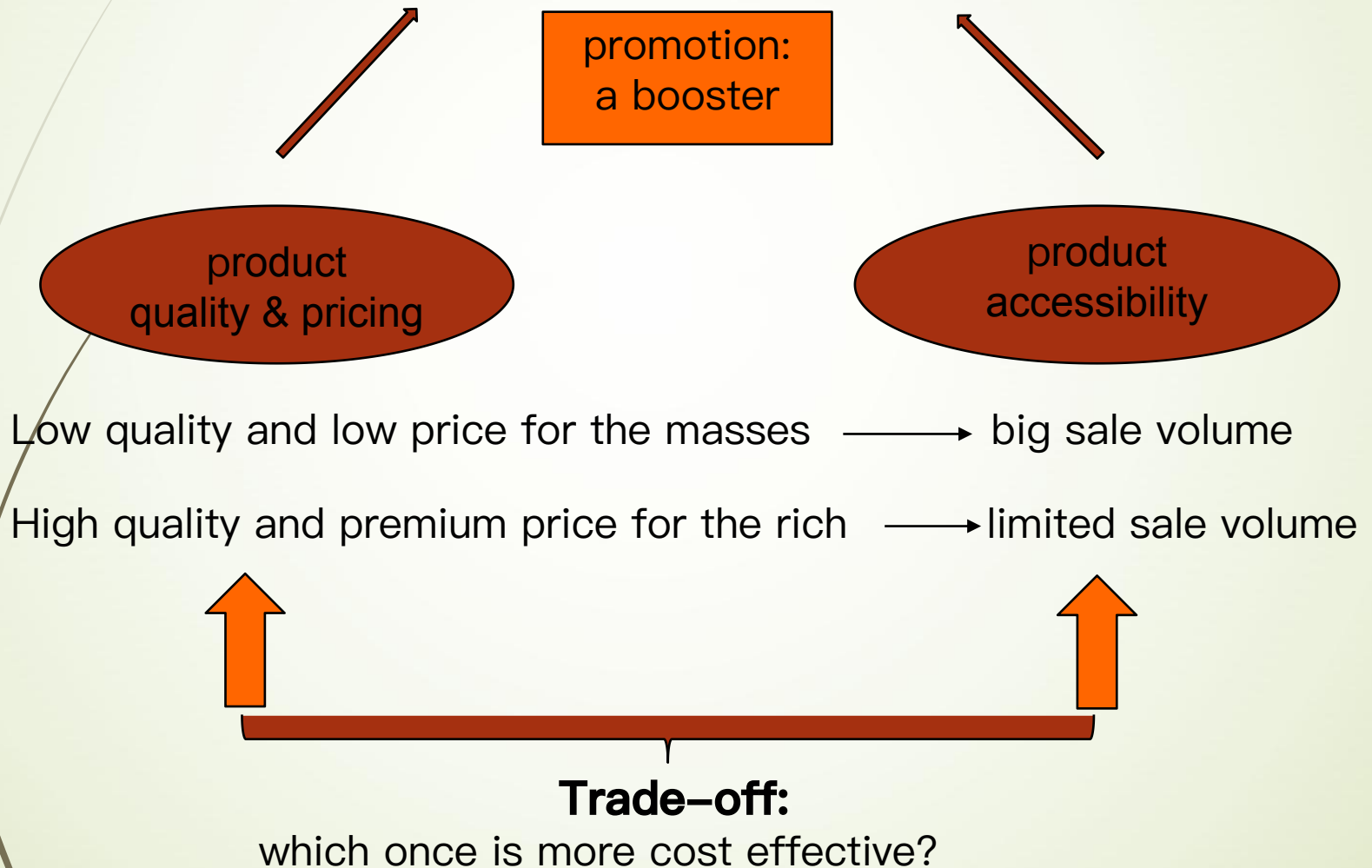


Some fundamental economic forces in marketing

- A profit function of profit margin and sales volume
- Long tail
- Bad money drives out good
- Externality and network effects

