Business Model Analysis

Professor Glenn A. Okun
NYU Stern School of Business
gokun@stern.nyu.edu
The venture design process

The Venture Design Process

- Formulate a business thesis
- Identify the risk profile
- Understand the required resource set
- Create transactions for acquiring the required resource set
- Assess incremental value provided
- Define the business concept
Business Model Defined

• The business model is the manager’s logic that will allow a venture to:
  – Capture the market opportunity;
  – Mitigate risks;
  – Identify the required resource set; and
  – Create value for investors and founders.
Business Models v. Business Strategy

• The business model bridges idea and action.
• It answers the question of why a venture will be viable and valuable.
• Business models relate to business strategy as logic relates to the algorithm.
Business Models v. Business Plans

• The business model is not burdened with the “how” questions.
• These are resolved by the strategic plan.
Business Model Formation

• Business models are formed through a process of addressing a series of questions:
  – What is the value proposition?
  – What are the target markets?
  – Who are the critical members of the team?
  – Where does competitive advantage exist?
  – Why is there a competitive advantage?
  – When will development, launch and cash flow breakeven occur?
From Business Model to Financial Model

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Market Segmentation</th>
<th>Core Competency</th>
<th>Internal &amp; External Analysis</th>
<th>Pro Forma Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
<td>Price Units Timing</td>
<td>Expenses</td>
<td>Expenses</td>
<td>Capital Budgeting &amp; Cash Flow Assumptions</td>
</tr>
<tr>
<td>Conclusions</td>
<td>Risk (k)</td>
<td>Risk (k)</td>
<td>Risk (k)</td>
<td>Viability &amp; Value (RAROC)</td>
</tr>
</tbody>
</table>
Business Model Analysis

• Facets of analysis
  – Revenues
    • Cash flows and their timing
    • Revenue drivers
  – Expenses
    • Cash flows and their timing
  – Investment required through cash flow breakeven
    • Working capital
  – Maximum financing required and cash flow breakeven timing
  – Sensitivity analysis
    • Key success factors
Revenue Analysis

• Sources
  – Single stream
  – Multiple stream
  – Interdependent
  – Loss leader

• Models
  – Subscription/membership
  – Unit based
  – Advertising
  – Licensing
  – Transaction fee
Expense Analysis

• Cost structures
  – Payroll
    • Direct
    • Indirect
  – Inventory
  – Location
  – Marketing

• Cost drivers
  – Fixed, variable or semi-variable
  – Scale of fixed cost base
  – Anticipated changes to cost drivers
Investment Analysis

- Maximum financing need
- Timing of cash flow breakeven
- Timing to positive cash flow
Success Factor Analysis

• Identify the business factors with the greatest impact on the cash flows
  – An anticipatory business scorecard
Building a Financial Plan

• Sales forecast
  – Two to three years
  – Detailed assumptions
    • Sales per customer
    • Number of customers
    • Sales growth rate

• Cost forecast
  – Costs of operating and costs per sale

• Income statement and balance sheet
  – a/r, a/p

• Cash flow forecast

• Summary statement of sources & uses of cash
Top-down analysis of prospects: quantifying market opportunity

- Prospects
  - Project terminal value year (TVY) market size
  - Project TVY market share
  - Project the firm’s TVY net margin
  - Project the terminal value
    - Comparable transactions
    - Comparable valuations (P/E, P/S)
    - Dividend discount model
  - Discount the terminal value at risk-adjusted ROR to present value
Cash Budgeting

- Minimum cash balance
- Sales forecast
- Cash receipts forecast
- Cash disbursements forecast
- Ending cash balance
Sales forecast

• Three scenario approach (results in three cash budgets)
  – Optimistic
  – Realistic
  – Pessimistic
Cash receipts forecast

- Cash budget must account for delays between sales and collections (including write-offs)
Cash disbursements forecast

- Record disbursements in the month of payment, not when the obligation is incurred
Building a Financial Plan

• Sales forecast
  – Two to three years
  – Detailed assumptions
    • Sales per customer
    • Number of customers
    • Sales growth rate

• Cost forecast
  – Costs of operating and costs per sale

• Income statement and balance sheet
  – a/r, a/p

• Cash flow forecast

• Summary statement of sources & uses of cash
Cash Flow Calculation

- Net income
- + depreciation
- working capital from operations
- - net increase in current assets
- + net increase in current liabilities
- cash flow from operations
- - net increase in gross fixed assets
- + net increase in debt & equity invested
- - dividends paid
- net cash flow
- + beginning cash balance
- - required ending cash balance
- net cash surplus or borrowing required