# Information Economy 37E00100

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## Summary of Esko's previous lecture: Core Concepts

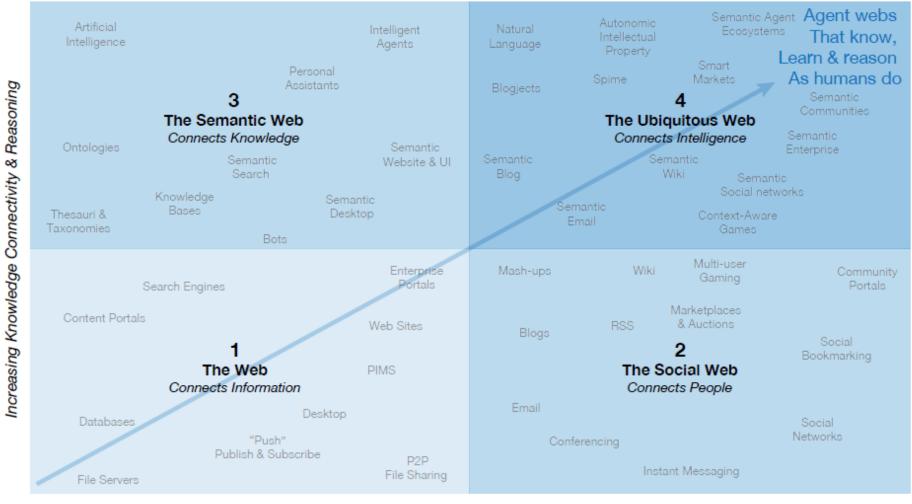
- Platform-mediated networks
- Network effects
- One- and Two-sided networks
- Switching costs and homing costs
- Mono-homing and multi-homing
- "Winner takes all"-dynamics

## Article of the day

Cusumano, M.A., Yoffie, D.B. & Gower, A. (2020), "The Future of Platforms", MIT Sloan Management Review

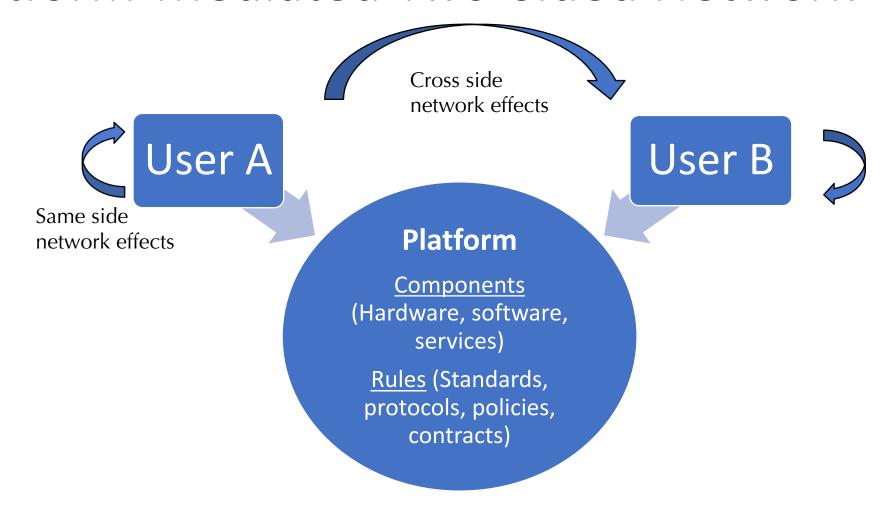
- What did you like about the paper? Dislikes?
- New insights from the article?
- What not clear?
- What would you like to learn more about?

## WWW development



Increasing Social Connectivity

#### Platform-Mediated Two-Sided Network



## Examples of Two-Sided Networks

- Credit cards (merchants, consumers, platform e.g. VISA)
- Internet auctions (buyers, sellers, platform e.g. eBay)
- Physical retail (buyers, sellers, platform e.g. shopping center)
- Match-making (men, women, platform e.g. nightclub)
- Travel services (travellers, airlines/hotels/car rentals, platform e.g. travel agencies)

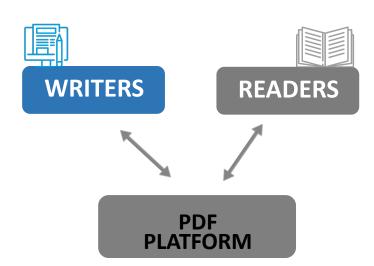
#### Strategies for Network Mobilization

- Subsidizing and product giveaways
  - Should one side be subsidized?
- Marquee strategy
  - Focus on onboarding key users on either side
  - Should platform providers seek exclusive relationships with some users?
- Seeding strategy and staged strategy
  - Aim to create immediate value to one side of the platform, others will follow
- Platform envelopment
  - Leverage power from another platform

