



**POLITECNICO
DI MILANO**



Multisided platforms Strategies and Business Models

Prof. Antonio Ghezzi, PhD

rapid strategy

Politecnico di Milano

Department of Management, Economics and Industrial Engineering



Agenda

1. *Definitions*
2. *Examples*
3. *Network effects*
4. *Subsidy-side and Money-side*
5. *Critical issues*
6. *Ignition strategies and tactics*



1. Definitions

In the last 15 years, multi-sided platforms have:

- Become some of the largest and fastest-growing businesses
- Reduced several market frictions
- Challenged many industries
- Overran the incumbents in many cases



■ Nokia, Samsung, Sony Ericsson, Motorola, LG ■ Other

■ Apple ■ Other



1. Definitions

“A platform provides the **infrastructure and rules** for a **marketplace** that brings together **producers and consumers**” (Van Alstyne et al., 2016).
offer and demand



“**Multisided platforms** are **technologies, products and services** that create value primarily by **enabling direct interactions between two or more customer or participant groups**” (Hagiu, 2013).

“They [Multi-sided platforms] enable direct interactions between two or more distinct sides. Each side is **affiliated to the platform**” (Hagiu and Wright, 2015).



“Platforms are **matchmakers** of sorts, although the matchers are often not one-to-one. But like matchmakers, they **discover a need for**, and then **facilitate, consumer coordination**” (Wu, 2013).

“They are called platforms because they usually **operate a physical or virtual place** that helps the **different customers get together**. Their efforts are aimed at **reducing a market friction**. Such a reduction is a **necessary but not sufficient condition** for a multi-sided platform to succeed” (Evans & Schmalensee, 2016).





1. Definitions

Multi-sided platforms create huge value by:

sides: customer segments
more than 1!
market friction (Search Cost, Transaction cost,
development cost, ...)

- Reducing search costs

Airbnb provides advanced search functionalities based on the desirable characteristics;

- Reducing transaction costs

eBay allows payments performed by Paypal;

- Reducing product development costs

Wikipedia provides editors with tools for collaboration; Sony provides game developers with development kits and application programming interfaces.

