CIS COMMERCIALISATION BOOTCAMP

Innovation Commercialisation

Prof. Stephan C. Henneberg, Ph.D.
Director Business Ecosystems Research Group
Chair Professor of Marketing and Strategy
AGENDA

A Tour de Force of commercialisation

1. Innovation commercialisation
   Introduction to entrepreneurship and innovation concepts relating to commercialisation, such as sources of innovation, creating value through commercialisation, and commercialisation strategy

2. Building the case: Business Model & Business Plan
   Introduction to building the business case; aspects of business models including value creation and capture, and developing business plans including providing evidence.
COMMERCIALISATION IS INNOVATION

“The adoption of an idea or behaviour pertaining to a product, service, device, system, policy or programme that is new to the adopting organisation”

Damanpour and Gopalakrishnan (2001)

- Adoption: Innovation vs. Invention
- Different types: not just about technology (e.g. Starbucks, Haagen Dazs, McDonalds, Zara etc.)
- Innovations do not have to be new to the world, but new to the adopting organization (e.g. Amazon Kindle)
Innovation is not just about opening up **new markets** – it can also offer new ways of serving **established and mature ones**:

- Low cost airlines: Southwest Airlines, Easyjet and Ryanair

Innovation is not just about manufactured **products** - in most economies the **service** sector accounts for a vast majority of activities

- Amazon (retailing), eBay (market trading and auctions), Google (advertising), Skype (telecommunications), Starbucks

- Often the lower capital costs associated with services mean that opportunities for new entrants and radical change are the greatest in the service sector (e.g. Skype versus Apple in terms of resources, manpower and time)

Bessant & Tidd (2011)
**Figure 1. The Growth of the World Population and Some Major Events in the History of Technology**

Notes: There is usually a lag between the invention of a process or a machine and its general application to production. "Beginning" means the earliest stage of this diffusion process.

**IMPORTANCE OF INNOVATION**

- Innovation is about **regular + focused change** with the aim to gain **strategic advantage over competition, growth**, and ultimately **survival**.

  - Firms that do not change what they offer the world (products and services) and how they create and deliver them, risk being overtaken by others who do.
  - Andy Grove, Co-founder of Intel: “Only the paranoid survive!”
  - Microsoft: takes the view that it is always only two years away from extinction
  - OECD countries spent $700 billion per year on R&D
  - More than 16,000 firms in the USA operate their own R&D labs and at least 20 US firms have annual R&D budgets of more than $1 billion
  - 16.8% - 38% of sales is generated with newly introduced products in Germany, 4% of unit costs are saved through process innovation

Bessant & Tidd (2011)
INNOVATION A STRATEGIC PROCESS

- Developing the Venture
  - Business Plan, Implementation, Proto-typing, Testing, etc.

- Creating and capturing value
  - Intellectual property, scaling, etc.

- Innovation is the starting point as it provides the opportunity, thus we need to understand innovation properly, i.e. its facets and its drivers
• **Innovation** does not happen automatically – **it is driven by entrepreneurship**...
  • a potent mixture of vision, passion, energy, enthusiasm, insight, judgement and plain hard work which enables good ideas to become reality
  • the skill/ability to 1) recognize new opportunities + 2) create ways to exploit them

• **Innovation** = process, which can be organized and managed, whether in a start-up venture or in an established firm

• **Entrepreneurship** = motive power, to drive this process through the efforts of passionate individuals, engaged teams, and focused networks

• **Creating value** = the purpose for innovation (financial, growth, employment, sustainability, social welfare)

Bessant & Tidd (2011)
Levels of Entrepreneurship

1. New start-up ventures
   • Create commercial value

2. Established organizations (Intrapreneurship, Corporate Entrepreneurship)
   • Renew itself in what it offers and how it creates and delivers that offering: competitive advantage, growth, survival.

3. Social Entrepreneurship
   • Passion to enabling change in a wider social sphere: sustainability or improvement of social welfare

Entrepreneurship drives Innovation

Bessant & Tidd (2011)
# Entrepreneurship and Innovation

<table>
<thead>
<tr>
<th>Stage in life cycle</th>
<th>Start-up</th>
<th>Growth</th>
<th>Sustain/scale</th>
<th>Renew</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual entrepreneur exploits new technology or market opportunity</td>
<td>Growing the business through adding new products/service or moving into new markets</td>
<td>Building a portfolio of incremental innovation to sustain the business/spread influence into new markets</td>
<td>Return to the radical frame-breaking kind of innovation which began the business and enables it to move forward as something very different</td>
<td></td>
</tr>
</tbody>
</table>

![MakerBot](https://example.com/makerbot.png)  ![skype](https://example.com/skype.png)  ![Apple](https://example.com/apple.png)  ![IBM](https://example.com/ibm.png)

Bessant & Tidd (2011)
TYPES OF INNOVATION

1. Product Innovation:
   • Changes in a firm’s offering (products/services)
   • E.g.: a new design of a car (hybrid engine, electric cars, carbon, etc.)
   • → enhances the product (features) → affects sales

2. Process Innovation:
   • Changes in the way a firm creates and delivers its offering
   • E.g.: manufacturing methods and equipment used to produce the car (3D printing)
   • → enhances firms operational efficiency → affects cost, profit margins

   • → Services: product and process aspects often merge
3. Position Innovation:

- Changes in the context in which the products/services are introduced rather than changing the product/service or manufacturing/delivery process

  - **Shift in target market**
  - E.g.: Lucozade: developed for medical convalescence → health drink aimed at the growing fitness market where it is now presented as a performance-enhancing aid to healthy exercise)
  - E.g.: Haagen Dazs Ice cream: shift from targeting kids to adults

Bessant & Tidd (2011)
4. Paradigm Innovation:

- Changes in the underlying mental models which frame what the organisation does

  **Shifting/shaping the entire market**

- E.g. Henry Ford did not invent the motor car nor developed the manufacturing process → changed the underlying model from one which offered a hand-made specialist product to a few wealthy customers to one which offered a car for “Everyman” at a price he/she could afford

- E.g. Starbucks, Low Cost Airlines, Mercedes F105, Drones
Types of Innovation

- Technological product performance + Market performance moves along an S-curve
- Radical innovation can be identified by the initiation of a new technology and new marketing S-curve

Fig. 1. Technology/Marketing S-Curve Phenomena (adapted from Foster 1986).
RISKS AND REWARDS OF INNOVATIONS

- High Market Uncertainty
  - Radical Innovation
  - Really New Innovation
- Low Market Uncertainty
  - Incremental Innovation
  - Really New Innovation