Let's start with some math

$$\text{Profit} = \text{Profit margin} * \text{Sales volume}$$



How Endless Choice Is Creating Unlimited Demand

The Long Tail

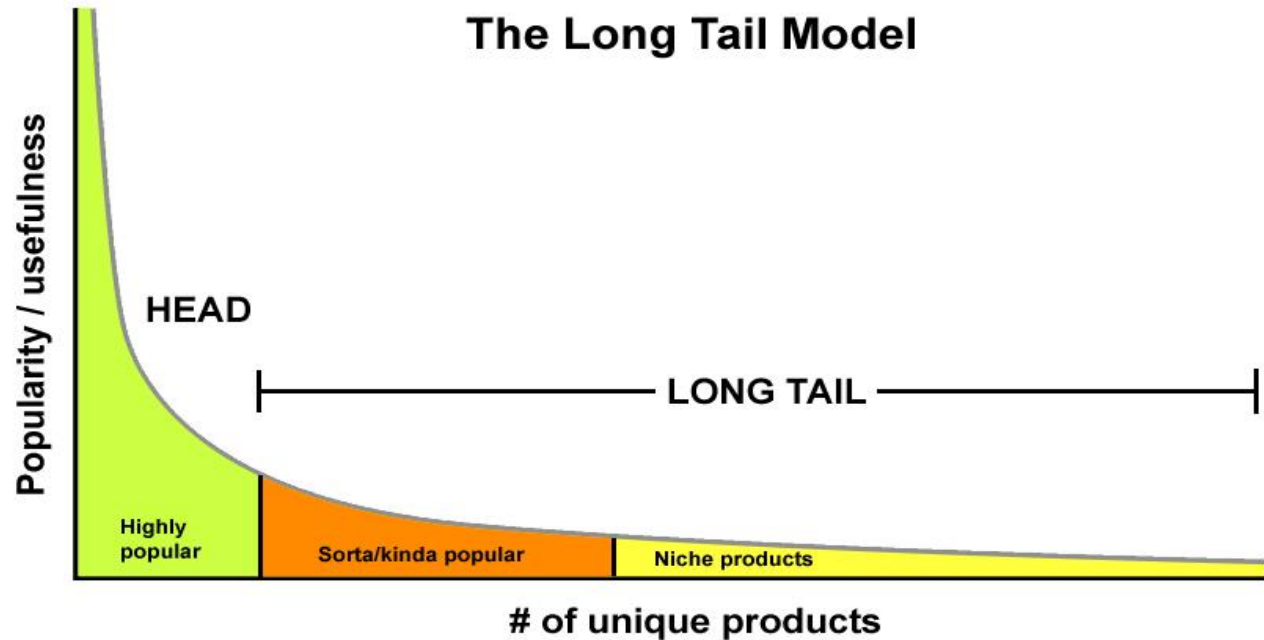


Why the Future of Business
Is Selling Less of More

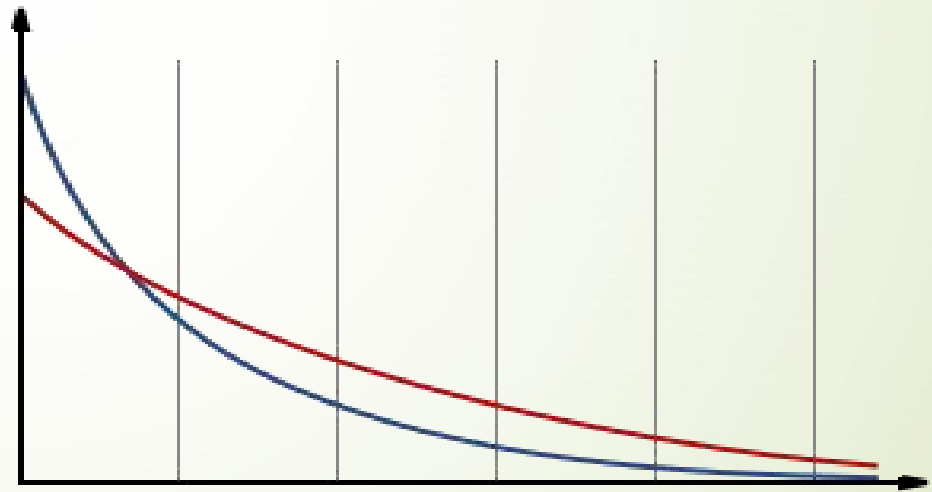
CHRIS ANDERSON

*"Anderson's insights influence Google's strategic thinking in a profound way.
