



Theta Equity Partners

Revolutionizing finance through Customer-Based Corporate Valuation

www.thetaequity.com

Customer behavior drives corporate valuation, but is often overlooked



90% down since IPO

“Worst tech IPO in 2017”



Promising financials...

- Annual revenue growth 100%+
- Gross margin 33% and improving
- Operating margin -7% but improving



... but weak customer fundamentals:

- 70% of customers leave after 6 months
- Marketing cost 18% of revenue & growing CAC
- Decreasing spend by new customers

Sued by investors for not disclosing customer-related problems; CEO resigned

STITCH FIX

60%+ up since IPO



Promising financials...

- Annual revenue growth 70%
- Gross margin 44% and stable
- Positive operating income last 3 years



... and customer fundamentals:

- 86% of revenue generated by repeat customers
- Marketing cost only 7% of revenue
- Increasing spend per customer

Deeper understanding of customer behavior is critical to estimate true underlying company value

Traditional valuation methods often miss key customer-driven leading indicators of company value

Traditional valuation approach

Uses:

- SEC filings
- Managerial reporting
- 3rd party data

Focuses on financial metrics that can **hide useful underlying processes**

Often **backward-looking**, extrapolating off of historical financials

Provides **limited insight** beyond financial valuation

Less diagnostic for **growing companies with negative cash flows**



Customer-Based Corporate Valuation (CBCV) approach

Uses:

- Customer behavior data
- SEC filings
- Managerial reporting
- 3rd party data

Focuses on **underlying customer behaviors** – acquisition, churn, purchasing and their **impact on company value**

Forward-looking – predicts future customer value and its impact on future financials

In addition to estimating value more accurately, provides **insights into unit economics** (e.g., how profitable customers are and what the retention curve is)

Well-suited for growing companies with negative cash flows

CBCV expands traditional valuation approach by incorporating predictions of customer behavior directly into the overall company valuation

We help better estimate company value by predicting future customer behavior – acquisition, retention, purchasing, spending

Data

Customer-based Corporate Valuation (CBCV) Models

Insights



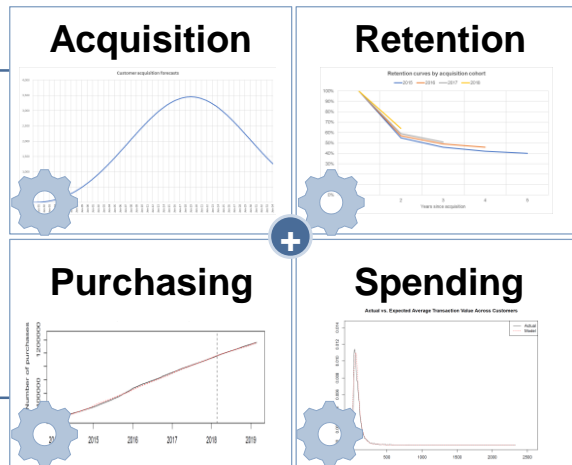
Internal company data

- Customer transaction logs
- Other sources, e.g., marketing, satisfaction, CRM data, etc.



Aggregated company data

- SEC filings
- Investor presentations
- 3rd party disclosures
- Company disclosures from early-stage deal diligence



Highly predictive probability models of customer behavior

- 1 Predictions** of future customer acquisition, retention, purchasing, spend
- 2 Insights into unit economics** – customer profitability, retention, CLV, and more
- 3 Bottom-up revenue forecasts** driven by predicted customer behavior
- 4 Customer-based valuation model** based on bottom-up revenue forecasts

Customer-Based Corporate Valuation is a value measurement and management tool for PE, VC, corporations, and public equities



Private Equity / Venture Capital

- **Investing.** Gain a competitive edge in bidding by more accurately estimating target's value and identifying levers to improve value of revenue streams
- **Operating.** Improve valuations of current portfolio companies by regularly assessing and improving customer value
- **Selling.** Maximize return on investment when exiting a company by identifying sources of company value ignored by traditional valuation methods