High Technological Uncertainty

Low Technological Uncertainty
INNOVATION STRATEGY SPACE

“PARADIGM” (Mental Model)

(Change the business model ... ... rewrite the rules)

PRODUCT (SERVICE)

(Product improvement ... ... Completely different product)

POSITION

(Extend, deepen, segment markets ... ... finding new playing fields)

GETTING LEAN ... ... Radical process change
Factors affecting innovation adoption

Difference in success factors:
- Emphasise technical performance and novelty
- Emphasise price, quality, convenience and support

Short term preferences of early adopters will have a disproportionate impact on subsequent development of the innovation → abandonment of superior alternatives

Moore (1991)
Factors affecting innovation adoption

1. Relative advantage (positive)
   • perceived to be better than competing products or services: economic (cost, financial pay back) + non economic factors (convenience, satisfaction)

2. Compatibility (positive)
   • consistent with existing values and norms (e.g. culture) + needs and experience (e.g. Marketing) + skills, equipment, practices and procedures (e.g. Technology + Behaviour) of potential adopters

3. Complexity (negative)
   • Difficult to understand or use

4. Trialability (positive)
   • Product, service or innovation can be experimented with
     - Trialable innovation represent less uncertainty to the potential adopter

5. Observability (positive)
   • Results of an innovation are visible to others (easy to see the benefits)

Bessant & Tidd (2011)
MANAGING INNOVATION AND ENTREPRENEURSHIP

• Success in Innovation is not just about having a good idea it is about understanding Innovation and Entrepreneurship as an extended sequence of activities - a Process – that needs to be managed

• There is a core process involved which can be organized and managed (not about being lucky just by being in the right place at the right time)

• Bridging the gap between a great idea and commercial success

Bessant & Tidd (2011)
Managing the Process:

1. **Recognising the Opportunity:**
   - Ability to spot the key opportunity from a forest of possibilities
   - **Searching and scanning of the environment:** R&D, market research, competitor analysis
   - Drivers of Innovation:
     - New technological opportunities
     - Changing needs
     - Changing legislation (e.g. renewable energies)
     - Competitor action
     - Dissatisfaction with social conditions

Bessant & Tidd (2011)
2. **Finding the Resources**

- Innovation consumes resources, however, is risky at the same time
- Resources are limited: time, money, knowledge sets, etc.
  - Balancing resource requirements with uncertain outcomes
  - Finding and mobilizing resources and skills
- Large Company:
  - Bringing different departments together: Marketing, R&D, Purchasing, etc.
  - Develop business case for monthly project portfolio meeting
  - Build portfolio of projects to balance risks and rewards
- Individual Entrepreneur:
  - create networks
  - Pitch to venture capitalists

Bessant & Tidd (2011)
Managing the Process:

3. Developing the venture
   - Implementation
   - R&D, market studies, competitor analysis, prototyping, testing, etc. to improve understanding of the innovation and whether it will work
   - Developing a business plan
   - Launch into market place
   - Project management – balancing resources against time and budget – but doing so against the background of uncertainty

Bessant & Tidd (2011)
Managing the Process:

4. Creating Value

• Capturing value from the innovation: stream of income, social gains, recovery of investments of time, energy and money
• Protecting the idea/intellectual property
• Capturing learning from failure to develop an innovation capability

• Exit strategy?

Bessant & Tidd (2011)
1. **Assessing the opportunity** – generating, evaluating and refining the business model
2. **Developing a business plan** – internal stress test + external communication
3. **Acquiring the resources** – including export support and potential partnerships
4. **Growing and harvesting the venture** – how to create and extract value from the business

*Bessant & Tidd (2011)*
2. **Profit Formula**

How can the company create value for itself, while providing value to the customer?

- **Capture value**
  1. Revenue model (sales)
  2. Cost structure
     - Variable costs + fixed costs, economies of scale → low/high volume
  3. Margin model
     - Low margin/large volume *versus* high margin/low volume → profits
  4. Resource velocity (speed at which resources flow through)
     - Inventory turnover speed, revenue cycles

*Johnson, Christensen & Kagerman (2008)*
1. Assessing the opportunity – generating, evaluating and refining the business model
2. Developing a business plan – internal stress test + external communication
3. Acquiring the resources – including export support and potential partnerships
4. Growing and harvesting the venture – how to create and extract value from the business

Bessant & Tidd (2011)
Business Plans:

• **Attract** funding for a venture

• **Translate** abstract or ambiguous goals into more explicit operational needs, and support subsequent decision-making and identify trade-offs

• Make risks and opportunities more **explicit**: Technology, Market, Competition, etc.

Think through + articulate your business idea/model in a **systematic way**

• **Communicate** Business idea **externally**

• **Understand** Business idea “**internally**”

Bessant & Tidd (2011)
Common problems with Business Plans submitted to VCs:

- Too much emphasis on technology relative to other issues
- Lack of:
  - sales plan (50%)
  - detailed marketing strategy (>50%)
  - competitor analysis (75%)
  - financial forecasts and sensitivity analysis (90%)

Bessant & Tidd (2011)
1. Assessing the opportunity – generating, evaluating and refining the business model
2. Developing a business plan – **internal** stress test + **external** communication
3. Acquiring the resources – including export support and potential partnerships
4. Growing and harvesting the venture – how to create and extract value from the business

Bessant & Tidd (2011)
1. **Assessing the opportunity** – generating, evaluating and refining the business model

2. **Developing a business plan** – internal stress test + external communication

3. **Acquiring the resources** – including expert support and potential partnerships

---

### Process and Stages for Creating a New Venture

<table>
<thead>
<tr>
<th>Sources of funding</th>
<th>Stages of financial requirements</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-funding</td>
<td>1) Initial financing for launch</td>
<td>Equity</td>
</tr>
<tr>
<td>Family and friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incubators</td>
<td>1) Initial financing for launch</td>
<td>Equity</td>
</tr>
<tr>
<td>Government schemes</td>
<td>1) Initial financing for launch</td>
<td>Equity/Interest</td>
</tr>
<tr>
<td>Business angles</td>
<td>2) 2nd-round financing for initial development and growth</td>
<td>Equity</td>
</tr>
<tr>
<td>Venture capitalist</td>
<td>3) 3rd-round financing for consolidation and growth/maturity and exit</td>
<td>Equity/Management Involvement</td>
</tr>
<tr>
<td>Bank loans</td>
<td>3) 3rd-round financing for consolidation and growth/maturity and exit</td>
<td>Interest</td>
</tr>
</tbody>
</table>
3. Acquiring the resources

- **Business Incubators:**
  - Small amounts of financial resources, but start-up mentoring/coaching, office space, operational services (IT, legal, accounting, recruiting, PR), and network.

