



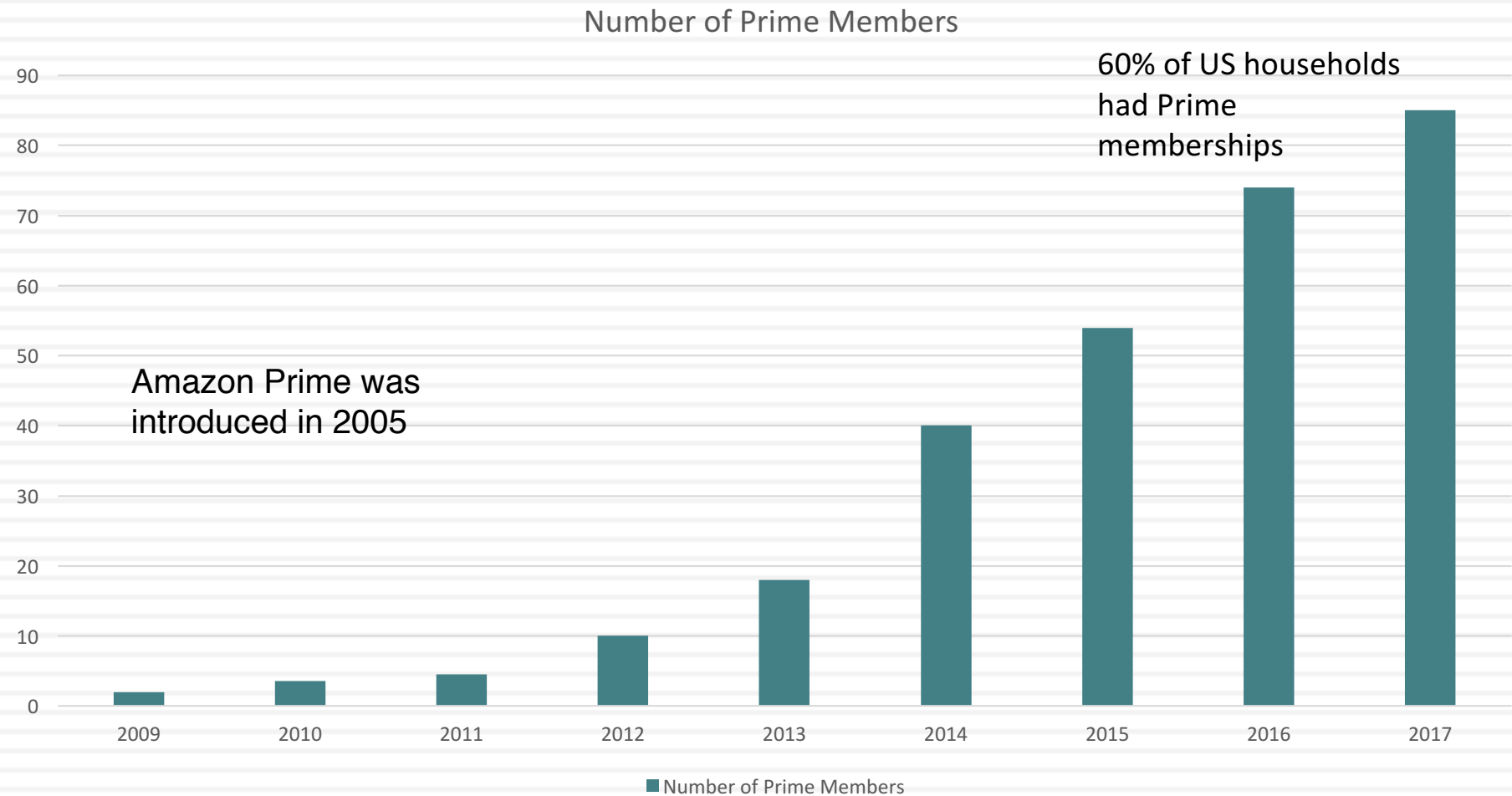
PRIMING THE PUMP: THE VALUE OF AMAZON PRIME

Customers win, but does Amazon?

Amazon Prime: A Customer's Perspective

- Becoming a member: An Amazon Prime membership costs \$99/year.
- The Membership Privileges:
 - ▣ Free shipping on two-day deliveries for items that are classified as prime items.
 - ▣ Unlimited streaming of movies and TV shows with **Prime** Video.
 - ▣ Borrow books from the Kindle Owners' Lending Library

The Growth of Amazon Prime



The Revenue Side

- The Membership Fee: Any one (in the countries where Prime is offered) can become a Prime member, either on a monthly or an annual basis. In the US, in 2017, the annual fee for membership was \$99, as it has been for the last few years, and the monthly fee was \$10.99. With 85 million members, that translates into a total revenue for the company of over \$9 billion, since approximately 20% of Prime members are monthly members.
- The Incremental Sales: The typical Prime member spends approximately \$1,300/year on Amazon products, as opposed to the \$700 spent by non-Prime members. (But is the incremental sales a Prime effect?)

