a rise of the global middle class particularly from China and India.

Multi-National Corporations (MNCs)

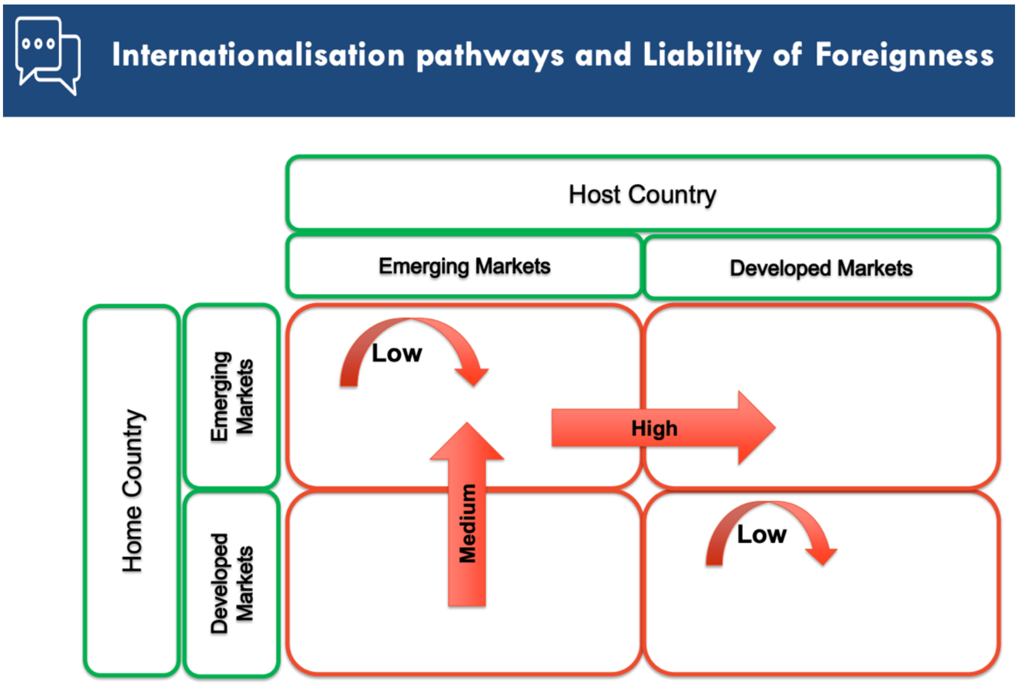
Liability of Foreignness (LOF)

- Firms face additional social and economic costs when they operate in foreign markets:
  → Communication costs
  → Resource costs
  → Host government discrimination
  → Cultural unfamiliarity
  → Legal and institutional unfamiliarity



Institutions

- Institutional environment consists of normative or regulatory pressures placed on an organisation by the state, society, and professions (consider PESTLE).
  → Pressures can be direct and enforced through regulations or courts.
  → Pressures can be indirectly enforced by creating expectations and norms that the organisation needs to adhere to acquire legitimacy and access resources.
- The institutional environment within emerging markets is often less developed than the institutional environment within developed markets.



<u>The Rise of MNC's FROM Emerging Markets</u>

- Stats and information can be found within the lecture slides.
- Question: How have MNCs from formerly peripheral areas such as Asia Pacific established themselves successfully, against the fierce resistance of the incumbents?

MNC Expansion Considerations

- Frameworks explore ways that a business can analyse whether FDI is valuable, often through the lens of LoF.

OLI Framework

- OLI Framework determines if a particular approach provides greater overall value than other available national or international choices for the production of G+S (whether to pursue FDI).
  - → The early MNCs were forced to operate within a regime of relatively closed markets, and found themselves constrained to produce mini-versions of themselves.
  - → Sources of multinational advantage focus on the firms' ability to exploit domestic assets abroad.
- OLI framework suggests that:
  - → Low productivity firms produce only in the home market.
  - → High productivity firms engage in FDI.

<u>Ownership Advantage</u>

- Suggests that the MNC must possess a resource that is not generally available or imitated, which can be applied to production in different locations.

<u>Location Advantage</u>

- Suggests that the MNC must have an incentive (location advantages) producing where they can generate the highest profits → comparative advantage to performing specific functions within a particular nation.
  - → Access to required resources (e.g. raw materials).
  - → Cost of required resources (e.g. cheap labour).
  - → Transportation costs

<u>Internalisation Advantage</u>

Organisation cost of running firm **>** transaction cost of using the market
Use the market

Organisation cost of running firm **<** transaction cost of using the market
Internalise

	Location	
	Home	**Abroad**
Internal	Integrated National Firm	FDI
External	Outsourcing	Offshoring

LLL Framework

- The LLL Framework is an iterative process that underpins and accelerates the success of internationalisation efforts by latecomer MNCs.

  → As the pace of globalisation has quickened, sources of multinational advantage focus on tapping into resources that would otherwise not be available to a firm competing solely at home and seeking to sustain an international presence through exports – Variant on the Resource Based View.

Linkage

- Emerging MNCs take an outward orientation and seek to acquire advantageous resources and complimentary assets which can't be accessed in their home countries.
- Taking advantage of the interlinked character of the global economy such as through joint ventures, supply chain contracts, market entry partnerships.

Leverage

- Focusing on how barriers to access resources, often sustained by incumbents, may be overcome.
- Refers to the MNCs ability to take advantage of these unique capabilities in their network of linkages e.g. imitation, reverse engineering, technology licencing contracts.

Learning

- Repeated application of linkage and leverage processes may result in the firm building the dynamic capabilities and global reach of the internationalizing firm, equipping it with the capabilities needed to withstand the competitive challenges imposed by established firms.