- **Government Funding:**
  - Fill the “equity funding gap” between the costs and risk involved in assessing and funding a new venture and its potential return
  - Fill the “equity funding gap” for certain industries overlooked by professional investors

<table>
<thead>
<tr>
<th>Sources of funding</th>
<th>Stages of financial requirements</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-funding</td>
<td>1) Initial financing for launch</td>
<td></td>
</tr>
<tr>
<td>Family and friends</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incubators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government schemes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business angles</td>
<td>2) 2nd-round financing for initial development and growth</td>
<td>Equity</td>
</tr>
<tr>
<td>Venture capitalist</td>
<td>3) 3rd-round financing for consolidation and growth/maturity and exit</td>
<td>Equity/Management Involvement</td>
</tr>
<tr>
<td>Bank loans</td>
<td></td>
<td>Interest</td>
</tr>
</tbody>
</table>

Bessant & Tidd (2011)
3. Acquiring the resources

- **Angel Investors:**
  - Usually successful Entrepreneurs: individuals or act as a group
  - Primarily early stage ventures
  - GBP 100,000 – GBP 250,000
  - In addition to financial resources, business angels provide access to networks

- **Venture Capital:**
  - Institutional investors
  - Not interested in initial funding due to high due diligence cost + high risk + unproven development and sales record, i.e. look for proven track record and strong business plan (5% early/start-up vs. 29% expansion vs. 66% management buy-outs/in)
  - Early stage investments: 1) GBP 0.5M – GBP 1M + 2) management expertise/coaching/network
  - Only accept 3% - 5% of the ventures they are offered
  - Tend to look for 5 year exit
  - In addition to financial resources VCs provide experience and networks

Bessant & Tidd (2011)
3. Acquiring the resources
   • Funding needs vary by several factors
     • Type of venture:
       • Technology ventures often require external funding for product development and cannot be funded with cash-flows from early sales (no marketable product available)
       • Software-based ventures require less funding than either electronics or biotech ventures
     • Growth strategy:
       • Organic versus expedited growth strategy (contingent on the competitive environment): potential trade-off between high equity/low market share/firm value and low equity/high market share/firm value
     • Stage of Business Life-cycle

Bessant & Tidd (2011)
1. Assessing the Opportunity – generating, evaluating and refining the **business model**
2. Developing a business plan – **internal** stress test + **external** communication
3. Acquiring the resources – including export support and potential partnerships
4. Growing and harvesting the venture – how to create and extract value from the business

Bessant & Tidd (2011)
1. **Assessing the opportunity** – generating, evaluating and refining the business model
2. **Developing a business plan** – internal stress test + external communication
3. **Acquiring the resources** – including expert support and potential partnerships
4. **Growing and harvesting the venture**
   - 40% of business fail in their first year, 60% within the first two years
     - Poor financial control
     - Lack of managerial ability or experience
     - No strategy for transition, growth, exit
     - Overdependence on a small number of customers:
       - Vulnerability to strategy changes and health of customer
       - Loss of negotiation power
       - Underdeveloped marketing and sales functions

Bessant & Tidd (2011)
PROCESS AND STAGES FOR CREATING A NEW VENTURE

1. Assessing the opportunity – generating, evaluating and refining the business model
2. Developing a business plan – internal stress test + external communication
3. Acquiring the resources – including expert support and potential partnerships
4. Growing and harvesting the venture
   • For the ones that succeed:
     • Organic growth: sales/market share
     • Acquisition of or merger with another company
     • Sale of the business to another company, or private equity firm (quite common)
     • Initial public offering (IPO) on a stock exchange (relatively rare – less then 2% of VC funded new ventures in the UK exit via an IPO, compared to more than a quarter by trade sale)

Bessant & Tidd (2011)
CONCLUSION

• Both building the case and assessing the case usually involves business plans
• Four main elements of business plans
• Research shows that business plans are only part of the VC funding decision
• The ceremonial role of business plans
1. Assessing the opportunity – generating, evaluating and refining the business model
2. Developing a business plan – internal stress test + external communication
3. Acquiring the resources – including expert support and potential partnerships
4. Growing and harvesting the venture – how to create and extract value from the business

Bessant & Tidd (2011)
Managing new product or service development requires a fine balance between the costs of continuing with projects, which may not eventually succeed, and the danger of closing down too soon and eliminating false negatives.

Successful product development follows a structured and staged process:

- Each stage has different decision criteria or “gates” which projects must pass.
- Systematic identification, screening, reviewing, monitoring and development of projects as they move from idea to commercialization.
- Gradual process of reducing uncertainty.

Bessant & Tidd (2011)
1. Concept Generation

- Identify the **opportunity** for a new product or service: **Demand Pull & Knowledge Push; Open Innovation**
- Focus is on understanding **customer needs (knowing your customers)**:
  - Surveys, focus groups, latent needs analysis, lead users, customer-developers, competitor analysis (reverse engineering, benchmarking), industry experts, extrapolation of trends, building scenarios (alternative futures), market experimentation

Bessant & Tidd (2011)
2. Project Assessment and Selection

- **Screening and selection of projects prior to development** based on a series of explicit criteria for decision-making:
  - Value proposition (market, needs, competition)
  - Profit formula (revenue model, cost structure to inform NPV, IRR, cost-benefit analysis, pay back period etc.)
  - Resource requirements (VRIO/Gap analysis)
- Implications of failing to select the best projects:
  - Resource cost
  - Opportunity cost
3. **Product/Service Development**
   - Translate customer requirements into development needs/physical products or service concepts: → R&D staff, designers, engineers and marketing staff must work together
     - *Design to Manufacture* (80% of the production costs are determined at the design stage)
     - *Rapid Prototyping* (Customer feedback + Manufacturing process development)
     - *Computer-Aided Techniques* (Reduction on development lead time, complexity of products)
     - *Quality Function Deployment*: → translate customer needs in development needs
       - Identify customer requirements (primary and secondary data).
       - Rank requirements according to importance.
       - Translate requirements into measurable characteristics.
       - Establish the relationship between the customer requirements and technical product characteristics.
       - Choose appropriate units of measurement and determine target values based on customer requirements and competitor benchmarks.