Corporations

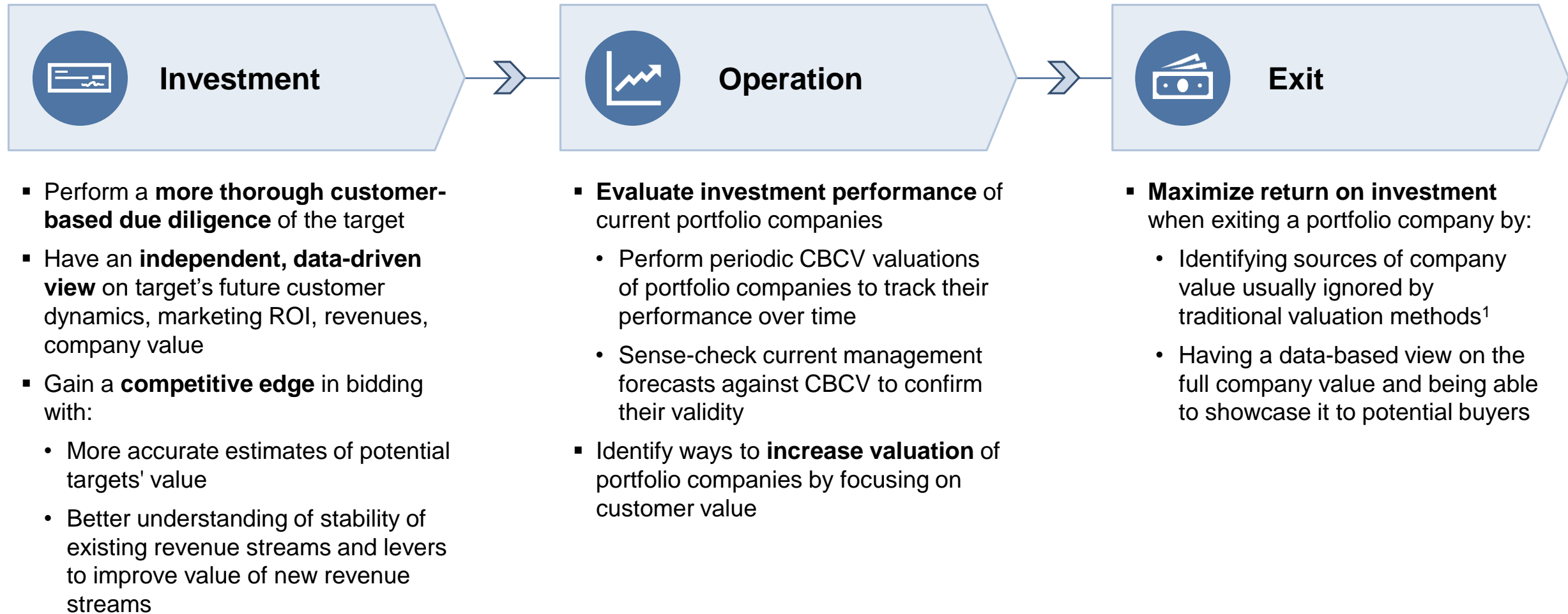
- **Managing customer value.** Better understand health of your customer base and customers' relationship to overall company valuation
- **Raising capital and M&A.** Get more favorable investment / M&A terms by having a data-backed view on firm value including sources of value ignored by other valuation methods
- **Working with investors.** Demonstrate full company value to outside investors by strategically disclosing key customer metrics directly linked to company valuation



