Platform economics

Tutorial 3 : Platform Competition

Michelangelo Rossi, Luca Rossi, Martin Delville
martin.delville@telecom-paris.fr

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- Horizontal Differentiation ?
- Meaning in this context ?
- Outcome without horizontal differentiation

- Horizontal Differentiation ?
  - No quality difference by opposition to Vertical differentiation. Only self preferences, for equal prices and network benefits (utility)
- Meaning in this context ?
  - Depending on individual characteristics, an individual may prefer a given platform everything else being equal. Ex : If you are 14 you may prefer Tik Tok, if you are 20 Instagram, if you are 30 Facebook etc ...
- Outcome without horizontal differentiation
  - Without horizontal differentiation : winner takes all dynamic. Why would someone go to a different platform than the biggest ? (Horizontal differentiation mitigates network effects)

Final equilibrium membership fee :

$$A_i = c_i + t_i - \alpha_j \tag{1}$$

- Monopoly case ?
  - In previous tutorial : the side of the market that exerts the stronger indirect network effect on the other side tends to be subsidized. In the equation, nothing really different than monopoly case. Same asymmetric pricing principle
- One sided standard **Hotelling model**
  - One sided Hotelling model ? In this framework, no network effect brought by other side $\Leftrightarrow$ weaker network effects. Because decreased network effects, prices should increase (cf Tutorial 1 : link between network effects and prices)

- Competitive bottleneck occurs when one side of the market has a clear preference or is locked into using a single platform (singlehoming), creating a bottleneck for the other side that seeks to interact with it (reasons : switching costs e.g.).
- The side that multihomes faces lower switching costs and can easily move between platforms to find the best match or offer
- Prioritizing the Singlehoming Side, for multihoming side : need to compete on price, convenience, and the breadth or quality of interactions possible with Side A.
- Differentiate pricing : single homing side pays the lowest fee
- Platforms may seek to carve out unique value propositions that appeal to specific segments of either side of the market, circumventing the bottleneck by creating new market spaces or serving underserved needs within the existing market

Ways to produce incentives to singlehome ?

- Ways to do so : Exclusive contracts, Reward programs, Reputation systems
- Examples : Exclusive contracts with superstars. Exclusivity $\Leftarrow$ more consumers on the favored platform $\Leftarrow$ more firms join the favored platform only. Competition intensity $\Leftarrow$ more consumers grouped $\Leftarrow$ More surplus extracted. Superstar allows consumers and firms aggregation.

- Private local transportation services (e.g. Uber) ?
  - One side for users, one side for drivers.
  - Usually users multihome while drivers singlehome
  - Concentration propension : positive cross group effects
- Messenger services (e.g. Whatsapp) ?
  - One side for users
  - Users multihome
  - Coexistence of platforms : taste for variety and multihoming.

cf slide 5

- Traditional businesses : cost oriented regulation. For collusion or abuse of dominant position cases : prices over marginal cost.
- Platforms : cost is not a relevant benchmark, because of multiple sides and differential pricing. Efficiency may require skewed prices.

cf slide 8

Drawbacks of big platforms (example of Google search, X, Amazon) :

- Congestion ?
- Switching costs ?
- Reduced Privacy ?
- Bundle promotion ?
- Innovation incentives ?
- Information flow regulation ?

- Digital payment system market :
  - Sunk costs (depending on infrastructure and payment terminal needs)
  - Missing installed base
  - Network effects/switching costs
- Fitness tracking apps :
  - Missing installed base

- Car navigation application
  - Data produces positive network effects, and it has to be collected by the platform (real time data, you can't buy it).
  - If the platform uses adds : another barrier to entry
- Ride sharing application
  - Here data is a barrier to entry if we consider drivers reviews. But it is less prominent than previous platforms

cf slide 12