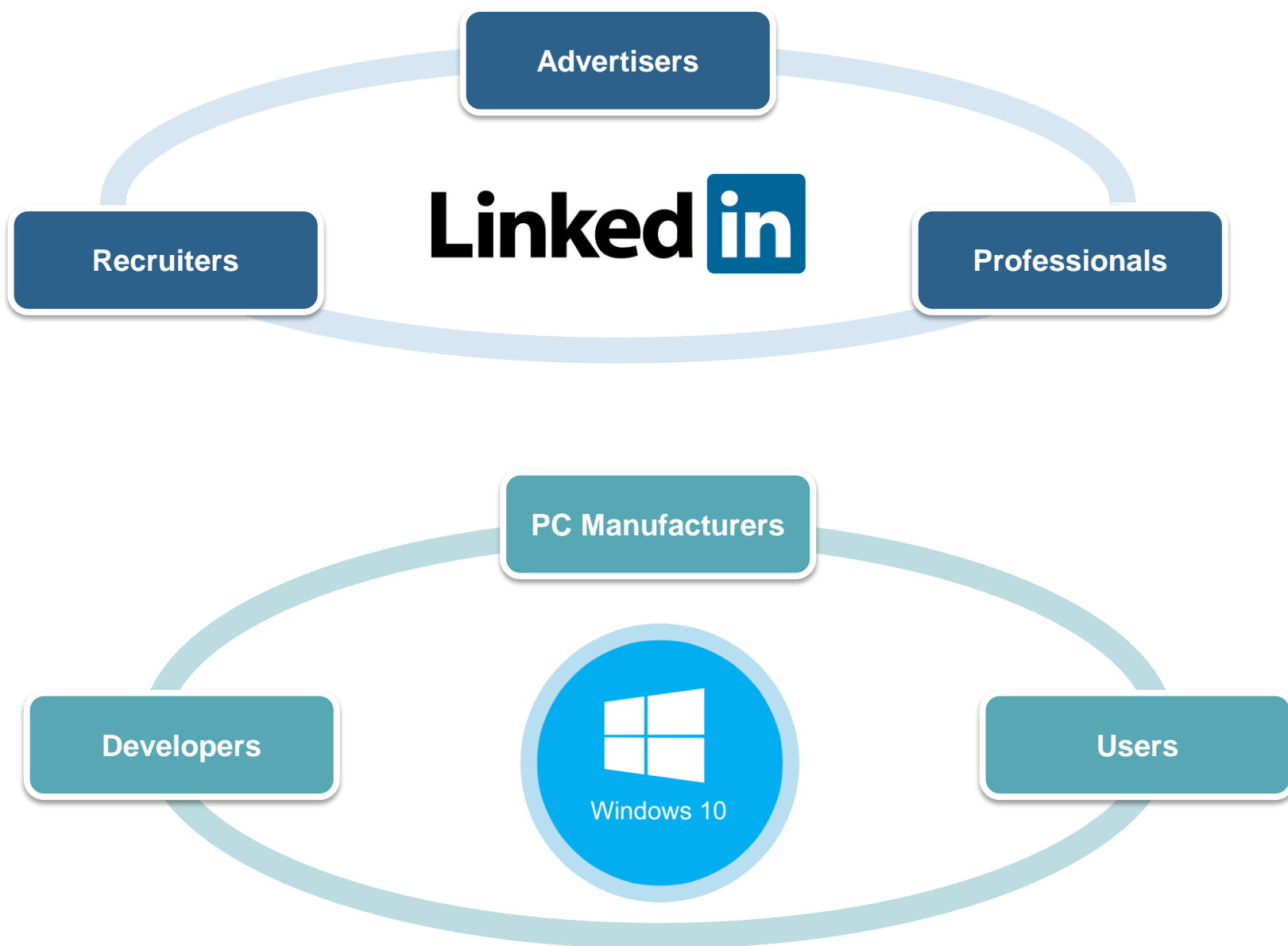


2. Examples: traditional businesses



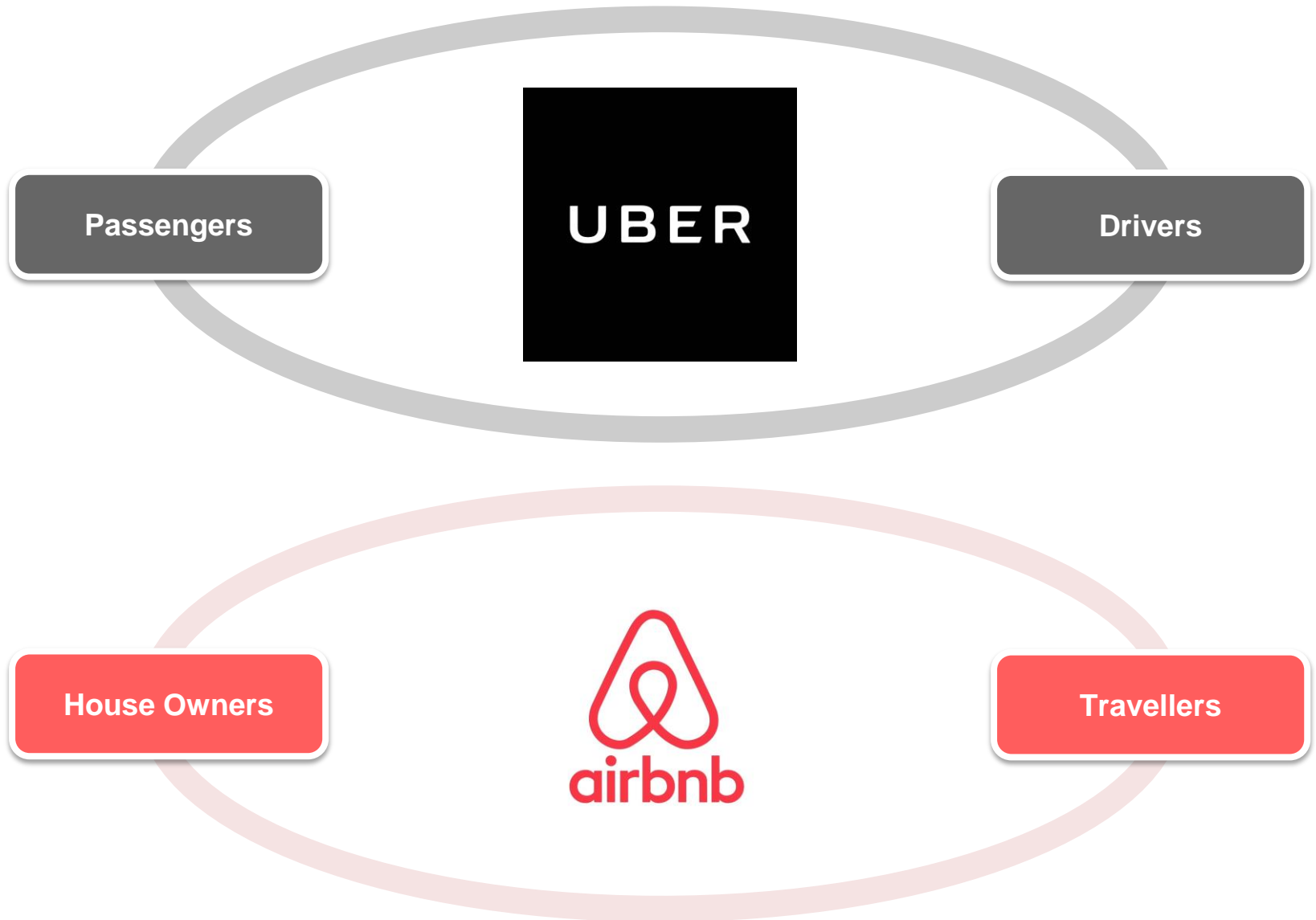


2. Examples: more than two sides





2. Examples: new businesses



