

Morgan Stanley



Valuation 101

Multicultural Innovation Lab

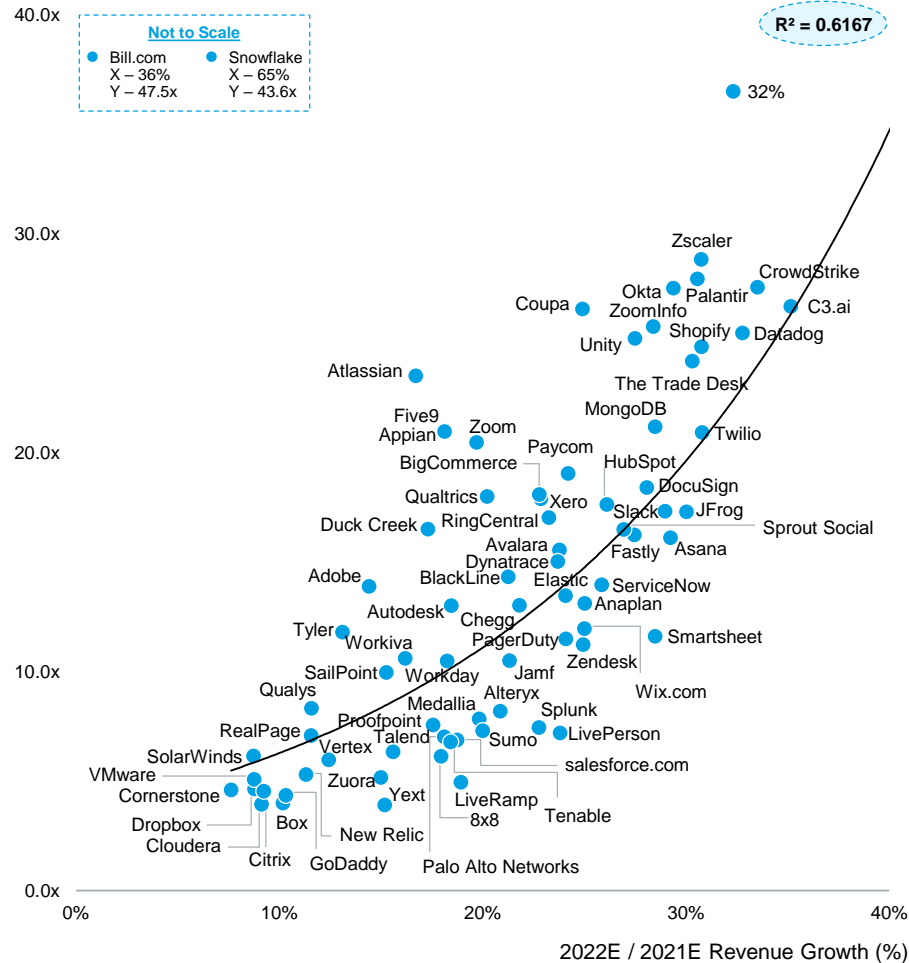
May 2021

2022 Software Valuation Multiples Are More Correlated to Growth Than Growth and Profitability

Revenue Growth Plus FCF Margin Correlations (2)

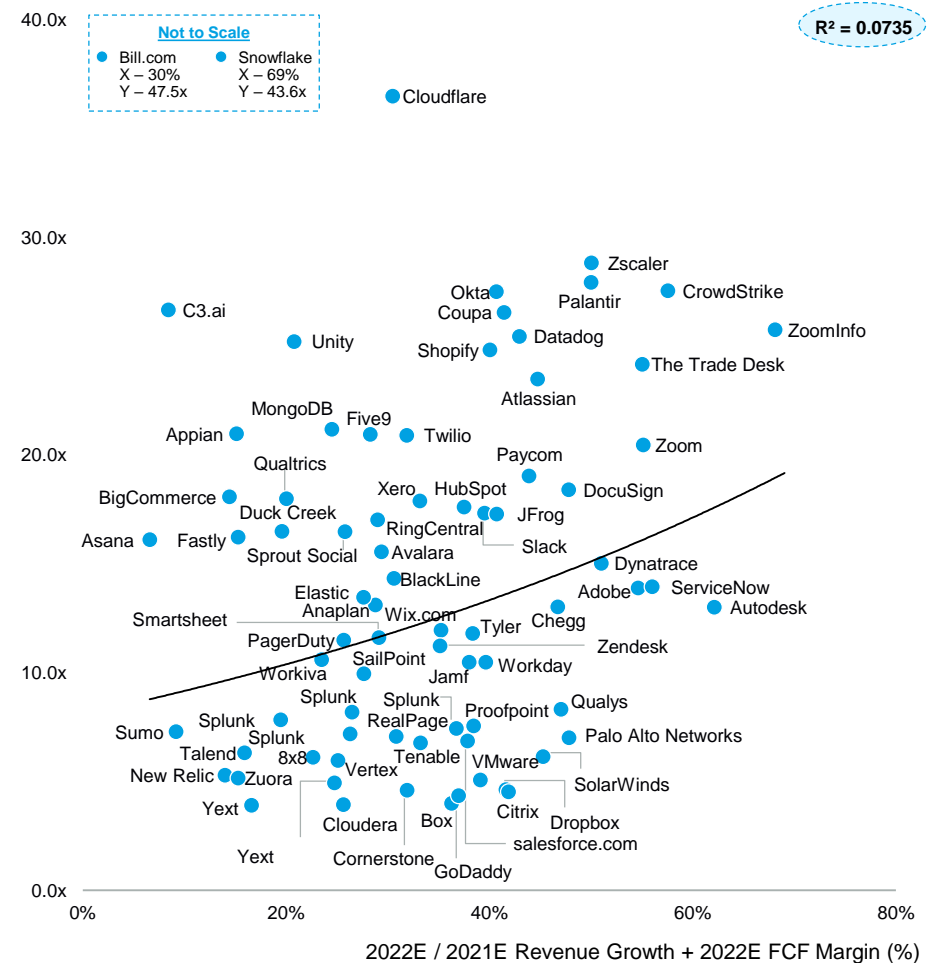
2022E AV / Rev vs. 2022E Revenue Growth

2022E AV / Rev (X)



2022E AV / Rev vs. 2022E Revenue Growth + FCF Margin

2022E AV / Rev (X)



- Notes:**
1. Market data and consensus estimates as of 4/30/2021
 2. Other factors influencing valuations could include: execution, TAM, disruption, competition, business models, customer concentration

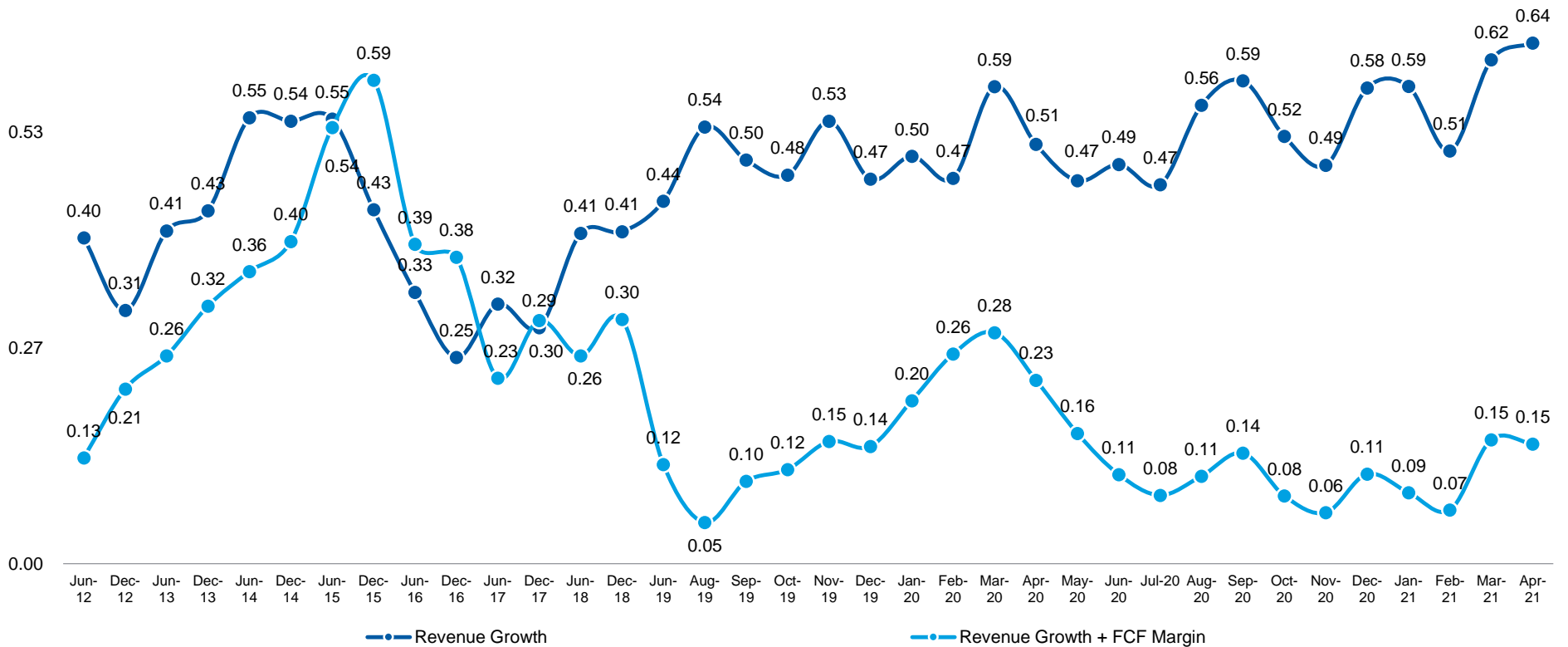
Growth Over Profitability Near Peak Levels

Correlation of AV / NTM Revenue v. NTM Revenue Growth (& FCF Margin) in Enterprise Software

Correlation between Valuation and Growth / Growth + FCF Margin

R-Squared

0.80



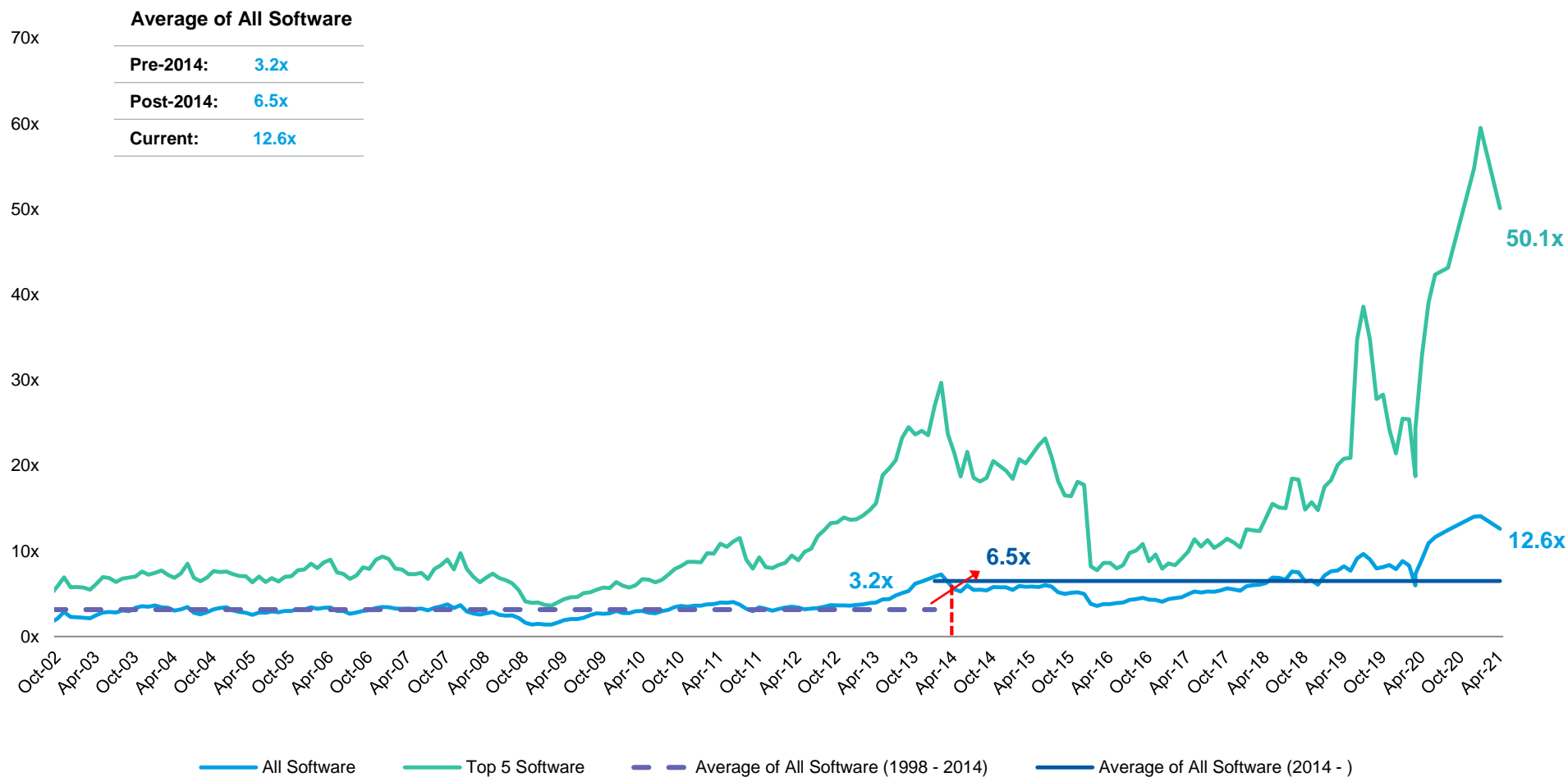
Note:

1. Market data and consensus estimates as of 4/30/2021. Excludes Zoom in some periods for outlier NTM revenue growth.

A “New Normal” Developing for Software

Forward Revenue Multiples of Software Companies Since 2002

As of 4/30/2021



Notes: AV / Revenue multiple represents the average of the highest 5 and all AV / NTM Revenue multiples on a given day. Excludes Symantec for some periods due to distortionary effects.

