Software

2021 Software Playbook

January 11, 2021

Key Takeaway

For our Software Playbook 2021, we highlight our top picks across the app, infra and sec spaces. Software delivered a blockbuster '20 outperforming the S&P 500 by 36% (highest in 2 decades) as overall valuations expanded 56%. We expect the next leg of growth will come from fundamentals and see room for further gains among select names.

Stretched Valuations, Fundamentals Still Alive. Software delivered blockbuster outperformance in 2020, outperforming the S&P 500 by 36% (highest in 2 decades). Valuations expanded 56% in 2020 compared to 26% in 2019 and 7% in 2018. Despite some early trading pressure in 2021 as investors reposition their portfolios to take advantage of the reopening trade, we expect software will continue to outperform other sectors driven by strong fundamentals. Multiple expansion will be limited in '21, and we believe the next leg of growth needs to come from fundamentals, not multiple expansion. Our checks indicate fundamentals are strong for the space.

Top predictions:

1. Tripling down on Teams – MSFT goes all in on collaboration and telephony to add another lever of rev growth via upsell to E5 driving shares higher.
2. INTU Lucky #13: 2021 should be 13th year of stock gains thanks to product and vaccine tailwinds driving up-sells and SMB recovery.
3. Security spend continues to climb as the severity of breaches increases – security remains a quilt of different vendors patched together as no one vendor can protect a full enterprise. We favor a basket of names (CRWD, PANW, NET, SPLK, and VRNS).
4. 2021 the year of Work-from-Anywhere – Collaboration Apps Lead the Way.

- While not deemed emergency spend in 2020, collaboration apps like ASAN are mission critical to remote work and productivity and flourish in 2021.
- We believe DBX can offer sustained DD top line growth with significant margin leverage and cash flows.

5. Valuations have expanded 56% for the space in '20 and we believe upside from multiple expansion will be limited in '21. '20 has taught us to favor the best fundamental names within the space (CRWD, NET, and DDOG).
6. CRM will take a breather on large M&A in '21 as it digests WORK. We believe WORK will allow CRM to sell to additional users within the enterprise. Over the LT, RPA will be another avenue for investment for CRM.
7. ADBE accelerates growth from mid-teens to high-teens % with the help of Experience Cloud jump starting and pent-up demand for digital transformation projects.
8. SPLK is the come-back kid in CY21 and we are buyers of the sales execution related pullback given the strength of the enterprise-focused platform. Expect observability to be top-of-mind among enterprise CIOs and see potential for the space to consolidate in a bigger way.

Top Picks:

Category	Tickers
Large Cap	MSFT, CRM, ADBE, INTU, PANW, CRWD
SMID Cap	SPLK, NET, VRNS, ASAN
Growth	CRWD, NET, DDOG
Value	DBX

Ratings Changes:

Ticker	New PT	Old PT	New Rating	Old Rating
CRWD	$275	$160	Buy	Hold
DDOG	$125	$105	Buy	Hold
PLAN	$85	$70	Buy	Hold
SWI	$15	$18	Hold	Buy
MIME	$55	$50	Hold	Buy

Brent Thill *
Equity Analyst
(415) 229-1559
bthill@jefferies.com

Joseph Gallo *
Equity Associate
(212) 336-7402
jgallo@jefferies.com

Parthiv Varadarajan *
Equity Associate
(212) 323-7676
pvaradarajan@jefferies.com

Luv Sodha, CPA, CFA *
Equity Associate
(212) 510-3252
lsodha@jefferies.com

John Byun *
Equity Analyst
(415) 229-1558
jbyun@jefferies.com

Bo Yin *
Equity Associate
+1 (212) 284-2249
byin@jefferies.com

Avi Kumar *
Equity Associate
+1 (212) 778-8405
akumar12@jefferies.com

* Jefferies LLC / Jefferies Research Services, LLC

9. Aggressive platform build-out stories that enable TAM growth continue to work – ESTC's TAM growing to $78B in CY21 vs. $45B in CY18 enables 30%+ growth alongside positive FCF.
10. WDAY and PLAN snap back in '21 as back office/middle office takes attention away from the front office. Both WDAY and PLAN will have easy compares in '21 as they lap pandemic hit in '20.

PT Changes:

Ticker	New PT	Old PT	New Rating	Old Rating
INTU	$450	$430	Buy	Buy
PLTR	$30	$18	Buy	Buy
TEAM	$235	$200	Hold	Hold
WDAY	$280	$260	Buy	Buy
PANW	$425	$325	Buy	Buy
NET	$95	$80	Buy	Buy
CHKP	$135	$130	Hold	Hold
ESTC	$175	$150	Buy	Buy
DT	$45	$39	Hold	Hold
ASAN	$40	$35	Buy	Buy
VRNS	$200	$155	Buy	Buy
SAIL	$70	$55	Buy	Buy
MSP	$30	$32	Hold	Hold
TWOU	$55	$50	Buy	Buy
TUFN	$15	$8	Hold	Hold

Summary of Changes										
Company	Ticker	Rating	Price	Price Target	EPS Estimates 2019	2020	2021	P/E 2019	2020	2021
2U	TWOU	BUY	$44.06	$55.00	$(3.83)	$(3.16)	$(2.57)	--	--	--
Previous				*$50.00*	*$(3.83)*	*$(3.16)*	*$(2.57)*			
Adobe	ADBE	BUY	$485.10	$600.00	$7.87	$10.10	$11.20	61.6x	48.0x	43.3x
Anaplan	PLAN	BUY	$71.46	$85.00	--	$(0.44)	$(0.30)	--	NM	NM
Previous		*HOLD*		*$70.00*	*--*	*$(0.44)*	*$(0.30)*			
Asana	ASAN	BUY	$31.58	$40.00	$(0.65)	$(0.97)	$(1.22)	NM	NM	NM
Previous				*$35.00*	*$(0.65)*	*$(0.97)*	*$(1.22)*			
Atlassian	TEAM	HOLD	$235.48	$235.00	$0.86	$1.15	$1.12	NM	NM	NM
Previous				*$200.00*	*$0.86*	*$1.15*	*$1.10*			
Check Point Software	CHKP	HOLD	$131.96	$135.00	$6.13	$6.71	$7.19	21.5x	19.7x	18.4x
Previous				*$130.00*	*$6.13*	*$6.71*	*$7.19*			
Cloudflare	NET	BUY	$79.15	$95.00	$(0.48)	$(0.13)	$(0.10)	NM	NM	NM
Previous				*$80.00*	*$(0.48)*	*$(0.13)*	*$(0.10)*			
CrowdStrike	CRWD	BUY	$223.73	$275.00	--	$(0.42)	$0.21	--	NM	NM
Previous		*HOLD*		*$160.00*	*--*	*$(0.42)*	*$0.21*			
Datadog	DDOG	BUY	$99.94	$125.00	$(0.01)	$0.18	$0.32	NM	NM	NM
Previous		*HOLD*		*$105.00*	*$(0.01)*	*$0.18*	*$0.32*			
Datto	MSP	HOLD	$26.51	$30.00	$0.03	$0.49	$0.44	NM	54.1x	60.3x
Previous				*$32.00*	*$0.03*	*$0.49*	*$0.44*			
Dynatrace	DT	HOLD	$42.27	$45.00	$0.12	$0.31	$0.56	NM	NM	75.5x
Previous				*$39.00*	*$0.12*	*$0.31*	*$0.56*			
Elastic	ESTC	BUY	$152.15	$175.00	$(1.11)	$(0.93)	$(0.32)	NM	NM	NM
Previous				*$150.00*	*$(1.11)*	*$(0.93)*	*$(0.32)*			
Intuit	INTU	BUY	$374.46	$450.00	$6.75	$7.86	$8.35	55.5x	47.6x	44.8x
Previous				*$430.00*	*$6.75*	*$7.86*	*$8.35*			
Microsoft	MSFT	BUY	$219.62	$260.00	$4.75	$5.76	$6.56	46.2x	38.1x	33.5x
Mimecast	MIME	HOLD	$52.37	$55.00	$0.26	$0.50	$0.91	--	--	--
Previous		*BUY*		*$50.00*	*$0.26*	*$0.50*	*$0.91*			
Palantir Technologies	PLTR	BUY	$25.20	$30.00	$(0.24)	$0.09	$0.17	NM	NM	NM
Previous				*$18.00*	*$(0.24)*	*$0.09*	*$0.17*			

Please see important disclosure information on pages 180 - 193 of this report.

Summary of Changes										
Company	Ticker	Rating	Price	Price Target	EPS Estimates 2019	2020	2021	P/E 2019	2020	2021
Palo Alto Networks	**PANW**	**BUY**	**$366.55**	**↑ $425.00**	**$5.45**	**$4.88**	**$5.74**	**67.3x**	**75.1x**	**63.9x**
Previous				*$325.00*	*$5.45*	*$4.88*	*$5.74*			
SailPoint	**SAIL**	**BUY**	**$57.58**	**↑ $70.00**	**$0.21**	**$0.28**	**$0.08**	**--**	**--**	**--**
Previous				*$55.00*	*$0.21*	*$0.28*	*$0.08*			
Smartsheet	**SMAR**	**HOLD**	**$68.10**	**$75.00**	**$(0.36)**	**$(0.49)**	**$(0.43)**	**NM**	**NM**	**NM**
Tufin	**TUFN**	**HOLD**	**$14.39**	**↑ $15.00**	**$(0.63)**	**$(0.69)**	**$(0.61)**	**NM**	**NM**	**NM**
Previous				*$8.00*	*$(0.63)*	*$(0.69)*	*$(0.61)*			
Upland Software	**UPLD**	**BUY**	**$47.51**	**$58.00**	**$2.47**	**↓ $2.34**	**↓ $1.88**	**19.2x**	**20.3x**	**25.3x**
Previous					*$2.47*	*$2.41*	*$2.01*			
Varonis	**VRNS**	**BUY**	**$173.41**	**↑ $200.00**	**$(0.96)**	**$(0.51)**	**$0.11**	**NM**	**NM**	**NM**
Previous				*$155.00*	*$(0.96)*	*$(0.51)*	*$0.11*			
Workday, Inc.	**WDAY**	**BUY**	**$227.65**	**↑ $280.00**	**$1.36**	**$1.89**	**$2.70**	**--**	**--**	**--**
Previous				*$260.00*	*$1.36*	*$1.89*	*$2.70*			
SolarWinds	**SWI**	**↓ HOLD**	**$15.35**	**↓ $15.00**	**$0.85**	**$0.98**	**$0.90**	**18.1x**	**15.7x**	**17.1x**
Previous		*BUY*		*$18.00*	*$0.85*	*$0.98*	*$0.90*			

Software Playbook 2021: Blockbuster '20 for Software – More to Come in '21?

Brent Thill
(415) 229-1559
bthill@jefferies.com

John Byun
(415) 229-1558
jbyun@jefferies.com

Joseph Gallo
(212) 336-7402
jgallo@jefferies.com

Parthiv Varadarajan
(212) 323-7676
pvaradarajan@jefferies.com

Luv Sodha, CPA, CFA
(212) 510-3252
lsodha@jefferies.com

Bo Yin
(212) 284-2249
byin@jefferies.com

Avi Kumar
(212) 778-8405
akumar12@jefferies.com

Top Picks in US Software

Large Cap:

Microsoft (MSFT) – PT: $260: We view Microsoft as a large, diversified business with excellent visibility and a clear line of sight into double-digit revenue growth for the foreseeable future. Microsoft is uniquely positioned to benefit from the growth of both the IaaS/PaaS market as well as the SaaS market. The majority of Microsoft's growth today comes from these verticals, which industry experts expect to grow significantly.

Salesforce.com (CRM) – PT: $320: We view CRM as a top front office apps pick. Stock underperformed the IGV in 2020 up 37% vs. IGV's 52% due to mixed news with a CFO transition, and a 25x rev. WORK deal (largest M&A deal ever). We expect CRM to take a breather on large M&A in 2021. The fundamental demand looks bright as we expect a F4Q bounce back. Pipelines are improving, and COVID-19 has accelerated the digital transformation journey for businesses. One partner cited a "tsunami of deals" in F4Q. Investors should also quickly warm up to new CFO Amy Weaver (7 yr CRM legal exec). Maintain Buy and $320 PT.

Adobe (ADBE) – PT: $600: Adobe should accelerate growth in FY21 thanks to sustained strength in the Digital Media segment and rebound in the Digital Experience segment. The company benefits from multiple secular tailwinds including digital transformation, increasing importance of design, and intensifying focus on customer engagement in an omnichannel environment. We continue to like ADBE for its double-digit top-line growth, >90% recurring revenues, >40% op mgn, and ~$17Bn in authorized share buyback.

Intuit (INTU) – PT: $450: Intuit has been a consistent performer thanks to its leadership in tax and small business software. Stock has delivered 12 straight years of positive returns, and 2021 should mark #13. Innovation has accelerated under CEO Sasan Goodarzi, and FY21 should benefit from multiple product drivers. In addition, the Covid vaccine should improve the health of its small business segment and set up Credit Karma for upside results. We like INTU for its high-quality fundamentals, tailwinds from Live assist offerings, U.S.-centric rev mix (>95%), mid 30s% operating margins, cash flows that fund stock buybacks ($2.4Bn authorized), and dividends that grow double digits.

Palo Alto Networks (PANW) – PT: $425 PANW reported strong F1Q results, raised FY21 guide and provided increased visibility into its business likely alleviating a lot of investor concerns. PANW is well-positioned in the hybrid world given investments in cloud to complement its network assets, although this has meant continued M&A ($2.7B over last 2 years). Our SOTP analysis derives a $425 PT. PANW shares are a bargain at less than 7x EV/2022 revenue for a near rule of 40 vendor.

CrowdStrike (CRWD) – PT: $275: CRWD is well-positioned to demonstrate that a security vendor with roots in the endpoint can become much more than its predecessors were, with high enterprise class renewal rates, hyper-growth, and impressive SaaS gross margin as it's on its way to becoming a true security platform.

Small/Mid Cap:

Splunk (SPLK) – PT: $240: We are buyers of recent sales execution related weakness in shares given the competitive nature of the platform for large enterprises across IT/security/observability use cases. FY22/FY23 ARR growth expectations have reset to +36%/+30% and any execution improvement that enables beat-and-raise Qs should help the stock re-rate from current 11x CY21 revs (vs. ESTC at 22x). The cloud and pricing transitions are well under way and we expect the model to scale significantly over the next 3-5 years.

Cloudflare (NET) – PT: $95: NET is disrupting legacy network and web security vendors with its unique cloud-based technology architecture and freemium model. We believe NET could sustain elevated growth for multiple years as it launches more security services (Cloudflare One, Cloudflare for Teams, Workers) and enterprise adoption further accelerates, justifying a premium valuation.

Varonis (VRNS) – PT: $200: VRNS has completed perhaps the fastest transition to subscription we've seen in software. It is a rare gem with accelerating top and bottom line as this stock continues to work post model transition. See potential significant rev acceleration above Street estimates coupled with an improving bottom-line.

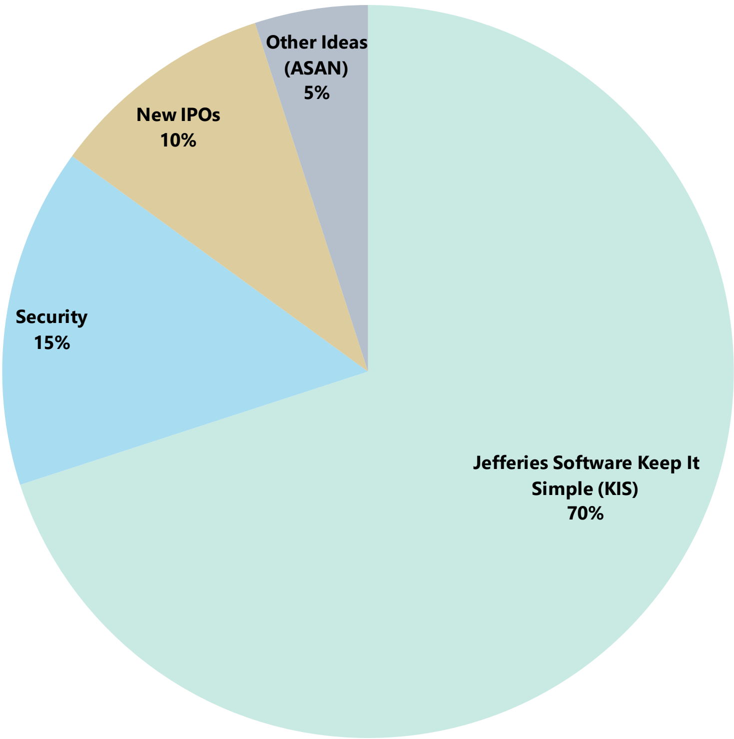
Asana – Buy - $40 PT: Asana's differentiated solution for work management enables knowledge workers to work more efficiently, resulting in a large and growing customer base in a new and expanding market opportunity. ASAN has shown early success in a land/expand strategy and strong net revenue expansion, which can support sustainable high growth and meaningful profitability with scale. If we use Forrester's 2019 estimate of 1.25B knowledge workers in the world, Asana, with its 1.3M paid users, is only 0.1% penetrated today. Our price target implies 21x EV/CY22E total revenue based on Street estimates.

Jefferies Software KIS (Keep It Simple) Portfolio

		1YR	3YR	5YR
Front Office	CRM	26%	105%	199%
	ADBE	46%	162%	444%
	HUBS	139%	345%	664%
	ZEN	90%	327%	512%
Back Office	MSFT	41%	160%	361%
	WDAY	32%	108%	217%
	INTU	42%	134%	315%
PaaS	NOW	81%	292%	565%
IaaS	AMZN	67%	159%	424%
	Average	63%	199%	411%
	IGV	49%	122%	270%
	COMP	46%	85%	182%

Source: Jefferies, FactSet. Note: priced as of market close on 01-08-20.

Constructing the Software Portfolio for 2021



Source: Jefferies

Jefferies Software Coverage Summary

Top Software Picks

Large Cap: MSFT, CRM, ADBE, INTU, PANW, CRWD **Small and Mid Cap:** SPLK, NET, VRNS, ASAN

	Company	Ticker	Rating	Price Target ($)	Upside (%)	Our View
Large Cap	Microsoft	MSFT	Buy	$260	18%	Multiple growth levers in collaboration, telephony, and security to drive upsell to E5. Set up well into '21 as tough on-prem comps pass and Azure continues to fuel double-digit commercial bookings growth.
	Adobe	ADBE	Buy	$600	24%	Secular tailwinds from digital content creation and digital transformation continue to power >90% recurring revs, double digit rev growth, and >40% op margins.
	Salesforce.com	CRM	Buy	$320	44%	Continued front office apps digital transformation momentum. Will take a breather on large in M&A in '21 as it digests WORK. Fundamental demand is strong and we expect a F4Q comeback.
	Oracle	ORCL	Hold	$65	3%	Muted rev growth due to pressures to on-premise infrastructure spending. Lags AWS/Azure in cloud infrastructure. Prefer MSFT in large-cap software.
	Snowflake	SNOW	Hold	$280	-7%	Best-in-class growth as TAM expands beyond core data warehousing toward enterprise data platform. Highest multiple in software keeps us in the sidelines and the lock-up expiration bears monitoring.
	Intuit	INTU	Buy	$450	20%	Leadership in consumer tax and small business accounting creates high quality fundamentals and consistency. 2021 to benefit from expansion of "Live" expert-enabled products and SMB recovery.
	VMWare	VMW	Hold	$160	12%	High single-digit grower with limited growth upside given on-premise infrastructure spending exposure. Acknowledge un-demanding valuation but catalysts lacking.
	Palantir	PLTR	Buy	$30	19%	Highly differentiated platform for high-end data management use cases. Stick with the story on sustained large deal bookings though the mid-late Feb lock-up expiration is a near-term risk.
	Atlassian	TEAM	Hold	$235	0%	Best in class collaboration apps play with viral GTM motion; one of the best fundamental stories we cover and in the midst of a Cloud transition, but rich valuation keeps us on sidelines.
	Workday	WDAY	Buy	$280	23%	Snap back in BO/MO apps digital transformation demand in '21; expect WDAY to benefit from the rebound in demand with its platform approach. WDAY will have easy compares heading into 2021.
	CrowdStrike	CRWD	Buy	$275	23%	Category winner in endpoint security. Positioned to continue taking share from legacy vendors with its unique graph database and sticky modules. Cloud workloads further expand TAM, and justify valuation.
	Palo Alto Network	PANW	Buy	$425	16%	Security platform with highly profitable and steady firewall business + rapidly-growing "next-gen" business for protecting cloud-native and hybrid IT environments. Balanced rule of 40 story.
	Datadog	DDOG	Buy	$125	25%	Premium valuation is warranted given strong growth + profitability profile. See ongoing TAM expansion on aggressive product build-out, which enables growth sustainability over the next 2-3 years.
Mid Cap	Splunk	SPLK	Buy	$240	45%	Top mid-cap pick. Strong platform play and large TAM opportunity. We are buyers of sales execution related weakness in the stock and see potential for a re-rate.
	Cloudflare	NET	Buy	$95	20%	Multi-year secular winner in the early stages of disrupting multiple security and related infrastructure software verticals. We believe the multiple will level out as the company continues to beat + raise.
	Check Point	CHKP	Hold	$135	2%	Persistent low-grower and high margin value play. We remain on the sidelines until there is evidence that the company can re-accelerate revenue growth.
	Citrix	CTXS	Hold	$140	7%	Potential beneficiary of broader enterprise adoption of WFA policies. Valuation un-demanding but slower-than-expected migration to the cloud keeps us Neutral.
	Elastic	ESTC	Buy	$175	15%	Stay with aggressive platform build-out stories such as ESTC. Addition of security and APM capabilities enable growth sustainability and valuation discount to DDOG is significant.
	Dynatrace	DT	Hold	$45	6%	Market leading APM vendor in an intensely competitive space. Like the balanced Rule of 50 profile and reasonable valuation but prefer SPLK/ESTC for growth upside.
	Anaplan	PLAN	Buy	$85	19%	Snap back in BO/MO apps demand in '21; offers best of breed exposure to the MO (planning) apps. Partner ecosystem creates a moat for the business and trades at a discount to growth peers.
	Dropbox	DBX	Buy	$28	24%	Top value pick that will continue to benefit from the WFA theme into 2021. Can offer sustained DD top line growth with significant margin leverage and cash flows.
	Smartsheet	SMAR	Hold	$75	10%	WFA beneficiary with rebounding billings and steadying business metrics. New CFO + massive addressable market opportunity can lead to reacceleration in rev growth.
	Asana	ASAN	Buy	$40	27%	Differentiated solution for work management in the early stages of its large market opportunity. Hybrid sales model should be a tailwind to margins in the future.
	Varonis	VRNS	Buy	$200	15%	Set up for revenue acceleration as model transition is wrapped up. More licenses per customer being sold upfront and an improving bottom line make this a compelling story.
	SailPoint	SAIL	Buy	$70	22%	Leading IGA vendor poised to benefit from the secular tailwinds of WFA as well as a model transition.
Small Cap	SolarWinds	SWI	Hold	$15	-2%	Reaction to security hack is overdone in the NT. Limited impact on MSP business which is on track for spin off in 2021. Opportunity for LT, patient investors.
	Datto	MSP	Hold	$30	13%	Unique MSP-only approach is an efficient go-to-market model. Focused on re-accelerating growth in the near-term and eventually improving profitability over time.
	Sumo Logic	SUMO	Hold	$28	1%	Similar growth to SPLK at 1/10th the rev scale. Breaking into the enterprise segment in a bigger way is not going to be easy. Prefer SPLK given the valuation discount.
	Mimecast	MIME	Hold	$55	5%	Large opportunity in email security, but the ongoing concern is that that MSFT's solutions are "good enough". Need to see improving metrics to become more constructive.
	2U	TWOU	Buy	$55	25%	Digital higher education leader selling to universities. Strong organic growth, but slow pace of both partner additions and bottom line progress raise questions around the scalability of the model.
	Zuora	ZUO	Hold	$13	-10%	Benefits from secular tailwinds to the subscription economy with its billings and revenue recognition SaaS solutions. First signs of recovery seen last Q, but need more evidence before we get constructive.
	Upland	UPLD	Buy	$58	22%	FO small cap vendor; Street expectations for flat organic growth in 2021 seem conservative as UPLD has invested in revamping its GTM motion. M&A will come back in '21 which should support rev. growth.
	Tufin	TUFN	Hold	$15	4%	Security policy vendor with strong product, but we remain on the sidelines due to uncertainty and execution risk associated with a perpetual license model in this environment.

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Source: Jefferies, FactSet. Note: priced as of market close on 1-8-21.

Software overview: Blockbuster '20 for Software – More to Come in '21?

Software multiples expanded by 56% in 2020; Large Cap by 58%; Mid Cap by 62%; and Small Cap by 41%

Jefferies Software Team Brent Thill, bthill@jefferies.com

Company	Ticker	Rating	Price Target ($)	1/8/2021 Price ($)	YTD (%)	Market Cap ($M)	Enterprise Value ($M)	Revenue Growth 2020E	Revenue Growth 2021E	Revenue Growth 2022E	EV/Revenue 2021E	EV/Revenue 2022E	EV/Recurring Revenue NTM	EBITDA Margin 2020E	EBITDA Margin 2021E	EBITDA Margin 2022E	EV/EBITDA 2021E	EV/EBITDA 2022E	Price/Earnings 2021E	Price/Earnings 2022E	EV/FCF 2021E	EV/FCF 2022E
Large Cap																						
Microsoft	MSFT	Buy	**$260**	$219.62	-1.3%	1,677,238	1,622,477	12.1%	10.4%	10.6%	*9.8x*	*8.8x*	*16.8x*	47.0%	46.6%	48.1%	*21.0x*	*18.4x*	*31.6x*	*28.4x*	*32.7x*	*N/A*
Adobe	ADBE	Buy	**$600**	$485.10	-3.0%	234,982	233,698	15.2%	18.1%	14.2%	*15.4x*	*13.5x*	*16.6x*	48.8%	49.6%	48.5%	*31.0x*	*27.7x*	*43.1x*	*36.6x*	*39.8x*	*34.0x*
Salesforce.com	CRM	Buy	**$320**	$222.04	-0.2%	208,496	201,676	23.4%	20.5%	18.6%	*7.9x*	*6.7x*	*8.9x*	30.0%	28.3%	27.1%	*28.0x*	*24.7x*	*63.4x*	*52.1x*	*39.1x*	*31.3x*
Oracle	ORCL	Hold	**$65**	$63.38	-1.7%	193,055	225,244	-0.4%	2.9%	1.7%	*5.6x*	*5.5x*	*7.7x*	50.4%	51.8%	51.2%	*10.7x*	*10.7x*	*14.0x*	*13.1x*	*18.9x*	*17.6x*
Snowflake	SNOW	Hold	**$280**	$300.10	6.6%	108,936	104,996	118.5%	89.2%	63.6%	*95.9x*	*58.6x*	*121.0x*	N/A	N/A	N/A	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Intuit	INTU	Buy	**$450**	$374.46	-1.3%	99,232	96,073	13.5%	19.1%	9.8%	*10.0x*	*9.1x*	*N/A*	38.9%	36.0%	37.2%	*27.7x*	*24.4x*	*43.0x*	*38.1x*	*37.0x*	*30.9x*
VMWare	VMW	Hold	**$160**	$142.86	1.9%	60,487	62,575	8.3%	8.4%	9.2%	*4.9x*	*4.5x*	*8.4x*	39.8%	35.1%	36.4%	*14.1x*	*12.4x*	*20.4x*	*18.0x*	*16.1x*	*14.4x*
Palantir	PLTR	Buy	**$30**	$25.20	7.0%	60,417	58,685	44.3%	31.1%	25.9%	*41.8x*	*33.2x*	*44.8x*	12.8%	18.5%	21.7%	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Atlassian	TEAM	Hold	**$235**	$235.48	0.7%	59,694	58,408	25.2%	13.6%	21.5%	*29.0x*	*23.9x*	*32.8x*	24.7%	24.5%	28.6%	*N/A*	*83.5x*	*N/A*	*N/A*	*N/A*	*87.7x*
Workday	WDAY	Buy	**$280**	$227.65	-5.0%	57,869	56,713	18.6%	16.7%	17.4%	*11.3x*	*9.6x*	*13.3x*	26.1%	23.8%	23.7%	*47.4x*	*40.6x*	*78.8x*	*63.6x*	*63.3x*	*50.4x*
CrowdStrike	CRWD	Buy	**$275**	$223.73	5.6%	52,487	51,427	78.4%	38.9%	31.1%	*43.1x*	*32.9x*	*50.4x*	11.5%	10.2%	12.2%	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Palo Alto Networks	PANW	Buy	**$425**	$366.55	3.1%	35,812	34,840	20.2%	19.3%	18.2%	*7.8x*	*6.6x*	*9.3x*	24.9%	22.8%	22.6%	*34.2x*	*29.2x*	*60.8x*	*49.2x*	*27.2x*	*22.1x*
Datadog	DDOG	Buy	**$125**	$99.94	1.5%	33,280	33,082	62.5%	36.1%	32.8%	*41.2x*	*31.0x*	*44.4x*	11.2%	10.1%	12.3%	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Average											***24.9x***	***18.8x***	***31.2x***				***26.8x***	***30.2x***	***44.4x***	***37.4x***	***34.3x***	***36.1x***
Median											***11.3x***	***9.6x***	***16.7x***				***27.9x***	***24.7x***	***43.1x***	***37.4x***	***34.9x***	***31.1x***
Mid Cap																						
Splunk	SPLK	Buy	**$240**	$165.40	-2.6%	28,465	28,747	-8.1%	20.5%	27.6%	*11.0x*	*8.6x*	*13.9x*	N/A	3.1%	11.9%	*N/A*	*72.8x*	*N/A*	*N/A*	*N/A*	*50.2x*
Cloudflare	NET	Buy	**$95**	$79.15	4.2%	26,689	26,004	47.5%	33.6%	29.0%	*46.0x*	*35.6x*	*49.1x*	2.4%	6.4%	12.9%	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Check Point	CHKP	Hold	**$135**	$131.96	-0.7%	18,620	14,723	3.1%	2.9%	2.9%	*7.0x*	*6.8x*	*7.3x*	51.3%	50.2%	48.8%	*13.9x*	*13.9x*	*19.1x*	*18.1x*	*13.8x*	*13.5x*
Citrix	CTXS	Hold	**$140**	$130.85	0.6%	16,469	17,263	6.6%	3.9%	6.9%	*5.2x*	*4.8x*	*6.0x*	35.5%	34.2%	34.7%	*15.1x*	*14.0x*	*20.5x*	*17.9x*	*16.5x*	*14.7x*
Elastic	ESTC	Buy	**$175**	$152.15	4.1%	15,002	14,653	41.4%	22.9%	23.4%	*21.9x*	*17.8x*	*24.7x*	N/A	N/A	N/A	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Dynatrace	DT	Hold	**$45**	$42.27	-2.3%	12,102	12,101	26.5%	20.2%	24.1%	*15.6x*	*12.5x*	*17.2x*	29.5%	27.5%	30.8%	*56.5x*	*40.7x*	*74.9x*	*56.5x*	*69.8x*	*N/A*
Anaplan	PLAN	Buy	**$85**	$71.46	-0.5%	10,047	9,750	27.5%	24.1%	25.2%	*17.7x*	*14.1x*	*20.4x*	N/A	N/A	3.5%	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Dropbox	DBX	Buy	**$28**	$22.50	1.4%	9,448	8,477	14.9%	11.1%	9.6%	*4.0x*	*3.6x*	*4.1x*	29.1%	31.0%	32.1%	*12.9x*	*11.3x*	*22.3x*	*19.5x*	*14.8x*	*12.8x*
Smartsheet	SMAR	Hold	**$75**	$68.10	-1.7%	9,105	8,685	39.7%	29.2%	28.5%	*17.8x*	*13.8x*	*20.7x*	N/A	N/A	N/A	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Asana	ASAN	Buy	**$40**	$31.58	6.9%	6,704	6,293	55.2%	32.8%	29.4%	*21.4x*	*16.5x*	*23.0x*	N/A	N/A	N/A	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Varonis	VRNS	Buy	**$200**	$173.41	6.0%	6,087	5,978	10.9%	19.9%	23.8%	*17.7x*	*14.3x*	*20.3x*	N/A	2.4%	10.7%	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
SailPoint	SAIL	Buy	**$70**	$57.58	8.2%	5,522	5,354	23.6%	11.8%	16.7%	*13.4x*	*11.5x*	*23.0x*	11.1%	5.0%	6.3%	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*87.3x*
Average											***16.6x***	***13.3x***	***19.1x***				***24.6x***	***30.5x***	***34.2x***	***28.0x***	***28.7x***	***35.7x***
Median											***16.6x***	***13.2x***	***20.3x***				***14.5x***	***14.0x***	***21.4x***	***18.8x***	***15.7x***	***14.7x***
Small Cap																						
SolarWinds	SWI	Hold	**$15**	$15.35	2.7%	4,861	6,342	9.2%	8.7%	8.6%	*5.7x*	*5.3x*	*6.7x*	47.8%	47.1%	48.0%	*12.2x*	*11.0x*	*14.8x*	*13.3x*	*15.6x*	*12.7x*
Datto	MSP	Hold	**$30**	$26.51	-1.8%	4,430	4,276	12.0%	11.7%	16.6%	*7.4x*	*6.4x*	*8.2x*	28.9%	25.2%	24.8%	*29.6x*	*25.8x*	*46.3x*	*44.1x*	*71.6x*	*59.8x*
Sumo Logic	SUMO	Hold	**$28**	$27.70	-3.1%	3,490	3,083	29.3%	17.4%	21.1%	*13.1x*	*10.8x*	*13.8x*	N/A	N/A	N/A	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Mimecast	MIME	Hold	**$55**	$52.37	-7.9%	3,435	3,312	18.3%	14.7%	18.9%	*6.0x*	*5.1x*	*6.3x*	23.2%	20.3%	23.3%	*29.6x*	*21.7x*	*60.3x*	*46.2x*	*36.6x*	*29.9x*
2U	TWOU	Buy	**$55**	$44.06	10.1%	3,022	2,809	33.5%	18.6%	14.6%	*3.1x*	*2.7x*	*3.2x*	1.4%	3.9%	5.7%	*79.7x*	*47.1x*	*N/A*	*N/A*	*N/A*	*N/A*
Zuora	ZUO	Hold	**$13**	$14.37	3.2%	1,894	1,722	9.5%	10.2%	13.8%	*5.2x*	*4.5x*	*6.7x*	0.5%	0.7%	5.6%	*735.5x*	*81.2x*	*N/A*	*N/A*	*N/A*	*N/A*
Upland	UPLD	Buy	**$58**	$47.51	3.5%	1,292	1,598	28.7%	0.2%	3.6%	*5.6x*	*5.4x*	*5.8x*	33.8%	32.1%	33.6%	*17.3x*	*16.0x*	*27.6x*	*24.8x*	*32.9x*	*23.7x*
Tufin	TUFN	Hold	**$15**	$14.39	15.3%	597	513	-6.3%	13.0%	15.1%	*4.7x*	*4.1x*	*8.7x*	N/A	N/A	N/A	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*
Average											***6.4x***	***5.5x***	***7.4x***				***150.7x***	***33.8x***	***37.3x***	***32.1x***	***39.2x***	***31.5x***
Median											***5.6x***	***5.2x***	***6.7x***				***29.6x***	***23.8x***	***37.0x***	***34.5x***	***34.7x***	***26.8x***
SPX Return YTD	SP50				**1.8%**																	
IGV Return YTD	IGV				**0.3%**																	
Nasdaq Return YTD	COMP				**2.4%**																	

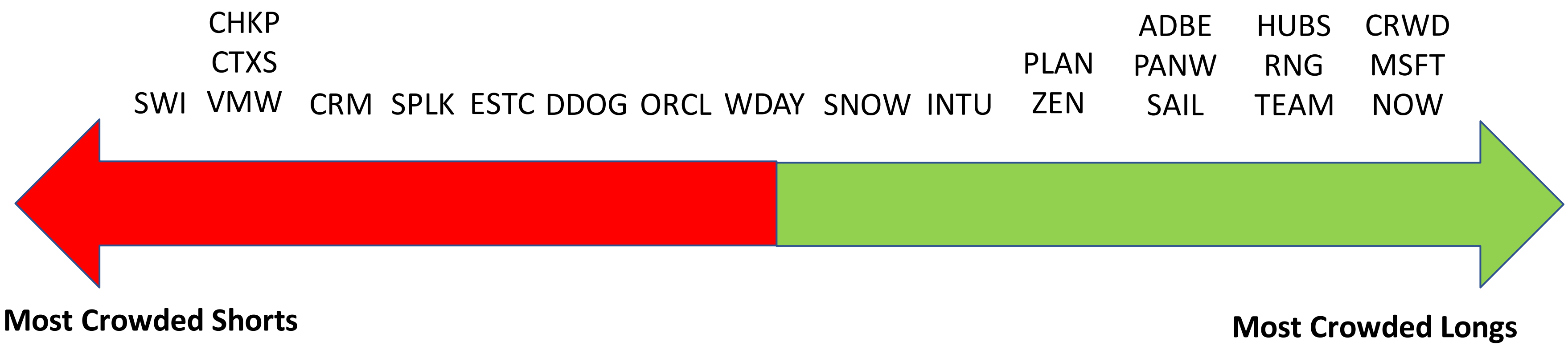
Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Source: Jefferies, FactSet. Note: priced as of market close on 1-8-21.

Software Positioning: Crowdedness

Biggest Changes vs. 3 months ago:

1. CRM Underweight post WORK transaction
2. Significantly improved PANW Sentiment, Security Sentiment on highs post SWI Breach
3. Questions around infrastructure valuations, convergence across search/log/observability/security



Source: Jefferies Equity Sales and Trading Department (Jared Weisfeld)

Software Valuations – Massive Outperformance, But Public Market Software Valuations Are Rich

What Is Happening in a Post COVID-19 World?

1. **Outstanding Outperformance for Software** – Software (IGV) showed no weakness, beating the S&P 500 by 36% in '20 (highest in 2 decades) driven by multiple appreciation and secular tailwinds favoring the space during the pandemic.
2. **Multiple Expansion in Software** - Overall avg. multiples for the entire software space have expanded 56% in 2020 compared to 26% in 2019 and 7% in 2018. Large cap multiples have expanded 58%, mid cap multiples expanded 62%, and small cap expanded 41%. Is it time for a new normal? Certain VC investors in the private market like Joe Lonsdale, PLTR cofounder, sounded the alarm in late Oct. noting public vals. seem higher than private vals. in software. **Higher multiples were driven by lack of growth in other sectors, permanent shifts to the digital economy and a superior business model. Next leg of growth needs to come from fundamentals, not multiple expansion. Our checks indicate fundamentals are strong for the space.**
3. **Security and Infra Outperform Apps** – In 2018, apps was ahead of infra and security trading at 6.8x NTM revs. vs. 5.7x for infra and 5.8x for Security. High growth IPOs such as CRWD, NET, and DDOG have changed that. In 2020, Security is ahead of both apps and infra trading at 15.6x NTM revs. vs. 13.8x for infra and 10.8x for apps.

		YTD	1YR	3YR	5YR	10YR
Internet	**PNQI**	61%	58%	90%	195%	552%
Software	**IGV**	52%	51%	124%	255%	519%
Nasdaq	**COMP**	44%	44%	88%	177%	438%
Semis	**SMH**	54%	55%	122%	341%	720%
S&P 500	**SP50**	16%	16%	38%	87%	196%
Russell Index	**RUT-RUX**	18%	19%	27%	78%	151%

Source: Jefferies, FactSet. Note: priced as of market close on 12-31-20.

Top Forecasts in Software for 2021

1. MSFT - PT $260 - Tripling down on Teams – MSFT goes all in on collaboration and telephony to add another lever of rev growth via upsell to E5 driving shares higher.

2. INTU Lucky #13: 2021 should be 13th year of stock gains thanks to product and vaccine tailwinds driving up-sells and SMB recovery.

3. Security spend continues to climb as the severity of breaches increases – security remains a quilt of different vendors patched together as no one vendor can protect a full enterprise. We favor a basket of names (CRWD, PANW, NET, SPLK, and VRNS). We upgrade CRWD to Buy with $275 PT.

4. 2021 the year of Work-from-Anywhere – Collaboration Apps Lead the Way.
   - While not deemed emergency spend in 2020, collaboration apps like ASAN are mission critical to remote work and flourish in 2021.
   - DBX is a top value pick. We believe DBX can offer sustained DD top line growth with significant margin leverage and cash flows.

5. Valuations have expanded 56% for the space in 2020 and we believe upside from multiple expansion will be limited in 2021. Fundamentals are alive and will drive the next leg of growth for the space. 2020 has taught us to favor the best fundamental names within the space as they have outperformed the IGV despite their rich valuations, and our best fundamental picks are CRWD, NET, and DDOG.

6. CRM will take a breather on large M&A in 2021 as it digests WORK. We believe WORK will allow CRM to sell to additional users within the enterprise. Fundamental demand for digital transformation remains robust. Over the LT, robotic process automation will be another avenue for investment for CRM.

7. ADBE accelerates growth from mid-teens to high-teens % with the help of Experience Cloud jump starting and pent-up demand for digital transformation projects.

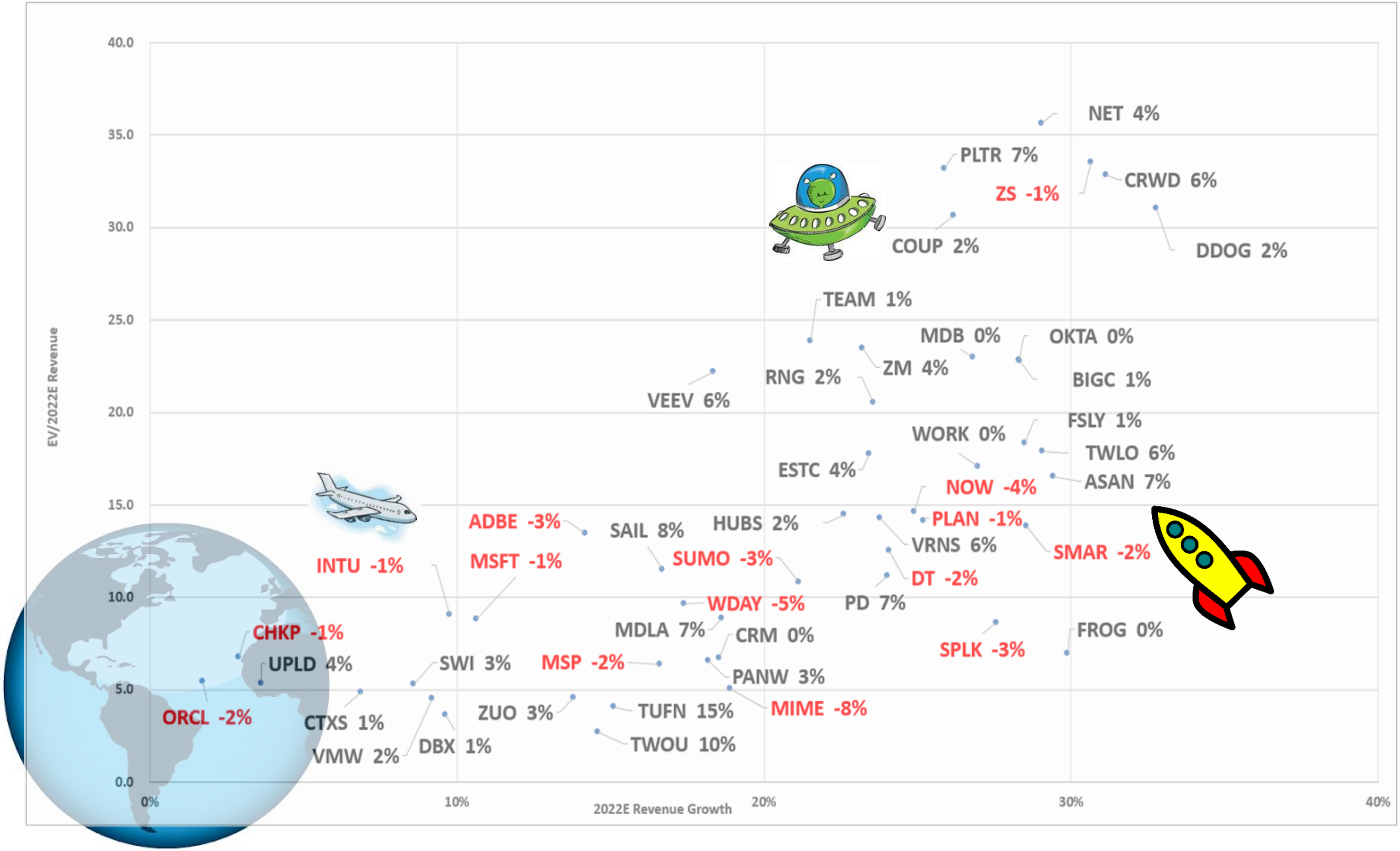
8. SPLK is the come-back kid in CY21 and we are buyers of the sales execution related pullback given the strength of the enterprise-focused platform. Valuation at 11x at CY21 revs is undemanding. Expect observability to be top-of-mind among enterprise CIOs and see potential for the space to consolidate in a bigger way.

9. Aggressive platform build-out stories that enable TAM growth continue to work – ESTC's TAM growing to $78B in CY21 vs. $45B in CY18 enables 30%+ growth alongside positive FCF. Upgrade DDOG to Buy ($125 PT) as 35%+ growth in the coming years on a $35B (and expanding) TAM warrants a premium multiple.

10. WDAY and PLAN snap back in 2021 as back office/middle office takes attention away from the front office. Our channel checks along with survey work of 300+ CIOs and CTOs indicates that investments in the back office/middle office apps will rebound in 2021. We upgrade PLAN (PT to $85) as we see it as a beneficiary in the middle apps space. Both WDAY and PLAN will have easy compares in 2021 as they lap pandemic hit in 2020.

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

EV/2022E Revenue Multiples vs 2022E Revenue Growth with Stock Performance in 2021 YTD



Sources: Jefferies, FactSet Note: priced as of market close on 1-8-21.
Performance from 1/1/2021 to 1/8/2021

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

DDOG, CRWD, PLAN Upgrades: Implied EV/2022E Revenue Multiples at PTs

1. **DDOG:** Stock currently trades at 31x the Street's +33% CY22 rev growth estimate. Assuming 35%+ rev growth in CY22 (following upside in CY21), the EV/CY22 multiple is 27x and the growth-adjusted EV/CY22 rev multiple is 0.77x. We think a growth-adjusted EV/CY22 rev multiple of 1.00x is more appropriate vs. comps (ZM at 1.01x, TEAM at 1.11x), which implies a target rev multiple of 35x.

2. **CRWD:** Stock currently trades at 33x the Street's +31% CY22 rev growth estimate. Assuming an upside growth case of 47%+ rev growth in CY22, the EV/CY22 multiple is 25x and the growth-adjusted EV/CY22 rev multiple is 0.53x. We think a growth-adjusted EV/CY22 rev multiple of 0.65x based on our PT of $275 is more appropriate and still represents a discount vs. comps (ZM at 1.01x, TEAM at 1.11x), which implies a price target rev multiple of 31x based on this upside scenario of 47% growth in CY2022 .

3. **PLAN:** Stock currently trades at 14x the Street's +25% CY22 rev growth estimate. Assuming 34%+ rev growth in CY22, the EV/CY22 multiple is 14x and the growth-adjusted EV/CY22 rev multiple is 0.41x. We think a growth-adjusted EV/CY22 rev multiple of 0.45x based on our PT of $85 is more appropriate. and still represents a discount vs. comps (COUP at 1.17x, TEAM at 1.11x), which implies a target rev multiple of 15x .

	Current FactSet Consensus			Upside Case			New Price Target	
	EV/CY22 Rev	CY22 Rev Growth	Growth-adj (x)	EV/CY22 Rev	CY22 Rev Growth	Growth-adj (x)	Growth-adj (x)	EV/CY22 Rev
PLTR	33x	26%	1.28x	29x	30%	0.97x	1.15x	35x
ZM	23x	23%	1.01x					
VEEV	22x	18%	1.21x					
COUP	31x	26%	1.17x					
CRWD	33x	31%	1.06x	25x	47%	0.53x	0.65x	31x
TEAM	24x	22%	1.11x					
BILL	41x	31%	1.35x					
ZS	34x	31%	1.09x					
SNOW	59x	64%	0.92x					
DDOG	31x	33%	0.95x	27x	35%	0.77x	1.00x	35x
RNG	21x	24%	0.87x					
MDB	23x	27%	0.86x					
OKTA	23x	28%	0.81x					
PLAN	14x	25%	0.56x	14x	34%	0.41x	0.45x	15x

Sources: Jefferies, FactSet Note: priced as of market close on 1-8-21.

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Best ways to play across the various subsectors

	Front Office	Back Office	Collaboration
Buy	CRM, ADBE	MSFT, INTU, PLAN, WDAY	DBX, ASAN
Hold		ZUO	SMAR, TEAM
Underperform			

	Security	Infrastructure	Other
Buy	CRWD, PANW, NET, SAIL, VRNS	SPLK, ESTC, PLTR, DDOG	UPLD, TWOU
Hold	CHKP, MIME, TUFN	DT, SNOW, SUMO, VMW, ORCL, CTXS, SWI	MSP
Underperform			

A Look Back at 2020

Top 2020 Predictions – Year-End Scorecard

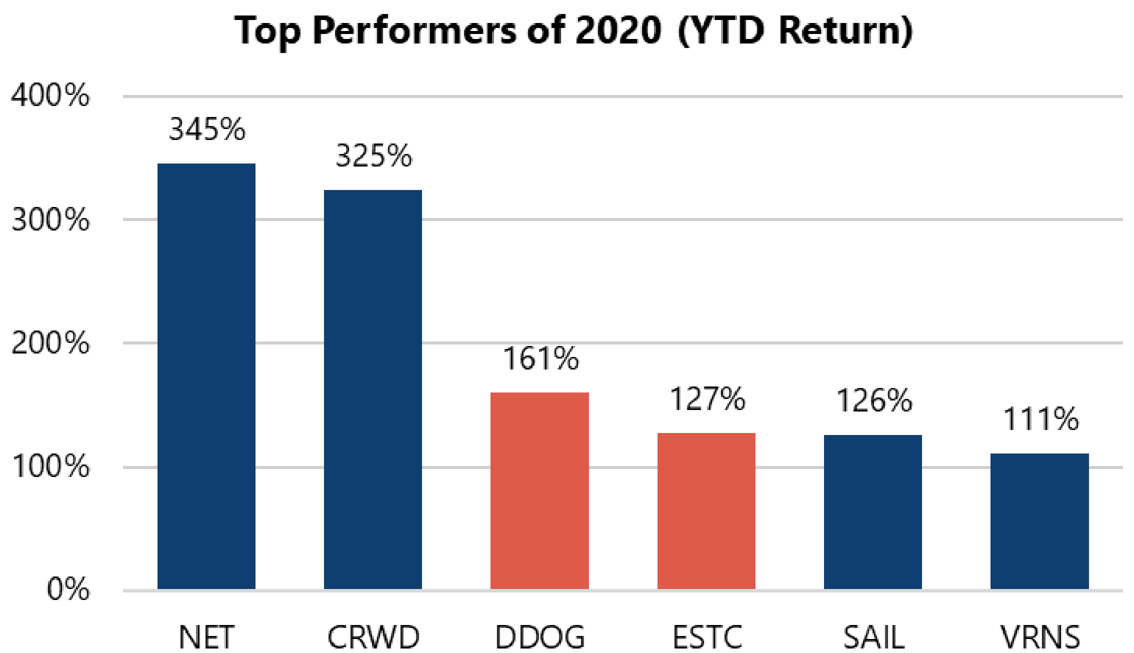
Link to 2020 Software Playbook – published 01/09/2020

	2020 Predictions	Year End Scorecard
1	**MSFT** can get to $175+, but a breather is more likely due to tougher comps and Windows Server and Desktops headwinds. Great defensive name but tough compares may collar some of the stock's trajectory as it's now a 2020 grinder versus 2019 high-flyer.	MSFT finished the year trading around $222 but lagged the broader software index by 1,000 bps; IGV (+52%), MSFT (+42%). **Grade: A+**
2	**CRM** is able to outperform IGV after having lagged the IGV by over 1000 basis points in 2019. After $17B of acquisitions in F2020, CRM takes a breather to digest Tableau and delivers margins at the higher end of the guided 125-150 bps improvement in F21.	CRM (+37%) underperformed the IGV (+52%) in 2020 and acquired WORK for $27B and ~25x '21E Rev. **Grade: B-**
3	**ADBE** apps train keeps rolling. FY20 should mark the 4th straight year of hitting 60%+ in combined revenue growth and op margins. The digital transformation tailwind benefits all 3 Adobe Clouds.	ADBE delivered revenue growth of 15% and op margins of 43%, falling just short of 60%, though digital transformation was a tailwind to the business. **Grade: A-**
4	**INTU** moves to the fast lane with CEO Sasan Goodarzi at the wheel. We expect FY20 rev growth to exceed guide of 10-11%. CY20 should mark the 12th straight year of positive stock returns.	FY20 rev growth was 13% and shares were up 46% in 2020. **Grade: A**
5	**SPLK** remains top pick; think it can march toward $180+ (or 20%+ upside) which would be a ~9x multiple on FY21 sales. Expect ARR growth of 40%+ for FY21 (after low 50s in FY20); margin expansion; cash flow leverage post transition. Valuation at 7.6x FY21 total revs (growing 25%+ at significant scale) is favorable vs. DT/ESTC at ~10-11x.	Shares finished the year trading around $170. Guidance implies ARR growth of 39% and margins are projected to dip to -8% from 14% in FY20. **Grade: C**
6	Upgrade **ESTC** to Buy with $85 PT as we think Street expectations have reset post F2Q results. We think fundamentals are intact and that the company can grow 35%+ over the next couple of years. Current valuation of 11.4x the Street's CY20 ests. is reasonable.	Shares were up 127% in '20 and now trades at 21x '21E rev. We now model FY21 rev growth of 34% and FY22 growth of 23%. **Grade: A-**
7	**PANW** remains a top mid-cap pick; hyper growth of "next gen" security products will more than offset slowing physical firewall sales. Our $275 PT (about 7x EV/Rev) supports a balanced rule of 40 story led by strong management team.	Next-gen security billings grew 105% in FY20 and outweighed slower firewall billings growth. Shares finished the year around $355 (+54%). **Grade: A+**
8	Upgraded **WDAY** based on survey of 300+ CIO/CTOs indicating pipelines are coming back for HCM and Financials apps. We see multiple levers to sustain LT growth. Trades at attractive valuation of 10.9x FY21 rev vs. comps at 14.9x, implying a 27% discount.	Checks indicate pipelines are set to rebound in '21 for back office apps. Shares have appreciated 5% since upgrading to Buy. **Grade: B+**
9	Downgrade **DBX** to Hold from Buy; PT to $19 from $28. Valuation is cheap but no major catalysts in sight	Upgraded to Buy and increased PT to $28 on 7/20. Shares currently trade at 76% discount to comps. **Grade: C**
10	**VMW** is more of a 2H20 story. We like the long-term, hybrid-cloud story; however, Street FY21 cash flow estimates seem on the high side. Wait for a potential reset when guidance is offered alongside F4Q results in late February (downside is mid-$130s) to get bullish.	Shares finished the year down 8%, and growth has yet to inflect. **Grade: A**
11	**ORCL** remains a laggard in cloud infrastructure with ongoing pressures to core relational database market share. Apps growth is healthy but not enough to move the growth needle. Expect stock underperformance to continue in 2020.	AMZN/MSFT/GOOGL maintained leads in cloud infrastructure, and shares lagged the IGV by 28% (ORCL +24%, IGV +52%). **Grade: A**
12	**SAIL's** turnaround story continues to play out. Inflection back to license growth should drive revenue acceleration back near 20%, supportive of multiple expansion back near peer group. Buy into F4Q19 earnings (in Jan) as guidance seems very conservative.	Guidance implies 23% rev growth for FY20 and multiple has expanded to 12x vs mid cap peer median of 16x. **Grade: A**
13	**VRNS** – the model transition is almost done but the stock is not! We see potential significant revenue acceleration above consensus estimates coupled with an improving bottom-line, supporting continued stock appreciation.	VRNS completed one of the fastest model transitions we've ever seen. 4Q guidance implies accel. rev growth and improved margins. **Grade: A+**
14	**TWOU** maintains its leadership in enabling universities to offer online education. Management continues to drive bottom line improvement and organic rev growth acceleration aided by the ongoing demand tailwind and underpenetrated TAM. Our $50 PT implies 3.7x our FY21 revenue estimate.	Questions remain around TWOU's pace of adding institutions, but guidance implies organic growth accel. and bottom line improved. **Grade: B**

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

The Top Performer in 2020 Was…….. NET, Up 345%

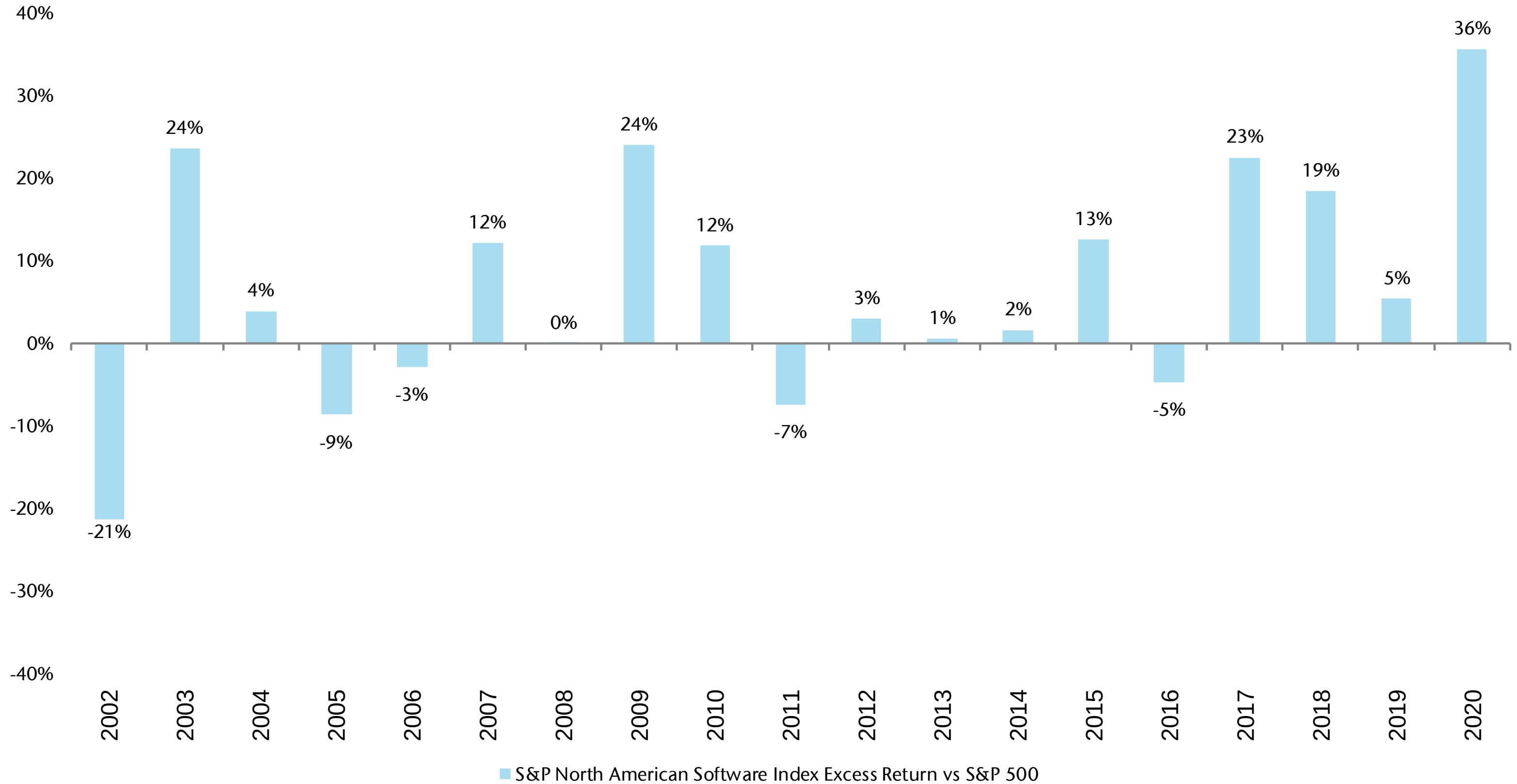
- NET and CRWD were the two companies with > 300% YTD return
- Excluding IPOs, six companies had triple-digit YTD returns
- 4 of the 6 companies that delivered triple-digit returns fall under security



Source: FactSet and Jefferies Research
Note: Excluding IPOs. Blue – Security, Red – Infrastructure
Priced as of market close on 12-31-20.

Software Massive Outperformance in '20 …

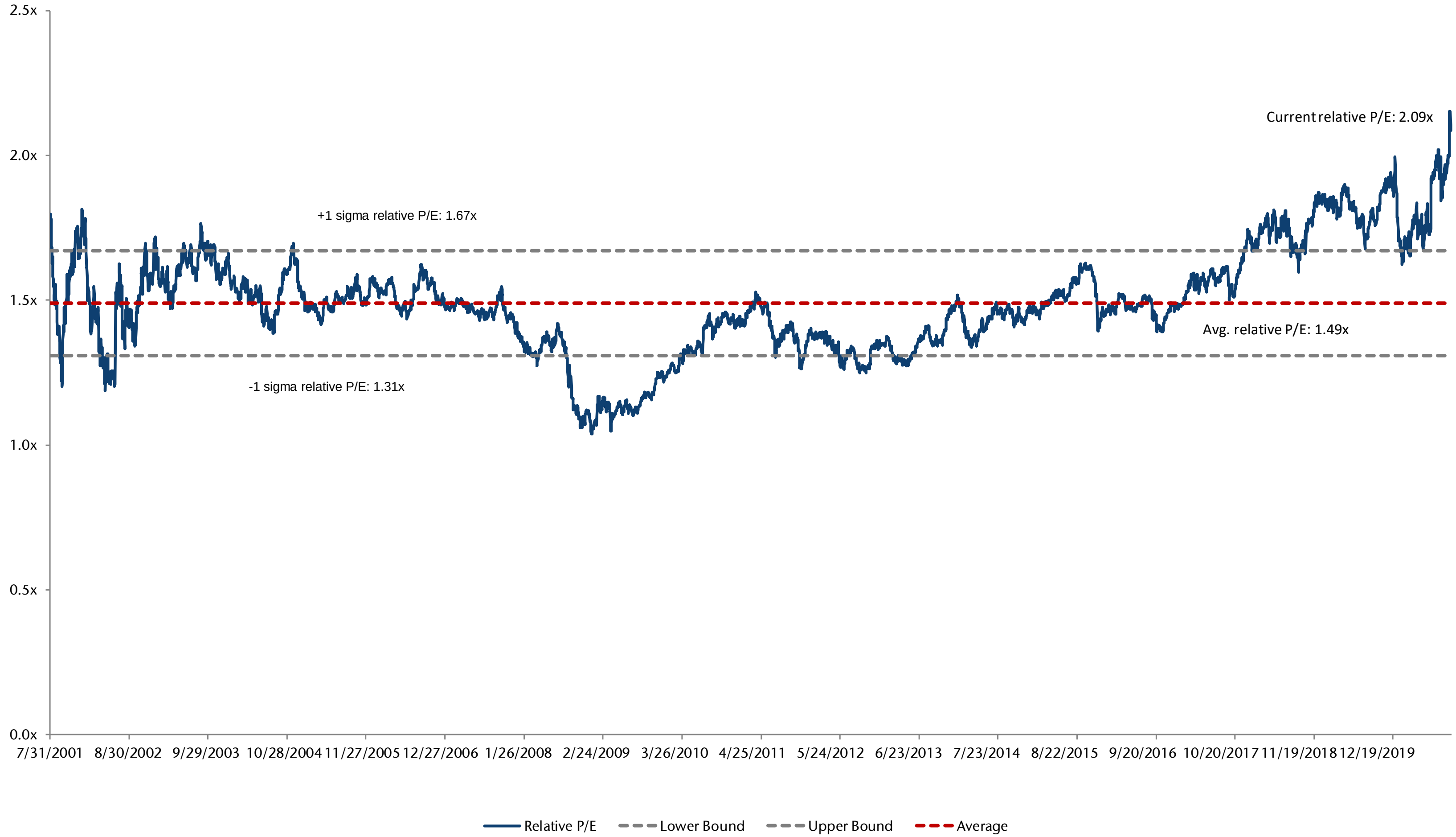
Outperformed the S&P 500 by **36% in 2020** the highest in 2 decades



Source: FactSet and Jefferies Research
Note: Software returns are represented by the S&P North American Technology Sector/Software Index.
Priced as of market close on 12-31-20.

… But Public Market Valuations Are Rich

The IGV trades at ~2x rel. prem. on a NTM P/E basis relative to the S&P 500. This level is roughly **3 st. devs. away** from the mean relative NTM P/E valuation from '01 to '20

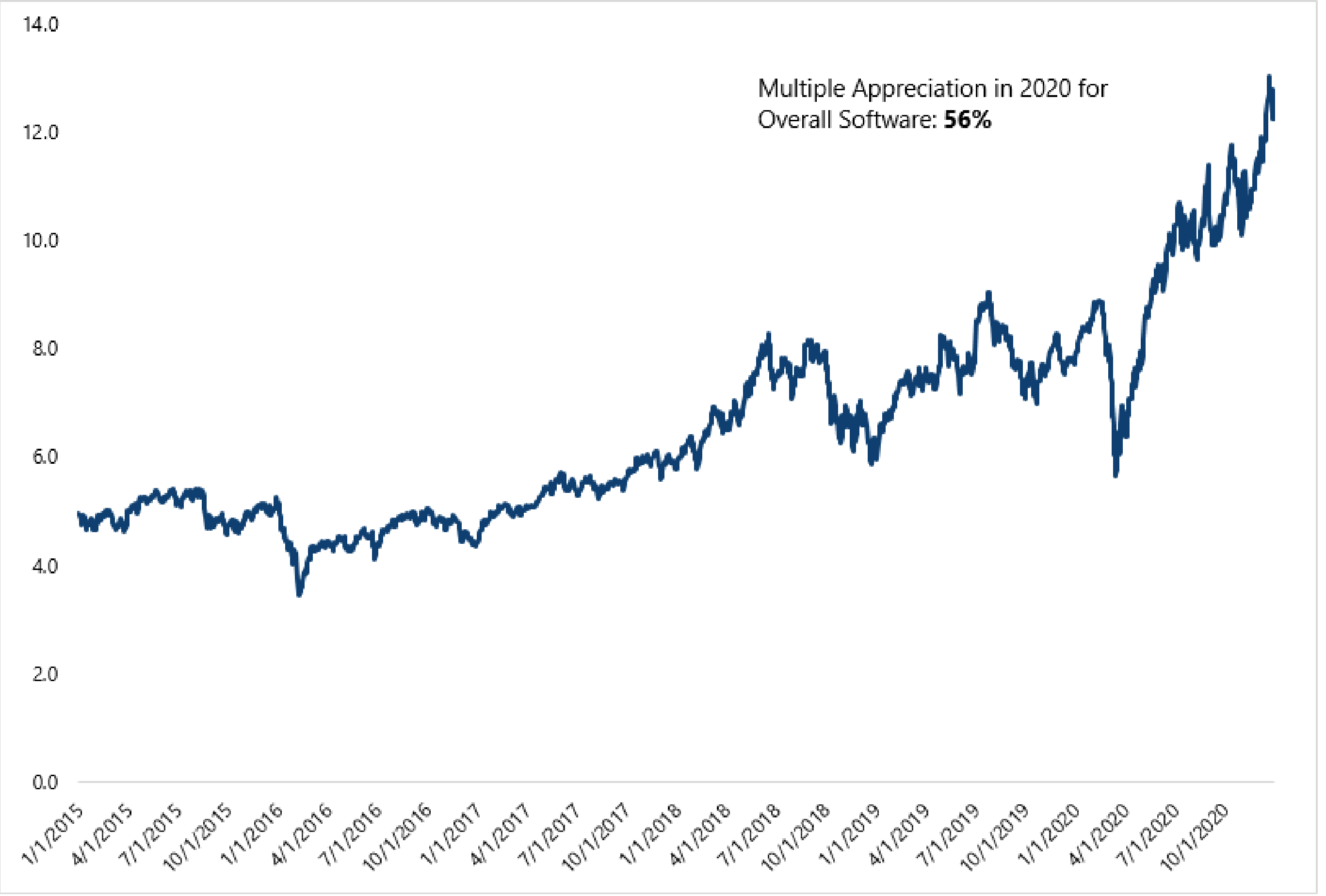


Source: FactSet and Jefferies Research
Priced as of market close on 12-31-20.

Outperformance Was Driven By Multiples Which Expanded 56%

- Overall avg. multiples for the entire software space have expanded 56% in 2020 compared to 26% in 2019 and 7% in 2018.

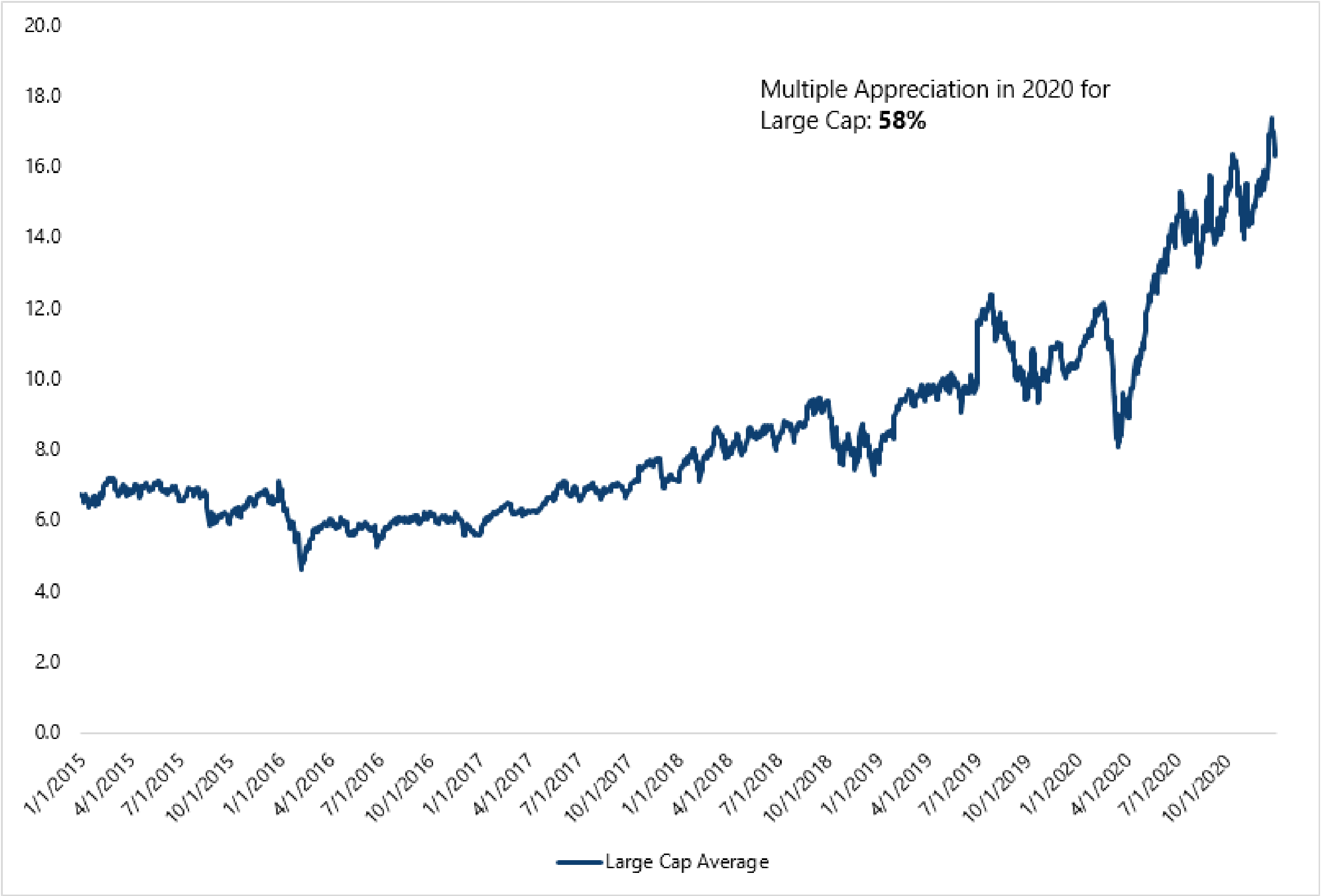
Software EV/NTM Revenue Multiples, 2015-2020



Source: FactSet and Jefferies Research
Software: MSFT, CRM, ADBE, TEAM, VMW, ORCL, DDOG, CRWD, NOW, ADSK, INTU, WDAY, PANW, SPLK, CHKP, CTXS, NET, ESTC, DT, DBX, PLAN, SMAR, SWI, HUBS, ZEN, NICE, VRNS, SAIL, MIME, TWOU, ZUO, UPLD, TUFN, BOX, VG, and LPSN.
Priced as of market close on 12-31-20.

Rising Tide Lifts All Boats – Large Cap Multiples Expand by 58% Led By CRWD, DDOG, and TEAM

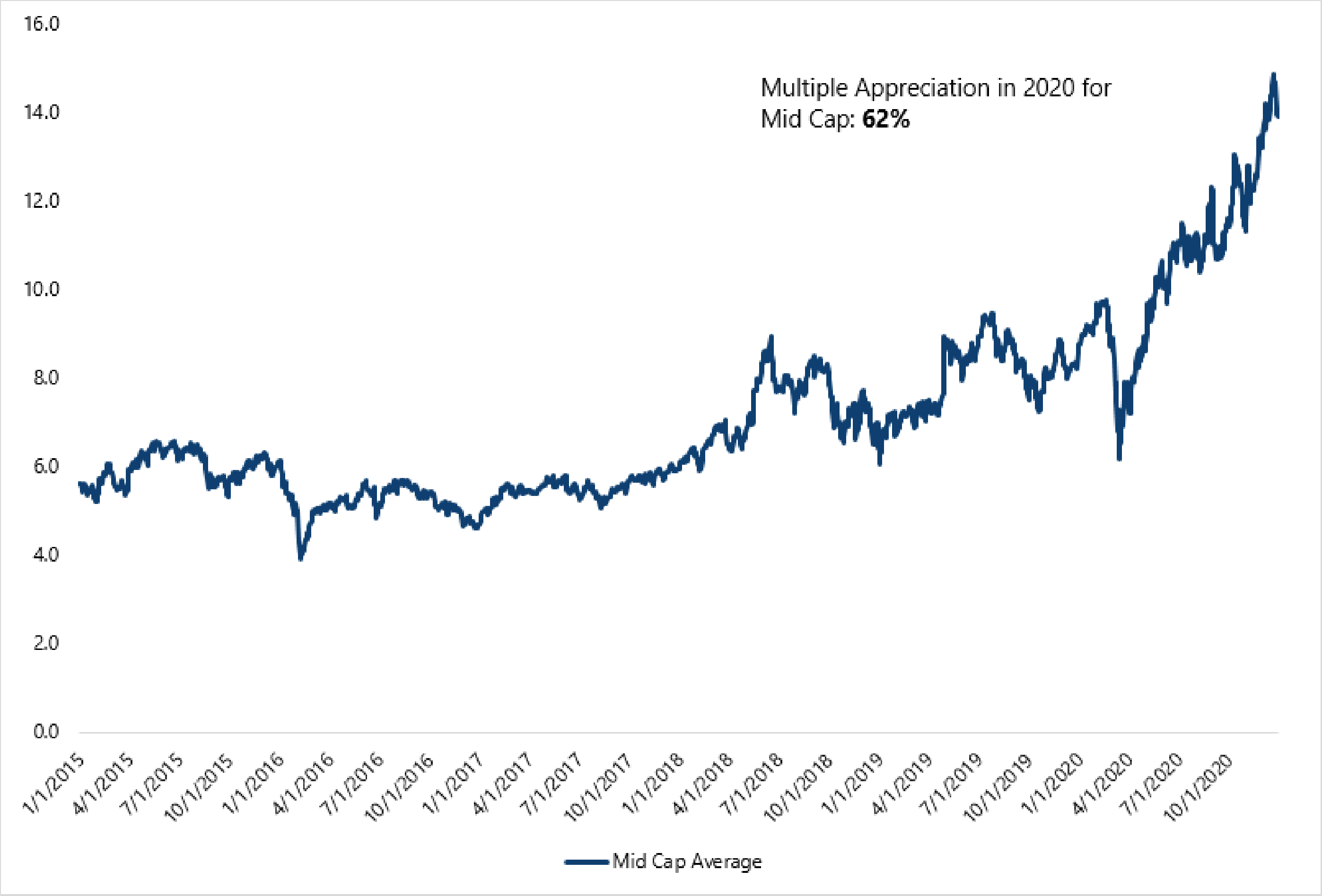
Software Large Cap EV/NTM Revenue Multiples, 2015-2020



Source: FactSet and Jefferies Research
Large Cap: MSFT, CRM, ADBE, TEAM, VMW, ORCL, DDOG, CRWD, NOW, ADSK, INTU, WDAY, and PANW.
Priced as of market close on 12-31-20.

Rising Tide Lifts All Boats – Mid Cap Multiples Expand by 62% led by NET and ESTC

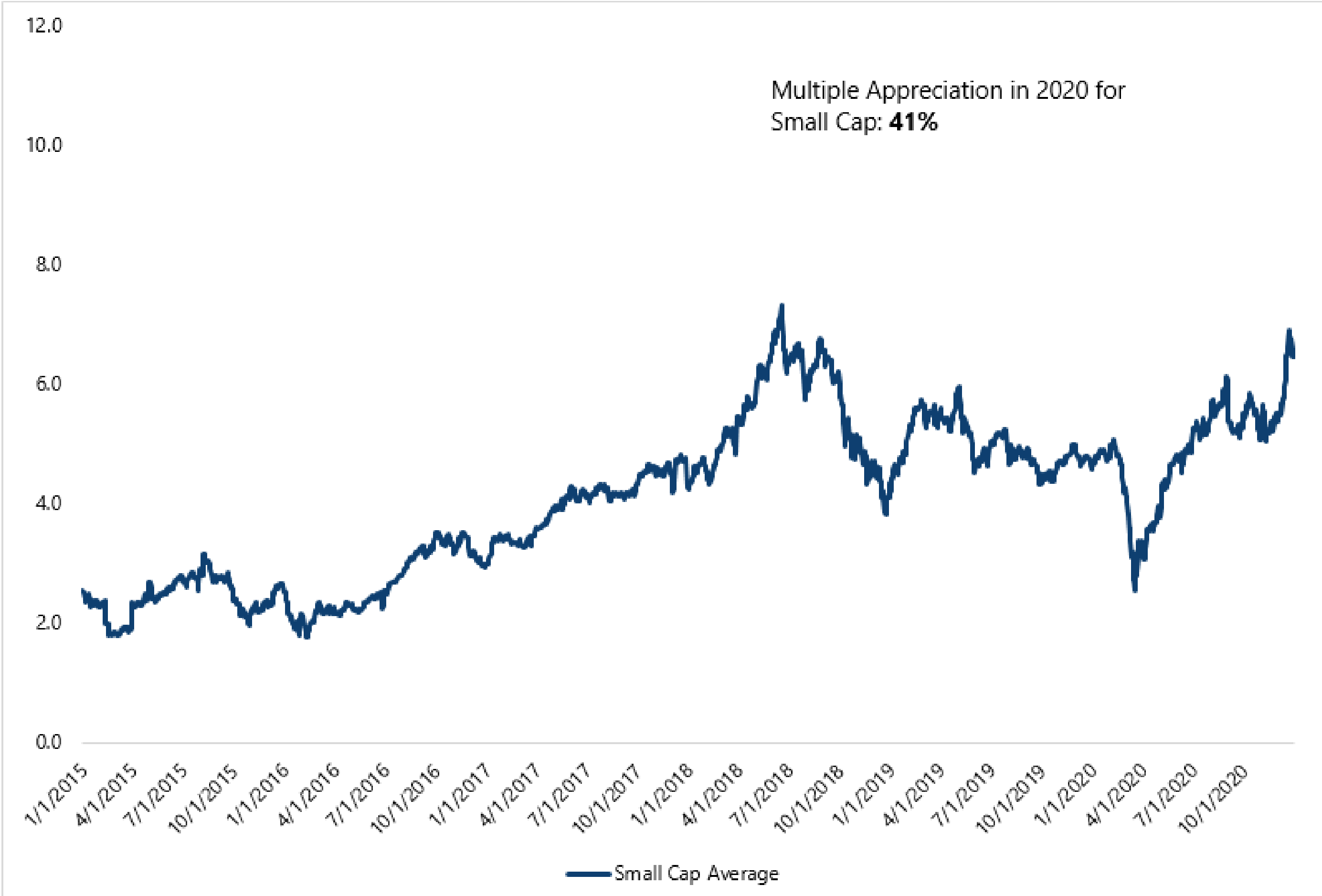
Software Mid Cap EV/NTM Revenue Multiples, 2015-2020



Source: FactSet and Jefferies Research
Mid Cap: SPLK, CHKP, CTXS, NET, ESTC, DT, DBX, PLAN, SMAR, SWI, HUBS, ZEN, and NICE.
Priced as of market close on 12-31-20.