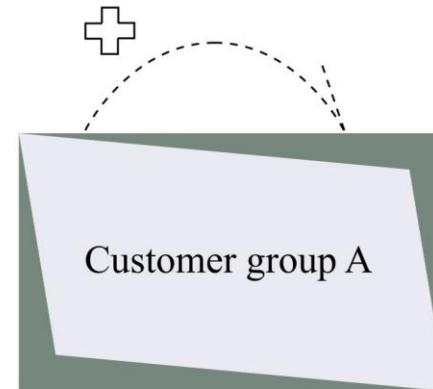


Network effects

value of being in a group

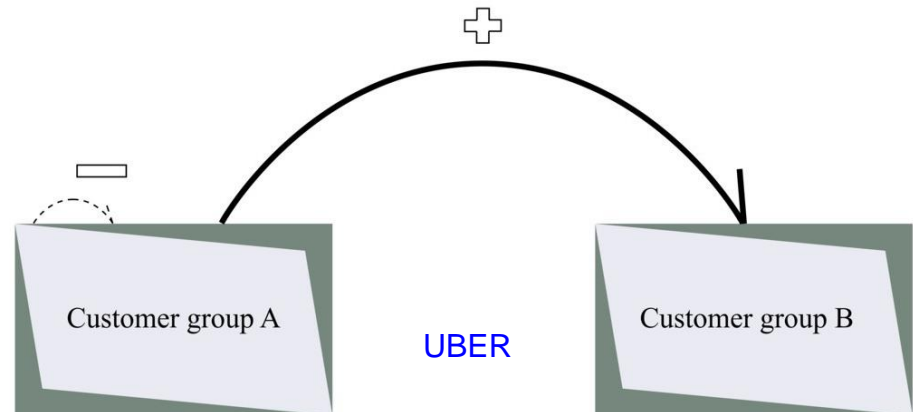
I. Same-side network effects

Network effects affect the same customer group they originate from.