READ THIS BRILLIANT AND TIMELY BOOK."*
—ERIC SCHMIDT, CEO, GOOGLE

The Long Tail Model



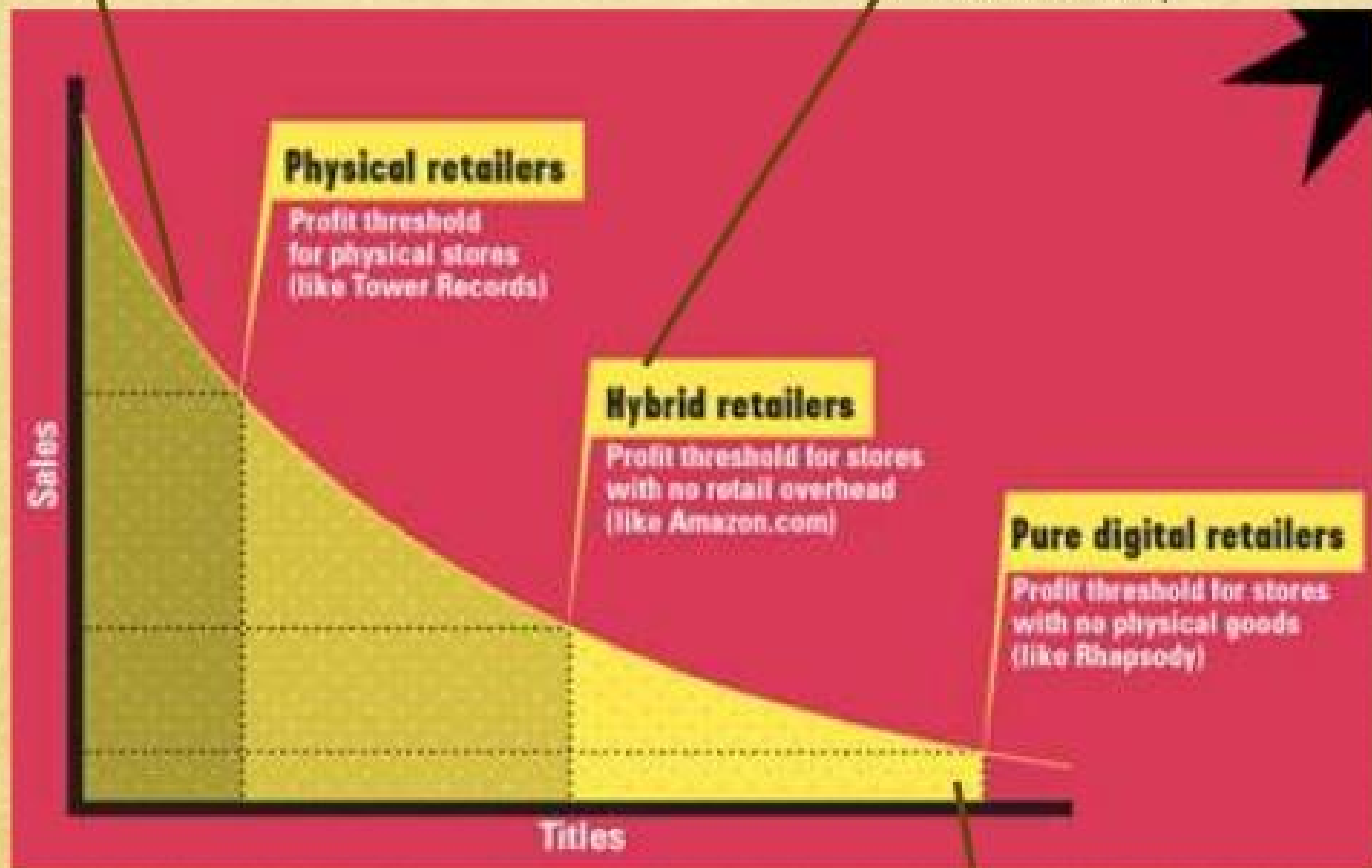
The tail becomes bigger and longer in new markets (depicted in red). In other words, whereas traditional retailers have focused on the area to the left of the chart, online bookstores derive more sales from the area to the right.



