Chap 6 Developing an Effective Business Model.

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Stroome - opening Profile

- Web based service for editing and re-mixing video
  - In a collaboration over the web
- Nonny DeLaPena and Tom Grasty both MS from USC

- Need to find a potential business model
  - Freemium – free basic fee for Premium
  - House branding. Offer services to organizations that rebrand it.
The Business Model

• How a company uses its resources, structures its relationships, interfaces with customers, creates value, and returns revenues and profits.
• How does it become self sustaining?
<table>
<thead>
<tr>
<th>Traditional PC (HP or Lenovo)</th>
<th>Dell</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Forecast demand</td>
<td>• Customer Places Order by phone or web</td>
</tr>
<tr>
<td>• Obtain subcomponents from suppliers</td>
<td>• Suppliers see order and ship components</td>
</tr>
<tr>
<td>• Make basic components</td>
<td>• Dell assembles computer</td>
</tr>
<tr>
<td>• Assemble Complete PC</td>
<td>• Maintains Customer relationship</td>
</tr>
<tr>
<td>• Inventory</td>
<td>• Ship to customer via UPS/FedEx</td>
</tr>
<tr>
<td>• Ship to retailer</td>
<td></td>
</tr>
<tr>
<td>• Retail inventory/display</td>
<td></td>
</tr>
<tr>
<td>• Consumer</td>
<td></td>
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</tbody>
</table>
Three Industries – Three Business Model Innovators

• Warby Parker – Eyewear
  – Direct internet sales to customer bypassing eyewear stores or optometrists

• Shopkick – Credit for visiting brick and mortar store
  – iPhone app recognizes when user enters a partner retail establishment
  – The shopper is given kickbucks, discounts, ads
  – Shopkick gets commission on sales

• SunRun
  – Installs solar power on customers’ roofs and shares in savings and sales or via lease payments (when regulations do not allow power purchase agreements)
Why are Business Models Important?

• Does a Business make sense? How does it make money. Ongoing feasibility analysis.
• How do the pieces fit together to make a compelling whole?
• Provides the rationale for why the various stakeholders (customers, suppliers, etc) want to (need to) work together.
• Articulates a companies “core logic” to all stakeholders, including the employees and potential investors.
Six distinct ways to make money online

- Affiliate Programs – commissions from merchant to web site
- Pay-per-click – Advertiser places ad on website and pays for each click-thru
- Direct Ads – banner ads, skyscraper ads, pop-up ads, interrupting ads
- E-Commerce – direct online sales from the merchant (i.e., Amazon or Dell)
- Subscription Services
- Freemium Models – Basic web service is free, but a fee based premium service offers far more functionality.
Value Chain

• A string of activities that add (quantified) value as the product moves to market.
  – Primary Activities
    • Inbound logistics (from supplier to firm)->
    • Operations (creating/manufacturing the product)->
    • Outbound Logistics moving the product to the market->
    • Marketing and Sales->
    • Service
  – Then there are support activities
    • Firm Infrastructure
    • HR
    • Tech. Development
    • Resource procurement/purchasing
Apple iPhone Value Chain

- Simon Reading, Bernt Wahl, Hannes Hesse, Chris Volz, Johnson Nguyen
  - people.ischool.berkeley.edu/~hal/Courses/.../Tech/.../H-iphone.doc
Capturing Value in Global Networks: Apple’s iPad and iPhone

- Kenneth L. Kraemer, Greg Linden, and Jason Dedrick
- University of California, Irvine, University of California, Berkeley and Syracuse University

![Figure 1. Distribution of value for iPhone, 2010](image)
Same authors of NSF study -iPad
Fatal Flaws in Business Models

• A complete misread of the customer
  – Iridium by Motorola: everyone needs a satellite phone useable everywhere.
  – Apple Newton: Customers are ready for a clunky tablet.

• Utterly unsound economics
  – “We lose money on every item, but make it up in volume.”
Components of an Effective Business Model

- Core Strategy – how a firm competes
- Strategic Resources – how it acquires and uses resources
- Partnership Network
- Customer interface

- Case Joost (Hulu predecessor)
  - First mover
  - To big too fast
  - Technical hiccups
  - Clunky download required
  - Poor partnership relationships
Core Strategy

• Mission statement-

• Product/market scope –
  – Defines the product and markets which the company will address
  – This can evolve
    • Amazon began as online bookseller – now sells everything
    • Google began as search engine, then maps, navigation, books, etc.
  – Market segments
    • Dell - business and government
    • HP - individuals, small business, first time computer buyers

