Competition in the Paper Industry

Intensity of rivalry is high, due to:

- Low Industry Growth
- High Fixed Costs
- Brand Identity
- Low Concentration
Growth in the Paper Industry

- Low – predicted revenue growth by 2013 less than 2%
- Since 2004, average annual revenue growth has been 1.14%, w/ negative growth past 2 years
- Predicted 4% annual decrease in employment

Growth in the Paper Industry

High Fixed Costs

- Very much an industrial process
- A variety of large fixed costs
- “Today, new paper machines are nearly 40 feet wide, hundreds of feet long, and over two stories high.”
- Up to $1.5 billion dollars
- Creates exit barriers

http://www.cpbis.gatech.edu/resources/industryfacts/today.htm
Brand Identity

- Many paper consumers (printers, publishers, newspapers, etc) rely on single firm
- Easier to manage, established relationship
- Constant access to materials, supply, inventory
- Possibility of ongoing reorders makes each customer important

Low Industry Concentration

- International Paper Company 13.2%
- Domtar Corporation 9.8%
- AbitibiBowater Inc 7.8%
- NewPage Corporation 5.7%
- Other 63.5%
- Top 4 companies control 36.5% of market share
- 'Others' have 1 – 4%
- Mergers and acquisitions (Domtar purchased Weyerhauser in '07)

Major Inputs Required

- **Fibrous Material**
  - Pulpwood, Recovered Fiber, Recycled Fiber

- **Chemicals**
  - Required for multiple stages of production

- **Labor**
  - Major factor historically
  - Decline in labor intensity currently

- **Energy**
  - Highly energy intensive industry
Fiber Source

- **Major Cost Implications**
  - Most fundamental component of paper
  - Largest expense for paper companies

- **Threat of Forward Integration low**
  - Larger firms already vertically integrated

(Source: IBIS World)
Fiber Cont.

- **Limited Presence of Substitutes**
  - Eucalyptus pulp emerging as viable option
    - Eucalyptus pulp made up about 53% of the hardwood pulp market in 2007, compared with just 29% in 1980
  - Recycled fiber
    - 7% of recycled paper is used to produce printing and writing papers

- **Switching Costs**
  - Minimal facility configuration costs
  - Major costs associated with transportation

(Source: S & P’s Industry Survey)
Energy Supply

- **Major Impact on Cost**
  - Paper Industry requires massive supply of energy
    - Historically represents 10% of production expense
    - Currently it can exceed 15%

- **Presence of Substitutes**
  - Internal waste streams
  - Biomass residuals from external source

- **Possibility of Backward Integration**
  - Internal energy production and distribution
Supply of Chemicals

- No Availability of Substitutes
  - Required in paper-making process

- Impact on Production Cost
  - Cost of chemicals on the rise
    - In 2008, The Dow Chemical Co. announced that it would raise prices on all of its products by 20%

- Minimal Threat of Forward/Backward Integration
  - Chemical Industry requires experience curve
  - Paper industry most capital intensive sector in manufacturing

(Source: S & P’s Industry Survey)
Bargaining Power of Suppliers

Conclusion

- The high cost and reliance on necessary inputs provides a challenge to the paper industry
  - Provides leverage and bargaining power to suppliers
  - Threatens industry profitability

- Companies must position themselves in order to negate this force
Rise of on-demand printing

- Increase in personal printing
- Printing of on-line journals or articles
- Hand outs
- Increase in cut-size demand
Buyer’s demand

- Uncoated Free sheet
  - 2007 shipments 11,665 million tons (down 4.4% 2006)
  - Imports 543 million tons
  - Demand 11,757 million tons (down 5.5% 2006)

- Total Printing and Writing Papers
  - 2007 shipments 27,379 million tons (down 0.8% 2006)
  - Imports 3,298 million tons
  - Demand 29,457 million tons (down 3.0% 2006)
Consumer shift

- Other Countries are looking to places like Latin America and Southeast Asia for products
- the US shifting to an importing country.
Uncoated free sheet prices continue to rise

- after the $60/ton price hike initiatives announced for March are all in place.

- Business Papers, (copy papers) prices rose $50/ton in March and another $10/tons in April. Offset roll prices rose $30/ton in March and another $20 in April. At the same time, demand appears to be easing.
Barriers to Entry

- Economies of scale
  - Purchasing
  - Managerial
  - Financial
  - Marketing
Barriers to Entry

- Brand Identity
- Switching Costs
- Capital Requirements
- Distribution
- Government Regulations
Substitutes

- Determinants of Substitution Threat
  - Relative Price Performance of Substitutes
  - Switching Costs