Eco380: Managerial Economics I

Competitive Strategy

Simon Board

Thursday 2–4, Autumn 2006

Competitive Strategy: Week 1

Introduction and Industry Analysis

Simon Board

Yours Truly

- Education
  - B.A. Caius College, Cambridge.
  - M.Phil. Nuffield College, Oxford.
  - Ph.D. Graduate School of Business, Stanford.
- Research: Auctions, Bargaining and Pricing.
- UTM Office: K112G
- Office hours: Thursday 1.00-2.00 or after lecture.
- Email: sboard@utm.utoronto.ca. I will reply to emails on Monday afternoons.

This Course

- This course will
  - Identify determinants of competitive advantage.
  - Develop strategies to take advantage of these opportunities.
  - Build toolkit of methods to evaluate different strategies.
- At the end of the course, students should be able to
  - Recognise major strategic problems.
  - Understand what elements of the environment are crucial.
  - Suggest how participants may change the game.

Course Evaluation

- Components of grade
  - Background quiz: 5%.
  - Class participation: 5%.
  - Two midterms: 25% each.
  - Final: 40 %.
- Grade given by

$$5\% \times \text{quiz} + 5\% \times \text{participation} + 25\% \times \max\{\text{mid1, final}\}$$
$$+ 25\% \times \max\{\text{mid2, final}\} + 40\% \times \text{final}$$

- There will also be
  - Three problem sets (not graded).
  - Weekly assignments (class discussion).
- Exams open book.

Assumed Knowledge

- Economic concepts:
  - Basics: perfect competition, monopoly pricing.
  - Industrial organisation: Bertrand competition, Cournot competition, Stackelberg competition (i.e. leader–follower).
  - Game theory: Nash equilibrium, backwards induction.
- Mathematical concepts:
  - Optimisation: constrained and unconstrained.
  - Basic statistics: mean, variance, distribution functions.

Books

- Competitive Solutions by McAfee
  - Paperback US$25 from Amazon.com. 24 hour availability.
- Co-Opetition by Brandenburger and Nalebuff
  - Paperback CA$20 from Amazon.ca. 24 hour availability.
- Introduction to Industrial Organisation by Cabral.
  - Hardback US$45 from Amazon.com. 24 hour availability.

Cooperation vs. Competition

- Value of industry = Buyer value – Supplier cost.
- This pie is shared between the firm, customers, suppliers and other firms.
- Business is cooperation
  - Cooperate with other parties to make pie as big as possible.
- Business is competition
  - Compete over share of the pie.
- Business is *both* cooperation and competition at the same time.

The Value Net

- Components: [see picture]
  - Our Firm
  - Customers
  - Suppliers
  - Competitors
  - Complimentors
- Interactions create and divide the pie.
- Notice symmetry:
  - Increase pie by increasing buyers' values of reducing suppliers' costs.
  - Tradeoff: The customer is *not* always right.
  - Example: Should staff give up holidays to serve customer?

Industry Analysis

- Identify factors determining industry profitability.
- Foundation for strategic analysis.
- Context for formulation of strategy.
- Analysis depends on market definition.
- Links between products A and B depend on links between value nets.
  - Products compliments/substitutes
  - A firm is in both markets
  - Contracts span markets (e.g. products are bundled).

Porter's "Five" Forces

1. Substitutes
2. Buyer bargaining power
3. Supplier bargaining power
4. Rivalry
5. New entrants
6. Compliments

Substitutes

- Two types of substitutes:

1. Goods outside the market being considered.
   - Limit the valuations of buyer.
   - Can be very broad: more leisure time is substitute for a car.
   - Strategic interactions not directly considered.
2. Goods inside the market being considered.
   - Affects how our firm interacts with competitors.
   - Depends on product differentiation.

- Product is often blind–sided by substitute outside immediate market (especially with new technology)
  - IBM and Microsoft/Intel
  - Microsoft and Internet.

Buyer/Supplier Bargaining Power

- Consider relationship between firm and supplier.
  - More on bargaining in week 13.
- How big is pie?
  - Potential pie = value of relationship.
  - Ex–post costs of negotiation: lawyers fees, delay, strikes.
  - Ex–ante costs of negotiation: underinvestment in relationship, cultivation of outside options.
- How is pie split?
  - Long side vs. short side of market
  - Power to commit to one stance
  - Perceptions, perceptions of perceptions, perceptions of perceptions of perceptions,...