Table 1 Theories of the firm and strategic decisions in emerging economies

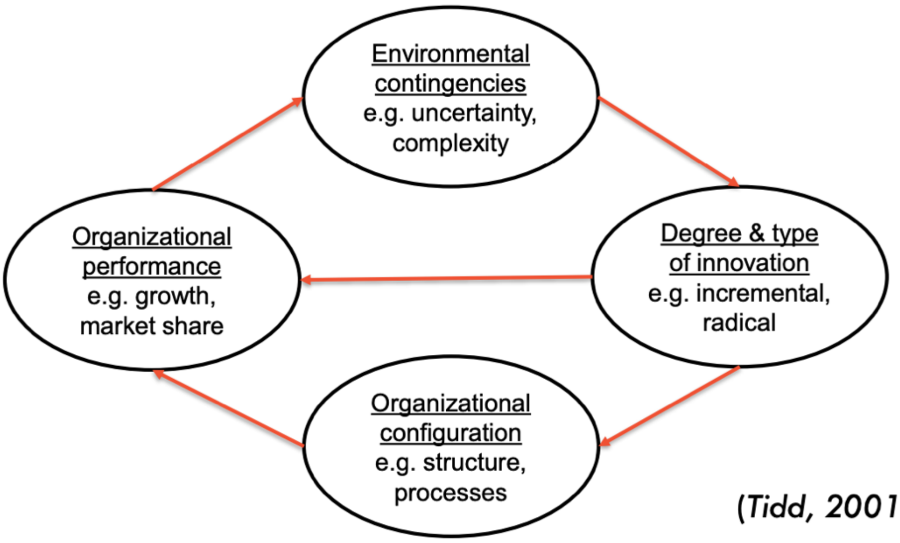
Theory of the firm	Basis for strategic choices	How strategic choices are altered in emerging economies
Neoclassical theory of the firm: Views firm as production function, with competitive advantage coming from barriers to entry or protectable niches in the industry.	Managers should attempt to choose attractive industries and then erect barriers to new entrants and improve bargaining power with suppliers and buyers to extract quasi-monopoly rents.	Institutional structure is less stable in emerging economies making it more difficult to plan, analyze and implement strategies. The weak institutional structure may allow more socially-unproductive means for firms to lock out competitors, improve bargaining power, or build scale as a national champion.
Resource-based view of the firm: Views firm as a bundle of heterogeneous resources, with emphasis on acquiring resources that are valuable, rare, and costly to imitate.	Strategies based on RBV would nurture firm-specific resources to obtain core competencies and other capabilities or resources that rivals cannot easily imitate or acquire.	The institutional environment of emerging economies offers fewer incentives for organizational stakeholders to invest in firm-specific organizational capital required for core competencies. This makes it more difficult for indigenous firms from emerging economies to compete in higher value-added industries or activities.
Firm as a nexus of contacts: Views the firm as nexus of contracts, with emphasis on reducing transaction costs for internal and external organizational stakeholders.	Contracts should be specified in such a way to reduce transaction costs, both externally and internally. Firms able to keep transaction or monitoring costs lower than rivals should have a competitive advantage, *ceteris paribus*.	Contracts are harder to specify and enforce in emerging economies, making transaction costs much higher. This likely expands firm boundaries and induces quasi-organizational forms such as business groups. Concentrated ownership and principal-principal corporate governance forms are more commonplace.

BUSS1000 Week 11 Lecture – Design Thinking

Innovation

- The generation, development, and adaption of novel ideas on the part of the firm → process of using of a new idea of method.

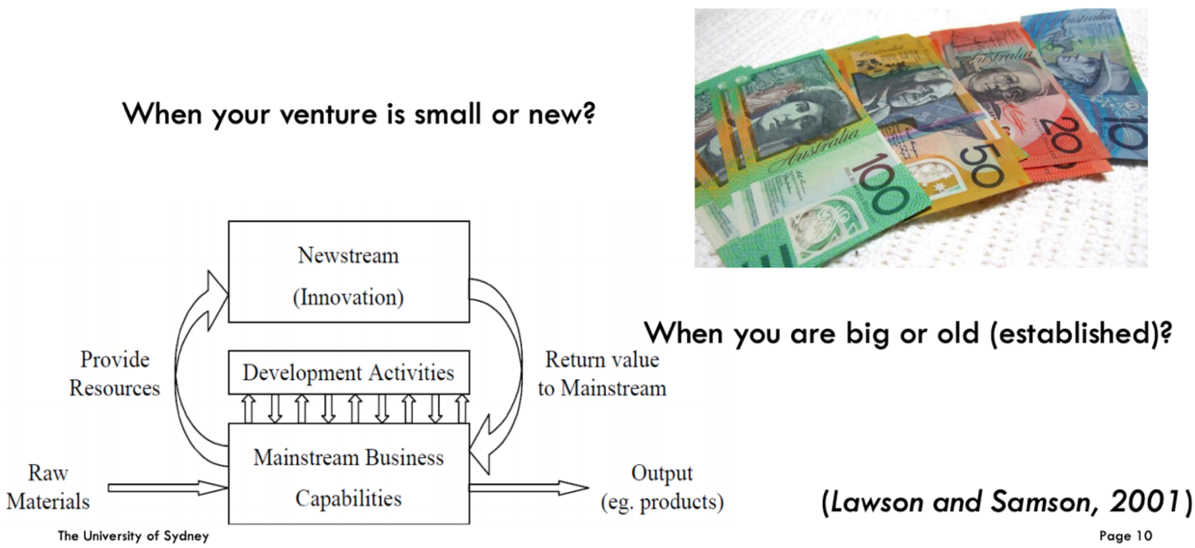
Why is Innovation so Important?