Key Takeaways from Recent IPOs

1 Strong pace of issuance:

IPO volumes in 1Q 2021 already exceeded the annual volume in 2014 through 2018

2 High quality investors increasingly discerning:

Participation from high quality investors has been mixed in recent deals vs. unanimous participation late last year / early this year

3 Marginal buyers have dissipated, leading to weak or muted aftermarket performance:

Average gross demand for IPOs this year-to-date have declined from ~20x for the pre-March 18 cohort to ~8x for the post-March 18 cohort. As a result, we have seen a deterioration of aftermarket performance (Day 1 trading performance, % of deals that break issue within 30 days), especially for marginal stories. However, for best-in-class companies with open ended growth stories, we expect strong demand to the extent that the risk-reward is fair

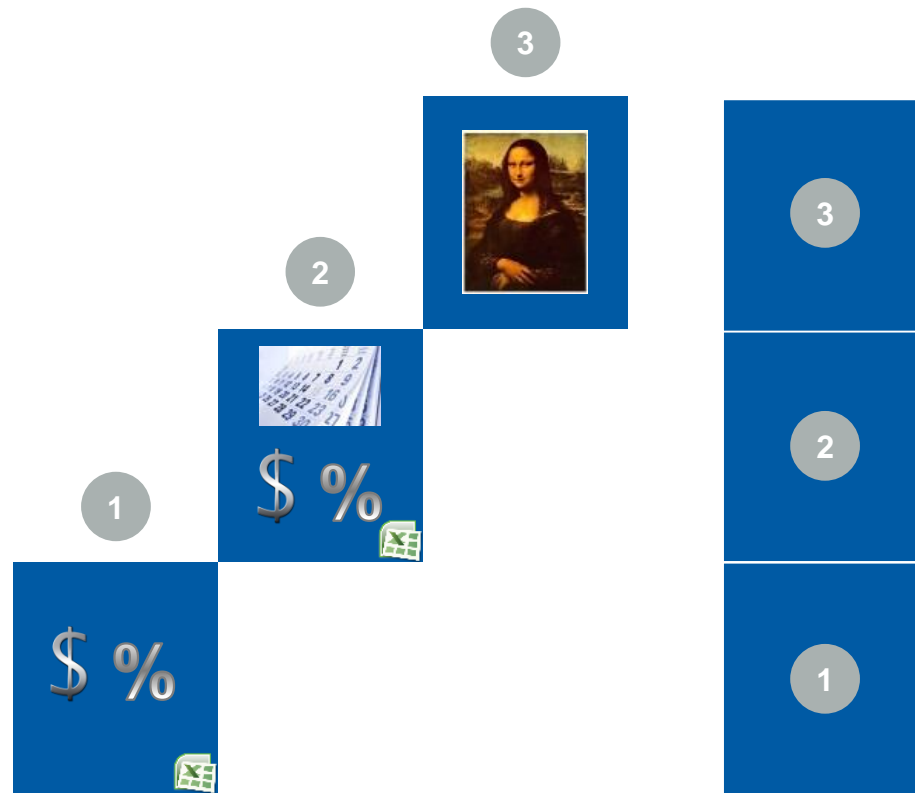
4 As such, important to identify cornerstone / anchor investors early on:

While some deals have benefitted from cornerstone investors on the cover of the IPO early on (Baillie Gifford and Capital Research on Coursera), we have advocated for an expansive investor education effort to provide potential large buyers with additional diligence ahead of IPO launch in order to de-risk the demand and price discovery process

5 Important to proactively address key investor referendums:

For more complex and nuanced stories, we recommend more transparency around metrics, data, customer anecdotes to help investors gain comfort, particularly given declining appetite to pay premium multiples for nascent execution

The Components of Value



1 **Fundamental Value:
Current Business
Model**

2 **Perceived Value:
Future Business
Model**

3 **Perceived Scarcity
Value: Value
Proposition**

Common Drivers of M&A Activity

- Mergers and acquisitions are commonly used to effect corporate change and achieve strategic objectives
- The reasons behind transactions are numerous—but the elemental forces driving the M&A process include: financial fluctuations, structural change, regulatory reform, technological change and a natural imperative towards scale and scarce resources

Financial Fluctuations	<ul style="list-style-type: none"> • Uneven developments in the financial markets present opportunities or cause the need for corporate restructuring
Structural Change	<ul style="list-style-type: none"> • Emergence of new asset classes such as private equity and hedge funds • Preponderance of liquidity in combination with benign interest rates created voracious buyers of corporate assets in recent years
Regulatory Change	<ul style="list-style-type: none"> • New legislation or deregulation are important drivers of M&A activity across many markets
Technological Change	<ul style="list-style-type: none"> • Technology creates new markets and products and introduces new competitors • Constant emergence new technologies ensure a rich market of buyers and sellers
Scale and Scarcity	<ul style="list-style-type: none"> • Desire for critical mass, scarce resources, new technologies, globalization (new customers, new markets) and integration (vertical, horizontal)
Other	<ul style="list-style-type: none"> • Generational change in family businesses • Emergence of China and India as economic powerhouses and the global re-allocation of manufacturing inputs

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SECTION 1

Valuation Deep Dive

Valuation

How to determine what is the maximum price you will pay (or minimum you will take)?

- Comps: multiples, growth, margins
- Comps over time
- Precedent multiples
- Premiums paid
- DCF
- Private market backstop: LBO valuation

Valuation (cont'd)

- Valuation and merger analysis in general is often termed an art rather than science because of the subjective judgments involved
- While there are many variations of financial analysis that may be suitable for a specific transaction, the cornerstone analyses are:
 - DCF analysis
 - Comparable companies analysis
 - Precedent transactions analysis
 - LBO analysis
 - Accretion / Dilution analysis
- Other useful analysis depending on the industry or circumstance may include: replacement cost analysis, DDM analysis, contribution analysis, volume weighted entry price analysis, levered recap analysis, etc

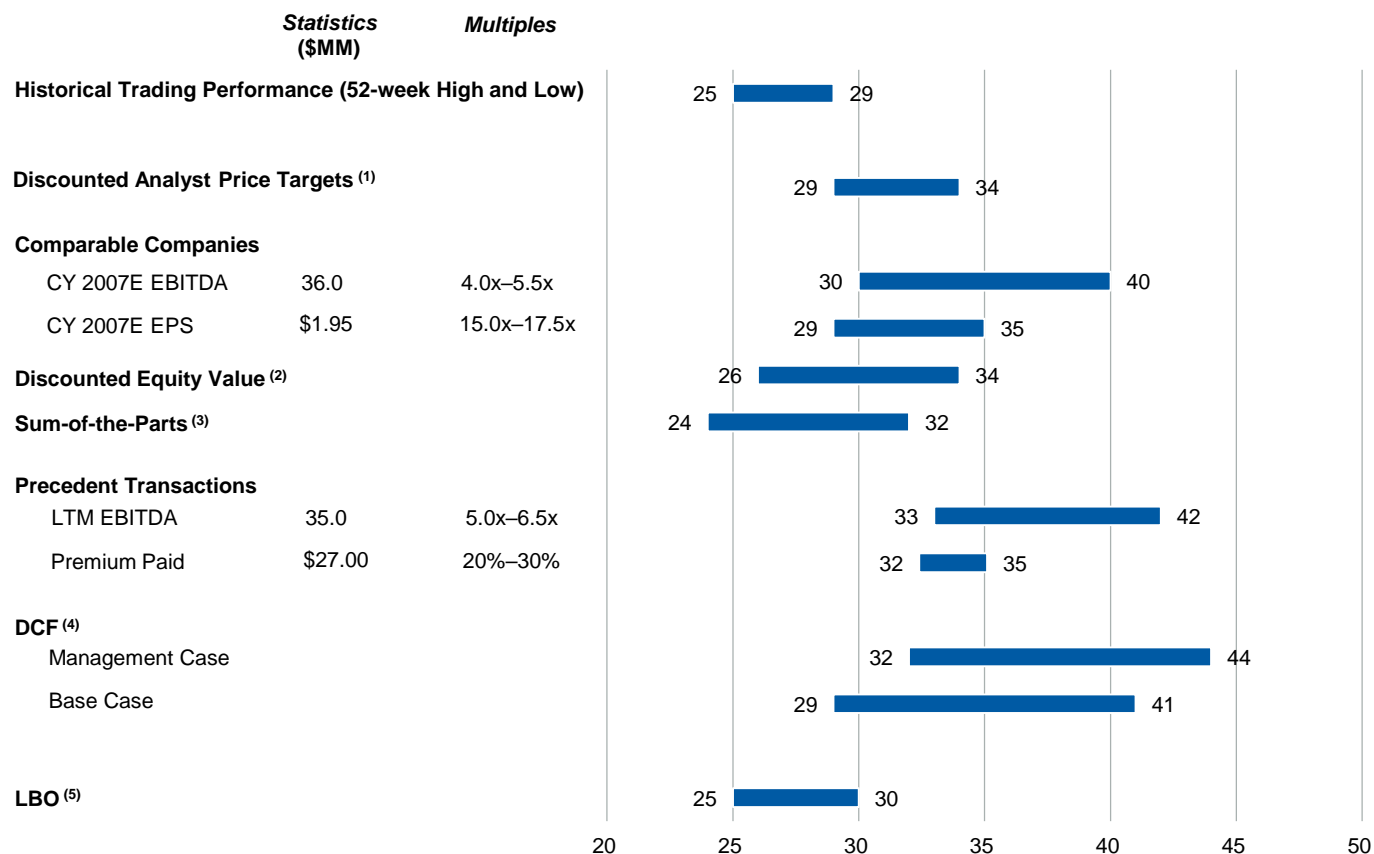
Intrinsic Valuation Techniques	Discounted Cash Flow Analysis	<ul style="list-style-type: none"> • Detailed projection of a company's earnings and cash flow potential discounted back to present value terms • Pros: allows for the systematic assessment of anticipated changes to a company's industry and business dynamics on a going forward basis • Cons: highly dependent on judgment-based assumptions on future business performance, discount rates and terminal multiples
	Comparable Companies Analysis	<ul style="list-style-type: none"> • Implied valuation based on the public trading values of comparable companies • Pros: reflects current public market values of similar assets • Cons: static view of market values, does not account for potential synergies, forward looking multiples involve underlying uncertainties of future performance
	Precedent Transactions Analysis	<ul style="list-style-type: none"> • Implied valuation based on premiums or multiples paid for similar assets • Pros: reflects private market values of similar assets • Cons: limited by available public information, directly comparable transactions are rare and often does not reflect the unique circumstances of a particular deal
	Leverage Buyout Analysis	<ul style="list-style-type: none"> • Similar in framework to the DCF analysis, except the target is assumed to be acquired with a significant amount of leverage • Financial sponsors analyze investment returns assuming an exit value • Backsolving maximum values based on minimum investment return thresholds may be useful to strategic buyers
Merger Consequences	Accretion / Dilution & Analysis	<ul style="list-style-type: none"> • Analyze the impact of a transaction on the acquiror's earnings, cashflow and capital structure • Analysis adds new earnings generated by the target offset by incremental interest expense and / or new shares issued as consideration • Adjustments are made for expected synergies and other transaction consequences such as tax or goodwill, if relevant

Preliminary Valuation Summary

- Number of valuation techniques used to establish value range
- No single “correct” valuation technique. Each approach has strengths and weaknesses and should be used in context
 - Judgment is critical in determining which are more relevant
- As much art as science
- First issue: date of valuation

Valuation Summary—Share Price

(\$)



Notes:

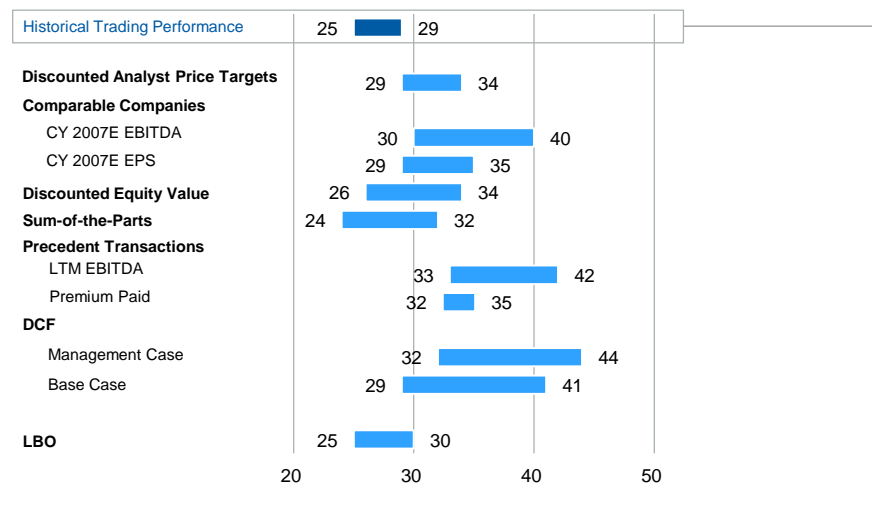
1. Discounted by cost of equity
2. Based on current P/E multiple range applied to future EPS (usually two years forward), discounted to today’s date by cost of equity
3. Based on trading multiples applied to various business segments
4. Assumes forward EBITDA multiple range, discount rate range, aggregate value less current net debt divided by fully-diluted shares outstanding
5. Assumes leverage ratio, EBITDA exit multiple range, and price to generate 15–25% returns

Preliminary Valuation Summary

Historical Trading Performance

Valuation Summary—Share Price

\$



Historical Trading Performance

Description

- 52-week High and Low range

Comments

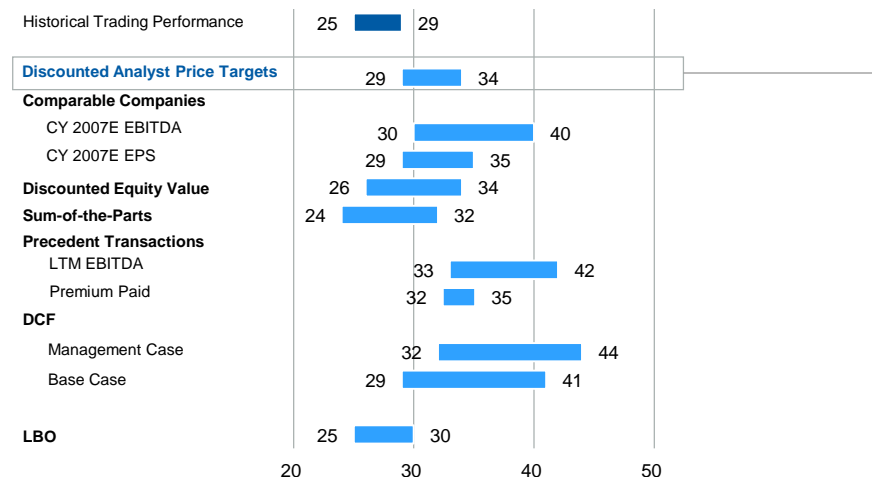
- Good initial tool for benchmarking valuation
- Must review major company events and impact on share price
- Review volume-weighted trading data

Preliminary Valuation Summary

Discounted Analyst Price Targets

Valuation Summary—Share Price

\$



Discounted Analyst Price Targets

Description

- Analyst price targets discounted back at cost of equity

Comments

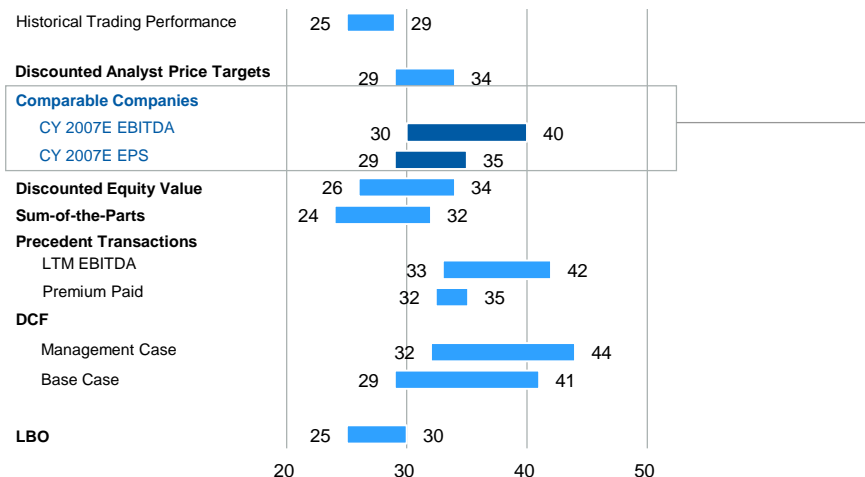
- Some targets are 1-year, 6-month, or current
- Some research is embargoed
- Analyze analyst commentary and valuation methodology
- Makes sense to calculate the median

Preliminary Valuation Summary

Comparable Company Analysis

Valuation Summary—Share Price

\$



Discounted Analyst Price Targets

Description

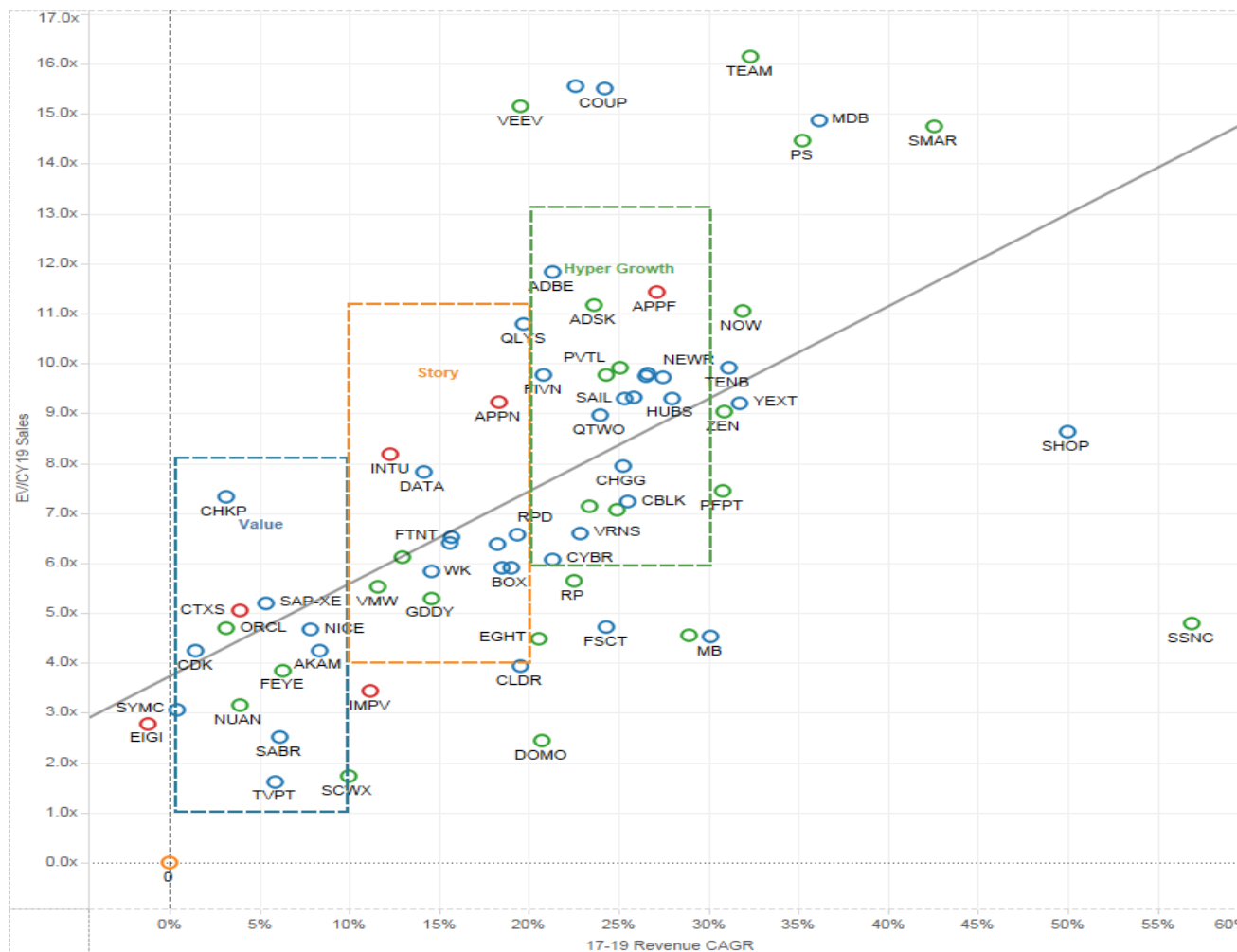
Comments

- | | |
|--|--|
| <ul style="list-style-type: none"> • Implied value in the public equity markets based on analysis of comparable companies' trading and operating statistics • Apply multiples derived from similar publicly traded companies | <ul style="list-style-type: none"> • Reliability depends on the level of comparability • Does not include control premium • "Fully distributed" trading value • Generally focused on forward multiples • Multiples can be effected by volume, size, level of research, overhang, etc. |
|--|--|