Rising Tide Lifts All Boats – Small Cap Multiples Expand by 41% led by VRNS and SAIL

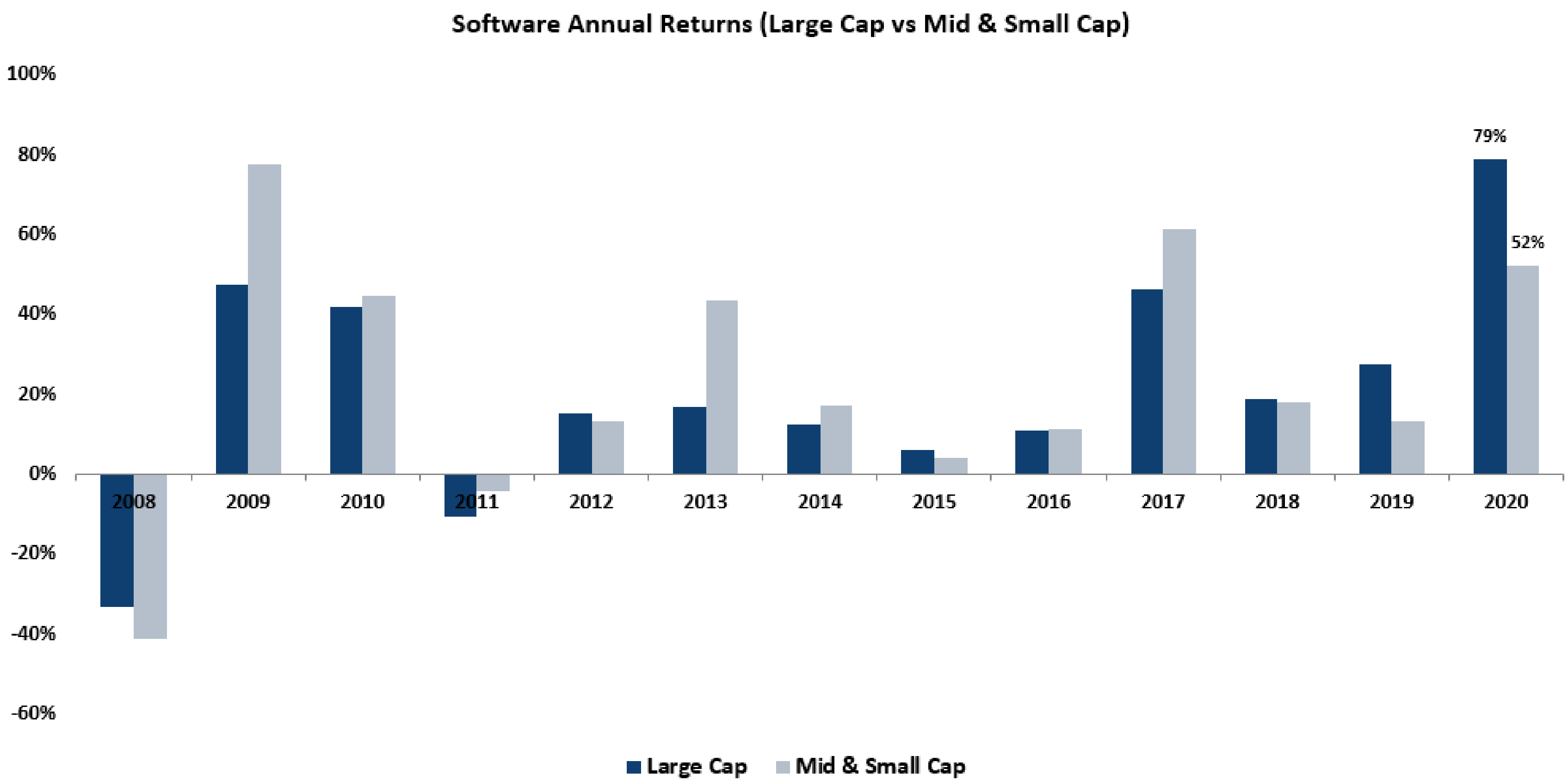
Software Small Cap EV/NTM Revenue Multiples, 2015-2020



Source: FactSet and Jefferies Research
Small Cap: VRNS, SAIL, MIME, TWOU, ZUO, UPLD, TUFN, BOX, VG, and LPSN.
Priced as of market close on 12-31-20.

Large Cap Coverage Outperforms SMID Cap Universe in CY20

- Large Caps +79% return exceeded the +52% return from the SMID Caps. CRWD and PLTR led the large cap while NET, ESTC and SAIL led the SMID cap
- In 2021, we expect large cap coverage to outperform our SMID cap coverage for the third year in a row



Source: FactSet, Jefferies
Software: MSFT, CRM, ADBE, TEAM, SNOW, PLTR, VMW, ORCL, DDOG, CRWD, NOW, INTU, WDAY, PANW, SPLK, CHKP, CTXS, NET, ESTC, DT, DBX, PLAN, SMAR, SWI, ASAN, SUMO, MSP, VRNS, SAIL, MIME, TWOU, ZUO, UPLD, TUFN,
Priced as of market close on 12-31-20.

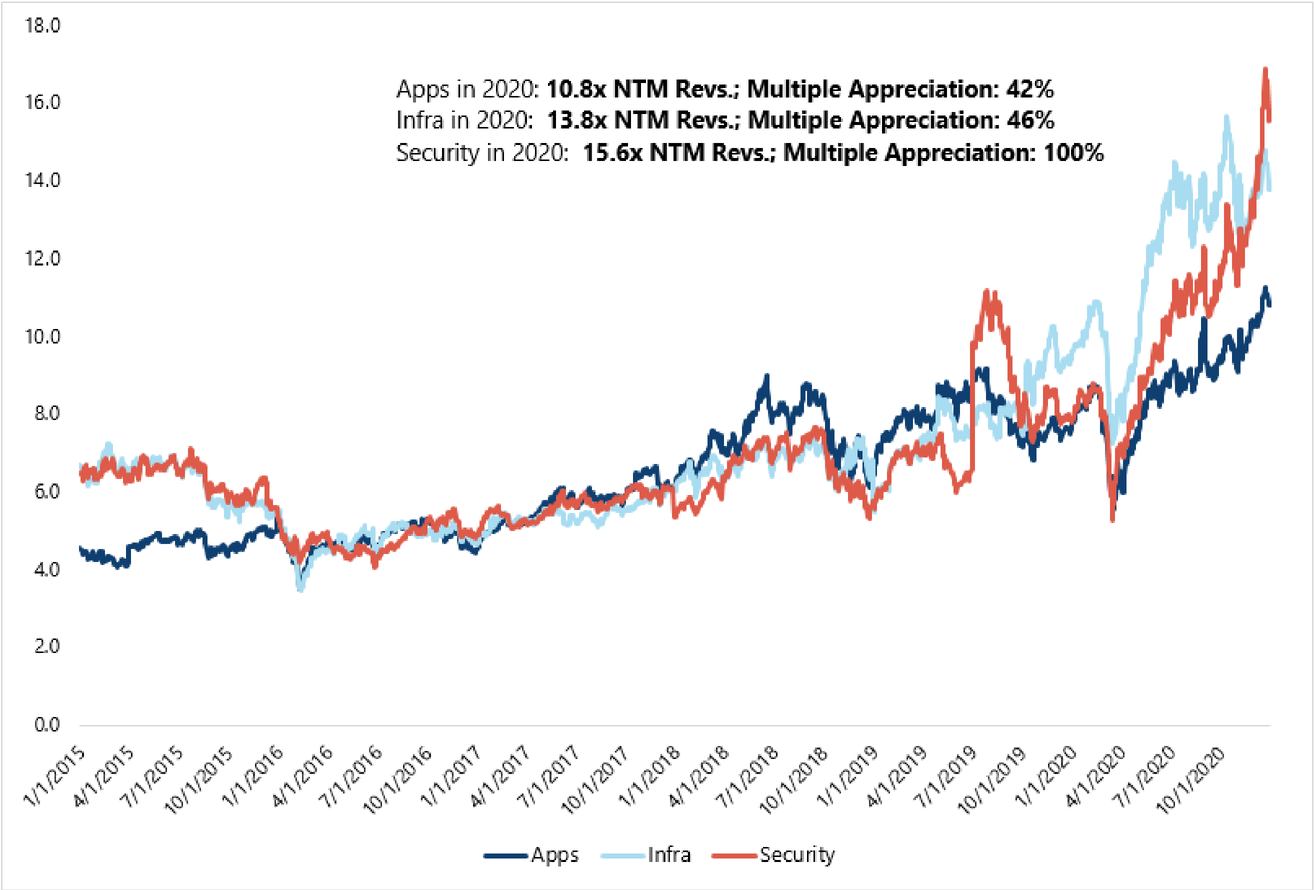
Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Security and Infra Outperform Apps in 2020 – Aided By CRWD, NET, and DDOG

- In 2018, apps was ahead of infra and security trading at 6.8x NTM revs. vs. 5.7x for infra and 5.8x for Security. High growth IPOs such as CRWD, NET, and DDOG have changed that. In 2020, Security is ahead of both apps and infra trading at 15.6x NTM revs. vs. 13.8x for infra and 10.8x for apps

Apps vs. Infrastructure vs. Security EV/NTM Revenue Multiples, 2015-2020

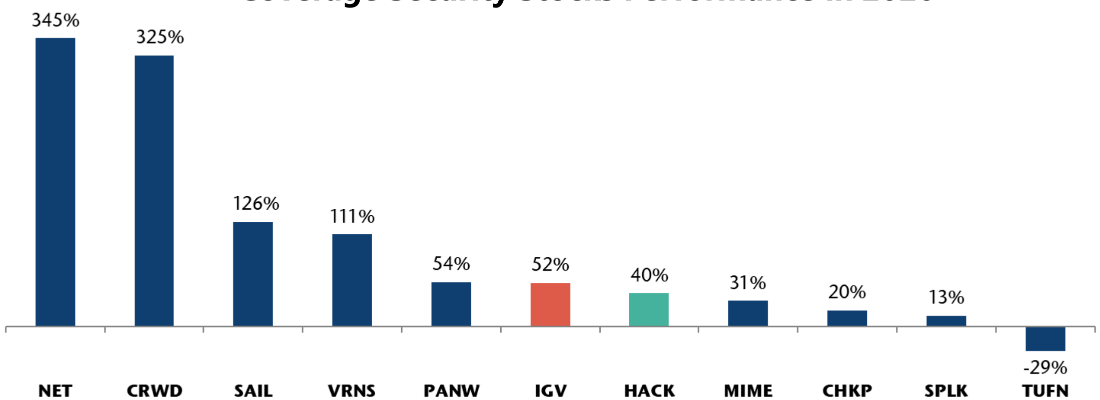


Source: FactSet and Jefferies Research
Apps: CRM, ADBE, TEAM, INTU, WDAY, ADSK, DBX, PLAN, SMAR, HUBS, ZEN, NICE, TWOU, ZUO, UPLD, BOX, VG, LPSN. Infra: VMW, DDOG, ORCL, NOW, SPLK. CTXS, ESTC, DT, SWI. Security: MSFT, PANW, CRWD, CHKP, NET, VRNS, SAIL, MIME, TUFN.
Priced as of market close on 12-31-20.

A Look Back On Security

- Security took on greater importance with WFH creating a more distributed network and increased attack surface.
  - SWI breach evidence that multiple bodyguards remain needed in todays world
  - IT budgets continue to grow as a % of IT spending
  - This growth opportunity is reflected in the multiples that investors are willing to pay for security cos (CRWD, OKTA, ZS, NET)
- Legacy Architecture Gets Left in the Dust – Cloud based Next Gen Tech (CRWD, NET) lead the pack
  - The cloud has disrupted everything, which presents both threat and opportunity. We prefer vendors that are able to protect workloads across hybrid environments, which is becoming increasingly important.
- Enterprise buyers continue to prefer best-of-breed solutions, and category leaders—such as CRWD, OKTA, ZS, PANW, SPLK, SAIL, VRNS, NET
  - This is demonstrated by the HACK underperforming the IGV but leaders such as NET/CRWD vastly outperforming
- Given the industry fragmentation—there is no "Microsoft" of security—we prefer a basket investment approach consisting of companies best-positioned in their cyber market categories.
- M&A not as active as one would have expected; potentially because of excessive valuation/tough to close deals in remote environment

Coverage Security Stocks Performance in 2020



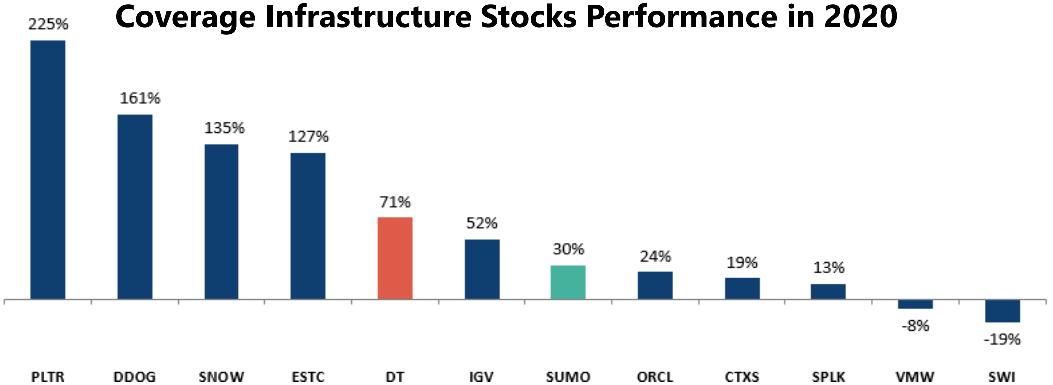
Sources: Jefferies Research, FactSet
Priced as of market close on 12/31/20

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

A Look Back On Infrastructure

- Infrastructure took on greater importance with enterprises reacting to greater digital adoption for work/lifestyle amid the pandemic.
  - Renewed investor focus resulted in some of 2020's strongest stock performers being infrastructure cos (e.g. DDOG, MDB, ESTC) that benefit from workload growth on the hyper-scale platforms (AWS, Azure, GCP).
- Accelerated pace of disruption at the infrastructure layer enabled significant growth opportunities for first movers/market leaders.
  - Infrastructure stocks carry some of the richest multiples across software (SNOW at >90x, PLTR at >40x)
- Best-of-breed is king – the overhang of the hyper-scalers competing with leading point solutions appears to be abating.
  - Investors are getting more comfortable with multi-year growth stories in infrastructure with strong fundamentals given rising customer use of multi-clouds and preference to avoid vendor lock-in.
- The observability space generated significant investor interest given the greenfield opportunity/potential for accelerated adoption
  - Investors valued platform plays based on the TAM opportunity ahead and the most successful stock picks were cos that aggressively built out the offering across the IT stack (application, infrastructure, network).
  - Consolidation in the space was limited to smaller scale tuck-ins deals.
- Greater acceptance of consumption-based SaaS models (e.g. SNOW) despite more limited visibility vs. traditional SaaS models.
- What didn't work in 2020:
  - Vendors with significant on-premise spending exposure (e.g. ORCL, VMW) saw limited growth upside
  - Model transition stories (e.g. SPLK, CTXS) have not lived up to expectations.

Coverage Infrastructure Stocks Performance in 2020

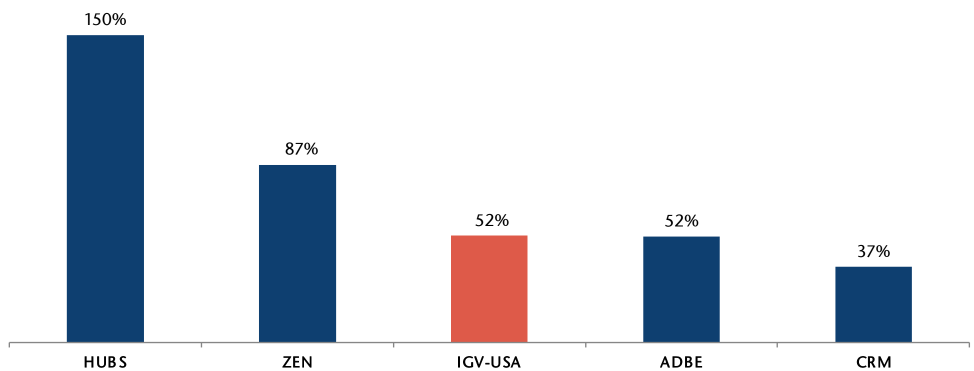


Sources: Jefferies Research, FactSet
Priced as of market close on 12/31/20

A Look Back and What to Expect on Front Office Apps

- Front office apps took center stage in 2020 as digital transformation efforts became the key priority for businesses. The pandemic accelerated digital transformation initiatives at many customers. Our channel checks indicate the fundamental demand is accelerating heading into 2021. Partners see strong fundamental demand for F4Q and heading into 2021. One partner noted that "pent up demand is driving deals" while another noted "no slowdown; still a 10 on 10 in terms of demand."
- We continue to believe that front office will see sustained momentum in 2021. While large platform plays like ADBE and CRM have underperformed the IGV in 2020, we expect them to deliver better performance in 2021.
- IT dollars continue to flow into the front office digital transformation, and we would be overweight the sub sector in 2021.

Front Office Apps Performance 2020

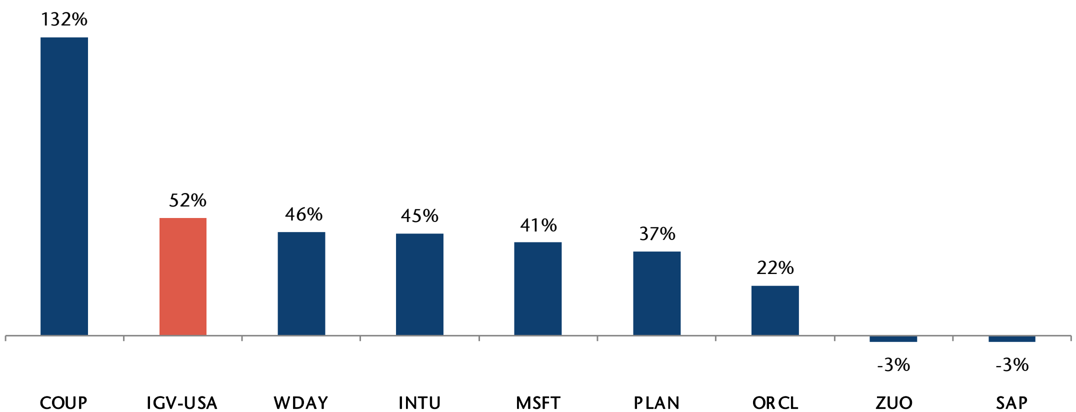


Sources: Jefferies Research, FactSet
Priced as of market close on 12/31/20

A Look Back and What to Expect on Middle Office/Back Office Apps

- Middle and back office digital transformation efforts were put on hold in 2020 as businesses focused on higher priority software areas that enabled WFA and front office digital transformation. As such, most middle and back office vendors except for COUP underperformed the IGV.
- We expect a snap back in demand for middle office and back office apps in 2021. The middle/back office will take attention away from the front office apps. Furthermore, front office digital transformations have created a burden on the middle/back office systems. We believe businesses will have to overhaul these systems to keep up with end customer demand.
- Our checks and survey of 300 CIOs/CTOs also confirm this that spend in the middle/back office apps landscape is likely going to become a priority in 2021.

Middle/Back Office Apps Performance 2020



Sources: Jefferies Research, FactSet
Priced as of market close on 12/31/20

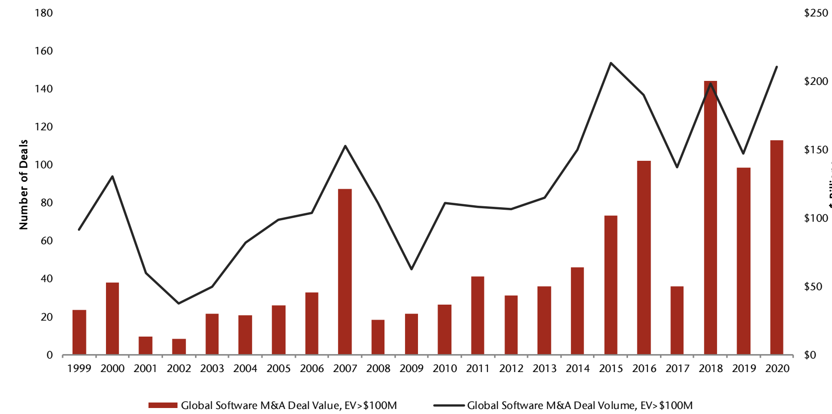
Solid 2020 on the M&A front in Software Despite Pandemic – Expect 2021 to be similar or stronger; Meaningful Growth in Software SPACs – Here to Stay in 2021

- Global Software M&A deal value was up 15% in 2020. Despite being lower than 2018, it is still the **second-largest M&A year in terms of deal value over the past two decades despite the pandemic impact.** We expect this strength to continue into 2021 as the environment normalizes. Activity picked up in the back half of the year as over 65% of deals were completed after July.

- **Rising Valuations and Deal Sizes:** Our analysis of US Software M&A activity ($1B or greater) indicates average multiples expanded 69% in 2020 to 10.6x EV/NTM revenues and average deal sizes expanded 33% to $5.55B.

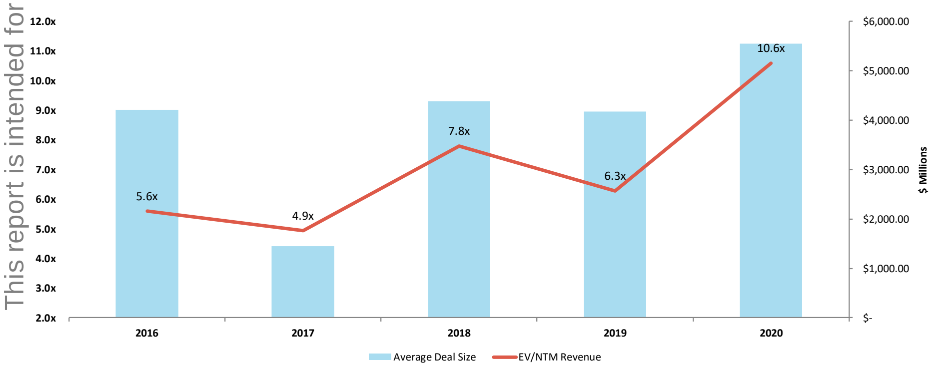
- **Software SPAC activity picked up meaningfully in 2020** and we expect more SPACs in 2021. Number of SPACs grew to 12 in 2020 vs. 1 in 2019 and 2 in 2018. Deal value grew to ~$18B vs. $470M in 2019 and $616M in 2018.

Global Software M&A with EV greater than $100M



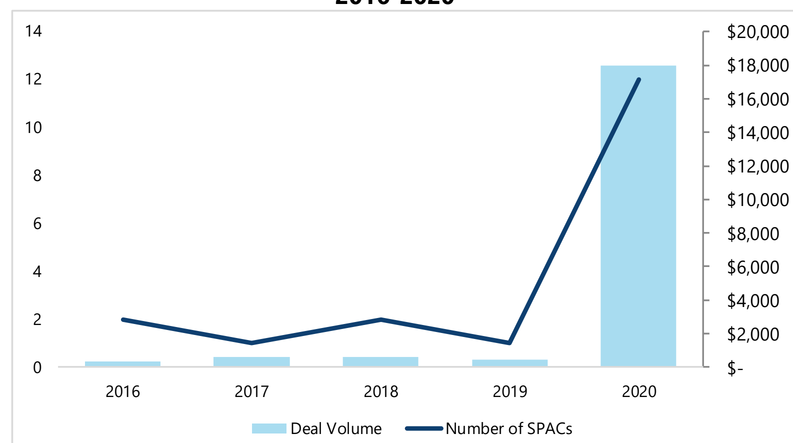
Sources: Jefferies Research, Bloomberg

U.S. Software M&A Activity, $1B EV or Higher, Valuations and Average Deal Sizes, 2016-2020



Sources: Jefferies Research

Software SPAC Activity, Deal Value ($ millions) and Number of SPACs, 2016-2020

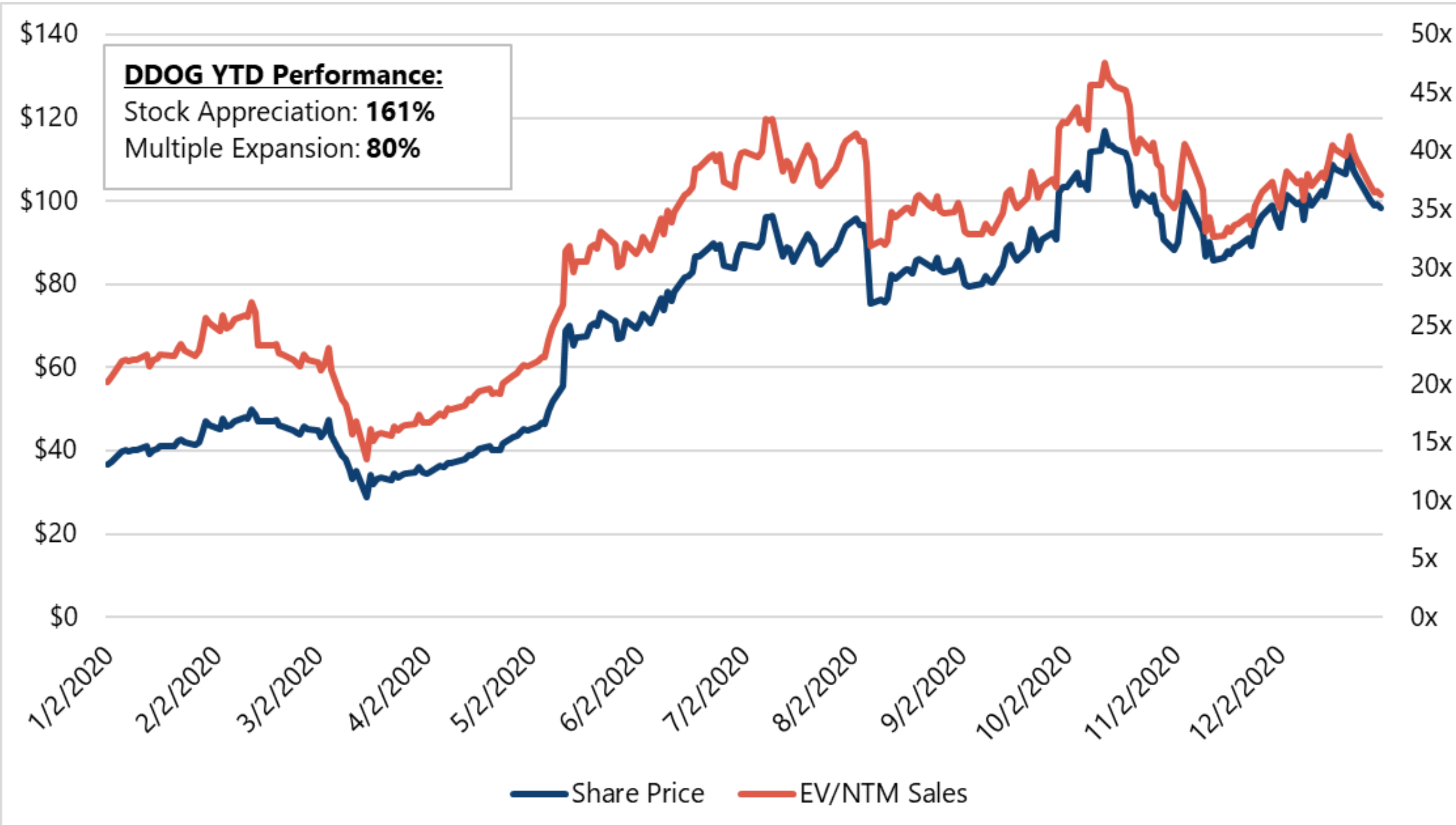


Sources: Jefferies Research, PitchBook

High Growth Case Studies I – DDOG Outperforms IGV By 109%

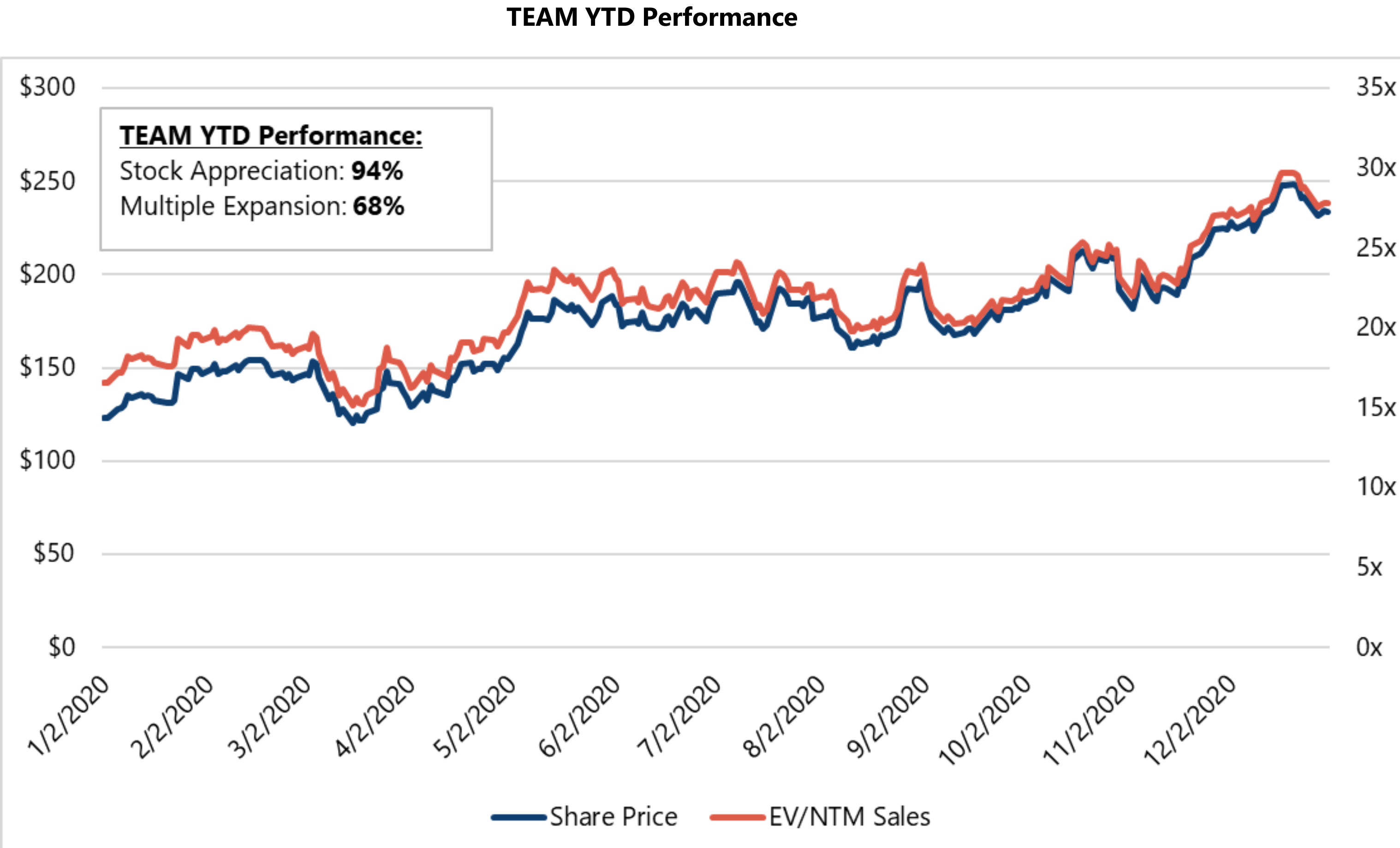
- We decided to analyze four high growth stocks within our coverage: DDOG, TEAM, NET, and CRWD. All have handily beat the IGV. **Bottom line, these are the best fundamental stories within our coverage, and they have all outperformed in 2020.**

DDOG YTD Performance



Source: FactSet and Jefferies Research
Priced as of market close on 12-31-20.

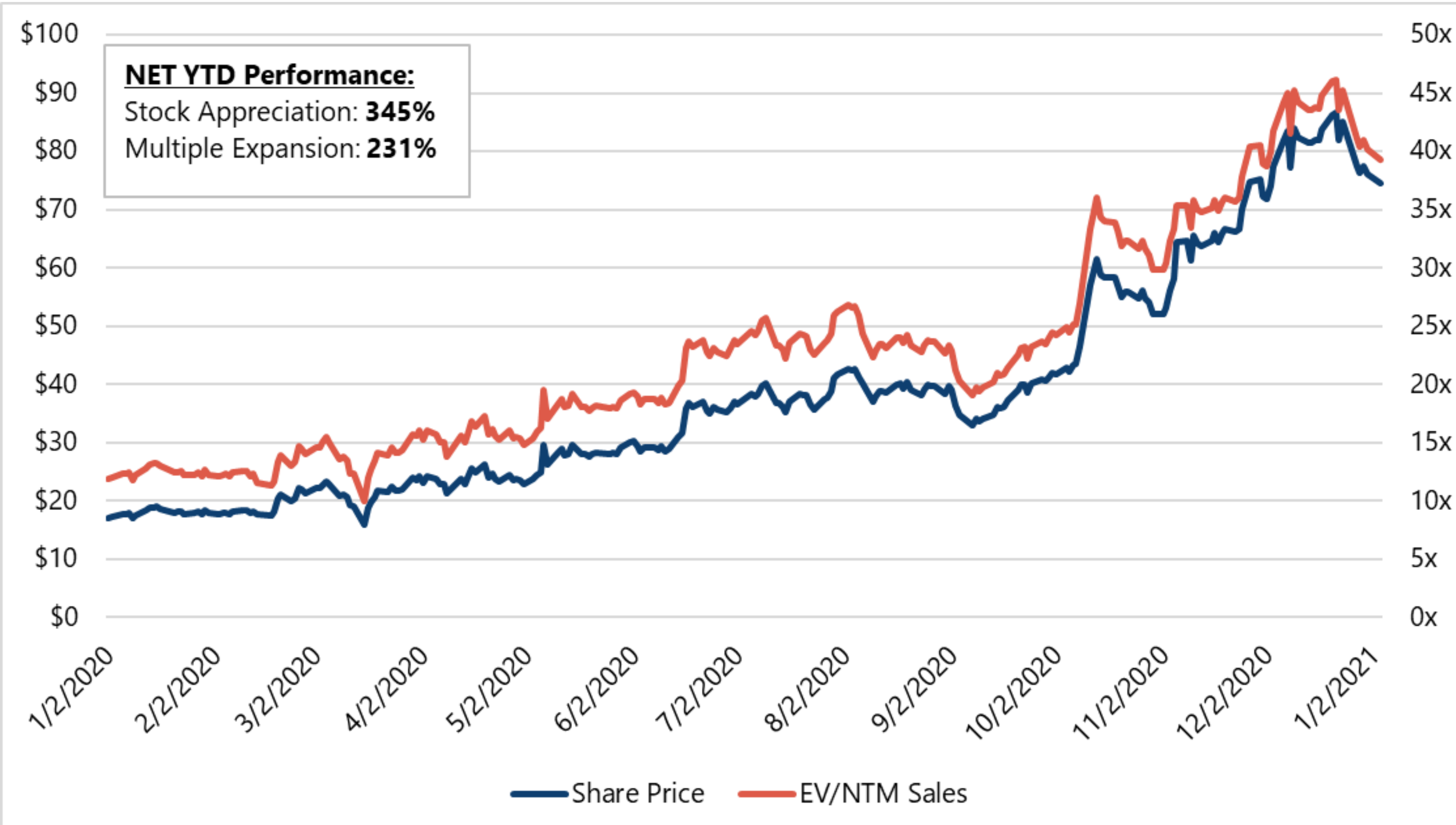
High Growth Case Studies II – TEAM Outperforms IGV By 42%



Source: FactSet and Jefferies Research
Priced as of market close on 12-31-20.

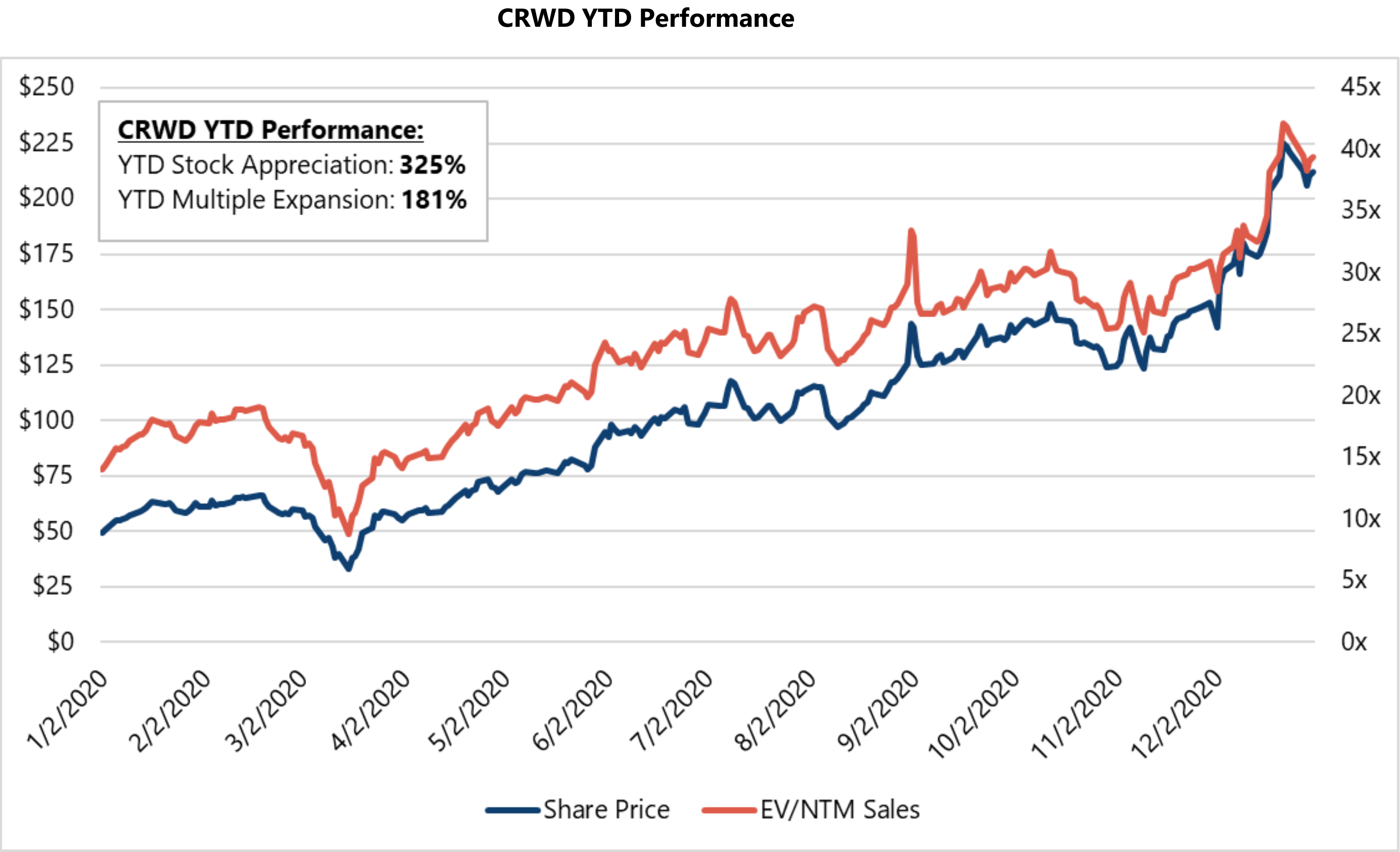
High Growth Case Studies III – NET Outperforms IGV By 294%

NET YTD Performance



Source: FactSet and Jefferies Research
Priced as of market close on 12-31-20.

High Growth Case Studies IV – CRWD Outperforms IGV By 273%



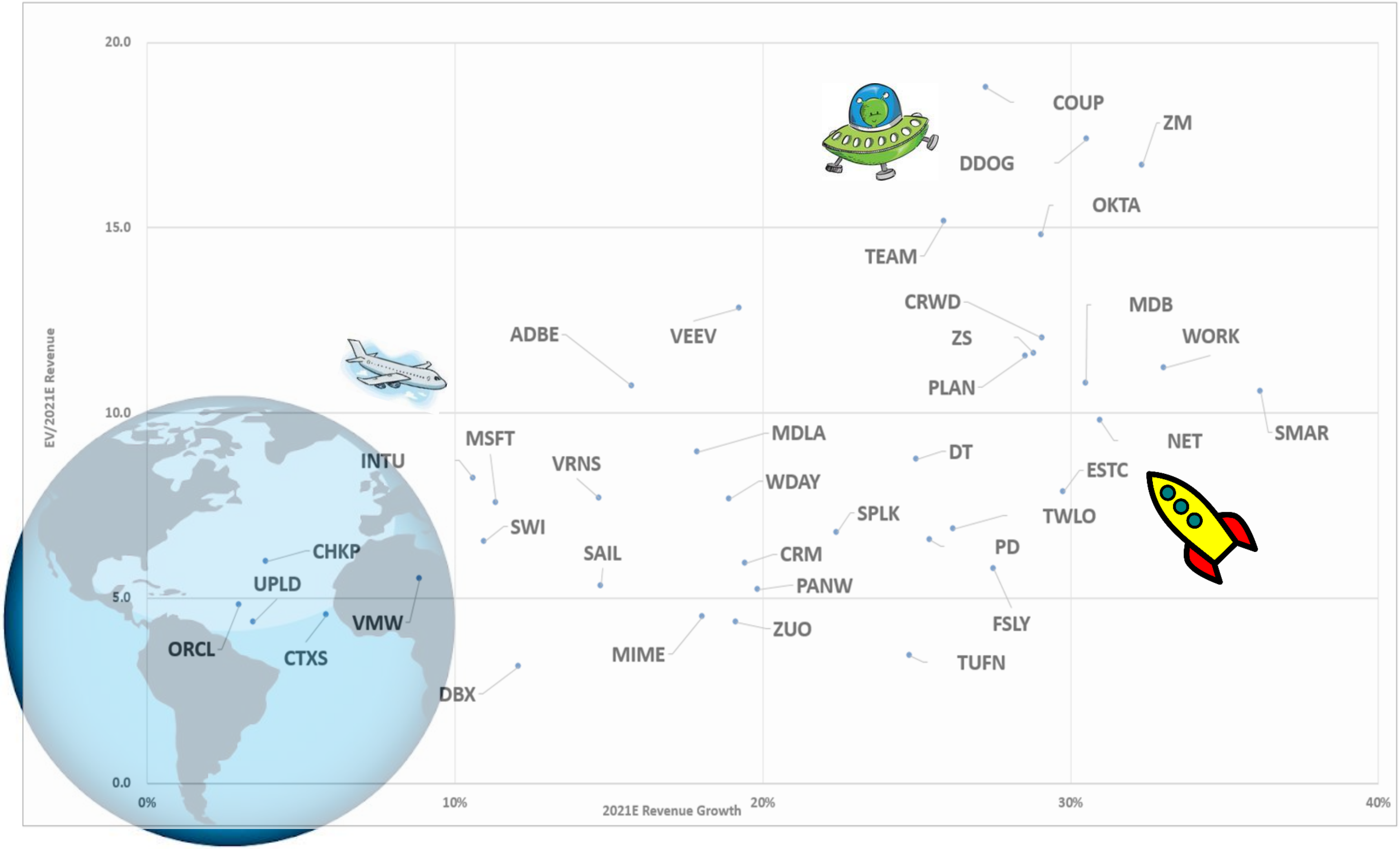
Source: FactSet and Jefferies Research
Priced as of market close on 12-31-20.

IPO Multiples Expanded an Avg. 88% vs. CY22E Rev Growth Unchanged

Company	Ticker		Price		Market Cap (millions)		EV/2022E Rev			2022E Rev. Growth		
2020 IPOs		12/31/2020	IPO Date	% Change	12/31/2020	IPO Date	12/31/2020	Post IPO	% Change	12/31/2020	Post IPO	% Change
Snowflake	SNOW	$280.70	$120.00	133.9%	101,894	43,560	*54.7x*	*22.6x*	141.7%	63.6%	62.8%	0.8%
Palantir	PLTR	$23.91	$7.25	229.8%	51,968	15,758	*28.4x*	*8.0x*	253.5%	25.9%	26.0%	-0.1%
Unity Software	U	$143.17	$52.00	175.3%	21,369	7,761	*16.2x*	*5.1x*	216.1%	27.9%	28.1%	-0.2%
Bentley Systems	BSY	$40.47	$22.00	84.0%	12,126	6,592	*13.4x*	*7.6x*	76.3%	8.1%	8.3%	-0.2%
Asana	ASAN	$28.72	$21.00	36.8%	6,097	4,458	*14.9x*	*11.3x*	32.0%	29.4%	28.7%	0.7%
Duck Creek	DCT	$41.76	$27.00	54.7%	5,464	3,532	*17.6x*	*11.2x*	57.5%	17.5%	17.9%	-0.4%
Vertex	VERX	$32.05	$19.00	68.7%	4,683	2,776	*9.8x*	*5.7x*	71.0%	13.4%	13.4%	0.0%
Datto	MSP	$25.74	$27.00	-4.7%	4,301	4,512	*6.2x*	*6.6x*	-5.5%	16.6%	16.7%	-0.1%
Sumo Logic	SUMO	$26.54	$22.00	20.6%	3,344	2,772	*10.3x*	*8.6x*	20.2%	21.1%	20.4%	0.7%
Jamf	JAMF	$29.20	$26.00	12.3%	3,306	2,943	*8.3x*	*7.7x*	7.8%	20.2%	21.2%	-0.9%
BigCommerce	BIGC	$58.67	$24.00	144.5%	2,896	1,185	*12.9x*	*5.1x*	151.4%	21.5%	22.2%	-0.7%
Jfrog	FROG	$60.17	$44.00	36.8%	2,257	1,651	*6.6x*	*4.3x*	54.3%	29.9%	29.9%	0.0%
Telos	TLS	$30.58	$17.00	79.9%	1,979	1,100	*5.5x*	*3.3x*	69.3%	40.7%	41.2%	-0.5%
Average				**78.2%**	**17,053**	**7,585**	***15.8x***	***8.2x***	**88.1%**	***25.8%***	***25.9%***	**-0.1%**
Median				**61.7%**	**4,683**	**3,532**	***12.9x***	***7.6x***	**69.3%**	***21.5%***	***22.2%***	**-0.1%**
SPX Return YTD	SP50			**16.3%**								
IGV Return YTD	IGV			**51.9%**								
Nasdaq Return YTD	COMP			**43.6%**								

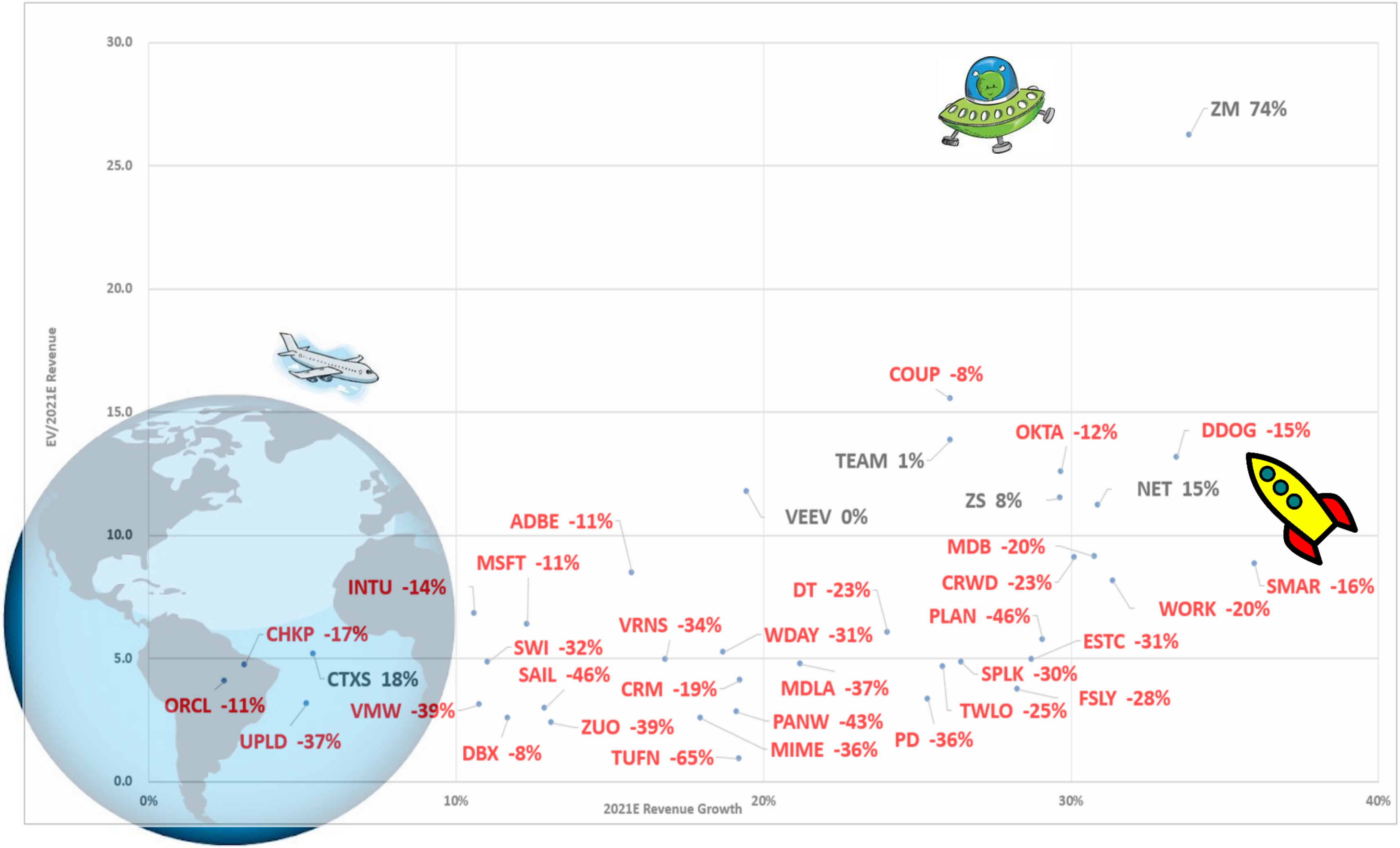
Sources: Jefferies, FactSet, Company data
Note: priced as of market close on 12-31-20.

EV/2021E Revenue Multiples vs 2021E Revenue Growth at the Beginning of 2020



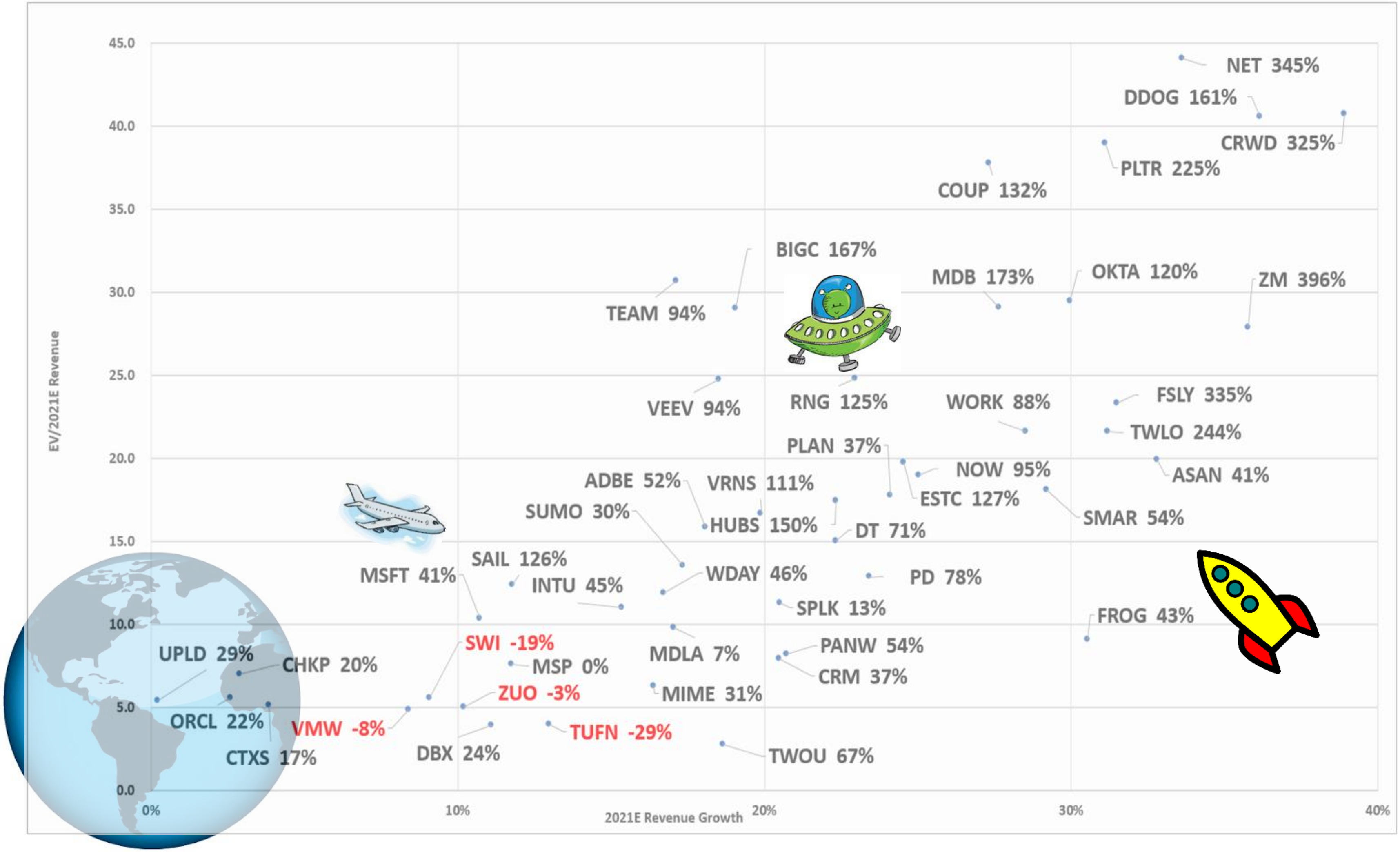
Sources: Jefferies, FactSet Note: priced as of market close on 1-1-20.

EV/2021E Revenue Multiples vs 2021E Revenue Growth with Stock Performance in 2020 from January 1 to March 18 (onset of COVID-19)



Sources: Jefferies, FactSet Note: priced as of market close on 3-18-20.
Performance from 1/1/2020 to 3/18/2020

EV/2021E Revenue Multiples vs 2021E Revenue Growth with Stock Performance in 2020



Sources: Jefferies, FactSet Note: priced as of market close on 12-31-20.
Performance from 1/1/2020 to 12/31/2020

Software Sub Sector Performance: Outperformance in Applications Relative to Infrastructure over the LT; Amazon AWS hangover continues to plague Infrastructure multiples over the LT

Applications		1 year Return %	2 year Return %	3 year Return %
Average of Apps		45.5%	112.6%	211.1%
Outperformance relative to IGV		-5.2%	8.8%	87.2%
Infrastructure		1 year Return	2 year Return	3 year Return
Average of Infrastructure		45.0%	45.0%	61.2%
Underperformance relative to IGV		-5.7%	-58.8%	-62.7%
Security		1 year Return %	2 year Return %	3 year Return %
Average of Security		45.8%	82.3%	125.5%
Underperformance relative to IGV		-4.9%	-21.5%	1.6%
Average of Infrastructure and Security		45.4%	64.7%	99.8%
Underperformance relative to IGV		-5.3%	-39.1%	-24.1%
Average of Software		45.4%	80.0%	138.5%
SPX Return	SP50	16.1%	48.3%	37.9%
IGV Return	IGV	50.7%	103.8%	123.9%
Nasdaq Return	COMP	42.9%	91.3%	82.1%

Source: Jefferies, FactSet. Note: priced as of market close on 12-31-20.
Note: The returns for apps include ADBE, PLAN, TEAM, ADSK, DBX, GWRE, INTU, CRM, SMAR, UPLD, VEEV, WDAY, and ZUO.
Note: The returns for infrastructure include CTXS, CVLT, DDOG, DT, ESTC, MSFT, ORCL, SWI, SPLK, and VMW.
Note: The returns for security include CHKP, CRWD, CYBR, FEYE, FTNT, MIME, NET, PANW, PFPT, SAIL, SYMC, TUFN, and VRNS.

How to Play the Software Sector in the Current Economic Environment

How we would play it:

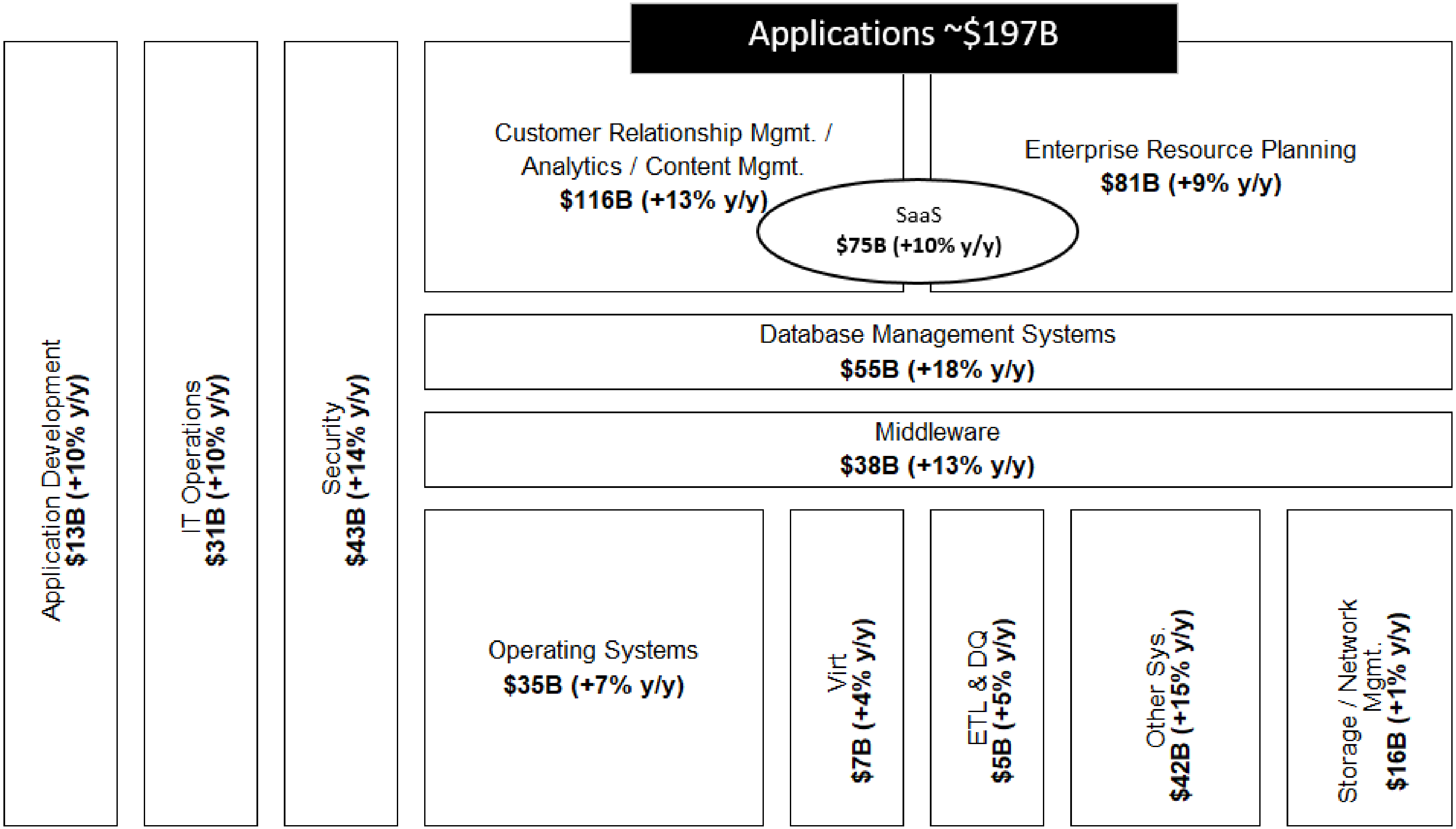
1. Favoring Large-Cap names with a balance of good growth and multiple support.
2. Favor apps as they cannot be "Amazoned"; more selective on the infrastructure & best-of-breed SaaS names.
3. Play defense on the high-fliers for the short term.

	Pros	Cons
1	An exemplary business model – high levels of visibility, generates revenue growth at high gross margins, higher operating margins normally with scale	Multiples have been the highest they have ever been (e.g., DDOG trading at 43.7x NTM recurring revenues, ZM trading at 50.6x NTM recurring revenues, CRWD trading at 47.7x NTM recurring revenues, and WORK trading at 28.8x NTM recurring revenues)
2	Recurring revenue visibility should garner a higher multiple	Software sector has outperformed tremendously and that has been a source of funds for investors
3	The software sector has not been affected by the regulatory overhang seen in the Internet space; a "safe haven" for investors	If a macroeconomic downturn were to hit, the new business that Software companies rely on would decline, even though existing customer bases would remain relatively stable. Furthermore, companies with negative free cash flow might need to access the capital markets to raise money

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Source: Jefferies, FactSet. Note: priced as of market close on 12-31-20.

Healthy Fundamentals for $482B Software Industry in 2019 Growing +12% y/y



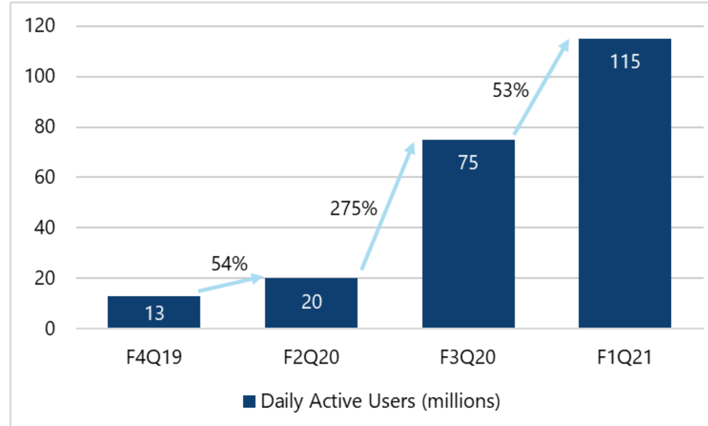
Source: Jefferies Research, Gartner

Top Picks and Predictions for 2021

MSFT - PT \$260 - Tripling down on Teams – MSFT goes all in on collaboration and telephony to add another lever of rev growth via upsell to E5 driving stock higher

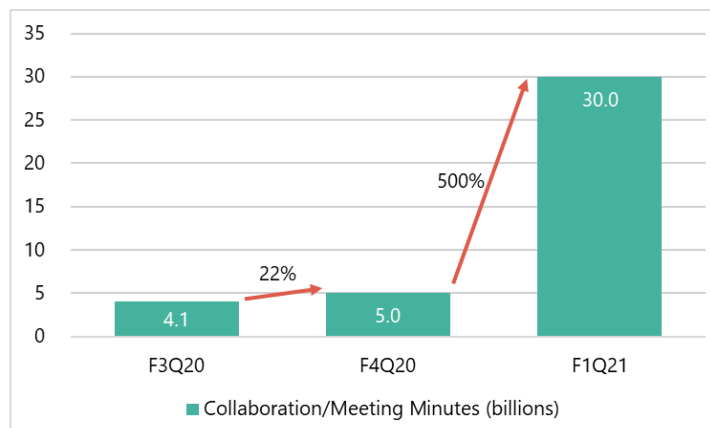
- Teams is only solution with meetings, calls, chat, content collaboration, as well as business process workflow
- We expect MSFT to triple down on phone/voice capabilities
  - As companies move through digital transformation, businesses want one unified platform, from meetings to phone systems
  - Within Unified Communications, we estimate that <10% of the 300-400m legacy PBX phone lines globally utilize cloud-based solutions
- Teams growth exploding – **Users up almost 9x in just over a year**
  - 115M Teams seats vs Slack cons. estimate of 15.4M DAU (12M reported in 3Q19)
  - 375M+ Office Comm. install base means **less than 1/3 penetrated**
- Halo Effect from Teams
  - Increases renewal strength/lowers discounting given larger value proposition
  - Helps with the upsell to M365 E5; **+78% price uplift from E3**
- **What does this mean?**
  - We think MSFT can help **drive sustainable total rev in double digits** (growing double digits since FY18)
  - Helps drive profitability during investment year offsetting impact of gaming launch and less on prem rev
  - Street estimating "organic" FY21 op. margin down 20 bps (after backing out \$2.7B+ of depreciation benefit) after increasing 290 bps in FY20

Teams DAUs and Sequential Growth



Source: Jefferies, Company data

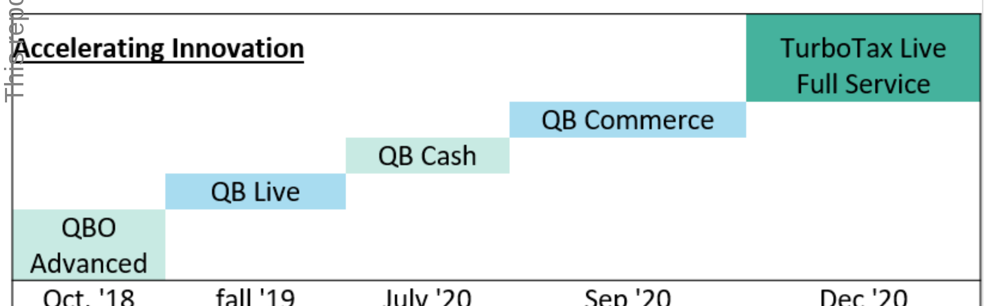
Teams Meeting Minutes and Sequential Growth

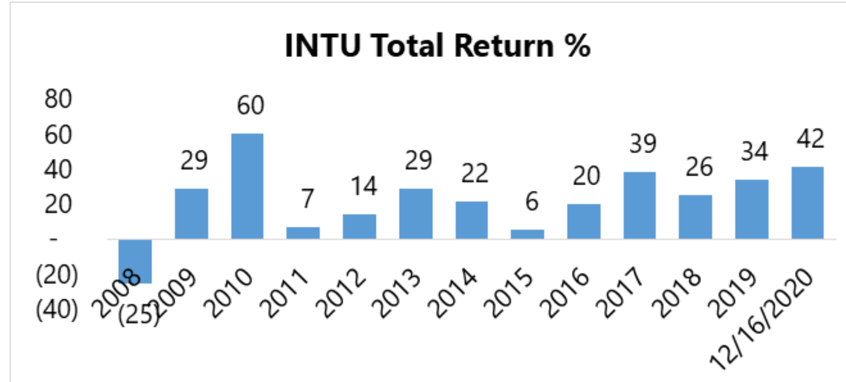


Source: Jefferies, Company data

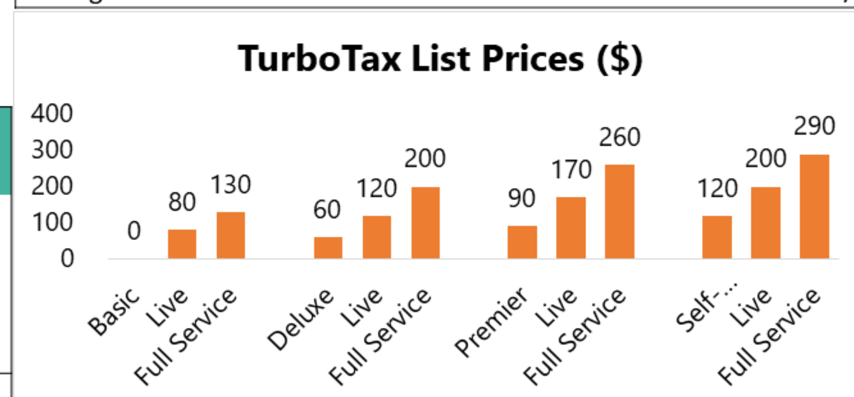
INTU Lucky #13: 2021 should be 13th year of stock gains thanks to product and vaccine tailwinds

- **12 straight years of positive stock gains**
  - INTU has consistently delivered for investors: 12 consecutive years of positive total returns (2009-20), including double-digit returns in 10 out of 12 yrs
  - We expect 2021 to mark year #13
- **Accelerating innovation and product cadence**
  - Since Sasan Goodarzi was named CEO in Jan. '19 (joined INTU in '04), product innovation has sped up
  - The latest launch is TurboTax Live Full Service, which should further disrupt the $20Bn assisted tax prep category
- **Numerous product cycle tailwinds**
  - In addition to TTL FS, Intuit should benefit from QuickBooks Live, QBO Advanced (disruptive to mid-market), QB Commerce
  - These should drive higher ARPU due to premium pricing
- **Levered to post-Covid recovery**
  - Economic rebound from vaccine should help:
  - Small Business segment – reduced attrition, higher payroll, increased payments volume;
  - Credit Karma – as financial partners re-open credit offers
- **FY21 guidance looks conservative**
  - Results beat initial guidance in last 3 fiscal years
  - We expect a repeat in FY21
- **Support from resumed stock buybacks**
  - Repurchases were paused until Credit Karma deal closed
  - $2.4B in buyback authorization remains





FY	2018	2019	2020	2021E	L-T goal
Small Business					
rev growth	17.9%	15.4%	14.6%	9.5%	
initial guide	12-14%	9-11%	12-14%	8-10%	10-15%
Consumer (tax)					
rev growth	14.4%	10.6%	13.0%	10.2%	
initial guide	7-9%	9-10%	9-10%	9-10%	8-12%
Total					
rev growth	15.2%	12.6%	13.2%	16.6%	
initial guide	9-11%	8-10%	10-11%	15-17%	n/a

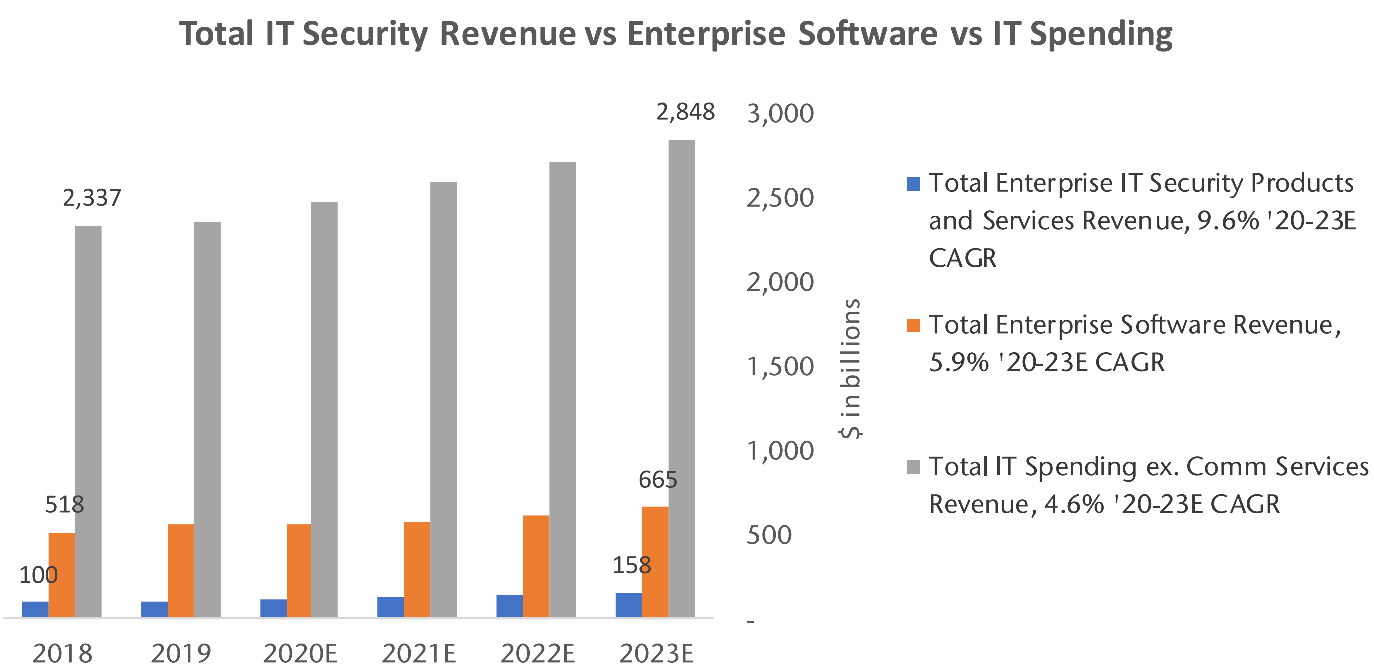


Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Sources for all charts: Jefferies, company data, FactSet

Security spend continues to climb as the severity of breaches increases – security remains a quilt of different vendors patched together as no one vendor can protect a full enterprise. We favor a basket of names (CRWD, PANW, NET, SPLK, and VRNS).

- According to both IT buyers and IT vendors, **security spending has remained robust and continues to rise as a % of total IT spend**, from mid-to-high single digits % to high single digit % and in some cases 10% or more.
- Worldwide IT spending (excluding communication services) is expected to be almost $2.5T in 2020 and grow at a 4.6% CAGR to reach $2.8T by 2023, according to IDC.
  - Worldwide IT security spending is growing about double that rate, and thus growing as a % of total IT spend
- Cybersecurity will remain a priority spending area, even in the event of an economic downturn.
- **We favor a basket of names (CRWD, PANW, NET, SPLK, and VRNS). Upgrading CRWD to Buy with $275 PT**



Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Source: IDC and Jefferies Research

2021 the year of Work-from-Anywhere; ASAN is mission critical to remote work and productivity and will flourish in 2021

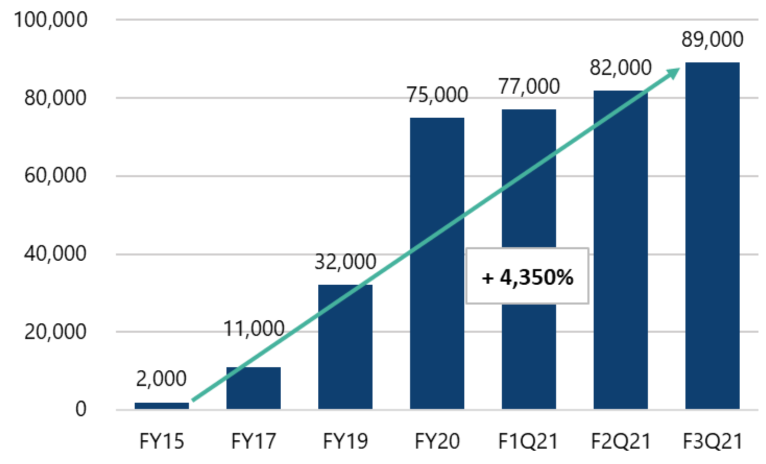
- **WFA Beneficiary.** While not deemed emergency spend in 2020; ASAN is mission critical to remote work and productivity in 2021
  - Low-cost high ROI solutions perfect for WFA environment
  - ASAN avg ACV $2,647; lots of room for upside
- **Huge Underpenetrated TAM = 1.25B knowledge workers** according to Forrester
  - ASAN with 1.3M paid users is only 0.1% penetrated
- **Only Just Begun.** Both were founded more than a decade ago, but the opportunity has only just begun to materialize.
  - ASAN customer count up almost 45x to 89K since 2015
- **Hybrid Model.** Low touch/indirect sales model should benefit margin over time.
- **Jefferies vs. The Street**. We model ASAN total revenue of $294.1M vs consensus of $293.9M and non-GAAP operating margins of (56.7%) vs consensus of (55.7%).

ASAN TAM

	2019	2020E	2021E	2022E	2023E	2024E	CAGR (2020-2024E)
Team Collaborative Applications	3.5	4.8	6.2	7.5	9.1	10.9	22.7%
Current Classified Market - IDC	**$ 3.5**	**$ 4.8**	**$ 6.2**	**$ 7.5**	**$ 9.1**	**$ 10.9**	**22.7%**
y/y change		*36.4%*	*28.1%*	*21.1%*	*21.5%*	*20.1%*	
Asana Rev Growth	**86%**	**55%**					
Penetration of Current Markets	**4.0%**	**4.6%**					
Conferencing Applications	5.9	7.9	9.5	11.2	13.1	15.3	17.9%
Email Applications	5.3	6.1	6.7	7.4	8.1	8.8	9.5%
Enterprise Community Applications	2.7	3.3	3.9	4.6	5.4	6.4	17.7%
Content Sharing and Collaboration Applications	6.2	7.2	8.1	9.1	10.2	11.4	12.0%
Other Collaborative Applications Markets	**$ 20.0**	**$ 24.6**	**$ 28.4**	**$ 32.3**	**$ 36.8**	**$ 41.9**	**14.2%**
		22.8%	*15.3%*	*14.0%*	*13.7%*	*13.8%*	
Project and Portfolio Management (PPM) Applications	3.9	4.0	4.3	4.6	4.9	5.3	6.8%
Other Adjacent Established Markets	**$ 23.9**	**$ 28.6**	**$ 32.7**	**$ 37.0**	**$ 41.7**	**$ 47.1**	**13.3%**
		19.8%	*14.0%*	*13.2%*	*12.9%*	*13.0%*	
Total Potential Addressable Market (TAM)	**$ 27.4**	**$ 33.5**	**$ 38.8**	**$ 44.4**	**$ 50.8**	**$ 58.0**	**14.8%**
		21.9%	*16.0%*	*14.4%*	*14.4%*	*14.3%*	
Asana Penetration of Total Potential TAM	**0.5%**	**0.7%**					

Source: Jefferies, IDC

ASAN Paying Customers



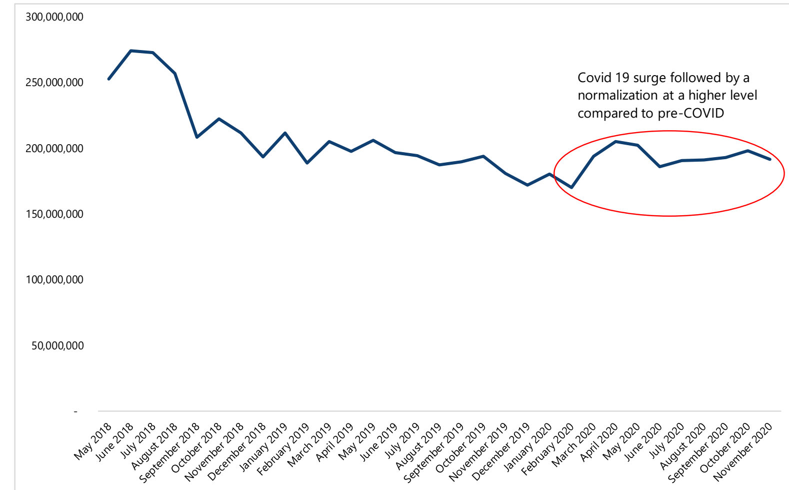
Source: Jefferies, Company Data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

DBX, Buy; Maintain $28 PT. WFA Beneficiary that Trades At An Attractive Valuation with Margin Support

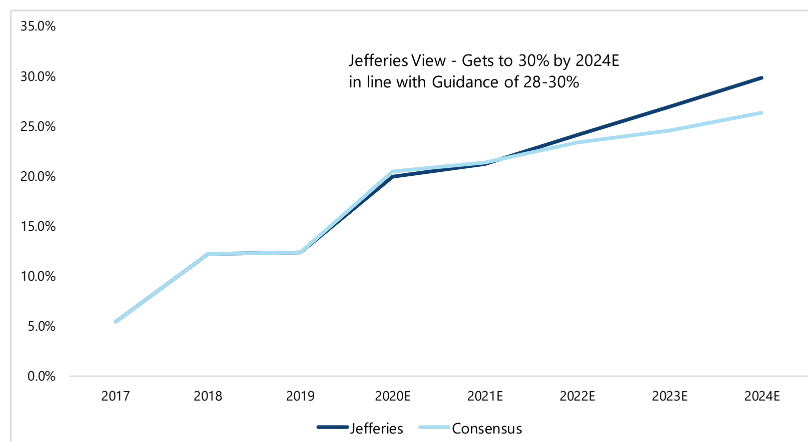
- **Initial COVID-19 Surge Has Dipped, But Current Levels Higher Than Pre-Pandemic Levels; CIOs Say WFA is Permanent.**
  - The total no. of visits to Dropbox desktop and mobile combined were up 14% m/m in March to ~194M and 6% in April to ~205M. Since then, while growth has dropped a bit. Visits across desktop and mobile platforms have normalized since the COVID-19 surge seen in March and April. The new normalized level of 190+M visits is still materially higher than the ~180M visits pre pandemic in Jan and Feb.
  - We are in line with the Street expecting ~200K NNPU adds. We believe these numbers are likely conservative after the company posted 290K NNPU adds last Q. Consensus implies a sequential deceleration of 31% in NNPU adds. DBX will likely beat this aided by a marketing campaign that went into effect at the end of Q3.
- **On Path to Deliver Margin Improvements and Cash Flows Over the LT.**
  - We believe can deliver over 1000+ bps. margin over the next four years heading to LT target of 28-30% by 2024 from 18% in 2020E.
  - Management has shown that it can deliver the revenue growth algorithm while delivering leverage on the margin side. We believe that the COVID-19 growth catalyst will further enhance management's ability to deliver on the growth side while delivering substantial margin leverage in the future.
- **Attractive Valuation; Accelerated Share Buyback Provides Support.**
  - DBX trades at a 62% discount — 3.6x 2022E revs. vs. comp group at 9.7x. Even at our price target of $28, the stock will trade at 4.6x 2022E revenues representing a 52% discount to comps. We also believe the share buyback program which will be ramped up over the next couple of Qs should provide support to valuation. Have bought back $60M on avg. in the first 3Qs of 2020 which we expect to ramp up 230% to $200M in Q4 and $220M in Q1 2021.

Site visits to Dropbox (Desktop and Mobile)



Source: SimilarWeb, Jefferies

DBX Non-GAAP Operating Margins



Source: FactSet, Jefferies

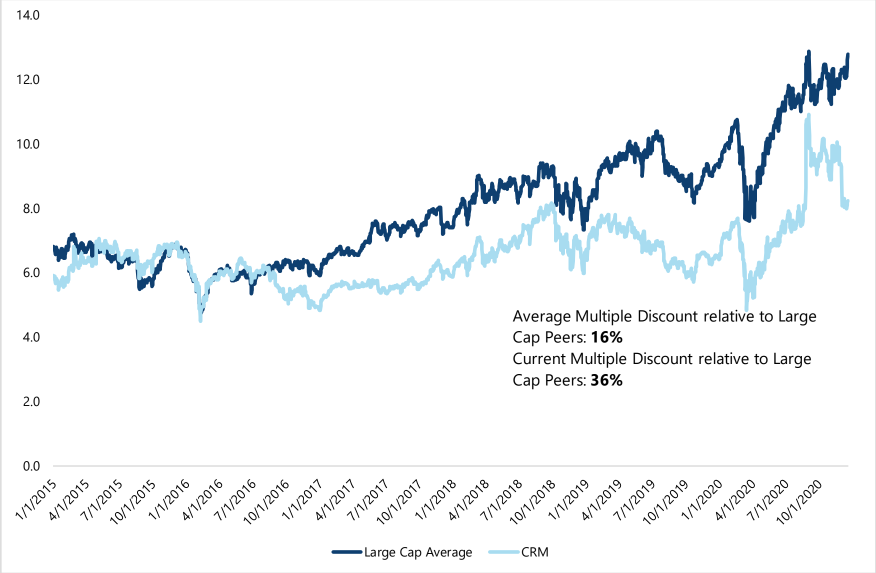
Salesforce.com (CRM) Takes a Breather On Large M&A in 2021; Stock Moves to $320 Driven By Strong Fundamental Demand

- CRM shares have underperformed the IGV in 2020: CRM is up 37% vs the IGV's up 52%. The recent underperformance is driven by a mixed Q and the largest transaction ever in WORK. CRM trades at a discount relative to large cap average within software. That discount has widened given the recent M&A announcement. See chart.
  - Average multiple discount relative to large cap peers is **16%**.
  - Current multiple discount relative to large cap peers is **36%**.