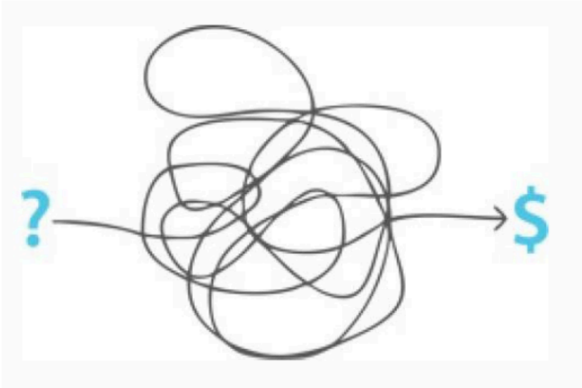
(Tidd, 2001)

Why is Innovation So Difficult?

- When you are small, the biggest challenge is convincing someone your idea is good (lack of track record works against you) → receiving funding.
- When you are large, difficulties exist in providing resources to innovation when there is a risk that it'll impact existing efficiencies (fear of failure).



Design Thinking



- A way of thinking that, in its largest context, comes from a different way of knowing → focus is not on finding the right solution but on producing the most satisfactory solution to the problem.
- Aided by Reflective Practice, which leads to tacit knowledge/Knowing-Action → Can you learn how to ride a bicycle without trying to ride the bicycle?

<u>Forms of Design Thinking</u>

- Based off three forms of reasoning, creating a problem-solving cycle.
- Based off three forms of argument, creating a cycle of solution building.

Example Problem

- Aspiration: I am planning to launch a new 'rideshare' service in Sydney.
- Problem: How do I differentiate my service offerings?

Inductive Approach

- I have prior knowledge about security concerns (phenomena) among customers while using rideshare.
- I gather (sample) data about existing rideshare services (population).
- I analyse the data.
- Based on the pattern, I propose a relationship/unmet customer need e.g. security is a concern for solitary passengers late at night. Hence, we can differentiate our service based on robust security mechanisms.
- SOLUTION: I create a new service that differentiates form the competitors based on security features.

Deductive Approach

- Customer expects a secured environment while receiving a service (the general rules/laws that we already know).
- I hypothesis that security might be a concern for solitary passengers late at night.
- I gather reported (sample) data on security issues whilst using rideshare during late night.
- I test my hypothesis and received confirmation.
- Hence, I infer that we can differentiate our service based on a robust security mechanism.
- SOLUTION: I create a new service that differentiates from the competitors based on security features.

Abductive Approach

- I conjecture and put out some insights into what this conjecture might mean for the development of new or alternative possibilities.
- Conjecture: safety, cost, predictability and comfort are the 4 most important aspects of a rideshare service.
- I gather some data and start testing the possible relationship (safety and differentiation? and so on).
- I received mixed results – effect of cost and comfort as a differentiator reduces in presence of safety concerns.
- I create a more nuanced hypothesis – cost/comfort is interlinked with the safety.

- I gather data to test the new hypothesis.
- Based on the analysis, I propose a relationship/unmet customer need e.g. solitary passengers during late nights are willing to pay more as long as safety is assured.
- SOLUTION: I create a new service that differentiates from the competitors based on security linked cost structure.

Profile of Design Thinkers

- Empathy
- Integrative thinking
- Optimism
- Experimentalism
- Collaboration

Path of Design Thinking

Empathise

- Observe; engage; watch and listen; what are people's needs?
- Do we always say what we think or what values we hold?

Define

- To craft a meaningful and actionable problem statement
- The explicit expression of the problem you are striving to address
- Connecting 'user', 'need', and 'insight'

Ideate

- To synthesise and distil what has been seen and heard into insights that can lead to solutions or opportunities for change.
- Are we narrowing down or expanding options?

Prototype

- Anything that a user can interact with
- A less finished prototype is more useful than a more finished one.