Different Frameworks for Different Parts of the Growth Curve

Looking across hyper-growth, scale subscription and mature software

- Hyper-growth names are growing over 20% in software, where we look to EV / Sales as a primary valuation metric
 - Ex: RealPage, Instructure, Zendesk, Proofpoint, Smartsheet
- Scale subscription names allow for EV / FCF multiple valuations
 - Ex: Salesforce, ServiceNow, Palo Alto Networks, Go Daddy, Veeva
- Mature software names allow for P / E multiple valuations
 - Ex: Adobe, Intuit, Microsoft



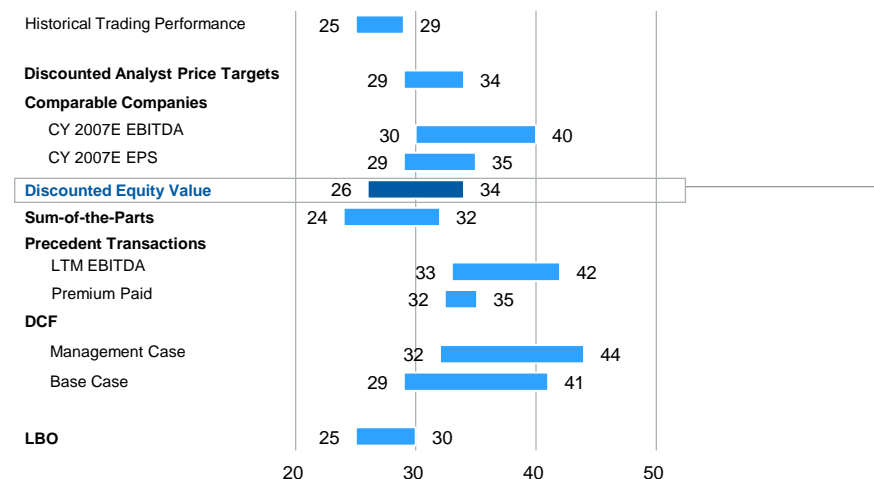
Source: Morgan Stanley Equity Research

Preliminary Valuation Summary

Discounted Equity Value

Valuation Summary—Share Price

\$



Discounted Analyst Price Targets

Description

Comments

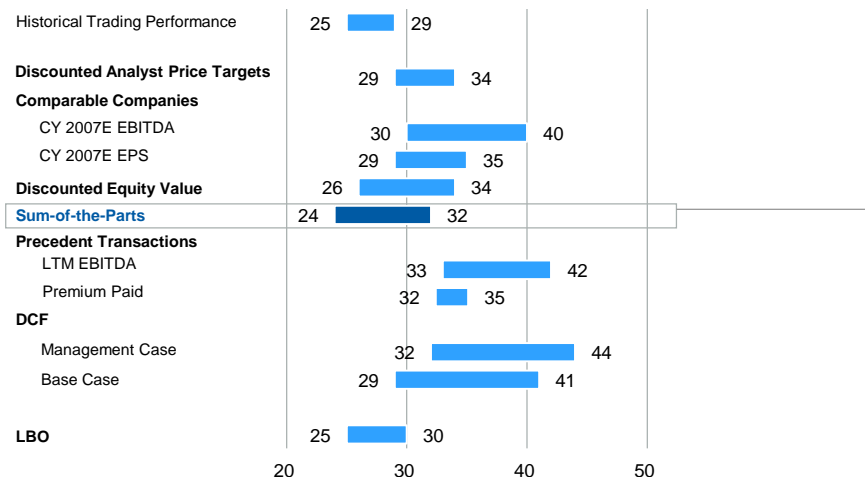
- Application of current multiple range to projections, discounted back by cost of equity
- Future estimates can provide long-term outlook and be more “stable” than near-term estimates
- What’s the right discount rate?
- Often basis for target’s view of standalone value

Preliminary Valuation Summary

Sum-of-the-Parts

Valuation Summary—Share Price

⌘



Discounted Analyst Price Targets

Description

Comments

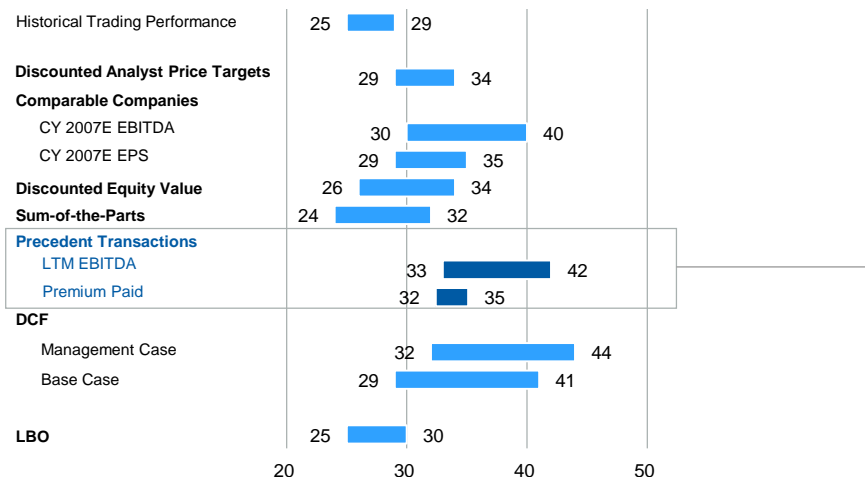
- | | |
|--|--|
| <ul style="list-style-type: none"> • Ascribe separate values to business lines with different characteristics • Multiples based on trading ranges of comparable companies • Alternatively, can be based on private market values or DCFs by segment | <ul style="list-style-type: none"> • Able to vary discount rates by segment • Often used to determine implied value of pipeline • Critical to include corporate level items: G&A, debt, other liabilities, tax attributes • If assessing private market value, need to consider tax leakage and other dissynergies |
|--|--|

Preliminary Valuation Summary

Precedent Transactions Analysis

Valuation Summary—Share Price

\$



Discounted Analyst Price Targets

Description

- Apply multiples derived from precedent M&A transactions to operating data
- Alternatively, apply precedent premia to share price (1-day, 1-week, 4-weeks)

Comments

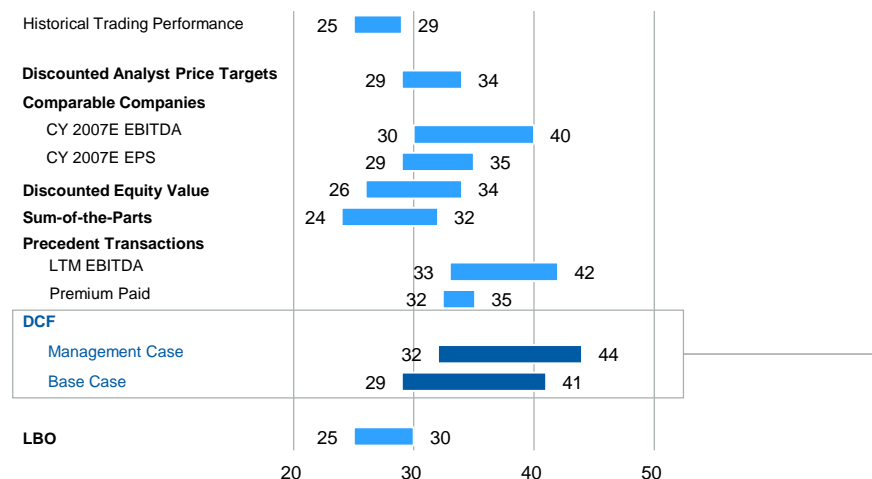
- Reliability depends on number of recent precedent transactions and degree of comparability
- Market cycles and volatility may also effect valuation
- Includes control premium

Preliminary Valuation Summary

Discounted Cash Flow Analysis

Valuation Summary—Share Price

\$



Discounted Analyst Price Targets

Description

- Theoretical valuation
- Calculate the present value of operating cash flows and of the terminal value using an appropriate cost of capital
- Use unlevered cash flows

Comments

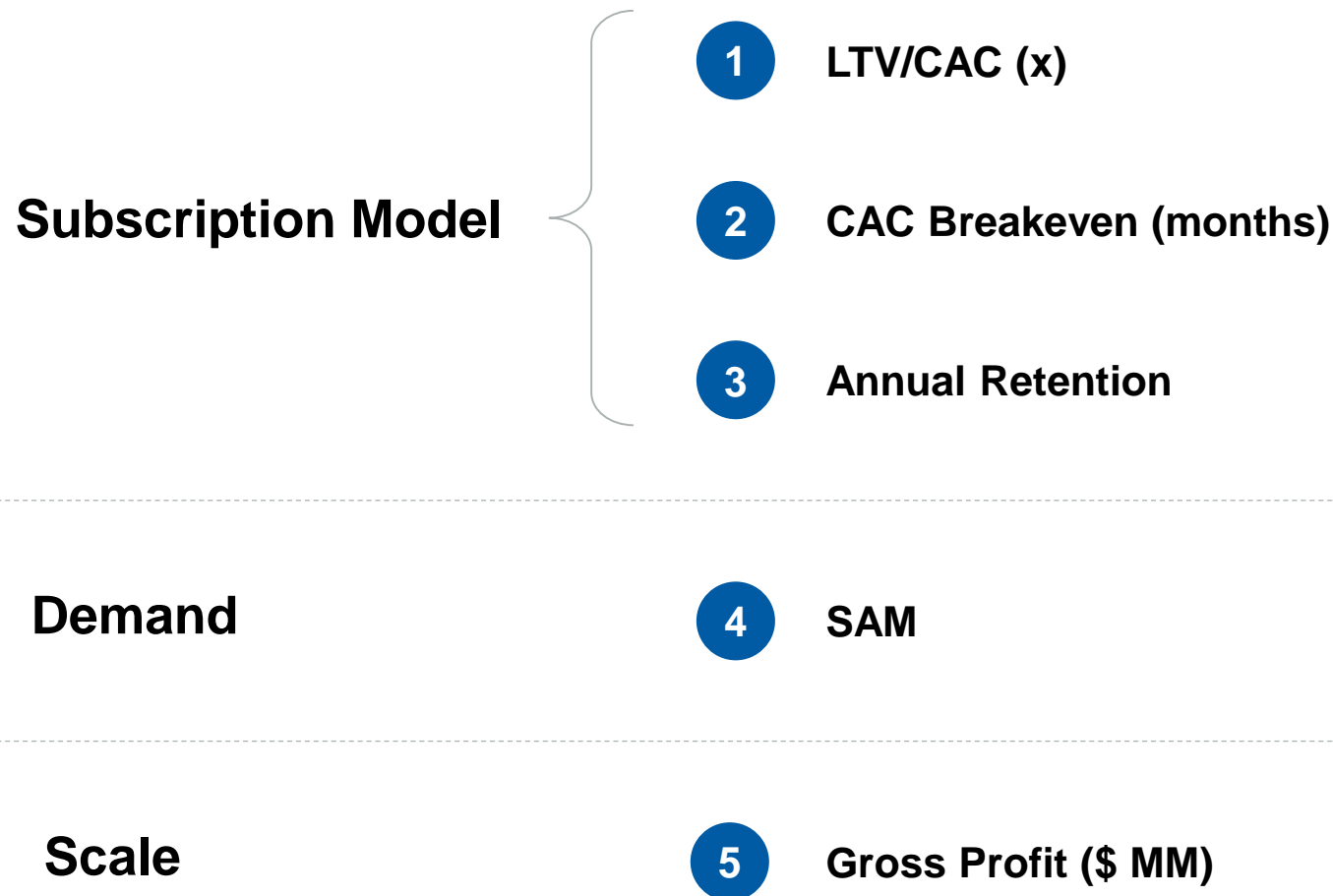
- Entirely dependent on the quality of the projections
- Reflects control value
- Can incorporate value of synergies
- Highly sensitive to terminal value assumption: multiples vs. perpetual growth
- Discount based on WACC

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APPENDIX A

Supplemental Business Metrics








Evaluating Subscription Businesses



Consumer Subscription Landscape

Metric		Subscription Model			Demand		Scale			
		LTV/CAC	CAC Breakeven (months)	Annual Retention	TAM (Bn)	Willingness to Pay	SAM (Bn)	2016 Revenue (\$ MM)	Gross Profit (\$ MM)	
Bundled Goods/ Disposable Goods	 Chegg®	3.3x	12.9	75%	Ages 18–24	30.8	90%	27.7	\$254 MM	\$136 MM
	 HEADSPACE	2.6x	5.3	40%	Ages 18–55	164.2	20%	32.8	\$50 MM	\$40 MM
	 NETFLIX	3.4x	8.0	64%	# Households	126.9	90%	114.2	\$8,288 MM	\$2,521 MM
	 pandora®	1.2x	20.9	61%	Ages 34–55	92.4	90%	83.1	\$225 MM	\$78 MM
	 PELOTON	2.6x	5.2	40%	Ages 34–55	92.4	20%	18.5	\$18 MM	\$8 MM
	 ring	10.0x	5.4	80%	# Households	126.9	50%	63.5	\$19 MM	\$8 MM
	 Spotify	2.6x	17.5	77%	Ages 18–55	164.2	90%	147.8	\$2,933 MM	\$451 MM
	 Dropbox	4.6x	11.8	80%	Ages 18–55	164.2	50%	82.1	\$900 MM	\$646 MM
	 fitbit Premium	1.7x	16.1	64%	Ages 18–55	164.2	20%	32.8	\$19 MM	\$8 MM
	 Care.com™	1.0x	13.3	40%	# Households w/ kids	23.6	20%	4.7	\$130 MM	\$104 MM
 CLASSPASS	1.2x	11.3	40%	Ages 18–55	164.2	20%	32.8	\$120 MM	\$24 MM	

Consumer Subscription Landscape (cont'd)

Metric	Subscription Model			Demand			Scale			
	LTV/CAC	CAC Breakeven (months)	Annual Retention		TAM (Bn)	Willingness to Pay	SAM (Bn)	2016 Revenue (\$ MM)	Gross Profit (\$ MM)	
Bundled Goods/ Disposable Goods	 Blue Apron	1.6x	4.3	15%	# Households	126.9	50%	63.5	\$795 MM	\$262 MM
	 HARRY'S	2.4x	4.9	60%	Male Ages 18–55	82.5	50%	41.3	\$198 MM	\$99 MM
	 Hello FRESH	2.2x	6.0	40%	# Households	126.9	50%	63.5	\$704 MM	\$400 MM
	 RENT THE RUNWAY	1.9x	7.1	40%	Female Ages 24–45	47.2	20%	9.4	\$100 MM	\$35 MM
	 TechStyle FASHION GROUP	1.7x	8.1	40%	Female Ages 18–34	37.3	20%	7.5	\$650 MM	\$325 MM
	 JUST FAB									
	 THE HONEST CO.	3.1x	4.4	40%	# Households w/ kids	23.6	20%	4.7	\$450 MM	\$157 MM