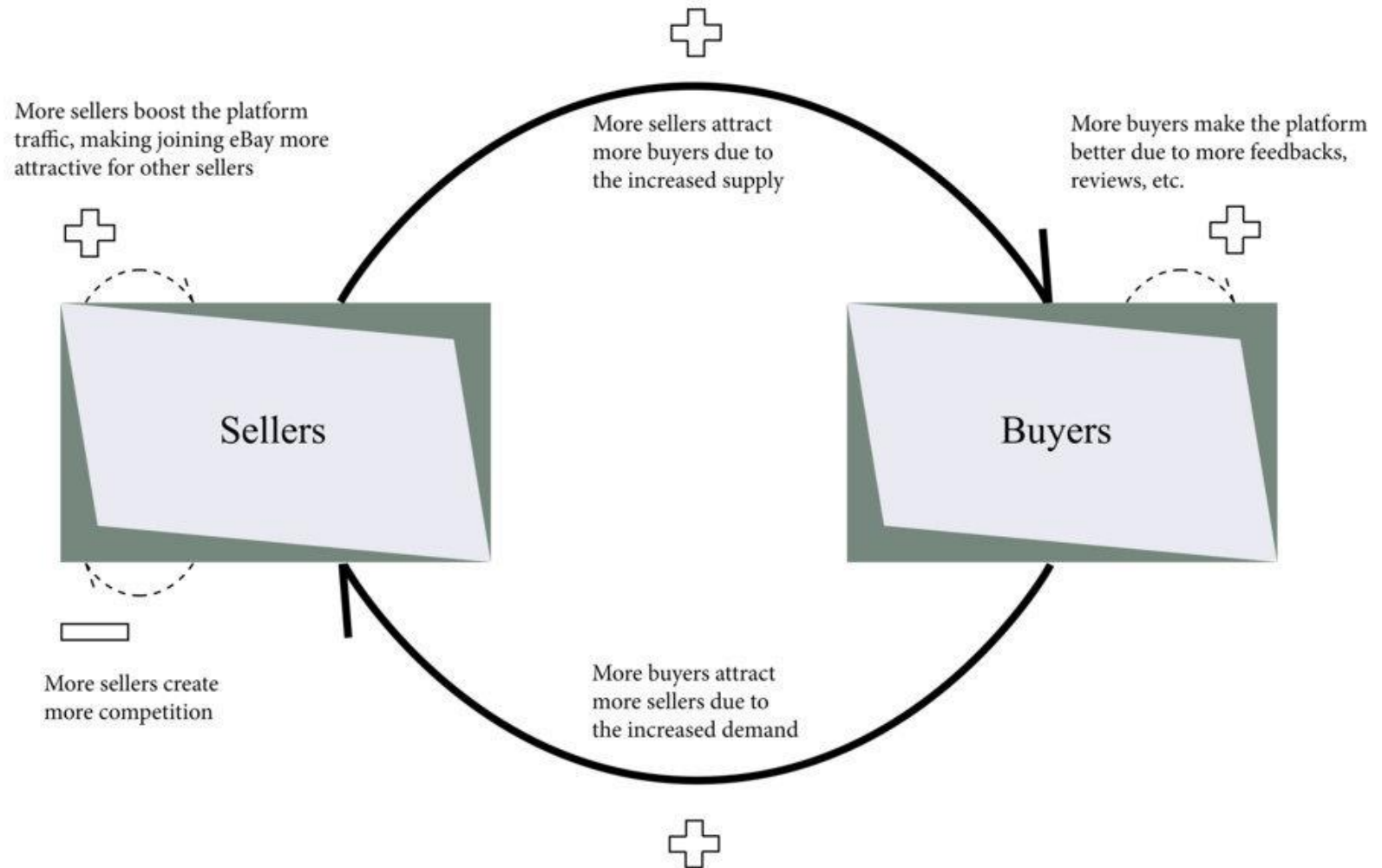
II. Cross-side network effects

Network effects affect a different customer group from the one they originate from.