In which market is doing business easier?

HMV, Blockbuster (stores)

Amazon (hard copy and digital such as Ebooks or DVDs and Digital Downloads)



Purely online – LoveFilm, Netflix

"Bad Money Drives Out Good" (Gresham's Law)



Lemons
- worth \$10,000



Good Cars
- worth \$15,000

Information asymmetry

Which one
should I buy? I
can't tell which
is good or bad.



"Bad Money Drives Out Good"



Good Cars
- worth \$15,000



Lemons
- worth \$10,000

an "average"
price of \$12,500

Which one
should I buy? I
can't tell which
is good or bad.



**Information
Asymmetry**



Market is dominated by Lemons.
Many buyers are too afraid to buy
at all in the market.

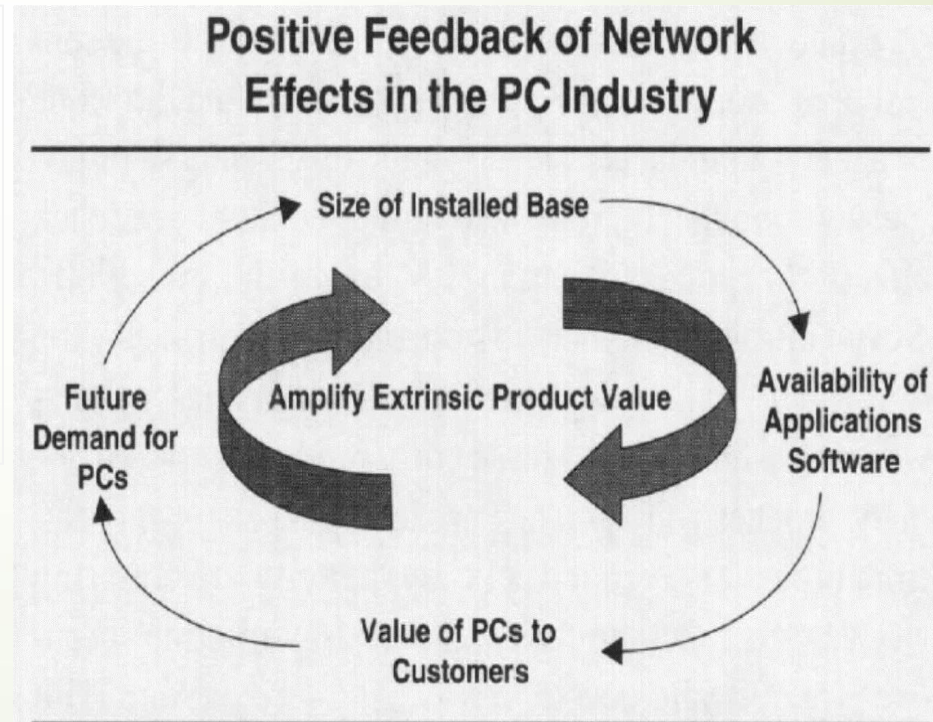
Many sellers of Good Cars leave
the market and sell only to friends
and relatives.

Buyers afraid of buying a lemon
drive down the average price for
all used cars to \$12,000.

Buyers may not like to pay the avg.
price of \$12,500 if they are *risk averse*

Externality: Network Effects

- ▶ **Direct network effect** is the increase in utility of a product as the number of users increases (e.g., telephones, fax machines).
- ▶ **Indirect network effect** is the increase in utility of a product as the number of associated accessories to that product increases.