• Differentiation basis
  – Cost leadership strategy
    • Often requires economies of scale that are hard for new companies.
  – Differentiation strategy – unique products or capabilities
Disruptive Innovation – a key strategy

- Clayton Christensen, Harvard
- Companies enter into a low-end or undesirable part of the market, are ignored by the players in the main market and then destroy the major players by growing capabilities into the main market.
  - Disk drives
  - Steel mini-mills
  - Japanese (and now Korean) cars
  - PC’s versus the Massachusetts mini-computer industry.
Business Concept blind-spot

- **Ex: Xerox**
  - “The Document Company”
  - Focus on reproduction (old stuff!)
  - Missed creation/printing of digital documents
  - HP now dominates this market

- **Ex: Kodak (or Polaroid)**
  - Photography, but mainly a chemistry company!
  - Could not accommodate to digital photography.

- **Wang, Digital, Data General –etc**
  - Computing is professional and not personal
    - Controlled by operators and not end users.
Product/Market Scope

• Amazon
  – Bookseller -> everything seller

• Market Scope
  – HP- consumer market
  – Dell- Business/government
Differentiation Basis

- **Cost Leadership Strategy**
  - Walmart, Dollar General

- **Differentiation Strategy**
  - Quality, timeliness, service, etc
  - Abercrombie and Fitch

- **Note that Walmart versus Target uses both!**
  - Target tries to position itself as the upscale alternative to Walmart.
Strategic Resources
– Finding a Sustainable Competitive Advantage

• Core Competencies
  – Things the company does better than others—competitive advantage
  – Resource leverage—using core competencies to target new markets
    • This is important in the longer term

• Strategic Assets
  – Sustainable competitive advantage—absolute key to success
    • Needs to be unique and not easy to imitate
    • Plant and equipment, location, brands, patents, customer data, highly qualified staff, or distinctive partnerships
Partnership Network

• Partnership network
  – Suppliers
  – Supply chain
    • Network of all the suppliers from raw materials to finished product.
    • Example: (Apple locked up aluminum CNC supplies)
    • Supply chain management
  – Other Key Relationships
    • Insourcing – a partner moves inside!
    • Outsourcing – getting external partners or suppliers to do things that the company does not do well or profitably.
  – Dangers here- partnerships founder at times.
Key types of business partnerships

• Joint Ventures—two orgs join to create a new JV
  – Sony-Ericsson was a joint venture by the Japanese consumer electronics company Sony Corporation and the Swedish telecommunications company Ericsson to make mobile phones. The stated reason for this venture is to combine Sony's consumer electronics expertise with Ericsson's technological leadership in the communications sector. Sony later bought out Ericsson.

• Network—Hub and spoke coordinated group

• Consortia—Peer network of similar groups

• Strategic Alliance—no JV but a win-win business relationship
  – Starbucks and Barnes and Noble in the early days
  – Microsoft
  – Sprint and Microsoft provide business and consumer applications delivered via Sprint's wireless services as well as solutions that provide network security and reliability.

• Trade Associations
  – Often important for government relations
  – General public relations
    • Example—API—American Petroleum Institute deals with contentious issues in fossil fuels
      – Addresses both public concerns and lobbies governments
Customer Interface

- Customer Interface
  - How the firm interacts with its customers
  - Target market
  - Fulfillment and Support - how to get to the customer
  - Pricing - one of the famous “4Ps” of marketing
  - Product, Price, Place, Promotion, (more in later chapter)
Apple supply chain

• Apple's wild success with unibody construction for all models of the MacBook appears to be having a negative effect on the competition in more than just reduced sales -- the other vendors can't get their hands on the CNC (computer numerical control) lathes that are required to make ultra thin magnesium-aluminum shells to encase the electronics of Intel's UltraBook design guideline.

• According to Taiwan-based electronics industry site Digitimes, Catcher Technology and Foxconn Technology both have more than 10,000 of the expensive CNC lathes used to make notebook chassis. These two companies are major suppliers to Apple, which means that companies wishing to make metal UltraBooks have to compete for capacity on those lathes. That's a hindrance to high-capacity production, so many manufacturers are choosing a different material.
### Privo Business Model Canvas