Test

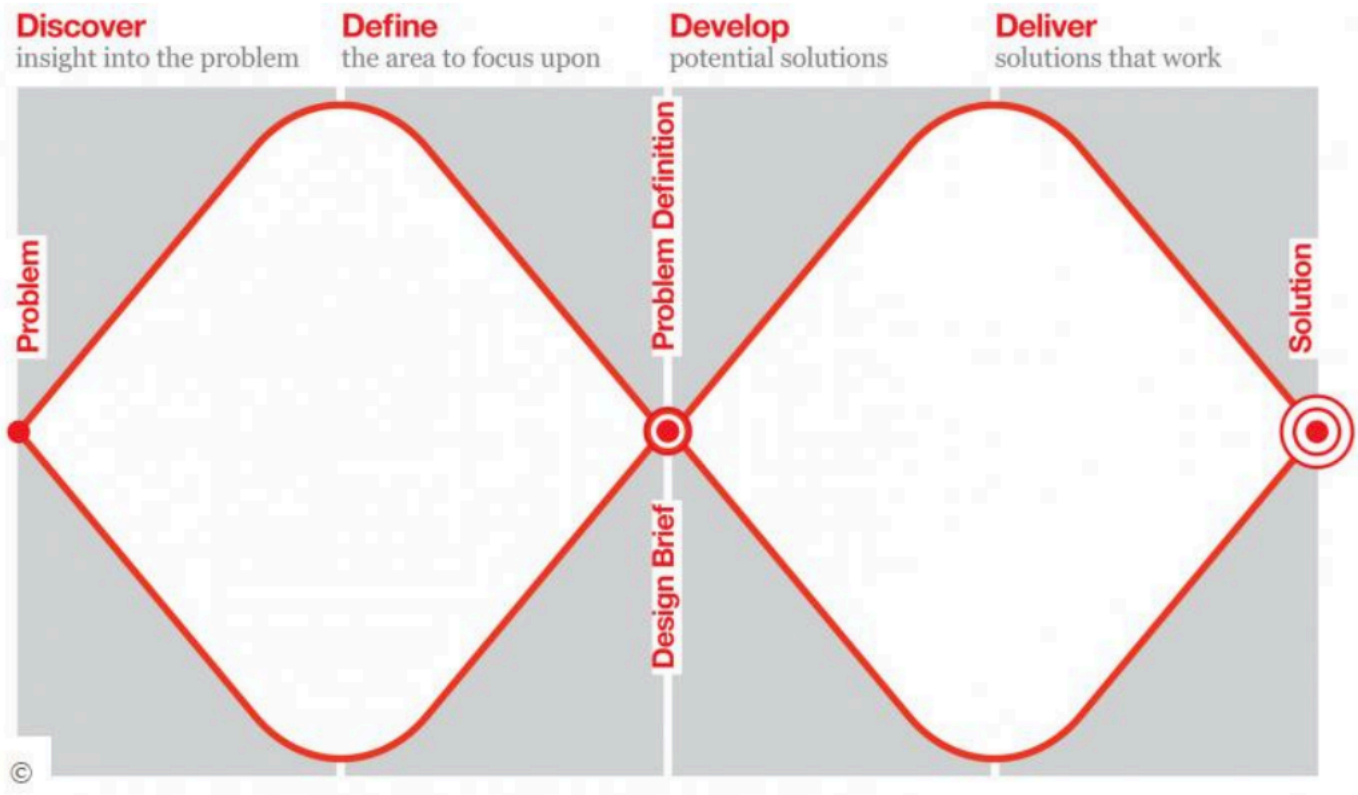
- The chance to refine your solutions and make them better
- Role of 'why' when soliciting feedback

Critiquing Attitudes Towards Design and Innovation

- We often frame and think about innovation and creativity as an enigma - the domain of the 'artists', 'creatives', and the 'innovators'.
- However, everyone has a vested interest in saying what they do is unique, and can't be replicated.
- People don't exist in isolation – even those who come up with ideas on their own draw from and are inspired by others.
- Ultimately – design thinking is talking about problem solving, with a vested interest in people → relies on our ability to be intuitive, recognise patterns, construct ideas that have emotional and functional meaning.

Design Thinking: Double Diamond Design Process

- Maps the divergent and convergent stages of the design process → aim to handle a problem that is unmet, frequently felt, urgent, unworkable, unavoidable.



1. Discover

- The first quarter of the double diamond model marks the start of the project.
- Begins with an initial idea or inspiration, often sourced from a discovery phase in which user needs are identified.
- Sources:
  - → Market research
  - → User research
  - → Design research groups
- Key skills include managing information.
- The objective of the Discover stage is to act as a 'phase of divergent thought', where the designers and other project team members keep their perspectives wide to allow for a broad range of ideas and influences.
- In this stage of the design process, the process is asking a question, posing a hypothesis or identifying a problem by analysing market data, trends and other information sources.

2. Define

- The second quarter of the double diamond model represents the definition stage.
- Interpretation and alignment of needs to business objectives is achieved.
- Key activities during the Define stage are:
  - → Development of ideas
  - → Project management of ideas

→ Corporate sign-off

- The Define stage should be thought of as a filter where the review, selection and discarding of ideas take place.
- This is where findings from the Discover stage are analysed, defined and refined as problems, and ideas for solutions are pitched and prototypes.

3. Develop

- The third quarter develops a solution.
- Design-led solutions are developed, iterated and tested within the company.
- Key activities and objectives during the Develop stage are:
  → Multi-disciplinary working
  → Visual management
  → Development methods
  → Testing
- At the Develop stage, the project has been taken through a formal sign-off, which has given the corporate and financial backing to the development of one of more concepts that have addressed the initial problem.

4. Deliver

- The Deliver stage of the double diamond design process is where the final concept is taken through final testing, signed-off, produced, and launched.

Critiques of the Double Diamond

- This is another model that is linear and does not have a chronological element embedded in it.
- Ideas are only really evaluated against the brief and the need (there can always be unexpected elements).
- In reality, the process isn't the meritocracy that we are seeing portrayed here:
  → Social desirability
  → Face management

Reading: Design Thinking and Process

- Design is about action rather than planning, analysis and controlling without result.
- Design teaches us to make thing feel real, contrasting most business rhetoric today which remains largely irrelevant to the people who are supposed to make things happen.
- Design is tailored to dealing with uncertainty, whilst business analysis is suited for a stable and predictable world.
- Design understands that products and services are bought by human being, not target markets segmented into demographic categories.

Empathy

- Establishing a deep understanding of those we are designing for → real people with real problems rather than a set of demographic statistics.
- Understanding of both emotional and 'rational' needs and wants to produce an inspiring, emotionally powerful design.

Invention

- At the intersection of constraint, contingency and possibility, designs require a level of creativity.

Iteration

- A process of iteration is required rather than finding the sole 'right' solution.