Public Equities

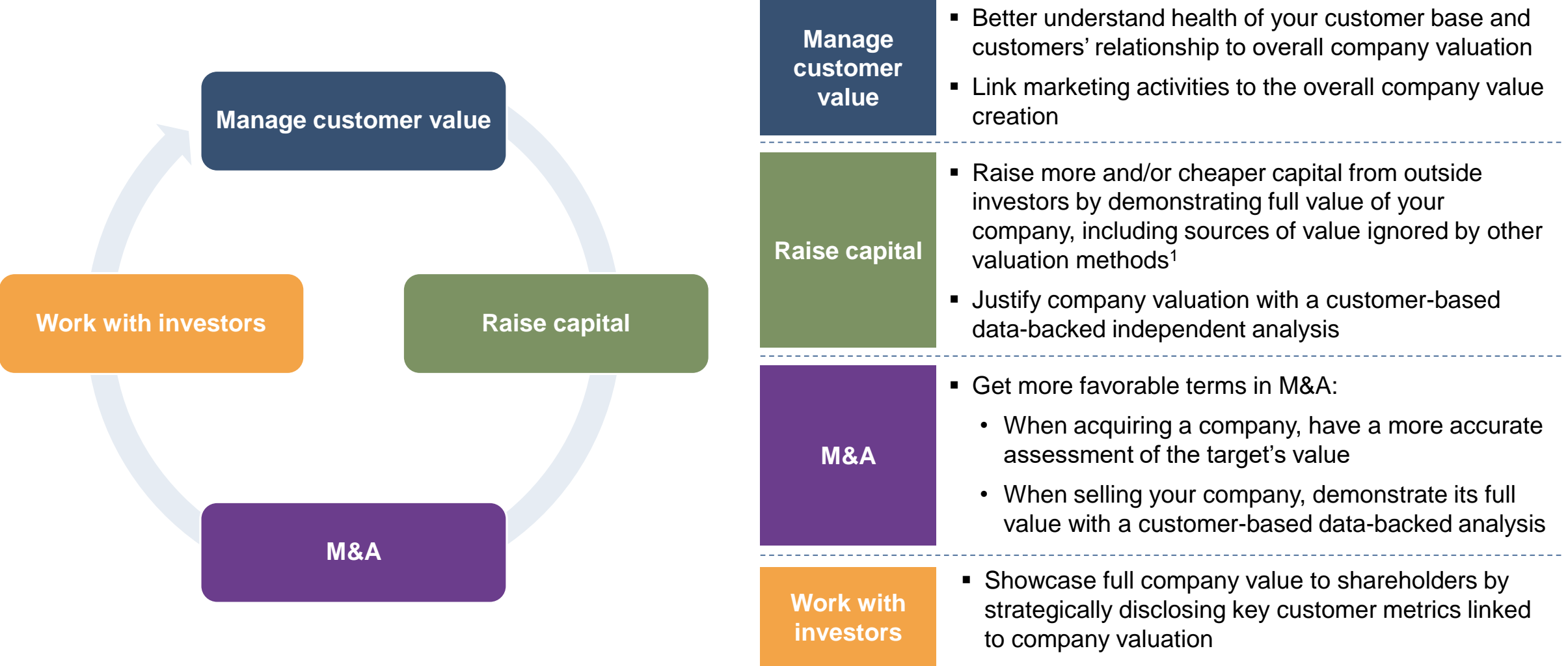
- **Investing.** Better estimate investments' value and gain deeper insights into unit economics using publicly available data (SEC filings, presentations, etc.)
- **Holding.** Always have an up-to-date forward-looking view of portfolio investments
- **Creating analyst reports.** Provide a more insightful picture of company unit economics and set more accurate target prices in analyst reports and recommendations

PE and VC firms: CBCV will add value at every stage of the investment process



1. For example, accounting for customer heterogeneity, which traditional valuation methods usually ignore, can significantly improve valuation accuracy

Corporations: CBCV will help demonstrate full company value to potential and current investors



1. For example, accounting for customer heterogeneity, which traditional valuation methods usually ignore, can significantly improve valuation accuracy

Public Equities: CBCV will give a more insightful customer-based view of potential and current investments

Investing



- Better estimate investments' value and gain deeper insights into unit economics using publicly available data (SEC filings, presentations, 3rd-party data providers, etc.)
 - CBCV is able to uncover hidden customer behavior patterns in aggregate SEC filings when even a few key customer metrics are reported (e.g., gross customer acquisitions, active customers, total orders)
 - 3rd-party data can enhance CBCV ability to forecast future customer behavior