#### Early Business Model Canvas

<table>
<thead>
<tr>
<th><strong>Key Partners</strong></th>
<th><strong>Key Activities</strong></th>
<th><strong>VALUE PROPOSITIONS</strong></th>
<th><strong>Customer Relationship</strong></th>
<th><strong>CUSTOMER SEGMENTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NSF, NIH</td>
<td>Diabetes Research</td>
<td>Oral mucosal drug delivery</td>
<td>Endocrinologists as advisors</td>
<td>Type II diabetic patients</td>
</tr>
<tr>
<td>Mass Life Sciences</td>
<td>Developing trans-mucosal delivery techniques</td>
<td>• Improve patient quality of life</td>
<td></td>
<td>Patients who need to inject insulin</td>
</tr>
<tr>
<td>Universities</td>
<td>Fund Raising</td>
<td>• Improve compliance relative injections</td>
<td></td>
<td>Mucositis</td>
</tr>
<tr>
<td>Academic Centers</td>
<td>Grant Writing</td>
<td>• Minimize side effects</td>
<td></td>
<td>Patients that have gone through radiation therapy</td>
</tr>
<tr>
<td>Venture Capital</td>
<td></td>
<td>• Reduce hospital Stay</td>
<td></td>
<td>Oral cancer</td>
</tr>
<tr>
<td>Philanthropy</td>
<td></td>
<td>• Reduce overall cost of healthcare</td>
<td></td>
<td>Patients with the cancer in their mouth</td>
</tr>
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<th><strong>Key Resources</strong></th>
<th><strong>Channels</strong></th>
<th><strong>Cost Structure</strong></th>
<th><strong>Revenue Stream</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientists</td>
<td>Large Pharma as partner or purchaser</td>
<td>Salaries</td>
<td>Commercial Licensing</td>
</tr>
<tr>
<td>Mass Life Science</td>
<td></td>
<td>Lab space</td>
<td>Sale of the company</td>
</tr>
</tbody>
</table>

- **Cost Structure**
  - Salaries
  - Lab space
  - Lab equipment
  - Materials & Supplies
  - Fund Raising
  - IP License & Development
  - Legal

- **Revenue Stream**
  - Commercial Licensing
  - Sale of the company
  - Royalties
Learn and Pivot

- Interviewed
  - 20 Physicians
  - 40 Scientists
  - 12 Attorneys
  - 6 Multinational Pharmaceutical Co.

- Written many Grants for
  - NCI (National Cancer Institute)
  - NIH (National Institute of Health)
  - MLSC (Mass Life Science Center)
  - NSF (National Science Foundation)
  - Next (Rare Disease services)
  - NCL (Nano Characterization)
  - Deshpande –MIT

- Governments of 7 other countries
### Business Model after pivot

#### Current Business Model Canvas

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>VALUE PROPOSITIONS</th>
<th>Customer Relationship</th>
<th>CUSTOMER SEGMENTS</th>
</tr>
</thead>
</table>
| • NSF, NIH, NCI  
• Mass Life Sciences  
• Universities  
• Academic Centers  
• Angel Investors  
• Venture Capital  
• New England Hospitals  
• Global Hospitals  
• CRO’s for manufacturing, preclinical and | • Fund Raising  
• Grant Writing  
• Optimize Formulation  
• Build Partnerships  
• Mfg NP’s  
• Pre-clinical trials  
• Phase 1 Clinical Trials | Replacing existing intravenous Oral Cancer chemotherapy  
• Much Higher efficacy  
• Better quality of life  
• Vastly lower toxicity  
• Ease of use  
• Lower Total Cost | • Oncologists as advisors  
• Pharma as advisors/mentors  
• Oncology radiologists | Chemo-Wafer Patients  
• Age 62+ at diagnosis  
• Early Stage OC patients  
• Later Stage OC patients  
• HPV Patients (male age 40-59)  
• Oncology surgery patients |

<table>
<thead>
<tr>
<th>Key Resources</th>
<th></th>
<th>Other applications</th>
<th>Channels</th>
</tr>
</thead>
</table>
| • Scientists  
• Mass Life Science  
• NSF, NIH, NCI  
• IP Attorneys  
• Business Advisors  
• Science Advisors  
• Medical Advisors  
• GMP/GLP CRO’s | | • Deliver other drugs through buccal tissue using NP permutation  
• Use NP loaded Chemo-Wafer (CW) to deliver drugs to target other cancers | • Large Pharma as partner or purchaser for Global Marketing, Sales, & Distribution |

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<th>Revenue Stream</th>
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| • Salaries  
• Lab space  
• Lab equipment | • Commercial Licensing  
• Sale of the company  
• Royalties |
Cases

• **You be the VC**
  - GroupMe – Group Messaging entirely free
  - FastPencil - Self Publish Books

• **Case 1 AirBNB**  Web broker for Bed and Breakfast or private accommodations
  - How to differentiate from Craig’s List and Couch Surfing sites!
  - Focused solely on conferences and events
  - Charge a transaction fee and change to handling the money instead of simply being the broker
  - Y-Combinator

• **Case 2- ZipCar**  Team 3