#### When does free make sense?

- People understand the razors & blades strategy (same as printers & ink)
  - Give away one thing, charge for another
  - The SAME person gets both items
- People often misunderstand 2-sided network pricing
  - Subsidize one party in order to attract, then charge another party
  - Subsidy side and money side of the market are different parties
- Monetization is trickier for 2-sided networks
  - Charging the wrong side (or both) reduces growth and network effects







## Subsidizing consumers vs. developers

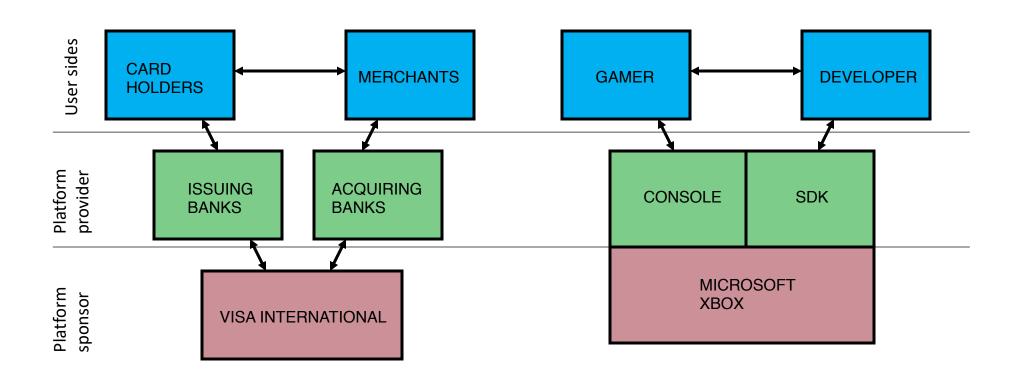
- Subsidize consumer side when
  - Highly price sensitive
    - Acrobat Reader, streaming audio, streaming video
  - Presence is the main requirement
    - Ad markets, credit cards, auctions, search engines
- Subsidize developer side when
  - Critical for adding value
    - Applications development, operating systems, computer games
  - Stronger persuader or gatekeeper
    - Trend setters, textbooks

## Platform Roles: Sponsors and Providers

- Providers are users' primary point of contact with platform
- Sponsors do not deal directly with users; rather, sponsors hold property rights that determine:
  - Who may change platform technology
  - Who may participate in network as a platform provider or network user

VISA =
JOINTLY SPONSORED
SHARED PLATFORM

XBOX = SOLE SPONSORED PROPRIETARY PLATFORM



## Different ways to categorize platforms

- Principal activity:
  - Innovation platforms, transaction platforms, hybrids (Cusumano et al. 2020)
- Structure/ownership:
  - Proprietary, shared, joint venture, licensor
- Function:
  - Connectivity, variety, matching, price setting
- Type:
  - Exchange, advertiser-supported media, software platform, transaction device (Evans & Schmalensee 2008)

#### Categorization Based on Platform Function

- Connectivity: platform facilitates point-to-point exchange of information, physical goods, or passengers (e.g., e-invoicing)
  - More points connected  $\Rightarrow$  more valuable network  $\Rightarrow$  more points  $\Rightarrow$  etc.
- Variety: platform elicits supply of a variety of complements from one network side and promotes complement consumption by the other side (e.g., console + games)
  - More complements  $\Rightarrow$  more demand-side users  $\Rightarrow$  more complements  $\Rightarrow$  etc.
- Matching network: platform matches transaction partners with heterogeneous needs and offers (e.g., online real estate platforms)
  - More buyers  $\Rightarrow$  more sellers  $\Rightarrow$  improved odds of suitable transaction  $\Rightarrow$  more buyers  $\Rightarrow$  etc.
- Price-setting network: platform facilitates exchange of well-defined items valued differently by trading partners (e.g., stock exchange)
  - More buyers  $\Rightarrow$  more sellers  $\Rightarrow$  reduced price volatility  $\Rightarrow$  more buyers  $\Rightarrow$  etc.

#### Key Challenges in Network Mobilization

#### Connectivity

- •Ensure *reliability*
- •Optimize *reach* (infrastructure investment to extend network vs. incremental revenue)

#### **Price Setting**

- Balance users' different needs for:
  - -Anonymity
  - Transparency with respect to most recent price and best current offer
  - -Transaction speed
  - -Flexibility to trade with preferred partners

#### Variety

- •Optimize *price structure, exclusivity*
- Elicit complement supply despite:
  - -Risky platform-specific investments
  - -Conflict with large users over rent division, end user relationship control
  - Concerns about platform provider integration into user role
- •Help end users find complements

#### Matching

- •Optimize *price structure, exclusivity*
- •Build user trust
- Address worries about business stealing
- •Manage concerns about conflicts of interest, ownership of data, etc.
- Avoid disintermediation, off-exchange trading

## QUESTIONS?

Slides and video recording on MyCourses

Cusumano, M.A., Yoffie, D.B. & Gower, A. (2020), "The Future of Platforms", MIT Sloan Management Review