- **WORK - Largest Deal Ever and One Of the Most Expensive – Expect CRM To Take a Breather in 2021.**
  - CRM announced its largest deal ever as it acquired WORK for **$27.7B** (~$13B more than DATA and $21B more the MULE). This translated to a ~25x '21E rev. multiple representing more than twice the multiple paid for DATA..
  - Despite the rich multiple paid for WORK, we believe CRM can turbo charge enterprise adoption for WORK through its distribution system and bring more users to its platform. We think there is more than enough room in the collaboration space for a two-horse race — MSFT & CRM.

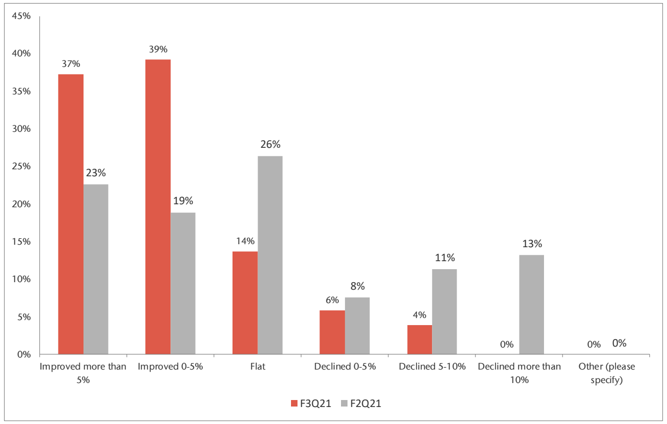
- **Fundamentals Are Sound – Our Survey and Checks Indicate Pipelines Are Improving.** We asked our 51 survey respondents how their pipelines have changed in August, Sept., Oct. relative to the last 3 mos. Approximately 90% of respondents noted that their pipelines were either flat or had improved vs. 68% last Q. Of that 90%, 76% noted that their pipelines had improved over the past three mos. vs. 42% last Q. In fact, one of the experts noted he has seen a "tsunami of deals" in F4Q. We believe these fundamentals will sustain momentum into 2021 buoyed by digital transformation tailwinds.

- **Expect Modest Margin Reset Post WORK Deal – Expect a 25 bps. headwind in F22.**
  - Margins are likely to reset in F22 - we est. a 25 bps. headwind in F22 (CRM will drive op. leverage to offset WORK dilution).



Source: FactSet, Jefferies
Large Cap Average includes ADBE, INTU, WDAY, ORCL, ADSK, NOW, MSFT

Has your Salesforce pipeline changed in August, September, and October when compared to May, June, and July and by how much?



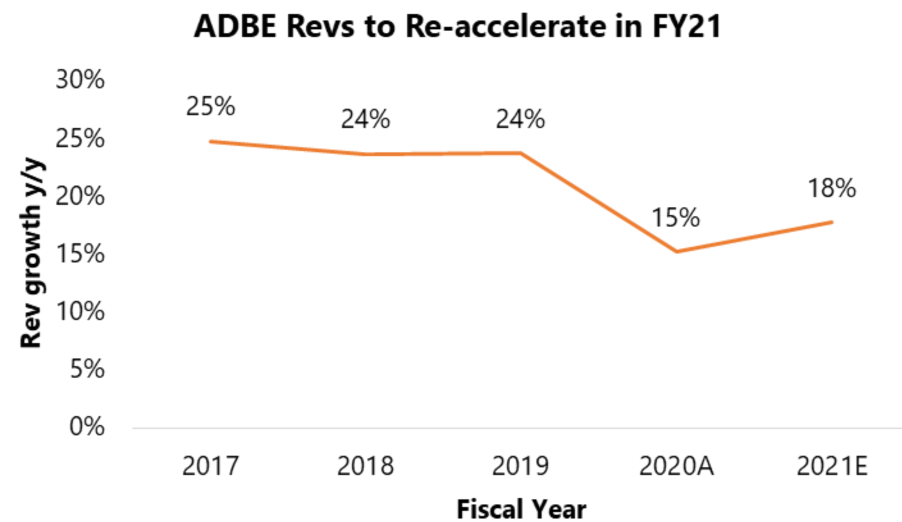
Source: JefData proprietary salesforce.com Partner Surveys (F3Q21: n=51; F2Q21: n=53)

ADBE Accelerates Growth with the Help of Experience Cloud Jump Starting

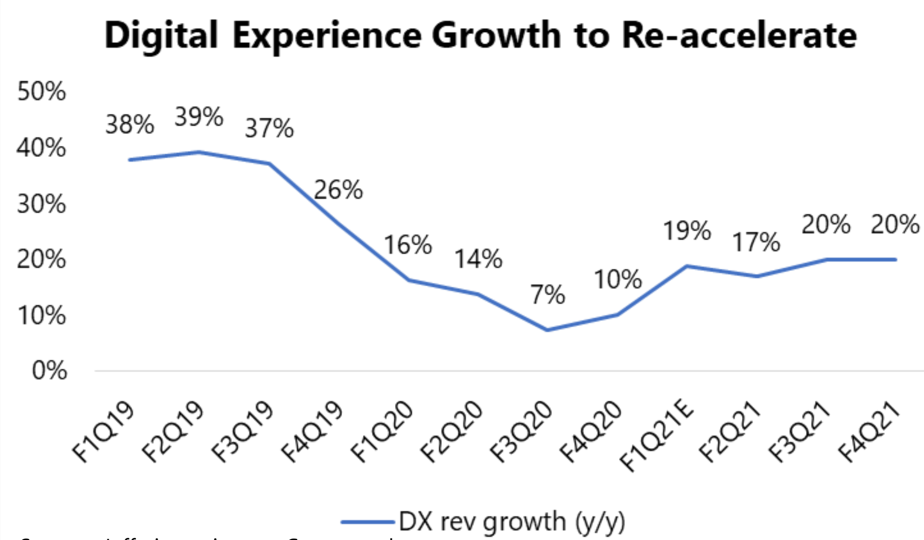
- **Revs to accelerate in FY21 after Covid headwinds in FY20**
  - Rev growth should rebound to 18% in FY21 from 15% in FY20. FY20 was impacted by the pandemic, especially in FQ2-FQ4 and more severely in the Digital Experience segment.

- **FY21 guidance looks conservative**
  - FY21 rev guide implies 18% growth vs. 15% in FY20
  - However, guidance includes an extra week of revs (53-week year vs. 52 weeks in FY20) worth $240M and Workfront acquired revs of $140-150M
  - Excluding the extra week and Workfront, we estimate FY21 rev growth of 14.7%, which would be slightly down from 15.2% in FY20
  - We believe guidance is overly conservative as: 1) Workfront is likely to outperform due to better cross-selling and given revenues were greater than $200M in 2019 (even with conservative deferred rev haircut in FY21), and 2) vaccine-driven recovery should accelerate growth in both the SMB and enterprise segments.

- **Digital Experience (DX) segment could finally outperform**
  - DX has missed internal expectations for several years, but FY21 should be different.
  - Our industry checks indicate there is a backlog of digital transformation projects which should return in FY21.
  - Workfront acquisition could breathe new life into DX growth as it provides a workflow coordination layer that stitches together various DX products.



Sources: Jefferies estimates, Company data



Sources: Jefferies estimates, Company data

Splunk (SPLK) $28B Market Cap. Buy the recent sales execution related weakness

- SPLK was +10% in 2020, underperforming the IGV's +48%. The stock's weakness was driven by highly disappointing F3Q21 results that saw total ARR growth decelerate as several large deals slipped due to sales execution issues. We are buyers of the pullback given the highly competitive product offering as expectations have now reset. Stock at 11x CY21 revs is attractive.

SPLK	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Total ARR	727	1,091	1,680	2,341	3,174	4,136
y/y growth	*na*	*50%*	*54%*	*39%*	*36%*	*30%*
y/y net adds	*na*	*364*	*589*	*661*	*833*	*962*
Free Cash Flow	241	274	(390)	(261)	86	609
y/y growth	*na*	*na*	*na*	*na*	*na*	*606%*

Source: FactSet, Jefferies

- **Deal slippages due to sales execution and not competitive losses.**
  - Our checks indicate that Splunk's competitive positioning is intact with a robust platform across IT, observability and security (enabling TAM expansion to $114B in 2023 from $81B in 2020). Several large deals slipped in F3Q21 amid the current uncertain macro environment. We believe a couple of these have closed since with the remainder in the pipeline.
  - Similar to ESTC, we are buyers of sales execution related weakness in the stock. We favor the large market opportunity and Splunk's positioning among large enterprise customers.
- **Growth expectations have reset.**
  - **ARR growth and FCF.** Mgmt. pulled its FY20-FY23 ARR growth targets and the Street now expects +36%/+30% in FY22/FY23 (down from +40%/+35%). FY23 FCF expectations have moved meaningfully lower to $600M (from $800M) as well. We think the new pricing model + shift to the cloud should help ARR growth beat lowered expectations.
  - **Valuation.** SPLK trades at 11x CY21 revs (on ests. of 20% growth) vs. ESTC at 22x (on ests. of 23% growth). We need to see beat-and-raise Qs for the stock to re-rate, but at current valuation, risk/reward is compelling.

Elastic (ESTC) $15B Market Cap. Stick with aggressive platform expansion stories

- ESTC was +121% in 2020, vastly outperforming the IGV's +48%. At 22x CY21 revs, the multiple has expanded but is still well below DDOG's 41x. We think the story continues to work in CY21 with potential growth in the high 20s/low 30s (vs. the Street's +23%).

ESTC	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Total Revenue	160	272	428	571	713	873
y/y growth	*81%*	*70%*	*57%*	*34%*	*25%*	*23%*
Total Billings	206	343	513	675	834	1,000
y/y growth	*80%*	*67%*	*49%*	*32%*	*24%*	*20%*
FCF Margin	-15%	-10%	-8%	-2%	2%	5%

Source: FactSet, Jefferies

- **Winner as platform expands to address growing data needs.**
  - ESTC's platform continues to resonate with customers across search/observability/security per our checks. >$100K customer net adds remain healthy and net expansion rates continue to print in the >130% range.
  - We think FY21/FY22 total billings growth can print in mid-high 30s/high 20s vs. Street ests. of 32%/24% (following 49% in FY20). Security is a relatively new use case for the company; however, adoption of the SIEM offering can enable growth upside.
- **Balanced growth + profitability profile.**
  - **FCF margins turn positive in FY22.** Alongside our expectation of high 20s/low 30s rev growth in CY21, we expect FCF margins to turn positive. We view this as indicative of the inherent sales efficiency of the model.
  - **Valuation.** At 22x CY21 revs, the stock is well off its lows in 2019 following sales execution issues. However, we believe the multiple still screens attractive relative to DDOG's 41x. We think consistent execution toward beat-and-raise Qs enables the stock to grind higher over the course of CY21.

Upgrade DDOG to Buy; $125 PT. Growth Potential Warrants a Premium Multiple

- DDOG was +168% in 2020 (vs. the IGV's +48%), with significant outperformance driven by strong growth momentum on continued uptake of cloud infrastructure. 35%+ rev growth can sustain over the next 2-3 years as the platform expands and the TAM grows.
  - We think rev growth can come in >40%/>35% (vs. Street ests. of 36%/33%) on broader adoption of the platform.

DDOG	FY18A	FY19A	FY20E	FY21E	FY22E	FY23E
Total Revenue	198	363	590	803	1,066	1,414
y/y growth	*97%*	*83%*	*63%*	*36%*	*33%*	*33%*
y/y net new adds	*97*	*165*	*227*	*213*	*263*	*348*
Total Billings	230	431	634	853	1,122	na
y/y growth	*76%*	*87%*	*47%*	*35%*	*31%*	*na*
Free Cash Flow	(7)	1	69	69	108	140
% margin	*-3%*	*0%*	*12%*	*9%*	*10%*	*10%*

Source: FactSet, Jefferies

- **Getting behind the aggressive platform growth stories.**
  - In DDOG, we see parallels to NOW, SPLK, CRM in their early days. Rapid product innovation with recent launches include Incident Management (Aug 2020), Compliance Monitoring (Aug 2020), Marketplace (Aug 2020), Synthetic Monitoring (Jun 2020), Security Monitoring (Apr 2020), Network Performance Monitoring (Nov 2019).
  - See room for broader adoption within the base: 71%/20% of customers use 2+/4+ products currently while 75% land with 2+ products. We expect cross-sell to enable continued growth as product launches remain robust.
- **Best-in-class growth + profitability profile warrants a premium multiple.**
  - **Rule of 40 Score.** Given our expectation of 40%+ growth in CY21 and 10%+ FCF margin, the RoF score of >50% is among the best in enterprise software. High efficiency sales model supports profitability growth at even as rev growth sustains.
  - **Valuation.** DDOG trades at 41x CY21 revs (vs. CRWD at 43x, ZS at 37x). The stock is currently trading at 30x on our base case CY22 rev est. and 27x on our upside case rev growth est. of +35% y/y. Our target multiple is 35x our upside case rev est.

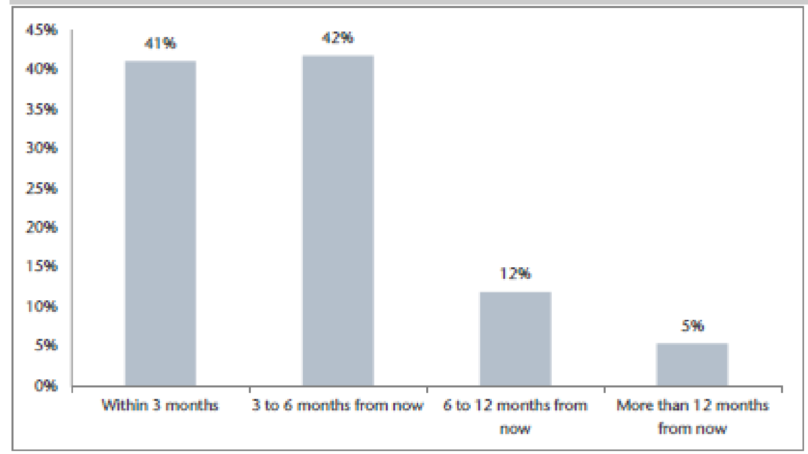
PLAN, Upgrading to Buy; Raise PT to $85. Benefits from Demand Snapping Back in Middle Office Apps.

- **Positive Survey of 300+ CIOs/CTOs Indicates Pipelines Coming Back.**
  - About 63% of respondents noted that COVID-19 caused them to postpone their digital transformation efforts in the Financials space. **We believe this highlights that transformation in this area of Software was not mission critical during the pandemic; however, as we come out of the pandemic, digital transformation will return to the middle office apps space.**
  - 41% of the respondents expect digital transformation within their Financials software to commence within 3 mos., and 42% expect it to commence 3-6 mos. from now. **We believe this indicates that pipelines are coming back.**

- **Why Our View Has Changed? How Are We Different From the Street?**
  - PLAN delivered a healthy F3Q beat on billings beating ests. by 10%. PLAN's billings growth has accelerated to 27% this Q from 22% last Q and 10% two Qs ago. Mgmt. also noted that pipeline is "getting better" and that new deals are coming back. **We believe this is in line with commentary from our partner checks: a 7-yr. Gold Partner noted was ramping back up into Q4 with 60% new deals; and one of CRM's fastest growing partners citing PLAN momentum in sales force optimization.**
  - **New CRO Bill Schuh (ex-MDLA) appointed will add more stability to GTM motion.**
  - F4Q billings guide for 21% is conservative given an easy compare; compares will be easier in F22 as we lap pandemic hit Qs.
  - **While we are in line with consensus over the NT, we believe growth will rebound to 28% in FY23 ahead of Street at 25%.**

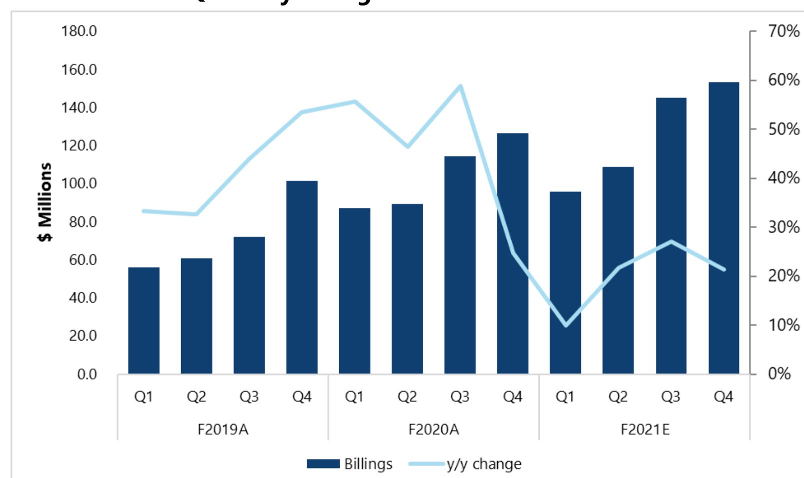
- **Attractive Valuation; Should Trade at a Premium.**
  - We note that Anaplan trades at an attractive valuation relative to its peers. It trades at 13.7x EV/22E revenues vs. comps at 16.1x. We believe PLAN should trade at a premium since it is expected to grow 25% in F22 vs. comps at 18%. Our target multiple is 15x our upside case rev est.

If COVID-19 has resulted in a delay in your Financials transformation project, when do you expect it to commence again?



Source: JefData proprietary Workday Survey, September 2020

PLAN Quarterly Billings Growth F2019 – F2021E



Source: Jefferies, FactSet

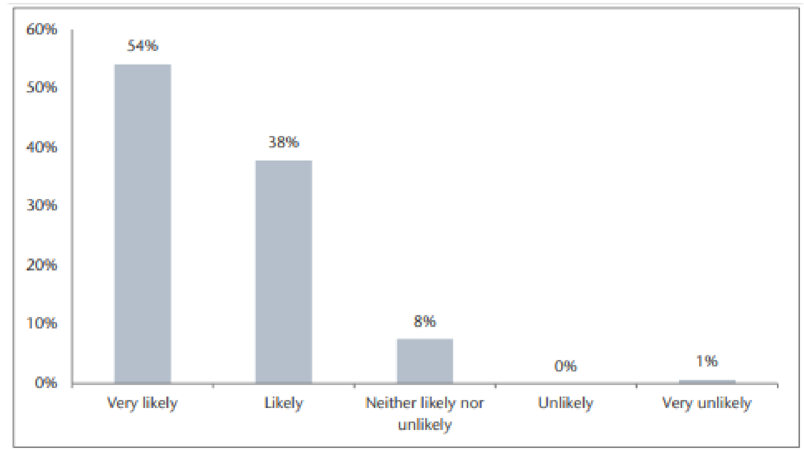
WDAY, Buy; Raise PT to $280. Survey Says … Pipes Coming Back for HCM and Financials

- **Positive Survey of 300+ CIOs/CTOs Indicates Pipelines Coming Back.**
  - 92% of respondents are either likely or very likely to adopt Workday HCM. We believe this highlights Workday's product leadership within the HCM space.
  - 80% of respondents expect to commence their digital transformation projects in the HCM space over the next 6 mos. **We believe this indicates that pipelines and interest in the back office apps space are coming back.**
  - 89% are either likely or more likely to adopt Workday Financials. We believe this showcases WDAY's product leadership within the Financials space.
  - 74% noted that COVID-19 has accelerated their move to the Cloud. **We believe this is a reflection of strong demand environment for Software. We believe this is sustainable as 20% of workloads are in the Cloud right now.**

- **Long Runway for Growth – Multiple Levers to Drive Growth.**
  - First, we believe the company has a large TAM of $79B in '19, growing to $99B by '24 at 4.7% CAGR. Second, WDAY is still in the early innings of driving the expand motion for its products like Procurement, Planning, and Prism Analytics. Third, we believe WDAY has a significant opportunity to apply its model to other geographies. Finally, WDAY is still in the early innings of growth in the Procurement market.
  - **While we are in line with consensus over the NT, we believe growth will rebound to 20% in FY23 ahead of Street at 19%.**

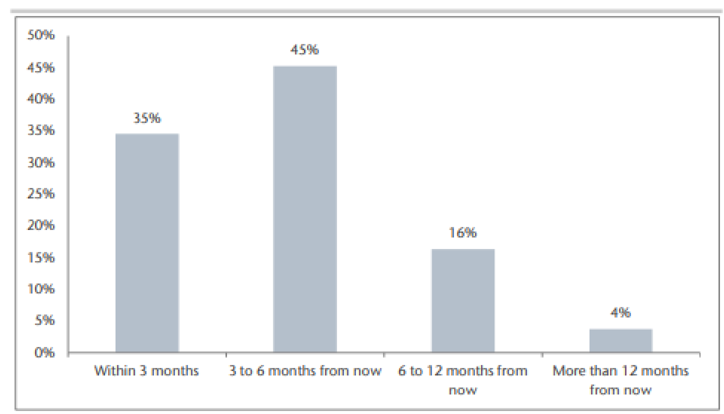
- **Attractive Valuation.**
  - We note that Workday trades at an attractive valuation relative to its peers. It trades at 9.6x EV/2022E revenues vs. comps at 13.6x.

If your organization does not use Workday HCM, how likely is it that you will adopt them in the future?



Source: JefData proprietary Workday Survey, September 2020

If your organization does not use Workday HCM currently but has considered moving to Workday HCM, when would you be comfortable commencing on the HCM transformation project?



Source: JefData proprietary Workday Survey, September 2020

CRWD: Untethering the Falcon; Upgrading to Buy from Hold, PT $275

- **Thesis.** We believe CRWD's dream of defining a new category - The Security Cloud - is coming closer to fruition. We view CRWD as a great company and a category winner that is addressing a huge and ever expanding TAM which should sustain hyper growth for years.

- **Security took on greater importance with WFH creating a more distributed network**
  - SWI breach evidence that multiple bodyguards remain needed in todays world
  - Security budgets continue to grow as a % of IT spending

- **Large Displacement opportunity of Legacy Vendors Remains.** CRWD should continue to take share from more legacy vendors such as Symantec's enterprise assets (AVGO) as well as McAfee.
  - Symantec, McAfee, Trend Micro, and Sophos account for $2.4B or 34% of the market in 2019
  - The opportunity is even larger with upsells representing a 2x+ multiplier to core AV product
  - 14 modules today vs. 3 in 2016

- **Cloud Workloads Expand TAM even Further.** New module enables customers to protect multi-cloud environments by preventing misconfiguration and automating security across any environment
  - Many cloud workloads have no protection, and CRWD believes the typical enterprise has 10x as many cloud workloads as it does endpoints.
  - Moves CRWD into more metered billings vs per endpoint pricing and we estimate that cloud security spend today is $1.2B and see this growing to $12.4B in 2023.

Gartner Corporate Market Share

Vendor	2018 Rev	Share %	2019 Rev	Share %	YoY Growth %
Microsoft	978	17.4%	1,633	23.5%	66.9%
McAfee	585	10.4%	670	9.6%	14.5%
Symantec	807	14.3%	658	9.5%	-18.4%
Trend Micro	567	10.1%	594	8.5%	4.6%
Sophos	428	7.6%	461	6.6%	7.7%
CrowdStrike	220	3.9%	422	6.1%	91.8%
Other	2,043	36%	2,519	36%	23.3%
Total Corporate Endpoint	**5,629**	**100.0%**	**6,957**	**100.0%**	**23.6%**

Source: Jefferies, Gartner,

All statements in this report attributable to Gartner represent Jefferies interpretation of data, research opinion or viewpoints published as part of a syndicated subscription service by Gartner, Inc., and have not been reviewed by Gartner. Each Gartner publication speaks as of its original publication date. The opinions expressed in Gartner publications are not representations of fact and are subject to change without notice.

- **Numbers Remain Achievable.** Using typical linearity, Street FY22 rev estimates imply new business ARR of down approximately -30% for the next 5 quarters vs +68% in FY20 and an avg of +64% in the first 3Qs of FY21.

- **Not Just Another Endpoint Vendor – Customers Stay.** Endpoint is the area of software (not just security) where we hear more about competitive displacements than any other. CRWD provides state of the art, next generation endpoint technology with a foundation in its unique graph database and lightweight agent, which leverages AI and ML. Integrated technologies beyond endpoint that are underpinned by the same graph database will likely make CRWD stickier than traditional endpoint vendors.

- **Jefferies vs. The Street.** For CY21, we model total rev of $1,279.8M vs consensus of $1,193.1M and non-GAAP operating margins of 9.5% vs cons of 5.9%.

- **Valuation.** Our $275 PT represents 41x EV/2022 rev (31% yoy growth) vs DDOG 31x (33% growth), SNOW 55x (64% growth), PLTR 31x (26% growth)
  - If we assume a more normalized 30% new ARR growth in FY22 and 20% in FY23, our PT implies 31x EV/CY2022 rev (based on upside case 47% rev growth).

CrowdStrike TAM by Submarket

in billions of $

Market/Submarket	2018	2019	2020E	2021E	2022E	'19-'22E CAGR
Consumer Endpoint	**5.2**	**5.3**	**5.3**	**5.4**	**5.5**	**0.9%**
yoy growth	*1.1%*	*2.7%*	*0.7%*	*1.1%*	*0.9%*	
Corporate Endpoint Security	**6.9**	**7.6**	**8.1**	**8.7**	**9.3**	**7.1%**
yoy growth	*12.1%*	*9.7%*	*7.5%*	*6.9%*	*6.8%*	
Security Information and Event Management & Vulnerability Assessment	**5.3**	**6.0**	**6.8**	**7.6**	**8.4**	**11.8%**
yoy growth	*12.9%*	*13.5%*	*12.4%*	*11.9%*	*11.1%*	
Security Information and Event Management	**3.3**	**3.7**	**4.1**	**4.6**	**5.1**	**11.4%**
yoy growth	*12.7%*	*12.9%*	*12.3%*	*11.5%*	*10.5%*	
Vulnerability Assessment	**2.1**	**2.4**	**2.6**	**3.0**	**3.3**	**12.3%**
yoy growth	*13.1%*	*14.4%*	*12.5%*	*12.4%*	*12.0%*	
Corporate Endpoint Managed Security Services - Jefferies Estimate	**3.6**	**4.2**	**4.8**	**5.4**	**6.1**	**12.9%**
yoy growth	*18.0%*	*16.6%*	*13.8%*	*12.8%*	*12.1%*	
Total Managed Security Services	21.1	24.3	27.9	31.8	36.0	14.0%
yoy growth	*15.3%*	*15.1%*	*14.8%*	*14.1%*	*13.2%*	
IT Asset Management	**2.0**	**2.2**	**2.2**	**2.1**	**2.2**	**-0.4%**
yoy growth		*10.0%*	*-2.6%*	*-1.0%*	*2.4%*	
Cloud Workload Security (1)	**7.7**	**8.3**	**8.3**	**8.5**	**9.1**	**3.5%**
yoy growth	*39.9%*	*6.8%*	*0.7%*	*2.4%*	*7.5%*	
Jefferies Estimate of Crowdstrike's Total Addressable Market	**30.7**	**33.6**	**35.5**	**37.8**	**40.6**	**6.5%**
yoy growth	*45.2%*	*9.3%*	*5.8%*	*6.2%*	*7.5%*	
Crowdstrike revenue, Jefferies est. (in millions of $) (2)	249.8	481.4	857.6	1,279.8	1,697.1	52.2%
yoy growth	*110.4%*	*92.7%*	*78.1%*	*49.2%*	*32.6%*	
% of TAM	*0.8%*	*1.4%*	*2.4%*	*3.4%*	*4.2%*	

(1) Cloud Workload Security estimate based on IDC forecasts for Application Development and Deployment and System Infrastructure Software markets multiplied by 5.7% cloud security spend allocation

(2) We show the closest corresponding fiscal year for Crowdstrike (January FY); for example, Crowdstrike's F2019 compared to our calendar 2018 market size estimates.

Source: Jefferies, IDC

Mimecast (MIME) $3.4B Market Cap, Downgrading to Hold from Buy, $55 PT from $50, Becoming a Show Me Story

Thesis. Mimecast is pursuing a large opportunity to secure, archive, and ensure the lifeblood of organizations (email) but growth rates and business metrics have slowed down given the pandemic and the company continues to face competitive (Microsoft) concerns as well as see impact related to FX greater than any other company we cover. We would become more constructive with improved execution and new logo additions increasing our confidence in rev acceleration to warrant multiple expansion.

Slowing Business metrics

- **New Logos Added –** Have added 5-600 new logos the past 2 Qs vs 800-1,200 each Q last year likely impacted by the pandemic
- **Constant Currency Growth –** MIME growth has decelerated from 32% in FY19 to latest guidance of 15-16% for F3Q21

Lack of Near-Term Driver. Remains a great company with strong contiguous technology solution but lacks share catalysts in near term

- The email security market is sometimes considered as a relatively mature and saturated market resulting in modest market growth.

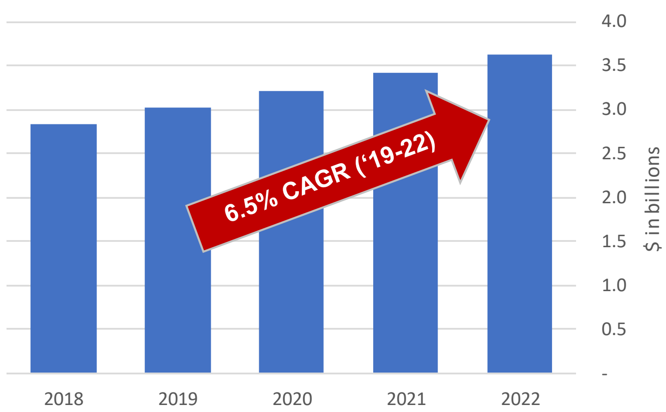
Pandemic Overhang. Strong competition with the ever-looming challenge of Microsoft's Email security being "good enough" which has delayed purchasing decisions

FX Exposure. High FX exposure often leads to variability in results (mitigated perhaps by the company's commentary on cc growth)

Jefferies vs. The Street. For CY21, we model total revenue of $564.9M vs consensus of $573.7M and non-GAAP operating margins of 18.6% vs consensus of 15.5%.

Valuation. MIME trades at 6x EV/NTM Recurring Revenue which we believe is fair given the mid teens growth rates. Compares to 7x for SWI (9% rev growth) and 8x for MSP (12% rev growth).

Messaging Market Forecast , 2018-2023E



Source: Jefferies, IDC

	F2018 (A)	F2019 (A)	F2020 (A)					F2021 (E)				
	Full Year	Full Year	Jun'19	Sep'19	Dec'19	Mar'20	Full Year	Jun'20	Sep'20A	Dec'20E	Mar'21E	Full Year
Total revenue	261.9	340.4	99.2	103.4	110.2	114.2	427.0	115.2	122.7	126.4	127.7	492.0
y/y change in constant currency (Jeff. Est.)	38%	32%	31%	29%	26%	26%	28%	21%	19%	16%	12%	17%
y/y FX impact (Jeff. Est.)	2.3%	-1.7%	-4.4%	-2.8%	-0.7%	-2.4%	-2.5%	-5.1%	-0.8%	-1.6%	-0.6%	-1.9%
y/y change in constant currency (Co. Provided)	38%	32%	32%	29%	27%	26%		21%	19%	15-16%		16-17%

Source: Jefferies

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

SolarWinds (SWI) $4.9B Market Cap, Downgrading to Hold from Buy, $15 PT from $18 Challenged Near Term as Hack Impact Plays Out

- **Expert Checks Indicate Hack Impact Might Be Worse Than Expected.**
  - We hosted three experts who commented on impact of the recent hack. One expert pointed out that churn rates could be as high as 50% for his customer base. **We believe this highlights that this hack could have a worse impact than we had initially forecasted. As such, we are moving to the sidelines till we get more clarity on the impact.**
  - Vendors that could take share include ExtraHop, CA, and Riverbed. **The reputational damage could be greater than our initial expectations. Experts indicate CIOs have begun to look for alternatives as they do not want to be associated with a vendor exposed to a breach.**
- **Why Our View Has Changed? How Are We Different From the Street?**
  - Note we published a detailed report highlighting our Sensitivity analysis and took down numbers for 2021E. **We refreshed the scenario analysis to incorporate higher churn estimates and believe the impact in the base case could be ~$200M if the 50% churn estimate were true for the customer base.**
  - **We are not lowering estimates further since SWI is set to report earnings in a few weeks. Note we did lower our '21 rev. ests. by $102M to $1.015B (9%) and our '22 rev. ests. by $46M to $1.105B (4%). We also lowered our 2021 EBITDA est. by $75M to $471M (14%).**
  - Note other Street models have yet to incorporate any impact from the hack. We are forecasting 0% growth in 2021 vs. 9% for Street and 9% growth in 2022 vs. 9% for Street.
- **Stock On Sale But Will Be Challenged Near Term.**
  - Using our numbers, we note that SWI trades at a 49% discount to its comp set (6.2x '21E revs. vs. comps at 12.1x). Additionally, on an SOTP basis the company trades at a 29% discount compared to its fair value. However, we believe there is no catalyst to drive the stock in the near term.

SWI Revenue Impact Scenario 2 – Assuming Higher Churn Levels and 15% Federal Business

Scenario II: Assuming Federal Business in 15%

SWI Revenue Impact Scenarios in 2021E (in $M)							
	Federal Business Churn Estimates						
Commercial + Other Churn	50%	55%	60%	65%	70%	75%	80%
35%	-$170	-$174	-$177	-$181	-$184	-$188	-$191
40%	-$190	-$193	-$197	-$200	-$204	-$207	-$210
45%	-$209	-$213	-$216	-$220	-$223	-$226	-$230
50%	-$229	-$232	-$236	-$239	-$242	-$246	-$249
55%	-$248	-$252	-$255	-$258	-$262	-$265	-$269
60%	-$268	-$271	-$274	-$278	-$281	-$285	-$288
65%	-$287	-$290	-$294	-$297	-$301	-$304	-$308

Source: Jefferies

SWI SOTP Analysis

Sum of the Parts Analysis	FY21e revs ($Mn)	multiple	EV ($Mn)	footnotes
MSP Business	$ 357	7.6	$ 2,715	* assume same multiple as other public MSP; $300M run rate in 2020 and assume it rebounds to high teens growth in 2021
Core IT Business	$ 658	8.0	$ 5,250	*looking at comp group of NEWR, SUMO, and DT trade at an avg. of 11.4x 2021E rev. Discounted 30% for lower growth profile, but higher profitability and cash profile
Total revenues	$ 1,015			
		SOTP total EV	$ 7,964	
		Net Debt	1,480	
		SOTP mkt cap	6,484	
		current market cap	$ 4,583	
		SOTP value premium	41%	
		current market discount	-29%	

Source: Jefferies, FactSet

AWS Widely Acknowledged as the Clear Leader in Public Cloud

- At ~60% share among the "Big 3" vendors, AWS is the de facto standard for public Cloud
  - AWS is poised to exceed $50Bn in revenues in 2021
- However, challengers Azure and GCP are growing faster and gradually chipping away
  - Azure should pass the $30Bn revenue mark in 2021, while GCP should approach $10Bn
- The industry migration to Cloud is still in the early earnings as public Cloud revenues only represent a single digit % of the ~$4 Tn in global IT spend.

Snapshot of Big 3 Public Cloud Vendors

	Amazon (AWS)			Microsoft (Azure)			Google (GCP)		
	2019	2020E	2021E	2019	2020E	2021E	2019	2020E	2021E
Cloud Rev ($B)	$35.0	$45.4	$57.3	$16.5	$24.4	$33.3	$4.3	$6.6	$9.7
Cloud Rev Growth	37%	30%	26%	64%	48%	37%	70%	53%	46%
*Market Share	63%	59%	57%	29%	32%	33%	8%	9%	10%
CAPEX ($B)	$26.4	$40.2	$38.9	$13.9	$15.7	$19.2	$23.5	$22.8	$26.9
CAPEX growth	20%	52%	(3%)	20%	13%	22%	(6%)	(3%)	18%
Customers	Netflix, GE, Salesforce, Expedia, Adobe, Intuit, Kellogg's, Philips, BP			Walmart, Ford, NBC, Geico, T-Mobile, Daimler			Snap, Home Depot, Colgate, Disney, eBay, Spotify		
Other Key Metrics	77 Availability Zones within 24 geographic regions			Available in 140 countries and 60 geographic regions			73 Availability Zones within 24 regions in 17 countries. Available in 200+ countries & territories.		

Notes:
- Market share is among the "Big 3" public Cloud vendors (AWS, Azure, GCP)
- Google does not break out Google Cloud revenues between Workspace/G Suite (apps) and GCP (infrastructure). We estimate GCP represented approx. 51% of total Google Cloud revs in FY20. GCP's growth rate has been meaningfully higher than Google Cloud overall for at least the 4 quarters of 4Q19-3Q20. The above table only includes GCP.

Source: Company data, FactSet, Jefferies estimates

Catalyst Calendar for 2021

Ticker	Date(s)	Catalyst
CTXS	January 12-14, 19-21	Field Kickoff
PLTR	January 26	Live Demo Day
MIME	January 26	SecOps Virtual 2021
DT	February 8-11	Perform 2021
ADBE	April 27-28	Adobe Summit - The Digital Experience Conference
-	May 17-20	RSA Conference 2021
SNOW	June 7-10	Snowflake Summit 2021
WDAY	August 30 - September 2	Workday Rising
VMW	August 30 - September 2	VMworld 2021
SPLK	October 18-21	.conf21

Source: Jefferies, company data.

Top Picks for Samad Samana

Large Cap

- **Shopify (SHOP) – PT: $1,375**
  - We believe SHOP's LT prospects are brighter than ever with a path to $10B in revenue over the coming years. We are positive on SHOP's ability to drive the GMV take rate higher through new product initiatives such as Balance and Fulfillment. We also believe GMV will continue to benefit from a sustained shift to e-commerce transactions and renewed stimulus could drive NT GMV upside. Additionally, in 2020, the sharp increase in GMV has unveiled the inherent leverage in SHOP's model and we believe the results have quieted the debate on whether SHOP can achieve >20% op margin at scale.
- **ServiceNow (NOW) – PT: $625**
  - NOW has the rare combo of best-in-class growth and margins in large cap software. We are positive on NOW given its ability sustain this high growth/profitability combo due to ongoing digital transformation among enterprises, solid execution, the tailwind from emerging products and available runway in its core ITSM market. NOW most recently estimated its TAM at $150B implying <4% penetration. In addition to momentum within CSM and HR products, new products incl. Finance Operations Mgmt, DevOps, and Pro SKUs should drive material new billings over the medium-term. We believe NOW can sustain at least 20%+ sub revenue growth while driving margin expansion over the next few years.
- **RingCentral (RNG) – PT: $450**
  - RNG is one of the leaders in the fast growing UCaaS market and is well-positioned to continue capturing an outsized portion of the industry's growth. We believe the business can grow sub revenues by 25%+ (and potentially >30%) for the next several years while gradually improving operating margins. Unique distribution partnerships with Avaya, Alcatel-Lucent, Atos, and Vodafone provide RNG with a privileged competitive positioning with 185M of the world's 400M UC lines. These partnerships are reinforce of our bullish thesis and believe they can power strong future growth. Additionally, new products like Video and Glip Pro and int'l expansion should help sustain healthy growth for years.

Small/Mid Cap

- **NICE Systems (NICE) – PT: $320**
  - We believe NICE remains underappreciated even after a solid 2020. The business continues to gain momentum and is well-positioned to benefit from lasting COVID tailwinds as contact centers accelerate their transition to the cloud. Cloud revenue growth accelerated throughout 2020 to >30% and we expect this momentum to continue into 2021 and beyond. CXone is advantageously positioned to capture an outsized portion of the on-prem to cloud migration as a full-stack provider (routing, WFO, and analytics). NICE is able to leverage their legacy distribution channels, existing customer relationships, and brand name in the cloud.
- **HubSpot (HUBS) – PT: $465**
  - HubSpot delivered >30% new bookings growth in 1H20, despite notable macro headwinds. We believe an improving macro backdrop, an inflection in enterprise demand and strong execution will allow HubSpot to sustain healthy growth in 2021. We expect HUBS to achieve market share gains upmarket, as the 2020 reboots of the Marketing and Sales Hub Enterprise SKUs have leveled up the product suite and these investments in enterprise products will begin to pay dividends in 2021. Over the medium-term HubSpot should continue to benefit from the introduction of multiple new hubs (i.e., new major applications) and derive value from its growing ecosystem of partners.
- **PAR Tech (PAR) – PT: $75**
  - PAR navigated the pandemic well and is well positioned to benefit from the ensuing tailwinds as QSRs make progress on re-opening. PAR is entering 2021 with a full head of steam with strong Brink bookings momentum and a record backlog of installations. We expect the next phase of PAR's growth to be driven by improved ARPU growth as the company rolls out new initiatives such as PAR Payments which could provide a meaningful boost to ARR and ARPU growth in 2021. Over the medium term, PAR should benefit from increased secular tailwinds as digital tools have gained new importance and relevancy to the restaurant industry in 2020, pulling forward years of demand.

Top Picks for Europe

Large Cap

- **Amadeus (AMS SM) BUY – Price: €57.82; PT: €69, 19% upside, Market Cap: €26B**
  - Amadeus is a leading vendor of software and distribution solutions to the airline industry, with 2019 revenue of €5bn+ they operate in an addressable market worth €30bn. The largest segments being GDS (c.€10bn) and airline IT (c.€8bn). COVID-19 has heavily impacted Amadeus' 2020 revenue as the majority of Amadeus' revenue is linked to volumes. The company is now positioned to benefit from a recovery in air travel volumes (vaccine to act as tailwind). With just under €3 billion in cash and €550m in annual run-rate costs implemented, the company is well positioned. Trading at c.35x FY22EV/FCF shares are above the European software average of 33x, however growth is likely to outpace the sector as travel volumes recover – our 2022 estimates imply travel volumes levels approx. 25% below 2019.

- **SAP (SAP GR) BUY – Price: €105.40 PT: €132, 25% upside, Market Cap: €124B**
  - SAP is benefiting from the S/4HANA upgrade cycle, resulting in a multi-billion Euro incremental revenue tailwind as the company executes on its migration plan. However, SAP has recently announced a renewed focus on a full transition to cloud, impact near-term operating margin as license revenue declines and a step-up in R&D spending. However, the cloud conversation should be highly accretive to SAP's results in future years. We expect the stock to benefit from any additional proof-points around the success of the transition to cloud. SAP trades at 5x EV/2021 revenue, 27x EV/ 2021 FCF and at 6.9x EV/LTM recurring revenue, below the European software median.

Mid / Small Cap

- **Avast (AVST LN) BUY – Price: £5.35; PT: £6.85, Market Cap: £5.5B:**
  - Consumer endpoint security for free - Avast continues to sustain double digit growth and a highly profitable business model. Having executed since its 2018 IPO, the company faces a capital allocation decision as it achieves its leverage floor, creating potential for additional shareholder returns. Most recently Avast announced the launch of a new proposition called Avast One, setting the company up to improve LTV per customer, through the simplification of its product offering and increased customer engagement.

- **Blue Prism (PRSM LN) BUY – Price: £17.90; PT: £20.40, Market Cap: £1.9B:**
  - A leading Robotic Process Automation (RPA) vendor capitalizing on the fast-growing greenfield market opportunity in front of it; Blue Prism is likely to benefit from a re-acceleration in infrastructure software and RPA software spending in 2021.

- **LINK Mobility (LINK NO) BUY – Price: 49.51kr; PT: 64.00kr, Market Cap: 18.2krB:**
  - LINK Mobility has established itself as a leading CPaaS vendor and continues to focus on a pan-European strategy. The company enables enterprises to address the growing demand of consumers wanting to communicate through messaging solutions. LINK Mobility will expand its go-to-market following an established playbook and will continue to drive in-market consolidation; both enable increased scale and margin upside.

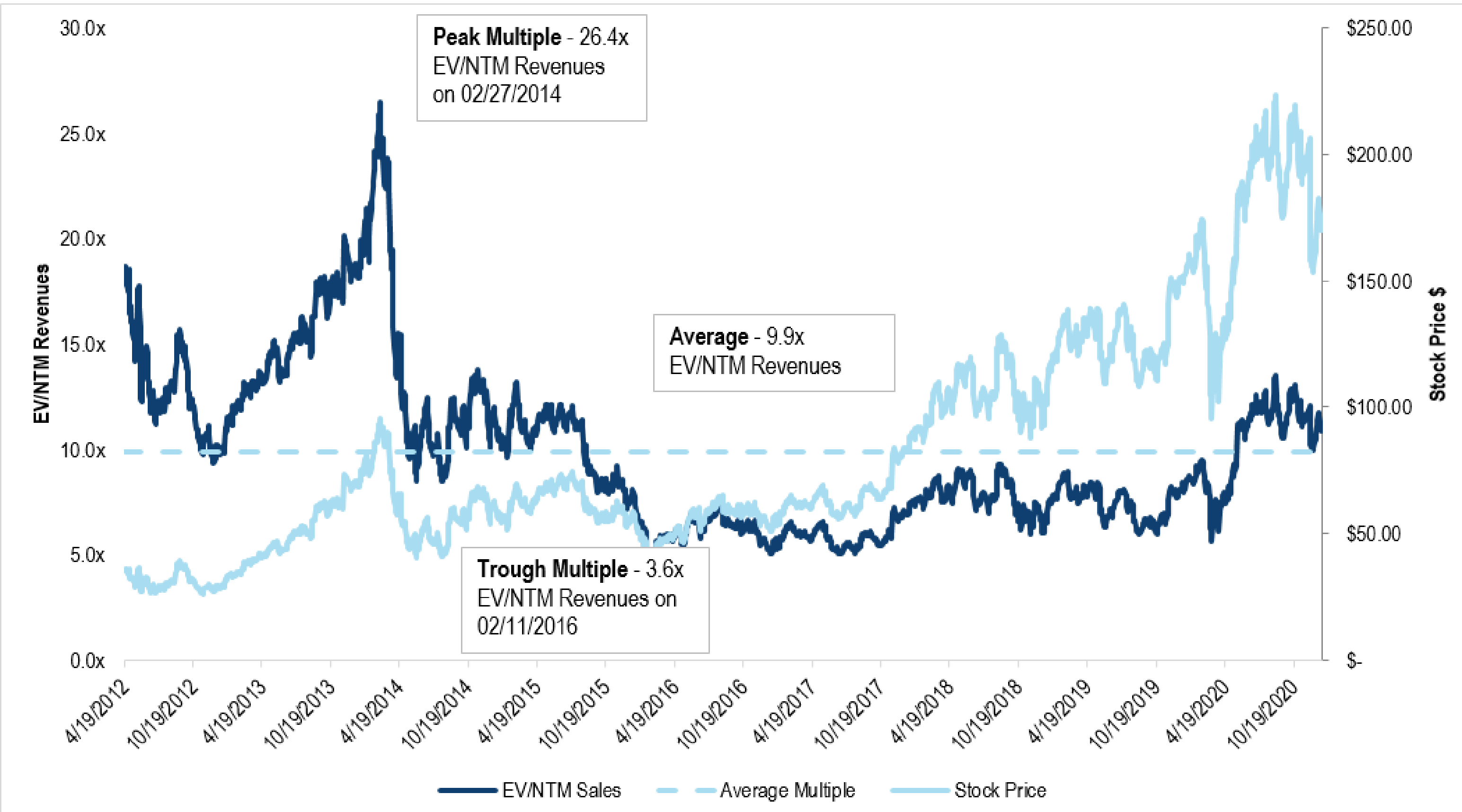
- **Softcat (SCT LN) BUY – Price: £15.33; PT: £16.40, Market Cap: £3.0B:**
  - A leading UK reseller that can sustain its current pace of earnings growth as initiatives to increase wallet share and a step up in employee productivity drive a 20%+ increase to EBIT over the next 3 years.

Valuation Case Studies

Valuation 101 – 25x does not last for long

SPLK Valuation Multiple Peaked at 26.4x in 2014; Stock Price Recovered in 4 years

SPLK Multiple and Stock Price from IPO to Present

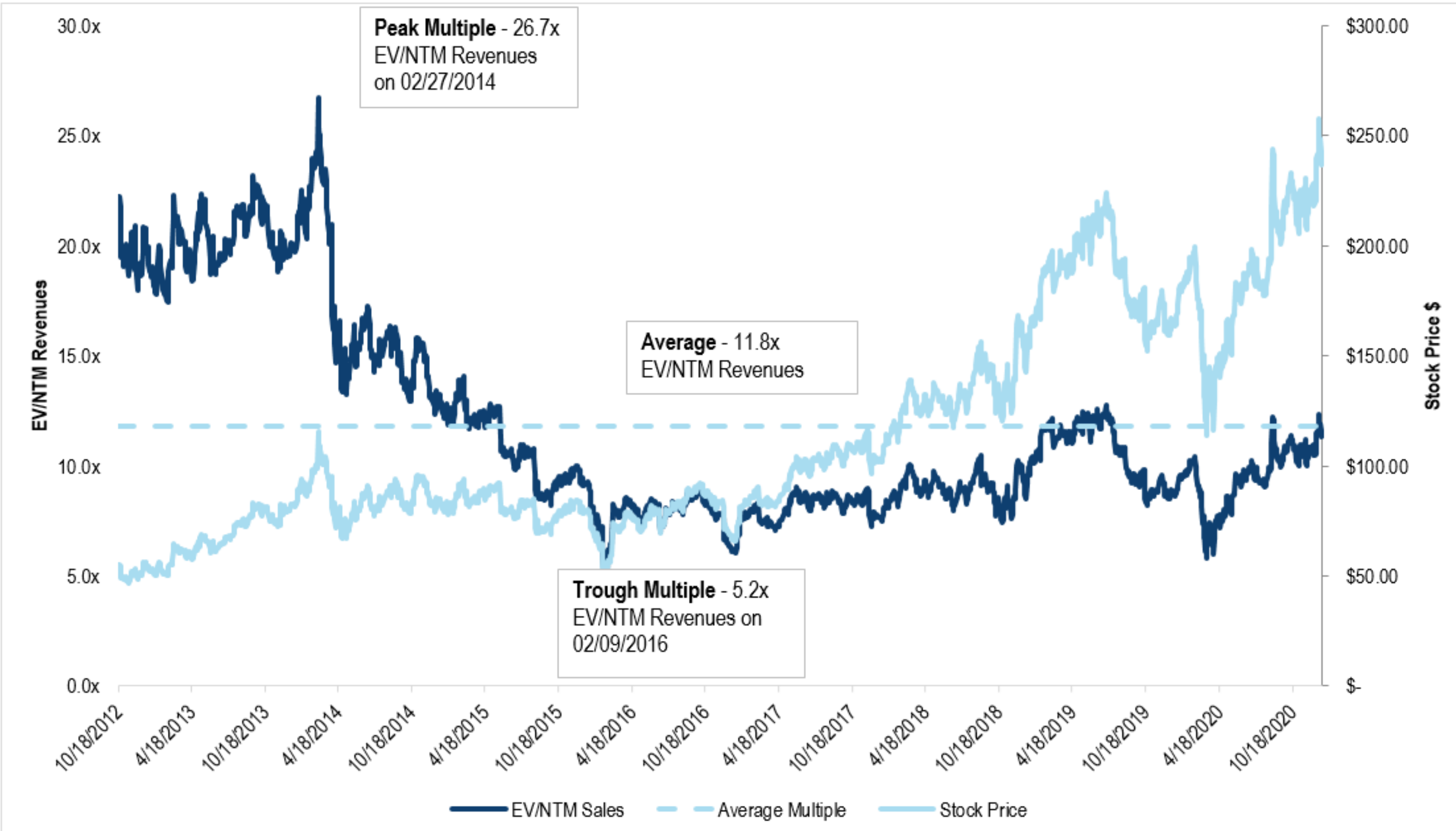


Sources: Jefferies, FactSet Note: priced as of 12-31-20.

Valuation 101 – 25x does not last for long

WDAY Valuation Multiple Peaked at 26.7x in 2014; Stock Price Recovered in 3.5 years

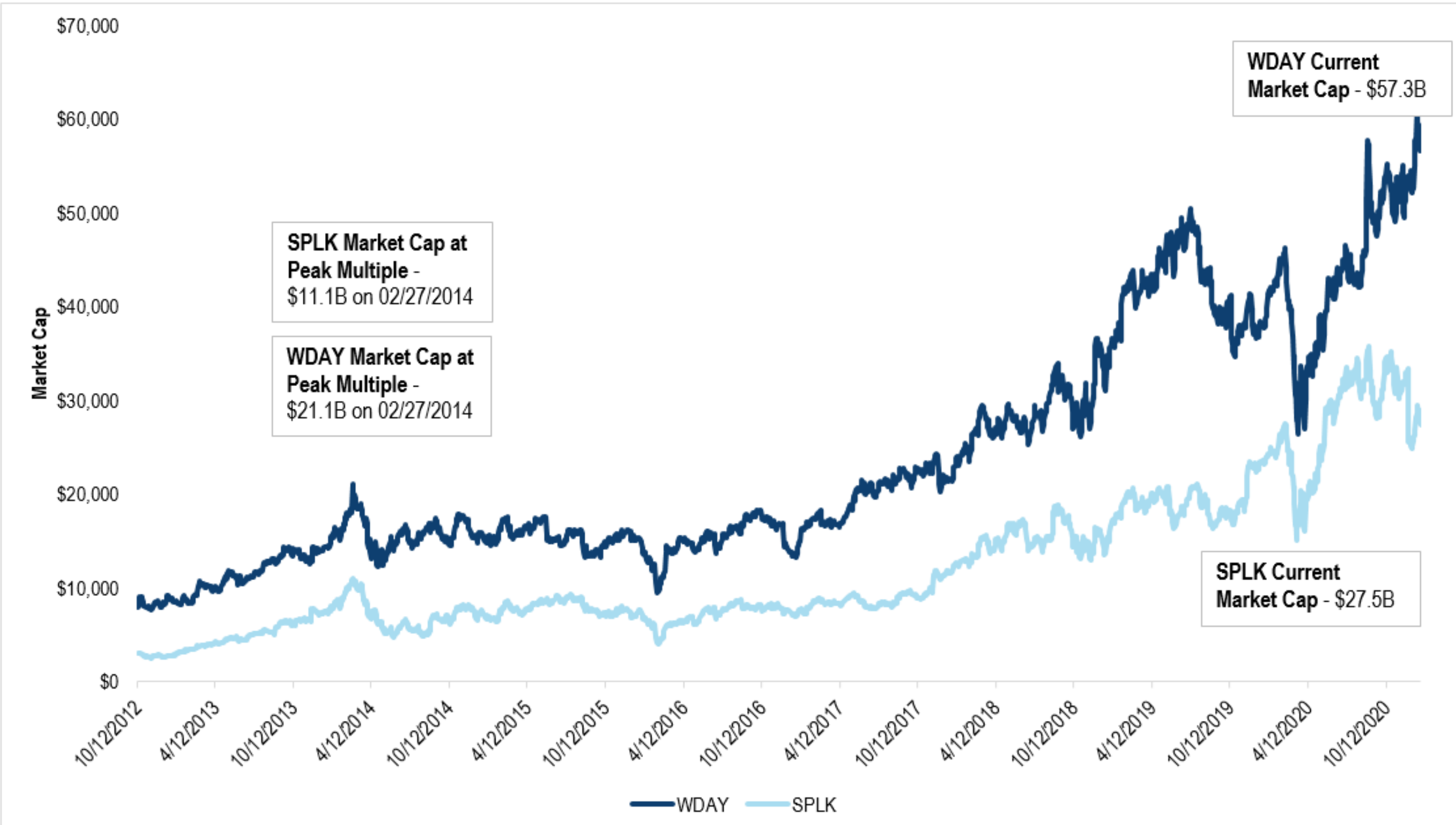
WDAY Multiple and Stock Price from IPO to Present



Sources: Jefferies, FactSet Note: priced as of 12-31-20.

Market Caps for SPLK/WDAY

Market Caps for WDAY and SPLK when their multiples peaked in 2014; Market Caps Recovered in 3.5 years



Sources: Jefferies, FactSet Note: priced as of 12-31-20.

A Tale of Two 20%+ Growers – CRM and ADBE

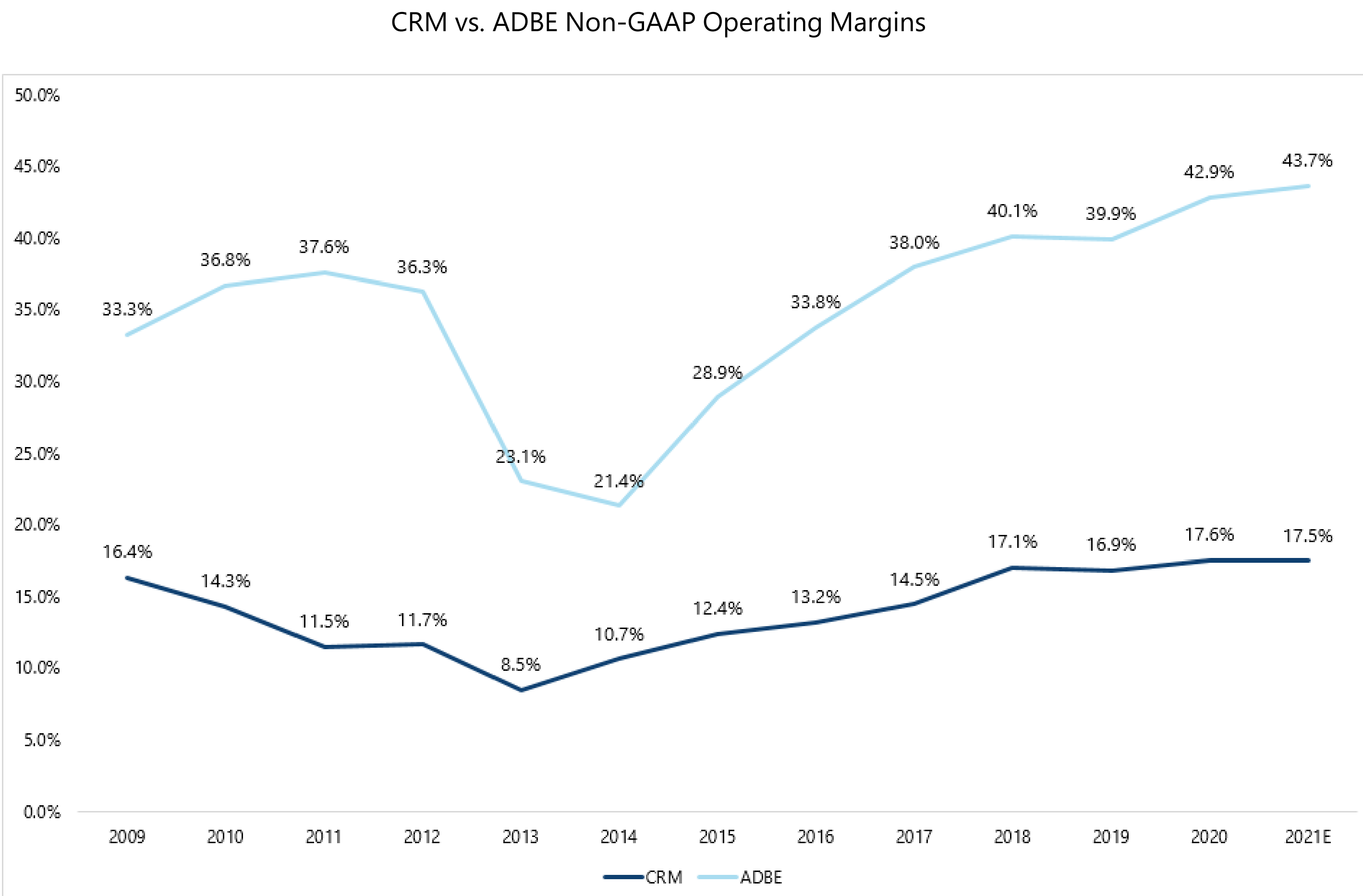
Why has CRM lagged ADBE over the past five years, despite their similar growth profiles?

	YTD	3YR	5YR	10YR
CRM	37%	109%	190%	556%
ADBE	52%	173%	444%	1487%
ORCL	22%	41%	95%	135%
MSFT	41%	166%	345%	896%
VMW	-8%	28%	198%	80%
WDAY	46%	119%	208%	NA
INTU	45%	140%	322%	746%
IGV	52%	124%	255%	519%
COMP	44%	88%	177%	438%
Large Cap Average (Ex- CRM)	33%	111%	269%	669%
Overperformance (Under) relative to IGV	-15%	-15%	-65%	37%
Overperformance (Under) relative to ADBE	-15%	-64%	-254%	-931%
Overperformance (Under) relative to Large Cap Avg	4%	-3%	-79%	-113%

Sources: Jefferies, FactSet Note: priced as of market close on 12-31-20.

A Tale of Two 20%+ Growers – CRM and ADBE

The answer lies in the operating margins – ADBE's non-GAAP operating margins are a step function higher than CRM's (40%+ vs 17%)



Sources: Jefferies, Company Data

Infrastructure – Best Ways to Play

How to Play:

- **Splunk** – Buy, $240 PT, 45% potential upside to PT – Splunk remains well positioned as a leader in the log management and observability spaces among ITOps and security use cases. We think recent sales execution issues are transient and believe that the platform is highly competitive in the large enterprise. We see the pricing and cloud transitions as steps in the right direction. Staying positive on category leaders through the transition has proved to be an a very profitable strategy for investors and we expect the same of Splunk. At 11x CY21 revs, we think the stock is attractively priced given 25%+ growth rates at scale. Dynatrace trades at 16x (20% growth) CY21 revs.

- **Datadog** – Buy, $125 PT, 25% upside to PT – Datadog is well positioned in the IT infrastructure monitoring market and management is focusing its product strategy on expanding to adjacent layers in the monitoring stack, thereby expanding the TAM to $35B. In addition, we see a very efficient go-to-market model, which coupled with 35%+ growth supports a best-in-class Rule of 40 score. Current premium valuation of 41x CY21 revs is warranted given growth sustainability and potential upside on better cross-sell.

- **Palantir** – Buy, $30 PT, 19% potential upside to PT – We like the unique nature of Palantir's offering for high-end data analytics use cases. We see potential for 30%+ growth over the next couple of years at well over $1B rev scale alongside expanding profitability. As such, we think the asset deserves a premium valuation vs. high-growth peers. The mid-late February lock-up expiration bears monitoring in the near-term given the significant potential expansion in float.

- **Elastic** – Buy, $175 PT, 15% potential upside to PT – We believe Elastic has a large market opportunity and the product portfolio continues to expand to adjacent workloads. We like the company's focus on the core observability, security and enterprise search markets and think the market is large enough to support multiple players at significant scale. Execution has improved significantly and current guidance remains conservative. At around 22x CY21 revenue ests. we think valuation is reasonable vs. DDOG at 41x.

Microsoft (MSFT) $1.7T Market Cap, Buy with $260 PT

Investor Debate: Microsoft has been an excellent company and stock but there remain questions of whether it can maintain healthy double-digit growth at this scale. We think investors are asking what is the next major growth driver. We see opportunities in SaaS, IaaS and in PaaS.

- Bulls Will Say…
  - Microsoft, outside of its Windows OEM business, is largely composed of recurring revenue streams which provides meaningful visibility into future results. A company this scale growing double-digits with this level of predictability is impressive. This is further supported by the company's reported RPO of $107B in the most recent Q (24% yoy growth) which the company expects to recognize approximately 50% of this revenue in the next 12 months.
  - Microsoft we believe is uniquely positioned to benefit from the growth of both the IaaS/PaaS market as well as the SaaS market. The majority of Microsoft's growth today comes from these verticals, which industry experts expect to grow significantly. Gartner projects an approximately 23% CAGR in IaaS/PaaS revenues from $82 billion in 2019 to $153 billion in 2022. Separately, Gartner estimates that the SaaS market will grow at an 11% CAGR from $102 billion 2019 to $141 billion in 2022. Bulls therefore expect Microsoft can sustain strong growth for many years, particularly impressive given the size of the business today.
- Bears Will Say…
  - Strength of Windows may not persist with a weaker-than-expected PC ecosystem
  - Azure may never see margins similar to AWS at scale
- Valuation
  - MSFT trades at 9.8x EV/2021E Revenue.
  - PT of $260 based on 37x FY2021 EPS; Large cap comps median is 43x

Jeff take…

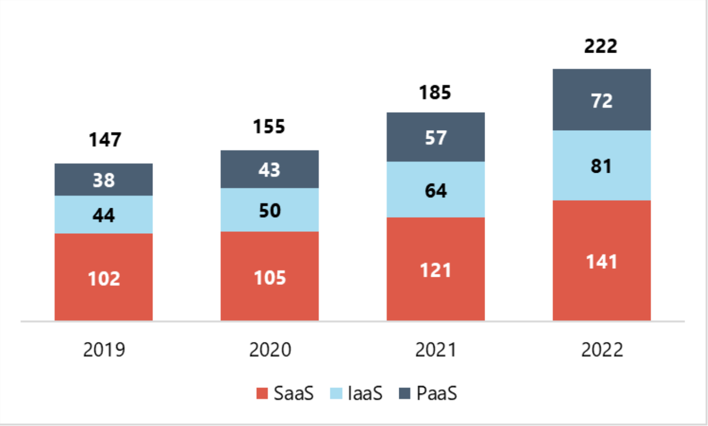
- We believe that Microsoft is a large diversified business with excellent visibility that has clear line of sight into double-digit revenue growth for the foreseeable future. The stock should be supported by several things such as: 1) safest large cap investment option, 2) multiple growth drivers, 3) levered to favorable secular trends, 4) ensuing profitability and free cash flow from this strong revenue growth, and 5) continuing return of capital.
- Solid cash flow and a strong balance sheet allow for regular dividend increases (last by 10% on Sept 20) and meaningful stock repurchases.

MSFT Performance

MSFT	FY18A	FY19A	FY20A	FY21E	FY22E
Total revenue ($M)	110,360	125,843	143,015	158,340	175,878
y/y growth	14%	14%	14%	11%	11%
EPS	$3.88	$4.75	$5.76	$6.77	$7.47
y/y growth	18%	22%	21%	18%	10%
FCF ($M)	31,119	37,677	45,172	48,265	53,535
y/y growth	1%	21%	20%	7%	11%

Sources: Jefferies, Numbers are Street estimates according to FactSet

IaaS + PaaS + SaaS Cloud Market ($, Billions)



Sources: Jefferies, Gartner

All statements in this report attributable to Gartner represent Jefferies interpretation of data, research opinion or viewpoints published as part of a syndicated subscription service by Gartner, Inc., and have not been reviewed by Gartner. Each Gartner publication speaks as of its original publication date. The opinions expressed in Gartner publications are not representations of fact and are subject to change without notice.

Oracle (ORCL) $193B Market Cap, Hold with $65 PT

Investor Debate: Despite its dominance for high-end, on-premise RDBMS workloads, Oracle has been a laggard in the infrastructure-as-a-service market, which has weighed on growth as workloads migrate to the cloud. Cloud ERP and HCM momentum appear healthy, however, the mix of this business is not large enough to move the growth needle meaningfully. We see limited upside potential given current valuation of 19x CY21 FCF (on -2% y/y growth). Maintain Hold and $65 PT.

- Bulls Will Say…
  - Oracle maintains leading market share for high-end, on-premise enterprise RDBMS workloads (despite share losses). There is potential for a database product cycle to accelerate top-line growth as customers potentially deploy DBaaS for net new workloads.
  - In addition to its NetSuite ERP offering for the mid-market, Oracle's Fusion ERP product represents a large opportunity as ERP deployments begin to migrate to the cloud.
  - Management has invested to grow the cloud business (which carries lower gross margins initially though holds the potential to scale over time), compressing operating margins to around 45% in FY20. However, margins have expanded during the pandemic.

- Bears Will Say…
  - Oracle has fallen behind in the cloud infrastructure market amid a migration of existing workloads as well as the net new workload growth in that segment. Amazon Web Services and Azure have been the primary beneficiaries of this trend, thereby, leading to market share loss for Oracle (despite the company largely maintaining its existing base of workloads). Infrastructure makes up 65% of software revenues and remains at risk.
  - Oracle faces competition from next-gen vendors such as Workday in HCM (and financials over time) as customers migrate their back-office applications to the cloud. However, the vast majority of Fusion ERP and HCM strength thus far has been driven by net new customer additions. As its on-premise installed base migrates over time, there is risk that these very customers evaluate and purchase competitive offerings.
  - Management repurchased $19 billion of stock in FY20. With muted top-line growth, margin expansion has largely been driven by cost rationalization. We remain wary of double-digit EPS growth given the reliance on cost measures and buybacks.

- Valuation
  - ORCL trades at 19x our CY21 FCF estimate on y/y growth of -2%

- **Jeff take…**
  - We acknowledge the stickiness of high-end database workloads and the significant profitability of maintenance revenues. In a tougher spending environment, cash flow generation and valuation are likely to support the stock to the downside. However, given current fundamental trends, we find it hard to argue for material multiple expansion.

ORCL	FY19A	FY20A	FY21E	FY22E	FY23E
Total Revenue	39,526	39,067	40,049	41,104	42,431
y/y growth	*0%*	*-1%*	*3%*	*3%*	*3%*
Non-GAAP EPS	3.52	3.85	4.36	4.69	5.09
y/y growth	*15%*	*9%*	*13%*	*8%*	*9%*
Total Billings	39,696	38,699	40,100	41,150	42,175
y/y growth	*na*	*-3%*	*4%*	*3%*	*2%*
Free Cash Flow	12,962	11,671	11,900	12,684	13,785
y/y growth	*na*	*-10%*	*2%*	*7%*	*9%*
% margin	*33%*	*30%*	*30%*	*31%*	*32%*

Source: FactSet, Jefferies

Support for the MSFT and ORCL pair trade

	YTD	1YR	3YR	5YR	10YR
MSFT	-1%	41%	160%	361%	866%
ORCL	-2%	20%	38%	96%	135%
IGV	0%	49%	122%	270%	516%
COMP	2%	45%	89%	194%	441%

Source: FactSet, Jefferies
Note: IGV is the Software Index
Note: priced as of market close on 1-8-21.

VMware (VMW) $60B Market Cap, Hold

Investor Debate: Though VMW has evolved its story over the past couple of years, the current environment remains challenging for on-premise focused vendors. We are constructive on the company's medium- to long-term prospects as it evolves to deliver a broader portfolio of products to its significant installed base but over the next 3 months, we see limited upside to consensus cash flow expectations given the current COVID pressures. Current 16x CY21 FCF seems balanced.

- Bulls Will Say…
  - 2-3 years ago, VMware faced some lingering uncertainty as to its relevance in a cloud-first world. As it became more apparent that hybrid clouds would become the most traversed path to the public cloud for the enterprise, we began to get more visibility into VMware's product strategy in light of migration of workloads. Although the secular risk persists, VMware's Build-Run-Manage-Connect-Protect framework provides more clarity.
  - The growth drivers outside of compute continue to deliver strong results. NSX has grown to become a business with $1.3 billion in bookings and 10,000 customers as of the end of FY19; vSAN was a $600 million run-rate bookings business at the end of FY18 and has continued to grow rapidly in FY19. Compute can potentially re-accelerate with vSphere 7.
  - VMW achieved non-GAAP operating margin of 33.9% in FY19 and 30.2% for FY20; FY21 is going to be impacted by M&A expenses and investments in Sub/SaaS. Greater expansion potential is possible as the company laps these near-term costs.

- Bears Will Say…
  - While customers primarily consume the core offerings on a license plus maintenance basis, some products in the portfolio are seeing uptake on a subscription/SaaS basis. However, the long-term trajectory remains unclear at this point in time.
  - Given that the company primarily sells software on a license plus maintenance basis today, there can be lumpiness around contract renewal cycles. In particular, enterprise agreements (EAs) where customers pay three years of maintenance up-front can have a meaningful impact on cash flow as well as license revenue growth upon renewal.
  - Dell continues to own a majority stake in VMware today. While Dell has indicated a potential tax-free spin transaction, this is unlikely to occur prior to September 2021.

- Valuation & Buybacks
  - VMW trades at 16x our CY21 FCF estimate. However, we would turn more constructive on signs of cash flow growth acceleration beyond Street estimates in CY21.

- **Jeff take…**
  - We like the clarity from management on the company plans to position itself in a hybrid cloud world. However, the current environment is likely to impair near-term visibility given that license is 25% of total revenue. Fundamentals could improve in 2H but unclear.

VMW	FY19A	FY20A	FY21E	FY22E	FY23E
Total Revenue	9,614	10,811	11,705	12,693	13,868
y/y growth	*na*	*12%*	*8%*	*8%*	*9%*
Total Billings	na	12,681	12,644	13,735	14,966
y/y growth	*na*	*na*	*0%*	*9%*	*9%*
Free Cash Flow	3,418	3,593	3,457	3,892	4,355
y/y growth	*na*	*5%*	*-4%*	*13%*	*12%*
% margin	*36%*	*33%*	*30%*	*31%*	*31%*

Source: FactSet, Jefferies

Splunk (SPLK) $28B Market Cap, Top Mid-Cap Pick

Investor Debate: Splunk remains well positioned as a leader at scale in the log management space with ongoing success in workload penetration for ITOM, application delivery and SIEM use cases. Management is fully committed to transitioning the company toward a purely renewable model). In our experience, staying positive on category leaders through the transition has proved to be a very profitable strategy for investors and we expect the same of Splunk. We think recent sales execution issues are transitory and believe in the competitive nature of Splunk's platform for large enterprises. At 11x CY21 revs, we think the stock is attractively priced given 20%+ growth rates at scale.

- Bulls Will Say…
  - Splunk is a category leader in the log management space and customers are adopting the platform as use cases of the platform expand over time. Demand trends remain strong with cross-sell opportunities available in observability.
  - An ongoing pushback among customers has been the TCO as the product is implemented for multiple use cases and ingestion levels grow. Over the years, the company has rolled out pricing schemes that provide flexibility in consumption and the recent initiatives continue to do that (e.g. predictive pricing and infrastructure-based pricing).
  - The company delivered around 14% non-GAAP operating margin in FY20 with margins negative in FY21 as a result of the transition. We think the model continues to scale from here, particularly as the company gets past the transition phase.

- Bears Will Say…
  - Given the pushback around Splunk's cost of ownership, customers have looked to competitive solutions, including the open-source Elastic offering. There are also a number of rapidly growing private companies that are expanding beyond application and infrastructure monitoring into log management.
  - After the discontinuation of perpetual licensing in FY20, the transition to a purely SaaS model is happening faster-than-expected, impacting n-t metrics. We think these are steps in the right direct and we model with cash flow leverage in FY22 (and onward).
  - The company's own Splunk Enterprise offering has seen adoption as an application performance monitoring (APM) tool by IT operations teams. SignalFx adds infrastructure performance monitoring (IPM) capabilities, particularly for cloud-native environments. The acquisition does introduce some execution risk to the story.

- Valuation
  - SPLK trades at 11x CY21 revs (with 20%+ growth). We expect significant cash flow growth once the transition is complete. Dynatrace trades at 16x CY21 revs and ESTC at 22x.

- **Jeff take…**
  - We like 20%+ growth at $2 billion+ scale. We see potential for a meaningfully larger and more profitable company in the coming years.

SPLK	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Total ARR	727	1,091	1,680	2,341	3,174	4,136
y/y growth	*na*	*50%*	*54%*	*39%*	*36%*	*30%*
y/y net adds	*na*	*364*	*589*	*661*	*833*	*962*
Free Cash Flow	241	274	(390)	(261)	86	609
y/y growth	*na*	*na*	*na*	*na*	*na*	*606%*

Source: FactSet, Jefferies

Elastic (ESTC) $15B Market Cap, Buy

Investor Debate: Elastic addresses a variety of use cases (search, logging, APM, SIEM and now endpoint security), enabling a large and growing TAM. We like the growth profile of end-markets with sustainability supported by the early stages of current penetration. Execution has improved and we see a path to FCF profitability in FY22. At around 22x the Street's CY21 total rev estimate (which we believe could prove conservative), the multiple compares with DDOG at 41x.

- Bulls Will Say…
  - TAM has grown to $78B in CY21 from $45B in CY18 as the product portfolio expands. After starting in search, the offering has expanded to APM, logs, SIEM, endpoint security (among others). The use case split is 1/3rd each between search, logging and APM/SIEM.
  - The company maintains a single, resource-based (i.e. per node) pricing model regardless of use cases, enabling relatively easy consumption upon expansion. This contrasts with competitor pricing models that vary by use cases – logs are priced based on amount of data ingested vs APM priced per host. Mgmt. believe this is a competitive differentiator.
  - Elastic leverages the open source community for its distribution model. This strategy results in what the company has referred to as "warm sales," where most paying customers were free users prior to finding value in paid.
  - Management expects to achieve positive FCF margin in FY22

- Bears Will Say…
  - Sales execution was choppy, however has improved in F3Q-F1Q21 with a rebound in revenue and billings growth rates.
  - GTM remains developer focused while business use case messaging needs to be better developed. This is related to the first point – funnel and sales execution need to evolve.
  - ESTC has the perception of being a jack-of-all-trades without specialization in any one. We see the rest of the industry driving toward the convergence of workloads on a single platform (DDOG, SPLK, DT included). Also, ESTC based on our recent survey result, ESTC is becoming easier/quicker to deploy at scale.

- Valuation
  - ESTC trades at 22x CY21 revs (with potential 30%+ growth). We think cons. growth estimates are very achievable with potential upside. While growth and profitability are better, DDOG trades at 41x.

- **Jeff take…**
  - We like the large end-markets, consistent pricing model and 30%+ potential growth rates over the next couple of years. With expectations reset, we think the set up is favorable.

ESTC	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E
Total Revenue	160	272	428	571	713	873
y/y growth	*81%*	*70%*	*57%*	*34%*	*25%*	*23%*
Total Billings	206	343	513	675	834	1,000
y/y growth	*80%*	*67%*	*49%*	*32%*	*24%*	*20%*
FCF Margin	-15%	-10%	-8%	-2%	2%	5%

Source: FactSet, Jefferies

Snowflake (SNOW) $109B Market Cap, Hold

Investor Debate: Snowflake has captured mindshare for cloud data warehouse management workloads. It has ambitions to expand beyond the data warehouse to become the enterprise data platform with use cases including Data Sharing/Exchange and Data Marketplace that extend beyond its core offering today. This could lead to growth in TAM much larger than the current $81B addressable market, spearheaded by an all-star management team with a proven track record of building from a base and expanding out. At 96x CY21 revs, the risk/reward does not seem very favorable and we await a better entry point.

- Bulls Will Say…
  - Snowflake is among the early leaders in the cloud data warehouse space and has seen attractive and sustainable revenue growth in the 100%+ range. Expanded use cases including Data Sharing/Exchange and execution on management's broader data strategy could propel growth rates to persist in the 75%+ range through CY23.
  - The company's unique cloud-based architectural design enables a consumption-based usage model, all the while separating storage charges from compute. This allows for price elasticity and workload flexibility, which we believe is particularly attractive to customers in the enterprise segment.
  - Snowflake's platform is designed to be cloud agnostic, enabling workloads to be instantiated across multiple public cloud providers and helping customers avoid vendor lock-in. This contrasts with data warehouses from the major public cloud vendors (AWS Redshift, GCP BigQuery, Azure Synapse) which either do not have multi-cloud capabilities or are not as mature as Snowflake's offering (BigQuery Omni).
  - The company is in good hands, led by a seasoned management team with a proven track record of growing software companies.
- Bears Will Say…
  - Snowflake's competitive advantage is diminishing as its peers add features/pricing models that compete more directly with the platform.
  - Limited visibility and potential lumpiness in revenue recognition due to the consumption-based nature of the business model makes it difficult to forecast growth.
  - Gross margins sit at a discount to its public cloud peers, given that the company relies on AWS/Azure/GCP for cloud infrastructure. These vendors are also its primary competitors, introducing an additional layer of competitive risk.
- Valuation
  - SNOW trades at 96x CY21 revs. (with 80%+ growth). While we believe that high growth rates can be sustained, we think that valuation is elevated at current levels and await a better entry point.
- **Jeff take…**
  - We like the broader data strategy and 60%+ potential growth rates over the next few years. We see potential for significant TAM expansion.

Bull	**FY21E**	**FY22E**	**FY23E**	**FY24E**
Total Revenue ($M)	609	1,218	2,314	4,050
y/y growth	130%	100%	90%	75%
Target Valuation				
Ent. Value ($B)	98,956	109,612	114,545	121,487
Ent. Value / Revenue	163x	90x	50x	30x
Growth Adj.	1.25x	0.90x	0.55x	0.40x
Current Valuation				
Ent. Value ($B)	104,229	104,229	104,229	104,229
Ent. Value / Revenue	171x	86x	45x	26x
Stock Price	$286	$315	$329	$348
Returns vs. Current	**-5%**	**5%**	**9%**	**16%**

Base	**FY21E**	**FY22E**	**FY23E**	**FY24E**
Total Revenue ($M)	575	1,034	1,696	2,544
y/y growth	117%	80%	64%	50%
Target Valuation				
Ent. Value ($B)	84,026	86,043	86,837	87,770
Ent. Value / Revenue	146x	83x	51x	35x
Growth Adj.	1.25x	1.04x	0.80x	0.69x
Current Valuation				
Ent. Value ($B)	104,229	104,229	104,229	104,229
Ent. Value / Revenue	181x	101x	61x	41x
Stock Price	$244	$250	$252	$255
Returns vs. Current	**-19%**	**-17%**	**-16%**	**-15%**

Source: FactSet, Jefferies

Other Names in Infrastructure

Other Ways to Play:

- **Citrix** – Hold, $140 PT, 7% potential upside to PT – We believe that the desktop virtualization market remains a high-single-digit grower as workloads become increasingly deployed as SaaS over the coming years (particularly amid COVID). On the competitive front, we believe VMware is a formidable competitor in the desktop business; although we think the company's overall subscription transition is a step in the right direction. We like management's firm commitment to transitioning the model and note that new perpetual licenses will not be sold starting in 2020. The company is targeting $10 in free cash flow per share in 2022 and we note that management tends to guide conservative. WFA policies in the enterprise should help demand; however, the transition to the cloud appears to be slower-than-expected. Current valuation at 15x CY22 FCF/share is un-demanding but we await clarity before turning more constructive.

