

M4: Yahoo Tumblr Case Study Report

- Introduction

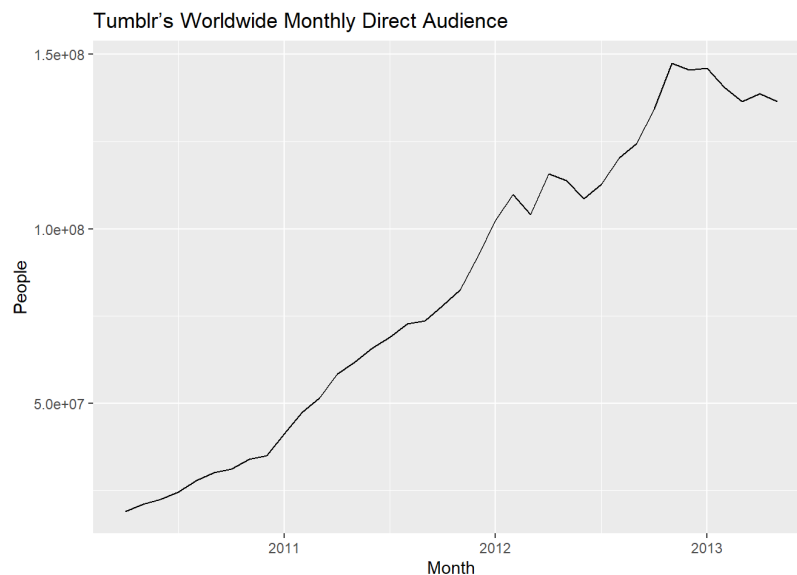
Yahoo recently made a large acquisition purchasing Tumblr for the \$1.1 billion to help spur growth for the acquirer which has been seeing a drop in traffic on its own sites. Tumblr boasts impressive numbers when it comes to user engagement and reach but has not proven itself in terms of monetizing their user base. Yahoo is hopeful that they will be able to use their existing capabilities to tap into Tumblr's young audience and increase future growth and profits. The main business problem here is to figure out if Yahoo forecasted the impact of Tumblr's acquisition correctly and whether or not they paid too much or got a good deal on the acquisition.

- Background

- Tumblr acquisition price: \$1.1 billion
- Tumblr monthly unique visitors: 300 million
- Tumblr daily signups: 120,000
- Tumblr average sessions per day: 7
- Tumblr daily blog posts: 75 million
- Tumblr 2012 revenue: \$13 million
- Tumblr 2012 expenses: \$25 million
- Tumblr MAU: 30-50 million
- Facebook MAU: 1.056 billion
- Tumblr May 2013 traffic: 45 million
- Facebook May 2013 traffic: 136 million
- Facebook 2012 Q4 ARPU: \$1.54

- Data Analysis

Looking at Tumblr's historic data of audience growth, it seems to be linear, with no clear error trend, and no seasonality.



- **Proposed Solutions and Recommendations**

1. Since April 2010, what has been the average monthly growth in the number of people worldwide accessing Tumblr's site? If Tumblr experienced this rate of growth for the next 10 years, how many people worldwide would be accessing Tumblr's site in December 2022?

The average monthly growth rate for people worldwide accessing Tumblr since April 2010 was 5.62%. If this growth rate remained constant for the next 115 months, Tumblr would have 73,486,723,098 people on the site which will be larger than the total amount of humans on the planet meaning that this growth rate is unsustainable for that amount of time.