Holding




- Always have an up-to-date forward-looking view of portfolio investments
 - Periodically re-assess value of portfolio investments using the CBCV methodology with the latest available data
 - Make adjustments to your investments based on updated CBCV valuations

Analyzing



- Provide a more insightful picture of company unit economics in analyst reports
- Set more accurate target prices in analyst reports and recommendations

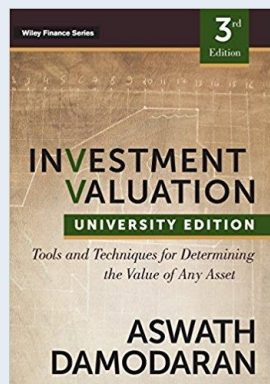
We have a range of CBCV offerings depending on your specific needs

	Express Analysis of unit economics (CLV, RLV, CAC ¹)		Deep Dive with complete company valuation
Deliverables	<p>Standardized outputs with key forward-looking and historical customer value metrics:</p> <ul style="list-style-type: none">• CLV and RLV trends (over time, by segment, etc.)• Marketing ROI (CLV vs CAC) trends and opportunity to improve customer acquisition channel performance• Cross-sell / up-sell potential of existing customers	<p>The right option for you will be context-dependent</p> 	<p>Customized valuation model and detailed report covering:</p> <ul style="list-style-type: none">• Detailed customer-based revenue forecasts• Key customer metric predictions: customer acquisitions, CLV, CAC, and marketing ROI• Product category analysis (product-level CLV, impact of cross-selling on value)• Complete valuation model• Sensitivity analysis (prediction intervals) for revenue and other customer metrics forecasts
Best suited for	<ul style="list-style-type: none">• Quick due diligence of potential investments• Evaluation of company unit economics and quick diagnostics of customer value		<ul style="list-style-type: none">• Detailed evaluation of a potential investment to get a competitive edge in the bidding process• Identify opportunities to improve customer value in target and portfolio companies

[Contact us](#) for examples of our deliverables

CBCV is endorsed by a leading corporate valuation expert and covered by reputable business and academic publications

Aswath Damodaran: “Dan McCarthy’s work is **changing the way analysts are approaching valuation** of user-based companies. ... Dan’s work on the value of a user in Blue Apron contributed not just to a **stock price drop** but a **CEO’s departure**.”



Alex Taussig, Partner at Lightspeed Ventures on CBCV: “This **more rigorous mathematical approach** to repeat purchasing and churn is a better way for companies to model these important metrics. ... It should lead to a **deeper understanding of customer behavior** and help **predict future cash flows** from customers.”

Winner of a number of prestigious academic awards, including the MSI Alden G. Clayton, American Statistical Association, INFORMS, and Shankar-Spiegel dissertation awards.

Harvard Business Review



THE WALL STREET JOURNAL.



MarketWatch



BUSINESS INSIDER



Our Team (1/2)



Peter Fader, Co-founder, Director

- Pete is a Professor of Marketing at the Wharton School of the University of Pennsylvania
- He is the author of the "Customer Centricity" book and a winner of many research and teaching awards
- Together with Dan McCarthy, he co-founded Zodiac, a predictive customer analytics firm, before it was acquired by Nike

✉ pete@thetaequity.com



Daniel McCarthy, Co-founder, Director

- Dan is an Assistant Professor of Marketing at Emory University's Goizueta Business School
- He is a co-creator of the CBCV methodology and has won numerous research awards for his work on the topic
- He holds a PhD in Statistics from the Wharton School of the University of Pennsylvania

✉ dan@thetaequity.com



Val Rastorguev, Director

- Prior to joining Theta Equity Partners, Val was a consultant and expert at McKinsey & Co, where he worked on a wide variety of topics, including marketing, finance, and advanced analytics
- He graduated with honors from the Wharton School of the University of Pennsylvania with an MBA degree and holds a MSc degree in Math