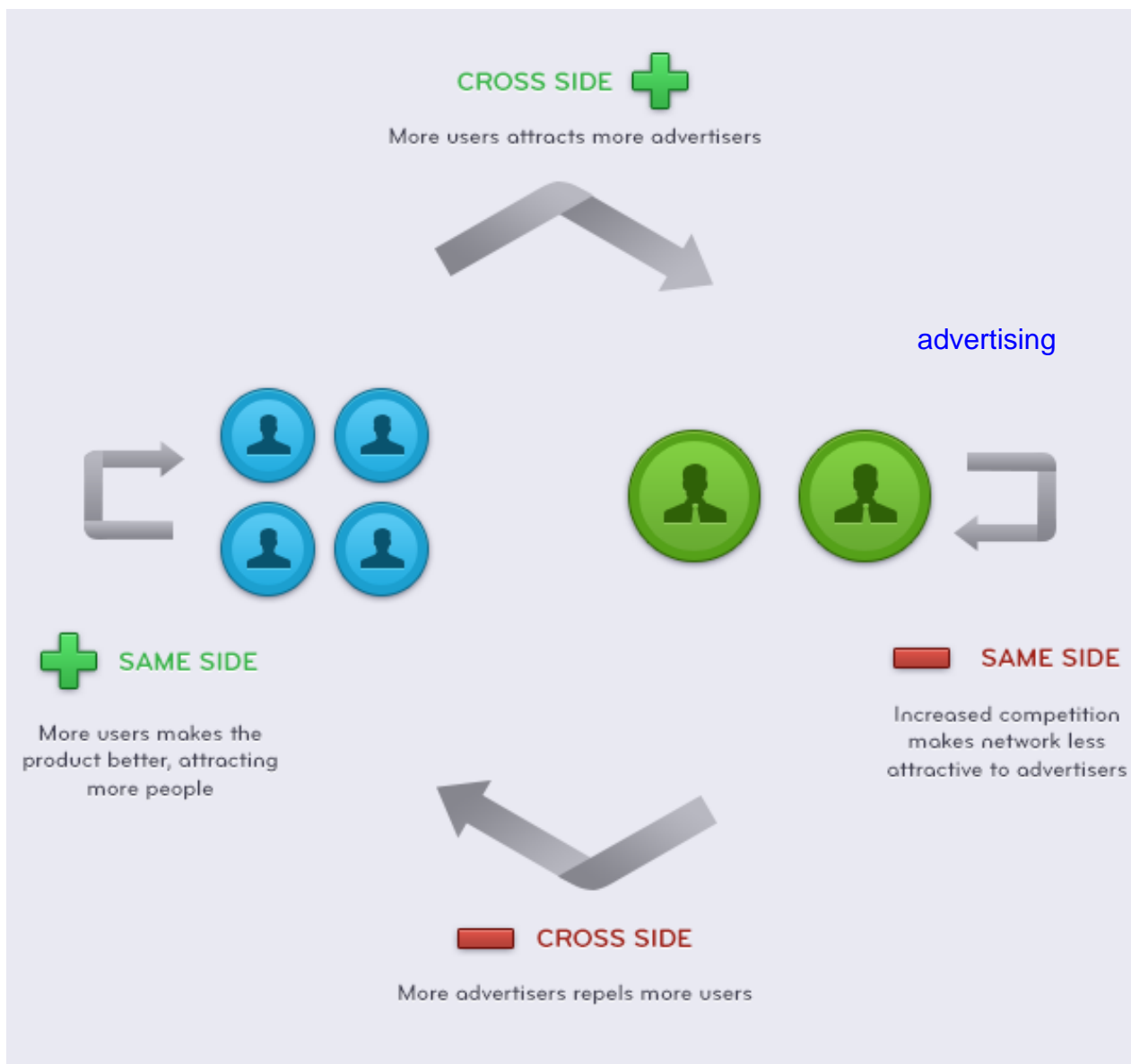


Network effects: the eBay case





Network effects: social networks



3. Network effects: possible causes 1/2

Cause	Description	Example	Nature
Information provision	Each user or customer can provide information that could be useful for other users or customers.	Reviews on TripAdvisor or Amazon, which are provided by users and buyers, drive the future choices of other users and buyers.	The network effects so generated may be either positive or negative, due to the quality of the information provided. When it is truthful, the network effects created are positive; when it is misleading, negative effects originate.
Competition	When transactions are performed between two customer groups, each additional customer in one group represents an additional competitor for customers of that group.	More sellers on eBay mean more competition on that side.	Negative for the customer group that exhibits the effect, while it may be positive for the customer group which perform the transactions with that group and that can benefit from price battles and so on.
Volume/traffic	In some cases, the traffic and volumes generated by more customers can affect the company's offering in ways that do not involve higher probabilities of matching and so on. Instead, fashion and trends of the moment can be the reasons.	Social networks are good examples: when snapchat faced its disruptive growth in terms of user, it became the trend of the moment. Each new user enforced this attractive power related to the trend.	As trends and fashions, this kind of network effects are positive when the trend of the moment is favorable, negative when it changes.
Higher probability of finding a counterpart for a transaction	When customer groups perform transactions between them, the wider the other customer base is, the higher the probability of finding a counterpart to perform the transaction with. It can be exhibited also inside the same customer group in case transactions are performed within it.	More Amazon buyers mean more demand to satisfy for independent sellers that use the Amazon marketplace to sell their products.	Network effects are positive, but they usually come along with network effects related to good behavior, misbehavior and content quality, due to the "social" component of dealing with another customer.

3. Network effects: possible causes 2/2

Cause	Description	Example	Nature
<i>Higher probability of finding a counterpart for enjoying the company's offering</i>	When the company's offering has to, or it may, be experienced and enjoyed with other customers, an increased customer base enhances the probability of matching.	More online FIFA players mean a higher probability of finding another player online to play with.	Network effects so generated are usually positive, but they come along with network effects related to good behavior and misbehavior of customers, due to the social experience.