Consumer Subscription Landscape (cont'd)

Metric		Subscription Model			Demand		Scale			
		LTV/CAC	CAC Breakeven (months)	Annual Retention	TAM (Bn)	Willingness to Pay	SAM (Bn)	2016 Revenue (\$ MM)	Gross Profit (\$ MM)	
Bundled Goods/ Disposable Goods	BIRCHBOX [®]	2.3	4.5	30%	Female Ages 18–34	37.3	20%	7.5	\$250 MM	\$50 MM
	ipsy	3.2	6.2	54%	Female Ages 18–34	37.3	20%	7.5	\$300 MM	\$90 MM
	match [®]	1.9	4.9	25%	Ages 18–55	164.2	50%	82.1	\$1,118 MM	\$884 MM
	ancestry	3.1	9.2	65%	Ages 45+	136.0	20%	27.2	\$683 MM	\$519 MM
	STITCH FIX	2.3	3.5	20%	Female Ages 18–45	59.9	20%	12.0	\$730 MM	\$328 MM

Select Key Disclosures

		Key Disclosures										
Company	IPO Date	1P / 3P Split	Controls Logistics Network	GMV ⁽¹⁾	Active Customers	Orders	AOV	Take Rate	Cohort Behavior / Retention Metrics	TAM Selected Defining Factors	Other Key Disclosures ⁽²⁾	
Emerging Market Marketplaces	Alibaba.com	9-2014	- / 100% ⁽³⁾	✓	✓	✓	✓ (Can be calculated)	✓ (Can be calculated)	✓	Chinese Consumer Spend Online Shopping Growth	Mobile MAUs	
	JD.com	5-2014	25% / 75% ⁽¹⁰⁾	✓	✓	✗	✗	✗	✗	China Retail Industry China Online Retail Market	Net Revenue, Net GMV, Non-GAAP Gross Profit, Non-GAAP Operating Profit of JD Mall and New Business	
	Mercado Libre	8-2017	- / 100%	✗	✓	✓	✗	✗	✗	LatAm GDP Increasing Internet Penetration	Number of Confirmed / New Users Total Payment Transactions	
	拼多多	7-2018	- / 100%	✓	✓	✓	✓	✗	✗	China Consumer Goods Sales Online Shopping Growth	Monthly Active Users Annual Spending	
	JUMIA	4-2019	10% / 90% ⁽⁴⁾	✓	✓	✓	✓ (Can be calculated)	✗	F-1	Africa GDP and Pop., Internet/mobile Penetration, Online Shopping Trends	Active Consumers Platform Contribution	
	美团点评 Meituan Dianping	9-2018	- / 100% ⁽⁵⁾	✓	✓	✗	✗	✗	✗	Urbanization; Consumer Service eComm. Mkt; Food Consumption Trends	Number of Transacting Users Monetization Rate	
US Scaled Marketplaces	amazon	5-1997	42% / 58%	✓	✓ (Total accounts)	✗	✗	✗	✓	NA	Operating Income AWS Segment Revenue	
	ebay	9-1998	- / 100%	✗	✓	✗	✗	✓	✗	U.S. Person-to-Person Trading	Net Revenue by Type & Geography GMV (Marketplace / StubHub)	
	BOOKING HOLDINGS	3-1999	- / 100%	✗	✓	✓	✓	✗	✗	Worldwide eCommerce Internet Usage Growth	Gross Bookings by Agency / Merchant	
	wayfair	10-2014	NA	✓	✓ ⁽⁵⁾	✓	✓	NA	S-1 / ✓	Home Goods Market, Millennial Pop. Growth, Mobile Comm. Growth	Direct Retail Revenue	
	GRUBHUB	4-2014	- / 100%	✓	✓	✗	✗	✗	✗	Independent Restaurant Market Company Take-out Estimates	Gross Food Sales Adjusted EBITDA	
	Etsy	4-2015	- / 100%	✗	✓	✗	✗	✗	S-1 / ✓	Online and Mobile Comm. Growth Consumption & Manufacturing Trends	Marketplace Revenue Active Buyers / Sellers	
Fashion	FARFETCH	9-2018	>90% / <10%	✗	✓	✓	✓	✓	F-1 / ✓	Global Luxury Goods Mkt. Luxury Channel Shift to Online	Platform Order Contribution Margin	
	asos	8-2008	NA	✗	✓ ⁽⁶⁾	✓	✓ ⁽⁷⁾	✗	✗	Apparel Mkt, Online Apparel Mkt Online Penetration ⁽⁸⁾	Average Order Frequency Mobile Device Visits	
	STITCH FIX	11-2017	NA	✗	✓ ⁽⁶⁾	✓	✗	NA	S-1	Apparel, Shoe and Accessories Market eComm. Market Growth	Repeat Rate Growth in Average Items Purchased by Fix	
	zalando	10-2014	~90% / >10%	✗	✓	✓	✓ ⁽⁷⁾	✓	✓	Europe (ex. Russia) Fashion Mobile usage	Site Visits Mobile Visit Share	
Recent IPOs	Uber	To Price May 2019	NA	✓	✓	✓	✓	✓	✗	Serviceable Personal Mobility Miles Consumer Spend at Retail Restaurants	Core Platform Adjusted Net Revenue Core Platform Contribution Margin	
	lyft	3-2019	NA	✓	✓	✓	✓	✗	S-1	Household Expenditure Transpo Spend (US & CA)	Contribution Margin	

Source: Company filings, Wall street research, Capital IQ

Notes:

- 1. Includes all measures that report a gross number, that is correlated to, but not revenue to the company
- 2. Key performance indicators that are disclosed outside of typical financial reporting constructs
- 3. Excludes "New Retail" brick and mortar initiatives
- 4. By items sold, not value
- 5. Excludes Ella Supermarket brick and mortar initiative
- 6. Represents revenue, due to lack of marketplace
- 7. Can be implied from other metrics
- 8. Per 2018 annual report
- 9. Total Addressable Market (TAM) selected defining factors as provided by company in initial public offering prospectus
- 10. Basis research estimates

SaaS Definitions and Metrics

- **ARPU:** Average monthly recurring Revenue per User. Can also be defined by seat or account
- **Billings:** Revenue plus the change in deferred revenue for a given period
- **ACV:** Annual Contract Value of a subscription agreement
- **ARR:** Annualized Run Rate = $MRR \times 12$ ARR is annual run-rate of recurring revenue from the current installed base. This is annual recurring revenue for the coming twelve months if you don't add or churn anything
- **Churned MRR/ACV:** The lost MRR from churning customers in the current month
- **Expansion MRR/ACV:** The increase in MRR from expansion in your installed base in the current month
- **MRR:** The Monthly Recurring Revenue at the end of each month. Computed by taking the MRR from the previous month and adding Net New MRR
- **Net New Customers:** Net New Customers = # of new Customers – # of churned Customers. This is the net number of new customers added once lost customers due to churn has been taken into account
- **Net New MRR/ACV:** Net New MRR = New MRR + Expansion MRR – Churned MRR This is the sum of the three different components that will change MRR during each month
- **New MRR/ACV:** The increase in MRR from new customers in the current month

Lifetime Value (LTV)	=	$\frac{\text{Avg. Revenue Per Customer} \times \text{Gross Margin \%}}{\text{Customer Churn Rate}}$
Customer Acquisition Cost (CAC)	=	$\frac{\text{Sales \& Marketing Expense}}{\text{\# of New Customers Added}}$
Customer Lifetime	=	$\frac{1}{\text{Customer Churn Rate}}$
LTV:CAC	=	$\frac{\text{LTV}}{\text{CAC}}$
Months to Recover CAC	=	$\frac{\text{CAC}}{\text{Avg. MRR per Customer} \times \text{Gross Margin}}$
% Customer Churn	=	$\frac{\text{\# of Customers Who Churned}}{\text{Total \# of Customers}}$
% MRR Churn	=	$\frac{\text{Churned MRR}}{\text{Previous Months MRR}}$
% MRR Expansion	=	$\frac{\text{Expansion MRR}}{\text{Previous Months MRR}}$
% Net MRR Churn	=	$\frac{\text{Churned MRR} - \text{Expansion MRR}}{\text{Previous Months MRR}}$

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APPENDIX B

Software and Internet Company Data Pack

Application Software

Application Software - Updated as of 4/30/2021

SMM Company Name	HQ Location	Current Price (USD)	Market Cap	Total Debt	Net Cash	Recent Stock Performance				Multiple Change			Trading Statistics								Operating Statistics									
						Aggregate Value	1 Week	3 Month	6 Month	12 Month	Prior AV / Rev	Current AV / Rev	Weekly Change	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E	CY2022 P/E	CY2021 P/CFPS	CY2022 P/CFPS	CY2021E Revenue	CY2022E Revenue	CY2022E FCF	CY2022E EBITDA	CY22E/21E Rev Growth	CY2022E FCF Margin	CY2022E EBITDA Margin	Headcount	
ADOBE SYSTEMS	San Jose, CA	508.34	243,660	4,707	256	243,404	(1.5%)	10.8%	13.7%	43.7%	16.0	15.7	(1.5%)	15.7	13.8	31.6	27.8	42.9	37.2	37.4	31.9	15,470.9	17,699.8	7,119.5	8,765.0	14%	40%	50%	22,516	
SAP	Walldorf, Germany	140.45	165,677	19,910	(6,124)	173,492	(2.5%)	10.4%	31.7%	17.9%	5.4	5.3	(2.2%)	5.3	5.1	16.0	15.4	23.2	22.9	23.3	21.7	32,838.7	34,133.2	6,722.1	11,269.5	4%	20%	33%	103,142	
INTUIT	Mountain View, CA	412.16	112,866	2,821	(83)	112,949	(0.7%)	14.1%	31.0%	52.8%	11.4	11.3	(0.7%)	11.3	10.5	31.5	28.1	45.1	41.4	36.6	37.2	9,970.3	10,776.5	2,925.6	4,022.3	8%	27%	37%	10,600	
AUTODESK	San Rafael, CA	291.91	64,101	2,105	(247)	64,349	(1.1%)	5.2%	23.9%	56.0%	15.1	14.9	(1.1%)	14.9	12.6	43.8	32.0	58.8	42.5	38.5	27.2	4,309.8	5,105.0	2,228.3	2,009.7	18%	44%	39%	11,500	
DOCUSIGN	San Francisco, CA	222.94	43,374	916	(142)	43,517	(0.8%)	(4.3%)	10.2%	112.8%	22.2	22.0	(0.8%)	22.0	17.2	125.9	90.1	170.1	119.9	112.0	83.9	1,973.8	2,527.6	499.1	483.2	28%	20%	19%	5,630	
YONYOU SOFTWARE	Beijing, China	5.13	16,771	512	274	16,638	(6.8%)	(23.5%)	(20.5%)	1.5%	11.1	10.5	(5.7%)	10.5	8.2	68.9	55.8	97.9	77.9	55.8	48.2	1,588.0	2,031.6	247.5	298.1	28%	12%	15%	18,082	
NUANCE COMMUNICATIONS	Burlington, MA	53.17	15,180	1,675	(1,301)	16,481	0.2%	16.8%	66.6%	163.2%	11.9	11.9	0.1%	11.9	10.9	40.2	36.0	70.5	60.3	N.A.	N.A.	1,388.2	1,511.4	NA	457.2	9%	NA	30%	7,100	
FAIR ISAAC	San Jose, CA	521.41	15,244	941	(796)	16,040	(3.9%)	15.8%	33.2%	47.7%	12.3	11.9	(3.7%)	11.9	10.9	30.8	26.9	45.6	38.4	44.3	37.2	1,351.8	1,478.1	NA	595.5	9%	NA	40%	3,890	
AVALARA	Seattle, WA	141.71	12,188	68	608	11,579	(3.4%)	(5.5%)	(4.9%)	58.6%	19.0	18.3	(3.6%)	18.3	14.8	NM	NM	NM	NM	NM	205.4	631.5	781.5	43.9	22.6	24%	6%	3%	3,351	
PEGASYS	Cambridge, MA	126.94	10,318	639	(197)	10,515	(2.9%)	(0.4%)	9.5%	51.8%	8.6	8.5	(1.2%)	8.5	7.1	151.7	63.7	NM	125.4	242.7	106.4	1,243.5	1,477.5	142.8	165.1	19%	10%	11%	5,776	
SAGE GROUP	Newcastle upon Tyne, United K	8.81	9,526	1,280	(206)	9,746	(1.3%)	8.9%	7.0%	9.3%	3.8	3.8	(1.2%)	3.8	3.6	16.4	15.2	27.3	24.5	20.2	17.7	2,584.6	2,695.9	463.6	641.2	4%	17%	24%	11,647	
MANHATTAN ASSOCIATES	Atlanta, GA	137.24	8,731	26	171	8,560	10.5%	21.2%	60.5%	93.5%	12.6	13.6	8.0%	13.6	12.5	59.7	53.6	84.2	76.8	61.3	50.1	628.2	683.8	160.5	159.7	9%	23%	23%	3,400	
APPIAN	Mclean, VA	121.18	8,584	58	164	8,419	(6.4%)	(44.5%)	91.4%	165.3%	25.3	23.7	(6.3%)	23.7	20.1	NM	NM	NM	NM	NM	NM	355.4	419.7	(12.4)	(28.1)	18%	(3%)	(7%)	1,460	
AGORA	Shanghai, China	48.61	5,632	0	635	4,997	(18.7%)	(13.9%)	26.3%	NA	34.7	27.5	(20.6%)	27.5	18.7	NM	NM	NM	287.6	NM	NM	181.5	267.0	1.6	16.6	47%	1%	6%	842	
TOTVS	São Paulo, SP	5.73	3,252	63	135	3,122	0.3%	10.4%	21.6%	57.0%	5.7	5.7	(1.0%)	5.7	5.0	23.9	19.6	46.5	35.7	32.6	33.1	549.9	628.8	103.5	159.6	14%	16%	25%	N.A.	
VERTEX	King of Prussia, PA	20.43	3,016	1	302	2,714	(10.6%)	(37.8%)	(15.7%)	NA	7.6	6.7	(11.6%)	6.7	6.0	38.6	34.1	94.1	84.4	42.1	32.7	403.1	453.2	57.5	79.6	12%	13%	18%	1,200	
PROS	Houston, TX	42.98	1,902	268	61	1,841	(5.8%)	2.0%	52.6%	25.0%	7.8	7.3	(6.0%)	7.3	6.5	NM	NM	NM	NM	NM	NM	252.5	282.9	(9.3)	(11.4)	12%	(3%)	(4%)	1,403	
MODEL N	San Mateo, CA	39.78	1,394	132	11	1,383	(4.8%)	17.1%	12.9%	37.8%	7.6	7.2	(4.8%)	7.2	6.4	148.6	48.4	NM	78.9	128.3	N.A.	192.0	214.6	31.4	28.6	12%	15%	13%	781	
SWORD GROUP	Windhof, Luxembourg	49.92	476	10	120	360	8.5%	20.3%	41.4%	75.5%	1.4	1.6	11.5%	1.6	1.4	11.5	10.2	28.1	25.1	20.4	18.0	231.6	258.4	11.1	35.3	12%	4%	14%	1,200	
EGAIN	Sunnyvale, CA	9.83	305	2	52	254	(0.7%)	(10.6%)	(38.0%)	18.4%	3.2	3.2	(0.9%)	3.2	2.7	89.6	37.8	151.2	50.7	N.A.	N.A.	79.8	93.9	7.6	6.7	18%	8%	7%	522	
Mean								(2.6%)	0.6%	22.7%	60.4%	12.1	11.5		11.5	9.7	58.1	37.2	70.4	72.3	64.0	53.6	3,811	4,176	1,152	1,459	16%	15%	20%	
Min								(18.7%)	(44.5%)	(38.0%)	1.5%	1.4	1.6		1.6	1.4	11.5	10.2	23.2	22.9	20.2	17.7	80	94	(12)	(28)	4%	(3%)	(7%)	
Max								10.5%	21.2%	91.4%	165.3%	34.7	27.5		27.5	20.1	151.7	90.1	170.1	287.6	242.7	205.4	32,839	34,133	7,119	11,269	47%	44%	50%	