4. **Commercialization**
   - Customer co-development, test marketing (alpha, beta and gamma test sites): **customer buy-in + address customer needs**

Bessant & Tidd (2011)
Marketing Mix (4Ps)
• Defined as the **elements an organization controls** that can be used to **satisfy or communicate** with customers.
• The traditional marketing mix is composed of the four Ps: **product, price, place** (distribution) and **promotion**
  • They are core decision making variables
  • All variables are **interrelated and depend on each other**
  • An **optimal mix** of the four factors exists for a given **market segment** at a given point in time
People

- **All human actors** who play a part in service delivery and thus influence the buyer’s perceptions: namely, 1) the firm’s personnel, 2) the customer, and 3) other customers in the service environment.

Physical evidence

- **The environment** in which the service is delivered and where the firm and customer interact, and any tangible components that facilitate performance or communication of the service.

Process

- The actual procedures, mechanisms, and **flow of activities** by which the service is delivered – the service delivery and operating systems.
Service Quality: focused evaluation that reflects the customer perception of reliability, assurance, responsiveness, empathy, and tangibles

- Consumers judge quality based on multiple factors relevant to the context
- \[ SQ = \text{Expectations} - \text{Perceived Performance} \]

1. **Reliability***
   - Ability to perform a promised service dependably and accurately.
2. **Responsiveness**
   - Willingness to help customers and provide prompt service.
   - Attentiveness/promptness in dealing with customer requests, questions, complaints and problems.
3. **Assurance**
   - Employees’ knowledge and courtesy and their ability to inspire trust and confidence.
   - Important for services perceived by the customer as high risk (e.g. medical, legal, etc.).
4. **Empathy**
   - Caring, individualised attention given to customers: personalized/customized service.
5. **Tangibles**
   - Appearance of physical facilities, equipment, personnel and communication materials.
CUSTOMER EXPECTATIONS AND THE ZONE OF TOLERANCE

Zone of Tolerance:
- The extent to which customers recognise and are willing to accept variation on service quality/performance
- \( = \) Difference between Desired and Adequate level of service expectations

Customer Delight

Customer Dissatisfaction

Desired Service

Adequate Service
CUSTOMER EXPECTATIONS AND THE ZONE OF TOLERANCE

Zone of Tolerance:
1. Varies between customer (groups)
   - can expand and contract within the same customer
   - E.g. waiting time at the airport security
2. Varies for service attributes or dimension

Not only important to understand the size and boundary levels of the zone of tolerance + but also when and how the tolerance zone fluctuates with a given customer.
Phase 1: Front-end planning

1. Business strategy development or review
   • *Cost-leadership, Differentiation, Focus*

2. New service strategy development
   • *Ansoff Matrix*

3. Idea generation
   • *Sources of Innovation/Searching for Innovation* → **Screen** ideas **against** new service strategy: **GO** or **NO GO**?

4. Concept development and evaluation
   • *Value Generation*: define the core and peripheral benefits → **Test** concept with customers and employees: **GO** or **NO GO**?

5. Business analysis
   • *Value Capture*: Demand analysis, revenue projections, cost analysis, operational feasibility → **Test** for profitability and feasibility: **GO** or **NO GO**?

Wilson, Zeithaml, Bitner, and Gremler (2010)
Phase 2: Implementation

6. Service development and testing
   • Service blueprinting → Implementation plan → Conduct service prototype test: **GO** or **NO GO**?

7. Market testing
   • Test new service and other marketing mix elements: **GO** or **NO GO**?

8. Commercialization
   • Monitoring the customer service experience as well as the operational efficiencies

9. Post-introduction evaluation
   • Review of information gathered during the commercialisation of the service and implementation of necessary changes

Wilson, Zeithaml, Bitner, and Gremler (2010)
The Challenge:
• A stumbling block in service innovation and development is the difficulty of describing and depicting the service at the concept development, service development, and market test stages so that employees, customers, and managers know what the service is (i.e. understand all the steps and flow involved in the service process)

Service Blueprint:
• Is a picture or map that accurately depicts the service system and breaks it down into its logical components:
• It simultaneously depicts:
  • the process of the service delivery
  • the points of customer contact
  • the roles of customers and employees
  • the visible elements of the service

Wilson, Zeithaml, Bitner, and Gremler (2010)
Building a Service Blueprint

1. Identify the process to be blueprinted
2. Identify the customer or customer segment
3. Map the process from the customer’s point of view
4. Map contact employee actions, onstage ...

... and backstage and/or technology actions

5. Link contact activities to needed support functions

6. Add physical evidence of service at each customer action step
Building a Service Blueprint

**Figure 8.6 Blueprint for an automated DVD rental kiosk**

<table>
<thead>
<tr>
<th>PHYSICAL EVIDENCE</th>
<th>Appearance of kiosk</th>
<th>Appearance of kiosk</th>
<th>Appearance of kiosk</th>
<th>Appearance of kiosk</th>
<th>Appearance of kiosk</th>
<th>Appearance of DVD case</th>
<th>Appearance of kiosk</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOMER</td>
<td>Approach the kiosk</td>
<td>Press 'select a movie on touch screen'</td>
<td>Browses movies by release date</td>
<td>Select movie by touching thumbnail picture</td>
<td>Swipe credit card on kiosk</td>
<td>Retrieve DVD from kiosk</td>
<td>Watch movie, DVD scratched, call customer service</td>
</tr>
<tr>
<td>ONSTAGE TECHNOLOGY</td>
<td>Screen shows touch options: rent or return a DVD</td>
<td>Screen shows thumbnail pictures of recent release movies</td>
<td>Screen shows 10 thumbnails per screen, advance with arrow key</td>
<td>Takes user to payment screen, asks user to swipe credit card</td>
<td>Releases DVD, ejects for pickup from front slot</td>
<td>Explain procedure for dealing with scratched DVD</td>
<td></td>
</tr>
<tr>
<td>CONTACT EMPLOYEE ACTIONS BACKSTAGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUPPORT PROCESS</td>
<td>Technology maintenance</td>
<td>New releases added to kiosk, update kiosk information</td>
<td>Record payment information</td>
<td>Process payment information</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Wilson, Zeithaml, Bitner, and Gremler (2010)
WHY NETWORKS MATTER

• Innovation is about **combing resources** (e.g. skills, technology, knowledge, etc.)
• Many of those resources lie **outside of the firm**
  ➢ Complex and interactive resource flows that drive innovation

How it really happens.....
IMPORTANCE OF NETWORKS

- Pooling **complementary resources**: knowledge, skills, technology, assets, channels, brands, finance:
  - **Shared creativity, experimentation, experiences, and learning** (think about your team vs. individual analysis): get more and different minds on the job
  - **Shared risks** of exploration and exploitation