✉ val@thetaequity.com

Our Team (2/2)



Nikhil Nabar,
Manager of Data Science & Engineering

- Prior to joining Theta Equity Partners, Nickhil developed high-frequency trading strategies and execution systems on the ETF market making team at Citadel Securities
- He completed his undergraduate studies at Penn M&T, where he graduated summa cum laude with dual degrees from Wharton and Penn Engineering

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Joshua Bernstein,
Director of Business Development

- Prior to joining Theta Equity Partners, Joshua was a partner in a private equity firm, advisor to multiple firms and consultant at McKinsey & Co.
- He holds an MBA from the Wharton School at the University of Pennsylvania and BA from Emory University

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Select Public CBCV Case Studies

[Contact us](#) for more detailed case studies and examples of our reports

Theta Equity Partners

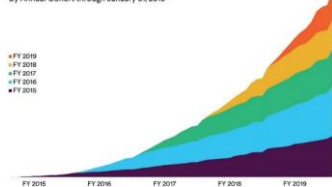
Case study: Slack



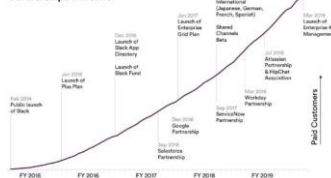
Context

- **Slack**, a leading B2B collaboration tool developer **filed for DPO** on April 26, 2019
- Most recent private market transactions **valued Slack at \$17B**
- **Disclosed key customer metrics in their S-1 filing**: number of customers, number of large customers, ARR by cohort, revenue retention, and more

Annual Recurring Revenue (ARR)
by Annual Cohort through January 31, 2019

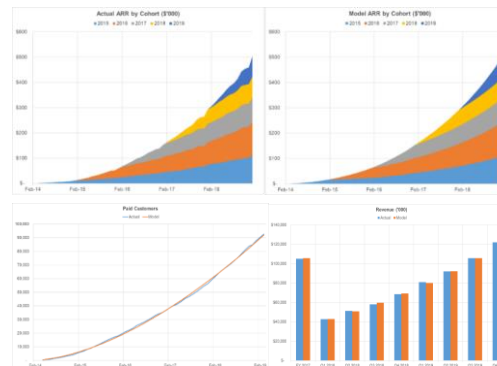


Product and
Partnerships Timeline



Approach

- **Analyzed Slack's S-1** filing using all disclosed customer data
- Built **probability models of customer behavior** for subscription businesses – acquisition, retention, spend
- Analyzed company's unit economics to **understand its path to profitability**
- Built a complete **valuation model** to estimate company's fair value



Results

- Revealed very strong unit economics with **\$100K average CLV** and **1,300% marketing ROI**, although with a **long average payback period of 3 years** ([unit economics analysis](#))
- **Fair equity valuation of \$22-27B** with upside potential – 30-60% above recent private transactions ([valuation analysis](#))
- Strong customer heterogeneity – **top 1% of customers have ~100x higher average CLV** and **account for 50% of value**

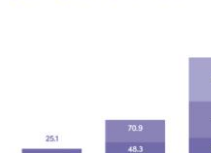
Case study: Lyft



Context

- **Lyft**, world's second-largest ride-sharing company with \$2.2B revenue and a \$1B operating loss in 2018, **filed for IPO** on March 1, 2019
- **IPO price**: \$72 (\$20.5B valuation)
- **Disclosed key customer metrics in the S-1 filing**: rides by cohort, active riders, total rides, revenue per ride

Rides by Annual Cohort (in millions)