	BUSINESS	DESIGN
Underlying Assumptions	Rationality, objectivity; Reality as fixed and quantifiable	Subjective experience; Reality as socially constructed
Method	Analysis aimed at proving one "best" answer	Experimentation aimed at iterating toward a "better" answer
Process	Planning	Doing
Decision Drivers	Logic; Numeric models	Emotional insight; Experiential models
Values	Pursuit of control and stability; Discomfort with uncertainty	Pursuit of novelty; Dislike of status quo
Levels of Focus	Abstract or particular	Iterative movement between abstract and particular

Design Process

- What is: accurate assessment of the current reality, characteristics, problems, opportunities for growth, trade-off (prepare to generate ideas).
- What if: consideration of new possibilities, trends, and uncertainties, to generate truly creative ideas.
- What wows: packs a potential 'wow', that hits the sweet spot where the chance of a significant upside in customer value meets attractive profit potential.
- What works: the process of iteration, prototyping and field research.

THE TEN TOOLS

1. **Visualization:** using imagery to envision possibilities and bring them to life
2. **Journey Mapping:** assessing the existing experience through the customer's eyes
3. **Value Chain Analysis:** assessing the current value chain that supports the customer's journey
4. **Mind Mapping:** generating insights from exploration activities and using those to create design criteria
5. **Brainstorming:** generating new possibilities and new alternative business models
6. **Concept Development:** assembling innovative elements into a coherent alternative solution that can be explored and evaluated
7. **Assumption Testing:** isolating and testing the key assumptions that will drive the success or failure of a concept
8. **Rapid Prototyping:** expressing a new concept in a tangible form for exploration, testing, and refinement
9. **Customer Co-Creation:** enrolling customers to participate in creating the solution that best meets their needs
10. **Learning Launch:** creating an affordable experiment that lets customers experience the new solution over an extended period of time, to test key assumptions with market data

BUSS1000 Lecture 12 – Entrepreneurship

- Conventional Meaning: entrepreneurship is the independent new venture creation process, driven by opportunity rather than the available internal resources.
- Entrepreneurship is a critical driving force of economic growth and new jobs creation.

Forms of Entrepreneurship

- The entrepreneur is the innovator who implements change within markets through the carrying out of new combinations. These can take several forms:
  → the introduction of a new good or quality
  → the introduction of a new method of production
  → the opening of a new market
  → the conquest of a new source of supply of new materials or parts
  → the carrying out of the new organisation of any industry.

Why is it Difficult to Study 'Entrepreneurship'?

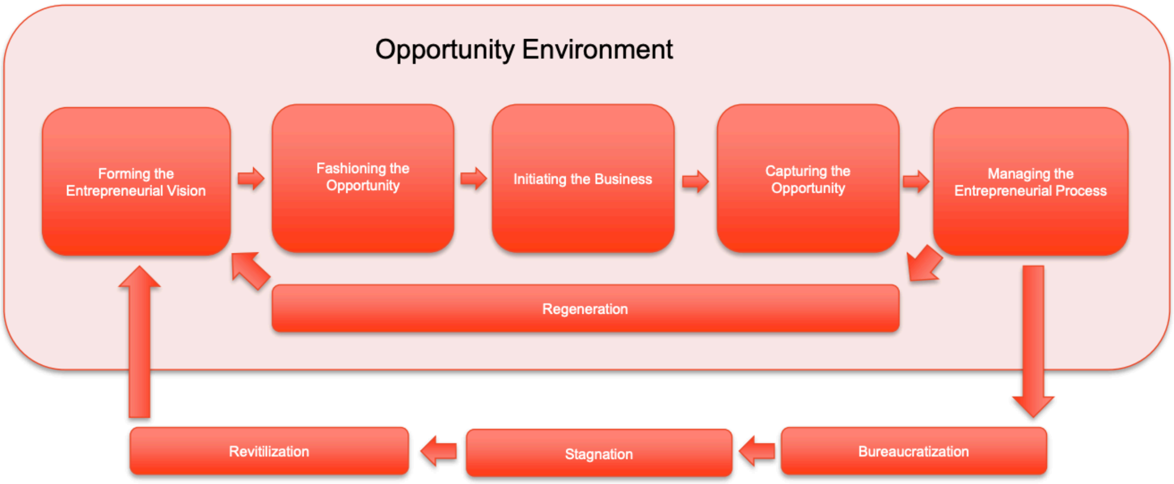
- Industry:
  → Wide ranges of purposes and objectives
  → Different questions asked
  → Different unit of analysis
- Academia:
  → Different theoretical perspectives
  → Different methodologies
  → Varied definition
- Complex set of overlapping factors:
  → Management of change
  → Innovation
  → Technological and environmental turbulence
  → New product development
  → Small business management
  → Individualism
  → Industry evolution

Theoretical Perspective

Strategic Adaptation

- Perspective
  → Decisions of the individual entrepreneurs who identify opportunities, develop strategies, assemble resources, and take initiatives.
- Process
  → Key success (or failure) factors that enhance (or reduce) the chances of survival.
  → Entry strategy – new or imitation, G, S, or both, sponsorship (customer or self or institution)

- Contingent Factor
  → Effect of 'experience curve'.



Population Ecology

- Perspective
  → Individual goal-driven behaviour is largely irrelevant
  → Environmental selection procedures are the most powerful determining factors
  → Environmental selection mechanism determines the characteristics of populations of organisations
- Process
  → Technological or demographic change
  → Expansion of existing or founding of new organisation
  → Creation of new opportunities
- Contingent Factor
  → Nature of existing organisations

How to Reconcile Two Perspectives

Types of Technological Discontinuity

- Competence Enhancing
  → Replacement of mechanical typewriter by electronic typewriter
  → Replacement of 'in-person lecture' by 'online learning environments'.
- Competence Destroying
  → Replacement of steam-engines by diesel locomotives
  → Replacement of point-and-shoot cameras by mobile phones
- Questions:
  → Does competence enhancing technological discontinuity favour existing organisations or new organisations.
  → Are aggressive entry strategies more likely to succeed under conditions of competence enhancing or destroying technological discontinuity?