- Networking is **important across the innovation process**: finding and developing the opportunity → finding the resources → capturing value

- Relevant across the whole firm life-cycle, i.e. start-up → incumbent

 Networks on the **inside**: Think about **Creativity** and **Culture**

 Networks on the **outside**: Think about **Open Innovation**

Bessant & Tidd (2011)
CHANGING INNOVATION CONTEXT

• Technology:
  • Acceleration of knowledge production: extending the frontier along which innovation can happen
  • Global distribution of knowledge production (e.g. emerging economies, BRIC countries): extending the innovation search space

• Demand:
  • Market fragmentation: extending the range of markets and segments (e.g. diverse needs, mass customization, bottom of the pyramid)
  • Active users: customer participation in innovation

Bessant & Tidd (2011)
WHERE IS THIS?
Clusters v. Incubators

- **Cluster**
  - “networks that form because of the players being close to each other, for example, in the same **geographical region**” (Bessant & Tidd, 2011: 260)

- **Incubator**
  - An **organisation** that offers “office space, funding and basic services (recruiting, accounting, legal) to start-ups in return for equity stakes” (Hansen, Chesborough, Nohria and Sull, 2000: 75)

- Entrepreneurs need more than location, public infrastructure and proximity...: “Critical need for access”
  - **Networked incubators** combine the benefits of two diverse worlds – the **scale and scope** of large established corporations and the **entrepreneurial drive** of small venture-capitalist firms

1. Take **small equity stakes** to maintain entrepreneurial drive and flexibility
2. **Preferred rates** and terms from top-tier service providers through **demand pooling**, i.e. economies of scale
3. Preferential **access to network of companies and experts** (25% of incubators)

Hansen et al. (2000)
WHAT INCUBATORS OFFER

Hansen et al. (2000)
<table>
<thead>
<tr>
<th></th>
<th>Established Companies</th>
<th>Venture Capitalists</th>
<th>Networked Incubators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scale and Scope</strong></td>
<td>High: Historically the key advantage of large global companies.</td>
<td>Low: VC-backed start-ups are left alone to obtain services and buy supplies.</td>
<td>Medium: Common services and pooling of resources ensure some benefits, especially time savings.</td>
</tr>
<tr>
<td>leveraging size and reach in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>order to lower costs by pooling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>resources and spreading them</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>across units</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Entrepreneurial Drive</strong></td>
<td>Low: Red tape hinders new ventures; entrepreneurs are not rewarded.</td>
<td>High: Entrepreneurs are free to pursue ventures and own large equity stakes.</td>
<td>High: Entrepreneurs are free of red tape and own equity in ventures.</td>
</tr>
<tr>
<td>stimulating individuals to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pursue risky and disruptive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>innovations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Network Access</strong></td>
<td>Medium: Many established companies have some, but not extensive, contacts with Internet</td>
<td>Low: A VC partner may have an excellent personal network, but it doesn’t go beyond the</td>
<td>High: Organized and active networking among portfolio companies and strategic partners.</td>
</tr>
<tr>
<td>forging partnerships,</td>
<td>companies.</td>
<td>individual partner.</td>
<td></td>
</tr>
<tr>
<td>obtaining advice, and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>recruiting people</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Hansen et al. (2000: 80)*
DESIGNING SUCCESSFUL NETWORKS

Hansen et al. (2000:82)

- Formal links with external experts
- Bring outside experts on site
- Specialised deal brokers
- Economic incentives
- Processes for information and know-how exchange
- Schedule occasional, but regular, meetings

Bessant & Tidd (2011: 357)

- Highly diverse
  - Network partners from a wide range of disciplines and backgrounds
- Third-party gatekeepers/neutral knowledge brokers
  - Universities, Consultants, Trade associations
- Financial leverage
  - Access to investors (Business Angels, VC, Corporate venturing)
- Proactive management and member participation
REGINAL CLUSTERS

FIGURE 7.1. GLOBAL INDUSTRY CLUSTERS


Florida (2008: 105)
Figure 6: Europe mega-regions

Florida et al. (2007)
Figure 5: North America mega-regions

Florida et al. (2007)
ASIAN MEGA-REGIONS

Florida et al. (2007)
# TOP 3T CITIES IN USA: TECHNOLOGY, TALENT, TOLERANCE

## Appendix B: Rankings of Top 50 Metropolitan Areas by Various Indices

<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Milken Tech-Pole</th>
<th>Milken Tech-Growth Index</th>
<th>Composite Diversity</th>
<th>Gay Index</th>
<th>Foreign Born Index</th>
<th>Bohemian Index</th>
<th>Talent Index % College Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>1</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Boston</td>
<td>2</td>
<td>36</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Seattle</td>
<td>3</td>
<td>20</td>
<td>5</td>
<td>6</td>
<td>15</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Washington D.C.</td>
<td>4</td>
<td>24</td>
<td>3</td>
<td>2</td>
<td>10</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Dallas</td>
<td>5</td>
<td>9</td>
<td>15</td>
<td>19</td>
<td>16</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>6</td>
<td>50</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>Chicago</td>
<td>7</td>
<td>13</td>
<td>11</td>
<td>15</td>
<td>7</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>Atlanta</td>
<td>8</td>
<td>5</td>
<td>14</td>
<td>4</td>
<td>31</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Phoenix</td>
<td>9</td>
<td>3</td>
<td>21</td>
<td>22</td>
<td>21</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>New York</td>
<td>10</td>
<td>37</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>11</td>
<td>27</td>
<td>32</td>
<td>36</td>
<td>25</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>San Diego</td>
<td>12</td>
<td>25</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Denver</td>
<td>13</td>
<td>8</td>
<td>17</td>
<td>10</td>
<td>29</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Austin</td>
<td>14</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td>19</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Houston</td>
<td>15</td>
<td>7</td>
<td>18</td>
<td>21</td>
<td>8</td>
<td>30</td>
<td>12</td>
</tr>
</tbody>
</table>

Florida et al. (2001)
A Tour de Force of commercialisation

1. Innovation commercialisation
   Introduction to entrepreneurship and innovation concepts relating to commercialisation, such as sources of innovation, creating value through commercialisation, and commercialisation strategy

2. Building the case: Business Model & Business Plan
   Introduction to building the business case; aspects of business models including value creation and capture, and developing business plans including providing evidence.
Business/Value Model

... “how value is to be *created* + *captured*.” (Bessant and Tidd, 2011)

Business/value Models have 4 core elements:

1. **Value Proposition:**
   - **Offering:** How does the innovation or venture *create* value and for whom?
   - Value *created* will be specific to target market segments and customer groups
   - Different types of innovation will contribute in different ways (e.g. product versus process)

2. **Revenue Generation:**
   - How does the enterprise *capture* and appropriate the benefits (rents): subscription model, renting, selling, etc.
   - What is the underlying *cost structure* and *scalability*?