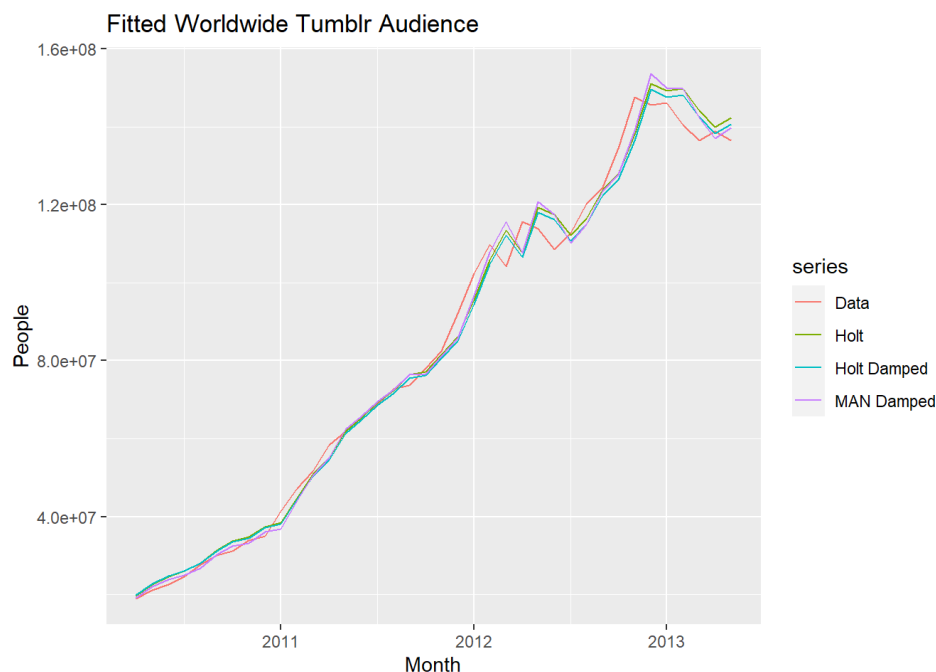
2. How does the average monthly growth rate over the past all months compare to the average monthly growth rate over the past 12 months?

The average monthly growth rate over the for people worldwide accessing Tumblr over the past 12 months is 1.62%. This is much lower than the total average of 5.62% and should be expected for any company that is past its infancy. Exponential growth is possible for a company to see when they are growing a small user base but growth will invariably slow down once their use base reaches in the millions.

3. Use the exponential smoothing models we have learned in class and try to fit the following models again the data:

- Holt's Linear Trend Model
- Holt's Damped Trend Model
- Multiplicative Error Damped Exponential Trend Model
- Which of the models best fits the data?

Graphing each of the fitted models on historic data, they all look to perform similarly and relatively accurately.