<0%
>=0% & <10%
>= 10%

Cross-Industry Cloud Software

Cross-Industry Cloud Software Companies - Updated as of 4/30/2021

Company Name	HQ Location	Current Price (USD)	Market Cap	Total Debt	Net Cash	Recent Stock Performance				Multiple Change		Trading Statistics						Operating Statistics												
						Aggregate Value	1 Week	3 Month	6 Month	12 Month	Prior AV / Rev	Current AV / Rev	Weekly Change	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E	CY2022 P/E	CY2021 P/CFFS	CY2022 P/CFFS	CY2021E Revenue	CY2022E Revenue	CY2022E FCF	CY2022E EBITDA	CY2022E Rev Growth	CY2022E FCF Margin	CY2022E EBITDA Margin	Headcount	
ADOBE SYSTEMS	San Jose, CA	508.34	243,660	4,707	256	243,404	(1.5%)	10.8%	13.7%	43.7%	16.0	15.7	(1.5%)	15.7	13.8	31.6	27.8	42.9	37.2	37.4	31.9	15,470.9	17,699.8	7,119.5	8,765.0	14%	40%	50%	22,516	
SALESFORCE.COM	San Francisco, CA	230.32	212,409	6,413	5,553	206,856	(1.4%)	2.1%	(0.8%)	42.2%	8.1	8.0	(1.3%)	8.0	6.7	27.0	22.5	67.2	55.5	42.2	34.1	25,862.8	30,708.8	5,867.3	9,181.4	19%	19%	30%	56,606	
SHOPIFY	Ottawa, ON	1182.51	147,021	1,079	6,794	140,227	7.6%	7.6%	27.8%	87.0%	32.0	31.8	(0.7%)	31.8	24.3	280.9	219.3	278.1	248.2	NM	NM	4,413.2	5,770.7	535.1	639.5	31%	9%	11%	7,000	
INTUIT	Mountain View, CA	412.16	112,866	2,821	(83)	112,949	(0.7%)	14.1%	31.0%	52.8%	11.4	11.3	(0.7%)	11.3	10.5	31.5	28.1	45.1	41.4	36.6	37.2	9,970.3	10,776.5	2,925.6	4,022.3	8%	27%	37%	10,600	
SQUARE	San Francisco, CA	244.82	111,482	3,493	360	110,746	(0.7%)	13.4%	58.1%	275.8%	7.8	7.7	(1.1%)	7.7	6.5	152.9	96.8	196.6	128.6	154.5	125.5	14,313.0	16,945.2	926.4	1,144.0	18%	5%	7%	5,477	
SERVICENOW	Santa Clara, CA	506.37	99,982	2,108	1,348	98,634	(8.4%)	(6.8%)	1.8%	44.0%	18.7	17.2	(8.1%)	17.2	13.7	55.3	44.0	92.1	71.6	54.7	43.6	5,739.8	7,223.6	2,179.4	2,241.2	26%	30%	31%	13,096	
ZOOM	San Jose, CA	319.57	93,862	106	4,139	89,724	(5.1%)	(14.1%)	(30.7%)	136.4%	24.7	23.4	(5.4%)	23.4	19.6	70.4	61.0	85.0	78.2	56.5	50.6	3,833.0	4,587.6	1,626.2	1,470.7	20%	35%	32%	4,422	
AUTODESK	San Rafael, CA	291.91	64,101	2,105	(247)	64,349	(1.1%)	5.2%	23.9%	56.0%	15.1	14.9	(1.1%)	14.9	12.6	43.8	32.0	58.8	42.5	38.5	27.2	4,309.8	5,105.0	2,228.3	2,009.7	18%	44%	39%	11,500	
TWILIO	San Francisco, CA	367.80	62,986	607	2,433	60,553	(4.4%)	2.3%	31.8%	227.5%	25.9	24.8	(4.5%)	24.8	18.9	NM	NM	NM	NM	NM	NM	2,444.6	3,197.2	34.0	137.2	31%	1%	4%	4,629	
WORKDAY	Pleasanton, CA	247.00	60,253	2,238	1,298	58,956	(3.1%)	8.6%	17.6%	60.5%	12.1	11.8	(2.8%)	11.8	10.0	50.8	41.6	87.8	71.1	53.5	43.8	4,992.9	5,903.4	1,263.8	1,418.8	18%	21%	24%	12,500	
ATLASSIAN	Sydney, NSW	237.56	59,671	787	777	58,894	2.9%	2.8%	24.0%	52.8%	26.6	26.6	0.3%	26.6	22.8	103.3	91.1	168.4	140.2	76.4	100.1	2,210.4	2,579.6	723.2	646.8	17%	28%	25%	4,907	
CROWDSTRIKE	Sunnyvale, CA	208.51	46,680	779	1,140	45,542	(4.9%)	(3.4%)	68.4%	208.2%	36.3	34.5	(5.0%)	34.5	25.8	293.0	178.5	NM	NM	NM	141.7	99.4	1,320.6	1,763.3	423.6	255.1	34%	24%	14%	3,394
OKTA	San Francisco, CA	269.70	35,388	1,969	618	34,770	(3.4%)	4.1%	28.5%	78.3%	33.1	31.9	(3.5%)	31.9	24.7	NM	NM	NM	NM	NM	276.6	178.0	1,089.6	1,409.7	159.3	42.0	29%	11%	3%	2,806
THE TRADE DESK	Ventura, CA	729.31	34,664	292	332	34,333	0.4%	(4.8%)	28.8%	149.3%	30.3	30.4	0.4%	30.4	23.3	89.2	66.6	131.1	103.5	113.5	84.4	1,128.7	1,470.8	363.7	515.5	30%	25%	35%	1,545	
RINGCENTRAL	Belmont, CA	318.95	28,984	1,461	(822)	29,806	(1.1%)	(14.5%)	23.5%	39.6%	20.2	20.0	(0.7%)	20.0	16.3	146.2	112.2	259.9	204.2	201.0	129.7	1,487.1	1,832.8	105.4	265.6	23%	6%	14%	3,140	
CLOUDFLARE	San Francisco, CA	84.74	26,319	428	608	25,711	2.4%	10.5%	63.1%	259.7%	42.3	43.4	2.5%	43.4	32.8	NM	273.9	NM	NM	NM	NM	592.8	784.4	(14.4)	93.9	32%	(2%)	12%	1,788	
DATADOG	New York, NY	85.77	26,447	644	874	25,573	(4.2%)	(16.5%)	(5.5%)	90.1%	32.1	30.7	(4.4%)	30.7	23.1	NM	214.8	NM	NM	248.6	180.6	833.6	1,106.8	112.7	119.1	33%	10%	11%	2,185	
ZSCALER	San Jose, CA	187.64	25,508	941	504	25,004	(1.4%)	(6.0%)	38.2%	179.7%	34.6	34.1	(1.4%)	34.1	26.1	285.4	163.3	NM	239.9	209.0	165.3	733.2	958.6	185.0	153.1	31%	19%	16%	2,020	
HUBSPOT	Cambridge, MA	526.45	24,790	789	463	24,327	(6.8%)	41.4%	81.5%	212.2%	22.4	20.8	(6.9%)	20.8	16.5	165.3	124.8	NM	233.3	164.6	128.4	1,167.7	1,472.5	168.0	194.9	26%	11%	13%	4,225	
SLACK	San Francisco, CA	42.40	24,862	912	676	24,009	(0.4%)	0.5%	65.8%	58.9%	20.8	20.7	(0.5%)	20.7	16.0	NM	NM	NM	NM	249.4	132.5	1,160.3	1,496.3	157.7	43.4	29%	11%	3%	2,545	
PAYCOM	Oklahoma City, OK	384.41	22,195	59	93	22,102	(3.8%)	1.2%	5.6%	47.3%	22.7	21.9	(3.8%)	21.9	17.6	55.7	43.4	91.7	70.4	79.6	63.4	1,010.2	1,254.7	246.8	509.4	24%	20%	41%	4,218	
ZOOMINFO	Vancouver, WA	51.86	4,455	795	(494)	21,614	1.0%	8.0%	36.5%	NA	32.8	33.1	0.9%	28.7	22.2	N.M.	N.M.	107.1	81.7	85.3	65.6	653.4	838.7	333.1	407.0	28%	40%	49%	1,747	
COUPA SOFTWARE	San Mateo, CA	269.04	19,748	1,550	(943)	20,691	0.3%	(13.2%)	0.5%	52.8%	30.4	30.5	0.3%	30.5	24.4	NM	297.6	NM	NM	220.5	169.7	679.2	848.4	140.3	69.5	25%	17%	8%	2,615	
WIX.COM	Tel Aviv, Israel	317.88	17,983	931	105	17,341	7.4%	28.7%	28.5%	143.0%	12.5	13.5	7.6%	13.5	10.8	NM	287.6	NM	NM	210.1	103.5	1,285.7	1,607.1	164.6	60.3	25%	10%	4%	3,869	
ZENDESK	San Francisco, CA	146.15	17,297	1,183	(229)	17,041	(0.9%)	1.3%	31.7%	90.1%	13.3	13.0	(2.3%)	13.0	10.4	123.1	85.4	207.6	138.0	130.5	82.0	1,311.7	1,638.7	167.1	199.5	25%	10%	12%	4,000	
FIVE9	San Ramon, CA	187.97	12,602	833	(190)	12,792	7.2%	13.1%	23.9%	102.8%	22.6	23.2	2.8%	23.2	19.7	144.9	109.6	206.8	160.4	NM	287.0	550.7	650.4	66.2	116.7	18%	10%	18%	1,549	
PAYLOCITY	Schaumburg, IL	193.24	10,507	177	55	10,452	(1.1%)	3.1%	4.2%	68.7%	15.3	15.1	(1.0%)	15.1	12.3	61.9	45.4	116.8	81.5	N.A.	N.A.	692.4	846.4	111.1	230.4	22%	13%	27%	3,600	
DROPBOX	San Francisco, CA	25.70	10,353	1,120	2	10,352	(2.1%)	13.6%	40.7%	22.3%	5.0	4.9	(2.1%)	4.9	4.5	18.9	16.9	20.1	17.8	15.5	13.3	2,106.8	2,291.6	752.6	612.2	9%	33%	27%	2,760	
PROOFPOINT	Sunnyvale, CA	172.11	9,869	1,117	(235)	10,103	30.6%	33.3%	79.8%	41.4%	6.4	8.4	31.0%	8.4	7.1	50.0	38.8	84.1	66.6	44.8	34.9	1,209.8	1,422.0	297.0	260.2	18%	21%	18%	3,658	
TEAMVIEWER AG	Göppingen, Germany	47.59	9,569	639	(531)	10,091	2.8%	(8.2%)	8.0%	9.8%	15.0	15.5	3.0%	15.5	12.0	31.8	24.3	63.4	43.8	36.9	29.0	651.8	840.6	310.0	414.4	29%	37%	49%	1,256	
ANAPLAN	San Francisco, CA	59.65	8,624	52	269	8,355	(3.8%)	(10.6%)	7.8%	46.0%	15.7	15.1	(3.9%)	15.1	12.1	NM	NM	NM	NM	N.A.	N.A.	553.7	692.2	26.1	10.7	25%	4%	2%	1,900	
FASTLY	San Francisco, CA	63.87	7,388	91	104	7,263	(7.3%)	(41.6%)	0.6%	195.0%	20.4	19.0	(6.6%)	19.0	14.9	NM	NM	NM	NM	NM	NM	381.5	486.3	(59.3)	2.8	27%	(12%)	1%	939	
Mean							(0.3%)	(1.7%)	23.5%	84.8%	17.0	16.8		16.8	13.0	99.8	90.4	116.6	94.8	104.0	85.7	2,202	2,671	564	680	21%	13%	15%		
Min							(25.8%)	(43.4%)	(32.3%)	(3.9%)	1.1	1.0		1.0	0.9	7.2	5.9	20.1	14.1	13.9	11.4	50	219	(91)	(163)	4%	(23%)	(40%)		
Max							30.6%	47.3%	90.3%	294.1%	42.3	43.8		43.8	32.8	293.0	297.6	291.6	248.2	276.6	287.0	25,863	30,709	7,119	9,181	34%	44%	50%		

<0% >=0% & <10% >= 10%

Cross-Industry Cloud Software (cont'd)

Cross-Industry Cloud Software Companies - Updated as of 4/30/2021 (cont'd)