Rivalry

- Factors that reduce rivalry:
  - Concentration
  - Industry leadership
  - High and increasing marginal costs
  - Large minimum efficient scale
  - Product differentiation and switching costs
  - Low exit barriers

Rivalry: Industry Structures

- Fragmented (e.g. dry-cleaners)
  - Little strategy unless market changes (e.g. home depot).
- Dominant firm (e.g. Microsoft)
  - Biggest danger: entrants with new technology.
- Tight oligopoly (e.g. Coke and Pepsi)
  - Much scope for cooperation and competition.
- Loose oligopoly (e.g. car firms)
  - Strategy to maximise value added.
- What determines structure?
  - Cost structure, transactions costs, regulation.

New Entrants

- More on this in week 6.
- When should you fight entry?
- When preemptively block entry?
- Some barriers to entry:
  - Government (USPS, Taxis, Patents)
  - Large MES (Intel, Boeing)
  - Product uniqueness e.g. loyalty, switching costs (Banking)
  - Network Externality (Microsoft)
  - Reputation (Nutrasweet)
  - No room for entry (Cereals)

Complimentors

- Complimentors make the pie bigger.
- Petrol, cars and roads
  - Michelin makes maps and tour guides
  - In 1913 General Motors built "seedling miles" or road
  - In 1919 General Motors created financing arm
- Video recorder and movies
  - Sony Betamax had few rentals
- Mall economics
  - Toys R Us and McDonalds
- Operating systems, software and hardware

Selling Books: Amazon

1. Substitutes:
2. Buyers:
   - Bargaining power:
3. Suppliers:
   - Bargaining power:
4. Rivals:
   - Rivalry:
5. Entrants:
6. Compliments:

Ice Cream: Haagan Dazs

1. Substitutes:
2. Buyers:
   - Bargaining power:
3. Suppliers:
   - Bargaining power:
4. Rivals:
   - Rivalry:
5. Entrants:
6. Compliments:

Market Definition

- How define market for Vespa?
  - Scooters? Motorbikes? Cars? Public Transport?
- Case Study: Epson
  - Epson dominated low–end dot–matrix printers.
  - HP dominated the Inkjet and high–end laser printer market.
  - Epson is in the wrong market → launched competitive laser printer in 1989.
  - Price War!
  - Laser printer prices ↓. Inkjet prices ↓. And dot–matrix market...?
- Lesson: There always a bigger market.

Coherent Strategies

- Porter (1996). Strategy is:
  - Creating unique and valuable position.
  - Making trade-offs. Choosing what *not* to do.
  - Creating fit among activities, doing many things well.
- Systems of activities:
  - Choices compliment each other.
  - Hard to imitate: can't copy piecemeal.
  - Increases value added.
  - Danger: in desire to grow firms can forget what makes them unique.
- Potential Counter Example: Budweiser B^E.

Case Study: Toyota

- In 1950s, Toyota was small Japanese car firm.
  - Little capital, no scale economies.
  - Couldn't mimic American mass production.
- Just-in-time manufacturing
  - Inventories act as buffer, but subject to large economies of scale.
  - Toyota reduced inventories via close coordination.
- Reliability of process
  - Without buffer of inventories, engineers worked on reliability of every step of production line.
- Fewer flaws in product
  - Problems noticed immediately, rather than sitting in inventories.

Toyota cont.

- Suppliers
  - Little scale, so can't produce in–house.
  - Communicate on day–to day basis.
  - Long term relationships.
- Skilled workers trained to fix own machines.
  - In US, this was specialised job.
- Flexible machines, due to lack of scale.
  - Leader in use of robots.
- Frequent redesigns possible
  - Because of flexibility of production line.
- Strategies are complements.

Modern Manufacturing

	Mass Production	Modern Manufacturing
Varieties	Small	Large
Machines	Specialised	Flexible
Workers	Specialised	Multiple tasks
Inventories	Large	Just-in-time
Authority	Centralised	Decentralised
Communications	Infrequent, top-down	Fast, bidirectional

Assignment

- Read: "The Future of Fast Fashion", Economist, 18th June 2005.
- What market is Zara targeting?
- What differentiates Zara's products from its competitors?
- What is special about Zara's production process?
- Is Zara's strategy coherent?
- We will discuss this case next week!