Toolkit 1 – Lean Strategy Process

Strategy

- Pursuit of a clearly defined path
- Systematically defined in advance
- A carefully chosen set of activities

Entrepreneurship

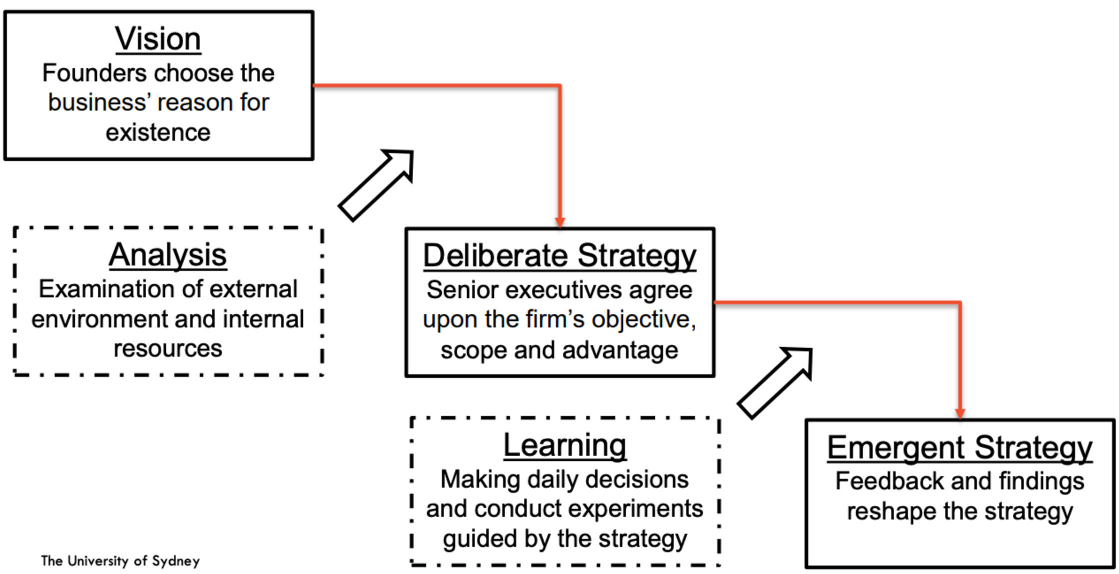
- The epitome of opportunism
- Requiring ventures to pivot in new direction continuously
- Adjustment with inflow of new information and market shift

<u>Typical Entrepreneurial Challenges</u>

- The opportunity cost of doing A is that you cannot also do B
  - → Customisation for a customer vs release of a new version
- Every choice creates a unique path with a different outcomes and unforeseen implications
  - → Postponing release of new version comes at a price
- Decisions are interdependent
  - → Decision of sales has ramification for production
- Limitations of simple market tests
  - → Difference between trial and repeat-use

<u>How Can Strategy Help?</u>

- Choosing a viable opportunity
  - → Low barrier to entry is not always good
  - → Larger market is not always good
  - → Minimum viable product vs long-term enduring return
- Stay focused on the prize
- Align the entire organisation
  - → Identify core value creation
- Make the necessary commitment



Business Models

What is a Business Model (BM)?

- The choices management makes for how the organisation will operate.
- Choices: i) Policies ii) Assets iii) Governance
- Consequences: i) Flexible ii) Rigid

Why is it Important?

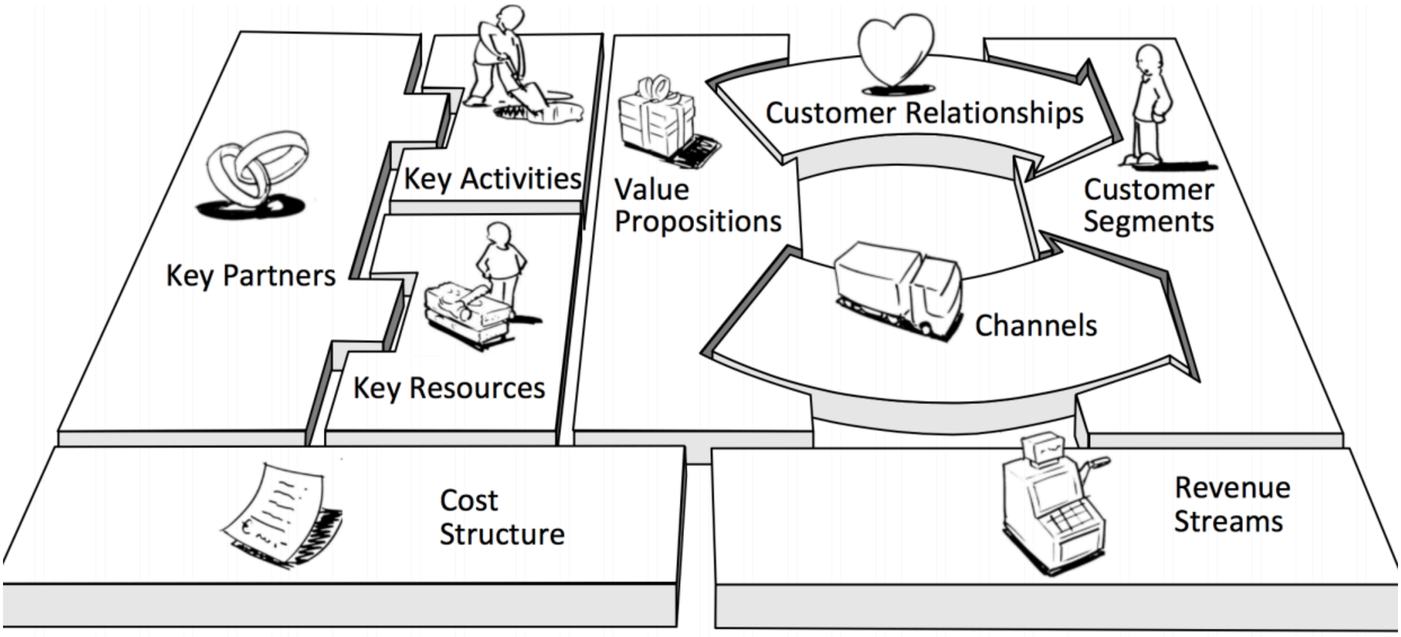
- Choices → Consequences e.g. incentive → cooperation, price → sales volume, bargaining power