Company Name	HQ Location	Current Price (USD)	Market Cap	Total Debt	Net Cash	Recent Stock Performance				Multiple Change			Trading Statistics						Operating Statistics											
						Aggregate Value	1 Week	3 Month	6 Month	12 Month	Prior AV / Rev	Current AV / Rev	Weekly Change	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E	CY2022 P/E	CY2021 PICFPS	CY2022 PICFPS	CY2021E Revenue	CY2022E Revenue	CY2022E FCF	CY2022E EBITDA	CY2022E Rev Growth	CY2022E FCF Margin	CY2022E EBITDA Margin	Headcount	
SMARTSHEET	Bellevue, WA	59.30	7,358	89	353	7,005	(4.4%)	(15.0%)	19.0%	12.5%	14.6	13.9	(4.6%)	13.9	10.8	NM	NM	NM	NM	NM	NM	502.8	646.0	4.3	(12.3)	28%	1%	(2%)	1,915	
BLACKLINE	Woodland Hills, CA	116.06	6,736	419	124	6,624	(3.3%)	(10.5%)	18.8%	91.1%	16.6	16.0	(3.4%)	16.0	13.2	152.0	100.5	291.6	169.9	165.8	138.2	413.3	501.2	46.9	65.9	21%	9%	13%	1,325	
ASANA	San Francisco, CA	33.32	5,433	586	(200)	5,632	0.3%	(5.8%)	50.7%	NA	18.0	18.0	0.3%	18.0	14.0	NM	NM	NM	NM	NM	NM	312.3	403.6	(91.4)	(162.9)	29%	(23%)	(40%)	1,080	
WORKIVA	Ames, IA	94.00	4,693	330	200	4,488	(2.1%)	(3.6%)	70.0%	145.1%	11.2	10.9	(2.2%)	10.9	9.4	NM	NM	NM	NM	130.6	200.0	410.6	477.0	34.8	8.8	16%	7%	2%	1,718	
MEDALLIA	San Francisco, CA	29.49	4,633	517	166	4,467	0.7%	(28.9%)	3.7%	37.3%	7.9	7.9	0.7%	7.9	6.6	N.A.	108.8	NM	NM	NM	NM	95.1	564.7	676.6	(2.5)	41.1	20%	(0%)	6%	2,037
BIGCOMMERCE	Austin, TX	59.94	4,386	16	204	4,182	11.3%	(25.0%)	(18.3%)	NA	19.6	21.9	11.9%	21.9	17.9	NM	NM	NM	NM	NM	NM	190.6	234.1	(19.6)	(17.4)	23%	(8%)	(7%)	813	
CORNERSTONE	San Jose, CA	44.27	2,929	1,264	(1,111)	4,040	(0.6%)	8.2%	16.5%	31.9%	4.8	4.7	(0.4%)	4.7	4.4	13.0	12.1	21.7	17.4	18.8	14.0	850.7	915.5	222.1	335.2	8%	24%	37%	2,900	
JFROG	Sunnyvale, CA	49.03	4,583	0	598	3,985	(6.7%)	(21.5%)	(32.3%)	NA	21.4	19.8	(7.7%)	19.8	15.2	NM	240.6	NM	NM	NM	NM	201.3	261.7	28.0	16.6	30%	11%	6%	700	
8XB	Campbell, CA	32.89	3,535	402	(254)	3,789	(2.5%)	(6.7%)	90.3%	93.9%	6.6	6.4	(2.3%)	6.4	5.4	249.1	101.8	NM	170.4	46.3	N.A.	591.5	697.6	32.9	37.2	18%	5%	5%	1,675	
LIVEPERSON	New York, NY	54.65	3,764	561	93	3,670	(1.8%)	(13.7%)	2.2%	128.3%	8.0	8.0	(0.3%)	8.0	6.4	97.1	61.0	NM	NM	94.2	66.6	461.0	570.6	14.3	60.2	24%	2%	11%	1,201	
QUALYS	Foster City, CA	101.36	3,972	57	299	3,575	(1.5%)	(26.8%)	15.4%	(3.9%)	9.1	8.9	(1.7%)	8.9	8.0	21.7	19.6	38.2	34.6	23.6	20.7	400.4	446.7	158.5	182.5	12%	35%	41%	1,498	
BOX	Redwood City, CA	21.30	3,465	649	(54)	3,519	(3.6%)	22.8%	37.4%	32.0%	4.3	4.2	(3.5%)	4.2	3.8	17.0	14.5	26.7	21.2	15.4	14.3	844.9	930.8	242.9	243.3	10%	26%	26%	1,934	
PLURALSIGHT	Draper, UT	22.45	3,266	582	(182)	3,449	0.0%	7.9%	43.0%	36.6%	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	NA	NA	NA	1,700		
SPROUT SOCIAL	Chicago, IL	66.29	3,549	26	138	3,411	3.4%	0.4%	51.7%	294.1%	19.1	19.7	3.5%	19.7	15.5	NM	NM	NM	NM	NM	NM	172.8	219.4	(2.5)	(9.7)	27%	(1%)	(4%)	700	
KINAXIS	Ottawa, ON	128.69	3,502	17	197	3,299	6.8%	(7.3%)	(15.8%)	27.7%	12.5	13.4	7.2%	13.4	10.4	109.7	49.3	251.4	93.5	100.5	60.1	246.1	315.7	53.2	66.9	28%	17%	21%	662	
LIVERAMP	San Francisco, CA	48.98	3,278	15	652	2,626	(0.4%)	(35.3%)	(25.9%)	29.4%	5.4	5.4	(0.5%)	5.4	4.5	104.9	35.5	167.7	56.1	N.A.	33.8	486.4	578.5	33.6	74.0	19%	6%	13%	1,150	
SYNACOR	London, United Kingdom	3.28	2,180	0	1	2,180	3.7%	(6.2%)	2.1%	27.0%	42.2	43.8	3.9%	43.8	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	49.7	N.A.	NA	NA	NA	NA	NA	805	
TALEND	Suresnes, France	64.41	2,098	186	(23)	2,121	0.5%	47.3%	71.1%	147.0%	6.4	6.4	0.5%	6.4	5.6	NM	NM	NM	NM	NM	NM	329.4	380.7	1.2	1.1	16%	0%	0%	1,397	
PING IDENTITY	Denver, CO	24.28	1,977	170	(24)	2,002	2.6%	(18.8%)	(12.3%)	(2.6%)	7.4	7.6	2.5%	7.6	6.7	84.5	61.4	124.5	77.1	84.6	77.6	263.2	298.3	17.6	32.6	13%	6%	11%	1,022	
ZUORA	Redwood City, CA	16.20	1,960	69	117	1,843	(2.2%)	9.8%	68.4%	53.3%	5.6	5.5	(2.4%)	5.5	4.8	289.8	96.0	NM	NM	N.A.	N.A.	336.3	386.7	8.0	19.2	15%	2%	5%	1,190	
YEXT	New York, NY	13.95	1,759	138	93	1,667	(0.4%)	(17.3%)	(15.9%)	9.0%	4.4	4.4	(0.4%)	4.4	3.8	NM	112.7	NM	NM	73.4	N.A.	377.8	435.1	6.2	14.8	15%	1%	3%	1,300	
SUMO LOGIC	Redwood City, CA	19.49	2,002	0	404	1,598	(1.2%)	(43.4%)	12.8%	NA	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	233.9	280.6	(30.4)	(35.4)	20%	(11%)	(13%)	759		
BENEFITFOCUS	Charleston, SC	13.52	N.A.	270	(84)	603	(4.9%)	9.9%	31.6%	24.8%	2.4	2.3	(3.6%)	2.3	2.3	12.9	11.9	NM	NM	13.9	11.4	257.3	266.8	28.4	50.6	4%	11%	19%	1,200	
BRIGHTCOVE	Boston, MA	14.52	586	8	27	559	(25.8%)	(11.7%)	14.8%	86.2%	3.5	2.6	(26.3%)	2.6	2.4	20.4	16.4	29.2	23.0	N.A.	N.A.	214.9	237.7	NA	34.1	11%	NA	14%	652	
IBEX	Washington, DC	23.10	409	125	(51)	459	(6.7%)	25.4%	52.9%	NA	1.1	1.0	(6.0%)	1.0	0.9	7.2	5.9	20.2	14.1	N.A.	N.A.	464.8	512.7	27.2	77.3	10%	5%	15%	22,976	
SERVICESTOURCE INTERNATIONAL	Denver, CO	1.48	144	50	(15)	160	8.8%	(5.7%)	6.5%	20.3%	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	NA	NA	NA	NA	NA	2,800	
MARIN SOFTWARE	San Francisco, CA	1.79	20	12	2	17	15.5%	(17.1%)	(27.5%)	(1.1%)	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	NA	NA	NA	NA	NA	162	
Mean							(0.3%)	(1.7%)	23.5%	84.8%	17.0	16.8		16.8	13.0	99.8	90.4	116.6	94.8	104.0	85.7	2,202	2,671	564	680	21%	13%	15%		
Min							(25.8%)	(43.4%)	(32.3%)	(3.9%)	1.1	1.0		1.0	0.9	7.2	5.9	20.1	14.1	13.9	11.4	50	219	(91)	(163)	4%	(23%)	(40%)		
Max							30.6%	47.3%	90.3%	294.1%	42.3	43.8		43.8	32.8	293.0	297.6	291.6	248.2	276.6	287.0	25,863	30,709	7,119	9,181	34%	44%	50%		

<0% >=0% & <10% >= 10%

Industry-Vertical Cloud Software

Industry-Vertical Cloud Software Companies - Updated as of 4/30/2021

SMM Company Name	HQ Location	Current Price (USD)	Market Cap	Total Debt	Net Cash	Aggregate Value	Recent Stock Performance				Multiple Change			Trading Statistics								Operating Statistics							
							1 Week	3 Month	6 Month	12 Month	Prior	Current AV / Rev	Weekly Change	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E	CY2022 P/E	CY2021 P/CFPS	CY2022 P/CFPS	CY2021E Revenue	CY2022E Revenue	CY2022E FCF	CY2022E EBITDA	CY2022E Rev Growth	CY2022E FCF Margin	CY2022E EBITDA Margin	Headcount
AUTODESK	San Rafael, CA	291.91	64,101	2,105	(247)	64,349	(1.1%)	5.2%	23.9%	56.0%	15.1	14.9	(1.1%)	14.9	12.6	43.8	32.0	58.8	42.5	38.5	27.2	4,309.8	5,105.0	2,228.3	2,009.7	18%	44%	39%	11,500
VEEVA SYSTEMS	Pleasanton, CA	282.45	42,996	63	1,601	41,395	0.6%	2.2%	4.6%	48.0%	23.3	23.5	0.7%	23.5	19.7	53.2	50.8	87.5	74.0	74.7	64.1	1,764.3	2,096.9	777.6	815.2	19%	37%	39%	4,506
CONSTELLATION SOFTWARE	Toronto, ON	1464.32	31,031	725	42	30,988	(0.5%)	20.2%	39.3%	51.9%	6.7	6.7	(0.5%)	6.7	5.6	21.7	19.5	32.0	28.0	26.8	22.2	4,653.3	5,499.7	1,340.7	1,589.1	18%	24%	29%	19,000
TELADOC	Purchase, NY	172.35	26,612	1,417	(695)	27,306	(5.5%)	(34.7%)	(12.3%)	4.7%	14.5	13.6	(6.2%)	13.6	10.5	101.6	63.2	NM	NM	NM	80.9	2,003.6	2,591.2	280.9	432.1	29%	11%	17%	4,026
TRIMBLE NAVIGATION	Sunnyvale, CA	82.00	20,610	1,690	(1,453)	22,064	(0.7%)	24.4%	70.4%	136.8%	6.6	6.5	(0.6%)	6.5	6.1	27.4	24.6	34.8	30.9	35.1	32.4	3,383.8	3,634.0	638.1	895.7	7%	18%	25%	11,402
TYLER TECHNOLOGIES	Plano, TX	424.86	17,298	614	738	16,560	(5.9%)	0.5%	10.5%	32.5%	14.7	12.8	(13.2%)	12.8	11.3	44.6	37.8	71.7	62.5	25.2	47.5	1,298.4	1,468.4	371.0	438.4	13%	25%	30%	5,500
ASPEN TECHNOLOGY	Bedford, MA	130.84	8,899	333	(16)	8,915	(13.3%)	(2.3%)	19.2%	28.0%	14.3	12.6	(11.4%)	12.6	12.1	23.6	22.1	28.1	26.9	36.2	33.0	705.9	736.2	384.2	403.4	4%	52%	55%	1,710
GUIDEWIRE SOFTWARE	San Mateo, CA	105.51	8,835	470	689	8,146	0.5%	(8.0%)	9.8%	16.1%	10.8	10.8	0.6%	10.8	9.8	NM	174.6	NM	262.5	NM	102.7	753.2	835.2	80.9	46.7	11%	10%	6%	2,788
WISETECH GLOBAL	Alexandria, NSW	24.22	7,833	31	162	7,671	1.6%	1.1%	19.1%	99.2%	17.5	17.9	2.0%	17.9	14.7	47.5	36.1	89.3	64.3	62.4	48.5	429.6	520.7	69.9	212.7	21%	13%	41%	1,800
Q2	Austin, TX	104.02	5,783	603	(64)	5,848	0.2%	(18.7%)	14.0%	30.5%	11.9	11.9	0.2%	11.9	9.9	164.1	105.4	NM	185.1	126.9	65.0	490.0	593.1	23.9	55.5	21%	4%	9%	1,750
INOVALON	Bowie, MD	30.21	4,710	1,018	(889)	5,599	3.7%	23.8%	59.1%	72.6%	7.2	7.4	2.1%	7.4	6.6	20.6	18.2	40.3	32.6	N.A.	N.A.	760.2	843.9	121.1	308.2	11%	14%	37%	1,836
COMPUGROUP MEDICAL	Koblenz, Germany	91.54	4,861	678	(584)	5,436	(0.3%)	(7.6%)	6.8%	20.5%	4.5	4.5	(0.2%)	4.5	4.3	20.6	18.7	40.0	33.6	26.9	23.8	1,207.9	1,267.1	129.4	291.0	5%	10%	23%	7,814
NATIONAL INSTRUMENTS	Austin, TX	41.41	5,450	142	156	5,293	(9.6%)	0.0%	32.4%	7.8%	4.1	3.8	(7.2%)	3.8	3.5	21.2	17.2	70.4	44.1	22.9	18.2	1,391.7	1,508.0	160.4	308.0	8%	11%	20%	7,000
DUCK CREEK TECHNOLOGIES	Boston, MA	41.58	5,471	23	340	5,131	(3.3%)	(14.0%)	(4.1%)	NA	20.3	19.5	(3.6%)	19.5	16.7	NM	NM	(2,259.8)	NM	NM	NM	262.7	307.2	7.0	14.1	17%	2%	5%	1,405
APPFOLIO	Santa Barbara, CA	144.63	4,983	42	127	4,856	(1.7%)	(5.4%)	1.2%	31.6%	14.3	14.0	(1.8%)	14.0	11.8	92.0	69.1	NM	190.8	N.A.	N.A.	346.9	410.2	29.3	70.3	18%	7%	17%	1,335
ALARM.COM	Tysons, VA	89.76	4,465	158	96	4,379	(3.6%)	(3.4%)	53.9%	100.7%	6.8	6.5	(3.7%)	6.5	6.1	34.7	30.0	53.8	47.1	47.5	39.0	669.0	721.1	110.9	146.0	8%	15%	20%	1,404
BLACKBAUD	Charleston, SC	71.12	3,382	567	(539)	3,921	0.4%	7.0%	44.1%	28.7%	4.3	4.3	0.4%	4.3	4.3	18.0	16.7	25.9	24.1	17.3	18.8	905.3	919.6	136.6	242.1	2%	15%	26%	3,100
BANDWIDTH	Raleigh, NC	132.20	3,315	305	(193)	3,509	(4.2%)	(25.8%)	(17.6%)	62.1%	7.9	7.5	(4.0%)	7.5	6.4	149.8	97.0	NM	245.7	81.6	200.3	465.2	549.5	13.0	36.2	18%	2%	7%	960
2U	Lanham, MD	39.25	2,920	371	116	2,805	(3.2%)	(4.0%)	6.5%	65.3%	3.1	3.0	(3.7%)	3.0	2.6	47.7	33.2	NM	NM	NM	53.1	941.9	1,085.2	7.5	84.6	15%	1%	8%	5,189
UPLAND SOFTWARE	Austin, TX	49.56	1,492	563	(313)	1,805	(1.4%)	3.9%	18.8%	56.7%	6.0	6.0	(0.8%)	6.0	5.8	18.7	16.7	27.4	25.8	N.A.	N.A.	303.2	311.6	54.5	108.4	3%	17%	35%	810
EBIX	Johns Creek, GA	30.11	932	725	(595)	1,574	(4.1%)	(42.2%)	66.7%	43.9%	2.3	2.0	(13.9%)	2.0	N.A.	7.7	N.A.	7.6	N.A.	N.A.	N.A.	789.9	N.A.	NA	NA	NA	NA	NA	9,802
LINX	São Paulo, SP	6.97	1,225	77	44	1,183	0.8%	1.2%	11.4%	73.5%	6.6	6.5	(0.6%)	6.5	5.8	27.7	22.7	177.7	80.7	33.8	26.6	180.7	203.2	18.4	52.0	12%	9%	26%	N.A.
CASTLIGHT HEALTH	San Francisco, CA	1.90	300	12	45	255	23.4%	6.7%	115.2%	159.2%	1.6	1.8	17.6%	1.8	1.8	NM	41.2	NM	82.6	N.A.	N.A.	138.2	145.2	10.7	6.2	5%	7%	4%	440
REFLEX HOLDINGS	Melbourne, VIC	0.73	111	18	(6)	117	5.1%	9.3%	173.7%	183.4%	N.A.	N.A.	NA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	NA	NA	NA	NA	NA	500
Mean							(0.9%)	(2.5%)	31.9%	61.3%	9.7	9.5		9.5	8.5	49.3	45.1	-88.4	83.4	46.8	53.1	1,224	1,425	318	389	13%	16%	23%	
Min							(13.3%)	(42.2%)	(17.6%)	4.7%	1.6	1.8		1.8	1.8	7.7	16.7	-2,259.8	24.1	17.3	18.2	138	145	7	6	2%	1%	4%	
Max							23.4%	24.4%	173.7%	183.4%	23.3	23.5		23.5	19.7	164.1	174.6	177.7	262.5	126.9	200.3	4,653	5,500	2,228	2,010	29%	52%	55%	

