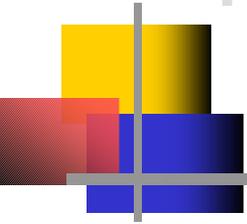
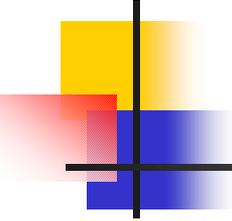


Market Structure and
Innovation: A Brief Synopsis
For the FTC, 2/20/02



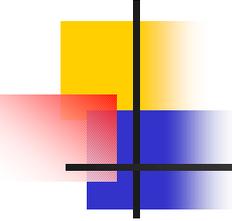
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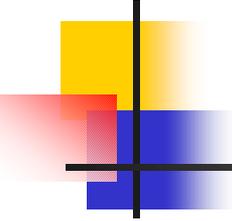
Overview

- A brief synopsis of the literature
 - Market structure and innovative behavior
 - Broad lessons for policy from academic discussion
- Main message
 - Competitive behavior by dominant firms in innovative markets
 - Concerns about non-innovative tactics that are not in buyer's interest



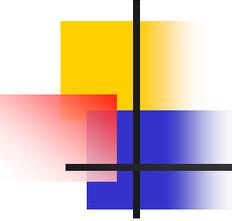
Motivation

- Central Question
 - Special scrutiny for large firms in innovative markets?
 - Important b/c tech change → economic growth
- Difficult question in high tech markets b/c of uncertainties
 - Tactical behavior for potentially ephemeral market structure
 - Policy seeks robust commercial experimentation



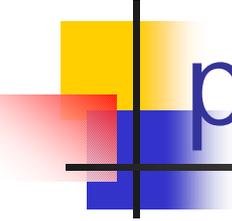
Traditional approach

- Concern that monopolies don't innovate
 - Cannibalization of rents
- Contrasting view that monopolies use innovation to preserve their position
 - Monopoly has more to lose than entrant has to gain
- Real contrast or "semantic" difference?
 - "Protected" or "Threatened" monopolist
 - "Threatened" similar to "competitive."
- Insights awkward to put into practical policy
 - Monopolies should not be protected from innovation



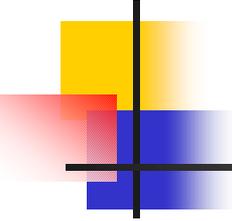
Recent thinking

- Reframing the central question
- The setting for technology markets
 - Widely distributed technical knowledge
 - Assets held by incumbent firms raise value of invention
 - Entrants either compete or contract
- Policy issues arise when assets are valuable
 - Entrants commercialize inventions by cooperating with incumbent or competing against them



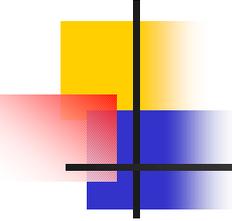
Effectiveness of intellectual property shapes outcomes

- When entrants can exclude imitation
 - Licensing common, JVs common
 - Markets for technology arise
- When entrants can't exclude imitation
 - Bargaining influences incentives/behavior
- Wide range of behavior shape innovation
 - Reputation/commitment to deal process
 - Offering information as carrot/stick for cooperative behavior



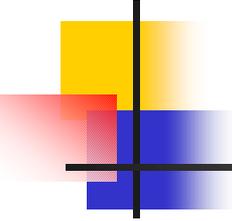
Implications for policy

- Recent thinking focusing on both structure and conduct
 - Intellectual property can contribute to use of markets
 - However, where intellectual property is weak...
- Special scrutiny for incumbents? Yes, but...
 - Not fully worked out
- A modest test
 - Presence of market power?
 - Non-innovative tactics shape innovative behavior?
 - Tactics in user interest?



Example: First screen restrictions w/OEMs

- Market power test?
 - Absence of alternatives
- Non-innovative tactics?
 - Diminish innovation at other firms
 - Also protects Microsoft
- User gain?
 - Encumbered choice w/ no apparent gain
- Conclude: A non-innovative tactics to move behavior away from innovative competition
 - Scope of the principal?



Main message reiterated

- Public policy can discourage use of non-innovative tactics
 - Question arises often in IT markets
 - Recent thinking examines both structure and conduct
- Policy works through two mechanisms
 - Shape entry and bargaining
- Policy can discouraging powerful firms from using non-innovative tactics
 - Getting closer to innovative competition