Define and Validate Your Business Model

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UC Davis GSM Class of 2008
Founder & CEO
VinPerfect

Overview

• Business Models:
  – Definitions
  – Types of business models and their inputs

• Capital Requirements
  – Breaking apart the business to maximize your ROI
  – Financing to value creation milestones

• Exercises for you...
My Background

Oxygen-Regulating Wine Closure
Won Big Bang 2008
Raised $2.6MM
Sold over 35 Million units
Licensed to Amcor (ASX: AMC)

What makes a good business?

- Will it work?
- Are materials available?
- Is it scalable?
- Can it be tested cost effectively?

- Who is the customer?
- How many customers?
- Value proposition to the customer?
- Competition?

- Can the management team grow the business?
- Can the team grow with the business?

- How much revenue can you generate?
- What are the costs?
- What are the long term goals?
The Four Steps to the Epiphany

Product Development Model

Concept / Seed → Product Develop → Alpha / Beta test → Launch / FCS → Co. build

As the Old Saying Goes...

“Build a better mousetrap, and the world will beat a path to your door” - Ralph Waldo Emerson

“That’s totally not true” - Andrew Hargadon
The Four Steps to the Epiphany

Customer Discovery

Customer Development Model

Product Development Model

Customer Validation

Customer Creation

Company Building

Phase 1 – State Hypotheses

Phase 2 – Test Problem Hypotheses

Phase 3 – Test Product Concept

Phase 4 - Verify

Customer Discovery Process
Goal of Customer Discovery...
Answers to these questions!

• Have we identified a problem the customer wants solved?
• Does our product solve these customer needs?
• If so, do we have a viable and profitable business model?
• Have we learned enough to go out and sell?
  ✓ Draw a day in the life of a customer
  ✓ Know the org chart of users, buyers, influencers, and channels

Business Model

• How will you make money?
  – Revenues
  – Who are the customers for your product/service?
  – Why do they want it - “Value Proposition”?

• How much will it cost to generate your revenues?
  – Expenses: COGS, CAPEX, and OPEX

• How much revenue can you make and how quickly?
  – Cost of Capital
**Definitions: Margins**

- **Revenue**
  - Money coming into the business
- **Cost of Goods Sold (COGS)**
  - What it costs to make your products
- **Gross Margin**
  - \( [\text{Revenue} - \text{COGS}] \)

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**Definitions: Expenses**

- **Fixed costs**
  - Don’t change with time
  - Capital Expenses (CAPEX)
  - Salaries
- **Variable costs**
  - Change with volume/time
  - Operating Expense (OPEX)
  - COGS
  - Salaries
Definitions: Profitability

• Net Income
  – Revenues minus all expenses

• EBITDA
  – Earnings Before Interest, Tax, Depreciation and Amortization
  – Useful for valuation comparisons

• Cash Burn Rate
  – How much cash you lose each month

Definitions: Pro-Forma Statements

Pro-Forma Statements
• “Best Guess” predictions
• Designed to show the impact of a certain choices
### Anatomy of a Pro-Forma

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
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<tr>
<td>(Cost of Sales)</td>
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<td></td>
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<tr>
<td>Gross Margin</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Expense</th>
<th>CASH</th>
<th>CASH</th>
<th>CASH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales &amp; Marketing</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>General &amp; Admin</td>
<td></td>
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<tr>
<td>Research &amp; Dev</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IP &amp; Legal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Expenses</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>EBITDA</td>
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<td></td>
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<tr>
<td>Interest &amp; Financing</td>
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<tr>
<td>Taxes</td>
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<tr>
<td>Net Profit</td>
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<tr>
<td>CASH</td>
<td></td>
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</tbody>
</table>
Definitions: J-Curve

Capital required to reach “Cash Flow Break Even”

Capital Requirements

Business Value

Proof of concept

Beta Customer

Commercial Launch

Cash Flow Break Even

Time

CASH

This is the amount you have to raise
Revenue Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Sales</strong></td>
<td>Sell a product or service to customers (wholesale, retail, or direct).</td>
</tr>
<tr>
<td><strong>Advertising Fees</strong></td>
<td>Sell opportunities to distribute messages (viewers, readers, listeners, or others).</td>
</tr>
<tr>
<td><strong>Franchise Fees</strong></td>
<td>Sell and support a replicable business for others to invest in, grow, and manage.</td>
</tr>
<tr>
<td><strong>Utility Fees</strong></td>
<td>Sell goods and services on a per-use basis.</td>
</tr>
<tr>
<td><strong>Subscription Fees</strong></td>
<td>Charge a fixed price for providing access to your goods or services.</td>
</tr>
<tr>
<td><strong>Transaction Fees</strong></td>
<td>Charge a fee for referring, enabling or executing a transaction.</td>
</tr>
<tr>
<td><strong>License Fees</strong></td>
<td>Sell the rights (exclusive or non-exclusive) to use patent- or copyright-protected IP.</td>
</tr>
</tbody>
</table>

