# Well-Functioning P2P Software Product Markets

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#### **Related Work**

- A. Chin, Antitrust Analysis in Software Product Markets, 18 Harv. J.L. & Tech. 1 (2004)
- A. Chin, Decoding Microsoft,
   39 Wake Forest L. Rev. \_\_\_ (2005)





## What is a software product?

A software product consists of "code and nothing else."

- Microsoft

Would Microsoft have taken the same litigation position in a copyright infringement suit?



## What is a software product?

- Legal rights (and/or immunities)
   derived from the vendor's copyright in
   the accompanying software
  - Limited to contemplated end uses
- Technological capabilities (i.e., services) supported by the accompanying software
  - Ability to install and run
  - For contemplated end uses
  - According to the accompanying documentation



### **Use Case**

**End Use: Get cash from ATM** 

**User Action** 

**System Response** 

insert card

read magnetic stripe

request PIN

enter PIN

verify PIN

display menu

press key

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#### **Essential Use Case**

**End Use: Get cash from ATM** 

User Intention

System Responsibility

identify self

verify identity
offer choices

choose

dispense cash
take cash



# Well-Functioning Software Product Markets

- Every software developer is free to choose the code that is to be executed when a user chooses its software product for a particular essential end use.
- Design choices are made by the software developer, not by courts or monopolists.
  - No: Napster/Grokster distinction, IE overriding default browser



#### **Price Discrimination Markets**

- A relevant product market can be defined around a captive end use segment
- Cellophane? Probably not.
   Arbitrage defeats price discrimination
- Software? Possibly. DRM can prevent arbitrage



# **Quality-Adjusted Price Discrimination Markets**

An end use segment is captive if a hypothetical monopolist could discriminate against it by reducing quality with respect to that end use alone.



# **P2P File Sharing**

#### Two end uses

- Download file
- Upload file
   Neither can be captive
- : One market

#### **Antitrust concerns**

- Overriding of user choice
- Judicial software design