<u>What Makes a Successful Business Model?</u>

- Alignment of goals
- Reinforcement (or internal consistency) → low price <-> heavy advertising
- Virtuousness (or positive feedback loop) → how to gain strength over a period of time
- Robustness → ability to sustain its effectiveness over time

Toolkit 2 – Business Model Canvas

- "a concept that allows you to describe and think through the business model of your organisation, your competitors, or any other enterprise."
- A shared language without which "it is difficult to systematically challenge assumptions about one's business model and innovate successfully."



<u>Customer Segments</u>

- The Customer Segments building block defines the different groups of people or organisations an enterprise aims to reach and serve e.g. mass, niche, segmented, diversified, multi-sided markets.
- Customer groups represent separate segments if:
  - → Their needs require and justify a distinct offer
  - → They are reached through different Distribution Channels
  - → They require different types of relationships
  - → They have substantially different profit abilities

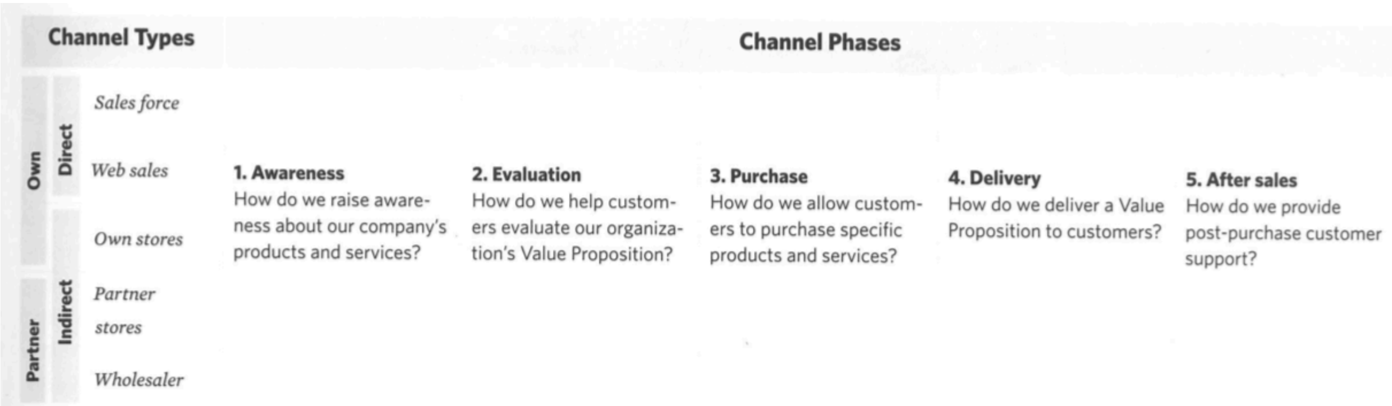
→ They are willing to pay for different aspects of the offer.

Value Propositions

- The Value Propositions building block describes the bundle of products and services that create value for a specific Customer Segment
- Elements from a non-exhaustive list can contribute to value creation:
  → Newness, performance, customisation, getting the job done, design, brand/status, price, cost reduction, risk reduction, accessibility, convenience, usability.

Channels

- The Channels building block describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition (communication, distribution, sales).
- Channels serve several functions, including:
  → Raising awareness among customers about a company's products and services.
  → Helping customers evaluate a company's Value Proposition to customers.
  → Allowing customers to purchase specific products and services.
  → Delivering a Value Proposition to customers
  → Providing post-purchase customer support.



Customer Relationships

- The Customer Relationships building block describes the types of relationships a company establishes with specific Customer Segments.
- Customer relationships may be driven by the following motivations:
  → Customer acquisition
  → Customer retention
  → Boosting sales (upselling)
- Some examples include personal assistance, dedicated personal assistance, self-service, automated services, communities, co-creation.

Revenue Streams

- The Revenue Streams Building Block represents the cash a company generates from each Customer Segment (costs must be subtracted from the revenues to create earnings).

- A business model can involve two different types of Revenue Streams:
    1. Transaction revenues resulting from one-time customer payments.
    2. Recurring revenues resulting from ongoing payments to either deliver a Value Proposition to customers or provide post-purchase customer support.
- Some examples include asset sale, usage fee, subscription fees, lending/renting/leasing, licencing, brokerage, advertising.

