Part II: Supply Chain Operations in eCommerce
Chapter 6: Auctions and Pricing in Electronic Marketplaces

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Abstract:
In recent years, we have witnessed an increased adoption of existing sophisticated pricing strategies, such as bundling, nonlinear pricing, auctions and dynamic pricing, and their further development. This is mainly due to the growth of electronic commerce (e-commerce), which provides sellers with the ability to dynamically change or discover prices quickly and inexpensively. Types of pricing policies/methods used in the exchange of goods and services varies greatly, ranging from fixed posted prices and price discrimination to auctions. This chapter will serve two purposed: (1) A literature review of the current research in each of these pricing mechanisms (2) A survey of the current pricing practices of companies on the internet. We will cover some of the issues that arise when implementing these pricing practices on the internet, and discuss future opportunities for pricing policies over the internet, in particular tying pricing practices to the operations management of companies.

1) Introduction
- different forms of pricing policies
- pricing as a strategic tool in supply chain operations
- opportunities for employing for complex pricing policies as a result of the internet, and challenges therein

2) Auctions
- Environments in which appropriate
- Ownership Structures
  - Private marketplaces
  - 3rd party neutral
- Types of Auctions
  - Direct (e.g. ebay style)
  - Reverse (e.g. priceline style)
  - Two-sided (e.g. enron’s broadband auction)
- Design Issues
  - Sequencing (simultaneous or sequential, ordering of sequential auctions, ascending or sealed-bid)
  - Price Determination (e.g., 1st or 2nd price, uniform or discriminatory)
  - Bundling of Products
- Performance of auctions over the internet
  - Which forms are most commonly used
  - Challenges encountered in using over the internet

3) 1st degree Price Discrimination
- Definition and form
- Conditions necessary for practice of 1st degree PD
- Pricing practices and challenges of companies utilizing 1st degree PD

4) 2nd degree PD
- Various Forms of 2nd degree PD
  - Markdowns and Promotional Pricing
  - Group Buying
- Nonlinear pricing
  - quantity discounts
  - quality differentiation
  - Time of use pricing
  - Bundling and Packaging
  - Dynamic pricing
    - Based on Inventory
    - Based on changing demand conditions (e.g. demand revelation, product life cycle)
- Pricing practices and challenges of companies utilizing 2\textsuperscript{nd} degree PD

5) 3rd degree PD
- Various forms and conditions necessary for practice of 3\textsuperscript{rd} degree PD
  - channel discrimination (pricing on internet vs. brick & mortar stores)
  - discrimination based on customer type (e.g., institutional vs. private buyer or size of company)
- Pricing practices and challenges of companies utilizing 3\textsuperscript{rd} degree PD