3. **Capabilities and processes:**
   - How can the innovation or venture deliver?: requires unique combination/configuration of resources, knowledge, and capabilities

4. **Position in the network:**
   - How are risks, responsibilities and rewards distributed between suppliers, customers, and other collaborators/business partners involved in the value creation.
   - **Creating** versus **capturing** value
   - Distribution driven by: positional advantages (e.g. size, power, ownership of IP, brands or standards, and access to distribution channels and customers)

Bessant & Tidd (2011)
How to create value?

Added-value = market price – input cost

To create more value, a firm must either:

- Decrease cost below its competitors
  - “Cost leadership”
  - “Generic Strategies” (Porter)

- Increase price above its competitors
  - “Differentiation”
Firms that offer a product or service that is of ‘standard’/comparative quality, but costs are significantly lower than the industry average/competition → they create value and earn superior profits.

Johnson, Whittington, and Scholes (2011)
Cost leadership

Gaining advantage by driving down costs while maintaining average quality can be **achieved by:**

- Increasing the scale of your operation (high volume) to take advantage of **economies of scale**
- Moving down the **experience curve** faster than your competitors
- Reduce input costs (e.g. labor or raw materials)
- Product/process design

**Process innovation** to lower costs

Johnson, Whittington, and Scholes (2011)
Case Example: Low-Cost Airlines

Achieving cost leadership:

• Fast turnaround times at airports, which *increases plane utilisation* and punctuality
• Use of a common fleet of planes to *reduce pilot and maintenance costs*
• Automation of bookings, and ticketless booking, to *reduce overhead costs*
• **Outsourcing or contracting** out of non-core services, e.g. baggage handling
• Use of **cheaper secondary airports** to reduce overhead costs
Firms that offer a product or service **that is unique in ways that customers value** + **firm costs are under control** $\rightarrow$ charge **premium prices**, create more value, and have **higher profitability**

Johnson, Whittington, and Scholes (2011)
Differentiation

• Can be based on **innovative product or service delivery**

• Can result in:
  • high customer loyalty and less head-to-head rivalry → higher prices

• Need to understand:
  • who the customer is
  • what is valued by the customer
  • who the competitors are and the value they offer

➢ Perceptual Maps

• But, be careful to:
  • **monitor the costs of differentiating** – to capture more value than competitors, the cost base need to be similar
  • choose bases of differentiation which are **difficult to imitate**
  • recognise that **bases of differentiation may need to change**

Johnson, Whittington, and Scholes (2011)
Focus

Segmentation, Targeting and Positioning & the 4Ps of Marketing

Figure 6.1
The STP process

Baines, Fill, and Page (2011)
"A firm “stuck in the middle”...“will compete at a disadvantage because the cost leader, differentiators, or focuser will be better positioned to compete in any segment... Such a firm will be much less profitable than rivals achieving one of the generic strategies”

Porter (1985)

In other words ... if you are in the middle you will be outcompeted by firms on the other ends
... “how value is to be **created + captured**.” (Bessant and Tidd, 2011)

Business/value Models have 4 core elements:

1. **Value Proposition:**
   - **Offering:** How does the innovation or venture **create** value and for whom?
   - Value **created** will be specific to target market segments and customer groups
   - Different types of innovation will contribute in different ways (e.g. product versus process)

2. **Revenue Generation:**
   - How does the enterprise **capture** and appropriate the benefits (rents): subscription model, renting, selling, etc.
   - What is the underlying **cost structure** and **scalability**?

3. **Capabilities and processes:**
   - How can the innovation or venture deliver?: requires unique combination/configuration of resources, knowledge, and capabilities

4. **Position in the network:**
   - How are risks, responsibilities and rewards distributed between suppliers, customers, and other collaborators/business partners involved in the value creation.
   - **Creating** versus **capturing** value
   - Distribution driven by: positional advantages (e.g. size, power, owner ship of IP, brands or standards, and access to distribution channels and customers)

Bessant & Tidd (2011)
Business/Value Model

... “how value is to be created + captured.” (Bessant and Tidd, 2011)

Business/value Models have 4 core elements:

1. **Value Proposition:**
   - **Offering:** How does the innovation or venture create value and for whom?
   - Value created will be specific to target market segments and customer groups
   - Different types of innovation will contribute in different ways (e.g. product versus process)

2. **Revenue Generation:**
   - How does the enterprise capture and appropriate the benefits (rents): subscription model, renting, selling, etc.
   - What is the underlying cost structure and scalability?

3. **Capabilities and processes:**
   - How can the innovation or venture deliver?: requires unique combination/configuration of resources, knowledge, and capabilities

4. **Position in the network:**
   - How are risks, responsibilities and rewards distributed between suppliers, customers, and other collaborators/business partners involved in the value creation.
   - Creating versus capturing value
   - Distribution driven by: positional advantages (e.g. size, power, owner ship of IP, brands or standards, and access to distribution channels and customers)

Bessant & Tidd (2011)
“Resources are inputs into the production process – they are basic units of analysis. ... But on their own, few resources are productive. Productive activity requires co-operation and co-ordination of teams of resources. A capability is the capacity for a team of resources to perform some task or activity.

While resources are the source of a firm’s capabilities, capabilities are the main source of its competitive advantage.”

Grant (1998)
3. Capabilities and Processes

Ways to add value

Resources
(Building Blocks)

- Anything which the organisation **owns**, or can **access**
- Examine resources audit and value chain analysis

Capabilities
(How building blocks are put together)

- Configurations of resources
- Strategic capabilities can be core competences
- Examine linkages in value chains & value systems
Business/Value Model

... “how value is to be created + captured.” (Bessant and Tidd, 2011)

Business/value Models have 4 core elements:

1. **Value Proposition:**
   - **Offering:** How does the innovation or venture create value and for whom?
   - Value created will be specific to target market segments and customer groups
   - Different types of innovation will contribute in different ways (e.g. product versus process)

2. **Revenue Generation:**
   - How does the enterprise capture and appropriate the benefits (rents): subscription model, renting, selling, etc.
   - What is the underlying cost structure and scalability?

