USER AND SUBSCRIBER BUSINESSES: THE GOOD, THE BAD AND THE UGLY

Aswath Damodaran

Setting the Stage

Aswath

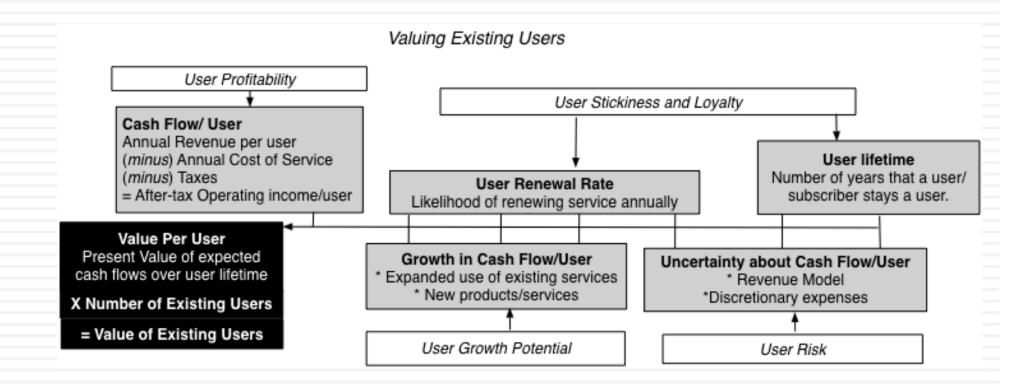
- In a series of posts over the course of the last year, I argued that you can value users and subscribers at businesses, using first principles in valuation, and have used the approach to value <u>Uber riders</u>, <u>Amazon Prime members</u> and <u>Spotify</u> & amp; <u>Netflix subscribers</u>.
- I was reminded of these principles this week, first as
 - I wrote about Walmart's \$16 billion bid for 77% of Flipkart, a deal at least partially motivated by user numbers, then again as
 - I read a <u>news story about MoviePass</u> and the potential demise of its "too good to be true" model and finally as
 - I tripped over a <u>LimeBike</u> on my walk home.

User Based Value: The Trigger

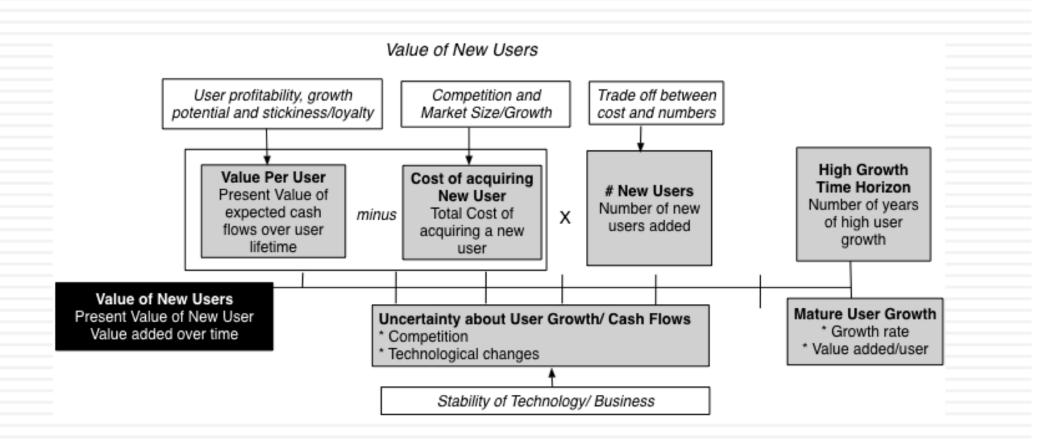
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- In a post, about a year ago, I approached Uber, as I would any other business, and valued it, based upon aggregated revenues, earnings and cash flows, discounted back at a company-wide cost of capital.
- I was taken to task for applying an old-economy valuation approach to a new-economy company and was told that that the companies of today derive their value from customers, users and subscribers.
- While my initial response was that you cannot pay dividends with users, I realized that there was a core truth to the critique and that companies are increasingly building their businesses around their members.

1. Valuing Existing Users



2. Valuing New Users



3. Corporate Drag



Corporate Expense Drag Present Value of Corporate Expenses over time After-tax Expense Corporate Expenses (minus) Taxes Economies of Scale

Growth in Expenses
* Economies of Scale

Continuing Costs

* Growth Rate

Uncertainty about Expenses

- Type of expense
- Contractual Guarantees

Drivers of Value

- A standard critique that old-time value investors have of user-based companies is that they lose money, but that is not true.
- There are user-based companies that make money, but it is also true that the user-based model is still in its infancy and that many user-based companies are young, and therefore lose money.
- That said, there are elements of the cost structure that you can look at, to make judgments on which user-based companies are most likely to grow out of their problems and which ones are just going to grow their problems.

Cost Structure

- Servicing Existing Users versus New User Acquisition: It is far better for a company to be losing money, because it is spending money try to acquire new users, than it is to be losing money, because it is servicing existing users. The latter signals a bad business model, at least for the moment, whereas the former offers a semblance of hope.
- <u>Fixed versus Variable Costs</u>: For mature companies with established business models, it is better to have a more flexible cost structure. With money-losing, high-growth companies, the reverse is true, since it is the fixed cost portion that yields economies of scale, as the company grows.