<i>Good behavior and misbehavior</i>	When transactions and interactions exist between customers, positive behaviors and misbehaviors can improve or undermine the company's offering.	In case of frequent misbehaviors by Uber drivers, potential passengers are likely to prefer a taxi rather than Uber.	Positive in case of good behaviors, negative in case of misbehaviors.
<i>Content provision</i>	When transactions exist between customers or in case each user or customer can provide content that could be useful for other users or customers, the company's offering can be affected by this content.	The apps available on the App Store are an example of content provided by a customer group (developers, who are a customer group of Apple).	The network effects so generated may be either positive or negative, due to the quality of the content provided. High quality implies positive effects, while poor quality implies negative ones. The precision of firm controls on the content added by third parties is determinant.
<i>Passion/sense of community</i>	Each customer hopes for the diffusion of it, trying to convince other people to become customers or to join the platform. It is a typical effect when the company's offering concerns an hobby.	Close-knit Xbox players try to persuade other people to buy the console produced by Microsoft, instead of Playstation, for example. Each acquired player is an additional source of customer attraction due to her/his tries of conviction.	It usually generates positive network effects. However, in case the customers feel betrayed by the firm as concerns their passion, the consequent negative network effects would be strong.



Pricing structure

The existence of network effects strongly affects the decision about pricing: serving multiple types of customers, multi-sided platforms have potentially **multiple revenues sources**.

For a multi-sided platform, **subsidizing** certain users can be essential. **The choice of which side subsidize and for how long represents an important strategic issue.**

In a two-sided market, a common situation implies a **subsidy-side** and a **money-side**:

- The **subsidy-side** is **charged less than it would be in an independent market**, charged nothing or is given rewards to participate in order to reach high volumes and make more valuable the platform for the other side;
- The **money-side** is charged more than it would be **in an independent market**.





Pricing structure



Sometimes a side is subsidized only in the start-up phase in order to build **critical mass**, sometimes it is charged free, or “negative” prices are permanently applied, in order to maximize profits thanks to the monetization of the other side influenced by **network effects**.