Pricing Mechanisms

Fixed Menu Pricing Predefined prices are based on static variables		Dynamic Pricing Prices change based on market conditions	
List price	Fixed prices for individual products, services, or other Value Propositions	*Negotiation (bargaining)*	Price negotiated between two or more partners depending on negotiation power and/or negotiation skills
Product feature dependent	Price depends on the number or quality of Value Proposition features	*Yield management*	Price depends on inventory and time of purchase (normally used for perishable resources such as hotel rooms or airline seats)
Customer segment dependent	Price depends on the type and characteristic of a Customer Segment	*Real-time-market*	Price is established dynamically based on supply and demand
Volume dependent	Price as a function of the quantity purchased	*Auctions*	Price determined by outcome of competitive bidding

Key Resources

- The Key Resources building block describes the most important assets required to make a business model work.
- Key resources can be categorised as:
    → Physical
    → Intellectual
    → Human
    → Financial

Key Activities

- The Key Activities building block describes the most important things a company must do to make its business model work (each company will always have some form of operations, customer service and marketing).
- Key activities can be categorised as:
    → Production – designing, making, delivering a product in substantial qualities and/or of superior quality.
    → Problem solving – coming up with new solutions to individual customer problems.
    → Platform/Network – platform or network as a Key Resource e.g. eBay, Visa.

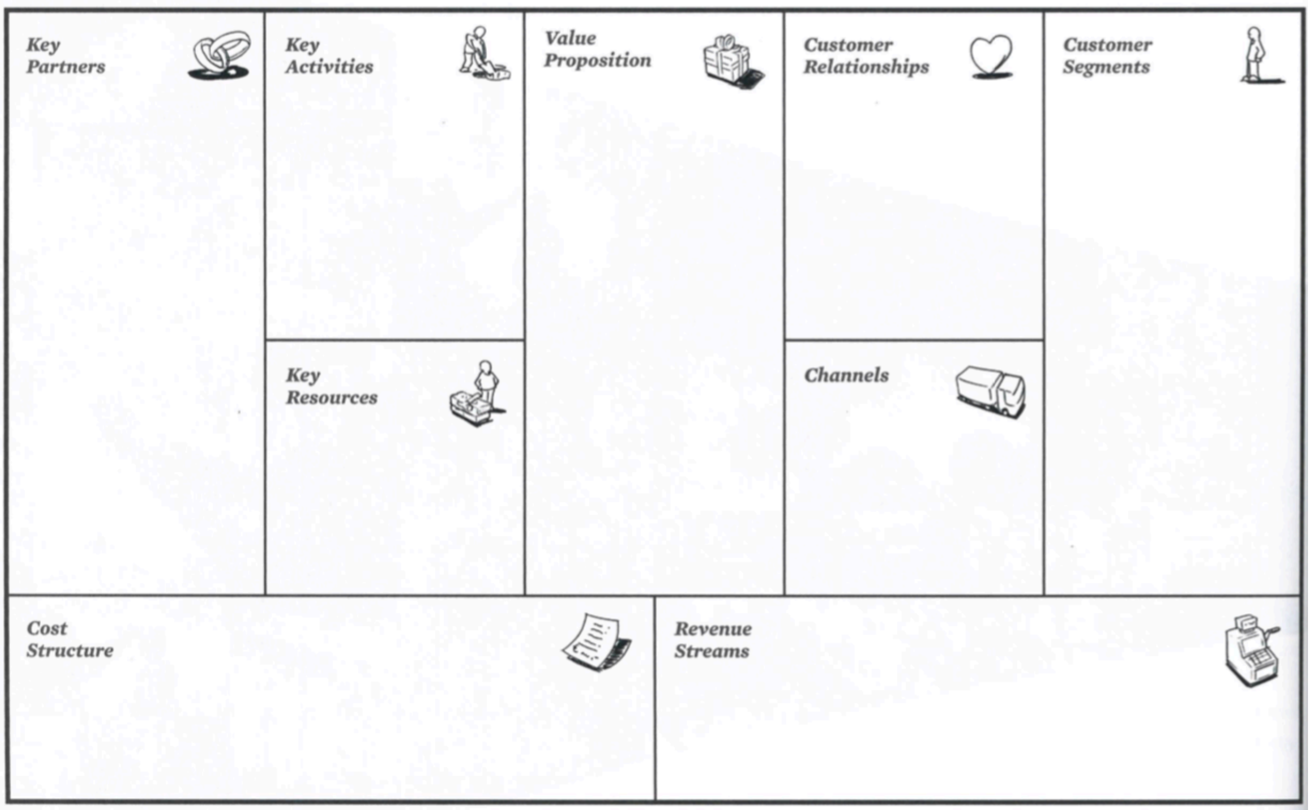
Key Partnerships

- The Key Partnerships building block describes the network of suppliers and partners that make the business model work.
- Four different types of partnerships:
  - → Strategic alliances between non-competitors
  - → Coopetition: strategic partnerships between competitors
  - → Join ventures to develop new businesses
  - → Buyer-supplier relationships to assure reliable supplies.
- Three motivations for creating partnerships:
  - → Optimisation and economy of scale
  - → Reduction of risk and uncertainty
  - → Acquisition of particular resources and activities

<u>Cost Structure</u>

- The Cost Structure describes all costs incurred to operate a business model.
- Two broad classes of business model cost structures:
  - → Cost-driven
  - → Value-driven
- Cost Structures can have the following characteristics:
  - → Fixed costs
  - → Variable costs
  - → Economies of scale
  - → Economies of scope

The Business Model Canvas



Critiques of the Business Model Canvas

- It is quite an abstract framework.
- It is quite focused on some key stakeholders, but notably not others.
- It seems somewhat blind to levels outside of the organisations as we have talked about them.
- It is more popular among SME's and start-ups, although it is well suited to large complex organisations as well.
- As with many frameworks, it lacks inclusion of time.
- However, it offers a great deal of utility for those in the process of creating a business.

Reading for this week is basically a more in-depth explanation/examples of the Business Model Canvas sections.