Growth

- Existing versus New Users: A user-based model, where you can grow cash flows from existing users is more valuable, other things remaining equal, than a user-based model that is dependent on adding new users for growth. Since a company already has expended resources to get existing users, any added revenue it derives from them is more likely to flow directly to the bottom line.
- Cost of New User Acquisition: User-based companies that are more cost-efficient in adding new users will be worth more than user-based companies that spend considerable amounts on promotion on marketing, to the same end.

Example: Netflix versus Spotify

	Netflix	Spotify
Number of Subscribers	117.6	71
Annual Revenue/Subscriber	\$ 113.16	\$ 77.63
Subscriber Service Expenses (as %)	18.90%	79.24%
CAGR in subscriber count	223.93%	369.86%
Value per Existing Subscriber	\$ 508.89	\$ 108.65
Cost of acquiring New Subscriber	\$ 111.01	\$ 27.30
Value per New Subscriber	\$ 397.88	\$ 81.35
Value of all Existing Subscribers	\$ 59,845.86	\$ 7,714.28
+ Value of all New Subscribers	\$ 137,276.49	\$ 20,764.56
- Corporate Cost Drag	\$ 111,251.70	\$ 13,139.75
=Value of Operating Assets	\$ 85,870.65	\$ 15,339.10

Revenue Models

- Subscription models tend to be stickier (making revenues more predictable) but they offer less upside potential (it is difficult to grow subscription fees at high rates).
- Advertising models scale up faster, since they require little in capital investment and adding new users is easier (since they free), but revenues are heavily driven by user intensity (how much time you can get users to stay in your ecosystem) and exclusive data (collected in the course of usage).
- Transaction models are the riskiest, since they require users to use your product or service, but they also offer the most upside, since your upside is less constrained.

Differentiating across User-based companies

	Cost of New User: High	Cost of New User: Low
Existing User Value: High	Exclusive user: Companies will focus on getting highest value users, keeping them and selling them more.	User-Value Stars: These are the value stars of the user business, and they have strong competitive advantages (that allow them to keep the cost of acquiring new users lows).
Existing User Value: Low	User-Value Dogs: These companies may have lots of users, but they will continually lose money, even as they grow.	Commoditized user: Companies with the most users will win and have higher value.

When Buzz Words become Business Propositions

- Network benefits refer to the possibility that as you grow bigger, it becomes easier for you to get even bigger, making it less costly to acquire new users. That is the promise of ride sharing, for instance, where as a company gets a larger share of a ride sharing market, both drivers and customers are more likely to switch to it, the former, because they get more customers and the latter, because they find rides more quickly.
- Big data, in a value framework, offers user-based companies an advantage, since what you learn about your users can be used to either sell them more products or services (if you are a transaction-based company), charge them higher premiums (if you are subscription-based) or direct advertising more effectively (if advertising-based).

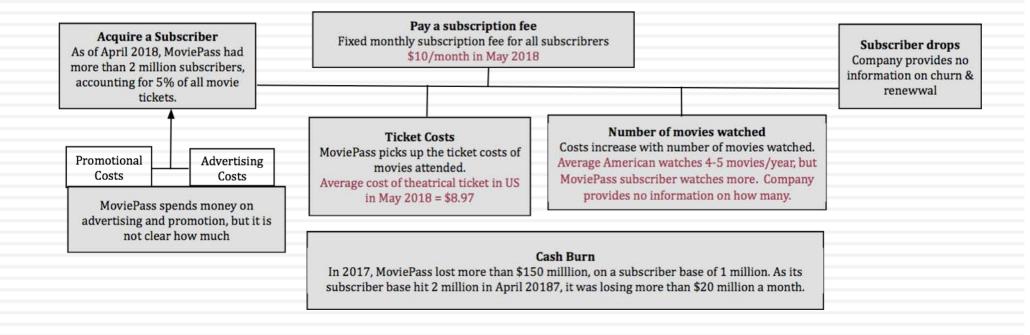
The Pricing Game

- As I look at user-based companies, some of which are being priced at billions of dollars, I am struck by how few of them are built to be long term businesses and how many of them are being priced on user numbers and buzz words.
- The drivers of user value also give insights on what to look for in user based businesses that are headed for the precipice.

Bad User Businesses: Characteristics

- All about users, all the time: If the entire sales pitch that a company makes to investors is about its user or subscriber numbers, rather than its operating results (revenues and operating profits/losses), it is a dangerous sign.
- Opacity about user data: The companies that are most opaque are often the ones that have user models that are not sustainable.
- Bad business models: A business model that is designed to deliver losses, not only in its current form, but with no light at the end of the tunnel
- Loose talk about data: The data that they will collect from their users to make money, without any serious attempt to explain why the data will give them an edge.
- And externalities: Their "innovative" twists on an existing business will both expand and alter the business, leading to benefits for other players in that business, who, in turn, will share their benefits.

MoviePass



The Predictable Consequence



The Bottom Line

- You can build valuable user-based companies, but to do so, you need to plan for, work on and develop pathways to profitability.
- The most valuable user-based companies, collect exclusive data from their users that they use to generate revenues, have significant economies of scale and networking benefits.
- A combination of hubris and laziness has led to user based companies that are built on bad business models, talk casually about big data and have few or no pathways to profitability.