Generally, **the more price sensitive side is subsidized**, while the side that increases more strongly its demand as the other side volume grows is charged. The objective is to **attract enough participants on the money-side in order to get huge revenues on the money side, which will be inclined to pay handsomely to access to the high volumes on the subsidy-side**.



Ignition strategies and tactics

خیمه شب بازی

Marquee customers

Customer relationships should not focus only the most profitable customers or most important ones, but a particular attention should be paid to the ones who enable the **strongest cross-side positive network effects**, too.

To do so, it is essential to understand who these customers are and if some **marquee customers** exist and who they are.

An example is provided by shopping malls, which sign up the stores that are likely to attract lots of people early on. Doing so, smaller retailers are persuaded to rent space at the mall, knowing that they will be able to exploit the traffic generated by the marquee shops.



Ignition strategies and tactics

Ecosystem seeding

facebook

Due to the chicken and egg dilemma, it might be convenient for a platform to start from a **market niche**. It allows to concentrate on defined customers, with delimited requests and needs.

How narrow should the niche be? The more the platform decides to keep it narrow, the smaller its market becomes. However, there are some advantages coming from a narrower target: the platform has the capability to address better and more specifically the customer preferences, and a smaller market niche makes easier the achievement of a critical mass.

Consequently, the platform may decide to enlarge the target, enabled also by the strength of the user volumes already attached to the platform. The approach is called “**ecosystem seeding**”: starting with a subset of the target customers sufficient to get the platform going. That subset is called “seed”, and it is chosen wisely, with the objective of making revenues soon, limiting the risk for investors. Clearly, **the choice of the seed is crucial**; nevertheless, the final aim is the growth of the platform’s value, in terms of customers and functions or applications.

Zig-zag strategy



In case of positive cross-side network effects, a “**zig-zag strategy**” could be a good option for the platform. It continuously shifts its focus from one side to the other, trying to attract critical mass in all of them.

An example of “zig-zag strategy” is provided by YouTube. The American video-sharing website pushed participation on both sides, fostering with several strategies views and videos upload in an alternating way. When sides provide themselves a content that enriched the platform’s offering, or they perform interactions and/or transactions, it may be fundamental to build critical mass in more than one of them simultaneously. YouTube needed to get on board viewers and video content providers at the same time, as both groups need each other to enjoy the company’s offering.

Two-step strategy



don't over stretch

When the platform concentrates its efforts on attracting customers on one side, generating the positive cross-side network effects and, then, the efforts are focused on the side supported by those network effects, a so called “**two-step strategy**” is carried out.

An example is represented by social networks. The first step is a total focus on user attraction and registrations; consequently, advertising space is sold high prices in case a large user base is reached.

Commitment strategy

SONY

Sometimes customers of one firm's business model have to make a significant investment to receive the company's offering and to take advantage of positive cross-side network effects. In these cases, the firm should prove to these customers that there will be a large customer base on the business model from which the network effects originate. This **commitment strategy** is totally based on the capability of the firm to assure that promised customer base, for instance by specific partnerships or a favorable pricing structure in that business model.

An example is provided by Sony Computer Entertainment: it designed PlayStation 4 few years ago. When the console was launched, the firm persuade customers to invest several hundreds of dollars buying the PlayStation 4 thanks to a strong marketing campaign about future videogames, that Sony would directly developed, and an exclusive partnership with Spotify.

Contacts

Prof. Antonio Ghezzi, Ph.D.

Professor of Strategy & Marketing

Politecnico di Milano – Department of Management, Economics and Industrial Engineering Milan, Italy

Core Faculty – Corporate Strategy

MIP Graduate School of Business

Research Director, Hi-tech Startups

Research Grants and EU-funded projects Coordinator

Digital Innovation Observatories

E-mail: antonio1.ghezzi@polimi.it

Researchgate: https://www.researchgate.net/profile/Antonio_Ghezzi

LinkedIn: Antonio Ghezzi, Politecnico di Milano

(<https://www.linkedin.com/in/antonio-ghezzi-179285a/>)

Twitter: @AntonioGhezzi83