3. **Capabilities and processes:**
   - How can the innovation or venture deliver?: requires unique combination/configuration of resources, knowledge, and capabilities

4. **Position in the network:**
   - How are risks, responsibilities and rewards distributed between suppliers, customers, and other collaborators/business partners involved in the value creation.
   - Creating versus capturing value
   - Distribution driven by: positional advantages (e.g. size, power, owner ship of IP, brands or standards, and access to distribution channels and customers)

Bessant & Tidd (2011)
4. Position in the network

Figure 3.5 The value system

Source: Adapted with the permission of The Free Press, a Division of Simon & Schuster, Inc., from Competitive Advantage: Creating and Sustaining Superior Performance by Michael E. Porter. Copyright © 1985, 1998 by Michael E. Porter. All rights reserved.
Many successful innovations do not stem from new science or technology, but new and unique combinations of the business model elements. Business model innovation enlarges the existing value of a market by either:

- Attracting new customers
- Encouraging existing customers to consume more
- Does not require the discovery of new products or services, but rather the redefinition of existing products or services and how these are used to create value (emphasizes different value proposition):
  - Amazon (did not invent book selling)
  - EasyJet or Ryanair (did not pioneer air travel)
  - Netflix (did not pioneer movie rental)
  - Apple (did not invent the mp3 player)
  - Dell (did not invent PCs)

New business models can co-exist with existing business models

So far: Traditional Approaches to Value Creation

• Creating value through **positioning**: carve out defensible position against competition in the existing market space:
  • Based on market attractiveness (**Five Forces, PESTL framework**)
  • Analysing structure of an Industry → Choosing a strategic position (cost leadership, differentiation, focus)
  • Opportunities and threats in the **external** environment

• Creating value through **capabilities**
  • The resource-based view (**VRIO, Value Chain/Network**)
  • Based on developing strategic assets
  • Strengths and weaknesses **internal** to the venture

• ... usually summarised through a SWOT analysis

Kim and Mauborgne (2008)
So far: Traditional Approaches to Value Creation

Figure 2.7 Comparative industry structure analysis

Johnson, Whittington, and Scholes (2011)
So far: Traditional Approaches to Value Creation

<table>
<thead>
<tr>
<th>External factors</th>
<th>Strengths (S)</th>
<th>Weaknesses (W)</th>
</tr>
</thead>
</table>
| Opportunities (O) | SO Strategic options  
Generate options here that use strengths to take advantage of opportunities | WO Strategic options  
Generate options here that take advantage of opportunities by overcoming weaknesses |
| Threats (T) | ST Strategic options  
Generate options here that use strengths to avoid threats | WT Strategic options  
Generate options here that minimise weaknesses and avoid threats |

Johnson, Whittington, and Scholes (2011)
Red and Blue Oceans

**Red Ocean Strategy**
- Compete in existing market space for greater market share
- Beat the Competition
- Make the value/cost trade-off
- Align the whole system of a company’s activities with differentiation **OR** low cost

**Blue Ocean Strategy**
- Create uncontested market space
- Make the competition irrelevant
- Break the value/cost trade-off
- Align the whole system of a company’s activities in pursuit of differentiation **AND** low cost

Kim and Mauborgne (2008)
Business Plans

Business Plans:

• Attract funding for a venture
• Translate abstract or ambiguous goals into more explicit operational needs, and support subsequent decision-making and identify trade-offs
• Make risks and opportunities more explicit: Technology, Market, Competition, etc.

Think through + articulate your business idea/model in a **systematic way**

• Communicate Business idea externally
• Understand Business idea “internally”

Bessant & Tidd (2011)
Business Plans

Elements of a Business Plan:

1. Details of the **product or service**: Value Creation/Resources (IP)
2. Assessment of the **market opportunity**: Value Creation/Capture
3. Identification of **target customers** (STP): Value Creation
4. Barriers to entry and **competitor analysis**: Value Creation
5. Experience, expertise and commitment of the **management team**: Resources
6. Strategy for **pricing, distribution and sales**: Value Capture/Position
7. Identification and planning for **key risks**
8. Cash-flow calculation, including **break-even** points and **sensitivity**: Value Capture
9. Financial and other resource **requirements** of the business (Gap analysis): Resources

Bessant & Tidd (2011)
### Evaluation Criteria

**Evidence on evaluation criteria used by venture capitalists in Europe, the US and Asia**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>European (n = 195)</th>
<th>American (n = 100)</th>
<th>Asian (n = 53)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneur able to evaluate and react to risk</td>
<td>3.6</td>
<td>3.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Entrepreneur capable of sustained effort</td>
<td>3.6</td>
<td>3.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Entrepreneur familiar with the market</td>
<td>3.5</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Entrepreneur demonstrated leadership ability*</td>
<td>3.2</td>
<td>3.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Entrepreneur has relevant track record*</td>
<td>3.0</td>
<td>3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Product prototype exists and functions*</td>
<td>3.0</td>
<td>2.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Product demonstrated market acceptance*</td>
<td>2.9</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Product proprietary or can be protected*</td>
<td>2.7</td>
<td>3.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Product is ‘high technology’*</td>
<td>1.5</td>
<td>2.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Target market has high growth rate*</td>
<td>3.0</td>
<td>3.3</td>
<td>3.2</td>
</tr>
<tr>
<td>Venture will stimulate an existing market</td>
<td>2.4</td>
<td>2.4</td>
<td>2.5</td>
</tr>
<tr>
<td>Little threat of competition within 3 years</td>
<td>2.2</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Venture will create a new market*</td>
<td>1.8</td>
<td>1.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Financial return &gt; 10 times within 10 years*</td>
<td>2.9</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Investment is easily made liquid* (e.g. made public or acquired)</td>
<td>2.7</td>
<td>3.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Financial return &gt; 10 times within 5 years*</td>
<td>2.1</td>
<td>2.3</td>
<td>2.1</td>
</tr>
</tbody>
</table>

1 = irrelevant, 2 = desirable, 3 = important, 4 = essential. * Denotes significant at the 0.05 level.