- **Dynatrace** – Hold, $45 PT, 7% potential upside to PT – While Dynatrace is the market leading APM (Application Performance Monitoring) vendor whose growth will likely accelerate over the next few years, we believe competitive forces will probably intensify even as the APM market itself is set to accelerate and Dynatrace's opportunity expands into adjacent markets. The Street is modeling 20% top-line growth in CY21 and high 20s FCF margin. We think the current valuations at 16x CY21 revs and 57x FCF is fair.

Other Names in Infrastructure

Other Ways to Play:

- **Sumo Logic** – Hold, $28 PT, 1% upside to PT – Sumo Logic has positioned itself well in the monitoring market as it expands its platform use cases from its core in IT/security logging to build a broader observability offering that addresses a $50B+ market over time. With a lead in product differentiation from its true, multi-tenant SaaS solution and an underpenetrated market, we see plenty of room to support 20%+ growth rates. However, we remain cautious about the delta in scale vs peers given similar growth rates. The company is less than 1/10th the revenue scale of Splunk today and growing at similar rates. Additionally, Sumo Logic is looking to make a push into the large enterprise segment, where Splunk currently dominates with over 14x >$1M ARR customers vs Sumo Logic. At 13x CY21 revs, we think the stock is fairly valued and prefer to own Splunk at 11x instead.

- **SolarWinds** – Hold, $15 PT, 2% potential downside to PT – SolarWinds combines steady growth in an expanding market with significant profitability. We hosted three experts who commented on impact of the recent hack. One expert pointed out that churn rates could be as high as 50% for his customer base. We believe this highlights that this hack could have a worse impact than we had initially forecasted. As such, we are moving to the sidelines till we get more clarity on the impact. The stock trades at 6.2x 2021 our est. revs. vs. 12.1x for comps (49% discount). However, there are no near term growth catalysts for the stock to work. The MSP spin is on track, and our SOTP analysis indicates a 28% discount to mkt. value Risks include competitive intensity rising as vendors in adjacent segments of the monitoring stack look to expand, SMB exposure in an economic downturn (though SWI sells to the MSPs and not the end customers) and a leveraged balance sheet.

- **Datto –** Hold, $30 PT, 14% potential upside to PT - We believe that Datto's unique MSP (managed service providers) only approach is a disruptive model in what has largely been an underserved SMB market and is supported by its strong underlying technology that should help it drive a re-acceleration of revenue growth. We believe Datto's strategic partnership with MSPs by not selling to their end customers, as well as an efficient leverage based sales model, has made the company highly profitable; these factors coupled with solid revenue growth of mid-teens makes the story compelling. Shares trade at 6.4x the Street's CY22E rev estimates (on 17% rev growth) which we believe is appropriately valued at this time.

Apps – Best Ways to Play

Software applications vendors are enjoying a renaissance thanks to the Cloud and to advances in foundational computing technologies over the past decade. We believe there are select stories that embody the best characteristics of the software sector – highly predictable and profitable revenue streams, vast open-ended TAM, and exposure to broad technology trends.

How to Play:

- **Adobe** – Buy, $600 PT, 24% potential upside to PT – Adobe should accelerate growth in FY21 thanks to sustained strength in the Digital Media segment and rebound in the Digital Experience segment. The company benefits from multiple secular tailwinds including digital transformation, increasing importance of design, and intensifying focus on customer engagement in an omnichannel environment. We continue to like ADBE for its double-digit top-line growth, >90% recurring revenues, >40% op mgn, and ~$17Bn in authorized share buyback.

- **Intuit** – Buy, $450 PT, 20% potential upside to PT – Intuit has been a consistent performer thanks to its leadership in tax and small business software. Stock has delivered 12 straight years of positive returns, and 2021 should mark #13. Innovation has accelerated under CEO Sasan Goodarzi, and FY21 should benefit from multiple product drivers. In addition, the Covid vaccine should improve the health of its small business segment and set up Credit Karma for upside results. We like INTU for its high quality fundamentals, tailwinds from Live assist offerings, U.S.-centric rev mix (>95%), mid 30s% operating margins, cash flows that fund stock buybacks ($2.4Bn authorized), and dividends that grow double digits.

- **Salesforce.com** – Buy, $320 PT, 45% potential upside to PT – We view CRM as a top front office apps pick. Stock underperformed the IGV in 2020 up 37% vs. IGV's 52% due to mixed news with a CFO transition, and a 25x rev. WORK deal (largest M&A deal ever). We expect CRM to take a breather on large M&A in 2021. The fundamental demand looks bright as we expect a F4Q bounce back. Pipelines are improving, and COVID-19 has accelerated the digital transformation journey for businesses. One partner cited a "tsunami of deals" in F4Q. Investors should also quickly warm up to new CFO Amy Weaver (7 yr CRM legal exec). Maintain Buy and $320 PT.

Adobe (ADBE) $235B Market Cap, Buy $600 PT – The Best of Software and Internet

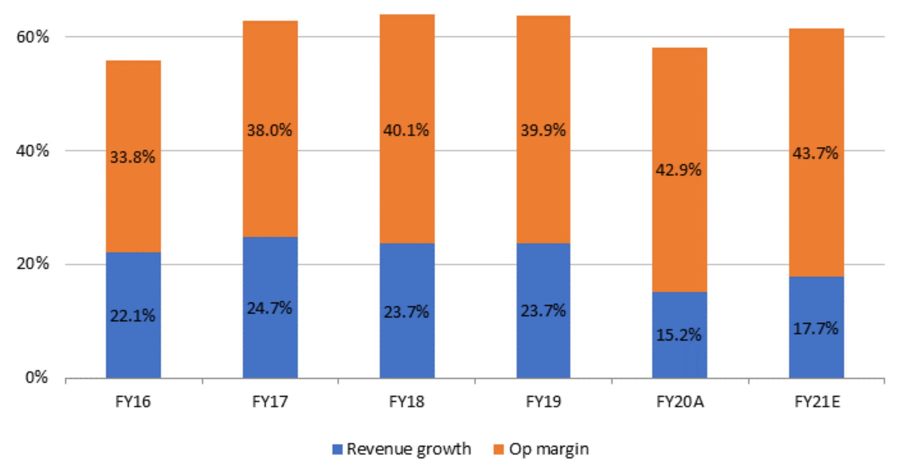
Investor Debate: Adobe is enjoying healthy double-digit growth at a large scale. FY21 is shaping up to re-accelerate after FY20 was impacted by the pandemic, especially in FQ2-FQ4 and more severely in the Digital Experience segment

- Bulls Will Say…
  - While ADBE is better known as a software company, its broad product line that has a B2C or B2B2C orientation also expose it to many of the most important internet themes – including, mobile, video, and digital marketing.
  - ADBE's comprehensive portfolio of creative, document management, and marketing products can help companies transition from an offline world to an online world. Adobe has arguably the most comprehensive platform for digital marketing and experience management.
  - Premium multiples reflect ADBE's successful transition to a subscription model, its growth profile, and the expanded market opportunities, and thus are well deserved.
- Bears Will Say…
  - Market cap of >$200Bn exceeds its $147Bn TAM. Can Digital Experience finally leave up to expectations?
  - Big agenda brings execution risk, including integration of Magento, Marketo, and Workfront acquisitions.
  - Marketing technology market is more competitive and fragmented than the creative solutions market.
  - Operating margin is already above 40%; can it expand much further?

- Valuation
  - While valuation multiples appear rich at first glance, they do not give full credit to its superior growth and margin profile in our view.
  - ADBE stock trades at valuation multiples that are above its 5-year historical averages, yet still trade at a discount to mid/large cap subscription peers

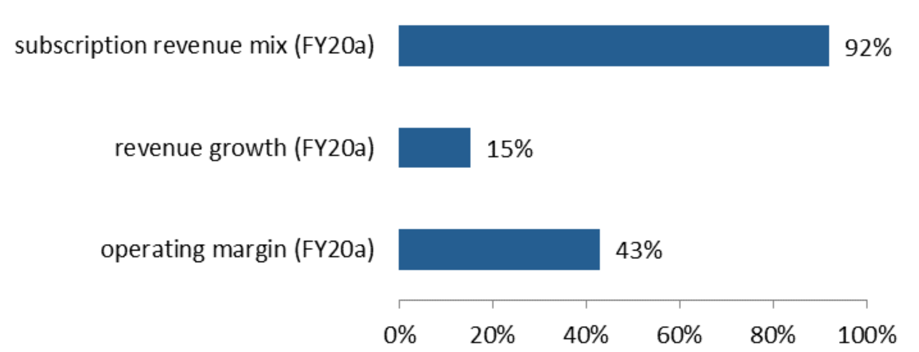
- **Jeff take…**
  - We believe the ADBE story embodies the best characteristics of both internet and software sectors – highly predictable and profitable revenue streams, vast open-ended TAM, and exposure to broad technology trends.
  - ADBE is levered to some of the most important software & internet trends, including the digitization of content and entire off-line businesses, the shift to mobile platforms, and the consumption of video across multiple new channels.
  - We see 15% 3-year revenue CAGR to $20Bn by FY23 as ADBE's multi-pronged Cloud/subscription model meets pervasively disruptive technology waves.

Rule of 40? No, Rule of ~60



Source: company data, Jefferies estimates

ADBE's Attractive Model



Source: company data, Jefferies estimates

Adobe – Key Metrics

TAM: $147Bn by 2023

- Digital Experience ($85Bn) is a bigger opportunity than Digital Media ($62Bn)

Financial highlights:

- $12.9B rev in FY20, 15% growth
- FY20-23 CAGRs: rev 15%, EBITDA 15%
- 42.9% op margin in FY20, +300bp y/y
- Gross cash $6.0Bn, debt $4.1Bn (F4Q20)
- RPO $11.3Bn, +15% ('20)
- Share repurchases: $3.0Bn in FY20; $17.0B remain authorized (F4Q20)

Catalysts and growth drivers:

- Annual Adobe MAX (creative) and Summit (experience) conferences
- Future price increases?
    - Past price increases took effect 3-1-18 for N.A. Creative Cloud (CC) products; up 6% on Individual plans, 14% on Team plans; upon plan renewal (many on annual terms)
    - Int'l price increases in select countries for CC and DC on 2-12-19

Other stats:

- Market share vs CRM for digital marketing & e-commerce revs: ADBE 50%, CRM 50% (JEFe CY20)
- Digital Media ARR grew 22% in FY20 to $10.3Bn
- Highly recurring revs: subscriptions = 92% of FY20 revs
- >75% of individual CC subscriptions in FY20 were new to CC franchise
- Experience Cloud traction with enterprises: ~$8M avg. ARR of top 100 customers, ~93% of top 100 customers have 3+ solutions (both for FY20)
- Geo rev mix: Americas 58%, EMEA 26%, Asia 16% ('20)
    - Growth: Amer. 15%, EMEA 14%, Asia 19%
- Employee headcount ~22,500 ('20)
    - Highly productive: $570K rev per employee

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Intuit (INTU) $99B Market Cap, Buy $450 PT – Adding Excitement to Tax & Accounting

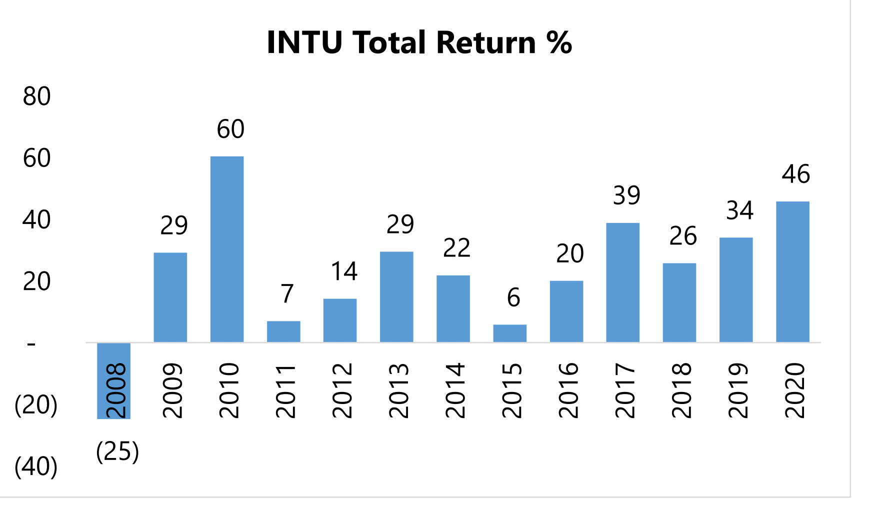
Investor Debate: With leading franchises in tax software and small business accounting, INTU has been a steady grower with high margins. In recent years, it has made a big push online and added live experts and AI smarts. The key investor questions are: 1) when will these efforts show up in accelerated revenue growth; and 2) can INTU extend its 12-year streak of positive stock returns?

- Bulls Will Say…
  - (Mostly) Positive Annual Stock Returns. Since 2007, INTU stock only had one down year – 2008 during the "Great Recession".
  - Rapid growth in QuickBooks Online adoption, where add-on services (payroll, time tracking, payments, etc.), on-demand live experts, commerce functionality, and mid-market expansion could shift L-T rev growth higher.
  - TurboTax is a steady and profitable grower, with enhanced growth from Live and Live Full Service premium SKUs
  - Shareholder friendly stance – ranging from financial discipline (stated goals of double-digit organic revenue growth, operating margin expansion, & ROI investment threshold of 15%), sizable share buybacks, increasing dividends

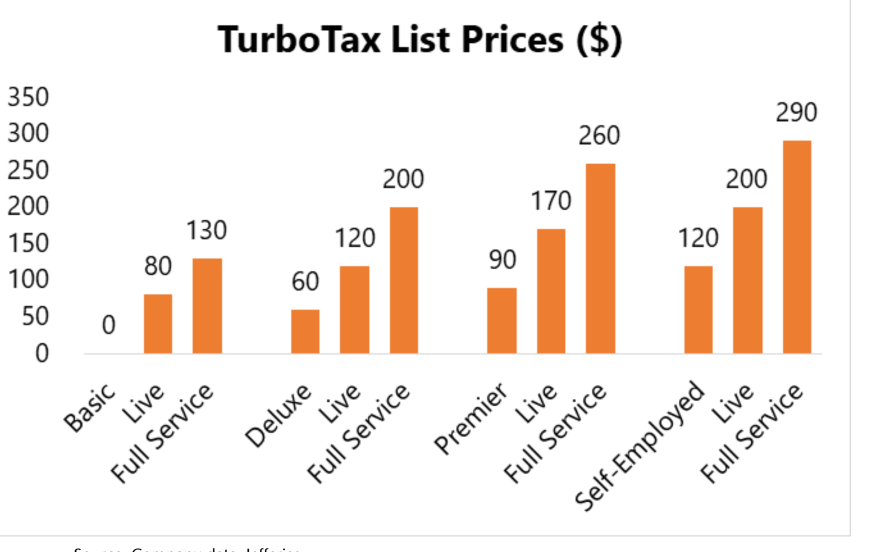
- Bears Will Say…
  - INTU's valuation multiples are markedly above historical averages (both over 5-year and 10-year periods). Valuation looks more reasonable vs peers but INTU is growing slower.
  - International traction has been slow in the past.
  - Law of large #'s make it a challenge to exceed 10% revenue growth.
  - Can it succeed with the acquisition of Credit Karma?

- Valuation
  - Valuation multiples are above INTU's own 5- and 10-year historical averages. Relative to the large cap coverage group averages, EV/S, P/E, and EV/EBITDA are generally in-line.

- **Jeff take…**
  - INTU stock has been a strong performer for many years as investors have been drawn to its (generally) consistent execution, dominant product leadership, strong financials, and shareholder friendly policies.
  - One of our best product cycle stories with TurboTax Live and Live Full Service kicking in across the entire TurboTax portfolio.
  - INTU stock is on a 12+ year streak of positive stock returns, and we believe the company can extend this trend.
  - Valuation multiples, with the P/E and EV/EBITDA inline with the large cap coverage group averages, appear justified given INTU's high quality fundamentals, consistency, and accelerating momentum.



Source: FactSet, Jefferies



Source: Company data, Jefferies

INTU – Key Metrics

Small Biz TAM: 800M+ small businesses

- Low penetration: INTU QuickBooks paying customers ~6M
- Self-employed (SE) TAM of 750M+ vs QB-SE subscribers >1M
- QBO revs driving growth last 6 yrs (FY15-20): +35%, 39%, 46%, 54%, 44%, 38% to $1,354M in FY20
    - ARPU/mo $20.75 (FY19)
- QBO subs 5.1M, +12% y/y (F4Q20)
- QB Online Ecosystem revs $2.2Bn, +31% (FY20); mgmt. expects growth to continue at >30% in the L-T

Financial highlights:

- $6.8B rev in FY19, 13% growth; $7.7Bn in FY20, +13%
- FY20-23 CAGRs: rev 14%, EPS 12%
- 33.6% op margin in FY19; 34.7% in FY20
- Gross cash $5.8Bn, debt $2.4Bn (F1Q21)
- Share repurchases: $0.3B in FY20; $2.4B remain authorized
- Dividends growing by double digits annually (yield ~1%)

Catalysts and growth drivers:

- TurboTax Live and Live Full Service, a family of premium SKUs, helping with ARPU, retention, & category share gain
- QuickBooks Live in early rollout
- Analyst Day in fall

Tax TAM: $22Bn Spent on Tax Preparation in N.A.

- TurboTax only has ~14% of a $22B market
- TurboTax ARPU on L-T rising trend: $29 in '05 to $63 in '20
- #1 in DIY tax software: 46M TurboTax units, >55M unique tax filers vs. market size of 160M IRS filers
- #1 in professional tax software: >600K tax pros/experts, who prepared >30M returns, for 36% market share (out of 84M returns in N.A. market).

Other stats:

- 12 consecutive years of positive stock returns (2009-20)
    - avg./yr. INTU 28% vs S&P500 13%
- Segment rev mix (FY20): Small Business & Self-Employed 53%, Consumer (tax) 41%, ProConnect 6%
- High segment operating margins (FY20): Small Business & SE 52%, Consumer 66%, ProConnect 70% (excludes corporate overhead)
- Geo rev mix: >95% U.S.
- Employee headcount 10,600 (FY20)
    - Highly productive: ~$770K rev per employee

Salesforce.com (CRM) $208B Market Cap, Buy $320 PT – The Best of CRM, Collaboration, Integration, and Analytics

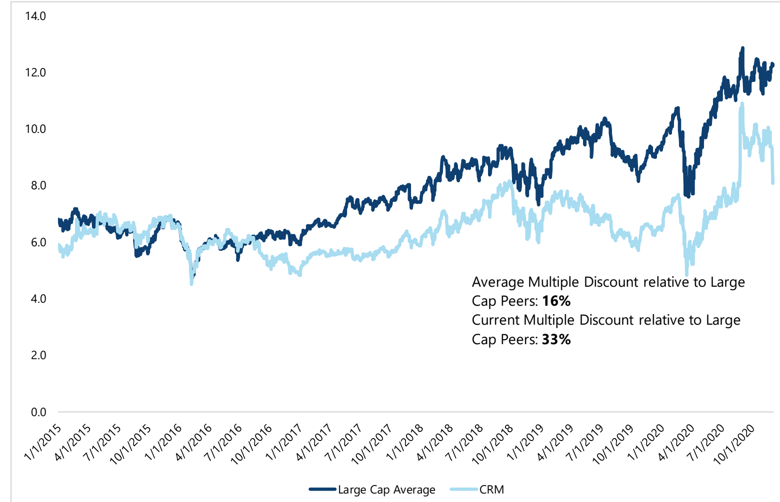
Investor Debate: Salesforce.com is enjoying healthy double-digit growth at a large scale. However, we think investors would like to see more margins and are asking what is the next major growth driver. Margins seem to be put on hold as CRM just announced its largest deal ever. We see opportunities in Service Cloud, collaboration, analytics, and in PaaS.

- Bulls Will Say…
  - CRM's comprehensive portfolio of customer relationship management, integration, collaboration, and analytics products can help companies embark effectively on their digital transformation journey.
  - Tableau and Slack give CRM an additional market (analytics and collaboration) to sell into enterprises. CRM is the industry leader in the customer relationship management market, and Tableau will enable CRM to increase its relevance to its customers by incorporating analytics on its platform.
  - CRM's growth profile at scale is unmatched in the software sector, combined with the expanded market opportunities, and thus a premium multiple is deserved.

- Bears Will Say…
  - Slowdown in core CRM markets such as Sales and Service Cloud has led CRM to become more aggressive on the M&A front.
  - Big agenda brings execution risk, including integration of Slack and Tableau acquisitions. Not taking a breather on the M&A front suggests they might be hiding something on the organic front.
  - Operating margins are still at 17.6% (F21E) despite scale; can margins ever expand given the propensity to do M&A? CRM continues to overinvest in Sales & Marketing still at 39% of revenues in F20 on a non-GAAP basis.

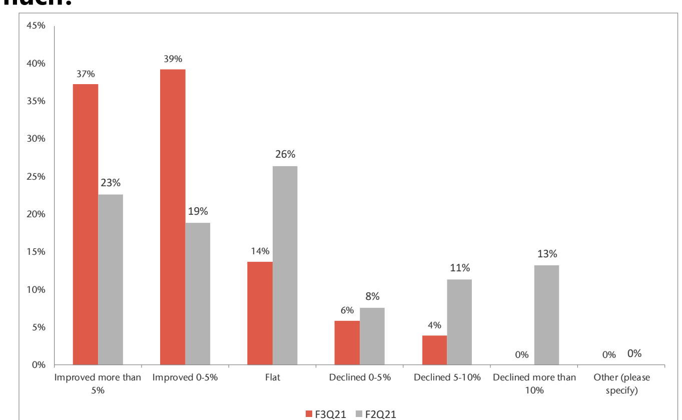
- Valuation
  - CRM trades at 6.7x EV/2022E revenues, a discount relative to its other large cap peers at 9.6x.
  - CRM has underperformed the IGV in 2020, having appreciated 37% vs IGV up 52%. The recent underperformance has been driven by a mixed Q, the largest deal in WORK, and the CFO transition.

- **Jeff take…**
  - We believe the CRM story embodies the best characteristics of the software sectors – highly predictable and profitable revenue streams, vast open-ended TAM, and exposure to broad trends in customer management, collaboration and analytics. We remain at Buy with a PT of $320.
  - While CRM will struggle NT, we believe the LT still looks bright as we expect a F4Q bounce back. Pipelines are improving, and COVID-19 has accelerated the digital transformation journey for businesses. One partner cited a "tsunami of deals" in F4Q. Investors should also quickly warm up to new CFO Amy Weaver (7 yr CRM legal exec). Emotional investors beware…this stock is likely to grind higher.



Source: FactSet, Jefferies
Large Cap Average includes ADBE, INTU, WDAY, ORCL, ADSK, NOW, MSFT

Has your Salesforce pipeline changed in August, September, and October when compared to May, June, and July and by how much?



Source: JefData proprietary salesforce.com Partner Surveys (F3Q21: n=51; F2Q21: n=53)

Salesforce.com – Key Metrics

TAM: $140Bn by 2022

- Platform ($35Bn) is a bigger opportunity than Sales ($16Bn); Integration (MuleSoft) added $12Bn
- CRM's investments on the Platform paying off, grew faster (+57%, +24% organic in F20) than Sales Cloud (14%) in FY20, and is almost as large as Sales Cloud ($4.5Bn vs $4.6Bn)

Financial highlights:

- $17.1B rev in F20, 29% growth (21% organic); $20.75B in F21, +21% (+16% organic) (JEFe)
- FY24 CAGR: rev 19% from F20
- 16.8% op margin in F20; 17.6% FY21 (JEFe and guidance)
- Cash and cash equivalents $9.5Bn, debt $2.7Bn (F3Q21)
- Total backlog $30.3Bn (F3Q21) = DR $7.9Bn + unbilled $22.4Bn
- Acquisition Revenue contributions (all JEFe):
    - Salesforce.org - $220M in F20; $104M in F21
    - Tableau - $671M in F20; $648M in F21
    - Slack - $150M in F22
    - Vlocity - $100M in F21; $75M in F22

Catalysts and growth drivers:

- Fiscal fourth quarter earnings – expected release in late February

Other stats:

- Extending leadership in CRM: Market share vs SAP for CRM revs: CRM 18.4%, SAP 5.3% in 2019 (IDC estimates)
- Billings grew 29% in FY20 to $19.2Bn (+22% organic)
    - JEFe Billings of $22.6Bn in F21 (+18%; 11% organic); seems conservative vs. F20 organic growth of +22%.
- Current RPO grew 19.5% (19.3% organic) vs expectations for 19% in F3Q21 to $15.3Bn
- Highly recurring revs: subscriptions and support = 94% of FY20 revs
- Nearly 73% of incremental revenue comes from installed base (the remainder from new logos); land and expand motion drives sustainable growth
- Rapid expansion is large customers
- Geo rev mix: Americas 69%, EMEA 21%, Asia 9%
    - Growth: Amer. 17%, EMEA 31%, Asia 23%
- Employee headcount ~55,000 (F3Q21)
    - Opportunity to increase productivity: $384K rev per employee

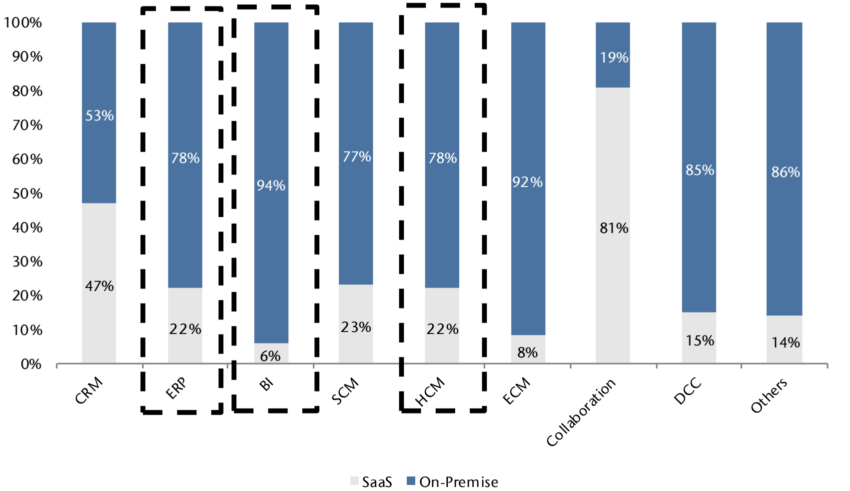
Workday (WDAY) $58B Market Cap, Buy $280 PT – Survey Says … Pipes Coming Back to the Back Office

Investor Debate: Are pipelines coming back to Financials and HCM? Will Workday benefit from that in 2021? Has penetration within their core HCM market peaked?

- Bulls Will Say…
  - Workday's technology can be classified as a multi-tenant, object-oriented SaaS solution. Its architecture was designed to allow its product to scale securely, reliably, and cost-effectively. Workday customers generally achieve a **lower total cost of ownership (TCO)** relative to on premise ERP applications when measured over both the near term and an extended period of five to 10 years, which is the opposite of what is expected for most SaaS applications.
  - Despite fears of high penetration, there are still probably 200 Fortune 500 accounts that have not decided on a cloud HCM vendor per mgmt. This doesn't include all the addons to core HR, such as recruiting, planning, Prism Analytics, payroll, and e-learning (in addition to others yet to come). Additionally, Workday has 17% penetration of the Global 2000 for its core HR system and sees significant opportunity in international markets too.
  - Cross-sell opportunities with financials and Adaptive Insights should drive growth in the future.
- Bears Will Say…
  - Large incumbents with deep pockets (SAP and ORCL), which would make it harder for them to take share.
  - Valuation improvement over the past few months might not be reflective of impact on pipeline which might be pushed out further due to impact on IT budgets and ERP transformations being less important.

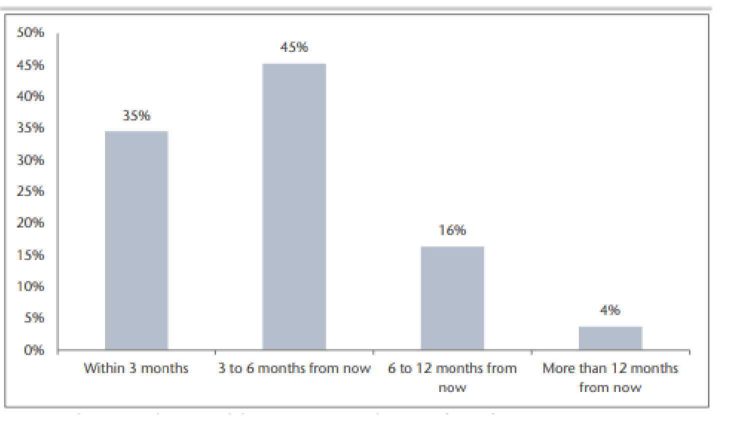
- Valuation
  - We note that Workday trades at an attractive valuation relative to its peers. It trades at 9.6x EV/2022E revenues vs. comps at 13.6x.
- **Jeff take…**
  - We surveyed over 300 CIOs/CTOs with decision-making power to buy HCM and Financials Software. Our survey gives us confidence that pipelines are coming back within the back office apps space. Our key takes include healthy market recognition for Workday's HCM and Financials solutions, increased propensity to invest in digital transformation within the HCM and Financials space over the next 6 months, and strong acceleration in the move to the Cloud.
  - We also believe Workday has multiple levers to drive sustainable, durable long term top line growth. The four major ones in our opinion are: large, expanding Total Addressable Market (TAM); low attach rates for products within portfolio; international opportunity; and procurement opportunity. While we are in line with consensus over the ST, we believe growth will rebound to 20% in fiscal 2023 ahead of consensus at 19%. We believe the multiple levers will drive sustainable growth for the longer term in the high teens to low twenties range.

Cloud Adoption Still in Early Days but Growing in Relevant Markets



Source: Company data, IDC, Jefferies

If your organization does not use Workday HCM currently but has considered moving to Workday HCM, when would you be comfortable commencing on the HCM transformation project?



Source: JefData proprietary Workday Survey, September 2020

Anaplan (PLAN) $10B Market Cap, Upgrade to Buy; $85 PT – Pipes Coming Back To Middle Office Apps in 2021

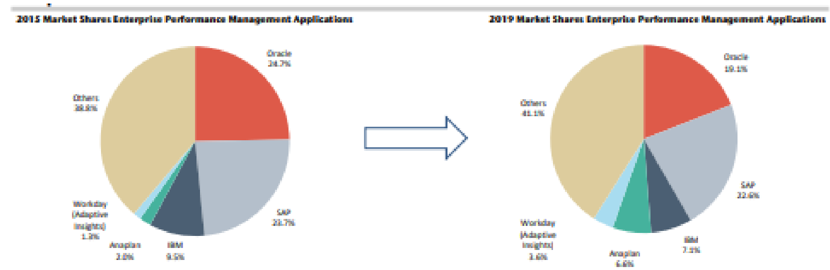
Investor Debate: Are pipelines coming back to Middle Office Apps? Will Anaplan solve its go to market execution issues? Can a best of breed vendor thrive in the current environment?

- Bulls Will Say…
  - PLAN delivered a healthy F3Q beat on billings beating ests. by 10%. PLAN's billings growth has accelerated to 27% this Q from 22% last Q and 10% two Qs ago.. The expand deals this past Q show the runway for growth in front of the company to drive both new logos and expand deals.
  - PLAN has a long runway for growth given the opportunity ahead. Large TAM of $18B in 2019 of which PLAN is about 2% penetrated. Successful product evidenced by market share gains from 2% in 2015 to 6.6% in 2019. Presence of legacy vendors ORCL, SAP, and IBM indicates more room to take share.
  - Continued demand for an agile, neutral platform connecting front office and back office apps.
- Bears Will Say…
  - Large incumbents with deep pockets (SAP and ORCL), which would make it harder for them to take share.
  - COVID-19 could continue to push out deals as organizations are reluctant to commit to large deals. The sales cycle can be lengthy and the need to coordinate between multiple stakeholders within a firm can delay the decision-making process.
  - Best of breed solution might not fare well in current environment.

- Valuation
  - We note that Anaplan trades at an attractive valuation relative to its peers. It trades at 13.7x EV/2022E revenues vs. comps at 16.1x. We believe PLAN should trade at a premium since it is expected to grow 25% in F22 vs. comps at 18%.

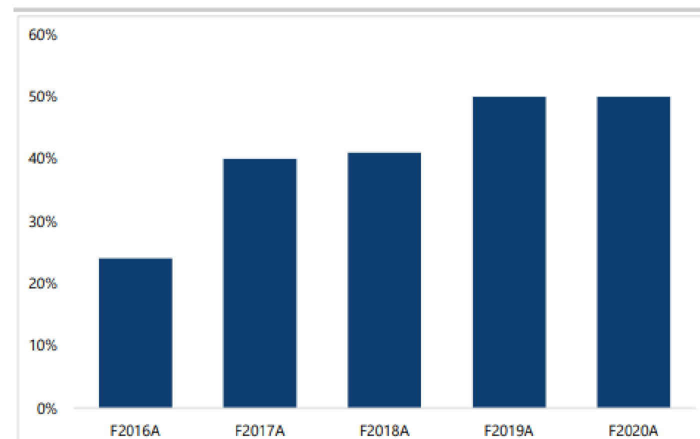
- **Jeff take…**
  - We believe the partner ecosystem that PLAN has invested significantly in creates a moat around the business. It becomes harder for new entrants to compete with PLAN's ecosystem. Partner led/touched deals have increased from 24% in fiscal 2016 to over 50% in fiscal 2020.
  - PLAN's billings growth has accelerated to 27% this Q from 22% last Q and 10% two Qs ago. Mgmt. also noted that pipeline is "getting better" and that new deals are coming back. We believe this is in line with commentary from our partner checks: a 7-yr. Gold Partner noted was ramping back up into Q4 with 60% new deals; and one of Salesforce.com's fastest growing partners citing PLAN momentum in sales force optimization.
  - F4Q billings guide for 21% is conservative given an easy compare; compares will be easier in F22 as we lap pandemic hit Qs.
  - While we are in line with consensus over the NT, we believe growth will rebound to 28% in FY23 ahead of Street at 25%.

2015 to 2019 Enterprise Performance Management Applications Market Share: Anaplan is the Share Gainer



Source: Jefferies; IDC Semiannual Software Tracker, 2019H2 Release, April 2020.

Partner Led/Touched Deals for PLAN Create Moat Around Business



Source: Jefferies, Company Data

Dropbox (DBX) $9.4B Market Cap, Buy, $28 PT – Attractive Valuation; Good Mix of Growth and Profitability

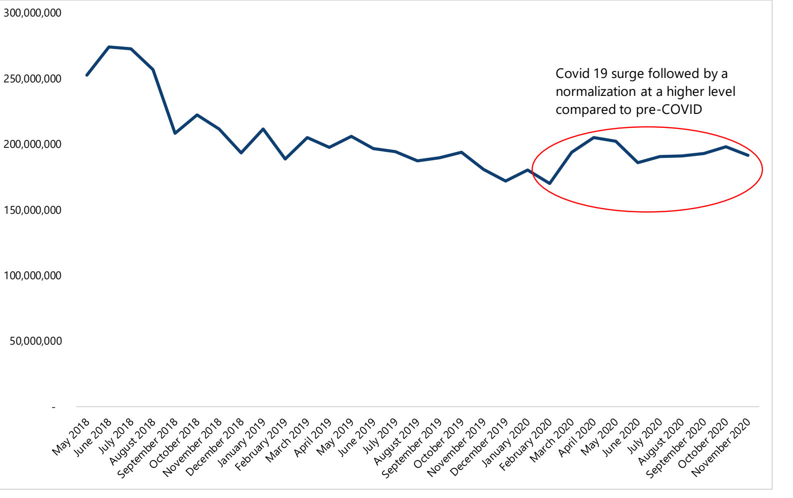
Investor Debate: Can Dropbox accelerate growth beyond mid teens to 20%? Can Dropbox continue to survive as a standalone offering given the competition from larger platform players such as Microsoft and Google? Will COVID-19 be the growth catalyst to drive the stock?

- Bulls Will Say…
  - DBX's simple user interface, 3rd-party app integration, and freemium model have contributed to massive consumer adoption at little marginal cost.
  - The new Dropbox desktop app marks a strategic shift from a folder centric approach that sits in the background to a unified workspace approach that sits in the foreground. Furthermore, the new Dropbox features integrations with Slack, Atlassian, and Zoom. By controlling the user experience in one place, Dropbox has more opportunity to cross-sell additional products such as HelloSign and Paper. This allows DBX to expand its TAM into the collaboration space.
  - Attractive valuation for a company that grows 20% per year and is able to deliver profitability and free cash flows.

- Bears Will Say…
  - Competition concerns have kept a lid on Dropbox's valuation. Larger platform players such as Google and Microsoft offer content storage as part of their suite offerings. Although these offerings might not have all the product features that Dropbox possesses, users might make do with the platform solutions given the cost advantage.
  - Move to collaboration space still in early innings and absence of a defined growth catalyst.

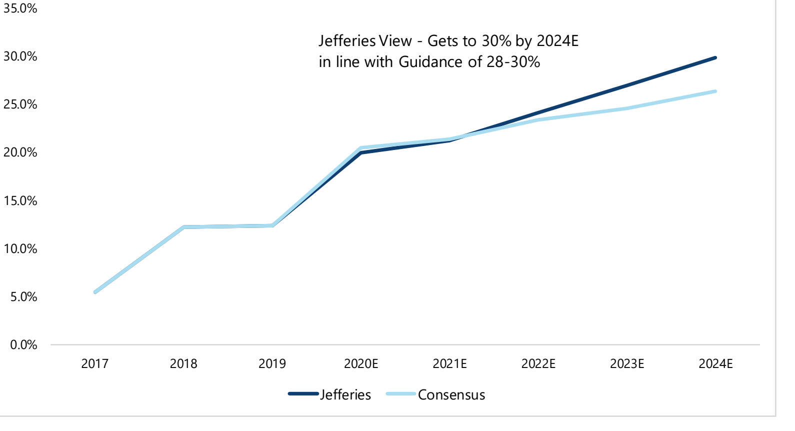
- Valuation
  - DBX trades at a 62% discount — 4x 2022E revs. vs. comp group at 9.7x. Even at our price target of $28, the stock will trade at 5x 2022E revenues representing a 52% discount to comps.
- **Jeff take…**
  - We believe DBX is a unique story in software with solid DD% rev. growth combined with bottom line seeing 1000 bps.+ leverage over the next 4 yrs heading to LT target of 28-30% by 24.
  - The total no. of visits to Dropbox desktop and mobile combined were up 14% m/m in March to ~194M and 6% in April to ~205M. Since then, while growth has dropped a bit. Visits across desktop and mobile platforms have normalized since the COVID-19 surge seen in March and April. The new normalized level of 190+M visits is still materially higher than the ~180M visits pre pandemic in Jan and Feb.
  - We are in line with the Street expecting ~200K NNPU adds. We believe these numbers are likely conservative after the company posted 290K NNPU adds last Q. Consensus implies a sequential deceleration of 31% in NNPU adds. DBX will likely beat this aided by a marketing campaign that went into effect at the end of Q3.

SimilarWeb data checks substantiate top of the funnel metrics



Source: SimilarWeb, Jefferies

DBX Non-GAAP Operating Margins 2017-2024E (Jefferies vs. Consensus)



Source: Jefferies, Company Data

2U (TWOU) 3.0B Market Cap – Digital Higher Education Leader with Attractive Valuation; BUY, $55 PT

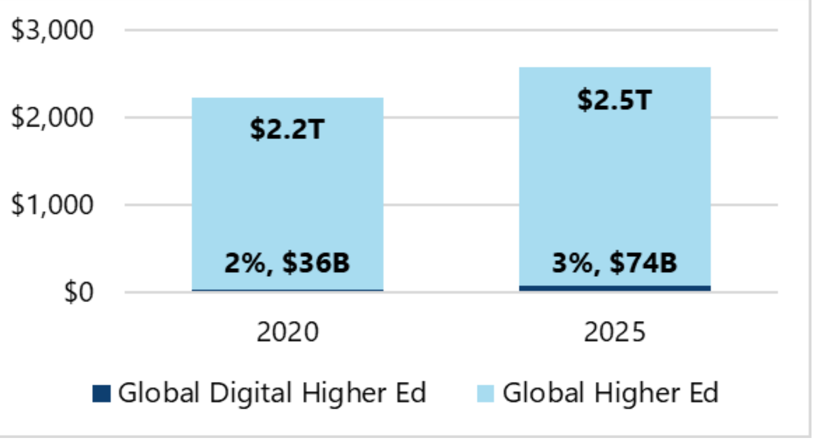
Investor Debate: Can 2U increase the software/services mix to drive lower program launch costs and improved scalability? Can 2U increase the pace of partner additions without hampering progress on the bottom line? Are margin improvements sustainable, and are l-t target margins of 18-20% achievable?

- Bulls Will Say…
  - TWOU is positioned to be a primary beneficiary of the COVID-accelerated adoption of digital higher education given their market leadership in the online program manager (OPM) space.
  - Management outlook for positive adj. EBITDA on a go-forward basis and commentary around strong leading indicators of demand signal turbulence from FY19 has passed, and profitable growth can be achieved.
  - Attractive valuation at current levels relative to historical multiple and small cap software comps - increased demand takes 7-12 months to flow through the to top line due to the revenue-share business model.

- Bears Will Say…
  - High up-front program launch costs prevent TWOU from effectively balancing investing for growth and managing the bottom line. The slow pace of adding new institutions is evidence that the business model doesn't scale well.
  - Services-led nature of the business limits margin upside and scalability. Follow-on offering is a sign that cash burn improvements aren't sustainable.
  - Organic revenue growth and margin outlook should have been stronger given the ongoing demand tailwind.
- Valuation
  - Shares screen inexpensive given TWOU's peak 10.9x EV/NTM Revenue multiple and 5.2x historical average relative to where shares trade today at 3.1x. CHGG is a close ed-tech proxy that sells directly to the student, but a significantly stronger margin profile (30%+ EBITDA margins) enables it to trade at a much richer 16x EV/CY21E rev multiple. TWOU also trades at a discount to the small-cap software median of 5.6x EV/CY21E Rev.

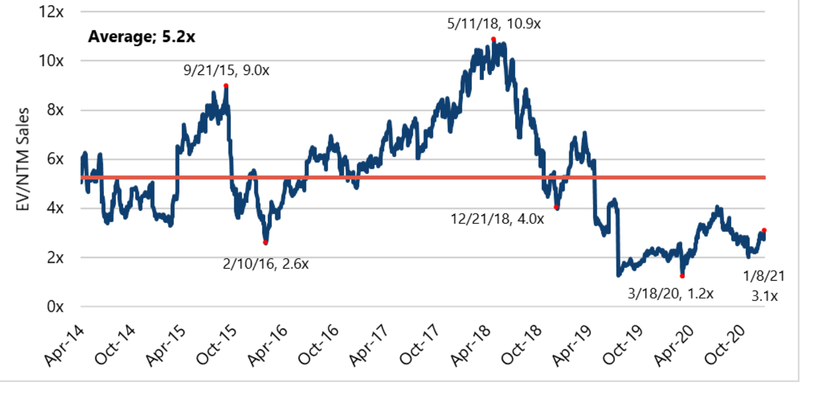
- **Jeff take…**
  - We believe TWOU is a leader in enabling universities to offer remote learning and is poised to continue to benefit from the digital tailwind to higher education. New CFO Paul Lalljie has driven steadily improving margins and lower cash burn since joining the organization in F3Q19. Management outlook for positive adj. EBITDA margins and commentary around strong leading indicators of demand are encouraging, but questions remain about both the pace of adding new institutions and rate of bottom-line inflection. We see stronger execution and a higher software/services mix as key to unlocking multiple expansion, and we view the current risk/reward as attractive given current trading levels vs. its historical average.

Ongoing Transformation of Higher Ed is in its Early Stages



Sources: HolonIQ

Trading Below Historical Avg. EV/NTM Sales



Sources: FactSet

Zuora (ZUO) $1.9B Market Cap, Hold $13 PT – First Signs of Recovery, But Need to See More Before We Hop On Board

Investor Debate: Since announcing integration and sales execution issues in 2019, ZUO has made considerable progress in addressing these issues. ZUO benefits from the secular tailwind: the move towards a subscription economy. The key investor questions are: 1) can ZUO deliver a few Qs of improved results showcasing improved execution; 2) when will ZUO see a recovery coming out of COVID-19; and 2) is the TAM big enough for ZUO to continue growing 25-30% in the long term?

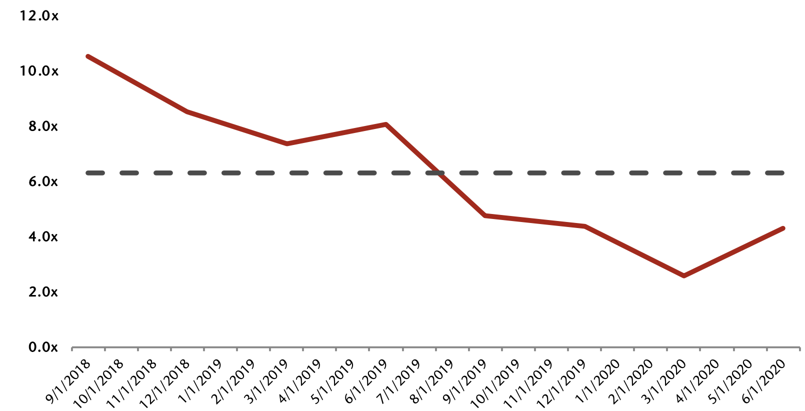
- Bulls Will Say…
  - Early innings of the subscription economy; enjoying secular tailwind as more businesses and industries adopt subscription-based billings.
  - Platform strategy should drive the company's growth trajectory in the future – reducing deployment time and easing integration to third party apps.
  - Integration issues are temporary – the engineering team has already fixed the issues and the company is in the process of implementing it live; cross sell motion should resume shortly.
  - Sales execution issues being addressed – go to market motion is more defined with four new playbooks, new sales enablement training to get new hires up and running, and reorg within the department to ensure greater productivity.

- Bears Will Say…
  - ZUO has a TAM issue – the execution issues they are having point to the overall market being a lot smaller for them (JEFe $13.4B by 2022)
  - ZUO should have addressed the integration issues a lot earlier since it made the Leeyo acquisition in May 2017.
  - Execution issues tend to persist for a few quarters – not a clean story.

- Valuation
  - ZUO's valuation has improved slightly after reporting a decent F3Q. It now trades at ~4.5x 2022E revenues.

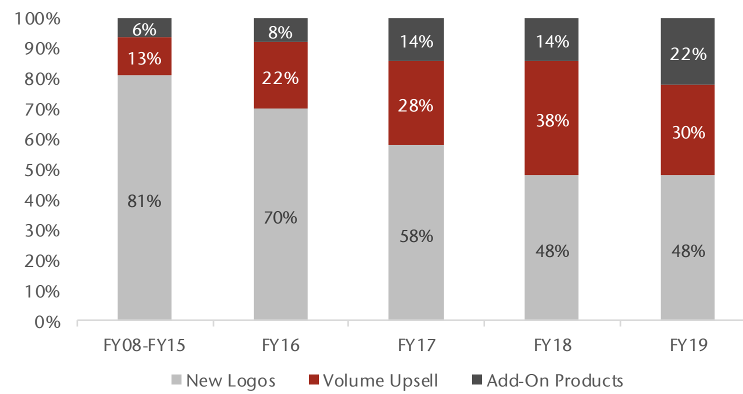
- **Jeff take…**
  - ZUO delivered a beat and raise showing the first signs of recovery. Subs. Billings growth accelerated to 14% from 2% last Q and benefited from increased enterprise traction. We believe these are early indications that the GTM investments are paying off. However, NRR was still at 99% indicating we are not back to normal. We continue to believe in the LT opportunity but are cautious till we see a few Qs of better execution.
  - Valuation looks very attractive, but a higher risk profile and NT headwinds put us on the sidelines.

EV to NTM Sales



Source: FactSet, Jefferies

New Subscription ACV Mix – Increasing Contribution from Upsells



Source: Company data, Jefferies

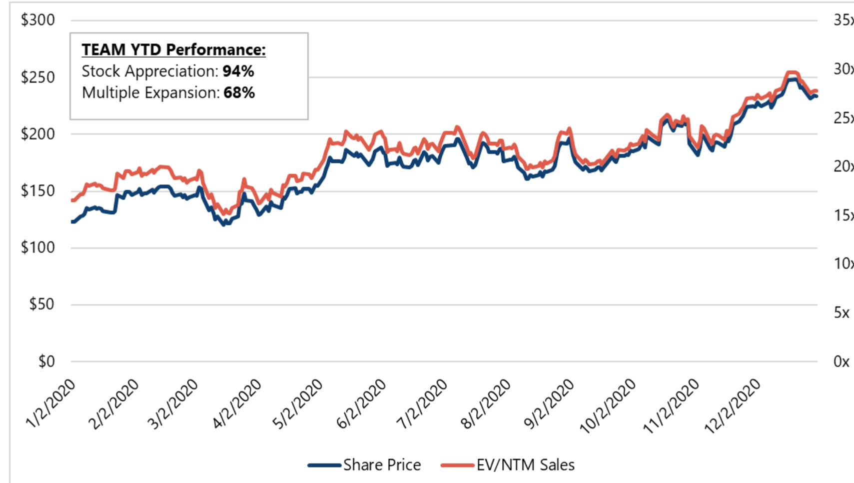
Atlassian (TEAM) $60B Market Cap, Hold; Raise PT to $235 PT – Amazing Software with Blockbuster Stock, but Rich Valuation

Investor Debate: Investors have come to appreciate the company's viral approach to selling software without investing in a sales force. Investor concerns mainly relate to whether the company can continue to operate without a sales force as it pushes up market into the enterprises. Can billings momentum be supported by the WFH trend in the current environment? Can new paid user growth rebound after COVID-19 impact?

- Bulls Will Say…
  - TEAM's stock premium is justified given its unique selling model that is unlike other software businesses. TEAM invests heavily in R&D (36% of revenues in F19) and this leads to products that are easy to use and consumer, and are virally adopted by its customers.
  - TEAM continues to push its customers to move from Server deployments to the Cloud. It has created pricing structures (like introducing free Cloud tiers for all its products) to incentivize customers to the Cloud. This will pay dividends in the long term as more workloads move to the Cloud.
  - TEAM has a large growing addressable market which has continued to expand as it acquired OpsGenie and launched JiraOps to serve the ITSM market. It has also acquired AgileCraft and launched Jira Align, which expands its offerings in the workflow management space.

- Bears Will Say…
  - The annual price increases might make TEAM's products less appealing to customers who have come to view the company as the low price leader in the markets they compete in.
  - Valuation multiples are rich for the stock (24x 2022E Revenues) and it could be affected if investors rotate to lower multiple stocks in the current macroeconomic environment.

- **Jeff take…**
  - We believe the company has a unique product portfolio and software business model that is unlike most software business models. TEAM has made a deliberate shift to the Cloud. We view this as an extension of a core mission of Atlassian: to provide powerful technology products for the masses that are easy to use and easy to consume. We expect this also to benefit Atlassian over time in revenue and eventual profit. Importantly, we don't expect to see the dramatic negative effect seen in some models when there is a "transition" to Cloud from on premise solutions.
  - TEAM is among the most expensive software stocks we cover. We would consider becoming more constructive on the name if its valuation came down.



Source: FactSet, Jefferies estimates; Priced as of 12/31/2020

Asana (ASAN) $6.7B Market Cap, Buy $40 PT

Investor Debate: Asana's vision is to help white collar workers manage everything from daily tasks to cross functional strategic initiatives to free up users' time and enable them to allocate more of their actual time to be creative and complete value-added work. Despite being founded in 2008, the market is only beginning to materialize, as evidenced by Asana's growth rates and customer count. The company is rapidly expanding its R&D and direct sales teams despite not being profitable given the market opportunity in front of it.

- Bulls Will Say…
  - ASAN's opportunity has only just begun to materialize. The paying customer count was only 2,000 in FY15, and since that time, the company has increased its customer count almost 45x to 89,000.
  - The addressable market opportunity is massive - we estimate it is growing at a 15% CAGR to $58B in 2024. If we use Forrester's 2019 estimate of 1.25B knowledge workers in the world, Asana, with its approx 1.3M paid users, is only 0.1% penetrated today.
  - The company's hybrid sales model should benefit margins in the future as it costs the company fewer commission dollars. We believe that about 60% of rev is generated from the self-serve channel with the remaining primarily driven by the direct sales force.

- Bears Will Say…
  - Asana has not achieved profitability or annual positive FCF throughout its history, as the company continues to invest in its go-to-market strategy and R&D
  - The company's average duration is less than a year, which provides less visibility into future results than some other software vendors.

- Valuation
  - Shares trade at 17x CY22E rev ests on 31% rev growth; our $40 PT implies 21x Street CY22 rev estimate.

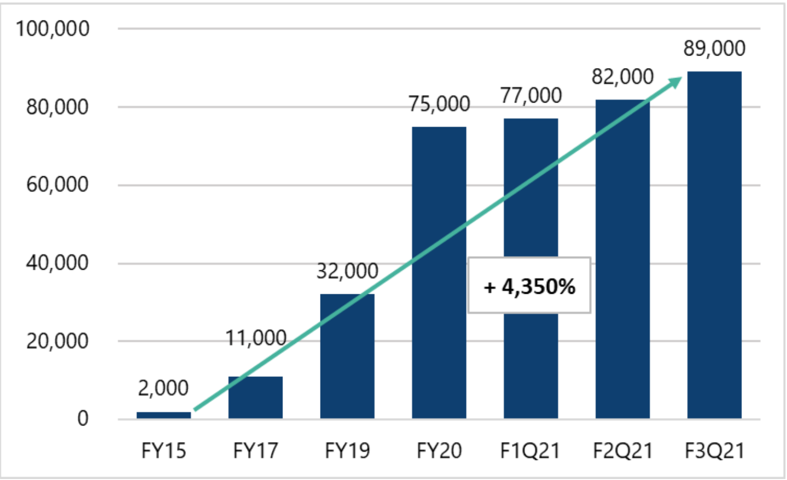
- **Jeff take…**
  - While not deemed emergency spend in 2020; ASAN is mission critical to remote work and productivity in 2021. ASAN is a Low-cost high ROI solutions perfect for WFA environment
  - ASAN's differentiated solution for work management enables knowledge workers to work more efficiently, resulting in a large and growing customer base
  - ASAN has shown early success in a land/expand strategy and strong net revenue expansion, which can support sustainable high growth and meaningful profitability with scale
  - We think a premium valuation is warranted given its potential ability to deliver outsized growth for several years.

ASAN TAM

	2019	2020E	2021E	2022E	2023E	2024E	CAGR (2020-2024E)
Team Collaborative Applications	3.5	4.8	6.2	7.5	9.1	10.9	22.7%
Current Classified Market - IDC	**$ 3.5**	**$ 4.8**	**$ 6.2**	**$ 7.5**	**$ 9.1**	**$ 10.9**	**22.7%**
y/y change		*36.4%*	*28.1%*	*21.1%*	*21.5%*	*20.1%*	
Asana Rev Growth	**86%**	**55%**					
Penetration of Current Markets	**4.0%**	**4.6%**					
Conferencing Applications	5.9	7.9	9.5	11.2	13.1	15.3	17.9%
Email Applications	5.3	6.1	6.7	7.4	8.1	8.8	9.5%
Enterprise Community Applications	2.7	3.3	3.9	4.6	5.4	6.4	17.7%
Content Sharing and Collaboration Applications	6.2	7.2	8.1	9.1	10.2	11.4	12.0%
Other Collaborative Applications Markets	**$ 20.0**	**$ 24.6**	**$ 28.4**	**$ 32.3**	**$ 36.8**	**$ 41.9**	**14.2%**
		22.8%	*15.3%*	*14.0%*	*13.7%*	*13.8%*	
Project and Portfolio Management (PPM) Applications	3.9	4.0	4.3	4.6	4.9	5.3	6.8%
Other Adjacent Established Markets	**$ 23.9**	**$ 28.6**	**$ 32.7**	**$ 37.0**	**$ 41.7**	**$ 47.1**	**13.3%**
		19.8%	*14.0%*	*13.2%*	*12.9%*	*13.0%*	
Total Potential Addressable Market (TAM)	**$ 27.4**	**$ 33.5**	**$ 38.8**	**$ 44.4**	**$ 50.8**	**$ 58.0**	**14.8%**
		21.9%	*16.0%*	*14.4%*	*14.4%*	*14.3%*	
Asana Penetration of Total Potential TAM	**0.5%**	**0.7%**					

Source: Jefferies, IDC

ASAN Paying Customers



Source: Jefferies, Company Data

Other Attractive App Opportunities

How to Play:

- **Upland** – Buy, $58 PT, 22% potential upside to PT – UPLD is a unique company with a highly effective approach to investing in and operating software assets. We believe this is due to: 1) the sound acquisition and operational strategy (it has paid a median of 2.7x and 3.3x run-rate total and rec rev, respectively, across the 25 deals, which is attractive given the recurring, and potentially highly profitable nature of these rev streams), and 2) UplandOne (implementation of customer and operational best practices) is a core part of the inorganic growth story. With 16 products across seven 'solution suites', the addressable market in enterprise work mgmt is large. Mgmt's estimate stands at $25B; our analysis suggests a similar figure in 2019, growing to approx. $41B by 2022 (18% CAGR). UPLD has delivered decent organic growth in addition to inorganic growth over the past few quarters. Organic subscription and support revenue grew 10% in 1Q19, 5% in 2Q19, 6% in 3Q19, 3% in 4Q19, 6% in 1Q20, 7% in 2Q20, and 14% in 3Q20. Going forward, investors are concerned whether UPLD can continue delivering organic growth and whether it can continue to compete in these large markets that already have established competitors. We believe Street estimates at flat organic growth for 2021 are conservative. We believe the valuation for the stock remains compelling which is attractive at 5.4x EV/2022E Revs

- **Smartsheet** – Hold, $75 PT – We believe Smartsheet has a large opportunity before it as a process automation platform that enables white collar workers to harness the value of Information Technology. The concept of empowering white collar workers to harness the power of IT is not new, but the ability to accomplish it in an efficient manner has enabled the promise of Smartsheet to flourish. We believe this will result in strong growth for Smartsheet. If we consider the 1.25B knowledge workers in the world, Smartsheet total seats only represent 60 bps of the opportunity, and paid users likely only 10 bps. Regardless how you look at it, we believe this is a massive opportunity, and Smartsheet has only just begun to penetrate it. While we are very bullish on the market opportunity for Smartsheet we remain cognizant of valuation, trading at a multiple of ~21x EV/NTM Subscription. We believe this is warranted but have a Hold rating.

E-Commerce – Best Ways to Play

Covid-19 accelerated the shift to e-commerce transactions, whether for physical goods or service items, causing a surge in demand for vendor solutions. Even businesses that relied mainly on a physical location had to aggressively pivot online. We expect to see sustained growth in 2021 as there is no turning back. Both pure online and hybrid businesses will be under pressure to continuously enhance their e-commerce capabilities, which should drive demand for easy-to-use and flexible solutions.

How to Play:

- **Shopify** (SHOP) – Buy PT $1,250 (covered by Samad Samana). SHOP's LT prospects are brighter than ever with a path to $10B in revenue. Samana's thesis is based on: 1) new initiatives should drive take rate gains; 2) GMV should benefit from sustained shift to e-commerce; 3) renewed stimulus could drive GMV upside; and 4) co is starting to see leverage in the model

- **BigCommerce** (BIGC) – Hold PT $100 (covered by Samad Samana). Samana sees a "Big(E)Commerce" opportunity, based on: 1) tailwinds translating to accelerating financials; 2) increasing traction with enterprise customers; and 3) technology and open ecosystem as differentiators.

In addition to the above pure-play vendors, the following have significant exposure to the e-commerce tailwind:

- **Adobe** (ADBE) – Buy PT $600: Adobe's e-commerce capability is centered around the Magento acquisition. Magento was historically strong in the mid-market, but has gained enterprise credibility under the Adobe umbrella. Magento is part of the Digital Experience segment, which has a $3.3Bn annual revenue run rate.

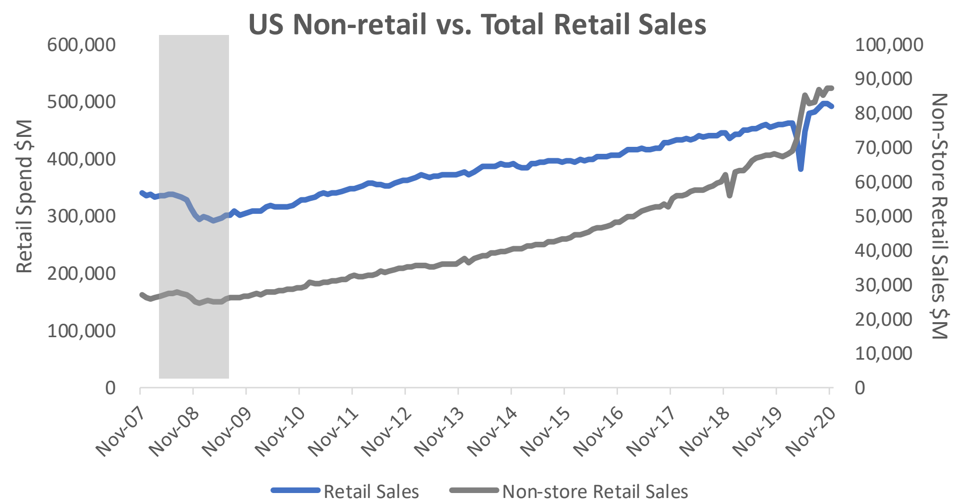
- **Salesforce.com** (CRM) – Buy PT $320: CRM's e-commerce capability is centered around the Demandware and CloudCraze acquisitions. The Marketing and Commerce segment has a $3.2Bn annual revenue run rate.

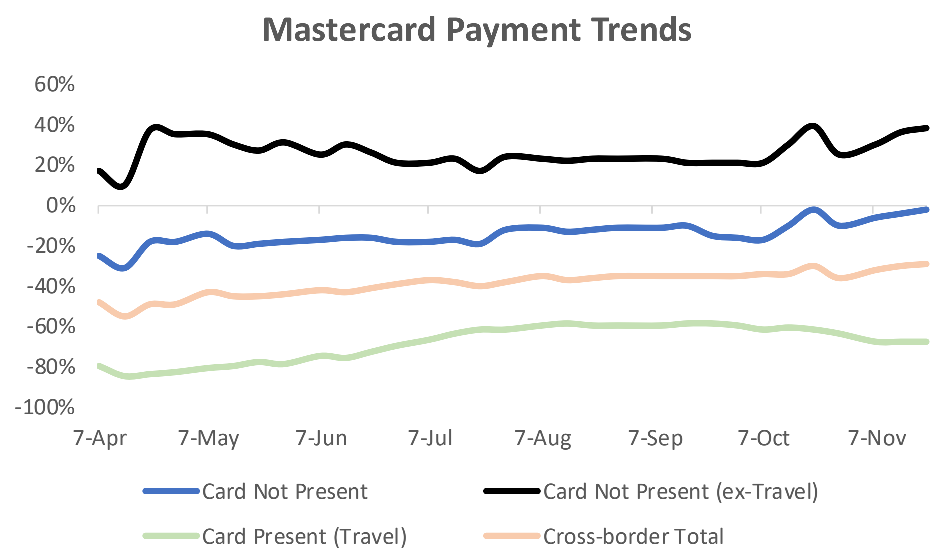
- **Wix.com** (WIX) - Buy PT $360: WIX is a premium SMID-cap story with high recurring revenues, innovation-driven growth, and an emerging platform story as WIX enables professional web sites/apps for businesses worldwide. Wix offers its own payments solutions and plans to roll-out a POS offering.

- **GoDaddy** Inc. (GDDY) - Buy PT $100: GDDY is the largest vendor for domains and web presence. We see GDDY becoming nimbler with its product offerings, including a new freemium option and more bundles. GDDY recently announced the acquisition of Poynt and its POS solutions. We like GDDY's consistent execution, double-digit organic revenue growth, strong uFCF generation and attractive valuation.

E-Commerce: Strong Tailwinds Heading Into 2021

- **Secular Tailwinds Paired with Covid Disruptions Turbocharged Growth**
  - E-commerce was benefitting from secular tailwinds driving accelerating growth trends before Covid
    - Stay-at-home orders and business closures during the pandemic drove shoppers to e-commerce in record numbers as an outlet to make purchases
- **E-Commerce Traction is Here to Stay**
  - Non-store retail sales have remained strong even as lockdowns have eased
    - Despite total retail sales growth faltering as fiscal stimulus faded in Oct/Nov, non-store retail sales growth has remained robust, suggesting sustained shifts in consumer behavior
  - Card Not Present payment volumes have also remained strong despite the reopening economy and expiration of enhanced UI benefits
    - Interestingly, and supported by strong non-store retail sales in October and November, card not present transactions have accelerated into the year end-- a potential indicator of a second wave of e-commerce strength.

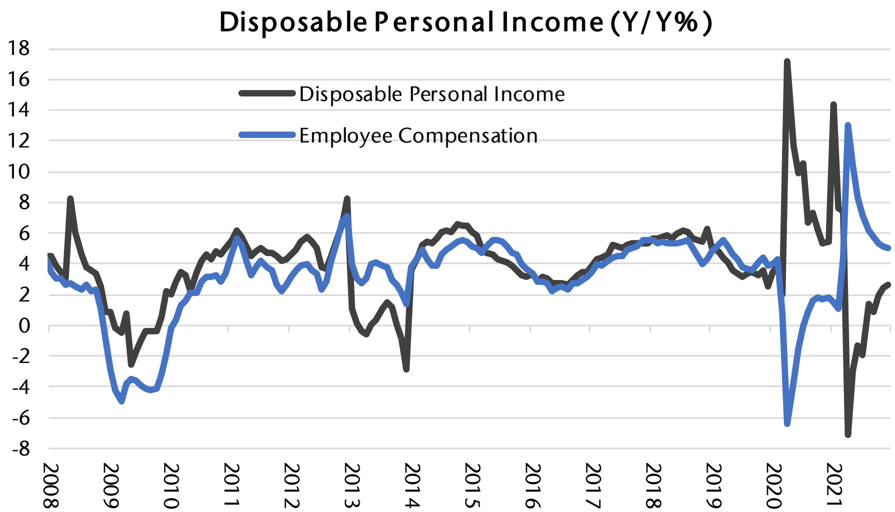




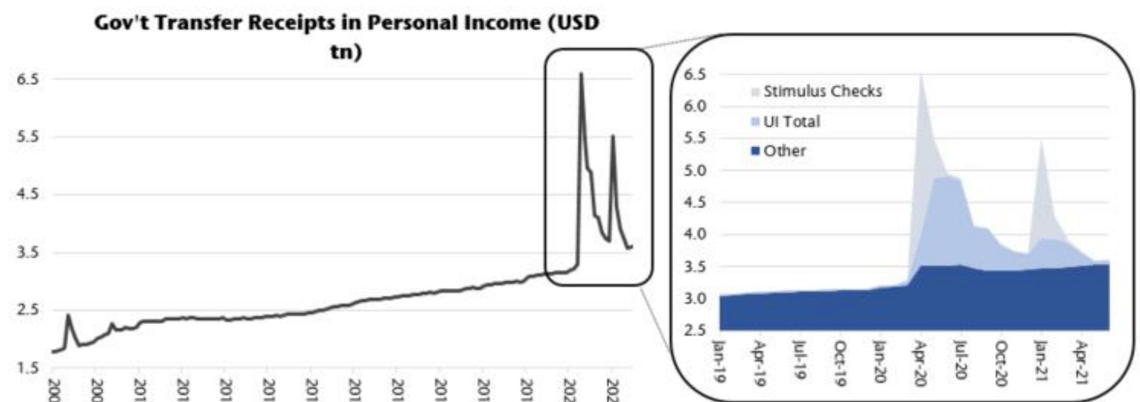
Source: Company data, Jefferies

E-Commerce: Renewed Stimulus Could Provide Upside

- **Renewed Fiscal Stimulus Could Provide Additional Boost**
  - We believe investors are no longer factoring a material impact from renewed stimulus, which we see as a driver of potential e-commerce sales upside
  - The Spring 2020 surge in retail spend coincided with the first surge in government transfer payments
    - While the summer plateau and fall stall occurred as the impact of stimulus faded
    - The late July expiration of enhanced benefits caused total UI payments to drop by nearly 50%, reducing total personal income in the US by ~3%
  - The renewed stimulus package recently agreed to by Congress will provide a second surge in disposable personal income (DPI)
    - JEF Economics estimates the new stimulus will cause DPI to surge 8.8% m/m in January and >20% annualized in 1Q20, which should filter down to higher retail spending



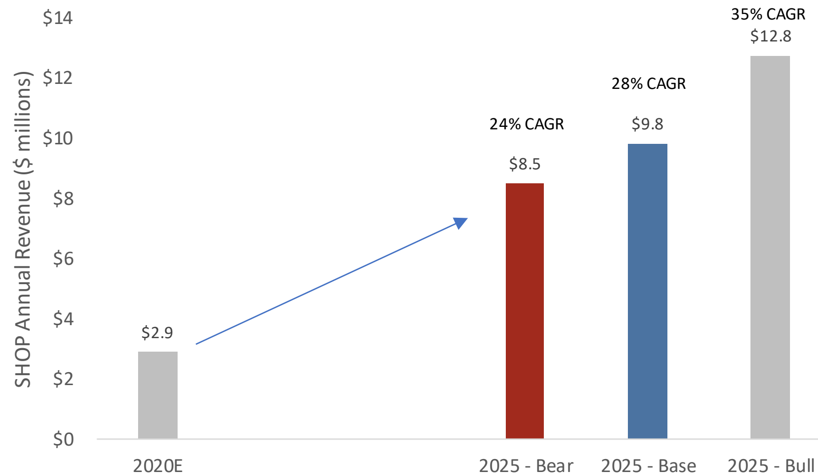
Source: Haver, JEF Economics.

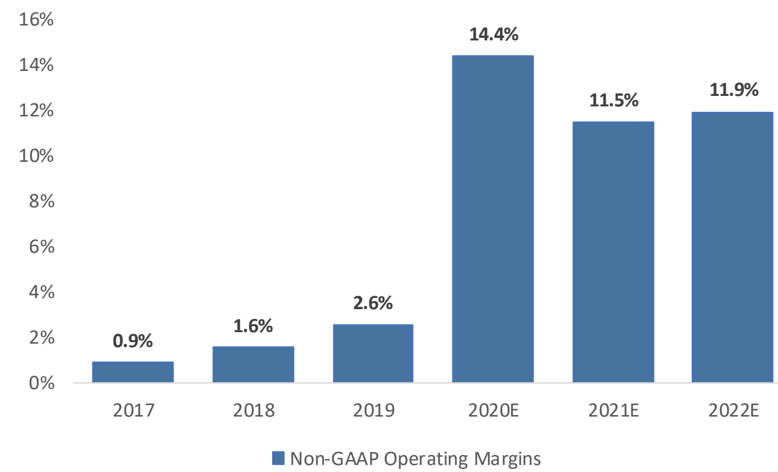


Source: Haver, JEF Economics. Projections assume a second stimulus check of $1200, phased out out between $75-100k, and enhanced UI benefits cut from $600 to $200/week.

Shopify (SHOP) – LT Prospects Brighter Than Ever With Path to $10B in Revenue

- **New Initiatives to Drive Take Rate Gains**
  - We are positive on SHOP's ability to drive the GMV take rate higher through new product initiatives such as Balance and Fulfillment
  - We believe new initiatives should boost the GMV take rate to at least 3% by 2025, driving revenue growth at a 5-year CAGR of 28% to ~$10B in 2025
  - Each additional percentage point would contribute ~$3B of incremental revenue
- **GMV Will Benefit From Sustained Shift to E-Commerce**
  - US Non-Store retail sales are up materially in 2020 and have remained strong even as the economy reopened
  - Online transaction volumes have settled into a higher y/y trend, indicative of e-commerce's staying power
- **Renewed Stimulus Could Drive GMV Upside**
  - We believe investors are no longer factoring in a material impact from renewed stimulus
  - We see the recent passing of fiscal stimulus as a potential driver of GMV upside
- **Starting to See the Leverage in the Model**
  - The sharp increase in 2020 GMV has unveiled the inherent leverage in SHOP's model
  - While some expansion has resulted from lower T&E and will likely reverse next year, we believe the results in 2020 have quieted the debate on whether SHOP can achieve >20% op margin at scale

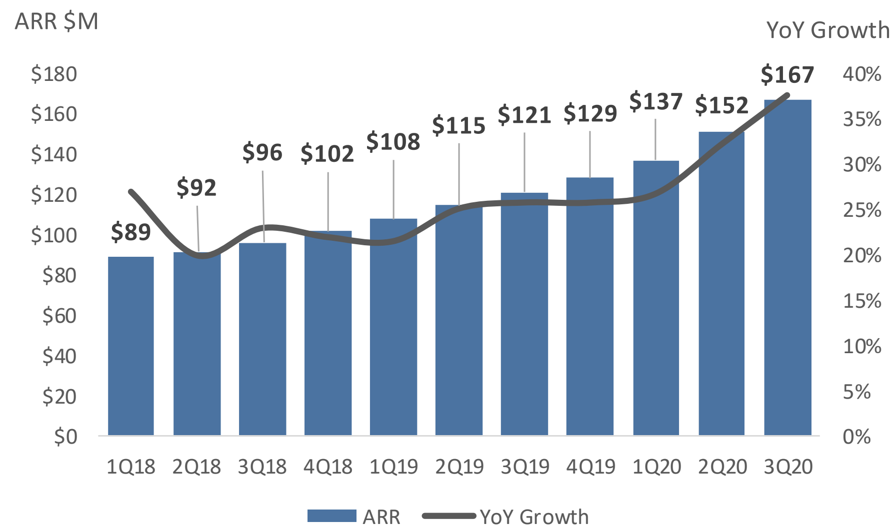


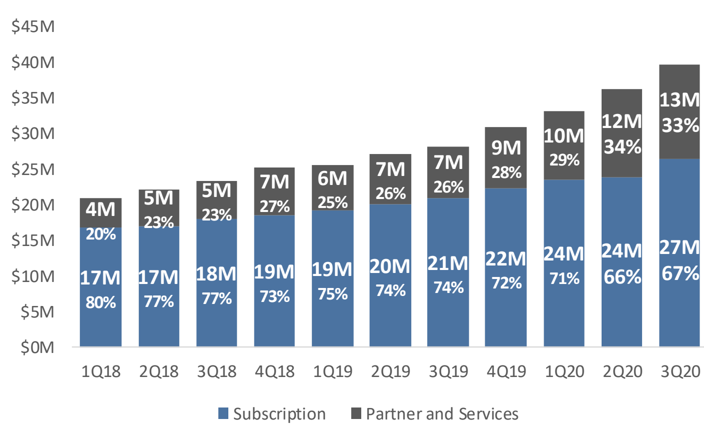


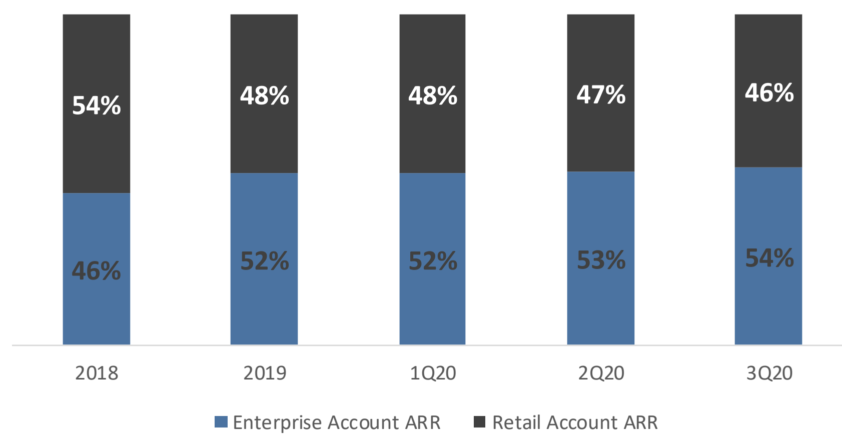
Source: Company data, Jefferies

BigCommerce (BIGC) – Big(E)Commerce Opportunity

- **Tailwinds Translating to Accelerating Financials**
  - BIGC's investments in an enterprise e-commerce platform over the last few years and secular tailwinds were driving accelerating growth trends before Covid
  - Years of groundwork left BIGC well positioned to capitalize on this moment driving accelerating total revenue growth, and particularly PSR growth
- **Increasing Traction with Enterprise Customers**
  - Mgmt. has repositioned itself upmarket into the mid-market and enterprise segments
  - This shift is reflected in BIGC's ARR trends, where enterprise accounts have steadily increased their share of total ARR
  - In 3Q20, 54% of BIGC's total ARR was derived from enterprise accounts, up from 46% in 2018
- **Technology, Open Ecosystem a Differentiator**
  - BIGC has a cloud-native, open SaaS platform that offers the ability to integrate with over 600+ third-party apps using APIs.
  - We see BIGC's approach of building a best-of-breed ecosystem as a key differentiator vs. some other e-comm platforms that have a more proprietary tech-based approach.







Source: Company data, Jefferies

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Top Picks in Security

Large Cap:

- **Microsoft (MSFT) – PT: $260:** We view Microsoft as a large, diversified business with excellent visibility and a clear line of sight into near double-digit revenue growth for the foreseeable future. Microsoft is uniquely positioned to benefit from the growth of both the IaaS/PaaS market as well as the SaaS market. The majority of Microsoft's growth today comes from these verticals, which industry experts expect to grow significantly.
- **Palo Alto Networks (PANW) – Buy, $425 PT**: PANW reported strong F1Q results, raised FY21 guide and provided increased visibility into its business likely alleviating a lot of investor concerns. PANW is well-positioned in the hybrid world given investments in cloud to complement its network assets, although this has meant continued M&A ($2.7B over last 2 years). Our SOTP analysis derives a $425 PT. PANW shares are a bargain at approximately 7x EV/2022 revenue for a near rule of 40 vendor.
- **CrowdStrike (CRWD) – Buy, $275 PT:** CRWD is well-positioned to demonstrate that a security vendor with roots in the endpoint can become much more than its predecessors were, with high enterprise class renewal rates, hyper-growth, and impressive SaaS gross margin as it's on its way to becoming a true security platform.

Small/Mid Cap:

- **Cloudflare (NET) – Buy, $95 PT:** NET is disrupting legacy network and web security vendors with its unique cloud-based technology architecture and freemium model. We believe NET could sustain elevated growth for multiple years as it launches more security services (Cloudflare One, Cloudflare for Teams, Workers) and enterprise adoption further accelerates, justifying a premium valuation.
- **Varonis (VRNS) – Buy, $200 PT:** VRNS has completed perhaps the fastest transition to subscription we've seen in software. VRNS is a rare gem with accelerating top and bottom line as this stock continues to work post model transition. See potential significant rev acceleration above Street estimates coupled with an improving bottom-line.

CRWD: Untethering the Falcon; Upgrading to Buy from Hold, PT $275

Thesis. We believe CRWD's dream of defining a new category - The Security Cloud - is coming closer to fruition. We view CRWD as a great company and a category winner that is addressing a huge and ever expanding TAM which should sustain hyper growth for years.

Security took on greater importance with WFH creating a more distributed network

- SWI breach evidence that multiple bodyguards remain needed in todays world
- Security budgets continue to grow as a % of IT spending

Large Displacement opportunity of Legacy Vendors Remains. CRWD should continue to take share from more legacy vendors such as Symantec's enterprise assets (AVGO) as well as McAfee.

- Symantec, McAfee, Trend Micro, and Sophos account for $2.4B or 34% of the market in 2019
- The opportunity is even larger with upsells representing a 2x+ multiplier to core AV product
- 14 modules today vs. 3 in 2016

Cloud Workloads Expand TAM even Further. New module enables customers to protect multi-cloud environments by preventing misconfiguration and automating security across any environment

- Many cloud workloads have no protection, and CRWD believes the typical enterprise has 10x as many cloud workloads as it does endpoints.
- Moves CRWD into more metered billings vs per endpoint pricing and we estimate that cloud security spend today is $1.2B and see this growing to $12.4B in 2023.

Gartner Corporate Market Share

Vendor	2018 Rev	Share %	2019 Rev	Share %	YoY Growth %
Microsoft	978	17.4%	1,633	23.5%	66.9%
McAfee	585	10.4%	670	9.6%	14.5%
Symantec	807	14.3%	658	9.5%	-18.4%
Trend Micro	567	10.1%	594	8.5%	4.6%
Sophos	428	7.6%	461	6.6%	7.7%
CrowdStrike	220	3.9%	422	6.1%	91.8%
Other	2,043	36%	2,519	36%	23.3%
Total Corporate Endpoint	**5,629**	**100.0%**	**6,957**	**100.0%**	**23.6%**

Source: Jefferies, Gartner,

All statements in this report attributable to Gartner represent Jefferies interpretation of data, research opinion or viewpoints published as part of a syndicated subscription service by Gartner, Inc., and have not been reviewed by Gartner. Each Gartner publication speaks as of its original publication date. The opinions expressed in Gartner publications are not representations of fact and are subject to change without notice.

Numbers Remain Achievable. Using typical linearity, Street FY22 rev estimates imply new business ARR of down approx -30% for the next 5 quarters vs +68% in FY20 and an avg of +64% in the first 3Qs of FY21.

Not Just Another Endpoint Vendor – Customers Stay. Endpoint is the area of software (not just security) where we hear more about competitive displacements than any other. CRWD provides state of the art, next generation endpoint technology with a foundation in its unique graph database and lightweight agent, which leverages AI and ML. Integrated technologies beyond endpoint that are underpinned by the same graph database will likely make CRWD stickier than traditional endpoint vendors.

Jefferies vs. The Street. For CY21, we model total rev of $1,279.8M vs consensus of $1,193.1M and non-GAAP operating margins of 9.5% vs cons of 5.9%.

Valuation. Our $275 PT represents 41x EV/2022 rev (31% yoy growth) vs DDOG 31x (33% growth), SNOW 55x (64% growth), PLTR 31x (26% growth)

- If we assume a more normalized 30% new ARR growth in FY22 and 20% in FY23, our PT implies 31x EV/CY2022 rev (based on 47% rev growth).

