

Information Technology & Competitive Strategy

Brian L. Dos Santos
University of Louisville

Agenda

- IT & competition
- Porter's Five Forces Model
- Competitive Strategies
- Role of IT in competitive strategy

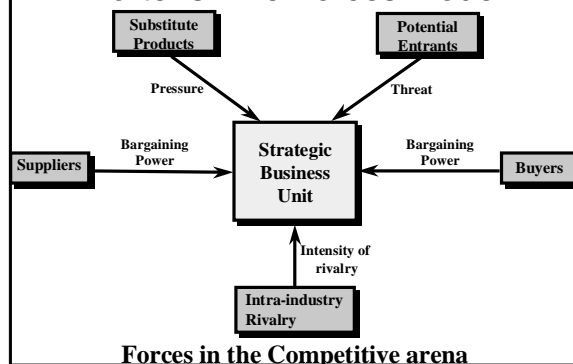
Introduction

- Information Technology Strategy & its potential impact on Competition
- Understand the best known framework to analyze competition and its use in determining IT strategy.

IT and Competition

- What is a competitive advantage (CA)?
 - allows a firm to perform better than the average
- How does a firm gain a CA?
 - possesses something special that enables better performance
 - what are the characteristics that enable a firm to gain a CA?
- How can one identify firms that have a competitive advantage?

Porter's Five Forces Model



IT and Industry Competition

- How can IT affect industry competition?
 - by building in barriers to entry
 - by building in switching costs for consumers
 - by changing the basis of power in supplier relationships
 - by changing the basis of competition
 - by enabling the generation of new products

Threat of New Entrants

- Reactions of incumbents to entry increase with
 - specific assets
 - economies of scale (EOS)
 - excess capacity
- Entry payoffs or incumbent advantage
 - pre-commitment contracts, licenses and patents
 - learning curve effects
 - pioneering brand advantages

Threat of New Entrants

- Potential role of IT
 - use IT to change basis of competition and obtain pre-commitment contracts
 - take advantage of learning curve effects by being the innovator
 - help create a pioneer brand image

Supplier Power

- Suppliers are powerful if
- When suppliers are powerful, they will siphon away any excess profits that the firm may be able to obtain

Supplier Power

- Potential role of IT in reducing supplier power; reducing dependence on a supplier, by
 - making it less expensive to deal with multiple suppliers (e.g., EDI with suppliers)
 - making it easier to change suppliers
 - making is easier to use substitute products

Buyer Power

- Buyers are powerful when
- When buyers are powerful, they can make demands that will siphon off any excess profits that the firm may be able to obtain

Buyer Power

- Potential role of IT in reducing buyer power; reducing dependence on a supplier, by
 - making it difficult for buyers to switch to a competitor
 - making is more difficult to use substitute products

Competitive Strategies

- Low cost
 - compete on the basis of price
 - e.g., Packard Bell computers
- Differentiation
 - Try to differentiate your product
 - e.g., Coca Cola, IBM's PC products

Competitive Strategies

- Cost basis
- Differentiation bases
 - product (quality, features, brand name, etc.)
 - price (discounts, payment periods, credit terms)
 - place (locations, inventory, transport, coverage)
 - promotion (advertising, publicity, personal selling)

Potential Role of IT

- Cost strategy
 - enable your firm to be the low cost producer
- Differentiation Strategy
 - facilitate differentiation
 - of products
 - by price
 - by place
 - by promotion

Competitive Strategies

- Low cost
 - compete on the basis of price
 - e.g., Packard Bell computers
- Differentiation
 - Try to differentiate your product
 - e.g., Coca Cola, IBM's PC products

Competitive Strategies

- Cost basis
- Differentiation bases
 - product (quality, features, brand name, etc.)
 - price (discounts, payment periods, credit terms)
 - place (locations, inventory, transport, coverage)
 - promotion (advertising, publicity, personal selling)

Potential Role of IT

- Cost strategy
 - enable your firm to be the low cost producer
- Differentiation Strategy
 - facilitate differentiation
 - of products
 - by price
 - by place
 - by promotion

IT and Industry Competition

- How can IT affect industry competition
 - reduce the threat of new entrants
 - decrease customer power
 - decrease supplier power
 - reduce the threat of substitute products
 - reduce industry competition

The Impact of Timing

- First-mover advantages
 - experience with technology -- learning
 - free publicity
 - locking in customers & forming alliances
- Second-mover advantages
 - better information on value
 - lower costs
 - first-mover is locked into obsolete technology

The Impact of Timing

- Sustainable advantage
 - large learning curve effects
 - able to build relationships that are difficult for other parties to break
 - leverage the firm's existing characteristics & advantages
- Contestable advantage

Summary

- IT and competitive strategy
- Can be used in many different ways, for example
 - to evaluate potential impact of new applications
 - to determine whether one should lead or follow