<0% >=0% & <10% >= 10%

Marketplaces

Updated as of 4/30/2021

SMM	Recent Stock Performance						Operating Statistics						Trading Statistics					
	Company Name	Current Price (USD)	7 Day	6 Month	12 Month	Market Cap	Aggregate Value	CY2021E Revenue	CY2022E Revenue	CY21E/20E Rev Growth	CY22E/21E Rev Growth	CY2021E EBITDA Margin	CY2022E EBITDA Margin	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E
AMAZON.COM	\$3,467.42	3.8%	14.2%	40.2%	\$1,747,984	\$1,776,233	\$488,529	\$577,307	29%	18%	16%	16%	3.6x	3.1x	23.2x	18.7x	NM	49.1x
ALIBABA	230.95	(0.5%)	(24.2%)	14.0%	626,133	598,981	136,922	163,444	40%	19%	25%	25%	4.4	3.7	17.2	14.4	21.8	18.5
MEITUAN	38.37	(2.8%)	3.2%	186.5%	233,114	227,436	27,636	38,463	58%	39%	N.M.	7%	8.2	5.9	NM	NM	NM	NM
PINDUODUO	133.93	(3.4%)	48.8%	182.3%	167,806	157,083	16,434	22,497	107%	37%	N.M.	4%	9.6	7.0	NM	NM	NM	NM
SEA	252.54	(2.3%)	60.1%	354.4%	131,217	127,054	8,267	11,628	64%	41%	10%	13%	15.4	10.9	NM	NM	NM	NM
UBER	54.77	(5.5%)	63.9%	80.9%	101,922	106,957	16,091	22,050	31%	37%	N.M.	6%	6.6	4.9	NM	NM	NM	NM
AIRBNB	172.71	(0.9%)	NA	NA	105,051	100,989	4,770	6,427	46%	35%	3%	12%	21.2	15.7	NM	NM	NM	NM
MERCADOLIBRE	1,570.98	(1.9%)	29.4%	169.2%	78,317	76,927	5,866	8,258	52%	41%	4%	7%	13.1	9.3	NM	NM	NM	NM
DOORDASH	143.17	(6.3%)	NA	NA	46,641	42,399	3,707	4,661	30%	26%	4%	7%	11.4	9.1	NM	NM	NM	NM
EBAY	55.79	(8.4%)	17.1%	40.1%	38,008	41,958	12,040	12,984	19%	8%	34%	34%	3.5	3.2	10.3	9.4	14.1	12.3
DELIVERY HERO	158.85	1.3%	38.0%	88.6%	39,543	39,815	5,949	8,573	89%	44%	N.M.	N.M.	6.7	4.6	NM	NM	NM	NM
ZILLOW	133.35	(4.0%)	49.3%	206.3%	32,400	30,989	5,460	8,024	66%	47%	9%	8%	5.7	3.9	NM	46.5	NM	NM
ETSY	198.79	(7.4%)	63.5%	206.4%	25,266	24,734	2,180	2,627	34%	21%	30%	31%	11.3	9.4	38.4	30.8	NM	NM
IAC/INTERACTIVECORP	253.47	1.3%	110.0%	NA	22,500	20,530	3,590	4,217	20%	17%	5%	8%	5.7	4.9	NM	NM	NM	NM
VIPSHOP	30.77	(3.1%)	43.8%	93.2%	21,158	18,719	19,214	21,945	25%	14%	8%	8%	1.0	0.9	12.9	11.0	17.7	15.0
LYFT	55.66	(12.6%)	143.8%	69.5%	18,332	17,103	3,041	4,313	29%	42%	N.M.	6%	5.6	4.0	NM	NM	NM	NM
ALLEGRO	15.34	2.6%	(24.5%)	NA	15,698	16,838	1,305	1,651	23%	27%	4%	40%	12.9	10.2	31.3	25.5	NM	42.8
FARFETCH	48.99	1.0%	74.2%	270.0%	17,353	16,775	2,219	2,846	34%	28%	1%	6%	7.6	5.9	NM	NM	NM	NM
TAKEAWAY.COM	103.45	(6.4%)	(7.1%)	1.7%	15,396	15,442	4,225	5,535	48%	31%	N.M.	4%	3.7	2.8	NM	NM	NM	NM
CHEGG	90.33	(1.8%)	23.0%	111.3%	12,813	13,200	790	963	26%	22%	34%	35%	16.7	13.7	48.9	38.9	NM	44.4
OPENDOOR	20.27	3.7%	23.3%	NA	11,700	10,789	4,032	7,271	56%	80%	N.M.	N.M.	2.7	1.5	NM	NM	NM	NM
COMPASS	19.02	7.9%	NA	NA	7,359	8,918	4,999	6,375	NA	28%	N.M.	N.M.	1.8	1.4	NM	NM	NM	NM
RAKUTEN	12.71	3.1%	30.9%	48.4%	20,022	8,298	14,846	16,599	5%	12%	5%	10%	0.6	0.5	10.7	4.9	NM	NM
ANGI HOMESERVICES	16.01	(1.1%)	51.0%	136.3%	8,072	8,078	1,666	1,996	14%	20%	11%	14%	4.8	4.0	44.2	28.1	NM	NM
FIVERR	208.07	(5.1%)	42.1%	430.4%	7,458	7,114	289	390	54%	35%	7%	16%	24.6	18.2	NM	NM	NM	NM
REDFIN	70.78	7.8%	69.5%	235.0%	7,361	6,977	1,391	1,724	60%	24%	7%	8%	5.0	4.0	NM	48.0	NM	NM
MERCARI	49.40	(0.1%)	17.4%	94.9%	7,788	6,802	1,063	1,309	23%	23%	8%	14%	6.4	5.2	NM	38.2	NM	NM
GRUBHUB	68.04	(6.3%)	(8.0%)	42.4%	6,345	6,553	2,161	2,550	19%	18%	7%	11%	3.0	2.6	42.3	22.4	NM	NM
WISH	13.87	2.4%	NA	NA	8,585	6,504	3,315	4,023	33%	21%	N.M.	0%	2.0	1.6	NM	NM	NM	NM
DELIVEROO	3.70	14.8%	NA	NA	6,773	6,299	N.A.	N.A.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POSHMARK	41.83	(1.4%)	NA	NA	3,139	3,092	322	416	24%	29%	2%	4%	9.6	7.4	NM	NM	NM	NM
SHUTTERSTOCK	87.18	(9.3%)	33.2%	129.4%	3,187	2,863	729	785	10%	8%	24%	25%	3.9	3.6	16.2	14.7	30.5	27.6
JUMIA	30.42	(2.3%)	103.3%	592.9%	2,999	2,638	205	259	20%	26%	N.M.	N.M.	12.9	10.2	NM	NM	NM	NM
THE REAL REAL	24.77	4.5%	96.7%	111.0%	2,249	2,173	431	557	41%	29%	N.M.	N.M.	5.0	3.9	NM	NM	NM	NM
EVENTBRITE	23.57	7.2%	155.4%	158.4%	2,206	1,923	201	302	90%	50%	2%	14%	9.6	6.4	NM	46.4	NM	NM
THREDUP	17.17	(10.2%)	NA	NA	1,580	1,803	N.A.	N.A.	NA	NA	NA	NA	NA	NA	NM	NM	NM	NM
CARS.COM	13.21	(0.8%)	78.8%	155.0%	907	1,468	613	643	13%	5%	29%	30%	2.4	2.3	8.2	7.6	8.4	7.6
YUNJI	2.03	0.0%	4.1%	(52.9%)	433	249	1,045	1,198	25%	15%	1%	2%	0.2	0.2	17.2	10.1	37.6	20.5
Mean		(1.1%)	45.9%	149.8%			\$22,376	\$27,078	39%	28%	13%	14%	7.5x	5.7x	24.7x	24.5x	21.7x	26.4x
Min		(12.6%)	(24.5%)	(52.9%)			201	259	5%	5%	1%	0%	0.2	0.2	8.2	4.9	8.4	7.6
Max		14.8%	155.4%	592.9%			488,529	577,307	107%	80%	41%	40%	24.6	18.2	48.9	48.0	37.6	49.1

Stock Performance

<(5%)
>=(5%) & <=5%
>5%

AV / EBITDA

<10x

Online Retail

Updated as of 4/30/2021

SMM	Recent Stock Performance						Operating Statistics						Trading Statistics						
	Company Name	Current Price (USD)	7 Day	6 Month	12 Month	Market Cap	Aggregate Value	CY2021E Revenue	CY2022E Revenue	CY21E/20E Rev Growth	CY22E/21E Rev Growth	CY2021E EBITDA Margin	CY2022E EBITDA Margin	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E	CY2022 P/E
AMAZON.COM	\$3,467.42	3.8%	14.2%	40.2%	1,747,984	1,776,233	\$488,529	\$577,307	29%	18%	16%	16%	3.6x	3.1x	23.2x	18.7x	NM	NM	49.1x
CARVANA	285.26	2.6%	53.9%	256.1%	47,143	48,899	8,840	11,992	65%	36%	N.M.	1%	5.5	4.1	NM	NM	NM	NM	
CHEWY	79.72	(1.1%)	29.4%	84.4%	33,105	32,889	8,936	10,746	26%	20%	2%	3%	3.7	3.1	NM	NM	NM	NM	
WAYFAIR	295.57	(4.1%)	19.2%	138.3%	30,655	31,691	15,927	19,169	12%	20%	5%	6%	2.0	1.7	42.6	29.1	NM	NM	
PELTON	98.35	(2.7%)	(10.8%)	212.2%	28,964	27,473	4,838	6,509	63%	35%	7%	11%	5.7	4.2	NM	39.7	NM	NM	
ZALANDO	104.10	(4.6%)	11.4%	113.9%	26,351	25,240	12,089	14,479	25%	20%	6%	6%	2.1	1.7	33.2	27.1	NM	NM	
OCADO	28.97	(6.4%)	(1.8%)	43.3%	21,408	20,535	3,732	4,336	19%	16%	3%	6%	5.5	4.7	NM	NM	NM	NM	
VIPSHOP	30.77	(3.1%)	43.8%	93.2%	21,158	18,719	19,214	21,945	25%	14%	8%	8%	1.0	0.9	12.9	11.0	17.7	15.0	
HELLOFRESH	83.00	(1.4%)	55.1%	134.3%	14,406	13,890	6,173	7,119	35%	15%	11%	11%	2.3	2.0	21.1	17.6	37.1	31.7	
ASOS	72.11	(2.0%)	26.3%	139.1%	7,181	7,510	5,730	6,718	34%	17%	8%	8%	1.3	1.1	14.5	13.9	35.0	31.0	
YATSEN	10.42	(10.9%)	NA	NA	6,581	5,782	1,421	2,110	82%	48%	N.M.	N.M.	4.1	2.7	NM	NM	NM	NM	
CRICUT	26.50	15.4%	NA	NA	5,866	5,744	N.A.	N.A.	NA	NA	NA	NA	NA	NA	NA	NA	34.9	29.3	
VROOM	46.27	1.7%	12.6%	NA	6,314	5,605	2,518	4,007	86%	59%	N.M.	N.M.	2.2	1.4	NM	NM	NM	NM	
BOOHOO	4.70	0.2%	33.5%	15.4%	5,864	5,408	2,934	3,631	31%	24%	9%	9%	1.8	1.5	19.9	15.7	33.4	26.7	
STITCH FIX	43.32	(4.3%)	25.8%	169.9%	4,607	4,460	2,217	2,602	22%	17%	2%	5%	2.0	1.7	NM	36.4	NM	NM	
CIMPRESS	95.26	0.0%	29.8%	30.9%	2,480	3,978	2,630	2,891	5%	10%	15%	15%	1.5	1.4	10.3	9.4	NM	33.5	
REVOLVE	48.49	(4.4%)	168.2%	341.2%	3,501	3,355	688	813	20%	18%	11%	13%	4.9	4.1	42.9	32.0	NM	49.0	
OVERSTOCK.COM	81.50	16.2%	45.3%	545.8%	3,504	3,115	2,833	3,163	12%	12%	5%	5%	1.1	1.0	21.7	18.1	49.7	34.9	
GLOBAL FASHION GROUP	15.76	(3.0%)	77.5%	869.8%	3,387	3,100	1,867	2,255	13%	21%	2%	3%	1.7	1.4	NM	NM	NM	NM	
MYTHERESA	29.97	3.9%	NA	NA	2,571	2,855	744	915	NA	23%	7%	8%	3.8	3.1	NM	41.0	NM	NM	
HIMS	12.38	8.4%	NA	NA	2,351	2,500	202	240	40%	19%	N.M.	N.M.	12.4	10.4	NM	NM	NM	NM	
ZOOPLUS	316.37	(0.5%)	96.7%	155.9%	2,262	2,236	2,491	2,851	14%	14%	3%	3%	0.9	0.8	31.7	25.2	NM	NM	
MOONPIG.COM	6.08	(0.3%)	NA	NA	2,078	2,110	385	392	NA	2%	23%	24%	5.5	5.4	23.8	22.3	39.3	40.5	
PURPLE	34.08	(4.8%)	20.1%	238.8%	1,837	1,857	858	1,016	28%	18%	11%	12%	2.2	1.8	19.9	15.4	39.4	30.2	
BOOZT	23.31	(3.0%)	44.1%	276.8%	1,485	1,366	649	754	24%	16%	8%	9%	2.1	1.8	25.6	20.6	47.8	38.7	
CASPER	8.55	21.4%	29.0%	23.0%	354	331	596	694	23%	16%	N.M.	2%	0.6	0.5	NM	26.1	NM	NM	
BLUE APRON	5.93	(5.7%)	37.9%	(22.9%)	107	131	486	508	6%	5%	1%	3%	0.3	0.3	26.2	8.3	NM	NM	
Mean		(0.2%)	39.7%	205.2%			\$24,852	\$29,498	32%	21%	8%	9%	3.3x	2.7x	24.5x	23.1x	37.1x	34.1x	
Min		(10.9%)	(10.8%)	(22.9%)			202	240	5%	2%	1%	1%	0.3	0.3	10.3	8.3	17.7	15.0	
Max		21.4%	168.2%	869.8%			488,529	577,307	86%	59%	23%	24%	12.4	10.4	42.9	41.0	49.7	49.1	

Stock Performance

<(5%)
>=(5%) & <=5%
>5%

AV / EBITDA

<10x

Advertising / Social / Search

Updated as of 4/30/2021

SMM	Recent Stock Performance						Operating Statistics						Trading Statistics					
	Company Name	Current Price (USD)	7 Day	6 Month	12 Month	Market Cap	Aggregate Value	CY2021E Revenue	CY2022E Revenue	CY21E/20E Rev Growth	CY22E/21E Rev Growth	CY2021E EBITDA Margin	CY2022E EBITDA Margin	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E
FACEBOOK	\$325.08	8.0%	23.6%	58.8%	\$921,753	\$869,675	\$113,085	\$135,271	34%	20%	52%	51%	7.7x	6.4x	14.7x	12.5x	26.6x	22.1x
SNAP	61.82	0.8%	56.9%	251.1%	94,182	94,197	3,902	5,766	59%	48%	10%	20%	24.1	16.3	NM	NM	NM	NM
BAIDU	210.33	(4.8%)	58.1%	108.4%	74,374	63,516	19,625	22,366	20%	14%	24%	26%	3.2	2.8	13.7	11.1	20.7	17.0
MATCH GROUP	155.63	4.4%	33.3%	NA	42,043	44,931	2,838	3,326	19%	17%	38%	39%	15.8	13.5	42.2	34.2	NM	NM
KAKAO	101.67	(3.4%)	75.0%	234.1%	43,858	42,399	4,934	6,177	30%	25%	19%	20%	8.6	6.9	46.4	33.6	NM	NM
BILIBILI	110.86	(5.0%)	148.2%	304.7%	42,610	42,039	2,967	4,267	64%	44%	N.M.	2%	14.2	9.9	NM	NM	NM	NM
TWITTER	55.22	(17.6%)	33.5%	92.5%	43,963	41,435	4,781	5,862	32%	23%	28%	30%	8.7	7.1	30.5	23.3	NM	49.0
PINTEREST	66.37	(11.5%)	12.6%	221.2%	42,268	40,364	2,587	3,439	58%	33%	25%	29%	15.6	11.7	NM	40.6	NM	NM
THE TRADE DESK	729.31	0.4%	28.8%	149.3%	34,664	34,333	1,129	1,471	40%	30%	34%	35%	NM	23.3	NM	NM	NM	NM
TENCENT MUSIC	17.42	(8.2%)	17.1%	52.7%	29,485	26,415	5,407	6,505	21%	20%	16%	18%	4.9	4.1	30.9	22.7	35.4	26.4
APPLOVIN	58.01	(0.8%)	NA	NA	20,765	22,555	N.A.	N.A.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YANDEX	65.55	7.7%	13.9%	73.5%	23,336	21,850	4,372	5,858	47%	34%	17%	18%	5.0	3.7	30.1	20.4	NM	34.2
GOODRX	40.01	1.1%	(17.3%)	NA	15,710	15,446	749	1,037	37%	38%	31%	34%	20.6	14.9	NM	44.0	NM	NM
IQIYI	14.71	(5.7%)	(40.4%)	(13.3%)	11,610	12,852	5,025	5,682	10%	13%	N.M.	4%	2.6	2.3	NM	NM	NM	NM
ZYNGA	10.82	1.4%	20.4%	43.5%	11,740	11,597	2,841	3,127	26%	10%	24%	25%	4.1	3.7	17.3	14.8	26.8	23.1
WEIBO	50.40	(2.5%)	21.3%	34.3%	11,484	10,496	2,050	2,286	22%	12%	31%	32%	5.1	4.6	16.6	14.4	19.5	16.4
BUMBLE	60.24	2.2%	NA	NA	6,948	7,658	724	895	25%	24%	24%	25%	10.6	8.6	43.5	33.7	NM	NM
JOYY	95.06	(4.1%)	4.0%	55.9%	7,434	4,793	2,952	3,919	(25%)	33%	10%	11%	1.6	1.2	16.7	10.8	NM	33.3
MAGNITE	40.05	4.5%	343.5%	458.6%	4,629	4,553	305	372	42%	22%	23%	26%	14.9	12.3	NM	47.3	NM	NM
YELP	39.30	(3.2%)	99.8%	75.8%	2,945	2,538	998	1,129	15%	13%	17%	21%	2.5	2.2	15.2	10.9	NM	NM
SOGO	8.45	(0.7%)	(5.1%)	137.4%	3,277	2,238	1,284	1,435	12%	12%	15%	16%	1.7	1.6	11.3	9.7	23.5	19.7
MOMO	14.66	(3.4%)	(2.3%)	(39.1%)	3,022	2,133	2,336	2,608	2%	12%	14%	17%	0.9	0.8	6.3	4.9	8.6	7.0
CRITEO	39.73	8.6%	131.5%	300.1%	2,415	2,056	863	892	8%	3%	31%	31%	2.4	2.3	7.7	7.5	17.8	17.5
QUOTIENT	16.34	2.3%	83.6%	127.6%	1,525	1,500	515	578	20%	12%	8%	11%	2.9	2.6	36.2	24.7	NM	NM
BLUCORA	14.40	(1.5%)	44.7%	2.3%	694	1,137	827	886	11%	7%	15%	15%	1.4	1.3	9.3	8.3	11.0	9.3
QUTOUTIAO	2.30	(5.0%)	7.0%	(6.5%)	661	892	904	1,005	13%	11%	NA	NA	1.0	0.9	NA	NA	20.3	5.8
Mean		(1.4%)	49.6%	123.8%			\$7,520	\$9,046	26%	21%	23%	23%	7.5x	6.6x	22.9x	21.5x	21.0x	21.6x
Min		(17.6%)	(40.4%)	(39.1%)			305	372	(25%)	3%	8%	2%	0.9	0.8	6.3	4.9	8.6	5.8
Max		8.6%	343.5%	458.6%			113,085	135,271	64%	48%	52%	51%	24.1	23.3	46.4	47.3	35.4	49.0