CrowdStrike TAM by Submarket

in billions of $

Market/Submarket	2018	2019	2020E	2021E	2022E	'19-'22E CAGR
Consumer Endpoint	**5.2**	**5.3**	**5.3**	**5.4**	**5.5**	**0.9%**
yoy growth	*1.1%*	*2.7%*	*0.7%*	*1.1%*	*0.9%*	
Corporate Endpoint Security	**6.9**	**7.6**	**8.1**	**8.7**	**9.3**	**7.1%**
yoy growth	*12.1%*	*9.7%*	*7.5%*	*6.9%*	*6.8%*	
Security Information and Event Management & Vulnerability Assessment	**5.3**	**6.0**	**6.8**	**7.6**	**8.4**	**11.8%**
yoy growth	*12.9%*	*13.5%*	*12.4%*	*11.9%*	*11.1%*	
Security Information and Event Management	**3.3**	**3.7**	**4.1**	**4.6**	**5.1**	**11.4%**
yoy growth	*12.7%*	*12.9%*	*12.3%*	*11.5%*	*10.5%*	
Vulnerability Assessment	**2.1**	**2.4**	**2.6**	**3.0**	**3.3**	**12.3%**
yoy growth	*13.1%*	*14.4%*	*12.5%*	*12.4%*	*12.0%*	
Corporate Endpoint Managed Security Services - Jefferies Estimate	**3.6**	**4.2**	**4.8**	**5.4**	**6.1**	**12.9%**
yoy growth	*18.0%*	*16.6%*	*13.8%*	*12.8%*	*12.1%*	
Total Managed Security Services	21.1	24.3	27.9	31.8	36.0	14.0%
yoy growth	*15.3%*	*15.1%*	*14.8%*	*14.1%*	*13.2%*	
IT Asset Management	**2.0**	**2.2**	**2.2**	**2.1**	**2.2**	**-0.4%**
yoy growth		*10.0%*	*-2.6%*	*-1.0%*	*2.4%*	
Cloud Workload Security [1]	**7.7**	**8.3**	**8.3**	**8.5**	**9.1**	**3.5%**
yoy growth	*39.9%*	*6.8%*	*0.7%*	*2.4%*	*7.5%*	
Jefferies Estimate of Crowdstrike's Total Addressable Market	**30.7**	**33.6**	**35.5**	**37.8**	**40.6**	**6.5%**
yoy growth	*45.2%*	*9.3%*	*5.8%*	*6.2%*	*7.5%*	
Crowdstrike revenue, Jefferies est. (in millions of $) [2]	249.8	481.4	857.6	1,279.8	1,697.1	52.2%
yoy growth	*110.4%*	*92.7%*	*78.1%*	*49.2%*	*32.6%*	
% of TAM	*0.8%*	*1.4%*	*2.4%*	*3.4%*	*4.2%*	

[1] Cloud Workload Security estimate based on IDC forecasts for Application Development and Deployment and System Infrastructure Software markets multiplied by 5.7% cloud security spend allocation

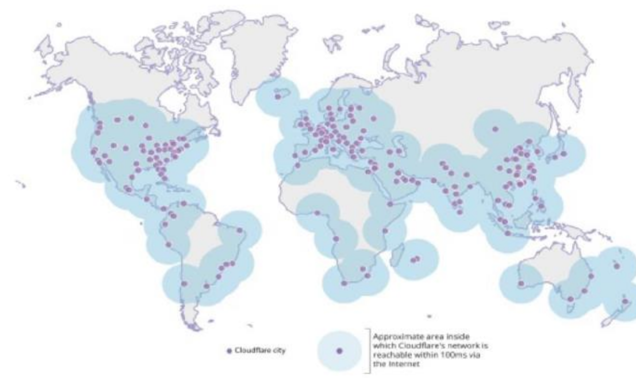
[2] We show the closest corresponding fiscal year for Crowdstrike (January FY); for example, Crowdstrike's F2019 compared to our calendar 2018 market size estimates.

Source: Jefferies, IDC

Behold the Cloudflare NETwork: Buy; $95 PT

- **Thesis.** We believe Cloudflare is a multi-year secular winner that's in just the early stages of disrupting multiple security and related infrastructure software. The company could sustain near 40%+ growth for multiple years (we're modeling over 37% growth in 2021 though this may prove conservative and as the company's TAM is large and growing near 20%) and reach meaningful profitability at scale, justifying current or higher valuation.
- **Unique Technology Disrupting Traditional Network Solutions.** NET's ability to deliver an entire suite of network-oriented solutions via a distributed network of global servers is disrupting incumbent players in network security, web security, networking equipment, and cloud computing. NET's network architecture also enables it to serve as part of the Internet backbone, by intelligently routing traffic, between external users and B2C/B2B websites or between internal corporate users. This unique bundle of web security and performance is starting to make NET indispensable to many organizations.
- **Unique Freemium model; Tremendous Land/Expand Opportunity.** NET has millions of users managing tens of millions of Internet domains, mobile apps, and APIs (accounting for over 20% of the world's traffic). Only 101,000 users are paying customers, and only 736 are "large enterprise" customers paying over $100K in ACV. The enterprise adoption has been all users naturally discovering NET—the company only started building out a small field sales force in 2018—and these large customers are growing about 60%+ yoy each quarter. The company's land and expand opportunity is enormous.
- **Beneficiary of Recent COVID-19 Pandemic.** NET is a potential beneficiary of increased remote working during the 2020 COVID-19 crisis. NET is one of a handful of key global CDN providers that deliver and optimize Internet traffic between users, ISPs, and web domains. Also, its customers tend to use more web security solutions during this period of increased Internet usage.
- **Valuation.** NET has the potential reach $1 billion of revenue with positive cash flows in just a few years. Our $95 PT implies 43x EV/2022E rev. We believe the multiple will level out as the company continues to beat and raise.

Cloudflare's Edge Server Network



Source: Jefferies and company data

Cloudflare's Long-Term Targets

	2019A	2020E	2021E	2022E	2023E	Steady State
Revenue ($M)	287.0	423.1	579.1	768.7	991.9	
Revenue Growth	49.0%	47.4%	36.9%	32.7%	29.0%	30%
Gross Margin	78.2%	77.2%	76.8%	76.8%	76.9%	75-77%
S&M Expense	52.5%	46.5%	43.7%	39.2%	34.0%	27-29%
R&D Expense	27.0%	21.8%	22.6%	20.6%	18.1%	18-20%
G&A Expense	23.5%	17.8%	14.8%	12.3%	10.8%	8-10%
Op. Margin	**(24.8%)**	**(9.0%)**	**(4.4%)**	**4.6%**	**13.9%**	**20%+**

Source: Jefferies and company data

Palo Alto Networks (PANW) $36B Market Cap, Buy $425 PT

Investor Debate: PANW is viewed by many investors as a best-in-class security platform play, having acquired formidable cloud security and orchestration offerings to complement its market-leading next-gen firewall. PANW's "next-gen security" portfolio (Prisma, Cortex, and VM-Series) will help deliver strong and mostly organic growth helping offset slowing core firewall growth.

- Bulls Will Say…
  - The Prisma suite (introduced March 2019), built primarily through acquisitions, addresses key areas that are ancillary to network security, such as cloud-native environments and CI/CD and microservices approaches to application development.
  - Mgmt. expectations for 29% non-GAAP op. margins in Network Security and 71% organic ARR growth in Cloud & AI for FY21 give the business a strong balance of growth and profitability.
  - PANW has ramped up its sales force and R&D teams to support its expanded product portfolio, including over 3,800 salespeople to support over 5,600 channel partners in over 170 countries. We believe there is tremendous cross-selling potential as more of the sales force gets ramped up.

- Bears Will Say…
  - Product revenue declined 3% in FY20. Mgmt attributed the declines to sales incentives that were designed to push new products. However, this raises potential concerns of continued slowdown in core firewall sales.
  - The biggest threat to PANW is the rise of pure cloud-based network firewall providers, such as Zscaler, and the major public cloud providers (e.g. Amazon Web Services).

- Valuation
  - Our $425 PT is SOTP-based; our analysis assumes a FY21 EV/Revenue multiple range of 34-39x for the Cloud & AI business and 5-6x for the Network Security business. Guidance implies 90% and 14% top line growth rates for each respective segment and yields a $391-$458 implied share price range.
  - PANW trades at 6.6x EV/2022E Revenue, which equals only 0.4x on a revenue growth adjusted basis (18% consensus revenue growth in 2021).

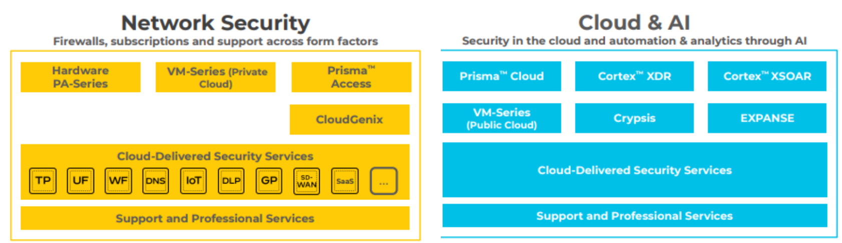
- **Jeff take…**
  - PANW has a best-in-class security portfolio, comprised of its market-leading next-gen firewall at its core and complemented by a growing suite of strong technologies that address cloud security and incorporate automation.
  - PANW's portfolio effectively addresses both increasing customer desire to consolidate security functionalities and to protect beyond the traditional network perimeter.
  - While execution will be key, we believe that PANW has the right management team and go-to-market strategy to further capture market share.

Revenue, Billings and Op Margin, FY18-FY22E

PANW	FY18A	FY19A	FY20A	FY21E	FY22E
Total revenue ($M)	2,274	2,900	3,408	4,115	4,847
y/y growth	30%	28%	18%	21%	18%
Total billings ($M)	2,861	3,509	4,330	5,110	6,014
y/y growth	NA	23%	23%	18%	18%
Non-GAAP Op. Profit	499	637	599	743	916
y/y growth	22%	28%	-6%	24%	23%
Non-GAAP Op. Margin	22%	22%	18%	18%	19%

Sources: Jefferies, Numbers are Street estimates according to FactSet

Product Portfolio



Source: Company data

Sum-of-the-Parts Analysis

	Multiple				Enterprise Value	
	Low	High	FY21 Rev Guidance	FY21 yoy growth	Low	High
Cloud & AI	34.0x	39.0x	605	90%	20,570	23,595
Network Security	5.0x	6.0x	3,510	14%	17,550	21,060
Implied Enterprise Value					38,120	44,655
Implied Share Price					**$391**	**$458**
Average Implied Share Price					**$425**	

Source: Jefferies estimates, Company data

Varonis (VRNS) $6.1B Market Cap, Buy $200 PT
The Model Transition is Done but the Stock is Not

- We believe Varonis is well positioned to be a leader in an emerging market opportunity around managing human-generated unstructured data (e.g., email, spreadsheets, documents, video and audio files). We think the company's secret sauce is its proprietary, metadata technology platform, which has no real competition today and is on its way to becoming the industry standard.

- Under a subscription model, customers don't have to wait years to recognize greater value from Varonis since they can now consume more licenses (average initial deal is 4-5) at a lower initial cost, versus for the perpetual model (average initial deal is 2-3).

- We see potential significant rev acceleration above cons estimates coupled with an improving bottom-line, supporting continued stock appreciation.
  - **Improving Profitability.** VRNS reported a 4% non-GAAP op margin vs cons. (4.3%) and was profitable for the first time since 4Q18. It is now seeing the beginnings of the benefits of its subscription transition further evidenced by its guidance for 6-7% op margin in 4Q
  - **Investments Demonstrate Confidence in the Business**. The company is focusing its hiring on sales and R&D roles and also bought Polyrize as a technology tuck that will lead to even more licenses (currently 26) it can sell.

- Recent material GDPR fines and security breaches could become a catalyst for product demand.

- Valuation
  - VRNS trades at 14.3x EV/2022 Revenue

Varonis – The Model Transition
Street Estimates Remain Conservative

Non-GAAP Income Statement	FY18A	FY19A	FY20E					FY21E				
	YearA	YearA	Mar-20A	Jun-20A	Sep-20A	Dec-20E	YearE	Mar-21E	Jun-21E	Sep-21E	Dec-21E	YearE
Revenues:												
License & Subscription	147.70	118.82	20.75	34.33	44.46	51.10	150.64	31.30	46.80	57.40	67.40	202.90
q/q change			*(45.9%)*	*65.4%*	*29.5%*	*14.9%*		*(38.7%)*	*49.5%*	*22.6%*	*17.4%*	
y/y change	*22.0%*	*-19.5%*	*-7.9%*	*30.3%*	*40.7%*	*33.2%*	*26.8%*	*50.8%*	*36.3%*	*29.1%*	*31.9%*	*34.7%*
Perpetual License	138.93	42.07	0.4	0.2	0.4	0.3	1.30	0.3	0.3	0.4	0.4	1.40
q/q change			*(94.3%)*	*-38.1%*	*55.4%*	*-19.6%*		*0.0%*	*0.0%*	*33.3%*	*0.0%*	
y/y change	*18.7%*	*-69.7%*	*-97.5%*	*-97.9%*	*-95.5%*	*-95.6%*	*-96.9%*	*-22.7%*	*25.0%*	*7.2%*	*33.3%*	*7.6%*
Subscription	*8.76*	*76.75*	*20.37*	*34.09*	*44.08*	*50.80*	*149.34*	*31.00*	*46.50*	*57.00*	*67.00*	*201.50*
q/q change			*(35.5%)*	*67.4%*	*29.3%*	*15.2%*		*(39.0%)*	*50.0%*	*22.6%*	*17.5%*	
y/y change	*119.1%*	*776.0%*	*190.7%*	*129.7%*	*88.8%*	*61.0%*	*94.6%*	*52.2%*	*36.4%*	*29.3%*	*31.9%*	*34.9%*
Percentage of Total License & Subscription r	*5.9%*	*64.6%*	*98.1%*	*99.3%*	*99.2%*	*99.4%*	*99.1%*	*99.0%*	*99.4%*	*99.3%*	*99.4%*	*99.3%*
Total License (Perpetual equivalent)	*150.03*	*193.19*	*30.7*	*45.2*	*49.1*	*47.5*	*172.46*	*26.8*	*32.9*	*35.6*	*43.9*	*139.16*
yoy growth		***28.8%***	***6.7%***	***8.8%***	***-10.1%***	***-30.5%***	***-10.7%***	***-12.6%***	***-27.3%***	***-27.4%***	***-7.6%***	***-19.3%***

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Sources: Jefferies, Company data, FactSet

Jefferies

Security – Other Ways to Play

How to Play:

- **SailPoint (SAIL) –** Buy, $70 PT: We believe SAIL offers a best-in-class identity governance solution that we expect to continue to gain market share in a large TAM. The company's solution is in the right place at the right time as it capitalizes on secular tailwinds related to WFA. SAIL trades at 12x EV/2022E revenue which we believe is warranted given its current growth profile.

- **Check Point (CHKP) –** Hold, $135 PT: As a pioneer in firewall technology that provides the cornerstone of a comprehensive network security platform and increased deployment options, CHKP could remain well-positioned for a consolidating IT security market. However, total revenue has grown only low-single-digits while product revenue has struggled to grow although it increased in F3Q for the second consecutive quarter based on WFH and product refresh tailwinds. However, there aren't signs this will sustain yet and secular risks have heightened. We acknowledge limited downside rooted in CHKP's consistent 50% operating margin and strong shareholder return but await top-line acceleration to become more positive. Our $135 PT implies 14x EV/2022 FCF.

- **Mimecast (MIME) –** Hold, $55 PT: Mimecast is pursuing a large opportunity to secure, archive, and ensure the lifeblood of organizations (email) but growth rates and business metrics have slowed down given the pandemic and the company continues to face competitive (Microsoft) concerns as well as sees impact related to FX greater than any other company we cover. We would become more constructive with improved execution and new logo additions increasing our confidence in rev acceleration. Our $55 PT implies 5x EV/2022 rev.

- **Tufin (TUFN) –** Hold, $15 PT: We believe Tufin has a large untapped opportunity of over $11.9B in security policy orchestration, which helps customers establish a unified security policy across their IT infrastructure from on-premise to the Public Cloud, while also helping to automate any required changes. While this is not a new issue faced by todays IT personnel, this opportunity has only recently materialized. We believe Tufin technology is in the right place at the right time and that Tufin is ahead of competitors in providing the functionality needed to manage and automate security policy. While we believe Tufin has a great product, we have a Hold rating due to the uncertainty and execution risk associated with a perpetual license model in this environment. Our DCF-derived PT of $15 equates to 4x EV/2022 rev.

Models

Palantir (PLTR) Non-GAAP Income Statement

Non-GAAP Income Statement	FY20E					FY21E					FY22E					FY23E				
	Mar-20	Jun-20	Sep-20	Dec-20E		Mar-21E	Jun-21E	Sep-21E	Dec-21E		Mar-22E	Jun-22E	Sep-22E	Dec-22E		Mar-23E	Jun-23E	Sep-23E	Dec-23E	
USD in Millions, except per share amounts	F1Q20	F2Q20	F3Q20	F4Q20E	FY20E	F1Q21E	F2Q21E	F3Q21E	F4Q21E	FY21E	F1Q22E	F2Q22E	F3Q22E	F4Q22E	FY22E	F1Q23E	F2Q23E	F3Q23E	F4Q23E	FY23E
Total Revenue	**229.3**	**251.9**	**289.4**	**300.5**	**1,071.0**	**310.7**	**334.1**	**378.6**	**391.4**	**1,414.7**	**401.1**	**424.2**	**472.3**	**483.7**	**1,781.3**	**492.0**	**515.2**	**562.9**	**572.9**	**2,143.0**
y/y growth	*56.7%*	*42.9%*	*51.9%*	*31.0%*	*44.2%*	*35.5%*	*32.6%*	*30.8%*	*30.3%*	*32.1%*	*29.1%*	*27.0%*	*24.8%*	*23.6%*	*25.9%*	*22.7%*	*21.4%*	*19.2%*	*18.5%*	*20.3%*
q/q growth	*(0.0%)*	*9.8%*	*14.9%*	*3.8%*		*3.4%*	*7.5%*	*13.3%*	*3.4%*		*2.5%*	*5.8%*	*11.3%*	*2.4%*		*1.7%*	*4.7%*	*9.3%*	*1.8%*	
Seasonality	*21.4%*	*23.5%*	*27.0%*	*28.1%*		*22.0%*	*23.6%*	*26.8%*	*27.7%*		*22.5%*	*23.8%*	*26.5%*	*27.2%*		*23.0%*	*24.0%*	*26.3%*	*26.7%*	
Total Cost of Sales	**56.2**	**50.6**	**55.0**	**54.1**	**215.8**	**62.1**	**65.1**	**71.9**	**66.5**	**265.7**	**78.2**	**80.6**	**87.4**	**79.8**	**326.0**	**91.5**	**90.7**	**104.7**	**100.8**	**387.7**
Gross Profit	**173.1**	**201.3**	**234.4**	**246.4**	**855.2**	**248.5**	**268.9**	**306.6**	**324.8**	**1,148.9**	**322.9**	**343.6**	**384.9**	**403.9**	**1,455.3**	**400.5**	**424.5**	**458.2**	**472.1**	**1,755.3**
Gross Margin	*75.5%*	*79.9%*	*81.0%*	*82.0%*	*79.8%*	*80.0%*	*80.5%*	*81.0%*	*83.0%*	*81.2%*	*80.5%*	*81.0%*	*81.5%*	*83.5%*	*81.7%*	*81.4%*	*82.4%*	*81.4%*	*82.4%*	*81.9%*
y/y growth	*62.7%*	*62.1%*	*76.7%*	*49.5%*	*61.9%*	*43.6%*	*33.6%*	*30.8%*	*31.9%*	*34.3%*	*29.9%*	*27.8%*	*25.5%*	*24.3%*	*26.7%*	*24.0%*	*23.5%*	*19.0%*	*16.9%*	*20.6%*
Research & Development	50.8	48.9	57.1	33.0	189.9	62.1	60.1	46.2	41.1	209.5	75.4	72.5	55.7	50.3	254.0	89.5	86.6	66.4	60.2	302.7
% of Total Revenue	*22.1%*	*19.4%*	*19.7%*	*11.0%*	*17.7%*	*20.0%*	*18.0%*	*12.2%*	*10.5%*	*14.8%*	*18.8%*	*17.1%*	*11.8%*	*10.4%*	*14.3%*	*18.2%*	*16.8%*	*11.8%*	*10.5%*	*14.1%*
y/y growth	*(11.6%)*	*(21.5%)*	*(6.1%)*	*(42.1%)*	*(20.1%)*	*22.4%*	*22.9%*	*(19.2%)*	*24.3%*	*10.4%*	*21.4%*	*20.6%*	*20.7%*	*22.4%*	*21.2%*	*18.7%*	*19.3%*	*19.2%*	*19.6%*	*19.2%*
q/q growth	*(11.0%)*	*(3.6%)*	*16.8%*	*(42.2%)*		*88.0%*	*(3.2%)*	*(23.2%)*	*(11.0%)*		*83.5%*	*(3.8%)*	*(23.2%)*	*(9.7%)*		*78.0%*	*(3.3%)*	*(23.3%)*	*(9.4%)*	
Sales & Marketing	80.2	62.6	71.0	72.1	285.8	101.0	86.9	94.6	97.8	380.3	128.3	110.7	120.4	125.8	485.3	152.5	130.3	140.7	146.1	569.7
% of Total Revenue	*35.0%*	*24.8%*	*24.5%*	*24.0%*	*26.7%*	*32.5%*	*26.0%*	*25.0%*	*25.0%*	*26.9%*	*32.0%*	*26.1%*	*25.5%*	*26.0%*	*27.2%*	*31.0%*	*25.3%*	*25.0%*	*25.5%*	*26.6%*
y/y growth	*(6.3%)*	*(31.7%)*	*(31.6%)*	*(19.8%)*	*(22.9%)*	*25.9%*	*38.8%*	*33.4%*	*35.7%*	*33.1%*	*27.1%*	*27.5%*	*27.3%*	*28.5%*	*27.6%*	*18.8%*	*17.7%*	*16.9%*	*16.2%*	*17.4%*
q/q growth	*(10.8%)*	*(22.0%)*	*13.4%*	*1.6%*		*40.0%*	*(14.0%)*	*9.0%*	*3.4%*		*31.2%*	*(13.7%)*	*8.8%*	*4.4%*		*21.3%*	*(14.5%)*	*8.0%*	*3.8%*	
General & Administrative	58.2	61.1	107.1	93.1	319.6	65.2	68.5	71.9	107.6	313.3	74.2	78.5	81.2	122.4	356.3	81.2	86.6	90.1	134.6	392.4
% of Total Revenue	*25.4%*	*24.3%*	*37.0%*	*31.0%*	*29.8%*	*21.0%*	*20.5%*	*19.0%*	*27.5%*	*22.1%*	*18.5%*	*18.5%*	*17.2%*	*25.3%*	*20.0%*	*16.5%*	*16.8%*	*16.0%*	*23.5%*	*18.3%*
y/y growth	*18.4%*	*8.4%*	*77.3%*	*5.8%*	*25.8%*	*12.1%*	*12.1%*	*(32.9%)*	*15.6%*	*(2.0%)*	*13.7%*	*14.6%*	*12.9%*	*13.7%*	*13.7%*	*9.4%*	*10.3%*	*10.9%*	*10.0%*	*10.1%*
q/q growth	*(33.9%)*	*5.0%*	*75.3%*	*(13.1%)*		*(30.0%)*	*5.0%*	*5.0%*	*49.6%*		*(31.1%)*	*5.8%*	*3.5%*	*50.6%*		*(33.7%)*	*6.6%*	*4.1%*	*49.5%*	
Total Operating Expenses	**189.2**	**172.6**	**235.2**	**198.3**	**795.3**	**228.3**	**215.5**	**212.7**	**246.6**	**903.1**	**278.0**	**261.7**	**257.4**	**298.4**	**1,095.5**	**323.2**	**303.4**	**297.2**	**340.9**	**1,264.8**
Operating Income	**(16.1)**	**28.7**	**73.1**	**48.1**	**133.8**	**20.2**	**53.5**	**93.9**	**78.3**	**245.8**	**44.9**	**81.9**	**127.5**	**105.4**	**359.8**	**77.2**	**121.1**	**161.0**	**131.2**	**490.5**
y/y growth	*na*	*na*	*na*	*na*	*na*	*na*	*86.2%*	*28.4%*	*62.8%*	*83.7%*	*122.5%*	*53.2%*	*35.8%*	*34.7%*	*46.4%*	*71.9%*	*47.9%*	*26.3%*	*24.4%*	*36.3%*
% margin	*(7.0%)*	*11.4%*	*25.3%*	*16.0%*	*12.5%*	*6.5%*	*16.0%*	*24.8%*	*20.0%*	*17.4%*	*11.2%*	*19.3%*	*27.0%*	*21.8%*	*20.2%*	*15.7%*	*23.5%*	*28.6%*	*22.9%*	*22.9%*
Contribution Profit	**92.9**	**138.7**	**163.5**	**174.3**	**569.4**	**147.6**	**182.1**	**212.0**	**227.0**	**768.6**	**194.5**	**232.9**	**264.5**	**278.1**	**970.0**	**248.0**	**294.2**	**317.5**	**326.0**	**1,185.6**
y/y growth	*346.6%*	*326.2%*	*465.9%*	*132.5%*	*262.2%*	*58.8%*	*31.2%*	*29.7%*	*30.3%*	*35.0%*	*31.8%*	*27.9%*	*24.8%*	*22.5%*	*26.2%*	*27.5%*	*26.3%*	*20.0%*	*17.2%*	*22.2%*
% margin	*40.5%*	*55.1%*	*56.5%*	*58.0%*	*53.2%*	*47.5%*	*54.5%*	*56.0%*	*58.0%*	*54.3%*	*48.5%*	*54.9%*	*56.0%*	*57.5%*	*54.5%*	*50.4%*	*57.1%*	*56.4%*	*56.9%*	*55.3%*
Other Income	15.2	(10.9)	(14.6)	(0.2)	(10.5)	(0.2)	(0.2)	(0.2)	(0.2)	(0.8)	(0.2)	(0.2)	(0.2)	(0.2)	(0.8)	(0.2)	(0.2)	(0.2)	(0.2)	(0.8)
Interest Expense	3.3	0.6	0.5	4.8	9.1	5.2	5.0	4.9	4.8	19.9	4.9	4.9	4.9	5.0	19.6	5.1	5.3	5.5	5.7	21.7
Pre-tax Income	**2.4**	**18.3**	**59.0**	**52.7**	**132.4**	**25.2**	**58.2**	**98.5**	**82.9**	**264.9**	**49.6**	**86.6**	**132.2**	**110.2**	**378.6**	**82.2**	**126.2**	**166.3**	**136.7**	**511.4**
Pre-tax Margin	*1.0%*	*7.3%*	*20.4%*	*17.5%*	*12.4%*	*8.1%*	*17.4%*	*26.0%*	*21.2%*	*18.7%*	*12.4%*	*20.4%*	*28.0%*	*22.8%*	*21.3%*	*16.7%*	*24.5%*	*29.5%*	*23.9%*	*23.9%*
Provision for Income Taxes	2.6	0.9	(8.5)	(0.5)	(5.6)	(0.3)	(0.6)	(1.0)	(0.8)	(2.6)	(0.5)	(0.9)	(1.3)	(1.1)	(3.8)	(0.8)	(1.3)	(1.7)	(1.4)	(5.1)
Effective Tax Rate	*107.0%*	*5.1%*	*(14.5%)*	*(1.0%)*	*(4.2%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*	*(1.0%)*
Net income, Non-GAAP	**(0.2)**	**17.4**	**67.5**	**53.2**	**138.0**	**25.5**	**58.8**	**99.5**	**83.7**	**267.6**	**50.1**	**87.4**	**133.5**	**111.3**	**382.3**	**83.0**	**127.5**	**168.0**	**138.1**	**516.5**
EPS, Non-GAAP	**(0.00)**	**0.01**	**0.04**	**0.03**	**0.09**	**0.02**	**0.04**	**0.06**	**0.05**	**0.17**	**0.03**	**0.05**	**0.08**	**0.07**	**0.23**	**0.05**	**0.08**	**0.10**	**0.08**	**0.31**
Basic Shares	1436.4	1471.7	1564.2	1584.2	1514.1	1591.7	1599.2	1606.7	1614.2	1602.9	1626.7	1639.2	1651.7	1664.2	1645.4	1674.2	1684.2	1694.2	1704.2	1689.2
Diluted Shares	1436.4	1471.7	1564.2	1584.2	1514.1	1591.7	1599.2	1606.7	1614.2	1602.9	1626.7	1639.2	1651.7	1664.2	1645.4	1674.2	1684.2	1694.2	1704.2	1689.2

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Palantir (PLTR) DCF Base Case

	Forecast	Transition	Terminal
Current Risk-free Rate of Return	3.50%	3.50%	3.50%
Historical Risk-free Rate of Return	5.00%	5.00%	5.00%
Beta	1.25		1.00
Market Rate of Return	11.50%	11.50%	11.50%
Cost of Equity	11.63%		10.00%
Growth Rate	As Modeled		5.00%

SCENARIO 2:

	FORECAST PERIOD						TRANSITIONARY PERIOD					TERMINAL	
	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	Perpetuity
Current Risk-free Rate of Return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical Risk-free Rate of Return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.25	1.25	1.25	1.25	1.25	1.25	1.21	1.17	1.13	1.08	1.04	1.00	
Market Rate of Return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of Equity	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.4%	11.1%	10.8%	10.5%	10.3%	10.0%	
FCF Growth Rate	na	na	(164.4%)	275.8%	120.0%	80.0%	67.3%	54.6%	41.9%	29.3%	16.6%	3.9%	
Diluted Shares at Year-end	1,514.1	1,602.9	1,645.4	1,689.2	1,731.4	1,766.1	1,795.5	1,819.4	1,837.6	1,849.9	1,856.0	1,856.0	
Share Growth %	8.9%	5.9%	2.7%	2.7%	2.5%	2.0%	1.7%	1.3%	1.0%	0.7%	0.3%	0.0%	
Free Cash Flow to Enterprise ($M)	(251.2)	(143.1)	92.1	346.3	761.8	1,371.2	2,294.2	3,547.5	5,035.3	6,508.3	7,586.5	7,880.9	128,772.2
Free Cash Flow to Enterprise per Share	(0.2)	(0.1)	0.1	0.2	0.4	0.8	1.3	1.9	2.7	3.5	4.1	4.2	69.4
NPV of Free Cash Flow to Enterprise per Share	(0.2)	(0.1)	0.0	0.1	0.3	0.4	0.6	0.9	1.1	1.4	1.5		23.2
Cumulative NPV of Free Cash Flow to Enterprise per Share	(0.2)	(0.2)	(0.2)	(0.1)	0.2	0.6	1.3	2.2	3.3	4.7	6.1		29.3

Cumulative NPV of FCFE per Share	29.32
Total NPV per Share	**$30.00**
Current Price per Share	$23.42
Upside/Downside Potential	28%

Source: FactSet, Jefferies estimates

Datadog (DDOG) Non-GAAP Income Statement

Non-GAAP Income Statement	FY20E					FY21E					FY22E					FY23E				
	Mar-20	Jun-20	Sep-20	Dec-20E		Mar-21E	Jun-21E	Sep-21E	Dec-21E		Mar-22E	Jun-22E	Sep-22E	Dec-22E		Mar-23E	Jun-23E	Sep-23E	Dec-23E	
USD in Millions, except per share amounts	1Q20	2Q20	3Q20	4Q20E	FY20E	1Q21E	2Q21E	3Q21E	4Q21E	FY21E	1Q22E	2Q22E	3Q22E	4Q22E	FY22E	1Q23E	2Q23E	3Q23E	4Q23E	FY23E
Total Revenue	**131.2**	**140.0**	**154.7**	**163.1**	**589.0**	**186.8**	**197.0**	**215.6**	**222.9**	**822.2**	**250.9**	**260.4**	**281.7**	**285.8**	**1,078.8**	**313.5**	**322.2**	**345.0**	**344.9**	**1,325.6**
y/y growth	*87.4%*	*68.2%*	*61.3%*	*43.5%*	*62.4%*	*42.3%*	*40.7%*	*39.4%*	*36.7%*	*39.6%*	*34.4%*	*32.2%*	*30.6%*	*28.2%*	*31.2%*	*24.9%*	*23.8%*	*22.5%*	*20.7%*	*22.9%*
q/q growth	*15.5%*	*6.7%*	*10.5%*	*5.4%*		*14.5%*	*5.5%*	*9.5%*	*3.4%*		*12.6%*	*3.8%*	*8.2%*	*1.5%*		*9.7%*	*2.8%*	*7.1%*	*(0.0%)*	
Total Cost of Sales	**26.0**	**28.2**	**33.1**	**37.2**	**124.5**	**40.7**	**40.8**	**46.1**	**47.9**	**175.5**	**53.9**	**52.9**	**59.1**	**60.3**	**226.3**	**65.8**	**63.8**	**70.0**	**70.4**	**270.0**
Gross Profit	**105.2**	**111.8**	**121.5**	**125.9**	**464.5**	**146.0**	**156.2**	**169.5**	**175.0**	**646.7**	**197.0**	**207.5**	**222.5**	**225.5**	**852.5**	**247.6**	**258.4**	**275.0**	**274.6**	**1,055.6**
Gross Margin	*80.2%*	*79.9%*	*78.6%*	*77.2%*	*78.9%*	*78.2%*	*79.3%*	*78.6%*	*78.5%*	*78.6%*	*78.5%*	*79.7%*	*79.0%*	*78.9%*	*79.0%*	*79.0%*	*80.2%*	*79.7%*	*79.6%*	*79.6%*
Research & Development	35.0	38.3	45.8	49.4	168.5	48.6	51.2	60.4	63.5	223.7	64.0	67.2	78.6	81.5	291.2	79.9	83.8	96.6	100.0	360.3
% of Total Revenue	*26.6%*	*27.3%*	*29.6%*	*30.3%*	*28.6%*	*26.0%*	*26.0%*	*28.0%*	*28.5%*	*27.2%*	*25.5%*	*25.8%*	*27.9%*	*28.5%*	*27.0%*	*25.5%*	*26.0%*	*28.0%*	*29.0%*	*27.2%*
y/y growth	*58.8%*	*50.7%*	*71.4%*	*56.2%*	*59.3%*	*38.8%*	*33.8%*	*31.7%*	*28.6%*	*32.7%*	*31.8%*	*31.2%*	*30.2%*	*28.2%*	*30.2%*	*24.9%*	*24.7%*	*22.9%*	*22.8%*	*23.7%*
q/q growth	*10.6%*	*9.4%*	*19.8%*	*7.8%*		*(1.7%)*	*5.5%*	*17.9%*	*5.2%*		*0.7%*	*5.0%*	*17.0%*	*3.7%*		*(1.9%)*	*4.8%*	*15.3%*	*3.6%*	
Sales & Marketing	42.1	45.7	49.7	59.4	196.9	57.0	64.0	67.9	81.4	270.2	72.5	81.2	85.9	103.2	342.8	85.9	96.4	101.8	122.5	406.5
% of Total Revenue	*32.1%*	*32.6%*	*32.1%*	*36.4%*	*33.4%*	*30.5%*	*32.5%*	*31.5%*	*36.5%*	*32.9%*	*28.9%*	*31.2%*	*30.5%*	*36.1%*	*31.8%*	*27.4%*	*29.9%*	*29.5%*	*35.5%*	*30.7%*
y/y growth	*43.4%*	*28.6%*	*33.3%*	*50.9%*	*39.1%*	*35.2%*	*40.2%*	*36.6%*	*37.1%*	*37.3%*	*27.3%*	*26.9%*	*26.5%*	*26.8%*	*26.9%*	*18.4%*	*18.6%*	*18.5%*	*18.7%*	*18.6%*
q/q growth	*7.1%*	*8.4%*	*8.9%*	*19.4%*		*(4.0%)*	*12.4%*	*6.1%*	*19.8%*		*(10.9%)*	*12.0%*	*5.8%*	*20.1%*		*(16.8%)*	*12.2%*	*5.6%*	*20.3%*	
General & Administrative	12.0	12.5	12.1	13.5	50.3	14.0	15.2	17.3	17.4	63.8	17.6	18.7	21.1	20.0	77.4	20.4	20.6	24.1	22.4	87.6
% of Total Revenue	*9.2%*	*9.0%*	*7.9%*	*8.3%*	*8.5%*	*7.5%*	*7.7%*	*8.0%*	*7.8%*	*7.8%*	*7.0%*	*7.2%*	*7.5%*	*7.0%*	*7.2%*	*6.5%*	*6.4%*	*7.0%*	*6.5%*	*6.6%*
y/y growth	*71.8%*	*65.6%*	*47.7%*	*30.0%*	*51.3%*	*16.3%*	*21.0%*	*42.0%*	*28.5%*	*27.0%*	*25.4%*	*23.6%*	*22.5%*	*15.1%*	*21.4%*	*16.0%*	*10.0%*	*14.3%*	*12.1%*	*13.1%*
q/q growth	*15.7%*	*4.1%*	*(3.1%)*	*11.4%*		*3.5%*	*8.3%*	*13.8%*	*0.8%*		*1.0%*	*6.7%*	*12.7%*	*(5.3%)*		*1.8%*	*1.2%*	*17.1%*	*(7.2%)*	
Total Operating Expenses	**89.2**	**96.5**	**107.7**	**122.3**	**415.6**	**119.5**	**130.4**	**145.6**	**162.3**	**557.7**	**154.1**	**167.1**	**185.6**	**204.7**	**711.5**	**186.2**	**200.8**	**222.5**	**244.9**	**854.4**
Operating Income	**16.1**	**15.3**	**13.8**	**3.6**	**48.8**	**26.5**	**25.8**	**23.9**	**12.7**	**89.0**	**42.9**	**40.4**	**36.9**	**20.9**	**141.0**	**61.4**	**57.7**	**52.4**	**29.7**	**201.2**
Operating Margin	*12.3%*	*11.0%*	*8.9%*	*2.2%*	*8.3%*	*14.2%*	*13.1%*	*11.1%*	*5.7%*	*10.8%*	*17.1%*	*15.5%*	*13.1%*	*7.3%*	*13.1%*	*19.6%*	*17.9%*	*15.2%*	*8.6%*	*15.2%*
Other Income (Expense)	2.9	0.2	(5.3)	2.5	0.3	2.8	2.8	2.8	2.9	11.3	3.3	3.4	3.4	3.5	13.6	4.0	4.1	4.2	4.3	16.5
Pre-tax Income	**19.0**	**15.5**	**8.5**	**6.1**	**49.1**	**29.3**	**28.6**	**26.8**	**15.6**	**100.3**	**46.2**	**43.7**	**40.3**	**24.3**	**154.6**	**65.4**	**61.8**	**56.6**	**33.9**	**217.7**
Pre-tax Margin	*14.5%*	*11.1%*	*5.5%*	*3.7%*	*8.3%*	*15.7%*	*14.5%*	*12.4%*	*7.0%*	*12.2%*	*18.4%*	*16.8%*	*14.3%*	*8.5%*	*14.3%*	*20.9%*	*19.2%*	*16.4%*	*9.8%*	*16.4%*
Provision for Income Taxes	(0.2)	1.9	7.5	0.6	9.8	2.9	2.9	2.7	1.6	10.0	4.6	4.4	4.0	2.4	15.5	6.5	6.2	5.7	3.4	21.8
Effective Tax Rate	*(1.0%)*	*12.5%*	*87.6%*	*9.5%*	*19.9%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*
Net income, Non-GAAP	**18.8**	**17.5**	**16.0**	**6.7**	**58.9**	**32.3**	**31.5**	**29.4**	**17.1**	**110.3**	**50.8**	**48.1**	**44.4**	**26.8**	**170.1**	**72.0**	**68.0**	**62.3**	**37.3**	**239.5**
EPS, Non-GAAP	**0.06**	**0.05**	**0.05**	**0.02**	**0.18**	**0.10**	**0.09**	**0.09**	**0.05**	**0.32**	**0.15**	**0.14**	**0.13**	**0.08**	**0.48**	**0.20**	**0.19**	**0.17**	**0.10**	**0.66**
Basic Shares	295.5	299.3	302.6	304.6	300.5	307.1	309.6	312.1	314.6	310.8	317.1	319.6	322.1	324.6	320.8	327.1	329.6	332.1	334.6	330.8
Diluted Shares	327.8	330.8	333.0	335.0	331.7	337.5	340.0	342.5	345.0	341.3	347.5	350.0	352.5	355.0	351.3	357.5	360.0	362.5	365.0	361.3

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Datadog (DDOG) DCF Base Case

	Forecast	Transition	Terminal
Current Risk-free Rate of Return	3.50%	3.50%	3.50%
Historical Risk-free Rate of Return	5.00%	5.00%	5.00%
Beta	1.25		1.00
Market Rate of Return	11.50%	11.50%	11.50%
Cost of Equity	11.63%		10.00%
Growth Rate	As Modeled		5.00%

SCENARIO 2:

				FORECAST PERIOD						TRANSITIONARY PERIOD					TERMINAL	
	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	Perpetuity
Current Risk-free Rate of Return				3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical Risk-free Rate of Return				5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta				1.25	1.25	1.25	1.25	1.22	1.19	1.16	1.13	1.09	1.06	1.03	1.00	
Market Rate of Return				11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of Equity				11.6%	11.6%	11.6%	11.6%	11.4%	11.2%	11.0%	10.8%	10.6%	10.4%	10.2%	10.0%	
FCF Growth Rate				(12147.1%)	(11.4%)	107.1%	44.1%	125.0%	110.0%	92.3%	74.5%	56.8%	39.0%	21.3%	3.5%	
Diluted Shares at Year-end			306.4	331.7	341.3	351.3	361.3	368.5	374.0	378.7	382.5	385.3	387.3	388.2	388.2	
Share Growth %				8.3%	2.9%	2.9%	2.8%	2.0%	1.5%	1.3%	1.0%	0.8%	0.5%	0.2%	0.0%	
Free Cash Flow to Enterprise ($M)	1.1	(6.6)	(0.6)	66.6	59.0	122.2	176.1	396.1	831.9	1,599.4	2,791.0	4,375.3	6,082.3	7,376.1	7,636.1	117,932.1
Free Cash Flow to Enterprise per Share				0.2	0.2	0.3	0.5	1.1	2.2	4.2	7.3	11.4	15.7	19.0	19.7	303.8
NPV of Free Cash Flow to Enterprise per Share				0.2	0.1	0.3	0.3	0.6	1.2	2.1	3.3	4.7	6.0	6.7		99.1
Cumulative NPV of Free Cash Flow to Enterprise per Share				0.2	0.3	0.6	0.9	1.6	2.8	4.8	8.1	12.8	18.8	25.5		124.6

Cumulative NPV of FCFE per Share	124.62
Total NPV per Share	**$125.06**
Current Price per Share	$92.09
Upside/Downside Potential	36%

Source: FactSet, Jefferies estimates

Elastic (ESTC) Non-GAAP Income Statement

Income Statement, Non-GAAP															
$ in millions, except for per share data			2020					2021					2022		
Fiscal quarter	1Q20	2Q20	3Q20	4Q20	FY20	1Q21	2Q21	3Q21E	4Q21E	FY21E	1Q22E	2Q22E	3Q22E	4Q22E	FY22E
Period end	Jul-19	Oct-19	Jan-20	Apr-20	2020	Jul-20	Oct-20	Jan-21	Apr-21	2021	Jul-21	Oct-21	Jan-22	Apr-22	2022
License Revenue	9.9	12.3	14.5	16.9	53.5	14.9	15.5	17.7	18.5	66.6	17.7	20.8	21.1	21.6	81.2
Subscription and Support Revenue	54.9	58.8	64.6	68.1	246.3	73.8	81.3	81.4	83.3	319.9	91.4	95.8	97.6	100.2	385.1
SaaS Revenue	17.6	20.6	25.1	29.0	92.3	32.6	37.4	37.5	37.8	145.4	43.3	49.2	49.5	49.9	191.9
Professional services	7.3	9.4	9.0	9.7	35.5	7.5	10.7	10.3	11.0	39.5	8.5	12.1	11.7	12.4	44.7
Total Revenue	**89.7**	**101.1**	**113.2**	**123.6**	**427.6**	**128.9**	**144.9**	**147.0**	**150.6**	**571.4**	**161.0**	**177.9**	**179.9**	**184.1**	**702.9**
y/y change	*58%*	*59%*	*60%*	*53%*	*57%*	*44%*	*43%*	*30%*	*22%*	*34%*	*25%*	*23%*	*22%*	*22%*	*23%*
Cost of subscription and support	16.3	17.8	19.5	20.9	74.5	22.6	25.4	25.3	25.3	98.6	28.2	31.2	31.0	30.9	121.2
q/q change	*11%*	*9%*	*10%*	*7%*		*8%*	*12%*	*-1%*	*0%*		*12%*	*11%*	*-1%*	*0%*	
y/y change	*77%*	*54%*	*60%*	*42%*	*56%*	*39%*	*43%*	*30%*	*21%*	*32%*	*25%*	*23%*	*22%*	*22%*	*23%*
Non-GAAP subscription and support gross margin	*80.2%*	*80.6%*	*81.3%*	*81.6%*	*81.0%*	*81.4%*	*81.1%*	*81.5%*	*81.9%*	*81.5%*	*81.5%*	*81.2%*	*81.6%*	*82.0%*	*81.6%*
Cost of professional services	7.7	8.1	9.0	9.0	33.8	7.6	8.0	9.9	9.9	35.3	8.3	11.2	11.0	11.0	41.5
q/q change	*21%*	*6%*	*10%*	*0%*		*-16%*	*5%*	*24%*	*1%*		*-17%*	*35%*	*-2%*	*1%*	
y/y change	*51%*	*51%*	*49%*	*42%*	*48%*	*-1%*	*-2%*	*10%*	*10%*	*5%*	*10%*	*41%*	*11%*	*11%*	*18%*
Non-GAAP professional services gross margin	*-4.7%*	*13.7%*	*0.2%*	*7.4%*	*4.8%*	*-0.5%*	*25.3%*	*4.5%*	*9.5%*	*10.6%*	*2.5%*	*7.0%*	*6.0%*	*11.0%*	*7.0%*
Total cost of revenue	24.0	25.9	28.5	29.9	108.3	30.2	33.4	35.1	35.2	134.0	36.5	42.4	41.9	41.9	162.8
% of revs	*27%*	*26%*	*25%*	*24%*	*25%*	*23%*	*23%*	*24%*	*23%*	*23%*	*23%*	*24%*	*23%*	*23%*	*23%*
Non-GAAP Gross Profit	**65.7**	**75.2**	**84.7**	**93.7**	**319.4**	**98.7**	**111.5**	**111.8**	**115.4**	**437.4**	**124.5**	**135.5**	**138.0**	**142.1**	**540.1**
Non-GAAP gross margin	*73.3%*	*74.4%*	*74.8%*	*75.8%*	*74.7%*	*76.6%*	*76.9%*	*76.1%*	*76.6%*	*76.6%*	*77.3%*	*76.2%*	*76.7%*	*77.2%*	*76.8%*
y/y change	*55%*	*61%*	*61%*	*58%*	*59%*	*50%*	*48%*	*32%*	*23%*	*37%*	*26%*	*22%*	*23%*	*23%*	*23%*
% of year	*21%*	*24%*	*27%*	*29%*	*100%*	*31%*	*25%*	*26%*	*26%*	*100%*	*23%*	*25%*	*26%*	*26%*	*100%*
Sales and Marketing, Non-GAAP	47.1	47.0	48.1	50.5	192.6	47.4	54.5	57.3	64.8	223.9	69.2	71.2	73.8	82.8	297.0
y/y change	*65%*	*48%*	*43%*	*25%*	*43%*	*1%*	*16%*	*19%*	*28%*	*16%*	*46%*	*31%*	*29%*	*28%*	*33%*
% of total revenue	*52%*	*46%*	*43%*	*41%*	*45%*	*37%*	*38%*	*39%*	*43%*	*39%*	*43%*	*40%*	*41%*	*45%*	*42%*
Research and Development, Non-GAAP	29.4	31.7	39.6	38.8	139.5	37.6	38.6	45.6	48.2	169.9	44.3	47.2	55.8	58.9	206.1
y/y change	*76%*	*55%*	*88%*	*54%*	*67%*	*28%*	*22%*	*15%*	*24%*	*22%*	*18%*	*22%*	*22%*	*22%*	*21%*
% of total revenue	*33%*	*31%*	*35%*	*31%*	*33%*	*29%*	*27%*	*31%*	*32%*	*30%*	*28%*	*27%*	*31%*	*32%*	*29%*
General and Administrative, Non-GAAP	13.5	14.9	17.1	17.2	62.7	18.0	20.2	20.6	21.8	80.7	20.1	22.2	22.5	23.0	87.9
y/y change	*54%*	*63%*	*79%*	*50%*	*61%*	*34%*	*36%*	*20%*	*27%*	*29%*	*12%*	*10%*	*9%*	*5%*	*9%*
% of total revenue	*15%*	*15%*	*15%*	*14%*	*15%*	*14%*	*14%*	*14%*	*15%*	*14%*	*13%*	*13%*	*13%*	*13%*	*13%*
Total Operating Expenses	90.0	93.6	104.9	106.4	394.9	103.0	113.2	123.5	134.8	474.5	133.6	140.6	152.0	164.8	590.9
y/y change	*67%*	*52%*	*63%*	*38%*	*54%*	*14%*	*21%*	*18%*	*27%*	*20%*	*30%*	*24%*	*23%*	*22%*	*25%*
Non-GAAP Operating Income/(Loss)	**(24.3)**	**(18.4)**	**(20.2)**	**(12.7)**	**(75.6)**	**(4.3)**	**(1.7)**	**(11.6)**	**(19.4)**	**(37.0)**	**(9.1)**	**(5.0)**	**(14.0)**	**(22.6)**	**(50.8)**
Non-GAAP Operating Margin	*-27.1%*	*-18.2%*	*-17.8%*	*-10.3%*	*-17.7%*	*-3.3%*	*-1.2%*	*-7.9%*	*-12.9%*	*-6.5%*	*-5.7%*	*-2.8%*	*-7.8%*	*-12.3%*	*-7.2%*
y/y change	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*
Total other expense, net	0.9	1.7	(1.3)	0.7	2.0	10.9	(0.1)	1.0	1.0	12.8	2.0	2.0	2.0	2.0	8.0
Pre-tax income	(23.3)	(16.7)	(21.5)	(12.0)	(73.6)	6.6	(1.8)	(10.6)	(18.4)	(24.2)	(7.1)	(3.0)	(12.0)	(20.6)	(42.8)
Income tax expense	0.8	0.5	0.7	(2.3)	(0.4)	0.5	0.7	1.5	1.5	4.2	0.5	0.5	0.5	0.5	2.0
Non-GAAP Tax Rate	-3.2%	-2.7%	-3.3%	18.9%	0.5%	6.9%	-38.8%	-14.1%	-8.2%	-17.2%	-7.0%	-16.4%	-4.2%	-2.4%	-4.7%
Non-GAAP Net Income/Loss	(24.1)	(17.2)	(22.2)	(9.8)	(73.3)	6.2	(2.5)	(12.1)	(19.9)	(28.4)	(7.6)	(3.5)	(12.5)	(21.1)	(44.8)
Net income/loss attributable to common stockhold	**(24.1)**	**(17.2)**	**(22.2)**	**(9.8)**	**(73.3)**	**6.2**	**(2.5)**	**(12.1)**	**(19.9)**	**(28.4)**	**(7.6)**	**(3.5)**	**(12.5)**	**(21.1)**	**(44.8)**
Diluted EPS, Non-GAAP	**(0.32)**	**(0.22)**	**(0.28)**	**(0.12)**	**(0.93)**	**0.06**	**(0.03)**	**(0.14)**	**(0.22)**	**(0.32)**	**(0.08)**	**(0.04)**	**(0.13)**	**(0.22)**	**(0.47)**
y/y change	*15%*	*43%*	*(75%)*	*58%*	*16%*	*120%*	*87%*	*51%*	*(82%)*	*65%*	*(228%)*	*(28%)*	*4%*	*(1%)*	*(46%)*
Basic Shares Outstanding	74.6	77.8	80.7	82.1	78.8	84.2	86.4	89.2	92.0	87.9	93.2	94.4	95.6	96.8	95.0
Diluted Shares Outstanding	91.8	93.0	91.1	92.1	92.0	96.1	86.4	98.1	99.1	94.9	100.1	101.1	102.1	103.1	101.6

Source: Jefferies estimates, company data

Elastic (ESTC) DCF Base Case

	Year 1	Transition	Terminal
Current risk-free rate of return	2.5%		2.5%
Historical risk-free rate of return	5.3%	5.3%	5.3%
Beta	1.71		1.00
Market rate of return	11.8%	11.8%	11.8%
Cost of equity	13.6%		9.0%
Growth rate	*As Modeled*		5.0%

SCENARIO 2: ESTC sees continued adoption of its product as a platform solution for search, as well as growing customer acceptance of the value prop beyond this, which leads to high model leverage

	HISTORICALS					FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	Perpetuity
Current risk-free rate of return	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
Beta	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.59	1.47	1.36	1.24	1.12	1.00	
Market rate of return	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	
Cost of equity	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	13.6%	12.8%	12.1%	11.3%	10.5%	9.8%	9.0%	
FCF Growth Rate	NM	NM	NM	NM	NM	NM	NM	150.0%	130.0%	115.0%	96.4%	77.9%	59.3%	40.8%	22.2%	3.7%	
Free cash flow to enterprise ($m)	-	(17.0)	(23.8)	(29.4)	(60.0)	(16.0)	19.7	49.4	113.6	244.1	479.6	853.2	1,359.4	1,913.8	2,339.2	2,425.2	
Diluted Shares Outstanding 4Q					92.1	99.1	103.1	107.2	110.9	114.3	117.1	119.5	121.3	122.5	123.1	123.1	
Share Growth %						7.6%	4.0%	4.0%	3.5%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%	
Free cash flow to Enterprise per share						(0.2)	0.2	0.5	1.0	2.1	4.1	7.1	11.2	15.6	19.0	19.7	370.0
NPV of free cash flow ($m)						(0.1)	0.1	0.3	0.6	1.1	2.0	3.2	4.8	6.3	7.5		145.7
Cumulative NPV of FCF ($m)						(0.1)	0.0	0.3	0.9	2.1	4.0	7.3	12.0	18.4	25.8		171.5

Cumulative NPV of FCF ($m)		171.5
Net cash/ share- 10% of revenue	$	3.45
Total NPV/share	**$**	**174.99**
Current price/share	$	143.75
Upside / Downside Potential		*22%*

Source: FactSet, Jefferies estimates

Dynatrace (DT) Non-GAAP Income Statement

Non-GAAP Income Statement	FY2020					FY2021					FY2022				
	Jun-19	Sep-19	Dec-19	Mar-20	FY2020	Jun-20	Sep-20	Dec-20E	Mar-21E	FY2021	Jun-21E	Sep-21E	Dec-21E	Mar-22E	FY2022
USD in Millions, except per share amounts	1Q2020	2Q2020	3Q2020	4Q2020		1Q2021	2Q2021	3Q2021	4Q2021						
Total revenue	**122.6**	**129.4**	**143.3**	**150.6**	**545.8**	**155.5**	**168.6**	**172.8**	**176.0**	**672.9**	**190.1**	**207.0**	**212.2**	**215.0**	**824.3**
y/y growth	*24.8%*	*27.0%*	*24.9%*	*29.6%*	*26.6%*	*26.9%*	*30.3%*	*20.6%*	*16.9%*	*23.3%*	*22.3%*	*22.8%*	*22.8%*	*22.1%*	*22.5%*
q/q growth	*5.5%*	*5.6%*	*10.8%*	*5.1%*		*3.3%*	*8.4%*	*2.5%*	*1.9%*		*8.0%*	*8.9%*	*2.5%*	*1.3%*	
Cost of subscriptions	12.2	13.1	14.0	16.4	55.6	16.0	16.1	16.8	18.4	67.4	18.8	20.7	21.0	22.2	82.7
Cost of license	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cost of services	9.5	9.5	9.6	9.6	38.2	7.2	8.6	9.8	9.9	35.4	6.5	10.0	10.9	8.1	35.5
Total cost of revenues	**21.7**	**22.6**	**23.6**	**26.0**	**93.8**	**23.2**	**24.7**	**26.6**	**28.4**	**102.8**	**25.3**	**30.7**	**31.9**	**30.3**	**118.3**
Gross profit: subscriptions	95.9	102.7	114.6	119.0	432.2	128.4	141.6	144.8	146.3	561.0	163.9	174.8	178.7	183.5	700.9
Subscriptions gross margin	*88.7%*	*88.7%*	*89.1%*	*87.9%*	*88.6%*	*88.9%*	*89.8%*	*89.6%*	*88.8%*	*89.3%*	*89.7%*	*89.4%*	*89.5%*	*89.2%*	*89.4%*
Gross profit: services	1.2	1.3	1.3	3.3	7.1	3.3	1.9	1.3	1.4	7.9	0.9	1.5	1.5	1.2	5.1
Services gross margin	*10.9%*	*12.3%*	*11.8%*	*25.9%*	*15.7%*	*31.4%*	*18.3%*	*12.1%*	*12.2%*	*18.3%*	*12.6%*	*12.8%*	*12.4%*	*12.6%*	*12.6%*
Gross profit	**100.9**	**106.8**	**119.7**	**124.6**	**452.0**	**132.3**	**143.9**	**146.2**	**147.7**	**570.1**	**164.8**	**176.3**	**180.3**	**184.7**	**706.0**
Gross margin	*82.3%*	*82.6%*	*83.6%*	*82.8%*	*82.8%*	*85.1%*	*85.4%*	*84.6%*	*83.9%*	*84.7%*	*86.7%*	*85.2%*	*85.0%*	*85.9%*	*85.7%*
Research and development	18.5	19.2	20.3	22.5	80.6	21.1	23.9	23.2	24.1	92.3	23.0	27.1	28.9	30.5	109.5
% of Total	*15.1%*	*14.8%*	*14.2%*	*15.0%*	*14.8%*	*13.6%*	*14.2%*	*13.4%*	*13.7%*	*13.7%*	*12.1%*	*13.1%*	*13.6%*	*14.2%*	*13.3%*
y/y growth	*19.7%*	*23.6%*	*22.3%*	*36.0%*	*25.5%*	*13.8%*	*24.7%*	*13.8%*	*7.1%*	*14.5%*	*9.1%*	*13.3%*	*24.6%*	*26.6%*	*18.7%*
q/q growth	*11.9%*	*3.6%*	*6.0%*	*10.7%*		*(6.4%)*	*13.5%*	*(3.3%)*	*4.2%*		*(4.6%)*	*17.9%*	*6.4%*	*5.8%*	
Sales and marketing	43.1	42.8	45.7	49.5	181.1	43.8	50.0	60.3	64.1	218.1	62.2	65.2	71.3	75.7	274.4
% of Total	*35.2%*	*33.1%*	*31.9%*	*32.9%*	*33.2%*	*28.1%*	*29.7%*	*34.9%*	*36.4%*	*32.4%*	*32.7%*	*31.5%*	*33.6%*	*35.2%*	*33.3%*
y/y growth	*13.3%*	*16.2%*	*11.2%*	*29.6%*	*17.5%*	*1.5%*	*16.7%*	*32.0%*	*29.5%*	*20.4%*	*42.1%*	*30.4%*	*18.2%*	*18.1%*	*25.8%*
q/q growth	*12.9%*	*(0.6%)*	*6.7%*	*8.3%*		*(11.6%)*	*14.2%*	*20.6%*	*6.3%*		*(3.0%)*	*4.9%*	*9.3%*	*6.1%*	
General and administrative	12.1	15.0	16.2	16.6	59.9	16.6	16.8	18.1	18.8	70.3	17.3	19.7	21.0	22.1	80.1
% of Total	*9.9%*	*11.6%*	*11.3%*	*11.0%*	*11.0%*	*10.7%*	*9.9%*	*10.5%*	*10.7%*	*10.5%*	*9.1%*	*9.5%*	*9.9%*	*10.3%*	*9.7%*
y/y growth	*(8.9%)*	*21.8%*	*29.9%*	*27.7%*	*17.3%*	*37.0%*	*11.7%*	*12.1%*	*13.3%*	*17.4%*	*4.1%*	*17.4%*	*15.8%*	*17.6%*	*13.9%*
q/q growth	*(6.8%)*	*23.6%*	*7.9%*	*2.7%*		*(0.1%)*	*0.8%*	*8.3%*	*3.8%*		*(8.1%)*	*13.7%*	*6.8%*	*5.4%*	
Total operating expenses	**73.8**	**77.0**	**82.2**	**88.6**	**321.7**	**81.5**	**90.7**	**101.6**	**107.0**	**380.7**	**102.5**	**112.0**	**121.2**	**128.3**	**464.0**
% of Total	*60.2%*	*59.5%*	*57.4%*	*58.9%*	*58.9%*	*52.4%*	*53.8%*	*58.8%*	*60.8%*	*56.6%*	*53.9%*	*54.1%*	*57.1%*	*59.7%*	*56.3%*
(Loss) income from operations	**27.1**	**29.8**	**37.5**	**36.0**	**130.4**	**50.8**	**53.3**	**44.6**	**40.7**	**189.3**	**62.3**	**64.3**	**59.1**	**56.3**	**242.1**
Operating margin	*22.1%*	*23.0%*	*26.2%*	*23.9%*	*23.9%*	*32.7%*	*31.6%*	*25.8%*	*23.1%*	*28.1%*	*32.8%*	*31.1%*	*27.9%*	*26.2%*	*29.4%*
Interest expense, net	(19.8)	(12.6)	(15.0)	(6.9)	(54.3)	(24.0)	1.804	(6.6)	(6.4)	(35.2)	(5.6)	(5.3)	(5.0)	(4.8)	(20.7)
Loss before taxes	**7.3**	**17.2**	**22.5**	**29.1**	**76.1**	**26.8**	**55.1**	**38.0**	**34.2**	**154.1**	**56.8**	**59.0**	**54.1**	**51.5**	**221.3**
Income tax expense	(2.1)	(0.5)	(4.2)	(0.6)	(7.4)	(10.1)	2.5	(0.1)	(0.1)	(7.9)	5.7	5.9	5.4	5.1	22.1
Effective tax rate	*(28.3%)*	*(2.7%)*	*(18.7%)*	*(2.2%)*	*(9.7%)*	*(37.8%)*	*4.5%*	*(0.3%)*	*(0.3%)*	*(5.1%)*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*
Net income, Non-GAAP	**9.3**	**17.7**	**26.7**	**29.8**	**83.4**	**36.9**	**52.6**	**38.1**	**34.4**	**162.0**	**51.1**	**53.1**	**48.7**	**46.3**	**199.2**
EPS, Non-GAAP	**0.04**	**0.07**	**0.10**	**0.11**	**0.31**	**0.13**	**0.18**	**0.13**	**0.12**	**0.56**	**0.17**	**0.18**	**0.16**	**0.15**	**0.67**
Basic shares	237.7	264.1	277.9	278.7	264.6	279.1	280.1	282.9	285.7	281.9	288.7	291.7	294.7	297.7	293.2
Fully diluted shares	238.6	270.0	280.2	283.3	268.0	284.3	286.3	289.4	292.7	288.2	294.7	297.7	300.7	303.7	299.2

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Dynatrace (DT) DCF Base Case

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%		3.50%
Historical risk-free rate of return	5.00%	5.00%	5.00%
Beta	1.00		1.00
Equity Risk Premium	6.50%		6.50%
Market rate of return	11.50%	11.50%	11.50%
Cost of equity	10.00%		10.00%
Growth rate in perpetiuity			5.00%
Point in time (date of last earnings report)	9/4/19		
Cash and Cash Equivalents	248.4		
Total Debt	247.0		
Net Cash and Cash Equivalents	1.4		
LTM Revenues	925.2		
Shares Outstanding (m)	286.3		
Net Cash/Share - 10% of Revenue	**$ (0.32)**		

Scenario 2: Base case.

	HISTORICALS			FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	Perpetuity
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Risk Premium	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	
Market rate of return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
WACC	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
FCF Growth Rate		42.7%	-156.7%	N/A	24.5%	44.0%	42.0%	40.0%	34.0%	28.0%	22.0%	16.0%	10.0%	4.0%	
Discount factor				0.91	0.83	0.75	0.68	0.62	0.56	0.51	0.47	0.42	0.39	0.35	
Free cash flow to the enterprise	135.7	193.6	(109.7)	202.8	252.6	363.7	516.5	723.0	968.9	1,240.1	1,513.0	1,755.1	1,930.6	2,007.8	
Diluted Share Count			270.0	288.2	299.2	311.1	323.6	336.5	347.8	357.0	364.2	369.0	371.5	371.5	
Share Count Growth				6.7%	3.8%	4.0%	4.0%	4.0%	3.3%	2.7%	2.0%	1.3%	0.7%	0.0%	
FCFE / Share				0.70	0.84	1.17	1.60	2.15	2.79	3.47	4.15	4.76	5.20	5.40	90.08
NPV/Share of FCFE				0.64	0.70	0.88	1.09	1.33	1.57	1.78	1.94	2.02	2.00		31.57
Cumulative NPV of FCFE / Share				0.64	1.34	2.22	3.31	4.64	6.21	8.00	9.93	11.95	13.95		45.53

Cumulative NPV of FCFE / Share	$ 45.53
Net cash/Share - 10% of revenue *	$ (0.32)
Total NPV/Share	**$ 45.21**
Current price/Share	$ 40.92
Upside potential	10%

Source: FactSet, Jefferies estimates

Atlassian (TEAM) Non-IFRS Income Statement

Non-IFRS Income Statement	FY20					FY21E					FY22E				
	Sep-19	Dec-19	Mar-20	Jun-20	Year	Sep-20	Dec-20E	Mar-21E	Jun-21E	YearE	Sep-21E	Dec-21E	Mar-22E	Jun-22E	YearE
Perpetual Licenses	24.7	29.1	21.0	20.4	95.2	22.1	17.3	5.3	3.1	47.7	2.2	2.6	0.1	0.0	4.9
Maintenance	110.1	116.9	119.6	122.8	469.4	127.7	121.0	112.7	109.9	471.3	109.0	99.5	90.6	87.3	386.4
Subscription	201.1	228.7	244.2	257.5	931.5	278.0	294.8	320.6	349.4	1,242.8	370.1	403.6	435.0	465.3	1,674.1
Other	27.5	34.1	26.8	29.8	118.2	31.7	34.4	25.4	27.1	118.7	35.0	35.8	26.7	28.7	126.2
Total Revenue	**363.4**	**408.7**	**411.6**	**430.5**	**1,614.2**	**459.5**	**467.5**	**464.0**	**489.4**	**1,880.5**	**516.4**	**541.5**	**552.3**	**581.3**	**2,191.6**
q/q change	*9%*	*12%*	*1%*	*5%*		*7%*	*2%*	*-1%*	*5%*		*6%*	*5%*	*2%*	*5%*	
y/y change	*36%*	*37%*	*33%*	*29%*	*33%*	*26%*	*14%*	*13%*	*14%*	*16%*	*12%*	*16%*	*19%*	*19%*	*17%*
Total Cost of Revenue, non-IFRS	49.1	52.2	58.5	59.8	219.5	63.0	65.3	71.9	75.9	276.1	78.8	77.0	87.0	91.6	334.3
Non-IFRS Gross Profit	**314.3**	**356.5**	**353.1**	**370.7**	**1,394.7**	**396.5**	**402.2**	**392.1**	**413.5**	**1,604.4**	**437.7**	**464.5**	**465.3**	**489.8**	**1,857.3**
% Non-IFRS Gross Margin	*86.5%*	*87.2%*	*85.0%*	*85.0%*	*86.4%*	*85.0%*	*86.0%*	*84.5%*	*84.5%*	*85.3%*	*84.8%*	*85.8%*	*84.3%*	*84.3%*	*84.7%*
Research and Development, non-IFRS	126.9	126.4	147.0	158.5	558.9	170.7	165.6	169.5	186.1	692.0	189.3	189.1	199.0	218.2	795.6
y/y change	*30%*	*28%*	*33%*	*29%*	*30%*	*35%*	*31%*	*15%*	*17%*	*24%*	*11%*	*14%*	*17%*	*17%*	*15%*
% of total revenues	*35%*	*31%*	*36%*	*37%*	*35%*	*37%*	*35%*	*37%*	*38%*	*37%*	*37%*	*35%*	*36%*	*38%*	*36%*
Sales and Marketing, non-IFRS	53.7	54.5	70.2	66.5	244.9	61.2	67.0	79.1	73.1	280.4	66.2	74.9	91.4	84.0	316.5
y/y change	*51%*	*12%*	*30%*	*7%*	*22%*	*14%*	*23%*	*13%*	*10%*	*15%*	*8%*	*12%*	*16%*	*15%*	*13%*
% of total revenues	*15%*	*13%*	*17%*	*15%*	*15%*	*13%*	*14%*	*17%*	*15%*	*15%*	*13%*	*14%*	*17%*	*14%*	*14%*
General and Administrative, non-IFRS	48.7	50.3	58.7	63.2	220.9	59.1	57.5	62.7	68.2	247.5	65.4	65.5	73.5	79.9	284.3
y/y change	*38%*	*32%*	*32%*	*38%*	*35%*	*21%*	*14%*	*7%*	*8%*	*12%*	*11%*	*14%*	*17%*	*17%*	*15%*
% of total revenues	*13%*	*12%*	*14%*	*15%*	*14%*	*13%*	*12%*	*14%*	*14%*	*13%*	*13%*	*12%*	*13%*	*14%*	*13%*
Total Operating Expenses, non-IFRS	229.4	231.1	275.9	288.2	1,024.6	291.1	290.1	311.3	327.5	1,219.9	320.9	329.5	363.9	382.0	1,396.3
y/y change	*36%*	*25%*	*32%*	*25%*	*29%*	*27%*	*26%*	*13%*	*14%*	*19%*	*10%*	*14%*	*17%*	*17%*	*14%*
Non-IFRS Operating Income	**85.0**	**125.4**	**77.2**	**82.5**	**370.0**	**105.4**	**112.1**	**80.8**	**86.1**	**384.4**	**116.7**	**135.0**	**101.4**	**107.8**	**460.9**
% Non-IFRS Operating Margin	*23.4%*	*30.7%*	*18.8%*	*19.2%*	*22.9%*	*22.9%*	*24.0%*	*17.4%*	*17.6%*	*20.4%*	*22.6%*	*24.9%*	*18.4%*	*18.5%*	*21.0%*
Interest income (expense), net	(3.2)	(4.3)	(5.2)	(9.1)	(21.8)	(10.0)	(10.0)	(10.0)	(10.0)	(39.9)	(10.0)	(10.0)	(10.0)	(10.0)	(39.9)
Other income (expense), net	8.9	6.6	9.0	8.5	33.1	10.4	1.7	11.7	11.7	35.6	11.7	11.7	11.7	11.7	46.9
Total Other Income (Expense)	5.7	2.4	3.8	(0.6)	11.3	0.4	(8.3)	1.7	1.7	(4.4)	1.7	1.7	1.7	1.7	7.0
Income Before Taxes	90.6	127.8	81.0	81.9	381.3	105.8	103.9	82.5	87.8	380.1	118.5	136.8	103.2	109.5	467.9
Income Taxes (benefit)	20.6	33.9	19.1	18.9	92.5	29.1	23.9	19.0	20.2	92.1	27.2	31.5	23.7	25.2	107.6
% Effective Tax Rate	*23%*	*27%*	*24%*	*23%*	*24%*	*27%*	*23%*	*23%*	*23%*	*24%*	*23%*	*23%*	*23%*	*23%*	*23%*
Non-IFRS Net Income	**70.0**	**93.9**	**61.9**	**63.0**	**288.8**	**76.8**	**80.0**	**63.6**	**67.6**	**287.9**	**91.2**	**105.3**	**79.4**	**84.3**	**360.3**
Diluted Non-IFRS EPS	**$0.28**	**$0.37**	**$0.25**	**$0.25**	**$1.15**	**$0.30**	**$0.31**	**$0.25**	**$0.26**	**$1.12**	**$0.35**	**$0.40**	**$0.30**	**$0.32**	**$1.37**
Diluted Shares Outstanding	250.9	251.0	251.9	252.9	251.7	253.5	255.0	259.0	260.0	256.9	261.0	262.0	263.0	264.0	262.5
Share count if operating loss	242.8	244.2	245.5	246.9	244.9	248.0	250.0	251.0	252.0	250.3	253.0	254.0	255.0	256.0	254.5
Share count if operating profit	250.9	251.0	251.9	252.9	251.7	253.5	255.0	259.0	260.0	256.9	261.0	262.0	263.0	264.0	262.5

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Atlassian (TEAM) DCF Base Case

	Year 1	Transition	Terminal
Current risk-free rate of return	3.5%		3.5%
Historical risk-free rate of return	5.3%	5.3%	5.3%
Beta	0.87		1.00
Market rate of return	11.8%	11.8%	11.8%
Cost of equity	9.2%		10.0%
Growth rate	*As Modeled*		5.0%

Cash and Cash Equivalents	2,184.4
Total Debt	898.4
Net Cash and Cash Equivalents	1,286.1
LTM Revenues	1,710.3
Shares Outstanding (m)	253.5
Net Cash/Share - 10% of Revenue	**$ 4.40**

SCENARIO 2: TEAM sees continued adoption of its product as a platform solution as well as general customer acceptance of unique pricing model, which leads to high model leverage

	HISTORICALS						FORECAST PERIOD				TRANSITIONARY PERIOD					TERMINAL	
	FY15A	FY16A	FY17A	FY18A	FY19A	FY20A	FY21E	FY22E	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	FY30E	Perpetuity
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	
Beta	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.89	0.91	0.93	0.93	0.94	0.96	1.00	
Market rate of return	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	
Cost of equity	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.3%	9.4%	9.5%	9.5%	9.6%	9.8%	10.0%	
FCF Growth Rate	NA	54.6%	NM	NM	-97.0%	64.4%	-31.2%	67.6%	**90.0%**	**83.5%**	71.4%	58.3%	45.2%	32.1%	19.0%	5.0%	
Discount Factor							0.936	0.858	0.858	0.784	0.714	0.649	0.593	0.537	0.486		
Free cash flow to enterprise ($m)	57.2	88.5	(203.2)	284.5	8.5	467.7	321.9	539.5	611.7	1,122.5	1,923.4	3,044.2	2,792.6	4,021.7	4,786.7	5,026.1	100,521.7
NPV of free cash flow ($m)							301.5	462.8	524.8	879.5	1,373.4	1,976.7	1,655.7	2,161.1	2,326.2		48,849.7
Cumulative NPV of FCF ($m)							301.5	764.3	826.2	1,705.7	3,079.2	5,055.8	4,734.9	7,216.9	9,543.1		58,392.8

Cumulative NPV of FCF ($m)	58,392.8
Shares outstanding (m)	253.5
NPV/share of FCF	$ 230.31
Net cash/ share- 10% of revenue	$ 4.40
Total NPV/share	**$ 234.71**
Current price/share	$ 233.38
Upside / Downside Potential	*1%*

Source: FactSet, Jefferies estimates

Anaplan (PLAN) Non-GAAP Income Statement

	F2020A					F2021E				
	Apr-19A	Jul-19A	Oct-19A	Jan-20A	YearA	Apr-20A	Jul-20A	Oct-20A	Jan-21E	YearE
Subscription Revenue	65.1	73.6	79.7	89.5	307.9	93.8	97.1	104.7	109.0	404.6
Professional Services Revenue	10.7	10.9	9.7	8.7	40.1	10.0	9.4	10.2	10.0	39.6
Total revenue	**75.8**	**84.5**	**89.4**	**98.2**	**348.0**	**103.8**	**106.5**	**114.9**	**119.0**	**444.2**
q/q change	*10%*	*11%*	*6%*	*10%*		*6%*	*3%*	*8%*	*4%*	
y/y change	*47%*	*46%*	*44%*	*42%*	*45%*	*37%*	*26%*	*28%*	*21%*	*28%*
Cost of subscription	10.6	11.6	12.4	14.3	48.9	14.5	15.3	18.2	17.4	65.4
q/q change	*5%*	*9%*	*7%*	*15%*		*1%*	*5%*	*19%*	*-4%*	
y/y change	*37%*	*33%*	*36%*	*41%*	*37%*	*37%*	*32%*	*47%*	*22%*	*34%*
Cost of professional services	10.0	9.8	8.8	8.5	37.1	9.0	8.6	9.7	9.3	36.6
q/q change	*10%*	*-2%*	*-9%*	*-3%*		*6%*	*-5%*	*13%*	*-4%*	
y/y change	*61%*	*38%*	*16%*	*-6%*	*24%*	*-9%*	*-12%*	*10%*	*9%*	*-1%*
Total Cost of revenues	20.6	21.3	21.3	22.9	86.0	23.5	23.9	27.9	26.7	102.0
y/y change	*48%*	*35%*	*27%*	*19%*	*31%*	*14%*	*12%*	*31%*	*17%*	*19%*
% of total revenue	*27.2%*	*25.2%*	*23.8%*	*23.3%*	*24.7%*	*22.7%*	*22.4%*	*24.3%*	*22.4%*	*23.0%*
Non-GAAP Gross profit	**55.2**	**63.2**	**68.2**	**75.4**	**262.0**	**80.3**	**82.6**	**87.0**	**92.3**	**342.2**
Non-GAAP Gross margin	*72.8%*	*74.8%*	*76.2%*	*76.7%*	*75.3%*	*77.3%*	*77.6%*	*75.7%*	*77.6%*	*77.0%*
y/y change	-0.1%	2.1%	3.2%	4.5%	2.6%	4.5%	2.8%	-0.5%	0.8%	1.8%
Research and development	13.2	13.9	13.7	16.9	57.8	20.1	20.2	19.4	20.5	80.3
q/q change	*18%*	*5%*	*(2%)*	*24%*		*19%*	*0%*	*(4%)*	*6%*	
y/y change	*16%*	*17%*	*29%*	*51%*	*28%*	*52%*	*45%*	*42%*	*21%*	*39%*
% of total revenue	*17.4%*	*16.5%*	*15.3%*	*17.2%*	*16.6%*	*19.4%*	*19.0%*	*16.9%*	*17.2%*	*18.1%*
Sales and marketing	49.7	55.8	51.7	58.8	216.0	61.6	61.7	61.3	69.7	254.4
q/q change	*15%*	*12%*	*(7%)*	*14%*		*5%*	*0%*	*(1%)*	*14%*	
y/y change	*29%*	*49%*	*24%*	*36%*	*34%*	*24%*	*11%*	*19%*	*19%*	*18%*
% of total revenue	*65.5%*	*66.0%*	*57.8%*	*59.9%*	*62.1%*	*59.4%*	*57.9%*	*53.4%*	*58.6%*	*57.3%*
General and administrative	13.1	14.5	14.4	14.5	56.6	14.8	13.4	15.2	15.8	59.2
q/q change	*7%*	*11%*	*(1%)*	*1%*		*2%*	*(10%)*	*13%*	*4%*	
y/y change	*18%*	*50%*	*28%*	*18%*	*28%*	*13%*	*(8%)*	*5%*	*9%*	*5%*
% of total revenue	*17.3%*	*17.2%*	*16.1%*	*14.8%*	*16.3%*	*14.3%*	*12.6%*	*13.2%*	*13.3%*	*13.3%*
Total operating expenses	**75.3**	**79.9**	**77.0**	**86.4**	**318.5**	**93.7**	**92.2**	**93.0**	**106.0**	**385.0**
q/q change	*14%*	*6%*	*(4%)*	*12%*		*9%*	*(2%)*	*1%*	*14%*	
y/y change	*24%*	*35%*	*21%*	*31%*	*28%*	*24%*	*15%*	*21%*	*23%*	*21%*
% of total revenue	*99.3%*	*94.5%*	*86.1%*	*87.9%*	*91.5%*	*90.3%*	*86.6%*	*81.0%*	*89.1%*	*86.7%*
Operating Income/(Loss)	**(20.1)**	**(16.6)**	**(8.8)**	**(11.0)**	**(56.5)**	**(13.4)**	**(9.6)**	**(6.1)**	**(13.7)**	**(42.8)**
Operating margin	*(26.5%)*	*(19.7%)*	*(9.9%)*	*(11.2%)*	*(16.2%)*	*(12.9%)*	*(9.0%)*	*(5.3%)*	*(11.5%)*	*(9.6%)*
y/y change	18.7%	9.6%	19.6%	11.7%	14.7%	13.6%	10.7%	4.6%	-0.3%	6.6%
Other Income & Expense, net	1.0	1.9	(1.2)	2.0	3.7	0.2	3.8	(0.5)	0.7	4.2
Pretax income	**(19.1)**	**(14.8)**	**(10.0)**	**(9.0)**	**(52.9)**	**(13.2)**	**(5.7)**	**(6.6)**	**(13.0)**	**(38.5)**
Income tax (expense)/benefit	(1.1)	(1.3)	(1.0)	(1.1)	(4.5)	(1.0)	(0.4)	(0.4)	(0.8)	(2.7)
Effective tax rate	*5.7%*	*9.0%*	*9.5%*	*12.1%*	*8.4%*	*7.7%*	*7.4%*	*6.4%*	*6.2%*	*6.9%*
Net income (loss)	**(20.2)**	**(16.1)**	**(11.0)**	**(10.1)**	**(57.3)**	**(14.3)**	**(6.1)**	**(7.0)**	**(13.8)**	**(41.2)**
Net margin	*-26.6%*	*-19.0%*	*-12.3%*	*-10.3%*	*-16.5%*	*-13.7%*	*-5.8%*	*-6.1%*	*-11.6%*	*-9.3%*
Non-GAAP EPS, basic	**($0.16)**	**($0.12)**	**($0.08)**	**($0.07)**	**($0.44)**	**($0.10)**	**($0.04)**	**($0.05)**	**($0.10)**	**($0.30)**
Non-GAAP EPS, diluted	**($0.16)**	**($0.12)**	**($0.08)**	**($0.07)**	**($0.44)**	**($0.10)**	**($0.04)**	**($0.05)**	**($0.10)**	**($0.30)**
Weighted average basic shares outstanding	123.0	129.5	132.4	134.4	129.8	136.4	138.3	140.6	143.1	139.6
Weighted average diluted shares outstanding	123.0	129.5	132.4	134.4	129.8	136.4	138.3	140.6	143.1	139.6

