Microsoft Anti-Trust

Network Effects

Internet Applications

Monopoly Power

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Network Effects

- Network Effects (or Network Externalities)
- Definition: **It exists when the benefit a consumer gets from owning a product increases as the number of other consumers of the products increase.**
- There are two kinds of network externalities**:**
- **Direct** and **Indirect** network externalities

Direct Network Effects

- Definition: Direct Network Externalities increase as the size of a network of users increase in which the users of the product can communicate with each other.
- Examples: **fax machines, email, telephones, and AIM program.**

Direct Network Effect Example

- Fax machine
- It is direct because **the value of a fax machine** increases as the number of others who use the machine increases.
- As the size of a network expands, there are more people whom **one can communicate with the fax machine**.

Indirect Network Effects

- Definition: Indirect Network Externalities exist when as the number of consumers of a particular good cause firms to produce **complementary goods** that increases the value of the initial product.
- Examples: Operating system software (such as Windows), ATM network, DVD players, palm pilots and electric vehicles.

Indirect Network Effect Example 1

- ATM network
- It is indirect because users of ATM network does not communicate with each other,
- **But as the network expands, there are more ATM machines and facilities that one can use.**
- Hence the greater is the value of the network to any user.

Indirect Network Effect Example 2

- Operating system (such as MS Windows, Mac)
- Direct Network Effects: more efficient file transfers from users to users
- **Indirect Network Effects: As the number of the users grows, there are more applications software develop such as MS Office, Window Media Player and so on.**

One of indirect network externality example

- Microsoft VS U.S.

---What is Microsoft anti trust case and how it relate with network externalities

Time line of Microsoft case

- September 1997: Microsoft releases internet explorer 4.0
- October 27, 1997: JD files suit demanding a $1million a day fine against Microsoft.
- May 18, 1998: the JD and 20 state attorneys general file an antitrust suit against Microsoft.
- November 5, 1999: Judge Jackson issues initial findings of fact.

Time line of Microsoft case

- April 3, 2000: Judge Jackson rules that Microsoft violated antitrust laws.
- November 2001: The DOJ reached an agreement with Microsoft to settle the case
- November 1, 2002: Judge Kollar-Kotelly released a judgment accepting most of the proposed DOJ settlement.
- June 30, 2004 : the U.S. appeals court unanimously approved the settlement with the Justice Department, rejecting objections from Massachusetts that the sanctions were inadequate :
- November 2007:Microsoft's obligations under the settlement, as originally drafted, expired on November.

United States VS Microsoft antitrust case

- How it started?

--The government had charged Microsoft with a range of abuses, including the alleged monopolization of the market for operating system (OS)

Case Issues

- Microsoft has a monopoly in the PC market
- Microsoft used its monopoly power in the PC operating system market
- Various Microsoft contracts had anti-competitive implication
- Microsoft actions harmed consumers

Microsoft Defense

- IE is just a feature of Windows
- IE is a innovation of software
- No monopoly power in OS market
- Consumers gets all the benefit

Government arguments

- Microsoft used their monopoly power in the OS market
- It harms Netscape
- IE at zero price reveals that Microsoft was not motivated
- There is actually no benefit for consumers.

Why would the success of Netscape in the browser market present a challenge to Microsoft's dominance in the OS market?

- The OS market is characterized by the presence of network effects
- The presence of network effects makes it difficult to displace a dominant firm.
- The rapid growth of the internet has led software firms developed.
- Netscape's software had the potential to become an alternative platform to windows.

What are the incentives for Microsoft to sell IE at a zero price?

- Portals are very valuable
- A portal site is web site where users enter the web
- The portal brings consumers to the service providers
- Higher overall revenues

The economic question is whether Microsoft's integration made Navigator unreasonably difficult to use?

- Literally, integration does not preclude Netscape from being used windows
- No loss of market share for Netscape
- Hence, integration on its own seems ok

Has Microsoft behaved in an uncompetitive way?

- Hard to distinguish predatory behavior
- Brings some much disagreement between economists
- In the short run
- In the long run

What about Consumers?

- Harmed 3 ways by anti-competitive actions:
  1. Prices increase
  2. Quality and Variety limited
  3. Innovation limited
- But…

Consumers, continued

- IE free, charge for Netscape
- Windows priced lower than monopoly price
- 22% of computers had Netscape in 1998
- Markets with network effects become "winner-take-all" – is this Microsoft's fault?
- Inequality can be the equilibrium
- Should market be made "competitive"?
  - Who benefits?

Outcome

- Most states settle in 2001
- Installers can use other software
- No retaliation
- Uniform Windows pricing
- No exclusive agreements/contract restrictions

- Browser market today?

References

- Economides, N. (2001). “The Microsoft antitrust case”, Journal of Industry, Competition and Trade, vol. 1, pp. 7–39.