Common problems with Business Plans submitted to VCs:

- Too much emphasis on technology relative to other issues
- Lack of:
  - detailed marketing strategy
  - sales plan
  - competitor analysis
  - Financial forecasts and sensitivity analysis

Bessant & Tidd (2011)
Common problems with Business Plans submitted to VCs:

- 30-45% of all projects fail to be completed
- >50% overrun budgets or schedules by up to 200%
- Managers cannot predict accurately the development cost, time periods, markets and profits of R&D projects
- R&D scientist and engineers are often overoptimistic in their estimates
- Important biases:
  - **Overconfidence**: unrealistic assumptions and uncritical assessment
  - **Cognitive bias**: seeking and overemphasizing evidence which supports our beliefs and reinforces our bias, but at the same time leads us to avoid and undervalue any information which contradicts our view
  - **Loss aversion**: we tend to prefer to avoid loss rather than to risk gain

Bessant & Tidd (2011)
Why Business Plans Don’t Deliver

Five most common flaws and how to fix them:

1. “Here I am, never mind the problem” (3D printing?)
   • Plan focuses on a detailed explanation of the **technology** rather than the identification of a **customer problem** to resolve
   • What matters more than great technology is the **problem or pain that the technology is resolving**
   ➢ A good business plan starts with a clearly defined problem supported by evidence from market research, testimonials, letters of intent (target market).

2. “A coke for every kid in China”
   • **Secondary data** (market size and growth) → opportunity
   ➢ **Primary data** (interviews, surveys, experiments, market tests) → adoption

3. “Just look at our (paper) profits”
   • large number of small transaction versus small number of large transactions?
   • product development + operation costs?
   ➢ Allow for **sensitivity analysis** (alter assumptions)
Why Business Plans Don’t Deliver

Five most common flaws and how to fix them:

4. “Our team walks on water”
   - Identify **critical success factors** and show how **team expertise and experience** address those
   - **Acknowledge missing links** + encourage potential investors to help fill that slot with a qualified person
   - Importance of previous venture experience (successful or unsuccessful)

5. “Everything is wonderful”
   - Identify **uncertainties and risks** + **address them** in the plan → develop **contingency plans**
   - Known risks versus unknown risks

Mullins (2009)
Business Model: four key elements:

1. Customer value proposition
2. Profit formula
3. Key resources
4. Key processes
1. Customer Value Proposition

Finding a way to help customers get a job done

- **Create value** for customer
  - Who is the target customer?
  - What is the job to be done?
  - What and how does your offering help get the job done?
  - (What are the other alternatives?)
  - (How can you “sell” your solution to customers?)
  - (What might be the barriers to adoption?)
1. Customer Value Proposition

Do you think this product will take off? Why or why not?
Factors affecting innovation adoption

Moore (1991)

- Emphasise technical performance and novelty
- Emphasise price, quality, convenience and support

Difference in success factors:

Short term preferences of early adopters will have a disproportionate impact on subsequent development of the innovation → abandonment of superior alternatives

Moore (1991)
2. Profit Formula

How can the company create value for itself, while providing value to the customer?

➢ Capture value

1. Revenue model (sales)
2. Cost structure
   • Variable costs + fixed costs, economies of scale $\rightarrow$ low/high volume
3. Margin model
   • low margin/large volume $versus$ high margin/low volume $\rightarrow$ profits
4. Resource velocity (speed at which resources flow through)
   • inventory turnover speed, revenue cycles

Johnson, Christensen & Kagerman (2008)
## Alternative revenue models

<table>
<thead>
<tr>
<th>Revenue model explanations</th>
<th>Examples*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commission-based</td>
<td>Inst-cash International</td>
</tr>
<tr>
<td>A fee that is imposed on a transaction by a third party</td>
<td>Unibarter.com</td>
</tr>
<tr>
<td>(usually an intermediary)</td>
<td>Metalogics, Inc.</td>
</tr>
<tr>
<td>Fee-for-service</td>
<td>Flash Gordon</td>
</tr>
<tr>
<td>Pay as you go option, charged for professional service</td>
<td>RealTraveling.com</td>
</tr>
<tr>
<td>as you use it</td>
<td></td>
</tr>
<tr>
<td>Advertising</td>
<td></td>
</tr>
<tr>
<td>Business of attracting public attention to a good or service</td>
<td>Fidget</td>
</tr>
<tr>
<td>achieved through banner ads, pop ups, permanent buttons, etc.</td>
<td>Tendersys.com</td>
</tr>
<tr>
<td>Subscription</td>
<td>Homesmart.com</td>
</tr>
<tr>
<td>Company charges a flat rate to use a service for a certain period</td>
<td>E-sitting</td>
</tr>
<tr>
<td>of time</td>
<td></td>
</tr>
<tr>
<td>Referral</td>
<td></td>
</tr>
<tr>
<td>Fees for steering customers to another company—can either be a</td>
<td>Insureconnection</td>
</tr>
<tr>
<td>flat fee or a fee per click-through</td>
<td>Games Interactive</td>
</tr>
<tr>
<td>Production</td>
<td>100x.com</td>
</tr>
<tr>
<td>Manufacturer sells directly over the Internet, cuts out middleman</td>
<td>RealLegends.com</td>
</tr>
<tr>
<td>Mark-up based</td>
<td>Smartenergy</td>
</tr>
<tr>
<td>The middleman, business not in production but in resale</td>
<td>Avatar Project</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Either not enough information to classify, or the revenue model</td>
<td></td>
</tr>
<tr>
<td>was outside the scheme of an Internet business</td>
<td></td>
</tr>
</tbody>
</table>

Examples?:
- Mobile Phone?
- Netflix?
- Estate Agents?
- Youtube?
- Google?
- Facebook?

Kirsch, Goldfarb & Gera (2009)
3. and 4. Key resources and processes

**Resources**

Required to deliver the value proposition to the target customer:

- People
- Technology, products
- Equipment
- Information
- Channels
- Partnerships, alliances
- Brand

**Processes**

Operational and managerial processes that allow delivering value in a way that can be successfully repeated and increase in scale:

- Processes
  - Training, development, manufacturing, budgeting, planning, sales, and service
- Rules and metrics
- Norms
- ... capabilities

- Evaluate resources and processes using the **VRIO criteria**
- Not as much about the individual resources and processes, but the unique **configuration** of resources and capabilities

Johnson, Christensen & Kagerman (2008)
Summary Business Models

• “Successful new businesses typically revise their business models four times or so on the road to profitability”
  ➢ Requires learning and adjusting

• “Success comes from enveloping the new technology in an appropriate, powerful business model”
  ➢ Importance of all 4 key elements working together

“I think historically where we [venture capitalists] fail is when we back technology. Where we succeed is when we back new business models”

Bob Higgins (Highland Capital partners)

Johnson, Christensen & Kagerman (2008)
GOOD LUCK...

...with your idea and your life as an entrepreneur!