	F2022E					F2023E					F2024E
	Apr-21E	Jul-21E	Oct-21E	Jan-22E	YearE	Apr-22E	Jul-22E	Oct-22E	Jan-23E	YearE	YearE
Subscription Revenue	116.2	122.7	129.2	140.9	509.0	154.8	159.4	165.9	179.9	660.0	833.2
Professional Services Revenue	9.5	9.8	10.3	11.3	41.0	12.4	11.2	10.8	11.7	46.0	52.0
Total revenue	**125.7**	**132.5**	**139.6**	**152.2**	**550.0**	**167.2**	**170.6**	**176.7**	**191.6**	**706.0**	**885.1**
q/q change	*6%*	*5%*	*5%*	*9%*		*10%*	*2%*	*4%*	*8%*		
y/y change	*21%*	*24%*	*21%*	*28%*	*24%*	*33%*	*29%*	*27%*	*26%*	*28%*	*25%*
Cost of subscription	17.9	19.3	22.5	22.6	82.3	23.9	25.1	28.9	28.8	106.8	134.8
q/q change	*3%*	*8%*	*17%*	*0%*		*6%*	*5%*	*15%*	*0%*		
y/y change	*24%*	*26%*	*24%*	*29%*	*26%*	*33%*	*30%*	*28%*	*28%*	*30%*	*26%*
Cost of professional services	8.9	9.0	9.7	10.3	37.9	11.6	10.1	10.0	10.5	42.1	47.0
q/q change	*-4%*	*0%*	*9%*	*6%*		*12%*	*-13%*	*0%*	*5%*		
y/y change	*-1%*	*4%*	*0%*	*11%*	*4%*	*30%*	*12%*	*3%*	*2%*	*11%*	*12%*
Total Cost of revenues	26.9	28.3	32.2	32.9	120.2	35.5	35.2	38.9	39.3	148.9	181.9
y/y change	*14%*	*18%*	*16%*	*23%*	*18%*	*32%*	*24%*	*21%*	*20%*	*24%*	*22%*
% of total revenue	*21.4%*	*21.3%*	*23.1%*	*21.6%*	*21.9%*	*21.2%*	*20.6%*	*22.0%*	*20.5%*	*21.1%*	*20.5%*
Non-GAAP Gross profit	**98.9**	**104.2**	**107.3**	**119.3**	**429.7**	**131.7**	**135.4**	**137.7**	**152.3**	**557.1**	**703.3**
Non-GAAP Gross margin	*78.6%*	*78.7%*	*76.9%*	*78.4%*	*78.1%*	*78.8%*	*79.4%*	*78.0%*	*79.5%*	*78.9%*	*79.5%*
y/y change	1.3%	1.1%	1.2%	0.8%	1.1%	0.1%	0.7%	1.1%	1.1%	0.8%	0.5%
Research and development	23.1	24.5	22.4	25.5	95.5	29.9	31.5	28.2	33.0	122.7	147.4
q/q change	*13%*	*6%*	*(8%)*	*14%*		*17%*	*6%*	*(10%)*	*17%*		
y/y change	*15%*	*21%*	*16%*	*24%*	*19%*	*29%*	*29%*	*26%*	*30%*	*28%*	*20%*
% of total revenue	*18.4%*	*18.5%*	*16.1%*	*16.7%*	*17.4%*	*17.9%*	*18.5%*	*16.0%*	*17.2%*	*17.4%*	*16.7%*
Sales and marketing	73.1	76.7	73.8	86.1	309.7	91.6	93.7	89.0	101.7	376.0	447.1
q/q change	*5%*	*5%*	*(4%)*	*17%*		*6%*	*2%*	*(5%)*	*14%*		
y/y change	*19%*	*24%*	*20%*	*24%*	*22%*	*25%*	*22%*	*21%*	*18%*	*21%*	*19%*
% of total revenue	*58.1%*	*57.9%*	*52.9%*	*56.6%*	*56.3%*	*54.8%*	*54.9%*	*50.4%*	*53.1%*	*53.3%*	*50.5%*
General and administrative	16.1	15.0	17.0	18.7	66.7	18.0	16.7	18.0	22.7	75.5	82.6
q/q change	*2%*	*(7%)*	*14%*	*10%*		*(3%)*	*(7%)*	*8%*	*26%*		
y/y change	*8%*	*12%*	*12%*	*18%*	*13%*	*12%*	*12%*	*6%*	*22%*	*13%*	*9%*
% of total revenue	*12.8%*	*11.3%*	*12.2%*	*12.3%*	*12.1%*	*10.8%*	*9.8%*	*10.2%*	*11.9%*	*10.7%*	*9.3%*
Total operating expenses	**112.2**	**116.2**	**113.3**	**130.2**	**471.9**	**139.5**	**141.9**	**135.2**	**157.4**	**574.1**	**677.1**
q/q change	*6%*	*4%*	*(3%)*	*15%*		*7%*	*2%*	*(5%)*	*16%*		
y/y change	*20%*	*26%*	*22%*	*23%*	*23%*	*24%*	*22%*	*19%*	*21%*	*22%*	*18%*
% of total revenue	*89.3%*	*87.7%*	*81.2%*	*85.6%*	*85.8%*	*83.5%*	*83.2%*	*76.6%*	*82.2%*	*81.3%*	*76.5%*
Operating Income/(Loss)	**(13.4)**	**(12.0)**	**(5.9)**	**(10.9)**	**(42.2)**	**(7.8)**	**(6.5)**	**2.5**	**(5.1)**	**(17.0)**	**26.2**
Operating margin	*(10.6%)*	*(9.0%)*	*(4.3%)*	*(7.2%)*	*(7.7%)*	*(4.7%)*	*(3.8%)*	*1.4%*	*(2.7%)*	*(2.4%)*	*3.0%*
y/y change	2.3%	-0.1%	1.0%	4.3%	2.0%	5.9%	5.2%	5.7%	4.5%	5.3%	5.4%
Other Income & Expense, net	-	-	-	-	-	-	-	-	-	-	-
Pretax income	**(13.4)**	**(12.0)**	**(5.9)**	**(10.9)**	**(42.2)**	**(7.8)**	**(6.5)**	**2.5**	**(5.1)**	**(17.0)**	**26.2**
Income tax (expense)/benefit	(0.8)	(0.8)	(0.8)	(1.0)	(3.4)	(0.9)	(0.8)	(0.7)	(0.9)	(3.3)	(3.4)
Effective tax rate	*6.3%*	*7.0%*	*13.2%*	*8.7%*	*8.1%*	*11.2%*	*12.1%*	*(27.0%)*	*18.5%*	*19.3%*	*(13.1%)*
Net income (loss)	**(14.2)**	**(12.8)**	**(6.7)**	**(11.9)**	**(45.6)**	**(8.7)**	**(7.3)**	**1.8**	**(6.1)**	**(20.3)**	**22.7**
Net margin	*-11.3%*	*-9.7%*	*-4.8%*	*-7.8%*	*-8.3%*	*-5.2%*	*-4.3%*	*1.0%*	*-3.2%*	*-2.9%*	*2.6%*
Non-GAAP EPS, basic	**($0.10)**	**($0.09)**	**($0.04)**	**($0.08)**	**($0.31)**	**($0.06)**	**($0.05)**	**$0.01**	**($0.04)**	**($0.13)**	**$0.13**
Non-GAAP EPS, diluted	**($0.10)**	**($0.09)**	**($0.04)**	**($0.08)**	**($0.31)**	**($0.06)**	**($0.05)**	**$0.01**	**($0.04)**	**($0.13)**	**$0.13**
Weighted average basic shares outstanding	145.6	148.1	150.6	153.1	149.4	155.6	158.1	160.6	163.1	159.4	169.4
Weighted average diluted shares outstanding	145.6	148.1	150.6	153.1	149.4	155.6	158.1	160.6	163.1	159.4	169.4

Source: Jefferies estimates, company data

Anaplan (PLAN) DCF Base Case

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%	As shown	3.50%
Historical risk-free rate of return	5.00%		5.00%
Beta	1.22		1.00
Historical market risk premium	6.5%		6.50%
Market rate of return	11.50%		11.50%
Cost of Equity	11.43%		10.00%
Terminal Growth rate			5.00%

Scenario 1: Base Case

	HISTORICALS					HYPER GROWTH PERIOD						TRANSITIONARY PERIOD				TERMINAL	
	2016A	2017A	2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	Perpetuity
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.18	1.13	1.09	1.04	1.00	
Market rate of return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.1%	10.9%	10.6%	10.3%	10.0%	
FCF Growth Rate		N/M	N/M	N/M	N/M	N/M	N/M	N/M	N/M	165.0%	158.0%	127.4%	96.8%	66.2%	35.6%	5.0%	
Free cash flow to the enterprise ($M)	(59.8)	(31.1)	(14.4)	(66.9)	(32.8)	(30.1)	(14.3)	(1.7)	21.5	56.9	146.7	333.6	656.6	1,091.2	1,479.7	1,553.7	
Diluted share count			19.0	53.3	129.8	139.6	149.4	159.4	169.4	156.8	163.1	168.3	172.3	174.9	176.2	176.2	
Actual share count growth				181.3%	143.4%	7.5%	7.0%	6.7%	6.3%	5.0%	4.0%	3.2%	2.4%	1.5%	0.7%	0.0%	
FCFE / Share						(0.22)	(0.10)	(0.01)	0.13	0.36	0.90	1.98	3.81	6.24	8.40	8.82	176.39
NPV / Share of FCFE						(0.21)	(0.08)	(0.01)	0.13	0.26	0.57	1.14	2.00	3.01	3.75		73.05
Cumulative NPV of FCFE / Share						(0.21)	(0.29)	(0.30)	(0.18)	(0.04)	0.53	1.67	3.67	6.68	10.42		83.47

Cumulative NPV of FCF /Share	$	83.47
Shares outstanding (M)		140.6
Net cash / Share - 10% of revenue	$	1.81
Total NPV/Share	**$**	**85.28**
Current price / Share	$	68.82
Upside potential		23.9%

Source: FactSet, Jefferies estimates

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

INTU Income Statement

Intuit Inc. (INTU)								
Income Statement ($Ms, except per share)		Oct.	Jan.	Apr.	July			
(FY ends in July)	FY20	F1Q21A	F2Q21E	F3Q21	F4Q21	FY21	FY22	FY23
Revenue:								
Small Business &-Self Employe	4,050	1,181	1,023	1,062	1,169	4,435	5,022	5,682
Consumer	3,136	119	587	2,563	186	3,455	3,731	3,978
Credit Karma			120	205	240	565	1,060	1,220
ProConnect	493	23	230	227	20	500	525	551
TOTAL revenue	**7,679**	**1,323**	**1,960**	**4,057**	**1,615**	**8,955**	**10,338**	**11,431**
guidance	*7440-7540*		*1935-1965*			*8810-8995*		
cost of rev	1,296	234	363	527	388	1,512	1,710	1,859
gross profit	6,383	1,089	1,598	3,530	1,227	7,443	8,628	9,572
gross margin %	83.1%	82.3%	81.5%	87.0%	76.0%	83.1%	83.5%	83.7%
S&M	1,932	330	627	779	549	2,285	2,613	2,863
% of rev	25.2%	24.9%	32.0%	19.2%	34.0%	25.5%	25.3%	25.0%
R&D	1,241	287	343	377	484	1,492	1,704	1,862
% of rev	16.2%	21.7%	17.5%	9.3%	30.0%	16.7%	16.5%	16.3%
G&A	542	138	157	169	178	641	713	758
% of rev	7.1%	10.4%	8.0%	4.2%	11.0%	7.2%	6.9%	6.6%
total opex	3,715	755	1,127	1,325	1,211	4,418	5,029	5,483
EBIT	2,668	334	470	2,205	16	3,025	3,599	4,088
guidance	*2515-2565*		*455-475*			*2975-3045*		
operating margin %	**34.7%**	**25.2%**	**24.0%**	**54.3%**	**1.0%**	**33.8%**	**34.8%**	**35.8%**
bp change (YoY)	111 bp	1417 bp	136 bp	307 bp	(3292 bp)	(96 bp)	103 bp	95 bp
interest & other	27	(6)	(8)	(8)	(8)	(30)	(30)	(26)
EBT	2,695	328	462	2,197	8	2,995	3,569	4,062
taxes	620	78	111	527	2	718	857	975
tax rate %	23.0%	23.8%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Net Income (non-gaap)	**2,075**	**250**	**351**	**1,669**	**6**	**2,277**	**2,712**	**3,087**
EPS (diluted, non-gaap)	**7.86**	**0.94**	**1.29**	**6.03**	**0.02**	**8.35**	**9.80**	**11.16**
guidance	*7.50-7.60*		*1.25-1.31*			*8.20-8.40*		
shares (diluted, avg)	264	265	273	277	277	273	277	277
dividends/share (cash)	2.12	0.59	0.59	0.59	0.59	2.36	2.36	2.36
% YoY growth								
Small Business &-Self Employe	14.6%	13%	5%	8%	11%	9.5%	13%	13%
Consumer	13.0%	19%	18%	40%	-74%	10.2%	8.0%	6.6%
Credit Karma							87.6%	15.1%
TOTAL revenue	13.2%	14%	16%	35%	-11%	16.6%	15.4%	10.6%

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Sources: Jefferies estimates, Company data

INTU Metrics

INTU METRICS	FY20	F1Q21A	F2Q21E	F3Q21	F4Q21	FY21	FY22	FY23
(in 1000s unless noted)								
Small Bus Rev Build								
QuickBooks Online rev ($M)	$ 1,354	$ 392	$ 394	$ 423	$ 449	$ 1,658	$ 2,101	$ 2,608
% YoY growth	38%	28%	19%	20%	23%	22%	27%	24%
QBO subs	5,083	5,130	5,382	5,688	6,042	6,042	7,310	8,699
guidance								
% YoY growth	12%	10%	9%	14%	19%	19%	21%	19%
QoQ change		47	252	305	354			
int'l subs	1,500							
% YoY growth								
QBSE subs								
QoQ change								
Total Online Ecosystem ($M)	$ 2,182	$ 621	$ 592	$ 631	$ 698	$ 2,542	$ 3,167	$ 3,877
% YoY growth	31%	24%	12%	13%	18%	16%	25%	22%
QB Desktop, Ent., & DT subs r	$ 755	$ 241	$ 157	$ 173	$ 187	$ 758	$ 720	$ 669
% YoY growth	3%	1%	-5%	0%	5%	0%	-5%	-7%
QB Desktop unit sales	594							
QB Desktop subs	451							
Total Desktop Ecosystem ($M)	$ 1,868	$ 560	$ 431	$ 431	$ 470	$ 1,893	$ 1,855	$ 1,805
% YoY growth	-0.1%	3%	-3%	2%	3%	1%	-2%	-3%
Total QB paying customers								
Consumer Tax (millions)								
U.S. Desktop units	4.9							
Web units	35.8							
Total U.S. TurboTax Fed units	42.7							
Employees	10,600							
YoY change	1,200							
rev/EE (avg, annualized, $100	$ 767.900							
B/S & C/F, selected items								
Cash & securities	7,069	5,821	2,613	4,522	3,964	3,964	4,977	6,195
Deferred revenue	652	574	735	692	714	714	808	915
% YoY growth	5%	4%	10%	10%	10%	10%	13%	13%
CFFO	2,414	45	86	2,317	(194)	2,254	2,657	2,983
% YoY growth	4%	-135%	-73%	20%	-167%	-7%	18%	12%
OCF mgn (% of rev)	31%					25%	26%	26%
shares repurchased ($M)	318	-	-	175	175	350	800	900
buyback remaining auth. ($M	2,400	2,400						

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Sources: Jefferies estimates, Company data

Jefferies

SolarWinds (SWI) Non-GAAP Income Statement

denotes ASC 606

ASC 606 --------------->

Non-GAAP Income Statement	FY 2019E					FY 2020E					FY 2021E					FY 2022E				
	Mar-19	Jun-19	Sep-19	Dec-19	Year	Mar-20	Jun-20	Sep-20	Dec-20E	YearE	Mar-21E	Jun-21E	Sep-21E	Dec-21E	YearE	Mar-22E	Jun-22E	Sep-22E	Dec-22E	YearE
License	37.9	39.2	43.6	44.6	165.3	37.0	33.7	39.3	34.1	144.0	21.4	19.4	21.7	20.5	83.0	22.4	20.4	22.8	21.5	87.1
Subscription	71.6	80.6	85.3	89.2	326.7	95.1	96.4	100.9	103.9	396.3	109.8	114.0	121.6	128.9	474.3	131.7	136.3	143.6	152.0	563.6
Maintenance and other	106.3	110.8	113.8	115.6	446.5	116.3	116.5	121.1	124.1	478.1	115.7	114.7	114.5	112.9	457.8	114.3	113.2	113.3	113.4	454.2
Lic+Maintenance	144.2	150.0	157.4	160.2	611.8	153.3	150.2	160.4	158.2	622.1	137.1	134.1	136.2	133.4	540.8	136.7	133.6	136.1	134.9	541.4
Total revenue	**215.8**	**230.6**	**242.7**	**249.4**	**938.5**	**248.5**	**246.6**	**261.3**	**262.1**	**1,018.5**	**246.8**	**248.2**	**257.8**	**262.3**	**1,015.0**	**268.4**	**269.9**	**279.8**	**286.9**	**1,105.0**
y/y change	*9%*	*14%*	*13%*	*13%*	*12.1%*	*15%*	*7%*	*8%*	*5%*	*8.5%*	*-1%*	*1%*	*-1%*	*0%*	*0%*	*9%*	*9%*	*9%*	*9%*	*9%*
Total cost of revenues	17.7	18.9	20.2	20.8	77.6	22.0	21.3	22.7	22.4	88.3	22.5	21.9	23.3	22.6	90.3	23.4	22.6	24.1	23.5	93.7
Non-GAAP Gross Profit	**198.1**	**211.6**	**222.5**	**228.6**	**860.8**	**226.5**	**225.3**	**238.6**	**239.8**	**930.1**	**224.3**	**226.3**	**234.5**	**239.7**	**924.8**	**245.0**	**247.3**	**255.6**	**263.3**	**1,011.3**
% Non-GAAP Gross Margin	*91.8%*	*91.8%*	*91.7%*	*91.7%*	*91.7%*	*91.1%*	*91.4%*	*91.3%*	*91.5%*	*91.3%*	*90.9%*	*91.2%*	*91.0%*	*91.4%*	*91.1%*	*91.3%*	*91.6%*	*91.4%*	*91.8%*	*91.5%*
Sales and marketing	56.7	61.8	64.8	66.8	250.3	69.0	66.0	66.4	69.9	271.3	71.0	68.9	68.1	72.5	280.5	75.9	73.6	72.5	77.9	299.9
y/y change	*9%*	*11%*	*16%*	*15%*	*13%*	*22%*	*7%*	*2%*	*5%*	*8%*	*3%*	*4%*	*3%*	*4%*	*3%*	*7%*	*7%*	*6%*	*7%*	*7%*
% of total revenues	*26%*	*27%*	*27%*	*27%*	*27%*	*28%*	*27%*	*25%*	*27%*	*27%*	*29%*	*28%*	*26%*	*28%*	*28%*	*28%*	*27%*	*26%*	*27%*	*27%*
Research and development	23.3	25.3	26.7	24.9	100.2	28.5	26.9	26.7	28.5	110.7	29.6	28.3	27.6	29.8	115.4	30.8	29.5	28.6	31.2	120.1
y/y change	*-2%*	*10%*	*18%*	*10%*	*9%*	*23%*	*7%*	*0%*	*15%*	*10%*	*4%*	*5%*	*3%*	*5%*	*4%*	*4%*	*4%*	*3%*	*5%*	*4%*
% of total revenues	*11%*	*11%*	*11%*	*10%*	*11%*	*11%*	*11%*	*10%*	*11%*	*11%*	*12%*	*11%*	*11%*	*11%*	*11%*	*11%*	*11%*	*10%*	*11%*	*11%*
General and administrative	17.4	18.2	20.0	18.6	74.2	23.3	19.5	18.2	19.5	80.6	23.2	19.6	18.0	19.6	80.3	25.2	21.4	19.5	21.4	87.4
y/y change	*13%*	*13%*	*33%*	*21%*	*20%*	*34%*	*7%*	*-9%*	*5%*	*9%*	*-1%*	*1%*	*-1%*	*0%*	*0%*	*9%*	*9%*	*9%*	*9%*	*9%*
% of total revenues	*8%*	*8%*	*8%*	*7%*	*8%*	*9%*	*8%*	*7%*	*7%*	*8%*	*9%*	*8%*	*7%*	*7%*	*8%*	*9%*	*8%*	*7%*	*7%*	*8%*
Total operating expenses	97.5	105.3	111.6	110.3	424.6	120.8	112.5	111.3	117.9	462.5	123.7	116.9	113.7	121.9	476.2	131.9	124.5	120.6	130.5	507.4
% of total revenues	*45%*	*46%*	*46%*	*44%*	*45%*	*49%*	*46%*	*43%*	*45%*	*45%*	*50%*	*47%*	*44%*	*46%*	*47%*	*49%*	*46%*	*43%*	*45%*	*46%*
Non-GAAP Operating Income	**100.6**	**106.3**	**111.0**	**118.3**	**436.2**	**105.6**	**112.9**	**127.3**	**121.9**	**467.6**	**100.6**	**109.4**	**120.8**	**117.8**	**448.5**	**113.1**	**122.8**	**135.1**	**132.9**	**503.9**
% Non-GAAP Operating Margin	*46.6%*	*46.1%*	*45.7%*	*47.4%*	*46.5%*	*42.5%*	*45.8%*	*48.7%*	*46.5%*	*45.9%*	*40.7%*	*44.1%*	*46.9%*	*44.9%*	*44.2%*	*42.2%*	*45.5%*	*48.3%*	*46.3%*	*45.6%*
Interest income (expense), net	(27.4)	(29.3)	(27.1)	(25.2)	(109.0)	(24.9)	(18.0)	(17.3)	(23.8)	(83.9)	(23.8)	(23.7)	(23.5)	(23.3)	(94.3)	(24.0)	(23.9)	(23.9)	(23.8)	(95.6)
Pretax income	73.2	77.1	83.9	93.1	327.2	80.8	94.9	110.0	98.1	383.7	76.8	85.8	97.3	94.4	354.3	89.2	98.9	111.2	109.1	408.4
Provision for income taxes	12.3	17.0	17.1	17.1	63.4	16.9	17.0	22.3	19.9	76.1	13.7	15.3	17.4	16.9	63.4	16.0	17.7	19.9	19.5	73.1
Tax rate	*17%*	*22%*	*20%*	*18%*	*19%*	*21%*	*18%*	*20%*	*20%*	*20%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*	*18%*
Non-GAAP Net Income	**60.9**	**60.1**	**66.7**	**76.0**	**263.8**	**63.9**	**77.9**	**87.7**	**78.2**	**307.7**	**63.0**	**70.4**	**79.9**	**77.5**	**290.9**	**73.2**	**81.2**	**91.3**	**89.6**	**335.3**
Diluted Non-GAAP EPS	**$ 0.20**	**$ 0.20**	**$ 0.21**	**$ 0.24**	**$ 0.85**	**$ 0.20**	**$ 0.25**	**$ 0.28**	**$ 0.25**	**$ 0.98**	**$ 0.20**	**$ 0.22**	**$ 0.25**	**$ 0.24**	**$ 0.90**	**$ 0.22**	**$ 0.25**	**$ 0.28**	**$ 0.27**	**$ 1.02**
y/y change	*86%*	*58%*	*26%*	*30%*	*42%*	*4%*	*26%*	*29%*	*1%*	*15%*	*-3%*	*-11%*	*-11%*	*-3%*	*-7%*	*13%*	*13%*	*12%*	*13%*	*13%*
Diluted shares outstanding	309.8	306.6	311.1	311.9	309.8	312.9	314.9	316.7	317.5	315.5	319.4	321.3	323.2	325.1	322.3	327.0	328.9	330.8	332.7	329.9

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

SolarWinds (SWI) DCF Base Case

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%		3.50%
Historical risk-free rate of return	5.28%	5.28%	5.28%
Beta	1.04		1
Market rate of return	11.78%	11.78%	11.78%
Cost of equity	10.26%		10.00%
Growth Rate			5.0%

Total Cash and Investments	425.0
- Total Debt	1,905.3
Net Cash and Investments	(1,480.3)
LTM Revenues - non-GAAP	1,005.7
Diluted Shares Outstanding	316.7
Net Cash/Share - 10% of Revenue	**$ (4.99)**

SCENARIO 2: Similar to Scenario 1, but more modest growth assumed in second half of hyper growth period

	HISTORICALS						FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
	2014A	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	Perpetuity
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.50%	
Historical risk-free rate of return	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.28%	
Beta	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.03	1.03	1.02	1.01	1.01	1.00	
Market rate of return	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	
Cost of equity	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	10.2%	10.2%	10.1%	10.1%	10.0%	10.0%	
FCF Growth Rate	NM	NM	NM	NM	-2.2%	-135.0%	NM	33.8%	24.4%	12.0%	9.0%	7.8%	6.7%	5.5%	4.3%	3.2%	2.0%	
Discount Factor							0.981	0.889	0.807	0.732	0.664	0.603	0.548	0.499	0.455	0.415		
Free cash flow to enterprise ($M)	118.9	93.3	(4,732.9)	289.0	282.5	(98.9)	259.7	347.4	432.2	484.0	527.6	568.9	606.8	640.2	667.9	689.1	702.9	8,785.9
NPV of Free cash flow ($M)							0.8	1.0	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.8		10.6
Cumulative NPV of FCF ($M)							0.8	1.8	2.8	3.9	4.9	5.9	6.9	7.8	8.7	9.5		20.1

Cumulative NPV of FCF ($M)	20.1
(Net cash - 10% of revenue)/Share	-$4.99
Total NPV per share	**$15.13**
Current price/share	$14.66
Upside / Downside Potential	*3%*

Source: FactSet, Jefferies estimates

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Upland (UPLD) Non-GAAP Income Statement

Non-GAAP income statement

$ millions except for per share items
Fiscal Year Ending December 31

	FY2019A					FY2020E					FY2021E					FY2022E				
	Mar-19A	Jun-19A	Sep-19A	Dec-19A	FY19A	Mar-20A	Jun-20A	Sep-20A	Dec-20E	FY20E	Mar-21E	Jun-21E	Sep-21E	Dec-21E	FY21E	Mar-22E	Jun-22E	Sep-22E	Dec-22E	FY22E
Subscription & support	**45.0**	**48.7**	**51.1**	**59.1**	**203.9**	**63.9**	**67.7**	**71.0**	**68.7**	**271.3**	**66.4**	**66.3**	**68.9**	**69.4**	**271.0**	**67.0**	**68.2**	**70.9**	**72.5**	**278.7**
q/q change	*7.7%*	*8.3%*	*4.8%*	*15.8%*		*8.1%*	*6.0%*	*4.9%*	*(3.2%)*		*(3.5%)*	*(0.0%)*	*3.8%*	*0.8%*		*(3.5%)*	*1.8%*	*4.0%*	*2.3%*	
y/y change	*62.2%*	*46.9%*	*50.5%*	*41.5%*	*49.3%*	*42.0%*	*39.0%*	*39.0%*	*16.3%*	*33.1%*	*3.9%*	*(2.0%)*	*(3.0%)*	*1.0%*	*(0.1%)*	*1.0%*	*2.8%*	*3.0%*	*4.5%*	*2.8%*
Subscription	44.1	47.8	50.2	58.1	200.2	62.8	66.6	69.9	67.6	266.9	65.3	65.3	67.8	68.3	266.6	65.9	67.1	69.9	71.5	274.5
q/q change	*7.8%*	*8.4%*	*4.9%*	*15.8%*		*8.1%*	*6.1%*	*4.9%*	*(3.2%)*		*(3.5%)*	*(0.0%)*	*3.9%*	*0.8%*		*(3.5%)*	*1.8%*	*4.1%*	*2.3%*	
y/y change	*63.4%*	*47.8%*	*51.5%*	*41.9%*	*50.1%*	*42.3%*	*39.2%*	*39.3%*	*16.4%*	*33.3%*	*3.9%*	*(2.0%)*	*(3.0%)*	*1.0%*	*(0.1%)*	*1.1%*	*2.9%*	*3.1%*	*4.6%*	*2.9%*
Maintenance	0.9	0.9	0.9	1.0	3.6	1.1	1.1	1.1	1.1	4.4	1.1	1.1	1.1	1.1	4.4	1.1	1.1	1.1	1.0	4.2
q/q change	*3.9%*	*1.5%*	*2.5%*	*11.6%*		*10.0%*	*0.1%*	*0.2%*	*(0.7%)*		*0.3%*	*(0.4%)*	*(0.6%)*	*(1.1%)*		*0.1%*	*(0.8%)*	*(1.1%)*	*(1.4%)*	
y/y change	*17.8%*	*12.4%*	*11.6%*	*20.7%*	*15.6%*	*27.8%*	*26.1%*	*23.2%*	*9.7%*	*21.3%*	*(0.0%)*	*(0.6%)*	*(1.4%)*	*(1.8%)*	*(1.0%)*	*(2.0%)*	*(2.4%)*	*(2.9%)*	*(3.2%)*	*(2.6%)*
Perpetual license revenue	**0.7**	**0.6**	**1.0**	**3.5**	**5.7**	**0.4**	**0.5**	**0.4**	**0.4**	**1.6**	**0.3**	**0.3**	**0.3**	**0.3**	**1.2**	**0.3**	**0.2**	**0.2**	**0.3**	**0.9**
q/q change	*(3.1%)*	*(12.5%)*	*69.6%*	*262.2%*		*(89.8%)*	*36.0%*	*(16.3%)*	*(14.1%)*		*(13.1%)*	*4.0%*	*(16.3%)*	*19.0%*		*(17.9%)*	*(20.5%)*	*(16.3%)*	*64.7%*	
y/y change	*(59.6%)*	*(15.8%)*	*6.6%*	*420.8%*	*47.1%*	*(45.1%)*	*(14.6%)*	*(57.8%)*	*(90.0%)*	*(71.8%)*	*(15.0%)*	*(35.0%)*	*(35.0%)*	*(10.0%)*	*(25.1%)*	*(15.0%)*	*(35.0%)*	*(35.0%)*	*(10.0%)*	*(23.4%)*
Professional services	**2.9**	**3.7**	**3.0**	**3.4**	**13.0**	**3.8**	**3.1**	**2.8**	**3.3**	**12.9**	**4.3**	**2.8**	**3.4**	**3.9**	**14.4**	**4.8**	**2.5**	**3.9**	**4.5**	**15.7**
q/q change	*4.7%*	*30.5%*	*(18.6%)*	*13.0%*		*10.3%*	*(17.3%)*	*(11.0%)*	*17.0%*		*33.6%*	*(35.3%)*	*19.6%*	*16.1%*		*22.4%*	*(47.1%)*	*52.9%*	*16.1%*	
y/y change	*26.2%*	*76.5%*	*31.2%*	*25.7%*	*38.6%*	*32.5%*	*(16.1%)*	*(8.2%)*	*(5.0%)*	*(0.7%)*	*15.0%*	*(10.0%)*	*21.0%*	*20.0%*	*11.5%*	*10.0%*	*(10.0%)*	*15.0%*	*15.0%*	*8.6%*
Total revenue	**48.5**	**53.0**	**55.1**	**66.1**	**222.6**	**68.0**	**71.3**	**74.2**	**72.3**	**285.9**	**71.0**	**69.5**	**72.5**	**73.6**	**286.6**	**72.1**	**70.9**	**75.0**	**77.3**	**295.3**
q/q change	*7.3%*	*9.3%*	*3.9%*	*20.0%*		*3.0%*	*4.8%*	*4.0%*	*(2.5%)*		*(1.8%)*	*(2.2%)*	*4.3%*	*1.6%*		*(2.1%)*	*(1.6%)*	*5.7%*	*3.1%*	
y/y change	*53.4%*	*47.5%*	*48.2%*	*46.2%*	*48.5%*	*40.3%*	*34.5%*	*34.7%*	*9.5%*	*28.4%*	*4.4%*	*(2.6%)*	*(2.3%)*	*1.8%*	*0.3%*	*1.5%*	*2.1%*	*3.4%*	*5.0%*	*3.0%*
Cost of revenue:																				
Subscription & support + perp.	11.0	12.2	12.3	16.2	51.7	17.2	18.0	20.4	16.9	72.4	16.3	16.3	16.9	17.0	66.5	16.4	16.7	17.4	17.8	68.3
% subscription & support + perp. gross margin	*75.9%*	*75.2%*	*76.4%*	*74.1%*	*75.3%*	*73.3%*	*73.6%*	*71.5%*	*75.6%*	*73.5%*	*75.6%*	*75.6%*	*75.6%*	*75.6%*	*75.6%*	*75.6%*	*75.6%*	*75.6%*	*75.6%*	*75.6%*
Professional services	1.5	2.0	2.0	2.2	7.7	2.3	2.5	2.0	2.0	8.7	2.6	1.7	2.0	2.3	8.7	2.9	1.5	2.3	2.7	9.4
% prof services gross margin	*46.9%*	*47.3%*	*34.2%*	*36.3%*	*41.3%*	*40.2%*	*20.9%*	*27.3%*	*40.0%*	*32.7%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*	*40.0%*
Total cost of revenues	12.5	14.2	14.3	18.4	59.4	19.4	20.5	22.4	18.8	81.1	18.9	18.0	18.9	19.4	75.1	19.3	18.2	19.7	20.5	77.7
Gross profit, non-GAAP	**36.0**	**38.8**	**40.8**	**47.7**	**163.3**	**48.6**	**50.8**	**51.8**	**53.5**	**204.8**	**52.1**	**51.5**	**53.6**	**54.3**	**211.5**	**52.8**	**52.7**	**55.3**	**56.8**	**217.6**
Gross margin	*74.2%*	*73.2%*	*74.1%*	*72.2%*	*73.3%*	*71.5%*	*71.3%*	*69.8%*	*74.0%*	*71.6%*	*73.4%*	*74.1%*	*73.9%*	*73.7%*	*73.8%*	*73.2%*	*74.3%*	*73.7%*	*73.5%*	*73.7%*
y/y change	*55.9%*	*46.5%*	*50.8%*	*47.1%*	*49.7%*	*35.1%*	*31.0%*	*27.0%*	*12.2%*	*25.4%*	*7.2%*	*1.3%*	*3.4%*	*1.4%*	*3.3%*	*1.2%*	*2.3%*	*3.2%*	*4.7%*	*2.9%*
Operating expenses:																				
Sales & marketing	6.8	7.6	8.2	11.0	33.6	10.4	10.9	10.8	13.8	45.9	12.3	12.3	13.1	13.4	51.2	11.5	12.1	13.5	14.4	51.6
% of revenues	*14.1%*	*14.4%*	*14.9%*	*16.6%*	*15.1%*	*15.3%*	*15.3%*	*14.5%*	*19.1%*	*16.1%*	*17.4%*	*17.8%*	*18.0%*	*18.2%*	*17.9%*	*16.0%*	*17.1%*	*18.0%*	*18.6%*	*17.5%*
Research and development	6.0	6.3	6.6	7.8	26.7	8.5	9.3	9.0	8.3	35.0	8.2	8.7	8.2	8.4	33.6	8.2	8.9	8.4	8.7	34.1
% of revenues	*12.4%*	*11.9%*	*12.0%*	*11.8%*	*12.0%*	*12.5%*	*13.0%*	*12.1%*	*11.4%*	*12.2%*	*11.6%*	*12.6%*	*11.3%*	*11.4%*	*11.7%*	*11.4%*	*12.5%*	*11.2%*	*11.2%*	*11.6%*
General and administrative	6.0	6.5	6.5	8.2	27.2	8.8	9.2	8.5	8.3	34.8	9.8	9.0	9.8	9.3	37.9	9.5	8.6	10.0	9.6	37.8
% of revenues	*12.3%*	*12.2%*	*11.7%*	*12.5%*	*12.2%*	*13.0%*	*12.8%*	*11.5%*	*11.5%*	*12.2%*	*13.8%*	*13.0%*	*13.5%*	*12.6%*	*13.2%*	*13.3%*	*12.1%*	*13.3%*	*12.5%*	*12.8%*
Total operating expenses, non-GAAP	19.4	21.0	21.8	27.6	89.8	28.3	29.9	28.7	31.1	117.9	31.1	30.8	31.8	31.8	125.5	30.0	30.3	32.7	33.5	126.4
Operating income, non-GAAP	**16.6**	**17.8**	**19.0**	**20.1**	**73.5**	**20.4**	**21.0**	**23.1**	**22.4**	**86.8**	**21.1**	**20.7**	**21.8**	**22.5**	**86.0**	**22.8**	**22.4**	**22.6**	**23.4**	**91.2**
Operating margin, non-GAAP	*34.3%*	*33.6%*	*34.4%*	*30.4%*	*33.0%*	*29.9%*	*29.4%*	*31.1%*	*31.0%*	*30.4%*	*29.7%*	*29.8%*	*30.0%*	*30.5%*	*30.0%*	*31.6%*	*31.6%*	*30.2%*	*30.2%*	*30.9%*
y/y change	*88.1%*	*62.8%*	*65.3%*	*33.0%*	*58.5%*	*22.5%*	*17.6%*	*21.7%*	*11.5%*	*18.1%*	*3.5%*	*-1.3%*	*-5.7%*	*0.3%*	*-0.9%*	*8.1%*	*8.3%*	*4.0%*	*4.1%*	*6.0%*
Other income/(expense), net	(5.6)	(5.7)	(5.3)	(5.6)	(22.2)	(8.5)	(7.3)	(6.9)	(8.0)	(30.7)	(7.5)	(6.6)	(6.6)	(6.6)	(27.2)	(6.6)	(6.6)	(6.6)	(6.6)	(26.3)
Pretax income, non-GAAP	**11.0**	**12.2**	**13.6**	**14.5**	**51.3**	**11.9**	**13.6**	**16.2**	**14.4**	**56.1**	**13.5**	**14.2**	**15.2**	**15.9**	**58.8**	**16.2**	**15.8**	**16.1**	**16.8**	**64.9**
Benefit / (Provision) for income taxes	(0.5)	5.1	(1.6)	2.6	5.5	6.3	1.5	(2.4)	(0.7)	4.6	(0.7)	(0.7)	(0.8)	(0.8)	(2.9)	(0.8)	(0.8)	(0.8)	(0.8)	(3.2)
Effective tax rate	*4.8%*	*(41.6%)*	*11.8%*	*(17.7%)*	*(10.7%)*	*(52.8%)*	*(11.0%)*	*15.0%*	*5.0%*	*(8.2%)*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*	*5.0%*
Net income, non-GAAP	**11.1**	**17.9**	**13.2**	**17.1**	**59.3**	**18.1**	**15.2**	**15.1**	**13.7**	**62.1**	**12.9**	**13.4**	**14.5**	**15.1**	**55.9**	**15.4**	**15.1**	**15.3**	**16.0**	**61.7**
Net margin, non-GAAP	*22.9%*	*33.8%*	*24.0%*	*25.8%*	*26.6%*	*26.7%*	*21.2%*	*20.4%*	*18.9%*	*21.7%*	*18.1%*	*19.4%*	*19.9%*	*20.5%*	*19.5%*	*21.4%*	*21.2%*	*20.4%*	*20.6%*	*20.9%*
y/y change	*44.3%*	*135.9%*	*63.3%*	*38.4%*	*66.1%*	*63.3%*	*-15.5%*	*14.8%*	*-19.8%*	*4.8%*	*-29.0%*	*-11.2%*	*-4.6%*	*10.5%*	*-10.0%*	*19.7%*	*12.0%*	*5.6%*	*5.6%*	*10.4%*
Diluted EPS - Non-GAAP	**0.53**	**0.76**	**0.52**	**0.67**	**2.47**	**0.72**	**0.60**	**0.56**	**0.47**	**2.34**	**0.44**	**0.45**	**0.48**	**0.50**	**1.88**	**0.51**	**0.49**	**0.49**	**0.51**	**2.01**
y/y change	*42.9%*	*109.5%*	*35.9%*	*14.7%*	*45.8%*	*36.2%*	*-21.5%*	*7.2%*	*-29.6%*	*-5.4%*	*-38.6%*	*-23.8%*	*-13.0%*	*6.4%*	*-19.7%*	*15.4%*	*8.2%*	*2.1%*	*2.2%*	*6.7%*
Basic shares outstanding	20.4	22.6	24.6	24.7	23.1	24.9	25.0	27.2	29.0	26.5	29.3	29.6	29.9	30.1	29.7	30.4	30.6	30.9	31.1	30.8
Diluted shares outstanding	21.1	23.6	25.4	25.5	23.9	25.4	25.4	27.2	29.0	26.7	29.3	29.6	29.9	30.1	29.7	30.4	30.6	30.9	31.1	30.8

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Upland (UPLD) DCF Base Case

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%	3.50%	3.50%
Historical risk-free rate of return	5.00%	5.00%	5.00%
Beta	1.00		1.00
Market rate of return	11.50%	11.50%	11.50%
Cost of equity	10.00%		10.00%
Growth Rate	As modeled		5.00%

SCENARIO 2:

				FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	Perpetuity
Current risk-free rate of return				3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return				5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta				0.00	0.00	0.00	0.00	0.00	0.17	0.33	0.50	0.67	0.83	1.00	
Market rate of return				11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity				3.5%	3.5%	3.5%	3.5%	3.5%	4.6%	5.7%	6.8%	7.8%	8.9%	10.0%	
FCF Growth Rate	134.4%	33.0%	83.9%	(7.3%)	146.0%	15.1%	37.0%	32.0%	27.5%	23.0%	18.5%	14.0%	9.5%	5.0%	
Diluted Shares as of 4Q	20.7	21.1	25.5	29.0	30.1	31.1	29.9	30.8	31.5	32.2	32.6	33.0	33.1		
Share Growth %		0.0	20.7%	13.9%	3.9%	3.3%	3.0%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%	
Free cash flow to enterprise ($M)	11.8	15.7	28.9	26.8	66.0	76.0	36.8	48.5	61.9	76.1	90.2	102.8	112.6	118.2	2,363.8
Free cash flow to enterprise ($M) - adjusted	26.9	33.6	68.6	52.8	73.8	77.8	72.4	95.6	121.8	149.9	177.6	202.5	221.7	232.8	4,655.5
Free cash flow to enterprise per share - average		1	1.9	1.4	2.3	2.5	1.8	2.3	2.9	3.5	4.1	4.6	5.0	5.3	105.9
NPV of Free cash flow per share				1.4	2.2	2.3	1.7	2.0	2.3	2.5	2.6	2.5	2.3		48.1
Cumulative NPV of FCF per share				1.4	3.6	5.9	7.6	9.6	11.9	14.4	16.9	19.4	21.7		69.8

Cumulative NPV of FCF ($M)	69.8
Total NPV/Share	**$57.53**
Current price/share	$47.42
Upside potential	21%

Source: FactSet, Jefferies estimates

Workday (WDAY) Non-GAAP Income Statement

$ in millions, except per share data	FY20A					FY21E					FY22E					FY23E					FY24E
	Apr-19A	Jul-19A	Oct-19A	Jan-20A	YearA	Apr-20A	Jul-20A	Oct-20A	Jan-21E	YearE	Apr-21E	Jul-21E	Oct-21E	Jan-22E	YearE	Apr-22E	Jul-22E	Oct-22E	Jan-23E	YearE	YearE
Revenue																					
Subscription and support	701.0	757.2	798.5	839.7	3,096.4	882.0	931.7	968.5	992.0	3,774.2	1,018.1	1,078.7	1,144.2	1,186.0	4,426.9	1,230.2	1,286.7	1,345.5	1,406.7	5,269.2	6,286.3
q/q change	4%	8%	5%	5%		5%	6%	4%	2%		3%	6%	6%	4%		4%	5%	5%	5%		
y/y change	34%	34%	28%	25%	30%	26%	23%	21%	18%	22%	15%	16%	18%	20%	17%	21%	19%	18%	19%	19%	19%
Professional services and other	124.0	130.6	139.6	136.6	530.8	136.4	130.3	137.4	121.0	525.1	132.4	140.2	148.7	154.2	575.5	153.8	160.8	168.2	175.8	658.6	722.9
q/q change	8%	5%	7%	(2%)		(0%)	(5%)	5%	(12%)		9%	6%	6%	4%		(0%)	5%	5%	5%		
y/y change	29%	23%	18%	19%	22%	10%	(0%)	(2%)	(11%)	(1%)	(3%)	8%	8%	27%	10%	16%	15%	13%	14%	14%	10%
Total revenue, non-GAAP	**825.1**	**887.8**	**938.1**	**976.3**	**3,627.2**	**1,018.4**	**1,062.0**	**1,106.0**	**1,113.1**	**4,299.4**	**1,150.5**	**1,218.9**	**1,292.9**	**1,340.2**	**5,002.4**	**1,384.0**	**1,447.6**	**1,513.7**	**1,582.5**	**5,927.8**	**7,009.3**
q/q change	5%	8%	6%	4%		4%	4%	4%	1%		3%	6%	6%	4%		3%	5%	5%	5%		
y/y change	33%	32%	26%	24%	29%	23%	20%	18%	14%	19%	13%	15%	17%	20%	16%	20%	19%	17%	18%	18%	18%
Gross profit: subscription and support	611.6	659.7	697.4	729.3	2,698.1	760.2	810.4	840.7	863.1	3,274.4	885.7	938.4	995.4	1,031.8	3,851.4	1,070.3	1,119.5	1,170.6	1,223.8	4,584.2	5,469.1
% margin	87.2%	87.1%	87.3%	86.9%	87.1%	86.2%	87.0%	86.8%	87.0%	86.8%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%
Gross profit: professional services	12.9	5.6	13.8	8.6	40.9	1.7	16.5	22.8	10.9	51.9	11.9	12.6	13.4	13.9	51.8	13.8	14.5	15.1	15.8	59.3	65.1
% margin	10.4%	4.3%	9.9%	6.3%	7.7%	1.3%	12.6%	16.6%	9.0%	9.9%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
Gross profit, non-GAAP	**624.5**	**665.4**	**711.2**	**737.9**	**2,739.0**	**762.0**	**826.8**	**863.5**	**874.0**	**3,326.3**	**897.7**	**951.1**	**1,008.8**	**1,045.7**	**3,903.2**	**1,084.1**	**1,133.9**	**1,185.8**	**1,239.7**	**4,643.5**	**5,534.2**
Gross margin	75.7%	75.0%	75.8%	75.6%	75.5%	74.8%	77.9%	78.1%	78.5%	77.4%	78.0%	78.0%	78.0%	78.0%	78.0%	78.3%	78.3%	78.3%	78.3%	78.3%	79.0%
Sales and marketing	221.2	227.1	231.8	248.9	929.0	261.0	218.7	240.4	289.3	1,009.5	300.6	257.1	287.5	355.0	1,200.4	358.9	302.5	333.6	416.1	1,411.1	1,626.3
% of total revenue	26.8%	25.6%	24.7%	25.5%	25.6%	25.6%	20.6%	21.7%	26.0%	23.5%	26.1%	21.1%	22.2%	26.5%	24.0%	25.9%	20.9%	22.0%	26.3%	23.8%	23.2%
Research and development	243.0	267.0	279.1	296.0	1,085.0	309.3	285.6	287.5	337.4	1,219.9	360.9	340.0	349.1	419.7	1,469.7	427.3	396.6	401.1	487.7	1,712.6	1,989.8
% of total revenue	29.4%	30.1%	29.8%	30.3%	29.9%	30.4%	26.9%	26.0%	30.3%	28.4%	31.4%	27.9%	27.0%	31.3%	29.4%	30.9%	27.4%	26.5%	30.8%	28.9%	28.4%
General and administrative	52.6	53.8	57.7	76.5	240.5	61.1	64.8	67.5	80.5	273.9	75.9	74.4	78.9	89.8	318.9	87.9	88.3	92.3	106.0	374.6	428.9
% of total revenue	6.4%	6.1%	6.1%	7.8%	6.6%	6.0%	6.1%	6.1%	7.2%	6.4%	6.6%	6.1%	6.1%	6.7%	6.4%	6.4%	6.1%	6.1%	6.7%	6.3%	6.1%
Total operating expenses, non-GAAP	516.8	547.8	568.6	621.3	2,254.6	631.5	569.1	595.4	707.3	2,503.3	737.5	671.5	715.5	864.5	2,989.0	874.1	787.4	827.1	1,009.8	3,498.3	4,045.0
Operating income, non-GAAP	**107.7**	**117.5**	**142.6**	**116.6**	**484.5**	**130.5**	**257.7**	**268.1**	**166.7**	**823.0**	**160.2**	**279.5**	**293.3**	**181.2**	**914.2**	**210.1**	**346.5**	**358.7**	**229.9**	**1,145.2**	**1,489.2**
Operating margin, non-GAAP	13.1%	13.2%	15.2%	11.9%	13.4%	12.8%	24.3%	24.2%	15.0%	19.1%	13.9%	22.9%	22.7%	13.5%	18.3%	15.2%	23.9%	23.7%	14.5%	19.3%	21.2%
Other income (expense), net	18.7	14.2	9.4	31.5	73.8	3.8	3.0	3.1	8.7	18.7	12.2	8.0	7.7	7.7	35.5	11.1	6.8	6.5	26.0	50.5	107.2
Pretax income	126.5	131.7	152.0	148.1	558.3	134.3	260.7	271.2	175.4	841.6	172.4	287.5	301.0	188.8	949.7	221.2	353.4	365.2	255.8	1,195.7	1,596.4
Provision (benefit) for income taxes	21.5	22.4	25.8	25.2	94.9	25.5	49.5	51.5	33.3	159.9	32.8	54.6	57.2	35.9	180.4	42.0	67.1	69.4	48.6	227.2	303.3
Effective tax rate	17%	17%	17%	17%	17%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%	19%
Net income (loss), non-GAAP	**104.9**	**109.3**	**126.1**	**122.9**	**463.3**	**108.8**	**211.1**	**219.7**	**142.1**	**681.7**	**139.6**	**232.9**	**243.8**	**152.9**	**769.3**	**179.2**	**286.2**	**295.8**	**207.2**	**968.5**	**1,293.1**
Net margin, non-GAAP	13%	12%	13%	13%	13%	11%	20%	20%	13%	16%	12%	19%	19%	11%	15%	13%	20%	20%	13%	16%	18%
EPS, non-GAAP	**$0.43**	**$0.44**	**$0.53**	**$0.50**	**$1.89**	**$0.44**	**$0.84**	**$0.86**	**$0.55**	**$2.70**	**$0.54**	**$0.90**	**$0.93**	**$0.58**	**$2.95**	**$0.67**	**$1.07**	**$1.09**	**$0.76**	**$3.60**	**$4.67**
Weighted average basic shares outstanding	223.3	226.4	228.5	230.5	227.2	232.9	236.0	238.1	240.1	236.8	242.1	244.1	246.1	248.1	245.1	250.1	252.1	254.1	256.1	253.1	261.1
Weighted average diluted shares outstanding	244.2	247.7	240.0	247.8	244.9	248.2	252.2	254.2	256.2	252.7	258.2	260.2	262.2	264.2	261.2	266.2	268.2	270.2	272.2	269.2	277.2

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Workday (WDAY) DCF Base Case

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%	As shown	3.50%
Historical risk-free rate of return	5.00%		5.00%
Beta	1.06		1.00
Historical market risk premium	6.5%		
Market rate of return	11.50%		11.50%
Cost of Equity	10.39%		10.00%
Terminal Growth rate			5.00%

Scenario 1: Base Case

	HISTORICALS								HYPER GROWTH PERIOD				TRANSITIONARY PERIOD					TERMINAL	
	2013A (YE Jan)	2014A (YE Jan)	2015A (YE Jan)	2016A (YE Jan)	2017A (YE Jan)	2018A (YE Jan)	2019A (YE Jan)	2020A (YE Jan)	2021E (YE Jan)	2022E (YE Jan)	2023E (YE Jan)	2024E (YE Jan)	2025E (YE Jan)	2026E (YE Jan)	2027E (YE Jan)	2028E (YE Jan)	2029E (YE Jan)	2030E (YE Jan)	Perpetuity
Current risk-free rate of return				3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return				5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta				1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.05	1.04	1.03	1.02	1.01	1.00	
Market rate of return				11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity				10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.3%	10.3%	10.2%	10.1%	10.1%	10.0%	
FCF Growth Rate		N/M	N/M	N/M	(25.0%)	285.4%	N/M	N/M	421.3%	23.0%	53.0%	50.0%	42.5%	35.0%	27.5%	20.0%	12.5%	5.0%	
Free cash flow ($M)	(22.9)	(28.3)	(25.6)	102.3	76.7	295.4	(1,095.0)	148.6	774.5	952.2	1,184.9	1,777.4	2,532.8	3,419.2	4,359.5	5,231.4	5,885.3	6,179.6	123,592.2
NPV of Free cash flow ($M)									755.6	841.5	948.6	1,289.0	1,668.1	2,047.5	2,376.4	2,599.0	2,667.9		56,025.4
Cumulative NPV of FCF ($M)									755.6	1,597.1	1,704.2	2,993.2	4,661.3	6,708.9	9,085.3	11,684.3	14,352.2		70,377.5

Cumulative NPV of FCF ($M)	70,378
Shares outstanding (M)	254.2
NPV / Share of FCF	276.89
Net cash / Share - 10% of revenue	2.91
Total NPV / Share	**$ 279.79**
Current price / Share	$ 226.07
Upside potential	23.8%

Source: FactSet, Jefferies estimates

2U (TWOU) Income Statement

2U (TWOU)															
Income Statement	**FY18**	**FY19**			**FY20E**					**FY21E**			**FY22E**	**FY23E**	**FY24E**
USD in Millions, except per share amounts	**2018**	**2019**	**Mar-20**	**Jun-20**	**Sep-20A**	**Dec-20E**	**2020E**	**Mar-21E**	**Jun-21E**	**Sep-21E**	**Dec-21E**	**2021E**	**2022E**	**2023E**	**2024E**
	FY18	**FY19**	**1Q20**	**2Q20**	**3Q20**	**4Q20E**	**FY20E**	**1Q21E**	**2Q21E**	**3Q21E**	**4Q21E**	**FY21E**	**FY22E**	**FY23E**	**FY24E**
Total Revenue	411.8	574.7	175.5	182.7	201.1	203.3	762.5	203.3	216.9	237.0	238.5	895.6	1,028.2	1,180.2	1,356.2
y/y growth	44%	40%	44%	35%	31%	25%	33%	16%	19%	18%	17%	17%	15%	15%	15%
Expenses:															
Curriculum and Teaching	23.3	63.3	20.5	26.3	30.2	22.4	99.2	23.7	26.0	27.7	27.8	105.2	125.7	144.3	165.9
% of Total Revenue	6%	11%	12%	14%	15%	11%	13%	12%	12%	12%	12%	12%	12%	12%	12%
Y/Y Growth	252%	172%	206%	97%	41%	2%	57%	16%	(1%)	(8%)	24%	6%	19%	15%	343%
Servicing and Support	67.2	98.9	30.5	30.3	32.5	30.5	123.9	32.5	35.8	37.9	37.0	143.2	157.6	165.0	189.7
% of Total Revenue	16%	17%	17%	17%	16%	15%	16%	16%	17%	16%	16%	16%	15%	14%	14%
Y/Y Growth	32%	47%	51%	26%	19%	11%	25%	7%	18%	17%	21%	16%	10%	5%	334%
Cost of Goods Sold	90.5	162.2	51.0	56.6	62.7	52.9	223.1	56.3	61.8	65.6	64.8	248.4	283.4	309.4	355.6
Gross Profit	321.3	412.5	124.5	126.1	138.4	150.4	539.4	147.1	155.1	171.4	173.7	647.2	744.8	870.8	1,000.7
Gross Margin	78%	72%	71%	69%	69%	74%	71%	72%	72%	72%	73%	72%	72%	74%	74%
Technology and Content Development	63.8	115.5	35.5	37.3	40.2	41.1	154.2	41.1	43.9	48.0	48.3	181.2	174.8	177.0	176.3
% of Total Revenue	15%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	17%	15%	13%
Y/Y Growth	39%	81%	79%	43%	18%	16%	34%	16%	18%	19%	17%	18%	(4%)	1%	277%
Program Marketing and Sales	221.0	342.4	99.2	98.3	100.1	95.5	393.2	107.8	108.4	113.7	95.4	425.3	501.6	546.7	628.4
% of Total Revenue	54%	60%	57%	54%	50%	47%	52%	53%	50%	48%	40%	47%	49%	46%	46%
Y/Y Growth	46%	55%	29%	10%	7%	16%	15%	9%	10%	14%	(0%)	8%	18%	9%	404%
General and administrative	83.0	131.0	43.7	39.6	44.0	46.8	174.0	44.7	47.7	52.1	52.5	197.0	226.2	236.0	244.1
% of Total Revenue	20%	23%	25%	22%	22%	23%	23%	22%	22%	22%	22%	22%	22%	20%	18%
Y/Y Growth	32%	58%	90%	39%	5%	25%	33%	2%	21%	18%	12%	13%	15%	4%	291%
Total Operating Expenses	458.3	821.4	229.4	231.8	247.0	236.3	944.4	249.9	261.9	279.4	260.9	1,052.0	1,186.0	1,269.2	1,404.4
Adjusted EBITDA	17.7	(23.9)	(4.3)	(2.1)	3.7	13.8	11.1	(3.9)	(3.8)	12.1	27.6	32.1	58.6	91.0	141.7
Adj. EBITDA Margin	4%	(4%)	(2%)	(1%)	2%	7%	1%	(2%)	(2%)	5%	12%	4%	6%	8%	10%
Depreciation	9.1	10.3	3.5	3.5	1.9	4.1	13.0	4.1	4.3	4.7	2.4	15.5	10.3	8.9	13.6
% Total Revenue	2%	2%	2%	2%	1%	2%	2%	2%	2%	2%	1%	2%	1%	1%	1%
Amortization	23.7	59.5	20.0	20.5	11.3	20.3	72.1	18.3	17.4	21.3	19.1	76.1	71.9	29.4	13.6
% Total Revenue	6%	10%	11%	11%	6%	10%	9%	9%	8%	9%	8%	8%	7%	2%	1%
Stock Based Comp Expense	31.4	51.5	20.9	21.1	22.0	22.4	86.3	20.3	19.5	28.4	28.6	96.9	134.2	141.6	162.7
% Total Revenue	8%	9%	12%	12%	11%	11%	11%	10%	9%	12%	12%	11%	13%	12%	12%
Operating Income	(46.5)	(246.7)	(53.9)	(49.1)	(45.9)	(33.0)	(181.9)	(46.6)	(45.0)	(42.4)	(22.4)	(156.4)	(157.8)	(89.0)	(48.2)
Operating Margin	(11%)	(43%)	(31%)	(27%)	(23%)	(16%)	(24%)	(23%)	(21%)	(18%)	(9%)	(17%)	(15%)	(8%)	(4%)
Non-GAAP Operating Income	(15.1)	(195.2)	(33.0)	(28.0)	(23.9)	(10.6)	(95.6)	(26.2)	(25.5)	(14.0)	6.2	(59.5)	(23.6)	52.6	114.6
Non-GAAP Operating Margin	(4%)	(34%)	(19%)	(15%)	(12%)	(5%)	(13%)	(13%)	(12%)	(6%)	3%	(7%)	(2%)	4%	8%
Interest Expense	(0.1)	(13.4)	(5.5)	(6.5)	(7.6)	(5.3)	(24.9)	(5.3)	(5.3)	(5.3)	(5.3)	(21.1)	(5.9)	(5.9)	(5.9)
Interest Income	5.2	5.8	0.5	0.2	0.7	0.2	1.5	0.2	0.2	0.2	0.2	0.6	0.6	0.6	0.6
Other Income (Expense), net	(1.7)	(0.7)	(2.3)	(11.1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% of Total Revenue	(0%)	(0%)	(1%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Pre-tax Income (Loss)	(43.2)	(255.1)	(61.2)	(66.5)	(52.7)	(38.2)	(205.2)	(51.7)	(50.1)	(47.5)	(27.5)	(176.8)	(163.1)	(94.3)	(53.5)
Income Tax Expense	4.9	19.9	1.1	0.4	0.2	0.1	1.7	0.2	0.2	0.1	0.1	0.5	0.5	0.3	0.2
Effective Tax Rate	(11%)	(8%)	(2%)	(1%)	(0%)	(0%)	(1%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Net income	(38.3)	(235.2)	(60.1)	(66.2)	(52.6)	(38.1)	(216.9)	(51.5)	(49.9)	(47.4)	(27.5)	(176.3)	(162.6)	(94.0)	(53.3)
Diluted EPS	($0.69)	($3.83)	($0.94)	($1.03)	($0.77)	($0.55)	($3.16)	($0.75)	($0.73)	($0.69)	($0.40)	($2.57)	($2.37)	($1.37)	($0.78)

Source: Jefferies estimates, company data

2U (TWOU) DCF Base Case

2U (TWOU)
Discounted Cash Flow Analysis
$ in millions, except per share data

	Year 1	Transition	Terminal
Current risk-free rate of return	3.5%		3.5%
Historical risk-free rate of return	5.0%	5.0%	5.0%
Beta	1.12		1.0
Market rate of return	11.5%	11.5%	11.5%
Cost of equity	10.8%		10.0%
Growth rate	*As Modeled*		5.0%

SCENARIO 2: BASE CASE

	HISTORICALS						FORECAST PERIOD						TRANSITIONARY PERIOD			TERMINAL	
	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E	FY26E	FY27E	FY28E	FY29E	Perpetuity
Period							1	2	3	4	5	6	7	8	9	10	
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.10	1.08	1.06	1.04	1.02	1.00	
Market rate of return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%	10.7%	10.5%	10.4%	10.3%	10.1%	10.0%	
FCF Growth Rate	NA	NA	NA	NM	NM	NM	NM	NM	296.2%	36.2%	58.0%	45.0%	35.0%	25.0%	15.0%	5.0%	
Discount Factor							0.903	0.815	0.736	0.664	0.603	0.549	0.501	0.458	0.420		
Free cash flow to enterprise ($m)	(21.5)	(22.5)	(19.5)	(0.3)	(85.9)	(122.1)	(3.3)	14.1	55.7	75.9	119.9	173.8	234.7	293.3	337.3	354.2	7,084.3
NPV of free cash flow ($m)							(3.0)	11.5	41.0	50.4	72.3	95.4	117.5	134.3	141.6		2,972.7
Cumulative NPV of FCF ($m)							(3.0)	8.5	49.4	99.8	172.1	267.5	385.0	519.3	660.8		3,633.5

Cumulative NPV of FCF ($m)		3,633.5
Shares outstanding (m)		68.6
NPV/share of FCF	$	52.98
Net cash/ share- 10% of revenue	$	2.05
Total NPV/share	**$**	**55.04**

Source: FactSet, Jefferies estimates

Microsoft (MSFT) Non-GAAP Income Statement

Microsoft (MSFT)
NON-GAAP INCOME STATEMENT
$ in millions, except per share items
For the Fiscal Years Ended June 30

$ in millions, except per share items	FY	FY			FY					FY					FY		
For the Fiscal Years Ended June 30	2018	2019	Sep-19	Dec-19	Mar-20A	Jun-20A	2020A	Sep-20A	Dec-20E	Mar-21E	Jun-21E	2021E	Sep-21E	Dec-21E	Mar-22E	Jun-22E	2022E
Revenue:																	
Productivity and Business Processes	35,865	41,160	11,077	11,826	11,743	11,752	46,398	12,319	12,872	12,809	13,006	51,006	13,345	14,052	13,960	14,185	55,542
y/y change %	20.1%	14.8%	13.4%	17.1%	14.7%	6.4%	12.7%	11.2%	8.8%	9.1%	10.7%	9.9%	8.3%	9.2%	9.0%	9.1%	8.9%
Intelligent Cloud	32,219	38,985	10,845	11,869	12,281	13,371	48,366	12,986	13,688	14,180	15,429	56,284	14,953	15,815	16,370	17,794	64,933
y/y change %	17.6%	21.0%	26.6%	26.6%	27.3%	17.4%	24.1%	19.7%	15.3%	15.5%	15.4%	16.4%	15.2%	15.5%	15.4%	15.3%	15.4%
More Personal Computing	42,276	45,698	11,133	13,211	10,997	12,910	48,251	11,849	13,434	11,591	13,214	50,087	12,276	13,658	11,991	13,574	51,499
y/y change %	7.6%	8.1%	3.6%	1.7%	3.0%	14.5%	5.6%	6.4%	1.7%	5.4%	2.4%	3.8%	3.6%	1.7%	3.5%	2.7%	2.8%
Corporate and Other																	
Total Revenue	**110,360**	**125,843**	**33,055**	**36,906**	**35,021**	**38,033**	**143,015**	**37,154**	**39,995**	**38,579**	**41,649**	**157,377**	**40,574**	**43,525**	**42,321**	**45,554**	**171,974**
y/y change %	*14%*	*14%*	*14%*	*14%*	*15%*	*13%*	*14%*	*12%*	*8%*	*10%*	*10%*	*10%*	*9%*	*9%*	*10%*	*9%*	*9%*
Cost of revenue	38,353	42,910	10,406	12,358	10,975	12,339	46,078	11,002	13,849	11,974	13,101	49,926	12,559	14,523	12,983	14,209	54,274
Gross Profit	72,007	82,933	22,649	24,548	24,046	25,694	96,937	26,152	26,146	26,605	28,549	107,452	28,015	29,002	29,338	31,345	117,700
Gross Margin	*65.2%*	*65.9%*	*68.5%*	*66.5%*	*68.7%*	*67.6%*	*67.8%*	*70.4%*	*65.4%*	*69.0%*	*68.5%*	*68.3%*	*69.0%*	*66.6%*	*69.3%*	*68.8%*	*68.4%*
Operating Expenses:	51%	48%					45%					45%					45%
Research and Development	14,726	16,876	4,565	4,603	4,887	5,214	19,269	4,926	4,639	5,478	5,914	20,958	4,463	5,223	6,115	6,583	22,384
% of total revenue	*13%*	*13%*	*14%*	*12%*	*14%*	*14%*	*13%*	*13%*	*12%*	*14%*	*14%*	*13%*	*11%*	*12%*	*14%*	*14%*	*13%*
y/y change %	*13%*	*15%*	*15%*	*13%*	*13%*	*16%*	*14%*	*8%*	*1%*	*12%*	*13%*	*9%*	*(9%)*	*13%*	*12%*	*11%*	*7%*
Sales and Marketing	17,469	18,213	4,337	4,933	4,911	5,417	19,598	4,231	5,459	5,864	6,331	21,885	5,559	6,268	5,883	6,332	24,041
% of total revenue	*16%*	*14%*	*13%*	*13%*	*14%*	*14%*	*14%*	*11%*	*14%*	*15%*	*15%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*
y/y change %	*13%*	*4%*	*6%*	*8%*	*8%*	*9%*	*8%*	*(2%)*	*11%*	*19%*	*17%*	*12%*	*31%*	*15%*	*0%*	*0%*	*10%*
General and Administrative	4,754	4,885	1,061	1,121	1,273	1,656	5,111	1,119	1,360	1,505	1,624	5,608	1,501	1,349	1,524	1,640	6,014
% of total revenue	*4%*	*4%*	*3%*	*3%*	*4%*	*4%*	*4%*	*3%*	*3%*	*4%*	*4%*	*4%*	*4%*	*3%*	*4%*	*4%*	*3%*
y/y change %	*6%*	*3%*	*-8%*	*-1%*	*8%*	*16%*	*5%*	*5%*	*21%*	*18%*	*-2%*	*10%*	*34%*	*-1%*	*1%*	*1%*	*7%*
Total Operating Expenses	36,949	39,974	9,963	10,657	11,071	12,287	43,978	10,276	11,458	12,847	13,869	48,451	11,523	12,840	13,522	14,554	52,439
% of total revenue	*33%*	*32%*	*30%*	*29%*	*32%*	*32%*	*31%*	*28%*	*29%*	*33%*	*33%*	*31%*	*28%*	*30%*	*32%*	*32%*	*30%*
y/y change %	*12%*	*8%*	*8%*	*9%*	*10%*	*13%*	*10%*	*3%*	*8%*	*16%*	*13%*	*10%*	*12%*	*12%*	*5%*	*5%*	*8%*
Operating income	**35,058**	**42,959**	**12,686**	**13,891**	**12,975**	**13,407**	**52,959**	**15,876**	**14,687**	**13,758**	**14,679**	**59,001**	**16,492**	**16,162**	**15,817**	**16,790**	**65,261**
Operating Margin	*31.8%*	*34.1%*	*38.4%*	*37.6%*	*37.0%*	*35.3%*	*37.0%*	*42.7%*	*36.7%*	*35.7%*	*35.2%*	*37.5%*	*40.6%*	*37.1%*	*37.4%*	*36.9%*	*37.9%*
Investment income	1,416	729	-	194	(132)	15	77	248	5	5	5	263	5	5	5	5	20
Income Before Taxes	36,474	43,688	12,686	14,085	12,843	13,422	53,036	16,124	14,692	13,763	14,684	59,264	16,497	16,167	15,822	16,795	65,281
Provision for Taxes	6,207	6,858	2,008	2,436	2,091	2,220	8,755	2,231	2,351	2,340	2,496	9,418	2,804	2,748	2,690	2,855	11,098
Tax rate	*17.0%*	*15.7%*	*15.8%*	*15.0%*	*15.0%*	*16.5%*	*16.5%*	*13.8%*	*16.0%*	*17.0%*	*17.0%*	*15.9%*	*17.0%*	*17.0%*	*17.0%*	*17.0%*	*17.0%*
Net Income	**30,267**	**36,830**	**10,678**	**11,649**	**10,752**	**11,202**	**44,281**	**13,893**	**12,342**	**11,424**	**12,188**	**49,846**	**13,692**	**13,419**	**13,132**	**13,940**	**54,183**
Diluted Non-GAAP EPS (Excl. Unusual Items)	**$3.88**	**$4.75**	**$1.38**	**$1.51**	**$1.40**	**$1.46**	**$5.76**	**$1.84**	**$1.62**	**$1.50**	**$1.61**	**$6.56**	**$1.80**	**$1.76**	**$1.73**	**$1.84**	**$7.13**
Diluted shares outstanding	7,792	7,753	7,710	7,691	7,675	7,650	7,682	7,566	7,617	7,603	7,589	7,594	7,625	7,610	7,596	7,582	7,603

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Microsoft (MSFT) DCF Base Case

Microsoft Corp.
DISCOUNTED CASH FLOW
$ in Millions, except per share items

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%		3.50%
Historical risk-free rate of return	5.28%	5.28%	5.28%
Beta	0.96		1.00
Market rate of return	11.78%	11.78%	11.78%
Cost of equity	9.7%		10.0%
Growth rate		As modeled	

Scenario 2: Assumes strong growth in free cash flow over the next few years, followed by modest growth into perpetuity as cloud efforts are driven by secular trends

	HISTORICALS					FORECAST PERIOD				TRANSITIONARY PERIOD					TERMINAL	
	2015A	2016A	2017A	2018A	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	Perpetuity
Current risk-free rate of return		3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return		5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	
Beta		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.97	0.97	0.98	0.99	0.99	1.00	
Market return of equity		11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	
Cost of equity		9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.8%	9.8%	9.9%	9.9%	10.0%	10.0%	
FCF growth rate	6.3%	(18.6%)	(90.3%) NM		26.0%	25.6%	14.5%	4.0%	35.0%	30.0%	25.0%	20.0%	15.0%	10.0%	5.0%	
Discount Factor			1.000	1.000	1.000	1.048	0.955	0.870	0.793	0.721	0.656	0.596	0.541	0.491		
Free cash flow to enterprise incl. stock buybacks ($m)	18,598	15,141	1,474	22,867	28,815	36,177	41,438	43,082	58,161	75,609	94,512	113,414	130,426	143,469	150,642	3,012,848
NPV of free cash flow ($mm)							39,557	37,476	46,102	54,538	61,987	67,582	70,557	70,404		1,478,480
Cumulative NPV of FCF ($mm)							39,557	77,033	123,135	177,673	239,660	307,242	377,798	448,202		1,926,683

Cumulative NPV of FCF ($mm)	1,926,683
Shares outstanding (mm)	7,617
NPV/share	$252.95
+ (Net cash/share - 10% of rev.)*	7.18
We assume 10% of revenues is requred as working capital to run the business	
Total NPV per share	**$260.12**

Source: FactSet, Jefferies estimates

CrowdStrike (CRWD) Non-GAAP Income Statement

Income Statement - Non-GAAP
($ in million except per share data)

Fiscal year ending Jan 31	FY19	FY20	Q1 FY21 Apr-20A	Q2 FY21 Jul-20A	Q3 FY21 Oct-20A	Q4 FY21 Jan-21E	FY21	Q1 FY22 Apr-21E	Q2 FY22 Jul-21E	Q3 FY22 Oct-21E	Q4 FY22 Jan-22E	FY22	FY23	FY24
Income Statement														
Subscription Revenue	**219.4**	**436.3**	**162.2**	**184.3**	**213.5**	**229.5**	**789.5**	**262.4**	**286.8**	**316.4**	**332.5**	**1,198.0**	**1,610.8**	**2,021.2**
q/q change			17.1%	13.6%	15.9%	7.5%		14.3%	9.3%	10.3%	5.1%			
y/y change	137.0%	98.9%	88.7%	88.8%	86.9%	65.7%	80.9%	61.7%	55.6%	48.2%	44.9%	51.7%	34.5%	25.5%
% of total rev	87.8%	90.6%	91.1%	92.6%	91.9%	92.5%	92.1%	93.5%	93.7%	93.9%	93.4%	93.6%	94.9%	95.7%
Professional Services Revenue	**30.4**	**45.1**	**15.9**	**14.7**	**18.9**	**18.6**	**68.1**	**18.3**	**19.4**	**20.7**	**23.4**	**81.8**	**86.3**	**90.8**
q/q change			16.8%	-7.2%	28.6%	-1.8%		-1.5%	6.1%	6.3%	13.3%			
y/y change	16.2%	48.2%	57.2%	39.7%	73.7%	37.0%	51.0%	15.5%	32.1%	9.1%	25.9%	20.1%	5.5%	5.2%
% of total	12.2%	9.4%	8.9%	7.4%	8.1%	7.5%	7.9%	6.5%	6.3%	6.1%	6.6%	6.4%	5.1%	4.3%
Total Revenue	**249.8**	**481.4**	**178.1**	**199.0**	**232.5**	**248.1**	**857.6**	**280.7**	**306.2**	**337.0**	**355.9**	**1,279.8**	**1,697.1**	**2,112.0**
q/q change			17.1%	11.7%	16.8%	6.7%		13.1%	9.1%	10.1%	5.6%			
y/y change	110.4%	92.7%	85.3%	84.0%	85.8%	63.1%	78.1%	57.6%	53.9%	45.0%	43.4%	49.2%	32.6%	24.5%
Subscription COR	**68.2**	**107.0**	35.2	41.3	46.1	50.5	**173.1**	57.7	63.1	69.6	73.1	**263.6**	**354.4**	**444.7**
Professional Services COR	**17.8**	**26.7**	8.7	8.9	10.4	12.1	**40.1**	11.9	12.6	13.4	15.2	**53.2**	**56.1**	**59.0**
Total COR	**86.0**	**133.7**	43.9	50.3	56.5	62.6	**213.2**	69.6	75.7	83.0	88.4	**316.7**	**410.5**	**503.7**
Subscription Gross Profit $	**151.2**	**329.3**	127.0	142.9	167.4	179.0	**616.4**	204.7	223.7	246.8	259.3	**934.5**	**1,256.4**	**1,576.6**
Subscription Gross Margin %	68.9%	75.5%	78.3%	77.6%	78.4%	78.0%	78.1%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%	78.0%
Professional Services Gross Profit $	**12.6**	**18.4**	7.2	5.8	8.5	6.5	**28.0**	6.4	6.8	7.2	8.2	**28.6**	**30.2**	**31.8**
Professional Services Gross Margin %	41.5%	40.8%	45.3%	39.3%	45.1%	35.0%	41.1%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Total Gross Profit $	**163.8**	**347.8**	**134.2**	**148.7**	**176.0**	**185.5**	**644.4**	**211.1**	**230.5**	**254.0**	**267.5**	**963.1**	**1,286.6**	**1,608.3**
Total Gross Margin %	**65.6%**	**72.2%**	**75.4%**	**74.7%**	**75.7%**	**74.8%**	**75.1%**	**75.2%**	**75.3%**	**75.4%**	**75.2%**	**75.3%**	**75.8%**	**76.2%**
S&M OPEX	**167.5**	**242.6**	79.4	81.5	92.7	98.2	**351.9**	111.1	120.2	130.6	134.5	**496.5**	**602.0**	**674.1**
q/q change			17.9%	2.6%	13.8%	6.0%		13.1%	8.2%	8.6%	3.0%			
y/y change	62.8%	44.9%	43.6%	39.0%	51.2%	45.8%	45.0%	39.9%	47.6%	40.9%	37.0%	41.1%	21.2%	12.0%
% of total rev	67.0%	50.4%	44.6%	41.0%	39.9%	39.6%	41.0%	39.6%	39.3%	38.8%	37.8%	38.8%	35.5%	31.9%
Adjusted S&M ARR	560.8	1,093.1	387.3	449.3	514.1	577.9	1,928.5	613.8	668.0	725.7	791.4	2,798.9	3,642.4	4,469.0
% of Adjusted S&M ARR	29.9%	22.2%	20.5%	18.1%	18.0%	17.0%	18.2%	18.1%	18.0%	18.0%	17.0%	17.7%	16.5%	15.1%
R&D OPEX	**76.5**	**114.6**	35.7	41.4	45.8	47.1	**170.0**	53.3	58.2	64.0	67.6	**243.2**	**322.4**	**401.3**
q/q change			6.1%	16.2%	10.4%	3.0%		13.1%	9.1%	10.1%	5.6%			
y/y change	38.8%	49.8%	54.1%	55.7%	46.7%	40.2%	48.4%	49.5%	40.4%	39.9%	43.4%	43.0%	32.6%	24.5%
% of total rev	30.6%	23.8%	20.0%	20.8%	19.7%	19.0%	19.8%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%
G&A OPEX	**35.6**	**56.2**	18.0	17.9	18.6	19.8	**74.3**	22.5	24.5	27.0	28.5	**102.4**	**135.8**	**169.0**
q/q change			3.0%	-0.1%	3.6%	6.8%		13.1%	9.1%	10.1%	5.6%			
y/y change	40.3%	57.6%	68.2%	29.1%	31.3%	13.8%	32.3%	25.0%	36.6%	45.1%	43.4%	37.8%	32.6%	24.5%
% of total rev	14.3%	11.7%	10.1%	9.0%	8.0%	8.0%	8.7%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Total OPEX	**279.7**	**413.4**	**133.0**	**140.9**	**157.0**	**165.2**	**596.2**	**186.9**	**202.9**	**221.6**	**230.6**	**842.1**	**1,060.2**	**1,244.3**
q/q change			12.3%	5.9%	11.5%	5.2%		13.1%	8.6%	9.2%	4.1%			
y/y change	52.5%	47.8%	49.2%	42.1%	47.2%	39.5%	44.2%	40.5%	44.0%	41.1%	39.6%	41.2%	25.9%	17.4%
% of total rev	111.9%	85.9%	74.7%	70.8%	67.6%	66.6%	69.5%	66.6%	66.3%	65.8%	64.8%	65.8%	62.5%	58.9%
Total Operating Income/(Loss) Non-GAAP	**(115.8)**	**(65.6)**	**1.2**	**7.8**	**18.9**	**20.3**	**48.2**	**24.2**	**27.6**	**32.4**	**36.9**	**121.0**	**226.4**	**364.0**
Operating margin	**-46.4%**	**-13.6%**	**0.7%**	**3.9%**	**8.1%**	**8.2%**	**5.6%**	**8.6%**	**9.0%**	**9.6%**	**10.4%**	**9.5%**	**13.3%**	**17.2%**
Other Expenses	5.5	1.7	0.1	0.2	0.2	0.2	0.8	0.2	0.2	0.2	0.2	1.0	1.0	1.0
Other Income	2.4	6.7	4.5	0.7	0.3	0.3	5.8	0.3	0.3	0.3	0.3	1.1	1.1	1.1
Total Pre-Tax Income/(Loss) Non-GAAP	**(118.9)**	**(60.6)**	**5.6**	**8.4**	**19.0**	**20.3**	**53.3**	**24.2**	**27.6**	**32.4**	**36.9**	**121.2**	**226.5**	**364.2**
Tax Provision	**0.0**	**2.0**	1.04	0.44	0.45	1.25	**3.2**	2.00	2.00	3.00	4.00	**11.0**	**16.0**	**20.0**
GAAP Tax Rate	0.0%	-3.3%	18.6%	5.3%	2.4%	6.1%	6.0%	8.3%	7.2%	9.3%	10.8%	9.1%	7.1%	5.5%
Net Income	**(118.9)**	**(62.6)**	**4.5**	**7.9**	**18.6**	**19.1**	**50.1**	**22.2**	**25.6**	**29.4**	**32.9**	**110.2**	**210.5**	**344.2**
Net Income Margin														
Diluted EPS, Non-GAAP	**(2.65)**	**(0.42)**	**0.02**	**0.04**	**0.08**	**0.08**	**0.21**	**0.09**	**0.11**	**0.12**	**0.13**	**0.45**	**0.83**	**1.30**
Basic Shares Outstanding	44.86	148.06	213.13	216.70	219.40	220.90	217.53	222.90	225.90	228.90	231.90	227.40	238.40	249.40
Diluted Shares Outstanding	171.20	230.58	229.80	233.17	234.63	236.13	233.43	238.13	241.13	244.13	247.13	242.63	253.63	264.63

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

CrowdStrike (CRWD) DCF Base Case

CrowdStrike
Discounted Cash Flow Analysis
$ in millions, except per share data

	Year 1	Transition	Terminal
Current risk-free rate of return	3.5%		3.5%
Historical risk-free rate of return	5.0%	5.0%	5.0%
Beta	1.50		1.00
Market rate of return	11.5%	11.5%	11.5%
Cost of equity	13.3%		10.0%
Growth rate	*As modeled*		5.0%

Last reported results as of:		10/31/2020
Cash and Cash Equivalents		1,059.9
Total Debt		0.0
Net Cash and Cash Equivalents		1,059.9
LTM Revenues		762
Shares Outstanding (m)		234.6
Net Cash/Share - 10% of Revenue	**$**	**4.19**

Scenario 2, Base Case: Company becomes sustainably FCF positive in F2023 supported by strong net and gross retention rates

	HISTORICALS			FORECAST PERIOD						TRANSITIONARY PERIOD					TERMINAL	
	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	Perpetuity
Period		0														
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.42	1.33	1.25	1.17	1.08	1.00	
Market return of equity	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	0.12	11.5%	
Cost of equity	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	12.7%	12.2%	11.6%	11.1%	10.5%	10.0%	
FCF growth rate	NM	NM	NM	NM	27.2%	29.0%	35.1%	**90.0%**	**75.0%**	63.3%	51.7%	40.0%	28.3%	16.6%	5.0%	
Discount Factor	1.000	1.000	1.000	0.940	0.830	0.733	0.647	0.571	0.504	0.460	0.423	0.393	0.368	0.349		
Free cash flow to Enterprise ($mm)	(80.1)	(62.6)	8.5	250.0	318.0	410.3	554.3	1,053.2	1,843.0	3,010.2	4,565.2	6,390.6	8,200.0	9564.6		
Diluted Shares Outstanding 4Q		171.2	233.0	236.1	247.1	258.1	269.1	278.5	288.3	296.7	303.6	308.9	312.5	314.4		
Share Growth %			36.1%	1.3%	4.7%	4.5%	4.3%	3.5%	3.5%	2.9%	2.3%	1.8%	1.2%	0.6%	0%	
Free cash flow to Enterprise per share			0.0	1.1	1.3	1.6	2.1	3.8	6.4	10.1	15.0	20.7	26.2	30.4	31.9	634.9
NPV of free cash flow per share			0.0	1.0	1.1	1.2	1.3	2.2	3.2	4.7	6.4	8.1	9.7	10.6		221.7
Cumulative NPV of FCF per share				1.0	2.1	3.2	4.6	6.7	9.9	14.6	21.0	29.1	38.7	49.4		271.0

Cumulative NPV of FCF ($mm)		271.0
Net cash/share - 10% of revenue	$	4.19
Total NPV per share	**$**	**275.23**

Source: FactSet, Jefferies estimates

Palo Alto Networks (PANW) Non-GAAP Income Statement

Palo Alto Networks Inc. (PANW) Non-GAAP Income Statement USD in Millions, except per share amounts	FY18A 2018	FY19A 2019	FY20 Oct-19	Jan-20	Apr-20	Jul-20	2020	FY21E Oct-20	Jan-21E	Apr-21E	Jul-21E	2021E	FY22E Oct-21E	Jan-22E	Apr-22E	Jul-22E	2022E
Revenue																	
Product	879.8	1,096.2	231.2	246.5	280.9	305.6	1,064.2	237.3	246.0	277.0	309.2	1,069.6	230.2	240.4	265.2	301.2	1,037.0
y/y change	24%	25%	-4%	-9%	1%	0%	-3%	3%	0%	-1%	1%	1%	-3%	-2%	-4%	-3%	-3%
q/q change			-24%	7%	14%	9%		-22%	4%	13%	12%		-26%	4%	10%	14%	
Subscription & Support	1,393.8	1,803.4	540.7	570.2	588.5	644.8	2,344.2	708.7	736.3	770.0	830.2	3,045.2	878.8	913.4	937.5	1,014.7	3,744.4
y/y change	33%	29%	30%	30%	31%		30%	31%	29%	31%	29%	30%	24%	24%	22%	22%	23%
q/q change			8%	5%	3%	10%		10%	4%	5%	8%		6%	4%	3%	8%	
Total Revenue	**2,273.6**	**2,899.6**	**771.9**	**816.7**	**869.4**	**950.4**	**3,408.4**	**946.0**	**982.4**	**1,047.0**	**1,139.4**	**4,114.8**	**1,109.0**	**1,153.7**	**1,202.8**	**1,316.0**	**4,781.5**
y/y change	30%	28%	18%	15%	20%		18%	23%	20%	20%	20%	21%	17%	17%	15%	15%	16%
q/q change			-4%	6%	6%	9%		0%	4%	7%	9%		-3%	4%	4%	9%	
Cost of product	252.7	299.7	63.7	67.2	70.0	83.9	284.8	58.9	68.9	77.6	86.6	291.9	64.5	67.3	74.3	84.3	290.4
Cost of subscription & support	287.3	373.9	117.0	125.8	145.7	160.0	548.5	170.3	169.4	177.1	190.9	707.7	202.1	210.1	215.6	233.4	861.2
Total cost of revenue	540.0	673.6	180.7	193.0	215.7	243.9	833.3	229.2	238.2	254.7	277.5	999.6	266.6	277.4	289.9	317.7	1,151.6
Gross profit: product, non-GAAP	627.1	796.5	167.5	179.3	210.9	221.7	779.4	178.4	177.1	199.5	222.6	777.6	165.7	173.1	191.0	216.9	746.7
Product gross margin	71%	73%	72%	73%	75%	73%	73%	75%	72%	72%	72%	73%	72%	72%	72%	72%	72%
Gross profit: subscription & support, non-GAAP	1,106.5	1,429.5	423.7	444.4	442.8	484.8	1,795.7	538.4	567.0	592.9	639.3	2,337.5	676.7	703.3	721.9	781.3	2,883.2
Subscription & support gross margin	79%	79%	78%	78%	75%	75%	77%	76%	77%	77%	77%	77%	77%	77%	77%	77%	77%
Gross profit, non-GAAP	**1,733.6**	**2,226.0**	**591.2**	**623.7**	**653.7**	**706.5**	**2,575.1**	**716.8**	**744.1**	**792.4**	**861.9**	**3,115.1**	**842.4**	**876.4**	**912.9**	**998.2**	**3,629.9**
Gross margin	76%	77%	77%	76%	75%	74%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%
Research & development	251.2	347.8	107.5	116.0	127.0	137.4	487.9	141.1	127.7	136.1	144.7	549.6	166.4	154.6	161.2	176.3	658.5
% of total revenue	11%	12%	14%	14%	15%	14%	14%	15%	13%	13%	13%	13%	15%	13%	13%	13%	14%
Sales & marketing	856.6	1,101.1	319.4	314.7	329.0	326.9	1,290.0	318.9	383.1	429.3	455.8	1,587.1	362.8	438.4	481.1	513.2	1,795.5
% of total revenue	38%	38%	41%	39%	38%	34%	38%	34%	39%	41%	40%	39%	33%	38%	40%	39%	38%
as a % of Billings	30%	31%	36%	31%	32%	24%	30%	29%	32%	35%	28%	31%	29%	32%	35%	28%	30%
General & administrative	127.0	139.9	42.3	47.2	54.8	53.8	198.1	51.4	49.1	64.9	68.4	233.8	68.2	71.0	74.0	80.9	294.1
% of total revenue	6%	5%	5%	6%	6%	6%	6%	5%	5%	6%	6%	6%	6%	6%	6%	6%	6%
Total operating expense, non-GAAP	1,234.8	1,588.8	469.2	477.9	510.8	518.1	1,976.0	511.4	559.9	630.3	668.8	2,370.5	597.3	664.0	716.2	770.5	2,748.0
Operating income, non-GAAP	**498.8**	**637.2**	**122.0**	**145.8**	**142.9**	**188.4**	**599.1**	**205.4**	**184.2**	**162.0**	**193.1**	**744.7**	**245.1**	**212.4**	**196.6**	**227.7**	**881.8**
Operating margin	22%	22%	16%	18%	16%	20%	18%	22%	19%	15%	17%	18.1%	22%	18%	16%	17%	18.4%
Interest & other income (expense), net, non-GAAP	26.7	54.4	12.3	8.5	3.9	(2.5)	22.2	(2.8)	(2.9)	(2.8)	(2.8)	(11.3)	(2.7)	(2.4)	(2.3)	(2.3)	(9.8)
Pretax income, non-GAAP	525.5	691.6	134.3	154.3	146.8	185.9	621.3	202.6	181.3	159.3	190.2	733.4	242.4	210.0	194.3	225.4	872.1
Tax expense, non-GAAP	124.8	152.2	29.5	34.0	32.2	41.0	136.7	44.5	39.9	35.0	41.9	161.3	53.3	46.2	42.7	49.6	191.9
Effective tax rate	24%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
Net Income, non-GAAP	**400.7**	**539.4**	**104.8**	**120.3**	**114.6**	**144.9**	**484.6**	**158.1**	**141.4**	**124.2**	**148.4**	**572.1**	**189.1**	**163.8**	**151.6**	**175.8**	**680.2**
EPS, non-GAAP	**$4.17**	**$5.45**	**$1.05**	**$1.19**	**$1.17**	**$1.48**	**$4.88**	**$1.62**	**$1.42**	**$1.23**	**$1.44**	**$5.74**	**$1.83**	**$1.57**	**$1.45**	**$1.67**	**$6.51**
Fully diluted shares	96.1	99.1	100.1	101.1	97.8	98.2	99.3	97.7	99.4	101.0	102.7	99.7	103.4	104.1	104.8	105.5	104.4

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Palo Alto Networks (PANW) DCF Base Case

Palo Alto Networks Inc. (PANW)
Discounted Cash Flow Analysis (DCF)

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%		3.50%
Historical risk-free rate of return	5.00%	5.00%	5.00%
Beta	1.30		1.00
Equity Risk Premium	6.50%		6.50%
Market rate of return	11.50%	11.50%	11.50%
Cost of equity	11.95%		10.00%
Growth rate in perpetiuity			5.00%
Point in time (date of last earnings report)	10/31/20		

Scenario 2: Base case. Moderating new business growth suppresses future revenue and profit growth, though PANW continues to satisfy its customers' needs for consolidated security solutions.