Revenue Models for Software

- **“Standard”** – unit sales (up-front license fee) plus maintenance & support subscriptions (e.g., Oracle)
- **SAAS** – license fees, maintenance, & support all one on-going subscription fee (e.g., Salesforce.com)
- **Support** – give away product, sell maintenance & support (e.g., Red Hat)
- **Premium Version** – give away base product, sell premium product (e.g., Dropbox)
- **Add-ons** – give away base product, sell add-on products (e.g., Zynga)
Additional Revenue Models for Web

**Subscription** – monthly fee to gain access to content (e.g., New York Times)

**Advertising** – give product away, incorporate ads (e.g., Yelp)
  - Can be cost per impression, cost per click, or revenue share per click

**Hybrid** – base product free but supported by ads, premium product has no ads (e.g., Pandora)

**Affiliate Sales** – revenue share for delivering customers (e.g., Amazon)

Distribution Models

- **Primary Manufacturer**
- **Component Assembly**
- **Customization**
- **Packaging**
- **Distribution**
- **Point of Sale**
**Distribution Model Impacts Costs**

- OEMs, System Integrators absorb most of the cost of customer acquisition.
- A Direct Sales force is expensive, only works for high value sales.
- Manufacturer’s Representatives need marketing support.
- Resellers/Retailers need substantial marketing support – they are order-takers not sales people.

**VinPerfect Example: Our 2017 Options**

- HiCap: 40% Margin
- Amcor: 5% Royalty
- Maia: 10% Margin
## VinPerfect Example – Impact of Business Model

![Graph showing unit volume and revenue over years for different business models](image)

### Revenue Model Impacts Expenses

<table>
<thead>
<tr>
<th></th>
<th>Unit Sales</th>
<th>Software</th>
<th>Subscript.</th>
<th>Consult</th>
<th>Licensing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COGS</strong></td>
<td>Materials &amp; Labor</td>
<td>Labor &amp; Servers</td>
<td>Servers</td>
<td>Labor</td>
<td>In-licensing</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td>Distribution</td>
<td>Distribution</td>
<td>Online / Telesales</td>
<td>Direct</td>
<td>Direct</td>
</tr>
<tr>
<td><strong>Marketing</strong></td>
<td>Advertising</td>
<td>Advertising</td>
<td>Customer Acquisitions</td>
<td>Public Relations</td>
<td>Minimal</td>
</tr>
<tr>
<td><strong>Product Develop.</strong></td>
<td>New Products</td>
<td>Maint &amp; New Prod</td>
<td>Content Development</td>
<td>Limited</td>
<td>Enhanced Products</td>
</tr>
<tr>
<td><strong>G&amp;A</strong></td>
<td>HR</td>
<td>HR</td>
<td>Billing</td>
<td>Low</td>
<td>Legal</td>
</tr>
</tbody>
</table>
### Now it’s your turn...

<table>
<thead>
<tr>
<th>Sales Price / Unit</th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost / Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Margin / Unit</td>
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<table>
<thead>
<tr>
<th>Units Sold</th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
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</thead>
<tbody>
<tr>
<td>Sales</td>
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<table>
<thead>
<tr>
<th>Salaries</th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
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</thead>
<tbody>
<tr>
<td>Facilities</td>
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<tr>
<td>Sales Expenses</td>
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<tr>
<td>Total Expense</td>
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<table>
<thead>
<tr>
<th>Net Profit (Loss)</th>
<th>Period 1</th>
<th>Period 2</th>
<th>Period 3</th>
<th>Period 4</th>
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<tbody>
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<table>
<thead>
<tr>
<th>CASH</th>
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### While you work

#### Questions?
Does your business work?

<table>
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<tr>
<th>Sales Price / Unit</th>
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<th>Period 4</th>
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<tbody>
<tr>
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Net Profit (Loss)

| CASH   |          |          |          |

Customer Discovery Process

Phase 4 - Verify

Phase 3 – Test
Product Concept

Phase 2 – Test
Problem Hypotheses

Phase 1 – State
Hypotheses
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