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Statistical Modeling and Data Collection for Customer-based Corporate Valuation

Marketing Professor Pete Fader and Statistics doctoral student Dan McCarthy are focused on building stronger models for company valuation. Their research values companies using a "bottom up" approach that values the company by valuing the customers of that company, because theoretically, all of the company's value should come from present and future customers. A strong customer-based model for company valuation has the potential to exceed other models and lead to a more accurate overall valuation of the company. Perhaps even more importantly, it will provide a window into the health of the customer base, allowing for comparisons across firms.

An accurate company valuation hinges on the ability to accurately value future customer value. In order to address this, we sorted through and synthesized massive amounts of publically available financial data so that the model's fit would be optimal. By extracting data from SEC filings, I supplemented the necessary data to make the model stronger. Additionally, I learned the theory and practiced the mechanics behind the construction of various ways to optimally fit the data and model the company.

By the end, we had completed data collection of all publically available customer metrics for 33 companies, including all of the major players in the telecommunications industry. By collecting almost all the data for a whole industry, we can now examine the effects of customers switching between competitors rather than only viewing them as subscribed or unsubscribed.

Additionally we read, discussed, and summarized the most important research that has been published thus far on customer-based valuation. This database will not only facilitate Prof. Fader and Dan McCarthy's model construction, but also will give myself and others the ability to perform whatever analysis we wish on the customer data of these companies. Moreover, the statistical modeling that I learned because it helps value companies can be applied in a wide array of fields, even outside of finance.