Product Development: Trading Off Risk and Reward
Risky Business

95% of new businesses fail in the first 5 years

Failure rates for new consumer packaged goods:

1961  45.6%
1971  53.4%
1981  64.5%
1991  80.0%
Why Introduce New Products?
Large Firms

Someone else will
Products under 5 yrs old contribute 30% of profits

Large firms innovate incrementally
Additional resources
Greater risk of cannibalization
Lower risk aversion
Why Introduce New Products?

Start-Ups

Not aware of the risks
Never hear about the failures
Over-estimate own abilities

Positive expected return despite the risks
Large upside
Manage downside
## Test Before You Leap

<table>
<thead>
<tr>
<th>Stage</th>
<th>Ideas</th>
<th>Success Ratio</th>
<th>Cost / Idea</th>
<th>Total Cost</th>
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<tbody>
<tr>
<td>Idea Screening</td>
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<td>1:4</td>
<td>$1,000</td>
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<tr>
<td>Concept Test</td>
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<td>1:2</td>
<td>$20,000</td>
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<td>Product Development</td>
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<td>1:2</td>
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<td>$1,600,000</td>
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<td>National Launch</td>
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Stages in the Process

1. Idea generation
2. Screening
3. Concept testing
4. Product development
5. Market testing

Business plan
Idea Generation: Examples

Channel suggestions: aspirin prevents heart attacks
Foreign markets: Muesli breakfast cereal
Consumers: Lite beer
Basic research: nylon
Competitors: diet colas
Employees: baking soda is a deodorizer
Existing products: personal computers
Idea Screening

Screen impractical and infeasible ideas

Write down your success criteria

Product can be introduced within 5 years
Market potential of at least $50 million
Market has at least a 15% growth rate
Product will yield at least 30% return on sales
Product will yield at least 40% return on investment
Product will achieve technical or market leadership

Separate tasks of sponsoring and evaluating the idea
Concept Testing

Product Concept

Target market

Needs

_Powder to add to milk to increase its nutrition / taste_

An instant breakfast drink for adults who want a quick nutritious breakfast with little preparation

A tasty snack drink for children as a midday refreshment

A health supplement for older adults to drink before retiring
Concept Testing

Begin informally (CD exchange service)

If advertising is important, advertise before the product is available

Do not ignore the results: “just using the wrong copy”
Concept Testing

A powdered product that is added to milk to make an instant breakfast providing all of the required nutrition in a convenient, tasty drink. The product would be offered in chocolate, vanilla and strawberry flavors and would be packaged individually and sold in packs of 6 for 79 cents.

1. Does this product satisfy a need for you?
2. Do other products currently satisfy this need?
3. Is the price reasonable in relation to value?
4. Would you purchase this product?
5. How frequently would you use this product?
Market Testing

Consumer Products
- Simulated Test
- Controlled Test
- Test Market

Industrial Products
- Alpha Test
- Beta Test
- Test Market

Generally optimistic because attention is focused

Under-test: perceived risk of competitive entry
Business Plan
Financial Predictions

Costs are additive

Demand is multiplicative

Estimating demand is even harder when:
  – Multiple needs
  – Needs vary across segments
  – Needs are measured on non-monetary scales
  – Product is very new/different
  – Benefits are hard to evaluate (predict perceptions)
Summary

You need a lot of ideas
Write down your success criteria
Get independent advice to ensure objectivity
The standard is: *overwhelming enthusiasm*
Do not reinterpret or ignore the evidence
Competitors respond to customers’ reactions
Focus on validating your demand forecasts