SOURCE: Adapted from Hill (1997).

Apple Ecosystem



Indirect (Cross-Side) Network Effects

eBay, Uber, Android/iOS, Credit cards, etc



Direct (Same-Side) Network Effects

Facebook, WeChat, etc.



Data Network Effects

Coexistence of several network effects:

amazon



Direct Network Effects

Indirect Network Effects

Data Network Effects

Product Reviews

Amazon Marketplace

Recommendation System

Can you identify some direct and in-direct network effects that may influence users' choices?

Can you use the notions we just discussed to explain some observations in marketing?

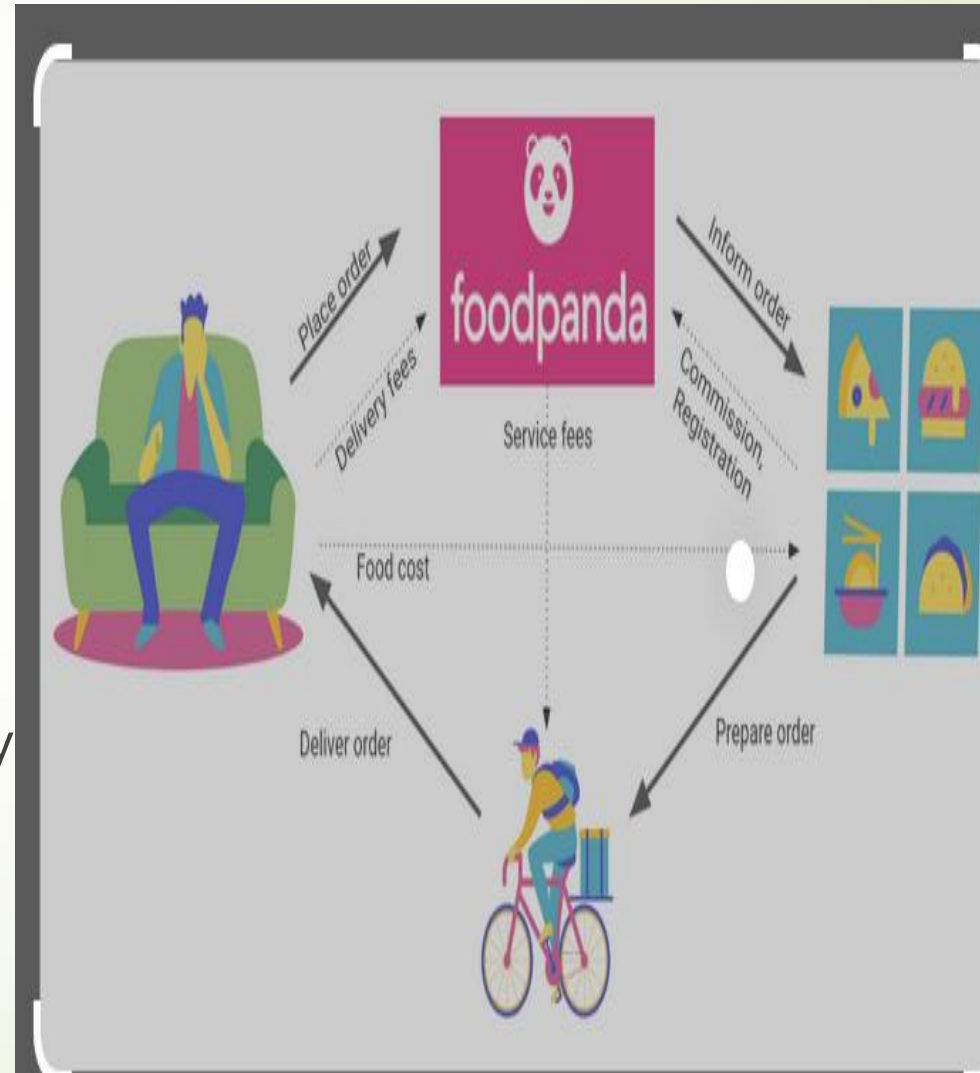
- WhatsApp vs. WeChat
- Free products and versioning, etc.