The Cost Side - Shipping

- The Cost of “free” Shipping: The biggest cost, by far, to Amazon is the shipping cost that the company now bears on Prime items.
 - ▣ In 2016, the company reported net shipping subsidy costs of \$7.2 billion (in the footnotes to the 10K)
 - ▣ Assuming that almost all of these costs were related to servicing the 60 million members that Amazon had in 2016 leads to a per-member shipping cost of close to \$120/member.

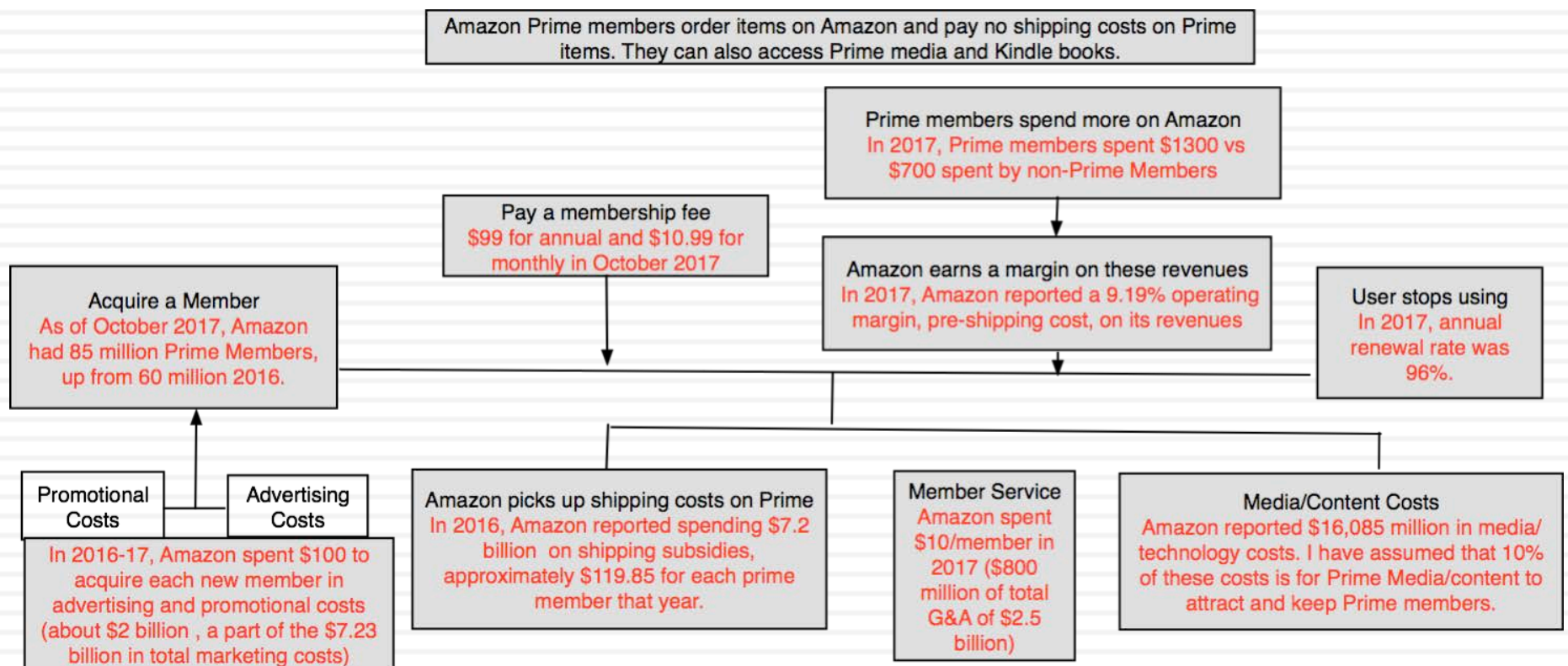
Other Costs

- Customer Service Costs: The company expends administrative costs in providing additional customer service to its Prime members. These costs are part of the total G&A cost of \$2,432 million that the company reported in 2016, but we will assume that the servicing cost per member was \$10 (or \$600 million in the aggregate in 2016).
- Media Content: The company also buys content for its media and Kindle reading sections specifically to back up its Prime membership. Again, that cost is part of the \$16,085 million that the company as its technology and content cost in 2016 and we will assume that 10% of those costs (approximately \$1.6 billion) can be attributed to Amazon Prime.

Cost of adding a member

- Big Ad Spender: Amazon spends freely on advertising, and while much of it is directed at getting consumers to buy products off its website, a portion is to get those consumers to become Prime members.
- Adds up to: That promotional/marketing cost is part of the total marketing cost of \$7,233 million that Amazon reported in 2016
- New Member Ads: We will assume that the cost of adding a member is \$100; in 2016, this would have translated into a total cost of \$2 billion to acquire 20 million new members, leaving the remaining \$5.2 billion in marketing costs as conventional advertising/marketing cost.