Stock Performance

■ <(5%)
 ■ >=(5%) & <=5%
 ■ >5%

AV / EBITDA

■ <10x

Travel

Updated as of 4/30/2021

SMM	Recent Stock Performance						Operating Statistics						Trading Statistics					
	Company Name	Current Price (USD)	7 Day	6 Month	12 Month	Market Cap	Aggregate Value	CY2021E Revenue	CY2022E Revenue	CY21E/20E Rev Growth	CY22E/21E Rev Growth	CY2021E EBITDA Margin	CY2022E EBITDA Margin	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E
AIRBNB	\$172.71	(0.9%)	NA	NA	\$105,051	\$100,989	\$4,770	\$6,427	46%	35%	3%	12%	21.2x	15.7x	NM	NM	NM	NM
BOOKING HOLDINGS	2,466.08	2.9%	52.0%	66.6%	101,239	99,611	9,424	14,169	39%	50%	28%	37%	10.6	7.0	37.6	18.8	NM	26.2
AMADEUS	68.21	(3.4%)	42.8%	42.0%	30,711	34,517	3,896	5,490	46%	41%	28%	37%	8.9	6.3	31.1	16.8	NM	32.9
EXPEDIA	176.23	(0.7%)	87.2%	148.3%	25,894	33,755	7,622	10,550	42%	38%	12%	20%	4.4	3.2	35.5	15.8	NM	29.9
TRIP.COM	39.08	1.4%	35.9%	51.7%	24,912	27,318	3,760	5,694	34%	51%	12%	23%	7.3	4.8	NM	20.6	NM	23.5
TRIPADVISOR	47.13	(7.6%)	146.6%	136.0%	6,452	6,668	867	1,283	46%	48%	17%	28%	7.7	5.2	46.3	18.3	NM	37.2
TONGCHENG-ELONG	2.51	(2.6%)	51.2%	48.6%	5,500	4,497	1,340	1,671	46%	25%	22%	24%	3.4	2.7	15.4	11.3	22.3	16.2
TRAINLINE	6.32	(0.7%)	77.4%	32.2%	3,025	3,247	192	342	(74%)	78%	8%	31%	16.9	9.5	NM	31.0	NM	NM
MAKEMYTRIP	27.42	4.5%	46.1%	85.8%	2,831	2,625	361	763	16%	111%	N.M.	4%	7.3	3.4	NM	NM	NM	NM
EDREAMS	5.82	3.0%	125.0%	148.1%	685	1,271	285	438	9%	54%	6%	20%	4.5	2.9	NM	14.9	NM	NM
TRIVAGO	3.58	(2.7%)	165.2%	95.6%	1,277	1,113	395	641	27%	62%	3%	9%	2.8	1.7	NM	18.4	NM	NM
ON THE BEACH	5.73	4.2%	105.8%	63.7%	903	858	118	212	109%	79%	10%	25%	7.3	4.1	NM	16.4	NM	25.3
DESPEGAR.COM	13.24	(3.0%)	94.7%	91.9%	928	791	355	520	219%	47%	1%	10%	2.2	1.5	NM	14.8	NM	NM
Mean		(0.4%)	85.8%	84.2%			\$2,568	\$3,708	47%	55%	13%	22%	8.0x	5.2x	33.2x	17.9x	22.3x	27.3x
Min		(7.6%)	35.9%	32.2%			118	212	(74%)	25%	1%	4%	2.2	1.5	15.4	11.3	22.3	16.2
Max		4.5%	165.2%	148.3%			9,424	14,169	219%	111%	28%	37%	21.2	15.7	46.3	31.0	22.3	37.2

Stock Performance

<(5%)
>=(5%) & <=5%
>5%

AV / EBITDA

<10x

FinTech

Updated as of 4/30/2021

Company Name	Recent Stock Performance						Operating Statistics						Trading Statistics					
	Current Price (USD)	7 Day	6 Month	12 Month	Market Cap	Aggregate Value	CY2021E Revenue	CY2022E Revenue	CY21E/20E Rev Growth	CY22E/21E Rev Growth	CY2021E EBITDA Margin	CY2022E EBITDA Margin	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E	CY2022 P/E
PAYPAL	\$262.29	(1.4%)	40.9%	113.2%	\$307,997	\$304,683	\$25,707	\$31,015	20%	21%	29%	29%	11.9x	9.8x	40.5x	33.4x	NM	45.6x
SQUARE	244.82	(0.7%)	58.1%	275.8%	\$111,482	\$110,746	14,313	16,945	52%	18%	5%	7%	7.7	6.5	NM	NM	NM	NM
ADYEN	2,455.79	(3.4%)	45.6%	149.1%	\$74,675	\$71,526	1,164	1,611	40%	38%	61%	63%	61.4	44.4	100.3	71.0	145.3	102.7
COINBASE	297.64	2.1%	NA	NA	\$59,290	\$59,170	5,196	5,053	NA	(3%)	45%	33%	11.4	11.7	25.5	35.6	45.3	NM
ROCKET MORTGAGE	22.45	1.4%	23.1%	NA	\$3,044	\$3,166	12,845	10,706	(17%)	(17%)	53%	45%	2.7	3.2	5.0	7.1	8.9	12.6
AFTERPAY	90.65	(5.2%)	33.2%	344.3%	\$26,237	\$25,968	946	1,407	69%	49%	13%	19%	27.4	18.5	NM	NM	NM	NM
AFFIRM	70.50	(4.9%)	NA	NA	\$18,147	\$20,610	905	1,173	NA	30%	N.M.	N.M.	22.8	17.6	NM	NM	NM	NM
STONECO	64.64	(4.5%)	23.0%	145.0%	\$19,956	\$19,118	1,038	1,577	57%	52%	53%	56%	18.4	12.1	34.9	21.7	NM	41.1
PAGSEGURO	45.74	0.1%	24.9%	80.6%	\$15,049	\$14,749	1,793	2,316	37%	29%	35%	37%	8.2	6.4	24.0	17.1	44.5	30.5
PING AN GROUP	11.72	(8.8%)	(9.1%)	(15.4%)	\$13,442	\$11,394	1,390	1,880	40%	35%	N.M.	N.M.	8.2	6.1	NM	NM	NM	NM
ZHONGAN	5.92	(3.0%)	14.0%	71.3%	\$8,705	\$9,370	3,448	3,789	34%	10%	1%	1%	2.7	2.5	NM	NM	NM	45.8
LIGHTSPEED	69.67	0.1%	117.5%	266.9%	\$9,142	\$8,959	338	471	101%	39%	N.M.	N.M.	26.5	19.0	NM	NM	NM	NM
UPSTART	109.02	1.5%	NA	NA	\$8,243	\$8,075	504	682	130%	35%	10%	15%	16.0	11.8	NM	NM	NM	NM
OPENLENDING	39.05	5.3%	50.4%	NA	\$4,928	\$4,989	213	299	107%	40%	69%	70%	23.4	16.7	33.7	23.8	NM	33.7
LEMONADE	90.40	(3.7%)	79.8%	NA	\$5,540	\$4,969	116	183	24%	58%	N.M.	N.M.	NM	27.2	NM	NM	NM	NM
YIXIN	0.34	(0.1%)	38.1%	101.9%	\$2,192	\$3,334	677	847	NA	25%	NA	NA	4.9	3.9	NA	NA	27.5	22.9
LENDINGTREE	206.49	(9.1%)	(36.2%)	(17.2%)	\$2,748	\$3,303	1,111	1,299	23%	17%	13%	16%	3.0	2.5	22.7	15.7	NM	33.5
LEXINFINTech	9.09	(2.0%)	10.3%	7.8%	\$1,655	\$2,851	2,049	2,406	18%	17%	24%	23%	1.4	1.2	5.9	5.0	4.8	4.1
ROOT	10.77	1.0%	(55.1%)	NA	\$2,724	\$1,799	841	1,569	36%	87%	N.M.	N.M.	2.1	1.1	NM	NM	NM	NM
TYRO	2.89	(4.7%)	11.0%	53.9%	\$1,470	\$1,350	210	269	24%	28%	4%	8%	6.4	5.0	NM	NM	NM	NM
UXIN	3.01	40.0%	213.5%	87.0%	\$1,028	\$1,279	N.A.	N.A.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FINVOLUTION	6.71	1.2%	230.5%	249.5%	\$1,901	\$1,213	1,439	1,846	23%	28%	NA	NA	0.8	0.7	NA	NA	5.7	5.0
LENDINGCLUB	15.39	6.7%	229.6%	100.7%	\$1,496	\$907	469	689	45%	47%	N.M.	20%	1.9	1.3	NM	6.7	NM	NM
GREENSKY	6.09	1.8%	28.8%	40.3%	\$477	\$637	583	657	12%	13%	9%	26%	1.1	1.0	12.8	3.8	NM	16.5
FUNDING CIRCLE	2.12	(3.9%)	106.8%	95.1%	\$752	\$601	260	301	30%	16%	15%	18%	2.3	2.0	15.5	11.2	NM	NM
CANGO	6.71	(2.3%)	23.1%	26.4%	\$979	\$488	1,033	1,234	264%	19%	7%	7%	0.5	0.4	6.6	5.5	14.5	12.4
QIWI	10.55	(3.4%)	(27.7%)	(13.7%)	\$658	\$119	272	288	(24%)	6%	51%	49%	0.4	0.4	0.9	0.8	6.7	6.5
JIANPU	2.88	0.0%	(23.0%)	(63.3%)	\$61	(\$23)	N.A.	N.A.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
QUDIAN	2.05	7.3%	53.0%	18.5%	\$519	(\$330)	470	577	(25%)	23%	12%	NA	NM	NM	NM	NA	2.7	3.3
Mean		0.4%	55.8%	120.9%			\$3,361	\$3,856	43.7%	30.3%	28.3%	29.1%	12.3x	10.0x	30.5x	21.9x	40.3x	32.8x
Min		(9.1%)	(55.1%)	(63.3%)			116	183	(25.0%)	(16.7%)	0.9%	1.0%	0.4	0.4	0.9	0.8	2.7	3.3
Max		40.0%	230.5%	344.3%			25,707	31,015	264.1%	86.6%	69.3%	70.1%	61.4	44.4	100.3	71.0	145.3	102.7

Stock Performance

<(5%)
>=(5%) & <=5%
>5%

AV / EBITDA

<10x

Gaming

Updated as of 4/30/2021

SMM	Recent Stock Performance						Operating Statistics						Trading Statistics					
	Company Name	Current Price (USD)	7 Day	6 Month	12 Month	Market Cap	Aggregate Value	CY2021E Revenue	CY2022E Revenue	CY21E/20E Rev Growth	CY22E/21E Rev Growth	CY2021E EBITDA Margin	CY2022E EBITDA Margin	CY2021 AV / Rev	CY2022 AV / Rev	CY2021 AV / EBITDA	CY2022 AV / EBITDA	CY2021 P/E
TENCENT	\$80.21	(1.5%)	5.3%	49.1%	\$763,088	\$779,823	\$91,401	\$110,244	24%	21%	37%	37%	8.5x	7.1x	22.8x	19.1x	32.8x	26.6x
SEA	252.54	(2.3%)	60.1%	354.4%	\$131,217	\$127,054	8,267	11,628	64%	41%	10%	13%	15.4	10.9	NM	NM	NM	NM
ACTIVISION BLIZZARD	91.19	(2.0%)	20.4%	43.1%	\$70,856	\$65,940	8,546	9,703	5%	14%	44%	45%	7.7	6.8	17.5	15.0	24.9	21.3
NETEASE	112.06	(0.5%)	29.1%	62.4%	\$72,892	\$63,463	13,794	16,151	22%	17%	22%	22%	4.6	3.9	21.4	17.9	26.8	22.9
ROBLOX	74.55	3.9%	NA	NA	\$28,374	\$40,514	1,980	2,498	13%	26%	25%	24%	20.5	16.2	NM	NM	NM	NM
ELECTRONIC ARTS	142.08	(0.7%)	18.6%	24.3%	\$40,866	\$35,448	6,470	7,143	10%	10%	36%	38%	5.5	5.0	15.4	13.0	24.3	20.2
UNITY	101.58	(0.9%)	7.1%	NA	\$28,374	\$26,746	971	1,238	28%	27%	N.M.	1%	27.5	21.6	NM	NM	NM	NM
NEXON	33.16	(1.2%)	18.8%	103.5%	\$29,468	\$24,657	3,127	3,524	10%	13%	46%	47%	7.9	7.0	17.3	14.8	26.1	22.0
DRAFTKINGS	56.66	(2.5%)	60.1%	191.2%	\$15,423	\$20,798	1,038	1,480	88%	43%	N.M.	N.M.	20.0	14.1	NM	NM	NM	NM
TAKE-TWO	175.38	(0.5%)	13.2%	44.9%	\$19,225	\$16,990	3,341	4,252	1%	27%	25%	27%	5.1	4.0	20.3	14.9	30.7	22.4
EMBRACER	30.82	2.8%	52.2%	188.5%	\$11,379	\$14,848	1,616	1,912	57%	18%	42%	44%	9.2	7.8	21.9	17.7	NM	NM
NCSOFT	743.52	(2.2%)	8.8%	39.8%	\$15,322	\$13,729	2,742	3,397	24%	24%	40%	43%	5.0	4.0	12.6	9.5	21.0	15.5
PLAYTIKA	27.78	0.0%	NA	NA	\$6,640	\$13,257	2,465	2,710	5%	10%	37%	37%	5.4	4.9	14.6	13.2	34.0	25.4
ZYNGA	10.82	1.4%	20.4%	43.5%	\$11,740	\$11,597	2,841	3,127	26%	10%	24%	25%	4.1	3.7	17.3	14.8	26.8	23.1
UBISOFT	75.14	(3.4%)	(14.9%)	1.1%	\$9,213	\$9,745	2,935	3,212	14%	9%	42%	43%	3.3	3.0	8.0	7.0	23.7	20.3
NETMARBLE	116.01	(7.5%)	12.6%	46.9%	\$9,505	\$9,415	2,558	2,788	9%	9%	17%	18%	3.7	3.4	21.9	18.9	31.6	27.8
KINGSOFT	7.08	(2.7%)	32.6%	103.7%	\$9,688	\$7,854	1,106	1,357	30%	23%	39%	39%	7.1	5.8	18.2	14.8	47.8	35.1
KONAMI	59.65	(0.1%)	53.3%	87.5%	\$7,946	\$6,914	2,582	2,598	3%	1%	28%	31%	2.7	2.7	9.5	8.5	22.5	19.5
SQUARE ENIX	55.62	(5.8%)	(5.0%)	35.1%	\$5,325	\$5,325	2,812	3,074	(9%)	9%	19%	19%	1.9	1.7	9.9	9.2	21.6	19.4
CD PROJEKT	45.94	1.5%	(45.8%)	(46.6%)	\$4,628	\$4,413	433	367	(30%)	(15%)	62%	62%	10.2	12.0	16.4	19.3	23.1	24.8
SCIPLAY	17.65	(2.8%)	32.2%	67.3%	\$2,229	\$2,103	604	635	4%	5%	31%	31%	3.5	3.3	11.3	10.5	18.8	18.1
Mean	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NA	NA	NA	NA	NA	NA
Min		(1.4%)	23.1%	88.7%			\$8,452	\$10,107	22%	19%	31%	31%	8.7x	7.0x	16.6x	13.9x	28.2x	23.0x
Max		(7.5%)	(14.9%)	1.1%			91,401	110,244	88%	43%	46%	47%	1.9	1.7	8.0	7.0	21.0	15.5

Stock Performance

<(5%)
>=(5%) & <=5%
>5%

AV / EBITDA

<10x

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