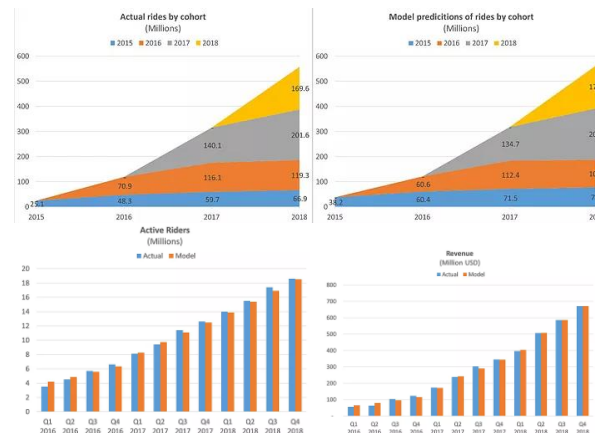


Active Riders (in millions)



Approach

- **Analyzed Lyft's S-1** filing with aggregated quarterly data
- Built **probability models of customer behavior** for noncontractual businesses
- Analyzed company's unit economics to **understand its path to profitability**
- Built a complete **valuation model** to estimate company's fair value



Results

- Revealed **constructive unit economics** with a \$19 CLV per rider, but fair value between \$5-7B – far from the target \$20.5B valuation ([unit economics](#) and [valuation analyses](#))
- **Poor post-IPO stock performance**
 - Stock price is 20% below the IPO price as of May 20, 2019
 - Numerous investor lawsuits have been filed against Lyft



Case study: Blue Apron



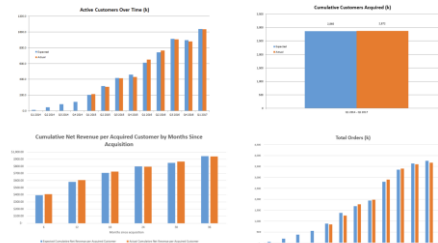
Context

- **Blue Apron**, a leading meal kit subscription company **filed for IPO** on June 1, 2017
- **Original IPO range** (6/19): \$15-17 (\$2.8-3.2B valuation), **revised down** to \$10-11 (\$1.9-2.1B valuation)
- **Did not disclose any churn metrics:** only CAC per customer, number of customers and orders



Approach

- **Analyzed company's S-1** filing with aggregated quarterly data on only 4 customer metrics – number of active customers, number of orders, CAC per customer
- Built **probability models of customer behavior** for subscription-based businesses
- Analyzed company's unit economics to **evaluate its business model sustainability**



Results

- Revealed that **70% of customers churn in 6 months** and **generate losses**
- **Published CBCV** analysis results that received a **widespread coverage** in top business media ([analysis 1](#), [analysis 2](#))
- **“Worst IPO of 2017”**
 - Stock down 90% and is a penny stock as of May 2019
 - Company sued by shareholders
 - CEO resigned, replacement also stepped down

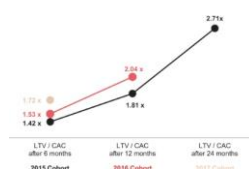
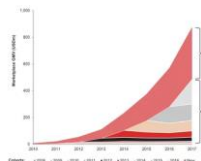


Case study: Farfetch



Context

- **Farfetch**, a global luxury fashion marketplace with \$600M revenue and 65% annual revenue growth, **filed for IPO** on August 20, 2018
- **Disclosed rich customer data in the F-1 filing**: GMV by cohort, active customers, total orders, short-term customer value, etc.
- **Original IPO range**: \$15-17, **actual IPO price**: \$20 (\$5.7B valuation)



Approach

- **Analyzed company's F-1** filing with aggregated quarterly data
- Built **probability models of customer behavior** for noncontractual businesses
- Analyzed company's unit economics to **evaluate its business model sustainability**
- Built a complete **valuation model** to estimate company's fair value



Results

- Revealed strong customer monetization, profitability and stable CAC, resulting in a **healthy marketing ROI** that **justified the IPO price of \$20** ([analysis](#))
- **Post-IPO stock performance – high volatility around \$20**
 - Price surged 50%+ on the first day of trading
 - Generally the stock has been trading within \$18-23 as of 05/2019





To discuss your needs contact:

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www.thetaequity.com