The Economics of an Amazon Prime Member



Valuing an Existing Member: Assumptions

- Renewal Rate: Annual renewal rates will stay high, at 96%, since the subscription model.
- Incremental Revenue/ Member Growth: The incremental revenue will grow 10% a year for the next five years. That growth rate will scale down to the inflation rate (1.50%) in year 10
- Shipping Costs: Shipping costs will grow 3% a year for the next five years (well below the incremental revenue growth), before settling into growing at the inflation rate thereafter.
- Customer Service Costs: The cost of Prime member customer service will increase 5% a year for the next 5 years and the inflation rate thereafter.
- Risk and Cost of Capital: I will assume that Amazon's overall cost of capital of 8% applies as the right risk adjusted rate to use on all of its user numbers.

Response	Percentage
Yes, the current government is responsible	95%
No, the current government is not responsible	5%

Valuing New Members: Assumptions

- If you work with my guess of \$100/new member as the base year number for the cost of adding a member, we need the growth in the membership base.
- Given the success that the company has shown on this front in the last five years, we will assume
 - ▣ A growth rate of 15% for the next five years (which will bring Prime membership to 155 million in 2022).
 - ▣ Given that large base, we will scale growth down to 5% a year from years 6-10 and to 1.5% a year thereafter.

Valuing Amazon's New Members

Cost of acquiring a new member is currently \$100

Cost of acquiring new Member =	\$ 100.00										
Value per new user (in today's \$) =	\$390.73										
	<i>Base Year</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
Total Prime Members	85.00	94.35	106.64	120.78	136.83	155.01	157.74	159.77	161.78	163.82	165.88
New Members	0.00	12.75	16.07	18.41	20.88	23.66	8.93	8.33	8.41	8.51	8.62
Value per new Member	\$390.73	\$396.59	\$402.54	\$408.57	\$414.70	\$420.92	\$427.24	\$433.65	\$440.15	\$446.75	\$453.45
Value added by new Members		\$5,056.50	\$6,466.75	\$7,520.19	\$8,658.21	\$9,957.35	\$3,816.66	\$3,613.95	\$3,699.51	\$3,801.59	\$3,907.19
Terminal Value (New Members)											\$29,875.77
Present Value		\$4,681.94	\$5,544.20	\$5,969.77	\$6,364.04	\$6,776.80	\$2,405.14	\$2,108.70	\$1,998.73	\$1,901.74	\$15,648.05
Value Added by New Users	\$53,399.12										

New Users grows 15% in yr 1-5 and 5% thereafter.

User growth continues at inflation rate in perpetuity.

Discounted back at 8%, the cost of capital for Amazon today.

Value of new user = Value of Existing user - Cost of acquiring New User = \$490.73 - \$100, growing at inflation rate (2%) every year.

Valuing Corporate Drag: Assumptions

- Earlier, we assume that 10% of the company's current technology/media costs are attributable to Prime, yielding a base year cost of \$1,609 million.
- We will assume that these costs will grow with the number of Prime members.
- These costs are tax deductible and will generate a tax benefit that starts at 20% but ends at 25%.

Divvying up Technology/Content Costs

Technology & Content Costs

Assumed that 10% of current corporate expense is for Prime members

Value Drag of Corporate Expenses (Cost)												
Total Media & Content Costs	\$ 16,085.00											
Amazon Prime Share of Expenses (%)	10.00%											
Total Prime Members	85.00	94.35	106.64	120.78	136.83	155.01	157.74	159.77	161.78	163.82	165.88	
Prime Share of Expenses (\$)	\$1,608.50	\$1,785.44	\$2,018.02	\$2,285.61	\$2,589.27	\$2,933.35	\$2,985.07	\$3,023.37	\$3,061.49	\$3,100.06	\$3,139.11	Grow with number of Prime Members
After-tax Corporate Expenses		\$1,419.42	\$1,594.24	\$1,794.20	\$2,019.63	\$2,273.35	\$2,298.50	\$2,312.88	\$2,326.73	\$2,340.54	\$ 2,354.33	
Terminal Value (Corporate Exp)											\$41,866.19	
PV of Corporate Expenses		\$1,314.28	\$1,366.80	\$1,424.30	\$1,484.49	\$1,547.20	\$1,448.45	\$1,349.54	\$1,257.06	\$1,170.86	\$20,482.66	Grows at inflation rate forever.
Value Drag of Corporate Expenses	\$32,845.63											

Discounted back Amazon's cost of capital of 8%

The Value of Amazon Prime

Value of Existing Members	\$41,712
Value of New Members	\$53,399
Value of All Prime Members =	\$95,111
- PV of Corporate Expenses	\$32,846
Value of Amazon Prime	\$62,265

Afterthoughts..

- Lots of assumptions: I know that I have made a multitude of assumptions along the way to get to this value and that you may disagree with many of them. As always, you can download my spreadsheet and make the changes that you think need to be made.
- And a real option with substance: I believe that there is an additional value that I have not counted in. Amazon is building a base of loyal, intense users that it can draw on to promote whatever its next product or service is, whether it be in retailing, technology, entertainment or cloud computing.