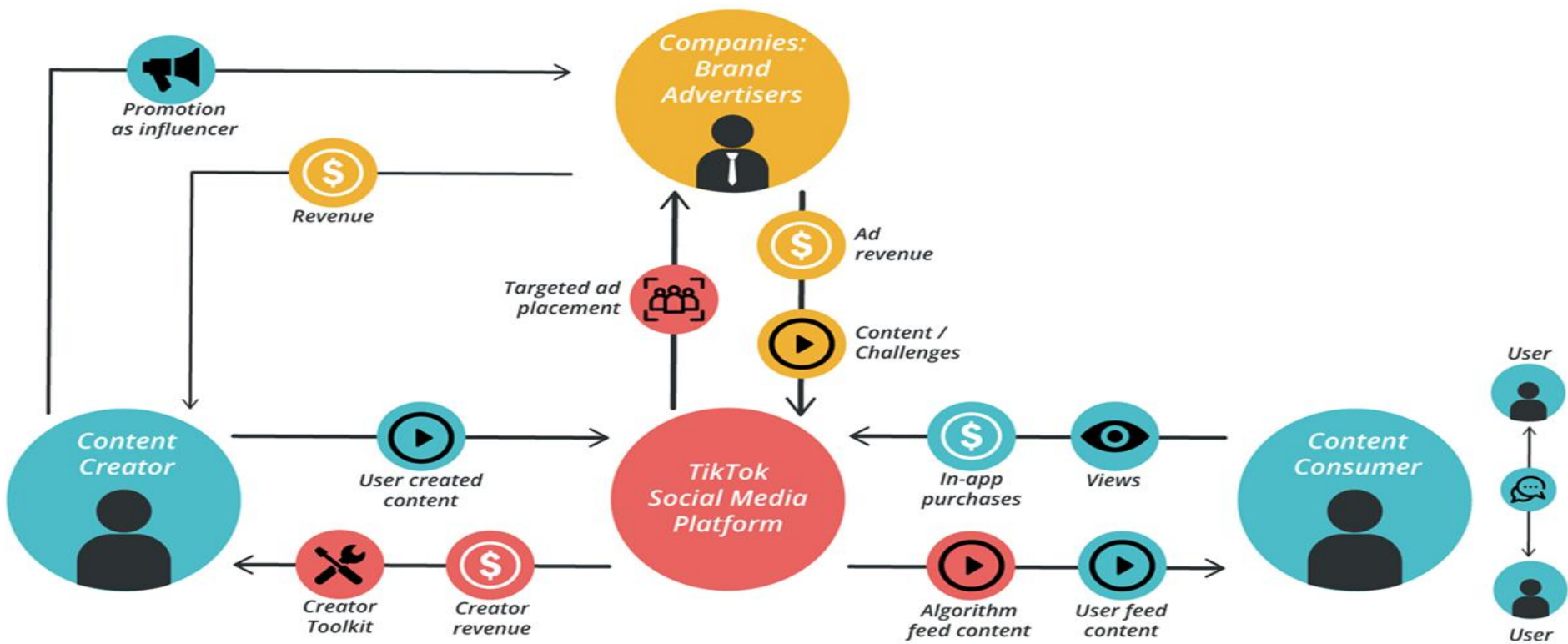


Two-sided markets

Examples:

- Matchmaking: match both males and females to date
- Crowdfunding: attract both campaign creators and backers (buyers & donors)
- Ride-hailing: drivers and passengers
- ride- and office-sharing, and other sharing economy





- Positive cross-side network effects (sequential and simultaneous moves)
- More competition among participants on the same side
- Increased heterogeneity in participants' preferences
- Change in participants' composition
- Higher cost of matching the two sides
- Effective matching becomes one of a platform's core competences