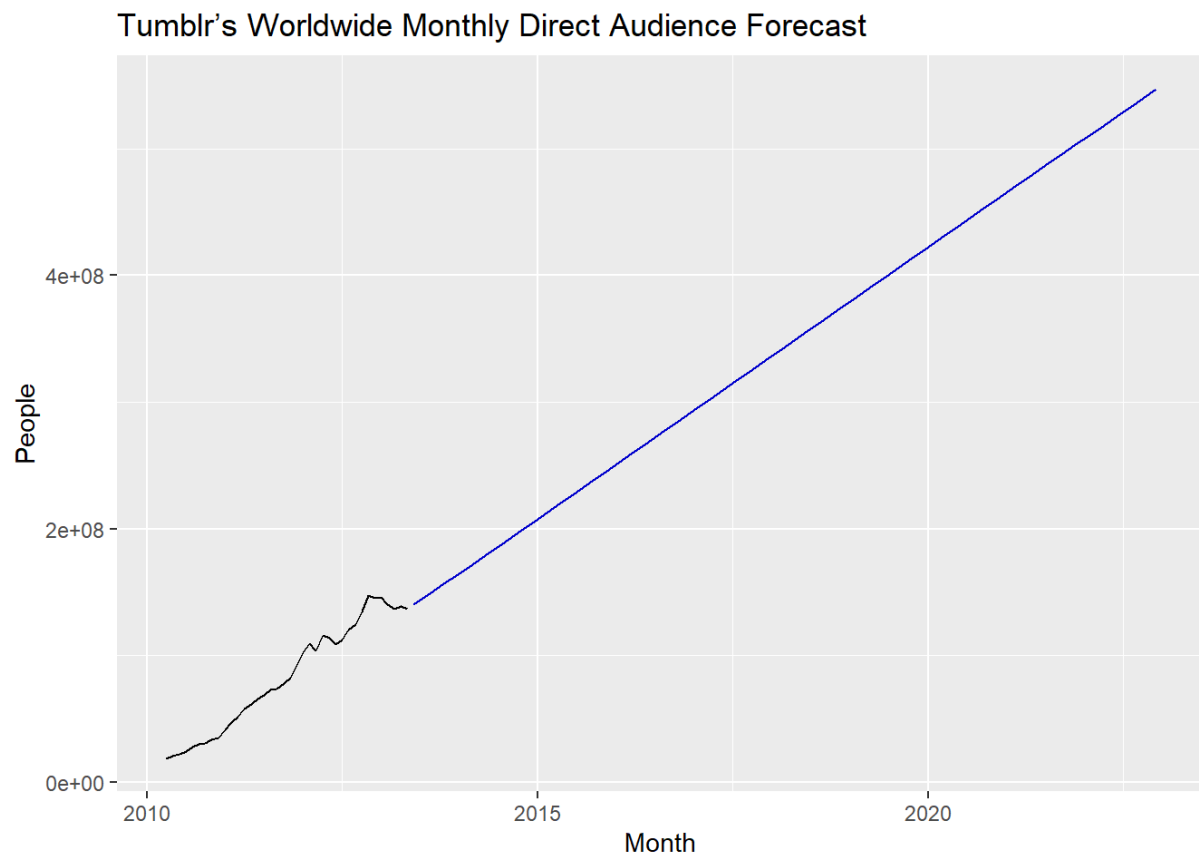


If we split the data into a test set of the last ~20% or 8 months and a training set of the first 30 months, the accuracy of the Holt's linear trend model is the best as it has the lowest RMSE.

Model	RMSE
Holt	12,470,046
Holt Damped	16,637,994
MMN Damped	20,762,264

4. What are your forecasts of people worldwide accessing Tumblr's site for the next 115 months from June 2013 to December 2022?

Using Holt's Linear Trend Model which performed the best in our previous test, we produce the following monthly forecast for the next 115 months ending in a final audience of 547,186,385 in December 2022:



5. How would you revise the valuation of Tumblr in case Exhibit 5 based on your forecasts? (Case Exhibit 5's valuation model is in the provided spreadsheet).

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
People Worldwide	161	204	247	290	333	376	419	461	504	547
Percentage of U.S. People	33%	31%	30%	28%	26%	25%	23%	21%	20%	18%
People, U.S.	53	63	74	81	87	94	96	97	101	98
People, ROW	108	141	173	209	246	282	323	364	403	449
User Equivalents, U.S.	27	32	37	41	43	47	48	48	50	49
User Equivalents, ROW	54	70	86	104	123	141	161	182	202	224
FB Revenue/User, U.S.	\$13.58	\$13.88	\$14.18	\$14.48	\$14.78	\$15.08	\$15.38	\$15.68	\$15.98	\$16.28
FB Revenue/User, ROW	\$3.21	\$3.24	\$3.27	\$3.30	\$3.33	\$3.36	\$3.39	\$3.42	\$3.45	\$3.48
Revenues (in millions)	\$68	\$148	\$177	\$206	\$235	\$261	\$286	\$310	\$331	\$352
Operating Cash Flows	\$22	\$47	\$56	\$65	\$74	\$83	\$91	\$98	\$105	\$111
Terminal Value										\$1,250
Total Cash Flows	\$22	\$47	\$56	\$65	\$74	\$83	\$91	\$98	\$105	\$1,362
Firm Value (in millions)	\$900									

Assuming the same revenue per user, discount rate, and operating margin as the original exhibit and just changing the number of people worldwide to correlate to the forecast we created above, the new total firm value is \$900, down from the \$1,230 million shown in the exhibit.

6. Is there anything else you want to change for Exhibit 5? If you were on Yahoo's board, would you have voted to approve the acquisition of Tumblr for \$1.1 billion?

The first thing I would change in Tumblr's valuation is the total growth rate of people on the site. The average growth rate of people on Tumblr over the past 12 months was already only 1.62% and as we have seen, that number is vastly lower than the average growth rate over the company's lifetime. Expecting the growth rate to stay constant over the next 9 years, even with synergies created by the acquisition by Yahoo, is not realistic and should be adjusted.

Another thing I would change in exhibit 5 would be to open up comparisons to different companies other than Facebook. Since Tumblr is an open site that does not require an account to access its content, it can be argued that it is more comparable to other open social media sites like Reddit or YouTube. Those companies also strive to create an emotional bond with consumers and are a more equivalent match to Tumblr than Facebook is.

If I was on the Yahoo's board, I would not have voted to approve the acquisition of Tumblr for \$1.1 billion since the company is only worth \$900 million according to our new valuation. However, acquiring Tumblr was described as being Yahoo's last attempt at staying afloat in an increasingly competitive industry and given its recent decline in traffic, this might have been its best option. If possible, I would recommend trying to negotiate a lower price for Tumblr closer to the \$900 million valuation that we generated.