	HISTORICALS							
	2011A	2012A	2013A	2014A	2015A	2016A	2017A	2018A
Period								0
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Beta	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Risk Premium	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Market rate of return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%
Cost of equity	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
WACC	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
FCF Growth Rate		260.9%	47.3%	-144.1%	N/A	105.0%	-61.4%	33.8%
Discount factor								
Free cash flow to the enterprise	17	62	92	(41)	277	569	220	294
Diluted Share Count				83.0	90.1	91.7	93.3	98.0
Share Count Growth				8.2%	8.7%	1.7%	1.7%	5.0%
FCFE / Share								3.00
NPV/Share of FCFE								
Cumulative NPV of FCFE / Share								

	FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	Perpetuity
Period	1.250	2.250	3.250	4.250	5.250	6.250	7.250	8.250	9.250	10.250	11.250	
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.30	1.30	1.30	1.30	1.26	1.21	1.17	1.13	1.09	1.04	1.00	
Risk Premium	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	
Market rate of return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity	12.0%	12.0%	12.0%	12.0%	11.7%	11.4%	11.1%	10.8%	10.6%	10.3%	10.0%	
WACC	12.0%	12.0%	12.0%	12.0%	11.7%	11.4%	11.1%	10.8%	10.6%	10.3%	10.0%	
FCF Growth Rate	-158.5%	N/A	N/A	1119.6%	66.5%	56.2%	46.0%	35.7%	25.5%	15.2%	5.0%	
Discount factor	1.15	1.29	1.44	1.62	1.79	1.96	2.15	2.34	2.53	2.73	2.92	
Free cash flow to the enterprise	(172)	(924)	63	772	1,285	2007	2,930	3,976	4,990	5750	6,038	
Diluted Share Count	100.0	98.2	102.7	105.8	109.0	111.7	113.9	115.6	116.8	117.4	117.4	
Share Count Growth	2.0%	-1.8%	4.6%	3.0%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%	
FCFE / Share	(1.72)	(9.41)	0.62	7.30	11.79	17.97	25.71	34.38	42.72	48.98	51.43	1,028.7
NPV/Share of FCFE	(1.49)	(7.30)	0.43	4.52	6.60	9.15	11.98	14.71	16.88	17.97		352.05
Cumulative NPV of FCFE / Share			0.43	4.94	7.03	14.10	26.07	40.79	57.67	75.64		427.69

Cumulative NPV of FCFE / Share	$	427.69
Net cash/Share - 10% of revenue *	$	(2.66)
Total NPV/Share	**$**	**425.03**

Source: FactSet, Jefferies estimates

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Cloudflare (NET) Non-GAAP Income Statement

Cloudflare (NET)
Income Statement, Non-GAAP
$ in millions, except per share data

	2017A	2018A	2019A					2020E					2021E					2022E	2023E
	YearA	YearA	Mar-19A	Jun-19A	Sep-19A	Dec-19A	YearA	Mar-20A	Jun-20A	Sep-20A	Dec-20E	YearE	Mar-21E	Jun-21E	Sep-21E	Dec-21E	YearE	YearE	YearE
Total revenue	**134.9**	**192.7**	**61.7**	**67.4**	**73.9**	**83.9**	**287.0**	**91.3**	**99.7**	**114.2**	**118.0**	**423.1**	**127.1**	**137.7**	**154.9**	**159.5**	**579.1**	**768.7**	**991.9**
y/y change	*59%*	*43%*	*48%*	*49%*	*48%*	*51%*	*49%*	*48%*	*48%*	*54%*	*41%*	*47%*	*39%*	*38%*	*36%*	*35%*	*37%*	*33%*	*29%*
Cost of revenues	28.3	42.9	14.3	14.8	15.6	17.9	62.6	19.8	23.1	26.0	27.7	96.5	29.8	32.1	36.0	36.7	134.6	178.3	229.6
y/y change	*19%*	*52%*	*61%*	*45%*	*42%*	*40%*	*46%*	*38%*	*57%*	*66%*	*54%*	*54%*	*51%*	*39%*	*39%*	*33%*	*39%*	*32%*	*29%*
% of total revenue	*21.0%*	*22.3%*	*23.2%*	*21.9%*	*21.1%*	*21.3%*	*21.8%*	*21.7%*	*23.2%*	*22.7%*	*23.4%*	*22.8%*	*23.4%*	*23.3%*	*23.2%*	*23.0%*	*23.2%*	*23.2%*	*23.1%*
Gross profit	**106.6**	**149.8**	**47.4**	**52.7**	**58.3**	**66.0**	**224.4**	**71.5**	**76.6**	**88.2**	**90.3**	**326.6**	**97.3**	**105.6**	**118.9**	**122.8**	**444.5**	**590.3**	**762.3**
Gross margin	*79.0%*	*77.7%*	*76.8%*	*78.1%*	*78.9%*	*78.7%*	*78.2%*	*78.3%*	*76.8%*	*77.3%*	*76.6%*	*77.2%*	*76.6%*	*76.7%*	*76.8%*	*77.0%*	*76.8%*	*76.8%*	*76.9%*
Sales and marketing	61.4	93.4	30.5	35.6	40.7	43.8	150.6	43.4	47.4	51.2	54.8	196.9	56.5	61.3	67.4	67.8	253.0	301.6	337.3
y/y change	*55%*	*52%*	*63%*	*57%*	*68%*	*57%*	*61%*	*42%*	*33%*	*26%*	*25%*	*31%*	*30%*	*29%*	*32%*	*24%*	*29%*	*19%*	*12%*
% of total revenue	*45.5%*	*48.5%*	*49.5%*	*52.7%*	*55.0%*	*52.2%*	*52.5%*	*47.5%*	*47.5%*	*44.9%*	*46.5%*	*46.5%*	*44.5%*	*44.5%*	*43.5%*	*42.5%*	*43.7%*	*39.2%*	*34.0%*
Research and development	32.7	52.9	17.2	18.5	20.1	21.9	77.6	20.5	21.3	23.5	27.1	92.4	29.2	31.0	34.9	35.9	130.9	158.4	179.7
y/y change	*44%*	*62%*	*56%*	*46%*	*40%*	*47%*	*47%*	*19%*	*15%*	*17%*	*24%*	*19%*	*43%*	*46%*	*48%*	*32%*	*42%*	*21%*	*13%*
% of total revenue	*24.2%*	*27.5%*	*27.9%*	*27.4%*	*27.1%*	*26.1%*	*27.0%*	*22.4%*	*21.3%*	*20.6%*	*23.0%*	*21.8%*	*23.0%*	*22.5%*	*22.5%*	*22.5%*	*22.6%*	*20.6%*	*18.1%*
General and administrative	19.1	60.5	15.7	17.3	15.8	18.6	67.4	22.0	17.4	18.0	17.8	75.2	19.7	20.7	22.5	23.1	85.9	94.9	107.6
y/y change	*93%*	*217%*	*20%*	*(9%)*	*27%*	*18%*	*11%*	*40%*	*0%*	*14%*	*(4%)*	*12%*	*(11%)*	*19%*	*25%*	*30%*	*14%*	*10%*	*13%*
% of total revenue	*14.1%*	*31.4%*	*25.5%*	*25.7%*	*21.3%*	*22.2%*	*23.5%*	*24.1%*	*17.5%*	*15.8%*	*15.1%*	*17.8%*	*15.5%*	*15.0%*	*14.5%*	*14.5%*	*14.8%*	*12.3%*	*10.8%*
Total operating expenses	**113.1**	**206.8**	**63.5**	**71.4**	**76.5**	**84.3**	**295.6**	**85.9**	**86.1**	**92.8**	**99.8**	**364.5**	**105.5**	**112.9**	**124.7**	**126.8**	**469.8**	**554.9**	**624.5**
y/y change		*83%*	*48%*	*31%*	*50%*	*44%*	*43%*	*35%*	*21%*	*21%*	*18%*	*23%*	*23%*	*31%*	*34%*	*27%*	*29%*	*18%*	*13%*
% of total revenue	*83.9%*	*107.3%*	*102.9%*	*105.8%*	*103.4%*	*100.5%*	*103.0%*	*94.1%*	*86.3%*	*81.3%*	*84.6%*	*86.1%*	*83.0%*	*82.0%*	*80.5%*	*79.5%*	*81.1%*	*72.2%*	*63.0%*
Operating Income/(Loss)	**(6.5)**	**(57.0)**	**(16.1)**	**(18.7)**	**(18.1)**	**(18.3)**	**(71.2)**	**(14.4)**	**(9.5)**	**(4.5)**	**(9.5)**	**(37.9)**	**(8.2)**	**(7.4)**	**(5.8)**	**(4.0)**	**(25.3)**	**35.5**	**137.8**
Operating margin	*(4.8%)*	*(29.6%)*	*(26.0%)*	*(27.7%)*	*(24.5%)*	*(21.8%)*	*(24.8%)*	*(15.8%)*	*(9.5%)*	*(4.0%)*	*(8.0%)*	*(9.0%)*	*(6.4%)*	*(5.3%)*	*(3.7%)*	*(2.5%)*	*(4.4%)*	*4.6%*	*13.9%*
Other Income & Expense, net	0.0	(1.2)	0.3	0.5	0.0	2.4	3.2	3.0	0.9	(0.2)	(0.8)	3.0	(0.8)	(0.8)	(0.8)	(0.8)	(3.0)	(3.0)	(3.0)
Pretax income	**(6.5)**	**(58.2)**	**(15.7)**	**(18.2)**	**(18.1)**	**(15.9)**	**(68.0)**	**(11.4)**	**(8.6)**	**(4.7)**	**(10.2)**	**(34.9)**	**(8.9)**	**(8.1)**	**(6.5)**	**(4.7)**	**(28.3)**	**32.5**	**134.8**
Income tax (expense)/benefit	(0.6)	(1.2)	(0.6)	(0.7)	(0.4)	(0.5)	(2.1)	(0.9)	(1.0)	(1.0)	(1.3)	(4.3)	(1.2)	(1.3)	(0.9)	(0.4)	(3.8)	(1.1)	0.6
Net income (loss)	**(7.1)**	**(59.4)**	**(16.3)**	**(18.9)**	**(18.5)**	**(16.4)**	**(70.0)**	**(12.3)**	**(9.6)**	**(5.7)**	**(11.6)**	**(39.2)**	**(10.1)**	**(9.4)**	**(7.5)**	**(5.1)**	**(32.1)**	**31.4**	**135.3**
Net margin	*-5.3%*	*-30.8%*	*-26.4%*	*-28.0%*	*-25.0%*	*-19.5%*	*-24.4%*	*-13.5%*	*-9.6%*	*-5.0%*	*-9.8%*	*-9.3%*	*-8.0%*	*-6.8%*	*-4.8%*	*-3.2%*	*-5.5%*	*4.1%*	*13.6%*
Non-GAAP EPS, diluted	**NA**	**($0.73)**	**($0.20)**	**($0.20)**	**($0.16)**	**($0.06)**	**($0.48)**	**($0.04)**	**($0.03)**	**($0.02)**	**($0.04)**	**($0.13)**	**($0.03)**	**($0.03)**	**($0.02)**	**($0.02)**	**($0.10)**	**$0.09**	**$0.37**
Weighted average basic shares outstanding		81.0	80.0	92.7	118.1	294.4	146.3	296.1	299.3	301.7	304.0	300.2	303.0	305.5	308.5	311.0	307.0	318.0	330.0
Weighted average diluted shares outstanding		0.0	105.3	111.1	147.9	324.6	172.2	329.8	332.2	337.2	338.1	334.3	337.1	339.6	342.6	345.1	341.1	352.1	364.1

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Cloudflare (NET) DCF Base Case

Cloudflare, Inc. (NET)
Discounted Cash Flow Analysis

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%	As shown	3.50%
Historical risk-free rate of return	5.00%		5.00%
Beta	1.00		1.00
Historical market risk premium	6.5%		6.50%
Market rate of return	11.50%		11.50%
Cost of Equity	10.00%		10.00%
Terminal Growth rate			5.00%
Point in time (last earnings)	6/30/2020		

Scenario 1: Base Case

	HISTORICALS				HYPER GROWTH PERIOD						TRANSITIONARY PERIOD				TERMINAL	
	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	Perpetuity
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Market rate of return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
FCF Growth Rate		N/M	N/M	N/M	N/M	N/M	N/M	N/M	188.0%	150.0%	121.0%	92.0%	63.0%	34.0%	5.0%	
Free cash flow to the enterprise ($M)	(33.3)	(20.1)	(77.4)	(92.7)	(114.4)	(72.9)	(22.9)	71.8	206.7	516.7	1,142.0	2,192.6	3,573.9	4,789.1	5,028.5	
Diluted share count					338.1	345.1	356.6	368.6	379.6	391.0	400.4	407.6	412.5	415.0	415.0	
Actual share count growth						2.1%	3.3%	3.4%	3.0%	3.0%	2.4%	1.8%	1.2%	0.6%	0.0%	
FCFE / Share					(0.34)	(0.21)	(0.06)	0.19	0.54	1.32	2.85	5.38	8.66	11.54	12.12	242.36
NPV / Share of FCFE					(0.29)	(0.17)	(0.05)	0.13	0.32	0.71	1.40	2.39	3.50	4.24		80.99
Cumulative NPV of FCFE / Share					(0.29)	(0.46)	(0.51)	(0.38)	(0.06)	0.65	2.05	4.44	7.95	12.19		93.18

Cumulative NPV of FCF /Share	$	93.18
Shares outstanding (M)		337.2
Net cash / Share - 10% of revenue	$	1.89
Total NPV/Share	**$**	**95.07**

Source: FactSet, Jefferies estimates

Varonis (VRNS) Non-GAAP Income Statement

Varonis Systems (VRNS)
Income Statement - Non-GAAP
($ in millions except per share data)
Fiscal year ending Dec 31

Non-GAAP Income Statement	**FY18A**	**FY19A**					**FY20E**					**FY21E**				
	YearA	**Mar-19A**	**Jun-19A**	**Sep-19A**	**Dec-19A**	**YearA**	**Mar-20A**	**Jun-20A**	**Sep-20A**	**Dec-20E**	**YearE**	**Mar-21E**	**Jun-21E**	**Sep-21E**	**Dec-21E**	**YearE**
Revenues:																
License & Subscription	147.70	22.53	26.35	31.60	38.35	118.82	20.75	34.33	44.46	52.17	151.71	33.51	49.53	62.33	73.04	218.41
q/q change		*(57.7%)*	*17.0%*	*19.9%*	*21.4%*		*(45.9%)*	*65.4%*	*29.5%*	*17.3%*		*(35.8%)*	*47.8%*	*25.8%*	*17.2%*	
y/y change	*22.0%*	*-10.5%*	*-21.2%*	*-11.8%*	*-28.0%*	*-19.5%*	*-7.9%*	*30.3%*	*40.7%*	*36.0%*	*27.7%*	*61.5%*	*44.3%*	*40.2%*	*40.0%*	*44.0%*
Perpetual License	138.93	15.5	11.5	8.25	6.79	42.07	0.4	0.2	0.37	0.52	1.52	0.34	0.50	0.62	0.73	2.18
q/q change		*(68.6%)*	*-25.8%*	*(28.4%)*	*-17.7%*		*(94.3%)*	*-38.1%*	*55.4%*	*39.9%*		*(35.8%)*	*47.8%*	*25.8%*	*17.2%*	
y/y change	*18.7%*	*-35.6%*	*-64.2%*	*-75.2%*	*-86.3%*	*-69.7%*	*-97.5%*	*-97.9%*	*-95.5%*	*-92.3%*	*-96.4%*	*-13.6%*	*106.4%*	*67.1%*	*40.0%*	*43.4%*
Subscription	*8.76*	*7.01*	*14.84*	*23.35*	*31.56*	*76.75*	*20.37*	*34.09*	*44.08*	*51.65*	*150.18*	*33.17*	*49.03*	*61.71*	*72.31*	*216.23*
q/q change		*79.6%*	*111.8%*	*57.4%*	*35.2%*		*(35.5%)*	*67.4%*	*29.3%*	*17.2%*		*(35.8%)*	*47.8%*	*25.8%*	*17.2%*	
y/y change	*119.1%*	*554.1%*	*1049.3%*	*834.0%*	*709.3%*	*776.0%*	*190.7%*	*129.7%*	*88.8%*	*63.6%*	*95.7%*	*62.9%*	*43.9%*	*40.0%*	*40.0%*	*44.0%*
Percentage of Total License & Subscription rev	5.9%	31.1%	56.3%	73.9%	82.3%	64.6%	98.1%	99.3%	99.2%	99%	99.0%	99%	99%	99%	99%	99.0%
Maintenance and Services	122.59	33.83	33.27	34.05	34.21	135.37	33.42	32.24	32.29	31.29	129.24	31.33	30.50	30.17	29.04	121.04
q/q change		*-1.2%*	*-1.7%*	*2.4%*	*0.5%*		*-2.3%*	*-3.5%*	*0.2%*	*-3.1%*		*0.1%*	*-2.6%*	*-1.1%*	*-3.8%*	
y/y change	*29.6%*	*19.3%*	*15.8%*	*9.0%*	*-0.1%*	*10.4%*	*-1.2%*	*-3.1%*	*-5.2%*	*-8.5%*	*-4.5%*	*-6.3%*	*-5.4%*	*-6.6%*	*-7.2%*	*-6.3%*
Total Revenue	**270.29**	**56.36**	**59.62**	**65.65**	**72.56**	**254.19**	**54.18**	**66.57**	**76.75**	**83.46**	**280.95**	**64.84**	**80.03**	**92.50**	**102.09**	**339.45**
q/q change		*-35.6%*	*5.8%*	*10.1%*	*10.5%*		*-25.3%*	*22.9%*	*15.3%*	*8.7%*		*-22.3%*	*23.4%*	*15.6%*	*10.4%*	
y/y change	*25.4%*	*5.3%*	*-4.1%*	*-2.1%*	*-17.1%*	*-6.0%*	*-3.9%*	*11.6%*	*16.9%*	*15.0%*	*10.5%*	*19.7%*	*20.2%*	*20.5%*	*22.3%*	*20.8%*
y/y change in CC (live)	*0.5%*	*-1.8%*	*-1.2%*	*-1.1%*	*-0.3%*	*-1.0%*	*-1.1%*	*-0.4%*	*-0.7%*	*1.1%*	*-0.2%*	*1.4%*	*1.3%*	*0.2%*	*0.0%*	*0.6%*
Cost of Revenue, non-GAAP	25.56	7.59	7.60	8.12	9.04	32.35	9.13	8.98	9.79	10.01	37.91	8.75	10.80	12.49	13.78	45.83
Gross Margin	*90.5%*	*86.5%*	*87.3%*	*87.6%*	*87.5%*	*87.3%*	*83.2%*	*86.5%*	*87.2%*	*88.0%*	*86.5%*	*86.5%*	*86.5%*	*86.5%*	*86.5%*	*86.5%*
Non-GAAP Gross Profit	**244.73**	**48.78**	**52.02**	**57.53**	**63.52**	**221.84**	**45.05**	**57.59**	**66.96**	**73.44**	**243.04**	**56.08**	**69.22**	**80.02**	**88.30**	**293.63**
% Gross Margin	*90.5%*	*86.5%*	*87.3%*	*87.6%*	*87.5%*	*87.3%*	*83.2%*	*86.5%*	*87.2%*	*88.0%*	*86.5%*	*86.5%*	*86.5%*	*86.5%*	*86.5%*	*86.5%*
Operating Expenses:																
Sales and Marketing, non-GAAP	150.04	37.18	37.82	38.15	40.18	153.33	36.23	35.68	37.64	39.64	149.19	37.61	40.01	43.48	44.92	166.01
% of revenue	*55.5%*	*66.0%*	*63.4%*	*58.1%*	*55.4%*	*60.3%*	*66.9%*	*53.6%*	*49.0%*	*47.5%*	*53.1%*	*58.0%*	*50.0%*	*47.0%*	*44.0%*	*48.9%*
Research and Development, non-GAAP	59.20	16.03	16.18	16.76	18.31	67.29	18.51	18.34	18.52	20.45	75.81	16.86	20.81	22.20	24.50	84.37
% of revenue	*21.9%*	*28.4%*	*27.1%*	*25.5%*	*25.2%*	*26.5%*	*34.2%*	*27.6%*	*24.1%*	*24.5%*	*27.0%*	*26.0%*	*26.0%*	*24.0%*	*24.0%*	*24.9%*
General and Administration, non-GAAP	25.69	6.71	6.97	7.35	7.40	28.42	7.73	7.54	7.73	7.93	30.93	6.16	7.60	8.79	9.70	32.25
% of revenue	*9.5%*	*11.9%*	*11.7%*	*11.2%*	*10.2%*	*11.2%*	*14.3%*	*11.3%*	*10.1%*	*9.5%*	*11.0%*	*9.5%*	*9.5%*	*9.5%*	*9.5%*	*9.5%*
Other operating expenses																
% of revenue																
Total Operating Expenses, non-GAAP	234.92	59.92	60.97	62.26	65.89	249.04	62.47	61.57	63.88	68.02	255.94	60.62	68.42	74.47	79.12	282.63
Non-GAAP Operating Income	**9.80**	**(11.15)**	**(8.95)**	**(4.73)**	**(2.37)**	**(27.20)**	**(17.42)**	**(3.98)**	**3.08**	**5.42**	**(12.90)**	**(4.54)**	**0.80**	**5.55**	**9.19**	**11.00**
% Operating Margin	*3.6%*	*(19.8%)*	*(15.0%)*	*(7.2%)*	*(3.3%)*	*(10.7%)*	*(32.2%)*	*(6.0%)*	*4.0%*	*6.5%*	*(4.6%)*	*(7.0%)*	*1.0%*	*6.0%*	*9.0%*	*3.2%*
Total Other Income (Expense)	0.97	0.45	0.49	(0.48)	0.16	0.62	0.21	(0.30)	(0.73)	(0.85)	(1.67)	(0.85)	(0.85)	(0.85)	(0.85)	(3.40)
Pretax Income	10.77	(10.69)	(8.46)	(5.21)	(2.22)	(26.58)	(17.21)	(4.28)	2.35	4.57	(14.57)	(5.39)	(0.05)	4.70	8.34	7.60
Income Taxes	0.41	0.51	0.55	0.53	0.80	2.39	0.21	0.38	0.22	0.60	1.42	0.80	0.80	1.00	1.20	3.80
Effective Tax Rate	*3.8%*	*(4.8%)*	*(6.5%)*	*(10.2%)*	*(36.1%)*	*(9.0%)*	*(1.2%)*	*(9.0%)*	*9.4%*	*13.1%*	*(9.7%)*	*(14.8%)*	*(1608.7%)*	*21.3%*	*14.4%*	*50.0%*
Non-GAAP Net Income	**10.36**	**(11.20)**	**(9.01)**	**(5.74)**	**(2.84)**	**(28.97)**	**(17.42)**	**(4.66)**	**2.13**	**3.97**	**(15.98)**	**(6.19)**	**(0.85)**	**3.70**	**7.14**	**3.80**
Net margin	3.8%	(19.9%)	(15.1%)	(8.7%)	(3.9%)	(11.4%)	(32.2%)	(7.0%)	2.8%	4.8%	(5.7%)	(9.5%)	(1.1%)	4.0%	7.0%	1.1%
Non-GAAP EPS	**$0.32**	**($0.38)**	**($0.30)**	**($0.19)**	**($0.09)**	**($0.96)**	**($0.56)**	**($0.15)**	**$0.06**	**$0.11**	**($0.51)**	**($0.19)**	**($0.03)**	**$0.10**	**$0.20**	**$0.11**
Shares outstanding (basic)	29.02	29.83	30.28	30.38	30.52	30.25	30.89	31.49	31.61	31.91	31.48	32.16	32.41	32.44	32.46	32.37
Shares outstanding (fully diluted)	32.35	33.28	33.73	33.83	33.97	33.70	34.34	34.94	35.06	35.36	34.93	35.61	35.86	35.89	35.91	35.82

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Varonis (VRNS) DCF Base Case

Varonis Systems (VRNS)
Discounted Cash Flow Analysis
$ in millions, except per share data

	Year 1	Transition	Terminal
Current risk-free rate of return	3.5%		3.5%
Historical risk-free rate of return	5.3%	5.3%	5.3%
Beta	1.18		1.00
Market rate of return	11.8%	11.8%	11.8%
Cost of equity	11.2%		10.0%
Growth rate	*As modeled*		5.0%

Cash and Cash Equivalents	325.6
Total Debt	216.8
Net Cash and Cash Equivalents	108.8
LTM Revenues	270
Shares Outstanding (m)	35.1
Net Cash/Share - 10% of Revenue	**$ 2.33**

Scenario 2: Varonis continues to grow and is a leader in the emerging space but has yet to establish itself as the industry standard by FY18

	HISTORICALS					FORECAST PERIOD				TRANSITIONARY PERIOD					TERMINAL	
	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	Perpetuity
Period					0	1	2	3	4	5	6	7	8	9	10	
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	
Beta	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.15	1.12	1.09	1.06	1.03	1.00	
Market return of equity	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	
Cost of equity	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.0%	10.8%	10.6%	10.4%	10.2%	10.0%	
FCF growth rate	-23.1%	NM	213.4%	26.5%	-358.4%	-26.6%	-140.7%	163.0%	122.0%	102.5%	83.0%	63.5%	44.0%	24.5%	5.0%	
Discount Factor				1.000	1.000	0.900	0.809	0.728	0.655	0.594	0.541	0.494	0.453	0.417		
Free cash flow to Enterprise ($mm)	(7.3)	3.5	11.0	14.0	(36.1)	(26.5)	10.8	28.4	63.0	127.6	233.4	381.6	549.5	684.0	717.9	14,273.2
NPV of free cash flow ($mm)						(23.8)	8.7	20.7	41.2	75.8	126.3	188.7	249.2	285.5		5,957.5
Cumulative NPV of FCF ($mm)						(23.8)	(15.1)	5.6	46.8	122.6	248.9	437.6	686.8	972.2		6,929.7

Cumulative NPV of FCF ($mm)	6,929.7
Shares outstanding (mm)	35.1
NPV/share	$ 197.63
Net cash/share - 10% of revenue	$ 2.33
Total NPV per share	**$ 199.97**

Source: FactSet, Jefferies estimates

SailPoint (SAIL) Non-GAAP Income Statement

SailPoint Technologies Holdings (SAIL)
Income Statement, Non-GAAP
$ in millions, except per share data

	2017A	2018A	2019A					2020E					2021E				
	YearA	YearA	Mar-19A	Jun-19A	Sep-19A	Dec-19A	YearA	Mar-20A	Jun-20A	Sep-20A	Dec-20E	YearE	Mar-21E	Jun-21E	Sep-21E	Dec-21E	YearE
Revenue																	
License	79.2	105.0	18.7	19.3	26.8	38.0	102.8	21.0	34.9	30.9	29.6	116.4	18.9	20.9	27.8	31.1	98.7
q/q change			*(54%)*	*4%*	*39%*	*42%*		*(45%)*	*66%*	*(12%)*	*(4%)*		*(36%)*	*11%*	*33%*	*12%*	
y/y change	*46%*		*11%*	*(1%)*	*(4%)*	*(6%)*	*(2%)*	*13%*	*80%*	*15%*	*(22%)*	*13%*	*(10%)*	*(40%)*	*(10%)*	*5%*	*(15%)*
Subscription	71.0	104.0	31.8	33.7	37.4	40.5	143.4	43.9	45.9	51.0	54.2	195.0	57.6	59.8	63.1	66.6	247.1
q/q change			*8%*	*6%*	*11%*	*8%*		*8%*	*5%*	*11%*	*6%*		*6%*	*4%*	*6%*	*6%*	
y/y change	*44%*		*41%*	*40%*	*34%*	*37%*	*38%*	*38%*	*36%*	*36%*	*34%*	*36%*	*31%*	*30%*	*24%*	*23%*	*27%*
Services and other	35.8	39.9	10.1	10.0	11.7	10.6	42.3	10.6	11.7	12.1	10.4	44.7	9.5	9.4	13.9	12.4	45.2
q/q change			*(4%)*	*(1%)*	*17%*	*(9%)*		*(0%)*	*10%*	*4%*	*(15%)*		*(9%)*	*(0%)*	*47%*	*(10%)*	
y/y change	*25%*		*5%*		*19%*		*6%*	*5%*		*4%*	*(2%)*	*6%*	*(10%)*	*(19%)*	*14%*	*20%*	*1%*
Total revenue	**186.1**	**248.9**	**60.6**	**63.1**	**75.9**	**89.0**	**288.5**	**75.4**	**92.5**	**94.0**	**94.1**	**356.1**	**85.9**	**90.1**	**104.8**	**110.2**	**391.0**
q/q change			*(25%)*	*4%*	*20%*	*17%*		*(15%)*	*23%*	*2%*	*0%*		*(9%)*	*5%*	*16%*	*5%*	
y/y change	*41%*		*24%*		*15%*		*16%*	*25%*	*47%*	*24%*	*6%*	*23%*	*14%*	*(3%)*	*11%*	*17%*	*10%*
Gross profit, non-GAAP	**146.5**	**201.2**	**47.5**	**49.1**	**60.7**	**73.5**	**230.8**	**59.7**	**76.7**	**76.2**	**76.5**	**289.1**	**67.9**	**72.6**	**82.3**	**88.7**	**311.5**
Gross margin	*78.7%*	*80.8%*	*78.4%*	*77.9%*	*80.0%*	*82.6%*	*80.0%*	*79.1%*	*83.0%*	*81.0%*	*81.3%*	*81.2%*	*79.0%*	*80.5%*	*78.6%*	*80.5%*	*79.7%*
Sales and marketing	75.0	95.3	27.6	32.7	30.9	34.3	125.4	32.8	34.9	39.8	46.6	154.1	40.4	45.1	49.2	51.8	186.5
% of total revenue	*40%*	*38%*	*46%*	*52%*	*41%*	*39%*	*43%*	*43%*	*38%*	*42%*	*50%*	*43%*	*47%*	*50%*	*47%*	*47%*	*48%*
Research and development	32.5	40.0	11.8	12.5	13.3	14.8	52.4	14.2	16.0	17.4	20.7	68.3	18.0	18.9	19.9	18.7	75.6
% of total revenue	*17%*	*16%*	*19%*	*20%*	*18%*	*17%*	*18%*	*19%*	*17%*	*19%*	*22%*	*19%*	*21%*	*21%*	*19%*	*17%*	*19%*
General and administrative	15.6	26.9	7.6	5.6	7.5	9.2	29.9	8.3	7.4	6.9	10.4	32.9	7.7	8.1	9.4	10.1	35.4
% of total revenue	*8%*	*11%*	*13%*	*9%*	*10%*	*10%*	*10%*	*11%*	*8%*	*7%*	*11%*	*9%*	*9%*	*9%*	*9%*	*9%*	*9%*
Total operating expenses, non-GAAP	123.2	162.2	47.0	50.7	51.7	58.2	207.6	55.3	58.3	64.2	77.7	255.4	66.2	72.1	78.6	80.6	297.5
Operating income, non-GAAP	**23.3**	**38.9**	**0.5**	**(1.6)**	**9.0**	**15.2**	**23.2**	**4.4**	**18.4**	**12.0**	**(1.2)**	**33.8**	**1.7**	**0.5**	**3.7**	**8.1**	**14.0**
Operating margin, non-GAAP	*12.5%*	*15.6%*	*0.9%*	*(2.5%)*	*11.9%*	*17.1%*	*8.0%*	*5.9%*	*19.9%*	*12.8%*	*(1.2%)*	*9.5%*	*2.0%*	*0.5%*	*3.6%*	*7.3%*	*3.6%*
Interest expense and other income, net	(11.4)	(3.7)	(0.4)	(0.0)	0.0	1.4	1.0	0.8	(0.1)	0.4	(0.9)	0.2	(0.9)	(0.9)	(0.9)	(0.9)	(3.5)
Pretax income	11.9	35.3	0.1	(1.6)	9.0	16.6	24.2	5.2	18.3	12.4	(2.0)	34.0	0.9	(0.4)	2.8	7.2	10.5
Benefit (provision) for income taxes	(1.6)	1.0	(0.5)	0.3	(2.3)	(3.3)	(5.7)	(1.2)	(4.6)	(2.3)	0.5	(7.5)	(0.2)	0.1	(0.7)	(1.7)	(2.5)
Effective tax rate	*14%*	*N/M*	*382%*	*19%*	*25%*	*20%*	*24%*	*22%*	*25%*	*19%*	*24%*	*22%*	*24%*	*24%*	*24%*	*24%*	*24%*
Net income (loss), non-GAAP	**10.3**	**36.3**	**(0.3)**	**(1.3)**	**6.8**	**13.3**	**18.5**	**4.1**	**13.8**	**10.1**	**(1.5)**	**26.4**	**0.7**	**(0.3)**	**2.2**	**5.5**	**8.0**
Net margin, non-GAAP	*6%*	*15%*	*(1%)*	*(2%)*	*9%*	*15%*	*6%*	*5%*	*15%*	*11%*	*(2%)*	*7%*	*1%*	*(0%)*	*2%*	*5%*	*2%*
EPS, non-GAAP	**$0.13**	**$0.40**	**($0.00)**	**($0.01)**	**$0.07**	**$0.15**	**$0.21**	**$0.04**	**$0.15**	**$0.11**	**($0.02)**	**$0.28**	**$0.01**	**($0.00)**	**$0.02**	**$0.06**	**$0.08**
Weighted average basic shares outstanding	72.3	86.5	88.3	88.8	89.1	89.4	88.9	89.9	90.3	90.8	91.8	90.7	92.3	92.8	93.3	93.8	93.0
Weighted average diluted shares outstanding	76.1	90.0	88.3	88.8	90.8	91.0	89.7	91.3	91.6	95.9	96.8	93.9	96.3	96.8	97.3	97.8	97.0

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

SailPoint (SAIL) DCF Base Case

SailPoint Technologies Holdings (SAIL)
Discounted Cash Flow Analysis

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%	As shown	3.50%
Historical risk-free rate of return	5.00%		5.00%
Beta	1.40		1.00
Historical market risk premium	6.5%		6.50%
Market rate of return	11.50%		11.50%
Cost of Equity	12.60%		10.00%
Terminal Growth rate			5.00%
Point in time (last earnings)	6/30/2020		

Scenario 1: Base Case

	HISTORICALS				HYPER GROWTH PERIOD				TRANSITIONARY PERIOD					TERMINAL	
	2015A	2016A	2017A	2018A	2019A	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	Perpetuity
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.33	1.27	1.20	1.13	1.07	1.00	
Market rate of return	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	
Cost of equity	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.6%	12.2%	11.7%	11.3%	10.9%	10.4%	10.0%	
FCF Growth Rate		N/M	187.2%	5.7%	(56.9%)	221.9%	(2.0%)	107.5%	90.4%	73.3%	56.3%	39.2%	22.1%	5.0%	
Free cash flow to the enterprise ($M)	(10.8)	9.8	28.1	29.7	12.8	41.3	40.4	83.9	159.8	277.0	432.8	602.3	735.3	772.1	
Diluted share count	0.0	0.0	69.2	90.2	91.0	96.8	97.8	100.7	103.2	105.3	106.9	107.9	108.5	108.5	
Diluted share count growth		0.0	69.2	21.1	0.8	5.7									
Estimated shares repurchased	0.0	0.0	0.0	0.0	0.0	0.0									
Implied share growth sans repurchase	0.0	0.0	69.2	21.1	0.8	5.7									
Shares issued															
Actual share count growth					0.9%	6.3%	3.0%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%	
FCFE / Share					0.14	0.43	0.41	0.83	1.55	2.63	4.05	5.58	6.78	7.12	142.37
NPV / Share of FCFE					0.13	0.36	0.31	0.55	0.92	1.43	2.02	2.57	2.92		57.57
Cumulative NPV of FCFE / Share						0.36	0.66	1.21	2.14	3.57	5.59	8.16	11.08		68.64

Cumulative NPV of FCF /Share	$	68.64
Shares outstanding (M)		95.9
Net cash / Share - 10% of revenue	$	1.39
Total NPV/Share	**$**	**70.03**

Source: FactSet, Jefferies estimates

Mimecast (MIME) Non-GAAP Income Statement

Mimecast (MIME)
Income Statement
$ in millions, except per share items
Fiscal Year End: March 31

Income Statement (Non-GAAP):	**F2018 (A)**	**F2019 (A)**			**F2020 (A)**					**F2021 (E)**					**F2022 (E)**		
	Full Year	**Full Year**	**Jun'19**	**Sep'19**	**Dec'19**	**Mar'20**	**Full Year**	**Jun'20**	**Sep'20A**	**Dec'20E**	**Mar'21E**	**Full Year**	**Jun'21E**	**Sep'21E**	**Dec'21E**	**Mar'22E**	**Full Year**
Total revenue Non-GAAP	**261.9**	**340.4**	**99.2**	**103.4**	**110.2**	**114.2**	**427.0**	**115.2**	**122.7**	**126.4**	**127.7**	**492.0**	**132.5**	**138.5**	**143.9**	**149.9**	**564.9**
y/y change in constant currency (Jeff. Est.)	*38%*	*32%*	*31%*	*29%*	*26%*	*26%*	*28%*	*21%*	*19%*	*16%*	*12%*	*17%*	*11%*	*12%*	*14%*	*17%*	*14%*
y/y FX impact (Jeff. Est.)	*2.3%*	*-1.7%*	*-4.4%*	*-2.8%*	*-0.7%*	*-2.4%*	*-2.5%*	*-5.1%*	*-0.8%*	*-1.6%*	*-0.6%*	*-1.9%*	*3.5%*	*0.7%*	*0.0%*	*0.0%*	*1.0%*
y/y change in constant currency (Co. Providec	*38%*	*32%*	*32%*	*29%*	*27%*	*26%*		*21%*	*19%*								
y/y FX impact (Co. Provided)	*2%*	*-2%*	*-5%*	*-3%*	*-1%*	*-2%*		*-5%*	*0%*								
y/y change	*40%*	*30%*	*27%*	*26%*	*26%*	*24%*	*25%*	*16%*	*19%*	*15%*	*12%*	*15%*	*15%*	*13%*	*14%*	*17%*	*15%*
q/q change			*8%*	*4%*	*7%*	*4%*		*1%*	*7%*	*3%*	*1%*		*4%*	*5%*	*4%*	*4%*	
% seasonality (% of FY total revenue)			*23%*	*24%*	*26%*	*27%*		*23%*	*25%*	*26%*	*26%*		*23%*	*25%*	*25%*	*27%*	
Total cost of revenue	68.5	87.6	24.1	24.6	26.9	27.5	103.0	26.4	27.5	29.1	30.0	113.0	31.8	32.6	33.8	35.2	133.4
Gross profit	**193.4**	**252.8**	**75.2**	**78.8**	**83.3**	**86.8**	**324.0**	**88.8**	**95.1**	**97.3**	**97.7**	**379.0**	**100.7**	**106.0**	**110.1**	**114.7**	**431.5**
Non-GAAP gross margin	73.9%	74.3%	75.8%	76.2%	75.6%	76.0%	75.9%	77.1%	77.5%	77.0%	76.5%	77.0%	76.0%	76.5%	76.5%	76.5%	76.4%
Sales and marketing	116.8	131.3	39.6	37.6	39.9	38.9	156.0	39.6	39.5	44.2	46.0	169.3	42.4	44.3	46.0	46.5	179.3
% of revenue	*44.6%*	*38.6%*	*39.9%*	*36.4%*	*36.2%*	*34.1%*	*36.5%*	*34.4%*	*32.2%*	*35.0%*	*36.0%*	*34.4%*	*32.0%*	*32.0%*	*32.0%*	*31.0%*	*31.7%*
y/y change	*28%*	*12%*	*22%*	*15%*	*23%*	*15%*	*19%*	*0%*	*5%*	*11%*	*18%*	*9%*	*7%*	*12%*	*4%*	*1%*	*6%*
Research and development	35.8	51.7	16.8	16.6	18.0	18.4	69.9	18.9	18.4	20.2	21.7	79.2	21.2	22.2	23.0	24.0	90.4
% of revenue	*13.7%*	*15.2%*	*17.0%*	*16.1%*	*16.4%*	*16.1%*	*16.4%*	*16.4%*	*15.0%*	*16.0%*	*17.0%*	*16.1%*	*16.0%*	*16.0%*	*16.0%*	*16.0%*	*16.0%*
y/y change	*73%*	*44%*	*43%*	*32%*	*37%*	*29%*	*35%*	*12%*	*11%*	*12%*	*18%*	*13%*	*12%*	*21%*	*14%*	*10%*	*14%*
General and administrative	33.3	40.9	12.2	11.5	12.6	13.4	49.8	12.6	12.2	13.9	16.0	54.6	13.2	13.9	14.4	15.0	56.5
% of revenue	*12.7%*	*12.0%*	*12.3%*	*11.2%*	*11.5%*	*11.8%*	*11.7%*	*10.9%*	*9.9%*	*11.0%*	*12.5%*	*11.1%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*	*10.0%*
y/y change	*31%*	*23%*	*23%*	*16%*	*25%*	*22%*	*22%*	*3%*	*6%*	*10%*	*19%*	*10%*	*5%*	*14%*	*3%*	*-6%*	*3%*
Total operating expenses	185.9	223.9	68.6	65.8	70.6	70.8	275.7	71.1	70.1	78.4	83.7	303.2	76.8	80.4	83.5	85.5	326.1
y/y change	*35%*	*20%*	*27%*	*19%*	*27%*	*20%*	*23%*	*4%*	*7%*	*11%*	*18%*	*10%*	*8%*	*15%*	*6%*	*2%*	*8%*
Operating income (loss)	**7.5**	**28.8**	**6.6**	**13.0**	**12.7**	**16.0**	**48.3**	**17.7**	**25.1**	**19.0**	**14.1**	**75.8**	**23.8**	**25.6**	**26.6**	**29.2**	**105.3**
Non-GAAP operating margin	2.9%	8.5%	6.7%	12.6%	11.5%	14.0%	11.3%	15.4%	20.4%	15.0%	11.0%	15.4%	18.0%	18.5%	18.5%	19.5%	18.6%
Total other income (expense), net	(2.7)	(3.8)	0.7	(0.8)	(0.5)	(1.5)	(2.1)	1.1	0.5	(0.9)	(0.9)	(0.2)	(0.9)	(0.9)	(0.8)	(0.8)	(3.4)
Pre-tax income (loss)	4.8	25.0	7.3	12.2	12.2	14.5	46.2	18.8	25.6	18.1	13.2	75.6	23.0	24.8	25.8	28.4	102.0
Benefit from (Provision for) income taxes	(5.6)	(8.7)	(2.3)	(3.8)	(3.5)	(4.7)	(14.3)	(4.6)	(4.9)	(3.3)	(2.6)	(15.4)	(5.7)	(6.2)	(6.4)	(7.1)	(25.5)
Effective tax rate	117.9%	34.6%	*31.6%*	*30.8%*	*28.4%*	*32.8%*	30.9%	*24.4%*	*19.1%*	18.0%	20.0%	20.3%	25.0%	25.0%	25.0%	25.0%	25.0%
Non-GAAP net income (loss)	**(0.9)**	**16.4**	**5.0**	**8.5**	**8.8**	**9.71**	**31.9**	**14.2**	**20.7**	**14.8**	**10.5**	**60.2**	**17.2**	**18.6**	**19.3**	**21.3**	**76.5**
Non-GAAP net income (loss) per share	**($0.01)**	**$0.26**	**$0.08**	**$0.13**	**$0.14**	**$0.15**	**$0.50**	**$0.22**	**$0.32**	**$0.22**	**$0.16**	**$0.91**	**$0.25**	**$0.27**	**$0.27**	**$0.30**	**$1.09**
Weighted avg shares, diluted	61.2	60.8	61.4	61.8	62.2	62.6	62.0	63.0	63.5	64.5	65.5	64.1	66.5	67.5	68.5	69.5	68.0
Weighted avg shares, basic	57.3	61.9	63.9	63.9	64.0	64.4	64.0	64.7	65.6	66.6	67.6	66.1	68.6	69.6	70.6	71.6	70.1

Source: Jefferies estimates, company data

Mimecast (MIME) DCF Base Case

Mimecast (MIME)
Discounted Cash Flow Analysis

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%		3.50%
Historical risk-free rate of return	5.30%	5.30%	5.30%
Beta	0.90		1.00
Equity Risk Premium	6.50%		6.50%
Market rate of return	11.80%	11.80%	11.80%
Cost of equity	9.35%		10.00%
WACC	9.16%		9.80%

Scenario 1: Base Case

	HISTORICALS				FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
	2016A	2017A	2018A	2019A	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Perpetuity
Period					1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	
Beta	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.93	0.95	0.97	0.98	1.00	
Equity Risk Premium	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	
Market rate of return	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%	
Cost of equity	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	9.5%	9.6%	9.7%	9.8%	9.9%	10.0%	
WACC	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.3%	9.4%	9.5%	9.6%	9.7%	9.8%	
FCF Growth Rate	27.5%	-25.5%	21.1%	-895.6%	NM	NM	83.3%	26.0%	19.0%	16.7%	14.3%	12.0%	9.7%	7.3%	5.0%	
Discount factor				1.00	1.09	1.19	1.30	1.42	1.55	1.70	1.87	2.06	2.28	2.52	2.80	
Free cash flow to enterprise ($M)	11	8	10	-80	-10	66	121	153	182	212	242	272	297.81	319.64	336	6,998
NPV of Free cash flow ($M)						55	93	108	117	125	129	132	131	127		2,503
Cumulative NPV of FCFE ($M)						55	149	256	373	498	628	759	890	1,017		3,520

Cumulative NPV of FCFE ($ M)	3,520
Shares outstanding (M)	66
NPV/Share of FCFE	$ 53.67
Net cash/ Share- 10% of revenue *	$ 1.18
Total NPV/Share	**$ 54.85**

Source: FactSet, Jefferies estimates

Tufin (TUFN) Non-GAAP Income Statement

Tufin Software Technologies Ltd. Income Statement (non-GAAP)		FY2019					FY2020					FY2021					FY2022				
$ in millions	2018	Mar-19A	Jun-19A	Sep-19A	Dec-19A	2019	Mar-20A	Jun-20A	Sep-20A	Dec-20E	2020	Mar-21E	Jun-21E	Sep-21E	Dec-21E	2021	Mar-22E	Jun-22E	Sep-22E	Dec-22E	2022
Revenues:																					
License	42.6	10.6	10.9	11.5	14.3	47.4	5.8	7.9	10.0	11.9	35.7	7.6	9.2	10.7	14.0	41.5	8.8	10.6	12.4	16.1	47.9
q/q change		(38%)	3%	6%	25%		(60%)	36%	27%	19%		(36%)	21%	17%	30%		(37%)	21%	17%	30%	
y/y change	38%	26%	31%	32%	(16%)	11%	(45%)	(27%)	(13%)	(17%)	(25%)	31%	16%	7%	17%	17%	15%	15%	15%	15%	15%
% of Total	50%	47%	43%	45%	48%	46%	27%	34%	39%	45%	37%	33%	35%	39%	45%	38%	33%	36%	40%	46%	39%
Maintenance and Professional Services	42.4	11.8	14.2	14.1	15.8	55.9	15.4	15.1	15.6	14.7	60.9	15.8	16.9	16.9	16.8	66.4	17.5	18.9	18.8	18.7	73.9
q/q change		(2%)	20%	(1%)	12%		(2%)	(2%)	3%	(6%)		7%	7%	(0%)	(0%)		4%	8%	(1%)	(0%)	
y/y change	26%	25%	39%	33%	30%	32%	31%	7%	11%	(7%)	9%	2%	12%	8%	15%	9%	11%	12%	11%	11%	11%
% of Total	50%	53%	57%	55%	52%	54%	73%	66%	61%	55%	63%	67%	65%	61%	55%	62%	67%	64%	60%	54%	61%
Total Revenues	**85.0**	**22.5**	**25.1**	**25.6**	**30.1**	**103.3**	**21.2**	**23.0**	**25.6**	**26.6**	**96.5**	**23.4**	**26.1**	**27.6**	**30.8**	**108.0**	**26.3**	**29.5**	**31.1**	**34.9**	**121.8**
q/q change		(23%)	12%	2%	18%		(29%)	8%	11%	4%		(12%)	12%	6%	12%		(15%)	12%	6%	12%	
y/y change	32%	25%	36%	32%	3%	22%	(5%)	(8%)	0%	(12%)	(7%)	10%	13%	8%	16%	12%	12%	13%	13%	13%	13%
Gross Profit (non GAAP)	**72.2**	**18.7**	**20.5**	**21.0**	**24.751**	**84.9**	**16.2**	**18.7**	**21.6**	**21.7**	**78.3**	**18.3**	**20.7**	**22.1**	**25.2**	**86.4**	**20.6**	**23.3**	**24.9**	**28.4**	**97.2**
% Gross Margin (non GAAP)	85%	83%	82%	82%	82%	82%	76%	81%	84%	82%	81%	78%	79%	80%	82%	80%	78%	79%	80%	82%	80%
Research and Development	20.6	6.4	7.0	7.8	8.0	29.2	9.1	6.9	6.8	7.5	30.3	7.2	7.8	7.5	6.5	29.0	7.9	8.6	9.0	7.0	32.4
%QoQ		3%	10%	12%	3%		14%	(24%)	(1%)	9%		(3%)	8%	(5%)	(13%)		22%	9%	6%	(23%)	
%YoY	21%	39%	46%	54%	30%	42%	43%	(1%)	(13%)	(7%)	4%	(20%)	13%	9%	(13%)	(4%)	9%	9%	21%	8%	12%
% of total revenue	24%	28%	28%	31%	27%	28%	43%	30%	27%	28%	31%	31%	30%	27%	21%	27%	30%	29%	29%	20%	27%
Sales and Marketing	44.6	13.1	15.6	15.1	15.3	59.1	16.6	12.6	11.9	14.9	56.0	15.4	16.7	16.6	16.0	64.8	14.5	16.2	17.1	15.0	62.8
%QoQ		5%	19%	(4%)	1%		9%	(24%)	(6%)	26%		3%	8%	(1%)	(3%)		(10%)	12%	6%	(12%)	
%YoY	30%	46%	35%	30%	22%		27%	(19%)	(21%)	(3%)		(7%)	33%	40%	8%		(6%)	(3%)	3%	(7%)	
% of total revenue	53%	58%	62%	59%	51%	57%	78%	55%	46%	56%	58%	66%	64%	60%	52%	60%	55%	55%	55%	43%	52%
% of Product revenue																					
General and Administrative	5.7	2.4	2.9	3.2	3.4	11.8	4.0	3.7	3.9	3.3	15.0	2.8	3.1	3.0	3.1	12.1	2.4	2.7	2.8	3.1	11.0
%QoQ		10%	25%	8%	6%		20%	(7%)	6%	(15%)		(16%)	12%	(3%)	1%		(23%)	12%	6%	12%	
%YoY	33%	126%	156%	141%	56%	109%	71%	27%	24%	(1%)	27%	(30%)	(16%)	(23%)	(7%)	(20%)	(16%)	(15%)	(8%)	2%	(9%)
% of total revenue	7%	11%	12%	12%	11%	11%	19%	16%	15%	13%	16%	12%	12%	11%	10%	11%	9%	9%	9%	9%	9%
Total Operating Expenses	70.9	21.8	25.6	26.1	26.7	100.2	29.8	23.3	22.6	25.7	101.4	25.5	27.7	27.1	25.6	105.9	24.7	27.4	29.0	25.1	106.2
%QoQ		5%	17%	2%	2%		12%	(22%)	(3%)	14%		(1%)	9%	(2%)	(6%)		(4%)	11%	6%	(13%)	
%YoY	28%	50%	46%	45%	28%	41%	36%	(9%)	(13%)	(4%)	1%	(14%)	19%	20%	(0%)	4%	(3%)	(1%)	7%	(2%)	0%
% of total revenue	83%	97%	102%	102%	89%	97%	140%	101%	88%	97%	105%	109%	106%	98%	83%	98%	94%	93%	93%	72%	87%
Operating (Loss) Income (non GAAP)	**1.2**	**(3.2)**	**(5.1)**	**(5.1)**	**(1.9)**	**(15.2)**	**(13.3)**	**(4.5)**	**(1.0)**	**(3.9)**	**(22.8)**	**(7.1)**	**(7.0)**	**(4.9)**	**(0.4)**	**(19.5)**	**(4.1)**	**(4.1)**	**(4.1)**	**3.3**	**(9.0)**
Operating Margin (non GAAP)	1%	(14%)	(20%)	(20%)	(6%)	(15%)	(63%)	(20%)	(4%)	(15%)	(24%)	(31%)	(27%)	(18%)	(1%)	(18%)	(16%)	(14%)	(13%)	10%	(7%)
Finance Expenses	1.0	(0.0)	0.3	0.3	(0.5)	0.1	(0.6)	0.1	(0.2)	0.0	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income before Taxes	0.2	(3.1)	(5.3)	(5.4)	(1.4)	-15.3	(12.7)	(4.7)	(0.8)	-4.0	-22.1	-7.1	-7.0	-5.0	-0.4	-19.5	-4.1	-4.1	-4.1	3.3	-9.0
Taxes	1.3	0.2	0.2	0.3	1.0	1.7	0.5	0.6	0.4	1.0	2.5	0.8	0.8	0.8	1.0	3.4	1.0	1.0	1.0	1.2	4.2
Tax Rate	635%	(7%)	(4%)	(5%)	(71%)	(11%)	(4%)	(13%)	(50%)	(26%)	(11%)	(11%)	(11%)	(16%)	(269%)	(17%)	(24%)	(24%)	(25%)	36%	(47%)
Net (Loss) Income Non-GAAP	**(1.1)**	**(3.4)**	**(5.6)**	**(5.7)**	**(2.4)**	**(17.1)**	**(13.2)**	**(5.2)**	**(1.2)**	**(5.0)**	**(24.6)**	**(7.9)**	**(7.8)**	**(5.8)**	**(1.4)**	**(22.9)**	**(5.1)**	**(5.1)**	**(5.1)**	**2.1**	**(13.2)**
Net Margin																					
Non-GAAP EPS	**(0.13)**	**(0.41)**	**(0.18)**	**(0.17)**	**(0.07)**	**(0.63)**	**(0.37)**	**(0.15)**	**(0.03)**	**(0.14)**	**(0.69)**	**(0.22)**	**(0.21)**	**(0.15)**	**(0.04)**	**(0.61)**	**(0.13)**	**(0.13)**	**(0.13)**	**0.05**	**(0.33)**
Basic Shares Outstanding	8.05	8.3	31.2	34.1	35.1	27.1	35.5	35.7	35.8	36.3	35.8	36.8	37.3	37.8	38.3	37.5	38.8	39.3	39.8	40.3	39.5
Fully Diluted Shares Outstanding	24.46		39.5	39.5	40.4	39.8	41.2	41.4	41.5	42.0	41.5	42.5	43.0	43.5	44.0	43.2	44.5	45.0	45.5	46.0	45.2

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Tufin (TUFN) DCF Base Case

Tufin
Discounted Cash Flow Analysis
$ in millions, except per share data

	Year 1	Transition	Terminal
Current risk-free rate of return	3.5%		3.5%
Historical risk-free rate of return	5.0%	5.0%	5.0%
Beta	1.50		1.00
Market rate of return	11.5%	11.5%	11.5%
Cost of equity	13.3%		10.0%
Growth rate	*As modeled*		5.0%

Cash and Cash Equivalents		84.4
Total Debt		0.0
Net Cash and Cash Equivalents		84.4
LTM Revenues		100
Shares Outstanding (m)		41.5
Net Cash/Share - 10% of Revenue	**$**	**1.80**

Scenario 2, Base Case: Begins to grow revenue again and solidifies itself as one of the leaders in policy orchestration

		HISTORICALS			FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
		2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	Perpetuity
Period			0													
Current risk-free rate of return		3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.42	1.33	1.25	1.17	1.08	1.00	
Market return of equity		11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	0.12	11.5%	
Cost of equity		13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	12.7%	12.2%	11.6%	11.1%	10.5%	10.0%	
FCF growth rate		NM	NM	NM	NM	NM	NM	75.0%	66.0%	55.8%	45.7%	35.5%	25.3%	15.2%	5.0%	
Discount Factor		1.000	1.000	0.969	0.856	0.756	0.667	0.589	0.520	0.473	0.435	0.404	0.378	0.358		
Free cash flow to Enterprise ($mm)		(1.0)	1.9	(12.3)	(27.5)	(11.4)	6.7	11.7	19.4	30.2	43.9	59.5	74.6	86.0		
Diluted Shares Outstanding 4Q			24.5	40.4	42.0	44.0	46.0	48.1	50.3	52.2	53.8	55.0	55.9	56.3		
	5.0			65.1%	3.9%	4.8%	4.5%	4.6%	4.6%	3.8%	3.1%	2.3%	1.5%	0.8%	0%	
Free cash flow to Enterprise per share				(0.3)	(0.7)	(0.3)	0.1	0.2	0.4	0.6	0.8	1.1	1.3	1.5	1.6	32.0
NPV of free cash flow per share				(0.3)	(0.6)	(0.2)	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.5		11.5
Cumulative NPV of FCF per share					(0.6)	(0.8)	(0.7)	(0.5)	(0.3)	(0.0)	0.3	0.7	1.3	1.8		13.3

Cumulative NPV of FCF ($mm)		13.3		
Net cash/share - 10% of revenue	$	1.80		
Total NPV per share	**$**	**15.07**	**Difference with SBC**	-25.1%

Source: FactSet, Jefferies estimates

Check Point (CHKP) Non-GAAP Income Statement

Check Point Software (CHKP)
Income Statement, Non-GAAP
$ in millions, except per share data

	2017A	2018A	2019A	2020E					2021E				
	YearA	YearA	YearA	Mar-20A	Jun-20A	Sep-20E	Dec-20E	YearE	Mar-21E	Jun-21E	Sep-21E	Dec-21E	YearE
Products and licenses	559.0	525.6	510.8	110.2	122.6	120.2	152.4	505.4	109.5	120.5	116.8	149.2	496.0
% of Revenue	30%	27%	26%	23%	24%	24%	28%	25%	22%	23%	23%	27%	24%
qoq change				-30.2%	11.3%	-2.0%	26.8%		-28.2%	10.1%	-3.1%	27.7%	
yoy change	-2.4%	-6.0%	-2.8%	-2.3%	0.6%	1.6%	-3.5%	-1.0%	-0.7%	-1.7%	-2.8%	-2.1%	-1.9%
Software subscriptions	480.4	542.3	610.2	158.8	164.0	168.8	178.2	669.8	175.2	178.6	180.9	191.8	726.5
% of Revenue	26%	28%	31%	33%	32%	33%	32%	33%	35%	35%	35%	34%	35%
qoq change				-3.0%	3.3%	2.9%	5.6%		-1.7%	2.0%	1.3%	6.0%	
yoy change	23.2%	12.9%	12.5%	10.3%	10.3%	9.7%	8.9%	9.8%	10.3%	8.9%	7.2%	7.6%	8.5%
Software updates and maintenance	815.3	848.6	873.6	217.5	219.0	220.0	221.3	877.8	215.0	215.9	216.3	217.0	864.2
New Product Attach rate				65%	64%	66%	60%		55%	55%	55%	55%	
Renewal rate				95%	95%	95%	95%		95%	95%	95%	95%	
% of Revenue	44%	44%	44%	45%	43%	43%	40%	43%	43%	42%	42%	39%	41%
qoq change				-2.1%	0.7%	0.5%	0.6%		-2.9%	0.4%	0.2%	0.3%	
yoy change	4.7%	4.1%	3.0%	1.1%	0.6%	0.6%	-0.4%	0.5%	-1.1%	-1.4%	-1.7%	-1.9%	-1.6%
Total revenue, non-GAAP	1,854.7	1,916.5	1,994.7	486.5	505.6	509.0	552.0	2,053.1	499.7	515.0	514.0	558.0	2,086.7
qoq change				-10.5%	3.9%	0.7%	8.4%		-9.5%	3.1%	-0.2%	8.6%	
yoy change	6.5%	3.3%	4.1%	3.1%	3.6%	3.7%	1.5%	2.9%	2.7%	1.9%	1.0%	1.1%	1.6%
Cost of products and licenses	104.1	91.8	90.6	20.8	22.4	22.8	27.7	93.7	20.7	22.0	22.2	27.1	92.0
GM on product and licenses	81.4%	82.5%	82.3%	81.1%	81.7%	81.0%	81.8%	81.5%	81.1%	81.7%	81.0%	81.8%	81.5%
Cost of software subscriptions	18.9	17.7	24.5	6.5	6.1	5.9	7.3	25.8	7.2	6.6	6.3	7.8	28.0
GM on software subscriptions	96.1%	96.7%	96.0%	95.9%	96.3%	96.5%	95.9%	96.1%	95.9%	96.3%	96.5%	95.9%	96.1%
Cost of software updates and maintenance	85.1	85.5	90.4	22.3	23.0	22.2	23.6	91.1	22.0	22.7	21.8	23.1	89.7
GM on software updates and maintenance	89.6%	89.9%	89.7%	89.7%	89.5%	89.9%	89.3%	89.6%	89.7%	89.5%	89.9%	89.3%	89.6%
Amortization of technology	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total cost of revenue	208.0	195.0	205.5	49.6	51.5	50.9	58.6	210.6	49.9	51.3	50.3	58.1	209.6
Gross profit, non-GAAP	1,646.6	1,721.5	1,789.2	436.9	454.1	458.1	493.3	1,842.4	449.8	463.7	463.7	499.9	1,877.1
Gross margin, non-GAAP	88.8%	89.8%	89.7%	89.8%	89.8%	90.0%	89.4%	89.7%	90.0%	90.0%	90.2%	89.6%	90.0%
Sales and marketing	411.9	476.8	522.3	133.4	129.8	123.8	140.7	527.7	134.9	128.8	128.5	139.5	531.7
% of Revenue	22.2%	24.9%	26.2%	27.4%	25.7%	24.3%	25.5%	25.7%	27.0%	25.0%	25.0%	25.0%	25.5%
Research and development	168.6	188.0	213.4	56.6	56.0	53.3	60.7	226.6	55.0	56.7	56.5	61.4	229.5
% of Revenue	9.1%	9.8%	10.7%	11.6%	11.1%	10.5%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
General & administrative	41.8	41.6	50.8	15.7	15.1	16.0	16.6	63.4	15.0	15.5	15.4	16.7	62.6
% of Revenue	2.3%	2.2%	2.5%	3.2%	3.0%	3.1%	3.0%	3.1%	3.0%	3.0%	3.0%	3.0%	3.0%
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total operating expenses	622.2	706.4	786.4	205.7	200.9	193.1	218.0	817.7	204.9	200.9	200.4	217.6	823.8
Operating income (loss), non-GAAP	1,024.4	1,015.0	1,002.8	231.2	253.2	265.0	275.3	1,024.7	244.9	262.8	263.2	282.3	1,053.3
Operating margin, non-GAAP	55.2%	53.0%	50.3%	47.5%	50.1%	52.1%	49.9%	49.9%	49.0%	51.0%	51.2%	50.6%	50.5%
Financial income, net	47.0	65.1	80.6	19.3	18.7	14.4	17.5	69.9	16.6	16.7	16.4	16.3	66.1
Pre-tax income	1,071.4	1,080.1	1,083.4	250.5	271.9	279.4	292.9	1,094.7	261.6	279.6	279.6	298.6	1,119.4
Income taxes	183.4	169.0	150.4	44.6	46.9	48.6	0.0	140.1	44.5	47.5	47.5	0.0	139.5
Tax rate	17.1%	15.6%	13.9%	17.8%	17.2%	17.4%	0.0%	12.8%	17.0%	17.0%	17.0%	0.0%	12.5%
Net income (loss), non-GAAP	888.0	911.0	933.0	205.9	225.0	230.8	292.9	954.5	217.1	232.0	232.1	298.6	979.9
Net margin, non-GAAP	47.9%	47.5%	46.8%	42.3%	44.5%	45.3%	53.1%	46.5%	43.4%	45.1%	45.2%	53.5%	47.0%
EPS, non-GAAP	$5.33	$5.72	$6.13	$1.42	$1.58	$1.64	$2.10	$6.71	$1.57	$1.70	$1.71	$2.22	$7.19
yoy change	12.9%	7.2%	7.2%	7.5%	14.7%	13.8%	3.8%	9.5%	10.8%	7.6%	4.6%	5.8%	7.1%
Basic shares	162.7	156.6	150.6	144.2	141.5	139.3	138.6	140.9	136.9	135.2	134.1	133.0	134.8
Fully diluted shares	166.7	159.4	152.1	145.4	142.6	141.1	139.6	142.2	138.4	136.7	135.6	134.5	136.3

Source: Jefferies estimates, company data

Check Point (CHKP) DCF Base Case

Check Point Software (CHKP)
Discounted Cash Flow Analysis

	Year 1	Transition	Terminal
Current risk-free rate of return	3.50%		3.50%
Historical risk-free rate of return	5.20%	5.20%	5.20%
Beta	1.10		1.00
Equity Risk Premium	6.50%		6.50%
Market rate of return	11.70%	11.70%	11.70%
Cost of equity	10.65%		10.00%

Scenario 1: Base Case. CHKP continues to manage a dynamic market well and a shift to a greater portion of sales allocated to recurring revenue has a positive effect on future revenue and cash flow.

	HISTORICALS						FORECAST PERIOD				TRANSITIONARY PERIOD					TERMINAL	
	2013A	2014A	2015A	2016A	2017A	2018A	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Perpetuity
Period							0.50	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50	9.50	
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	
Beta	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.08	1.07	1.05	1.03	1.02	1.00	
Risk Premium	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	
Market rate of return	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	
Cost of equity	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.5%	10.4%	10.3%	10.2%	10.1%	10.0%	
WACC	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%	10.5%	10.4%	10.3%	10.2%	10.1%	10.0%	
FCF Growth Rate (incl. stock buyback related to dilution)		-3.3%	23.2%	-9.8%	27.2%	-13.8%	12.6%	18.4%	1.2%	6.7%	6.4%	6.1%	5.9%	5.6%	5.3%	5.0%	
Discount factor							1.05	1.16	1.29	1.43	1.57	1.73	1.89	2.07	2.27	2.47	
Free cash flow to the enterprise (incl. stock buyback related to dilution)	544	526	648	585	744	641	722	854	865	923	982	1,042	1,103	1,164	1,226	1,287	25,743
NPV of Free cash flow ($M)							686	734	671	647	625	604	582	561	541		10,410
Cumulative NPV of FCFE ($M)								734	1,405	2,053	2,678	3,282	3,864	4,426	4,966		15,376

Cumulative NPV of FCFE ($ M)	15,376
Shares outstanding (M)	141
NPV/Share of FCFE	$ 108.97
Net cash/ Share - 10% of revenue *	$ 26.18
Total NPV/Share	**$ 135.15**

Source: FactSet, Jefferies estimates

Datto (MSP) Non-GAAP Income Statement

Datto			2020E					2021E					2022E				
Non - GAAP Income Statement			Mar	Jun	Sep	Dec		Mar	Jun	Sep	Dec		Mar	Jun	Sep	Dec	
USD in Millions, except per share amounts	2018A	2019A	1Q20A	2Q20A	3Q20A	4Q20E	2020E	1Q21E	2Q21E	3Q21E	4Q21E	2021E	1Q22E	2Q22E	3Q22E	4Q22E	2022E
Subscription Revenue	**333.4**	**412.2**	**116.0**	**117.6**	**122.8**	**124.8**	**481.1**	**127.6**	**130.6**	**136.3**	**141.3**	**535.8**	**147.4**	**152.0**	**160.1**	**166.5**	**626.0**
qoq growth			*4.4%*	*1.4%*	*4.4%*	*1.7%*		*2.3%*	*2.3%*	*4.4%*	*3.6%*		*4.3%*	*3.1%*	*5.3%*	*4.0%*	
yoy growth		*23.6%*	*20.7%*	*17.8%*	*16.7%*	*12.4%*	*16.7%*	*10.0%*	*11.0%*	*11.1%*	*13.2%*	*11.4%*	*15.5%*	*16.4%*	*17.4%*	*17.9%*	*16.8%*
Device & Other Revenue	**36.7**	**44.4**	**8.7**	**6.9**	**7.9**	**9.2**	**32.7**	**7.0**	**6.9**	**8.9**	**8.8**	**31.6**	**7.8**	**8.1**	**9.4**	**9.7**	**35.0**
qoq growth			*(39.4%)*	*(20.8%)*	*15.3%*	*16.7%*		*(24.0%)*	*(1.4%)*	*28.1%*	*(1.1%)*		*(10.8%)*	*3.1%*	*17.2%*	*2.3%*	
yoy growth		*20.9%*	*3.8%*	*(27.3%)*	*(35.7%)*	*(35.4%)*	*(26.4%)*	*(19.0%)*	*0.8%*	*12.0%*	*(5.1%)*	*(3.4%)*	*11.3%*	*16.4%*	*6.6%*	*10.3%*	*10.8%*
Total Revenue	**387.4**	**458.8**	**124.7**	**124.5**	**130.7**	**134.0**	**513.8**	**134.7**	**137.5**	**145.2**	**150.1**	**567.4**	**155.2**	**160.1**	**169.5**	**176.2**	**661.0**
qoq growth			*(1.2%)*	*(0.2%)*	*5.0%*	*2.6%*		*0.5%*	*2.1%*	*5.6%*	*3.3%*		*3.5%*	*3.1%*	*5.9%*	*3.9%*	
yoy growth		*18.4%*	*18.2%*	*13.7%*	*11.0%*	*6.3%*	*12.0%*	*8.0%*	*10.5%*	*11.1%*	*12.0%*	*10.4%*	*15.3%*	*16.4%*	*16.7%*	*17.4%*	*16.5%*
Total Cost of Sales	**134.79**	**152.50**	**36.22**	**32.32**	**34.61**	**38.08**	**141.23**	**38.12**	**38.07**	**40.85**	**41.13**	**158.17**	**41.79**	**42.75**	**45.75**	**47.24**	**177.53**
Gross Profit	**252.6**	**306.3**	**88.4**	**92.1**	**96.1**	**96.0**	**372.6**	**96.5**	**99.4**	**104.4**	**108.9**	**409.2**	**113.5**	**117.3**	**123.8**	**128.9**	**483.5**
Gross Margin	*65.2%*	*66.8%*	*70.9%*	*74.0%*	*73.5%*	*71.6%*	*72.5%*	*71.7%*	*72.3%*	*71.9%*	*72.6%*	*72.1%*	*73.1%*	*73.3%*	*73.0%*	*73.2%*	*73.1%*
OPEX																	
Sales & Marketing	97.4	107.5	31.3	24.6	24.2	25.5	105.6	29.6	32.4	31.9	35.4	129.4	37.9	38.6	39.9	42.6	159.1
qoq growth			*2.4%*	*(21.5%)*	*(1.6%)*	*5.2%*		*16.3%*	*9.5%*	*(1.5%)*	*10.8%*		*7.0%*	*2.0%*	*3.4%*	*6.7%*	
yoy growth		*10.3%*	*21.6%*	*(7.9%)*	*(1.1%)*	*(16.7%)*	*(1.8%)*	*(5.4%)*	*32.0%*	*32.0%*	*39.0%*	*22.6%*	*27.8%*	*19.1%*	*25.1%*	*20.4%*	*22.9%*
% of Total Rev	25.1%	23.4%	25.1%	19.8%	18.5%	19.0%	20.5%	22.0%	23.6%	22.0%	23.6%	22.8%	24.4%	24.1%	23.6%	24.2%	24.1%
Research & Development	52.9	56.9	16.4	14.7	14.8	16.1	62.0	17.2	18.3	19.3	20.4	75.2	21.0	21.6	22.9	24.3	89.8
qoq growth			*2.2%*	*(10.2%)*	*0.1%*	*9.0%*		*7.2%*	*6.1%*	*5.6%*	*5.7%*		*2.7%*	*3.1%*	*5.9%*	*6.2%*	
yoy growth		*7.6%*	*33.6%*	*4.1%*	*2.5%*	*0.1%*	*8.9%*	*4.9%*	*24.0%*	*30.8%*	*26.9%*	*21.3%*	*21.6%*	*18.2%*	*18.5%*	*19.1%*	*19.3%*
% of Total Rev	13.7%	12.4%	13.2%	11.9%	11.3%	12.0%	12.1%	12.8%	13.3%	13.3%	13.6%	13.3%	13.5%	13.5%	13.5%	13.8%	13.6%
General & Administrative	64.0	77.6	22.0	20.4	18.1	22.8	83.3	23.6	23.8	27.6	27.8	102.7	28.3	29.1	30.5	30.0	117.9
qoq growth			*(9.1%)*	*(7.3%)*	*(11.5%)*	*26.2%*		*3.4%*	*0.9%*	*16.0%*	*0.6%*		*1.8%*	*3.1%*	*4.7%*	*(1.8%)*	
yoy growth		*21.3%*	*43.8%*	*7.6%*	*(5.3%)*	*(5.9%)*	*7.3%*	*7.1%*	*16.6%*	*52.7%*	*21.8%*	*23.3%*	*19.9%*	*22.5%*	*10.6%*	*7.9%*	*14.8%*
% of Total Rev	16.5%	16.9%	17.7%	16.4%	13.8%	17.0%	16.2%	17.5%	17.3%	19.0%	18.5%	18.1%	18.2%	18.2%	18.0%	17.0%	17.8%
Total Operating Expenses	**214.3**	**242.0**	**69.7**	**59.7**	**57.0**	**64.3**	**250.8**	**70.4**	**74.5**	**78.8**	**83.6**	**307.3**	**87.1**	**89.4**	**93.3**	**96.9**	**366.7**
% of Revenue	*55.3%*	*52.8%*	*55.9%*	*48.0%*	*43.6%*	*48.0%*	*48.8%*	*52.3%*	*54.2%*	*54.3%*	*55.7%*	*54.2%*	*56.1%*	*55.8%*	*55.1%*	*55.0%*	*55.5%*
Income from Operations - Non-GAAP	**38.3**	**64.2**	**18.7**	**32.4**	**39.0**	**31.6**	**121.8**	**26.1**	**24.9**	**25.5**	**25.4**	**101.9**	**26.4**	**27.9**	**30.4**	**32.0**	**116.8**
Operating Margin	*9.9%*	*14.0%*	*15.0%*	*26.0%*	*29.9%*	*23.6%*	*23.7%*	*19.4%*	*18.1%*	*17.6%*	*16.9%*	*18.0%*	*17.0%*	*17.4%*	*17.9%*	*18.2%*	*17.7%*
Interest Expense**	(55.4)	(43.4)	(9.0)	(7.5)	(7.1)	(2.8)	(26.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Loss on Extinguishment of Debt	-	(19.2)	-	-	-	(9.0)	(9.0)	-	-	-	-	-	-	-	-	-	-
Other Income (Expense), net	(0.8)	(0.3)	(1.3)	1.7	1.0	-	1.4	-	-	-	-	-	-	-	-	-	-
Pre Tax Income	**(17.9)**	**1.3**	**8.4**	**26.6**	**33.0**	**19.8**	**87.8**	**26.1**	**24.9**	**25.5**	**25.4**	**101.9**	**26.4**	**27.9**	**30.4**	**32.0**	**116.8**
Provision for Income Taxes	10.0	2.5	1.8	(5.6)	(8.2)	(5.0)	(17.0)	(6.5)	(6.2)	(6.4)	(6.3)	(25.5)	(6.6)	(7.0)	(7.6)	(8.0)	(29.2)
Effective Tax Rate	*(56%)*	*190%*	*22%*	*(21%)*	*(25%)*	*(25%)*	*(19%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*	*(25%)*
Net Income, Non-GAAP	**(7.9)**	**3.8**	**10.2**	**21.0**	**24.7**	**14.9**	**70.8**	**19.6**	**18.7**	**19.1**	**19.0**	**76.4**	**19.8**	**20.9**	**22.8**	**24.0**	**87.6**
EPS, Non-GAAP	**(0.06)**	**0.03**	**0.07**	**0.15**	**0.18**	**0.09**	**0.49**	**0.11**	**0.11**	**0.11**	**0.11**	**0.44**	**0.11**	**0.12**	**0.13**	**0.14**	**0.50**
Basic Shares	135.5	135.2	135.4	135.5	135.6	161.0	141.9	162.0	163.0	164.0	165.0	163.5	166.0	167.0	168.0	169.0	167.5
Diluted Shares	135.5	135.3	136.3	136.2	138.6	165.0	144.0	171.0	172.0	173.0	174.0	172.5	175.0	176.0	177.0	178.0	176.5

Source: Jefferies estimates, company data

Brent Thill, Equity Analyst, (415) 229-1559, bthill@jefferies.com

Jefferies

Datto (MSP) DCF Base Case

Datto
Discounted Cash Flow Analysis
$ in millions, except per share data

	Year 1	Transition	Terminal
Current risk-free rate of return	3.5%		3.5%
Historical risk-free rate of return	5.0%	5.0%	5.0%
Beta	1.10		1.00
Market rate of return	11.0%	11.0%	11.0%
Cost of equity	10.1%		9.5%
Growth rate	*As modeled*		5.0%

Last reported results as of:		9/30/2020
Cash and Cash Equivalents		735.3
Total Debt		581.2
Net Cash and Cash Equivalents		154.1
LTM Revenues		493
Shares Outstanding (m)		167.1
Net Cash/Share - 10% of Revenue	**$**	**0.63**

Scenario 2, Base Case: Company continues to gain traction with SMBs through its strong MSP Partnerships

	HISTORICALS		FORECAST PERIOD					TRANSITIONARY PERIOD					TERMINAL	
	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	Perpetuity
Period														
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.08	1.07	1.05	1.03	1.02	1.00	
Market return of equity	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%	0.11	11.0%	
Cost of equity	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.0%	9.9%	9.8%	9.7%	9.6%	9.5%	
FCF growth rate	NM	NM	NM	NM	NM	40.0%	34.0%	29.2%	24.3%	19.5%	14.7%	9.8%	5.0%	
Discount Factor	1.000	0.990	1.000	0.908	0.825	0.749	0.681	0.621	0.568	0.520	0.477	0.438		
Free cash flow to Enterprise ($mm)	16.6	16.5	93.9	70.9	90.4	126.5	169.6	219.0	272.3	325.4	373.1	409.8		
Diluted Shares Outstanding 4Q	135.3	135.3	165.0	174.0	178.0	176.6	179.3	181.5	183.3	184.7	185.6	186.1		
Share Growth %			22.0%	5.5%	2.3%	1.5%	1.5%	1.3%	1.0%	0.8%	0.5%	0.2%	0%	
Free cash flow to Enterprise per share			0.6	0.4	0.5	0.7	0.9	1.2	1.5	1.8	2.0	2.2	2.3	51.4
NPV of free cash flow per share			0.6	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0		22.5
Cumulative NPV of FCF per share			0.6	0.9	1.4	1.9	2.5	3.3	4.1	5.0	6.0	7.0		29.5

Cumulative NPV of FCF ($mm)		29.5
Net cash/share - 10% of revenue	$	0.63
Total NPV per share	**$**	**30.12**

Source: FactSet, Jefferies estimates

Asana (ASAN) Non-GAAP Income Statement

Asana	FY2019	FY2020			FY2021					FY2022			FY2023	FY2024
Income Statement - Non-GAAP	FY2019	FY2020	Q1	Q2	Q3	Q4	FY2021	Q1	Q2	Q3	Q4	FY2022	FY2023	FY2024
($ in million except per share data)			Apr-20A	Jul-20A	Oct-20A	Jan-21E		Apr-21E	Jul-21E	Oct-21E	Jan-22E			
Fiscal year ending Jan 31														
Income Statement														
Total Revenues	76.8	142.6	47.7	52.0	58.9	62.5	221.1	65.4	69.8	76.6	82.3	294.1	381.0	479.0
YoY Growth %		86%	71%	57%	55%	44%	55%	37%	34%	30%	32%	33%	30%	26%
QoQ Growth %			10%	9%	13%	6%		5%	7%	10%	7%			
Total Cost of Revenue	$13.8	$19.8	$6.2	$7.0	$7.2	$8.0	$28.4	$8.4	$9.0	$9.9	$10.6	$37.9	$45.2	$56.9
Gross Profit	63.0	122.8	41.5	45.1	51.7	54.4	192.7	56.9	60.8	66.8	71.7	256.3	335.7	422.2
Gross Margin %	82.0%	86.1%	87.1%	86.6%	87.7%	87.1%	87.1%	87.1%	87.1%	87.1%	87.1%	87.1%	88.1%	88.1%
Operating Expenses														
Sales & Marketing	$50.0	$95.7	$35.0	$37.3	$45.6	$48.7	$166.6	$52.3	$55.9	$61.3	$64.2	$233.7	$259.9	$260.6
q/q change			16.1%	6.6%	22.2%	6.9%		7.3%	6.8%	9.8%	4.7%			
y/y change		91.3%	90.1%	89.7%	66.0%	61.7%	74.2%	49.4%	49.8%	34.5%	31.7%	40.2%	11.2%	0.3%
% of total rev	65.1%	67.1%	73.3%	71.7%	77.4%	78.0%	75.3%	80.0%	80.0%	80.0%	78.0%	79.4%	68.2%	54.4%
Research & Development	$37.4	$64.8	$20.3	$23.3	$28.2	$29.4	$101.2	$29.4	$31.4	$33.7	$35.4	$129.9	$154.2	$177.0
q/q change			11.7%	14.8%	21.1%	4.1%		0.2%	6.8%	7.3%	4.9%			
y/y change		73.2%	60.5%	51.9%	51.3%	61.6%	56.1%	44.9%	34.9%	19.5%	20.5%	28.4%	18.6%	14.8%
% of total rev	48.7%	45.4%	42.6%	44.8%	47.9%	47.0%	45.8%	45.0%	45.0%	44.0%	43.0%	44.2%	40.5%	36.9%
General & Administrative	$19.0	$31.7	$10.2	$11.6	$15.1	$17.5	$54.4	$13.7	$14.7	$15.3	$15.6	$59.4	$66.5	$76.6
q/q change			7.7%	14.2%	30.4%	15.5%		-21.5%	6.8%	4.5%	2.0%			
y/y change		66.7%	52.6%	56.7%	85.1%	85.3%	71.7%	35.0%	26.3%	1.2%	-10.6%	9.1%	12.1%	15.2%
% of total rev	24.8%	22.2%	21.3%	22.3%	25.7%	28.0%	24.6%	21.0%	21.0%	20.0%	19.0%	20.2%	17.5%	16.0%
Total Operating Expenses	$106.4	$192.2	$65.5	$72.2	$88.9	$95.6	$322.2	$95.4	$102.0	$110.4	$115.2	$422.9	$480.6	$514.2
YoY Growth														
Operating Profit (Loss)	(43.5)	(69.3)	(23.9)	(27.2)	(37.3)	(41.2)	(129.5)	(38.5)	(41.1)	(43.6)	(43.5)	(166.7)	(144.9)	(92.1)
Operating Margin %	-56.6%	-48.6%	-50.1%	-52.2%	-63.3%	-65.9%	-58.6%	-58.9%	-58.9%	-56.9%	-52.9%	-56.7%	-38.0%	-19.2%
Other Income / (Expense)	$1.1	$1.4	$0.4	$1.0	($0.4)	$1.5	$2.4	($2.0)	($2.0)	($2.0)	($2.0)	($8.0)	($8.0)	($8.0)
Pretax Income (Loss)	(42.4)	(68.0)	(23.6)	(26.1)	(37.7)	(39.7)	(127.1)	(40.5)	(43.1)	(45.6)	(45.5)	(174.7)	(152.9)	(100.1)
Pretax Income Margin	-55.2%	-47.7%	-49.4%	-50.2%	-64.0%	-63.5%	-57.5%	-61.9%	-61.7%	-59.5%	-55.3%	-59.4%	-40.1%	-20.9%
Tax Provision	$0.0	$0.2	$0.1	$0.2	$0.6	$1.0	$1.9	$1.0	$1.0	$1.0	$1.0	$4.0	$4.0	$4.0
Non-GAAP Tax Rate	-0.1%	-0.4%	-0.5%	-0.6%	-1.6%	-2.5%	-1.5%	-2.5%	-2.3%	-2.2%	-2.2%	-2.3%	-2.6%	-4.0%
Net Income	(42.4)	(68.2)	(23.7)	(26.3)	(38.3)	(40.7)	(129.0)	(41.5)	(44.1)	(46.6)	(46.5)	(178.7)	(156.9)	(104.1)
Net Income Margin	-55.2%	-47.8%	-49.6%	-50.5%	-65.0%	-65.1%	-58.3%	-63.5%	-63.2%	-60.8%	-56.5%	-60.8%	-41.2%	-21.7%
Basic EPS, Non-GAAP	(0.65)	(0.97)	(0.31)	(0.34)	(0.34)	(0.26)	(1.22)	(0.25)	(0.26)	(0.27)	(0.27)	(1.06)	(0.88)	(0.56)
Diluted EPS, Non-GAAP	(0.65)	(0.97)	(0.31)	(0.34)	(0.34)	(0.26)	(1.22)	(0.25)	(0.26)	(0.27)	(0.27)	(1.06)	(0.88)	(0.56)
Basic Shares Outstanding	65.2	70.3	75.6	76.4	113.3	158.0	105.8	166.0	168.0	170.0	172.5	169.1	177.5	185.5
Diluted Shares Outstanding	173.5	179.9	186.1	186.9	212.3	213.0	199.6	213.0	215.0	217.0	219.5	216.1	224.5	232.5

Source: Jefferies estimates, company data

Asana (ASAN) DCF Base Case

Asana
Discounted Cash Flow Analysis
$ in millions, except per share data

	Year 1	Transition	Terminal
Current risk-free rate of return	3.5%		3.5%
Historical risk-free rate of return	5.0%	5.0%	5.0%
Beta	1.50		1.00
Market rate of return	11.5%	11.5%	11.5%
Cost of equity	13.3%		10.0%
Growth rate	*As modeled*		5.0%

Last reported results as of:		10/30/2020
Cash and Cash Equivalents		423.9
Total Debt		12.5
Net Cash and Cash Equivalents		411.4
LTM Revenues		202
Shares Outstanding (m)		212.3
Net Cash/Share - 10% of Revenue	**$**	**1.84**

Scenario 2, Base Case: Company continues to have robust but moderating growth with a net retention rate that stays above 115%

	HISTORICALS				FORECAST PERIOD						TRANSITIONARY PERIOD					TERMINAL	
	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	Perpetuity
Period																	
Current risk-free rate of return	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	
Historical risk-free rate of return	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	
Beta	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.42	1.33	1.25	1.17	1.08	1.00	
Market return of equity	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	11.5%	0.12	11.5%	
Cost of equity	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%	12.7%	12.2%	11.6%	11.1%	10.5%	10.0%	
FCF growth rate	NM	NM	NM	NM	NM	NM	NM	NM	NM	138.0%	115.8%	93.7%	71.5%	49.3%	27.2%	5.0%	
Discount Factor		1.000	1.000	1.000	0.883	0.780	0.688	0.608	0.537	0.474	0.433	0.399	0.372	0.350	0.332		
Free cash flow to Enterprise ($mm)			(34.7)	(48.7)	(139.2)	(74.3)	(44.3)	28.4	38.2	90.9	196.2	380.1	651.8	973.4	1237.8		
Diluted Shares Outstanding 4Q					213.0	219.5	227.5	235.5	226.1	234.3	240.2	245.0	248.7	251.1	252.4		
Share Growth %						3.1%	3.6%	3.5%	-4.0%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0%	
Free cash flow to Enterprise per share					(0.7)	(0.3)	(0.2)	0.1	0.2	0.4	0.8	1.6	2.6	3.9	4.9	5.1	103.0
NPV of free cash flow per share					(0.6)	(0.3)	(0.1)	0.1	0.1	0.2	0.4	0.6	1.0	1.4	1.6		34.2
Cumulative NPV of FCF per share					(0.6)	(0.8)	(1.0)	(0.9)	(0.8)	(0.8)	(0.4)	0.2	1.2	2.5	4.1		38.3

Cumulative NPV of FCF ($mm)		38.3
Net cash/share - 10% of revenue	$	1.84
Total NPV per share	**$**	**40.18**

Source: FactSet, Jefferies estimates

Important Disclosures

Analyst Certifications

I, Brent Thill, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Samad Samana, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Julian Serafini, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Paul Kratz, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, John Byun, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Joseph Gallo, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report..

I, Mason Marion, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Jordan Boretz, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Luv Sodha, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Annick Baumann, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Ryan Bressner, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Parthiv Varadarajan, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Boxong Yin, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Avirath Kumar, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

Important Disclosures

- **Other Important Disclosures**

- Jefferies does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

- Jefferies Equity Research refers to research reports produced by analysts employed by one of the following Jefferies Group LLC ("Jefferies") group companies:

- **United States:** Jefferies LLC which is an SEC registered broker-dealer and a member of FINRA (and distributed by Jefferies Research Services, LLC, an SEC registered Investment Adviser, to clients paying separately for such research).

- **United Kingdom:** Jefferies International Limited, which is authorized and regulated by the Financial Conduct Authority; registered in England and Wales No. 1978621; registered office: Vintners Place, 68 Upper Thames Street, London EC4V 3BJ; telephone +44 (0)20 7029 8000; facsimile +44 (0)20 7029 8010.

- **Hong Kong:** Jefferies Hong Kong Limited, which is licensed by the Securities and Futures Commission of Hong Kong with CE number ATS546; located at Suite 2201, 22nd Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

- **Singapore:** Jefferies Singapore Limited, which is licensed by the Monetary Authority of Singapore; located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950.

- **Japan:** Jefferies (Japan) Limited, Tokyo Branch, which is a securities company registered by the Financial Services Agency of Japan and is a member of the Japan Securities Dealers Association; located at Hibiya Marine Bldg, 3F, 1-5-1 Yuraku-cho, Chiyoda-ku, Tokyo 100-0006; telephone +813 52516100; facsimile +813 5251 6101.

Important Disclosures

- **India:** Jefferies India Private Limited (CIN - U74140MH2007PTC200509), which is licensed by the Securities and Exchange Board of India as a Merchant Banker (INM000011443), Research Analyst (INH000000701) and a Stock Broker with Bombay Stock Exchange Limited (INB011491033) and National Stock Exchange of India Limited (INB231491037) in the Capital Market Segment; located at 42/43, 2 North Avenue, Maker Maxity, Bandra-Kurla Complex, Bandra (East) Mumbai 400 051, India; Tel +91 22 4356 6000.

- **Australia:** Jefferies (Australia) Pty Limited (ACN 623 059 898), which holds an Australian Financial Services License (AFSL 504712) and is located at Level 54, Governor Phillip Tower, 1 Farrer Place, Sydney NSW 2000; telephone +61 2 9364 2800.

- This report was prepared by personnel who are associated with Jefferies (Jefferies International Limited, Jefferies Hong Kong Limited, Jefferies Singapore Limited, Jefferies (Japan) Limited, Tokyo Branch, Jefferies India Private Limited, Jefferies (Australia) Pty Ltd; or by personnel who are associated with both Jefferies LLC and Jefferies Research Services LLC ("JRS"). Jefferies LLC is a US registered broker-dealer and is affiliated with JRS, which is a US registered investment adviser. JRS does not create tailored or personalized research and all research provided by JRS is impersonal. If you are paying separately for this research, it is being provided to you by JRS. Otherwise, it is being provided by Jefferies LLC. Jefferies LLC, JRS, and their affiliates are collectively referred to below as "Jefferies". Jefferies may seek to do business with companies covered in this research report. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only one of many factors in making their investment decisions. Specific conflict of interest and other disclosures that are required by FINRA and other rules are set forth in this disclosure section.

Disclaimer

If you are receiving this report from a non-US Jefferies entity, please note the following: Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, as amended, this material is distributed in the United States by Jefferies LLC, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6 under the US Securities Exchange Act of 1934, as amended. Transactions by or on behalf of any US person may only be effected through Jefferies LLC. In the United Kingdom and European Economic Area this report is issued and/or approved for distribution by Jefferies International Limited ("JIL") and is intended for use only by persons who have, or have been assessed as having, suitable professional experience and expertise, or by persons to whom it can be otherwise lawfully distributed.

JIL allows its analysts to undertake private consultancy work. JIL's conflicts management policy sets out the arrangements JIL employs to manage any potential conflicts of interest that may arise as a result of such consultancy work. Jefferies LLC, JIL and their affiliates, may make a market or provide liquidity in the financial instruments referred to in this report; and where they do make a market, such activity is disclosed specifically in this report under "company specific disclosures".

For Canadian investors, this material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a "Designated Institution" as defined by the Securities Act (Ontario). In Singapore, Jefferies Singapore Limited ("JSL") is regulated by the Monetary Authority of Singapore. For investors in the Republic of Singapore, this material is provided by JSL pursuant to Regulation 32C of the Financial Advisers Regulations. The material contained in this document is intended solely for accredited, expert or institutional investors, as defined under the Securities and Futures Act (Cap. 289 of Singapore). If there are any matters arising from, or in connection with this material, please contact JSL, located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950. In Japan, this material is issued and distributed by Jefferies (Japan) Limited to institutional investors only. In Hong Kong, this report is issued and approved by Jefferies Hong Kong Limited and is intended for use only by professional investors as defined in the Hong Kong Securities and Futures Ordinance and its subsidiary legislation. In the Republic of China (Taiwan), this report should not be distributed. The research in relation to this report is conducted outside the People's Republic of China ("PRC"). This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. In India, this report is made available by Jefferies India Private Limited. In Australia, this report may contain general advice. Where this report refers to a particular financial product, you should obtain a copy of the relevant product disclosure statement or offer document before making any decision in relation to the product. Recipients of this document in any other jurisdictions should inform themselves about and observe any applicable legal requirements in relation to the receipt of this document.

This report is not an offer or solicitation of an offer to buy or sell any security or derivative instrument, or to make any investment. Any opinion or estimate constitutes the preparer's best judgment as of the date of preparation, and is subject to change without notice. Jefferies assumes no obligation to maintain or update this report based on subsequent information and events. Jefferies, and their respective officers, directors, and employees, may have long or short positions in, or may buy or sell any of the securities, derivative instruments or other investments mentioned or described herein, either as agent or as principal for their own account. This material is provided solely for informational purposes and is not tailored to any recipient, and is not based on, and does not take into account, the particular investment objectives, portfolio holdings, strategy, financial situation, or needs of any recipient. As such, any advice or recommendation in this report may not be suitable for a particular recipient. Jefferies assumes recipients of this report are capable of evaluating the information contained herein and of exercising independent judgment. A recipient of this report should not make any investment decision without first considering whether any advice or recommendation in this report is suitable for the recipient based on the recipient's particular circumstances and, if appropriate or otherwise needed, seeking professional advice, including tax advice. Jefferies does not perform any suitability or other analysis to check whether an investment decision made by the recipient based on this report is consistent with a recipient's investment objectives, portfolio holdings, strategy, financial situation, or needs

By providing this report, neither JRS nor any other Jefferies entity accepts any authority, discretion, or control over the management of the recipient's assets. Any action taken by the recipient of this report, based on the information in the report, is at the recipient's sole judgment and risk. The recipient must perform his or her own independent review of any prospective investment. If the recipient uses the services of Jefferies LLC (or other affiliated broker-dealers), in connection with a purchase or sale of a security that is a subject of these materials, such broker-dealer may act as principal for its own accounts or as agent for another person. Only JRS is registered with the SEC as an investment adviser; and therefore neither Jefferies LLC nor any other Jefferies affiliate has any fiduciary duty in connection with distribution of these reports.

Disclaimer

The price and value of the investments referred to herein and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

This report may contain forward looking statements that may be affected by inaccurate assumptions or by known or unknown risks, uncertainties, and other important factors. As a result, the actual results, events, performance or achievements of the financial product may be materially different from those expressed or implied in such statements.

This report has been prepared independently of any issuer of securities mentioned herein and not as agent of any issuer of securities. No Equity Research personnel have authority whatsoever to make any representations or warranty on behalf of the issuer(s). Any comments or statements made herein are those of the Jefferies entity producing this report and may differ from the views of other Jefferies entities.

This report may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Jefferies does not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and is not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third-party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Neither Jefferies nor any third-party content provider shall be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Jefferies research reports are disseminated and available electronically, and, in some cases, also in printed form. Electronic research is simultaneously made available to all clients. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of Jefferies. Neither Jefferies nor any of its respective directors, officers or employees, is responsible for guaranteeing the financial success of any investment, or accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents. Nothing herein shall be construed to waive any liability Jefferies has under applicable U.S. federal or state securities laws.

For Important Disclosure information relating to JRS, please see https://adviserinfo.sec.gov/IAPD/Content/Common/crd_iapd_Brochure.aspx?BRCHR_VRSN_ID=483878 and https://adviserinfo.sec.gov/Firm/292142 or visit our website at https://javatar.bluematrix.com/sellside/Disclosures.action, or www.jefferies.com, or call 1.888.JEFFERIES.

2U, INC. (TWOU)

RATING	PRICE	MARKET CAP
BUY	$44.06^	$3.0B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$55.00 (FROM $50.00)	$66.00	$25.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	574.7	762.5	895.6	963.2
Previous				
EBITDA (MM)	(23.9)	11.1	32.1	34.4
Previous				
EPS				
Q1	(0.37)	(0.94)A	(0.75)	-
Previous				
Q2	(0.46)	(1.03)A	(0.73)	-
Previous				
Q3	(2.23)	(0.77)A	(0.69)	-
Previous				
Q4	(0.70)	(0.55)	(0.40)	-
Previous				
FY Dec	(3.83)	(3.16)	(2.57)	(2.34)
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	4.9x	3.7x	3.1x	2.9x

The Long View

Scenarios

Base Case

- Top-line growth stabilizes in high-teens due to moderate growth driven by undergrad degree programs and COVID-related demand tailwinds.
- Operational improvements and continued merger integration result in low single-digits adj. EBITDA in FY21.
- Cash flow initiatives result in positive unlevered FCF in FY21.
- $55 PT, 4.0x FY21E Sales

Upside Scenario

- Top-line growth stabilizes near low-20% due to greater-than-expected success of undergrad degree programs and higher demand uplift from COVID-related tailwinds.
- Operational improvements and merger integration flow through faster than expected, resulting in high single digits adj. EBITDA in FY20.
- Cash flow initiatives are highly successful, resulting in positive unlevered FCF in early FY21.
- $66 PT, 4.8x FY21E Sales

Downside Scenario

- Top-line growth slows significantly to low teens due to inability to gain a foothold in the undergrad market or capitalize on COVID-related demand uplift.
- Operational improvements and merger integration are slow and fail to outweigh new program launches in '20 and '21, resulting in the inability to sustain positive EBITDA in FY21.
- Cash flow initiatives are dwarfed by cash burn related to new program launches, resulting in negative unlevered FCF until FY23.
- $25 PT, 1.7x FY21E Sales

Investment Thesis / Where We Differ

- We like that 2U has demonstrated strong growth and is poised to be a primary beneficiary of the COVID-accelerated digital transformation of higher education.
- However, with a lack of consistent profitability and a services-led business model, we see steady-state margins as lower than a traditional software company.
- We believe that sustained top-line growth and bottom-line inflection are necessary for shares to re-rate.

Catalysts

- Winter semester being conducted primarily through remote instruction at the majority of US universities
- Continued digitization due to widespread adoption of the hybrid education model that enables both in-person and digital learning
- A potential recessionary environment would increase demand for degree programs and skills-based education.

ADOBE INC. (ADBE)

RATING	PRICE	MARKET CAP
BUY	$485.10^	$235.0B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$600.00	$675.00	$375.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	11,171.3	12,868.0	15,150.6	17,401.0
Previous				
Consensus EPS	7.87	10.10	↑ 11.28	↑ 13.24
Previous			11.20	13.10
EPS				
Q1	1.71	2.27	2.78	-
Previous				
Q2	1.83	2.45	2.68	-
Previous				
Q3	2.05	2.57	2.76	-
Previous				
Q4	2.29	2.81	2.97	-
Previous				
FY Nov	7.87	10.10	11.20	13.14
Previous				

Valuation				
	2019A	2020E	2021E	2022E
P/Rev	21.0x	18.3x	15.5x	13.5x
EV/Rev	20.9x	18.1x	15.4x	13.4x
FY P/E	61.6x	48.0x	43.3x	36.9x

The Long View

Scenarios

Base Case

- Digital Media Group: FY20-23 rev CAGR of 17% as opportunities exist to 1) attract new creative users (both pros & hobbyists), 2) migrate legacy users to Cloud subs, and 3) further monetize the user base thru up-sell/x-sell
- Digital Experience Group: ADBE maintains its lead in this fast-moving space that is most exposed to big internet trends; 14% 3-yr rev CAGR (FY20-23)
- EPS in 2 yrs: $13.14 (EBITDA $8.3Bn); Target Multiple: 46x (35x EBITDA); Price Target $600

Upside Scenario

- Digital Media: 3-year rev CAGR 21% as 1) new user attraction outperforms (incl. int'l adoption and anti-piracy efforts), and 2) user monetization accelerates
- Digital Experience: 3-yr CAGR 17% as ADBE's role in powering secular internet trends is significantly raised
- E-commerce becomes a 3rd major growth driver following Magento acquisition
- Marketo and Workfront help accelerate Digital Experience growth
- EPS in 2 yrs: $14.76; Target Multiple: 46x; Price Target: $675

Downside Scenario

- Digital Media: 3-year rev CAGR 12% as 1) new user addition slows (if market is more saturated than previously thought), and 2) user monetization struggles
- Digital Experience: 3-yr CAGR 10% as competition catches up (e.g., CRM, ORCL). ADBE's differentiation in content creation turns out to be less compelling to buyers
- Magento, Marketo, and Workfront acquisition integrations run into challenges
- EPS in 2 yrs: $11.15; Target Multiple: 34x; Price Target: $375

Investment Thesis / Where We Differ

- Leading provider of software solutions for creative professionals and marketing professionals.
- Features the best of both internet and software sectors – highly predictable and profitable revenue streams, vast open-ended TAM, and exposure to broad tech trends.
- Levered to major internet themes, incl. the digitization of content and entire off-line businesses, the shift to mobile platforms, and the consumption of video across new channels.

Catalysts

- Quarterly earnings
- Adobe Summit and MAX user conferences

ANAPLAN (PLAN)

RATING	PRICE	MARKET CAP
BUY	$71.46^	$10.0B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$85.00 (FROM $70.00)	$114.00	$47.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	-	348.0	444.2	550.0
Previous				
EPS Non-GAAP				
Q1	-	(0.16)	(0.10)A	(0.10)
Previous				
Q2	-	(0.12)	(0.04)A	(0.09)
Previous				
Q3	-	(0.08)	(0.05)A	(0.04)
Previous				
Q4	-	(0.07)	(0.10)	(0.08)
Previous				
FY Jan	-	(0.44)	(0.30)	(0.31)
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev		28.0x	22.0x	17.7x
P/Rev		28.9x	22.6x	18.3x
FY P/EPS Non-GAAP		NM	NM	NM

The Long View

Scenarios

Base Case

- Subscription revenue CAGR of 32% from F19-F24E, driven by a reacceleration in growth once GTM issues are fully resolved.
- Continued margin leverage in the business getting to Non-GAAP Operating margin profitability by F24E.
- Continued market share gains from legacy incumbents in line with the current pace of 460 bps. from 2015-2019.
- Positive free cash flow by F24E driven by operating leverage.
- DCF-based price target of $85 implies 17x 2022E (next fiscal year) revenue.

Upside Scenario

- Subscription revenue CAGR greater than 32% from F19-F24E, driven by higher customer adoption.
- Continued margin leverage in the business getting to Non-GAAP Operating margin profitability before F24E.
- Continued market share gains from legacy incumbents higher than the current pace of 460 bps. from 2015-2019.
- Positive free cash flow before F24E driven by higher than expected operating leverage.
- DCF-based price target of $114 implies 22x 2022E (next fiscal year) revenue.

Downside Scenario

- Subscription revenue CAGR less than 32% from F19-F24E, driven by continued GTM issues.
- Lower margin leverage in the business due to investments in S&M; getting to Non-GAAP Operating margin profitability after F24E.
- Continued market share gains from legacy incumbents, but slower than the current pace of 460 bps. from 2015-2019.
- Positive free cash flow after F24E driven by less than expected operating leverage.
- DCF-based price target of $47 implies 9x 2022E (next fiscal year) revenue.

Investment Thesis / Where We Differ

- Despite the near term impact to billings and revenue growth from COVID-19 and go-to market execution issues, we believe that the product is strong and Anaplan will continue to take share from legacy vendors within the Enterprise Resource Management market. We have already seen some progress in bringing stability to go to market function. We are modeling fiscal 2022 subscription revenue growth of 27% versus consensus at 26% growth and fiscal 2023 subscription revenue growth of 30% versus consensus at 30% growth.

Catalysts

- PLAN will report F4Q21 results in late February.

ASANA, INC. (ASAN)

RATING	PRICE	MARKET CAP
BUY	**$31.58^**	**$6.7B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$40.00 (FROM $35.00)	**$55.00**	**$23.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	76.8	142.6	221.1	294.1
Previous				
EPS Non-GAAP				
Q1	-	(0.20)	(0.31)A	(0.25)
Previous				
Q2	-	(0.20)	(0.34)A	(0.26)
Previous				
Q3	-	(0.30)	(0.34)A	(0.27)
Previous				
Q4	-	(0.27)	(0.26)	(0.27)
Previous				
FY Jan	(0.65)	(0.97)	(1.22)	(1.06)
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	81.9x	44.1x	28.5x	21.4x
P/Rev	87.3x	47.0x	30.3x	22.8x
FY P/EPS Non-GAAP	NM	NM	NM	NM

The Long View

Scenarios

Base Case

- Revenue CAGR of 30%+ from F20-F24E, driven by new logo/ASP growth.
- Asana's differentiated solution and early mover advantage enable it to reach meaningful scale and profitability.
- Continued successful execution of the company's land and expand strategy leads to continued growth in net revenue retention and operating leverage.
- Positive free cash flow by FY25
- DCF-based price target of $40 implies 30x EV/NTM Revenue.

Upside Scenario

- Revenue growth stays over 40% in the near term, reflecting continued robust new logo/net expansion growth.
- Successful expansion with direct salesforce results in outsized growth for years leading to an improvement in operating leverage.
- Positive free cash flow prior to our expected F25 time frame.
- DCF-based price target of $55 implies 41x EV/NTM Revenue.

Downside Scenario

- Revenue growth decelerates to below 30% or less in the near-term, reflecting rapid deceleration.
- Increased competition from large established productivity suite vendors, resulting in increased near-term investments, delaying the path to profitability.
- Increased customer churn hurts both revenue and profits.
- Impacts from COVID continue to impact smaller customers and net expansion rates
- DCF-based price target of $23 implies 16x EV/NTM Revenue.

Investment Thesis / Where We Differ

- Despite being founded in 2008, the market is only beginning to materialize, as evidenced by Asana's growth rates and customer count. The company is rapidly expanding its R&D and direct sales teams despite not being profitable, which we believe is the correct call at this point in time given the market opportunity in front of it.

Catalysts

- Company recognizes sales efficiencies quicker than expected via the indirect sales motion
- Successful expansion with direct salesforce results in outsized growth for years
- Acceleration in new customer growth and improvement in net retention rates
- Earnings
- Businesses' recovery from COVID leading to more spend on productivity tools

ATLASSIAN CORP. (TEAM)

RATING	PRICE	MARKET CAP
HOLD	**$235.48^**	**$59.7B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$235.00 (FROM $200.00)	**$309.00**	**$152.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	1,210.1	1,614.2	↑ 1,880.5	↑ 2,191.6
Previous			1,843.5	2,035.9
EPS				
Q1	0.20	0.28	0.30A	↑ 0.35
Previous				*0.33*
Q2	0.25	0.37	0.31	↑ 0.40
Previous				*0.38*
Q3	0.21	0.25	↑ 0.25	↑ 0.30
Previous			*0.24*	*0.28*
Q4	0.20	0.25	↑ 0.26	↑ 0.32
Previous			*0.25*	*0.29*
FY Jun	0.86	1.15	↑ 1.12	↑ 1.37
Previous			*1.10*	*1.28*

Valuation				
	2019A	2020E	2021E	2022E
P/Rev	49.3x	37.0x	31.7x	27.2x
EV/Rev	48.3x	36.2x	31.1x	26.7x
FY P/E	NM	NM	NM	NM

The Long View

Scenarios

Base Case

- Revenue growth of 19% from FY19 to FY22; recurring revenue growing 23%
- Maintain low cost model with mid-80% gross margins and operating margins ramping to low-20s
- R&D investment of 35-40% of revenue continues driving innovation and model leverage
- NTM Rev: $1.937 billion; Target EV/NTM Rev Multiple: 30.1x; Price Target $235

Upside Scenario

- Growth accelerates beyond our 19% estimate for FY19-FY22 (organically and inorganically)
- Accelerated product introductions further accelerates revenue
- Leverage from viral sales and marketing approach continues to work unabated
- Low-cost model enables steady operating margins above 30% in near-mid term
- Price Target: $309; Implied Multiple: 39.8x

Downside Scenario

- Increased competition from legacy players creates growth and margin pressure, which is amplified by a need for a shift to a direct sales force model
- R&D investment, more akin to a fixed cost for TEAM, produces less innovation resulting in product release issues
- Price Target: $152; Implied Multiple: 19.2x

Investment Thesis / Where We Differ

- We believe that TEAM's web based marketing, low cost/low touch sales model, low average transaction sizes, viral product adoption, focus on R&D investment, and highly profitable and outsized maintenance revenue pose a disruptive presence in the markets it serves and will continue to drive meaningful growth while ramping operating margins and FCF generation.

Catalysts

- Atlassian will report its fiscal second quarter 2021 earnings in late January 2021.

CHECK POINT SOFTWARE TECHNOLOGIES LTD. (CHKP)

RATING	PRICE	MARKET CAP
HOLD	**$131.96^**	**$18.6B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$135.00 (FROM $130.00)	**$146.00**	**$104.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	1,994.7	2,053.1	2,087.6	-
Previous				
EPS				
Q1	1.32	1.42A	1.57	-
Previous				
Q2	1.38	1.58A	1.70	-
Previous				
Q3	1.44	1.64A	1.71	-
Previous				
Q4	2.02	2.10	2.22	-
Previous				
FY Dec	6.13	6.71	7.19	-
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	7.4x	7.2x	7.1x	
P/Rev	9.3x	9.1x	8.9x	
FY P/E	21.5x	19.7x	18.4x	

The Long View

Scenarios

Base Case

- High-level assumptions relatively in line with consensus estimates
- Revenue growth in low-single digits in 2021, with non-GAAP op margins in the 47-51% range
- Product refresh cycle has modest impact to new product sales, leading to low to mid single digit product growth in 2020 following many quarters of decline
- Price Target: $135; Target Multiple: 14x EV/2021E FCF

Upside Scenario

- Corporate security spending re-accelerates meaningfully and CHKP takes share from competitors thanks to its integrated product offering
- Product cycle bottoms and re-accelerate more meaningfully than anticipated
- New products such as CloudGuard and Infinity Total Protection gain meaningful traction and contribute to results
- Non-GAAP operating margins remain stable
- Price Target: $146 Multiple: 15x EV/2021E FCF

Downside Scenario

- Large competitors re-focus their security businesses to take share from Check Point; new innovators take share at a rapid pace
- Network security spending growth decelerates
- New products offerings fail to gain traction and/or product cycle does not re-accelerate
- Margins fall from industry-leading levels
- Price Target: $104; Multiple: 10x EV/2021E FCF

Investment Thesis / Where We Differ

- Poised to benefit from a platform approach, which we believe is the direction of the market today.
- Strong management track record. Management has demonstrated an ability to sustain innovation and steer the company in a market which has seen many changes over the years.
- Moderating security market growth will affect most security vendors, including Check Point. Check Point's bias towards enterprises and the datacenter/cloud perimeter should partially offset potential headwinds.

Catalysts

- Product refresh cycle in 2019 drives positive inflection in product/license growth and total revenue acceleration in 2020
- Continued product innovation and growth of newer solutions, such as CloudGuard and Infinity Total Protection
- Substantial cash position leaves optionality for M&A or return to shareholders
- Potential trend of vendor consolidation from security buyers

CLOUDFLARE, INC. (NET)

RATING	PRICE	MARKET CAP
BUY	**$79.15^**	**$26.7B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$95.00 (FROM $80.00)	**$116.00**	**$42.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	287.0	423.1	579.1	-
Previous				
Operating Profit (MM)	(71.2)	(37.9)	(25.3)	-
Previous				
EPS				
Q1	(0.20)	(0.04)A	(0.03)	-
Previous				
Q2	(0.20)	(0.03)A	(0.03)	-
Previous				
Q3	(0.16)	(0.02)A	(0.02)	-
Previous				
Q4	(0.06)	(0.04)	(0.02)	-
Previous				
FY Dec	(0.48)	(0.13)	(0.10)	-
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	90.6x	61.5x	44.9x	
P/Rev	93.0x	63.1x	46.1x	
FY P/E	NM	NM	NM	

The Long View

Scenarios

Base Case

- Revenue CAGR of 32% from 2019-2022
- Continued strong user growth, expansion within existing customers, and increased enterprise traction
- Non-GAAP gross margins steady at 76-77%
- Op. cash flow positive in 2021 and non-GAAP op. margin positive in 2022 per company targets
- $95 price target based on DCF and implies 58x EV/NTM revenue

Upside Scenario

- Material revenue contribution from Workers over the next few years and/or significant acceleration in large enterprise adoption
- Gross margin expansion due to even greater network scale or product innovation
- Either reaching positive op. cash flow sooner-than-expected due to financial outperformance, or unchanged profit targets but clearly signaled investments for greater scale
- $116 price target based on DCF and implies 72x EV/NTM revenue

Downside Scenario

- Revenue deceleration to below 30% in the near-term due to increased competition or lack of enterprise traction
- Public cloud vendors make concerted push into areas that compete with Cloudflare
- Gross margin compression due to pricing pressures
- Reaching positive op. cash flow later-than-expected or needing additional funding to meet investment needs
- $42 price target based on DCF and implies 25x EV/NTM revenue

Investment Thesis / Where We Differ

We believe Cloudflare has an opportunity to transform multiple IT security and infrastructure markets over time beyond its core Internet performance and security use cases, by consolidating more functionalities through IT network layer. However, Cloudflare's functionalities compete with solutions offered by mature technology and software vendors, some of which may have their eyes on the same prize. We believe that our broad research coverage of both infrastructure and security software, as well as Internet players (e.g. Amazon and Google) can give us insights into where Cloudflare fits within the competitive landscape over time.

Catalysts

- Launch of new products that expand TAM in ancillary IT security or network infrastructure markets, or expansion into entirely new markets
- Changes in product pricing plans
- Meaningful increase or decrease in net revenue retention rates
- Increased disclosures on customers using multiple products or large customer mix % of revenue

CROWDSTRIKE HOLDINGS, INC. (CRWD)

RATING	PRICE	MARKET CAP
BUY	$223.73^	$52.5B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$275.00 (FROM $160.00)	$325.00	$112.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	249.8	481.4	857.6	1,279.8
Previous				
Adj EPS				
Q1	-	(0.47)	0.02A	0.09
Previous				
Q2	-	(0.18)	0.04A	0.11
Previous				
Q3	-	(0.07)	0.08A	0.12
Previous				
Q4	-	(0.02)	0.08	0.13
Previous				
FY Jan	-	(0.42)	0.21	0.45
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	NM	NM	60.0x	40.2x
P/Rev	NM	NM	61.2x	41.0x
FY P/Adj EPS		NM	NM	NM

The Long View

Scenarios

Base Case

- Emerges as one of the leaders in the market for endpoint security but also continues to add modules, which grows the addressable market and maintains hypergrowth
- Customers continue to purchase multiple solutions, and the net retention rate stays consistently above 120%
- CrowdStrike becomes sustainably free cash flow positive with inflection in calendar 2021
- $275 PT is DCF-derived and implies 54x EV/NTM revenue

Upside Scenario

- Emerges as the industry standard for endpoint security but also continues to add modules which grows the addressable market and maintains hypergrowth
- Successful expansion internationally results in outsized growth for years leading to improvement in operating leverage
- Customers purchase more solutions than expected and the net retention rate stays consistently above 130%
- $325 PT is DCF derived and implies 64x EV/NTM revenue

Downside Scenario

- Revenue growth decelerates faster than expected due to increased competition in the endpoint market
- The company has to continue paying commissions on renewals which will decrease future potential operating leverage
- Need to make continued investments to remain relevant in the marketplace, further delaying cash flow consistency
- $112 PT is DCF derived and implies 22x EV/NTM revenue

Investment Thesis / Where We Differ

- Endpoint is the area of software (not just security) where we hear more about competitive displacements than any other. CrowdStrike provides state-of-the-art, next- generation endpoint technology with a foundation in its unique graph database and lightweight agent, which leverages artificial intelligence and machine learning. Integrated technologies beyond endpoint will likely make CrowdStrike stickier than traditional endpoint vendors.

Catalysts

- Successful expansion internationally results in outsized growth for years leading to improvement in operating leverage
- Acceleration of new customer growth and maintaining strong gross retention rates
- Continued successful execution of company's land and expand strategy leads to continued growth in net revenue retention (120%+) and operating leverage.

DATADOG (DDOG)

RATING	PRICE	MARKET CAP
BUY	$99.94^	$32.7B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$125.00 (FROM $105.00)	$150.00	$80.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	362.8	589.0	822.2	1,078.8
Previous				
EPS				
Q1	(0.09)	0.06A	0.10	0.15
Previous			*0.09*	
Q2	(0.06)	0.05A	0.09	0.14
Previous				
Q3	0.01	0.05A	0.09	0.13
Previous			*0.08*	
Q4	0.03	0.02	0.05	0.08
Previous				
FY Dec	(0.01)	0.18	0.32	0.48
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	87.7x	54.0x	38.7x	29.5x
P/Rev	90.2x	55.5x	39.8x	30.3x
FY P/E	NM	NM	NM	NM

The Long View

Scenarios

Base Case

- Revenue growth of 62% in CY20 and 40% in CY21.
- Datadog continues to see traction in core infrastructure while cross-sell of APM, log management continue.
- Enterprise sales force continues to ramp.
- Positive and growing free cash flow in 2020 and 2021.
- DCF-based PT of $125 implies 50x our CY21 revs

Upside Scenario

- Revenue growth >62% in CY20 and >40% in CY21.
- Net retention rates in the 140%+ range as customers up-sell core infrastructure monitoring deployments and attach APM, log management in a more meaningful way.
- International expansion is faster than expected.
- Rapid free cash flow growth in 2020 and 2021 as top-line upside falls to the bottom-line.
- DCF-based PT of $150 implies 61x our CY21 revs

Downside Scenario

- Revenue growth <62% in CY20 and <40% in CY21.
- Net retention rates decline from the 140% range as the value proposition of a unified platform for infrastructure monitoring, APM and log management does not resonate with customers.
- Enterprise sales force experiences execution issues as deal sizes become larger and self-service nature of the product has limited benefit in this segment.
- Free cash flow remains positive but growth rates taper as investments weigh on profitability.
- DCF-based PT of $80 implies 32x our CY21 revs

Investment Thesis / Where We Differ

We believe Datadog can sustain robust 30%+ growth rates in the years to come as the company sees share gains in core infrastructure monitoring. In addition, the convergence of monitoring workloads makes a lot of sense to us; we expect incremental traction from APM, log management and potentially user monitoring over time as the cross-sell motion develops within the installed base (particularly among large enterprise customers). The company has proven to be a highly capital efficient grower, and we see a path to profitability in the coming years. That said, we think current valuation fairly discounts upside to our estimates in 2019 and 2020, with limited room for multiple expansion.

Catalysts

- The company is likely to report 4Q20 results in February.
- Potential for M&A across the monitoring space given the relatively crowded competitive environment.

DATTO, INC. (MSP)

RATING	PRICE	MARKET CAP
HOLD	**$26.51^**	**$4.4B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$30.00 (FROM $32.00)	**$41.00**	**$19.00**

^Prior trading day's closing price unless otherwise noted.

		Estimates		
USD	**2019A**	**2020E**	**2021E**	**2022E**
Rev. (MM)	458.8	513.8	567.4	661.0
Previous				
EBITDA (MM)	84.6	148.2	132.8	154.9
Previous				
EPS Non-GAAP				
Q1	0.05	0.07A	0.11	0.11
Previous				
Q2	(0.10)	0.15A	0.11	0.12
Previous				
Q3	0.07	0.18A	0.11	0.13
Previous				
Q4	0.00	0.09	0.11	0.14
Previous				
FY Dec	0.03	0.49	0.44	0.50
Previous				

		Valuation		
	2019A	**2020E**	**2021E**	**2022E**
EV/Rev	9.3x	8.3x	7.5x	6.5x
EV/EBITDA	50.5x	28.9x	32.2x	27.6x
FY P/EPS Non-GAAP	NM	54.1x	60.3x	53.0x

The Long View

Scenarios

Base Case

- Continued growth via new MSPs and expanding with existing customers driving revenue acceleration
- Sustained operating leverage from the Datto model with low touch sales; non-GAAP EBITDA margins gradually improve over time following investment in 2021
- DCF-based PT of $30 implies 8.6x our 2021 Revenue est.

Upside Scenario

- Above expected growth of new larger MSPs further drives ARR per MSP and leads to 20%+ rev growth
- Sustained operating leverage from the Datto model despite the investment leads to non-GAAP EBITDA margins above 30% in the near term
- DCF-based PT of $41 implies 11.8x our 2021 Revenue est.

Downside Scenario

- Increased competition from other vendors and continued pressure on SMBs from COVID leads to below 10% rev growth
- To get more traction in the MSP markets, company needs to increase sales and marketing spend; reduces operating leverage
- DCF-based PT of $19 implies 5.3x our 2021 Revenue est.

Investment Thesis / Where We Differ

- We believe that Datto's unique MSP only approach is a disruptive model in what has largely been an underserved SMB IT market and is supported by its strong underlying technology that should help it drive a re-acceleration of revenue growth. That said, we think shares are fairly valued at this time at 7.5x our 2021 rev vs peer group at 10.2x.

Catalysts

- Earnings
- Adding new products driving higher ARR per MSP
- Addition of new MSPs, especially larger high growth vendors
- Further penetration of the SMB market for IT spend

DYNATRACE, INC. (DT)

RATING	PRICE	MARKET CAP
HOLD	**$42.27^**	**$11.8B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$45.00 (FROM $39.00)	**$60.00**	**$30.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	431.0	545.8	672.9	824.3
Previous				
EPS				
Q1	0.06	0.04	0.13A	0.17
Previous				
Q2	0.03	0.06	0.18A	0.18
Previous				
Q3	0.01	0.10	0.13	0.16
Previous				
Q4	0.03	0.11	0.12	0.15
Previous				
FY Mar	0.12	0.31	0.56	0.67
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	28.1x	22.2x	18.0x	14.7x
P/Rev	27.5x	21.7x	17.6x	14.4x
FY P/E	NM	NM	75.5x	63.1x

The Long View

Scenarios

Base Case

- Consistent net new customer adds to Dynatrace Platform
- Ongoing progress in converting the remaining Classic installed base to Dynatrace Platform
- Incremental margin/cash flow leverage on accelerating top-line growth on installed base conversion activity
- DCF-based price target of $45 implies 52x EV to our FY22 uFCF estimate.

Upside Scenario

- Acceleration in net new customer additions to Dynatrace Platform on share gains and better traction beyond APM
- Higher-than-expected expansion ARR from conversion of Classic customers to Dynatrace Platform
- Significant top-line acceleration drives better margin leverage
- DCF-based price target of $60 implies 69x EV to our FY22 uFCF estimate.

Downside Scenario

- Lower-than-expected net new customer additions to Dynatrace Platform as a result of increasing competition
- Slower-than-expected conversion from Classic to Dynatrace Platform as customers see limited value in incremental features
- More modest acceleration (or even deceleration) in top-line leaves room for limited margin and cash flow upside
- DCF-based price target of $30 implies 35x EV to our FY22 uFCF estimate.

Investment Thesis / Where We Differ

- Our recurring revenue estimate is based on ARR analysis of net new ARR added to Dynatrace Platform from new logos in addition to conversion ARR from legacy Classic customers. We believe this ARR is the origin of incremental revenue over the subsequent four to five quarters.
- Solid profitability coupled with potential for accelerating top-line support strong business fundamentals. Our field work suggests a strong product offering in application performance monitoring, with the potential to expand to infrastructure, network and user monitoring over time
- Current valuation appears to reflect growth and profitability characters.

Catalysts

- Sustained share gains in the APM market as Dynatrace Platform sees traction with customers
- Rising net dollar retention rates.
- Greater international traction.

ELASTIC NV (ESTC)

RATING	PRICE	MARKET CAP
BUY	**$152.15^**	**$14.4B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$175.00 (FROM $150.00)	**$205.00**	**$115.00**

^Prior trading day's closing price unless otherwise noted.

		Estimates		
USD	2019A	2020A	2021E	2022E
Rev. (MM)	271.7	427.6	571.4	702.9
Previous				
EPS				
Q1	(0.37)	(0.32)	0.06A	(0.08)
Previous				
Q2	(0.38)	(0.22)	(0.03)A	(0.04)
Previous				
Q3	(0.16)	(0.28)	(0.14)	(0.13)
Previous				
Q4	(0.28)	(0.12)	(0.22)	(0.22)
Previous				
FY Apr	(1.11)	(0.93)	(0.32)	(0.47)
Previous				

		Valuation		
	2019A	2020E	2021E	2022E
EV/Rev	51.7x	32.9x	24.6x	20.0x
P/Rev	53.0x	33.7x	25.2x	20.5x
FY P/E	NM	NM	NM	NM

The Long View

Scenarios

Base Case

- Total revenue growth of 34%/23% in FY21E/FY22E
- Continued adoption of products as a platform for search, observability and incremental traction in security
- Model leverage begins beyond FY21 driven by improved S&M efficiency. CFFO positive in FY22
- PT of $175 implies EV/FY22 rev multiple of 21x

Upside Scenario

- Total revenue growth of >34%/23% in FY21E/FY22E
- Continued adoption of products as a platform for search, observability and incremental traction in security with upside coming from expansion of use cases within the base
- Model leverage begins beyond FY21 driven by improved S&M efficiency. Positive CFFO before FY22
- PT of $205 implies EV/FY22 rev multiple of 25x

Downside Scenario

- Total revenue growth of <34%/23% in FY21E/FY22E
- Limited expansion of use cases within the base and slower-than-expected net new customer additions
- Model leverage begins delayed to FY22 with limited CFFO growth on continued investments
- PT of $115 implies EV/FY22 rev multiple of 14x

Investment Thesis / Where We Differ

- We believe that Elastic's unique technical platform, open source-led distribution model, breadth of value proposition, and vast market runway will enable it to grow at elevated rates longer than most software businesses over the next several years.
- While a rapidly evolving, multifaceted competitive market poses risks, we believe Elastic can win by offering a flexible, powerful platform with broad applicability, deployable at the customers' choosing and pricing (i.e., on premise vs. cloud and open source vs. paid), from one source, all with the support of a robust open source community.

Catalysts

- Elastic will report its F3Q21 earnings in February

INTUIT INC. (INTU)

RATING	PRICE	MARKET CAP
BUY	$374.46^	$103.4B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$450.00 (FROM $430.00)	$480.00	$280.00

^Prior trading day's closing price unless otherwise noted.

	Estimates			
USD	2019A	2020A	2021E	2022E
Rev. (MM)	6,784.0	7,679.0	8,955.0	10,338.0
Previous				
EPS				
Q1	0.29	0.41	0.94A	-
Previous				
Q2	1.00	1.16	1.29	-
Previous				
Q3	5.55	4.49	6.03	-
Previous				
Q4	(0.09)	1.81	0.02	-
Previous				
FY Jul	6.75	7.86	8.35	9.80
Previous				

	Valuation			
	2019A	2020E	2021E	2022E
P/Rev	15.2x	13.5x	11.5x	10.0x
EV/Rev	15.2x	13.4x	11.5x	10.0x
FY P/E	55.5x	47.6x	44.8x	38.2x

The Long View

Scenarios

Base Case

- Small Business Group: QuickBooks Online (QBO) ecosystem revenues continue to grow at ~25-30%+ YoY, helped by international expansion and adoption by self-employed businesses.
- Tax: DIY category continues to take share from tax stores, and TurboTax extends share gains within DIY.
- EPS in 2 yrs: $10.28; Target Multiple: 44x; PT $450.

Upside Scenario

- Small Business: QBO ecosystem revenues grow at 30-40%+ YoY due to faster-than-expected international expansion, adoption by self-employed, and penetration of payroll and payments.
- Tax: Faster-than-expected shift to DIY tax prep method, TurboTax share gains, and mix shift to higher-priced versions.
- EPS in 2 yrs: $11.24; Target Multiple: 43x; PT $480.

Downside Scenario

- Small Business: QBO ecosystem revenues growth slows to <20% due to spotty international execution and intensified competition.
- Tax: Tax pros & stores regain mindshare as tax filers prefer human help over software; increased price competition.
- EPS in 2 yrs: $9.16; Target Multiple: 31x; PT $280.

Investment Thesis / Where We Differ

- Leading provider of accounting solutions for small businesses (the QuickBooks franchise) and tax preparation solutions for consumers (TurboTax).
- Small Business metrics are seeing rapid growth, especially outside the U.S. -- which could spur another leg of growth.
- Consistent execution, dominant product leadership, strong financials, and shareholder friendly policies.

Catalysts

- Quarterly earnings
- IRS weekly tax updates

MICROSOFT CORPORATION (MSFT)

RATING	PRICE	MARKET CAP
BUY	$219.62^	$16.8T
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$260.00	$294.00	$178.00

^Prior trading day's closing price unless otherwise noted.

	Estimates			
USD	2019A	2020A	2021E	2022E
Rev. (MM)	125,843.0	143,015.0	157,377.0	171,974.0
Previous				
EPS				
Q1	1.14	1.38	1.84A	1.80
Previous				
Q2	1.10	1.51	1.62	1.76
Previous				
Q3	1.14	1.40	1.50	1.73
Previous				
Q4	1.37	1.46	1.61	1.84
Previous				
FY Jun	4.75	5.76	6.56	7.13
Previous				

	Valuation			
	2019A	2020E	2021E	2022E
P/Rev	NM	NM	NM	97.5x
EV/Rev	NM	NM	NM	97.1x
FY P/E	46.2x	38.1x	33.5x	30.8x

The Long View

Scenarios

Base Case

- Operating margins improve modestly over time, driven by strong Azure operating improvements
- Successfully integrate with GitHub
- Potential for dividend and share repurchase increases
- DCF-based target price of $260; implies 39x P/CY2021E EPS.

Upside Scenario

- PC growth outperforms expectations and transactional Windows performance continues to outperform developed PC shipments
- Operating margins improve significantly driven by strong Azure operating improvements
- Potential for dividend and share repurchase increases
- DCF-based target price of $294; implies 44x P/CY2021 EPS.

Downside Scenario

- COVID lasts longer than a few quarters and continues to weigh on PC and on prem license sales
- Transition to the Cloud will be long and arduous, depressing margins
- Support unprofitable businesses keeping cash flow growth modest in the foreseeable future
- DCF-based target price of $178; implies 27x P/CY2021 EPS.

Investment Thesis / Where We Differ

- Microsoft is a large diversified business with excellent visibility and a clear line of sight into double-digit revenue growth for the foreseeable future. Other reasons to like the story include: 1) safest large-cap investment option, 2) multiple growth drivers, 3) levered to favorable secular trends, 4) ensuing profitability and free cash flow from this strong revenue growth, and 5) continuing return of capital to shareholders.

Catalysts

-
- Azure revenue continues to post hyper growth while also improving profitability
- End of COVID
- Earnings

MIMECAST LIMITED (MIME)

RATING	PRICE	MARKET CAP
HOLD	$52.37^	$3.4B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$55.00 (FROM $50.00)	$70.00	$31.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	340.4	427.0	492.0	564.9
Previous				
EPS				
Q1	0.04	0.08	0.22A	0.25
Previous				
Q2	0.06	0.13	0.32A	0.27
Previous				
Q3	0.09	0.14	0.22	0.27
Previous				
Q4	0.07	0.15	0.16	0.30
Previous				
FY Mar	0.26	0.50	0.91	1.09
Previous				

Valuation				
	2019A	2020E	2021E	2022E
P/Rev	10.1x	8.0x	7.0x	6.1x
EV/Rev	9.7x	7.8x	6.7x	5.9x

The Long View

Scenarios

Base Case

- Modest market share gains from incumbents
- Evolving cybersecurity landscape and growing compliance/e-discovery needs
- New customer wins and/or ASP expansion drive ARR over time
- Price target of $55 based on a DCF analysis and implies 6.6x EV/NTM Rev

Upside Scenario

- Stronger-than-expected revenue growth
- New products drive significant ASP expansion
- Strong customer growth driven by increased brand awareness
- Increased enterprise customer penetration as enterprises become more comfortable with cloud based solutions
- Price target of $70 based on a DCF analysis and implies 8.5x EV/NTM Rev

Downside Scenario

- Revenue growth decelerates
- Competition limits market share gains
- Stagnant ASP growth
- Weak customer adds
- Price target of $31 based on a DCF analysis and implies 3.6x EV/NTM Rev

Investment Thesis / Where We Differ

- Mimecast continues to penetrate the large market for email security, archiving, and continuity
- An onerous threat environment requires innovative third party security
- MIME's multi-tenant cloud platform wins versus legacy on-premise competition

Catalysts

- Market share gains vs. incumbents
- GDPR
- New customer adds
- New products and ASP expansion
- Evolving threat landscape
- Growth in the US and expansion to new geographies

PALANTIR TECHNOLOGIES INC (PLTR)

RATING	PRICE	MARKET CAP
BUY	$25.20^	$54.8B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$30.00 (FROM $18.00)	$40.00	$15.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	742.6	1,071.0	↑ 1,414.7	↑ 1,781.3
Previous			1,402.8	1,736.8
EPS Non-GAAP				
Q1	-	0.00A	0.02	0.03
Previous				
Q2	-	0.01A	0.04	0.05
Previous				
Q3	-	0.04A	0.06	0.08
Previous				
Q4	-	0.03	0.05	↑ 0.07
Previous				*0.06*
FY Dec	(0.24)	0.09	0.17	0.23
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	71.4x	49.5x	37.5x	29.8x
P/Rev	73.8x	51.1x	38.7x	30.7x
FY P/EPS Non-GAAP	NM	NM	NM	NM

The Long View

Scenarios

Base Case

- Assumes CY21E/CY22E revenue growth of 32%/26%
- Assumes CY21E/CY22E gross margin of 81%/82%
- Assumes CY21E/CY22E cont. margin of 54%/55%
- PT of $30 implies 50x/39x our CY21E/CY22E revenues

Upside Scenario

- Assumes CY21E/CY22E revenue growth of >32%/26%
- Assumes CY21E/CY22E gross margin of >81%/82%
- Assumes CY21E/CY22E cont. margin of >54%/55%
- PT of $40 implies 67x/53x our CY21E/CY22E revenues

Downside Scenario

- Assumes CY21E/CY22E revenue growth of <32%/26%
- Assumes CY21E/CY22E gross margin of <81%/82%
- Assumes CY21E/CY22E cont. margin of <54%/55%
- PT of $15 implies 24x/19x our CY21E/CY22E revenues

Investment Thesis / Where We Differ

Palantir is a beneficiary of the long-term trend of growing volumes and variability in data generated by commercial and government organizations. The company's Foundry and Gotham platforms help customers integrate and surface intelligence within datasets by way of establishing links between disparate objects. We like: 1) 40%+ growth rates at $1B+ scale; 2) rapidly improving profitability as Apollo penetrates the installed base in a more meaningful way; 3) current valuation screens attractive relative to high growth peers given a healthy balance between growth and profitability. Key risks include: 1) limited revenue visibility and potential lumpiness in quarterly bookings; 2) exposure to US government budgetary changes; 3) restrictive corporate governance structure for minority shareholders.

Catalysts

- PLTR likely reports 4Q20 results in mid-late Feb
- Lock-up expirations begin mid-late February

PALO ALTO NETWORKS (PANW)

RATING	PRICE	MARKET CAP
BUY	**$366.55^**	**$35.8B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$425.00 (FROM $325.00)	**$522.00**	**$198.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	2,899.6	3,408.4	4,114.8	4,781.5
Previous				
EPS Non-GAAP				
Q1	1.17	1.05	1.62A	1.83
Previous				
Q2	1.51	1.19	1.42	1.57
Previous				
Q3	1.31	1.17	1.23	1.45
Previous				
Q4	1.47	1.48	1.44	1.67
Previous				
FY Jul	5.45	4.88	5.74	6.51
Previous				

Valuation				
	2019A	2020E	2021E	2022E
P/Rev	12.4x	10.5x	8.7x	7.5x
EV/Rev	12.3x	10.5x	8.7x	7.5x
FY P/EPS Non-GAAP	67.3x	75.1x	63.9x	56.3x

The Long View

Scenarios

Base Case

- Non-GAAP operating margins remain flat in FY21 vs 18% in FY20 due to incremental go-to-market investments and integration costs.
- Price Target $425; Target Multiple: 9.7x EV/NTM Revenue

Upside Scenario

- PANW outperforms its revenue guidance due to strong adoption of platform play
- Corporate security spending re-accelerates meaningfully and PANW takes share from competitors
- Non-GAAP operating margins remain consistently above 20% or expand further
- Price: $522; Multiple: 11.9x EV/NTM Revenue

Downside Scenario

- Markets take longer to "digest" past security purchases than anticipated
- Large competitors re-focus their security businesses to take share from PANW; new innovators take share at a rapid pace
- Customer adoption of next-gen security billings takes longer than anticipated
- Margins fall due to competitive pressures
- Price: $198; Multiple: 4.5x EV/NTM Revenue

Investment Thesis / Where We Differ

- Palo Alto Networks' platform approach across traditional network security, cloud security, SIEM/SOAR, and endpoint meets customer demands for consolidated security solutions

Catalysts

- Continued hyper growth in next-gen security billings near-term and 50%+ CAGR over three years, driven by cloud security portfolio and Cortex SIEM/SOAR/EDR offering
- Continued product innovation and growth of newer solutions, such as Traps
- Trend of vendor consolidation from security buyers

SAILPOINT TECHNOLOGIES HOLDINGS, INC. (SAIL)

RATING	PRICE	MARKET CAP
BUY	**$57.58^**	**$5.5B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$70.00 (FROM $55.00)	**$86.00**	**$35.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	288.5	356.1	391.0	-
Previous				
EPS				
Q1	0.00	0.04A	0.01	-
Previous				
Q2	(0.01)	0.15A	0.00	-
Previous				
Q3	0.07	0.11A	0.02	-
Previous				
Q4	0.15	(0.02)	0.06	-
Previous				
FY Dec	0.21	0.28	0.08	-
Previous				

Valuation				
	2019A	2020E	2021E	2022E
P/Rev	19.1x	15.5x	14.1x	
EV/Rev	18.6x	15.0x	13.7x	

The Long View

Scenarios

Base Case

- Company executes on model transition
- Rev growth slows in 2021 due to the model transition but underlying business momentum still stays strong due to elevated subscription growth
- Price target: $70; Target multiple: 17x EV/NTM revenue

Upside Scenario

- Meaningful realization of expansion opportunities (up-sell and expansions with existing customers)
- Strong growth in IdentityNow, File Access Manager, and Predictive Identity
- Stronger growth in operating margins and free cash flows
- Price target: $86; Target multiple: 22x EV/NTM revenue

Downside Scenario

- Inability to meaningfully realize expansion opportunities with existing customers
- Data Access Governance (DAG) market and identity governance mid-market opportunity do not develop
- Operating margins continue declining
- Price target: $35, Target multiple: 9x EV/NTM revenue

Investment Thesis / Where We Differ

- SailPoint remains a leader in the identity governance market
- Growth comes not only from expansion opportunities with existing customers and new large enterprise customers, but also from the mid-market
- Existing large software vendors in the identity market represent a potential threat should they choose to invest in their products

Catalysts

- Company continues beating expectations as a public company
- New regulations such as GDPR in Europe and upcoming U.S. privacy laws lead to robust growth of the market for protection against insider threats
- Up-sell of new products to existing subscriber base
- Competitive threats from large players with deep pockets who may view the identity governance market as strategic

SMARTSHEET INC. (SMAR)

RATING	PRICE	MARKET CAP
HOLD	**$68.10^**	**$9.1B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$75.00	**$92.00**	**$32.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020A	2021E	2022E
Rev. (MM)	177.7	270.9	378.0	480.8
Previous				
EPS Non-GAAP				
Q1	(0.12)	(0.12)	(0.11)A	(0.14)
Previous				
Q2	(0.08)	(0.08)	(0.06)A	(0.13)
Previous				
Q3	(0.09)	(0.15)	(0.12)A	(0.14)
Previous				
Q4	(0.07)	(0.13)	(0.14)	(0.11)
Previous				
FY Jan	(0.36)	(0.49)	(0.43)	(0.52)
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	48.9x	32.1x	23.0x	18.1x
P/Rev	51.2x	33.6x	24.1x	18.9x
FY P/EPS Non-GAAP	NM	NM	NM	NM

The Long View

Scenarios

Base Case

- Smartsheet's differentiated solution and first-mover advantage enable it to reach meaningful scale and profitability.
- Continued successful execution of the company's land and expand strategy leads to continued growth in net revenue retention and operating leverage.
- DCF-based price target of $75 implies 25x EV/CY2020E Revenue.

Upside Scenario

- Successful expansion with direct and international salesforce results in outsized growth for years. This leads to an improvement in operating leverage.
- DCF-based price target of $92 implies 31x EV/ CY2020E Revenue.

Downside Scenario

- Subscription revenue growth decelerates to 30% or less in the near term, reflecting rapid deceleration in new business growth.
- Increased competition from large established productivity suite vendors, results in increased near-term investments, delaying the path to profitability.
- Increased customer churn hurts both revenue and profits.
- DCF-based price target of $32 implies 10x EV/ CY2020E Revenue.

Investment Thesis / Where We Differ

- Despite being around for more than a decade, SMAR's opportunity is only beginning to materialize. This is led by both the market opportunity driven by that enablement of advances in core foundational computing technologies as well as the company building out its direct sales force in scale and expanding internationally with its first international sales reps.

Catalysts

- Company recognizes sales efficiencies quicker than expected, led by the highly efficient unassisted sales motion
- Successful expansion with direct and international salesforce results in strong growth for years
- Acceleration in new customer growth and improvement in gross retention rates

TUFIN SOFTWARE TECHNOLOGIES LTD. (TUFN)

RATING	PRICE	MARKET CAP
HOLD	**$14.39^**	**$597.2M**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$15.00 (FROM $8.00)	**$22.00**	**$8.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	103.3	96.5	108.0	121.8
Previous				
EPS Non-GAAP				
Q1	(0.41)	(0.37)A	(0.22)	(0.13)
Previous				
Q2	(0.18)	(0.15)A	(0.21)	(0.13)
Previous				
Q3	(0.17)	(0.03)A	(0.15)	(0.13)
Previous				
Q4	(0.07)	(0.14)	(0.04)	0.05
Previous				
FY Dec	(0.63)	(0.69)	(0.61)	(0.33)
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	5.0x	5.3x	4.7x	4.2x
P/Rev	5.8x	6.2x	5.5x	4.9x
FY P/EPS Non-GAAP	NM	NM	NM	NM

The Long View

Scenarios

Base Case

- Emerges as one of the leaders in the market for security policy management
- Tufin's new SaaS products begin to impact revenue starting in 2021
- Tufin becomes sustainably free cash flow positive starting in 2022
- $15 DCF-based price target implies 5.2x EV/NTM revenue estimate

Upside Scenario

- Tufin technology emerges as the industry standard – as firewall sprawl and the need for orchestration puts Tufin's technology in the right place at the right time
- Tufin's new SaaS products have better than expected adoption leading to revenue upside and more stable future results due to recurring nature of revenue
- Better than expected results lead to Tufin recognizing leverage earlier than expected free cash flow
- $22 DCF-based upside scenario price target implies 8.0x EV/NTM revenue estimate

Downside Scenario

- Tufin struggles to grow and the market remains fragmented and no clear leader emerges
- Need to make continued investments to remain relevant in the marketplace, further delaying cash flow consistency
- Tufin's new SaaS products fail to be adopted by the market
- $8 DCF-based downside scenario price target implies 2.4x EV/NTM revenue estimate

Investment Thesis / Where We Differ

- We believe Tufin has a large opportunity before it as an orchestration suite that helps customers establish a unified security policy across their IT infrastructure from on-premise to Public Cloud deployments; while also helping automate any required changes. While this is not a new issue faced by today's IT personnel, this opportunity has only recently materialized and we believe that we are now at an inflection point.

Catalysts

- Establishing itself as an industry leader for security policy management
- Execution on its land-and-expand growth strategy
- Tufin's new SaaS products have better than expected adoption leading to revenue upside and more stable future results due to recurring nature of revenue

Please see important disclosure information on pages 180 - 193 of this report.

UPLAND SOFTWARE, INC. (UPLD)

RATING	PRICE	MARKET CAP
BUY	$47.51^	$1.3B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$58.00	$77.00	$32.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	222.6	285.9	286.6	295.3
Previous				
Adj EPS				
Q1	0.53	0.72A	↓ 0.44	0.51
Previous			*0.50*	
Q2	0.76	0.60A	↓ 0.45	0.49
Previous			*0.48*	
Q3	0.52	0.56A	↓ 0.48	0.49
Previous			*0.51*	
Q4	0.67	↓ 0.47	↓ 0.50	0.51
Previous		*0.54*	*0.53*	
FY Dec	2.47	↓ 2.34	↓ 1.88	2.01
Previous		*2.41*	*2.01*	

Valuation				
	2019A	2020E	2021E	2022E
EV/Rev	7.2x	5.6x	5.6x	5.4x
P/Rev	5.8x	4.5x	4.5x	4.4x
FY P/Adj EPS	19.2x	20.3x	25.3x	23.6x

The Long View

Scenarios

Base Case

- Consistent organic subscription and support growth in the flat to 5% range, driven by expansion bookings from the installed base.
- Upland executes to acquire $25-50 million in run-rate revenue annually with limited size and valuation creep.
- Adjusted EBITDA margins expand, though more incrementally as marginal profitability is re-invested with the goal of organic growth in mind.
- DCF-based price target of $58 implies 6.4x EV/2022E revenue.

Upside Scenario

- Organic subscription and support growth accelerates to the high single to low double digits as up-sell and cross-sell initiatives yield meaningful results.
- Upland remains consistent in acquiring $25-50 million in run-rate revenue annually with limited size and valuation creep.
- Adjusted EBITDA margins expand more healthily as sales efficiency of expansion bookings remains high.
- DCF-based price target of $77 implies 8.1x EV/2022E revenue.

Downside Scenario

- Organic subscription and support growth move toward the lower end of the flat to 5% range (or even go negative) as go-to-market initiatives fail to yield results.
- Size and valuation creep accelerate and Upland's inorganic growth engine becomes harder to execute.
- Adjusted EBITDA margin growth tapers off as incremental investments for organic growth weigh on profitability.
- DCF-based price target of $32 implies 4.0x EV/2022E revenue.

Investment Thesis / Where We Differ

- Broad product offering across the enterprise work management space supports up-sell and cross-sell goals given the stickiness of the deployment at customers.
- Acquisition strategy makes sense to us, and Upland has carved out a niche for itself in venture-backed 'orphans' space as a preferred buyer of assets.

Catalysts

- Acceleration in organic subscription and support revenue as product and go-to-market strategy yield results.
- Ongoing execution of acquisitions toward annual acquired revenue targets.
- Rising net dollar retention rates.

VARONIS SYSTEMS, INC. (VRNS)

RATING	PRICE	MARKET CAP
BUY	$173.41^	$6.1B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$200.00 (FROM $155.00)	$242.00	$101.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	254.2	281.0	339.5	-
Previous				
EPS				
Q1	(0.38)	(0.56)A	(0.19)	-
Previous				
Q2	(0.30)	(0.15)A	(0.03)	-
Previous				
Q3	(0.19)	0.06A	0.10	-
Previous				
Q4	(0.09)	0.11	0.20	-
Previous				
FY Dec	(0.96)	(0.51)	0.11	-
Previous				

Valuation				
	2019A	2020E	2021E	2022E
P/Rev	23.9x	21.7x	17.9x	
EV/Rev	23.5x	21.3x	17.6x	
FY P/E	NM	NM	NM	

The Long View

Scenarios

Base Case

- Emerges as one of the leaders in the market for managing unstructured human-generated data
- Transition to a subscription revenue model goes at the pace forecasted by Management
- $200 DCF-based price target implies 22x EV/NTM Revenue estimate

Upside Scenario

- Varonis technology emerges as the industry standard - the backdrop of recent high profile data breaches, including those related to ransomware put Varonis technology in the right place at the right time
- Transition to a subscription revenue model goes better than planned
- $242 DCF-based upside scenario price target implies 26x EV/NTM revenue estimate

Downside Scenario

- Varonis continues to grow but the market remains fragmented and no clear leader emerges
- Need to make continued investments to remain relevant in the marketplace, further delaying cash flow consistency
- $101 DCF-based downside scenario price target implies 11x EV/NTM revenue estimate

Investment Thesis / Where We Differ

- Varonis is likely to see uplift as a result of the GDPR tailwinds (particularly as large fines start to be levied), which went into effect in May 2018, and could provide upside to numbers.
- We believe Varonis technology is in the right place at the right time and is assuming the role of de facto standard.

Catalysts

- Establishing itself as an industry standard for managing human-generated, unstructured data
- Continued execution on its land-and-expand growth strategy
- Increased regulation and security breaches in todays enterprises
- Successful transition to a subscription revenue model

WORKDAY, INC. (WDAY)

RATING	PRICE	MARKET CAP
BUY	**$227.65^**	**$57.9B**
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$280.00 (FROM $260.00)	**$320.00**	**$166.00**

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	**2019A**	**2020A**	**2021E**	**2022E**
Rev. (MM)	2,822.2	3,627.2	4,299.4	5,002.4
Previous				
EPS				
Q1	0.33	0.43	0.44A	0.54
Previous				
Q2	0.31	0.44	0.84A	0.90
Previous				
Q3	0.31	0.53	0.86A	0.93
Previous				
Q4	0.41	0.50	0.55	0.58
Previous				
FY Jan	1.36	1.89	2.70	2.95
Previous				

Valuation				
	2019A	**2020E**	**2021E**	**2022E**
P/Rev	20.5x	16.0x	13.5x	11.6x
EV/Rev	20.1x	15.6x	13.2x	11.3x

The Long View

Scenarios

Base Case

- Company maintains growth profile (growing revenues at >18% y/y in coming years)
- HCM market share reaches ~25% by 2024
- Company gains momentum in markets outside of HCM, particularly in Financials
- $280 price target based on DCF with 53% and 50% free cash flow growth in the out years (FY2023 and FY2024)

Upside Scenario

- Company accelerates growth profile (growing revenues at 25+% y/y in coming years)
- Company gains significant traction in financials
- HCM market share reaches >35% by 2024
- $320 price target based on DCF with 60% and 54% free cash flow growth in the out years (FY2023 and FY2024)

Downside Scenario

- Company growth slows (revenues grow at <15% y/y in coming years)
- Company fails to gain traction with financials product
- HCM market share is below 15% by 2024
- $166 price target based on DCF with 37% and 33% free cash flow growth in the out years (FY2023 and FY2024)

Investment Thesis / Where We Differ

- Survey results indicate pipelines are returning with the back office apps space along with an acceleration in the move to the Cloud. Both of these should benefit Workday given the company's product leadership within the space.
- Attractive valuation on a growth adjusted basis relative to other high growth SaaS comps.
- Large, expanding Total Addressable Market (TAM); low attach rates for products within portfolio; international opportunity; and procurement opportunity are levers to drive durable, sustainable LT top line growth.

Catalysts

- Significant penetration in Financials, as evidenced by disclosed customer growth
- Sustained hyper growth in revenues and free cash flows
- Pace of market share gains in core HCM product

SOLARWINDS, INC. (SWI)

RATING	PRICE	MARKET CAP
HOLD	$15.35^	$4.9B
PRICE TARGET (PT)	UPSIDE SCENARIO PT	DOWNSIDE SCENARIO PT
$15.00 (FROM $18.00)	$20.00	$10.00

^Prior trading day's closing price unless otherwise noted.

Estimates				
USD	2019A	2020E	2021E	2022E
Rev. (MM)	938.5	1,018.5	1,015.0	1,105.0
Previous				
EPS Non-GAAP				
Q1	0.20	0.20A	0.20	0.22
Previous				
Q2	0.20	0.25A	0.22	0.25
Previous				
Q3	0.21	0.28A	0.25	0.28
Previous				
Q4	0.24	0.25	0.24	0.27
Previous				
FY Dec	0.85	0.98	0.90	1.02
Previous				

Valuation				
	2019A	2020E	2021E	2022E
EV/EBITDA	14.0x	13.3x	12.2x	11.2x
EV/Rev	6.8x	6.2x	6.2x	5.7x
P/Rev	5.2x	4.8x	4.8x	4.4x
FY P/EPS Non-GAAP	18.1x	15.7x	17.1x	15.0x

The Long View

Scenarios

Base Case

- Continued growth in the cloud and MSP markets with meaningful growth in the subscription business
- Sustained operating leverage from the Solar Winds model with low touch sales; non-GAAP margins in high 40s by 2020
- DCF-based PT of $15 implies 14x our 2022 uFCF est.

Upside Scenario

- Accelerated adoption of cloud and MSP products combined with market share growth in the Core IT products
- Operating leverage improves further as the company improves productivity; non-GAAP margins reach 50%+
- DCF-based PT of $20 implies 18x our 2022 uFCF est.

Downside Scenario

- Increased competition from native cloud monitoring platforms and more concerted effort from larger scale competitors in the core IT markets creates further growth and margin pressure
- To get more traction in the cloud and MSP markets, company needs to increase sales and marketing spend; reduces operating leverage as non-GAAP margins reach low 40s
- DCF-based PT of $10 implies 11x our 2022 uFCF est.

Investment Thesis / Where We Differ

- We believe that SolarWinds' unique disruptive model is the most important characteristic of the company, but that its strong underlying technology has also always been a key factor, and that the resulting growth is underappreciated. We believe SWI's web-based marketing, low cost/low touch sales model, low average transaction sizes, hyper-efficient and effective R&D process, and highly profitable and outsized maintenance revenue pose a disruptive presence in the markets it serves and will continue to drive meaningful growth with sustained high operating margins (high 40s non-GAAP operating margins).

Catalysts

- SolarWinds is expected to report its 4Q20 earnings in late January or early February.

Company Description

Adobe

Adobe is the leading provider of software solutions for creative professionals and marketing professionals. Revenues grew 15% in FY20 to $12.9Bn, with operating margin 43%. Revenues were globally diversified at the following mix: Americas 58%, EMEA 26%, Asia 16%.

Asana

Asana, Inc. provides a work management and collaboration platform that helps teams orchestrate work, from daily tasks to cross-functional strategic initiatives. The platform adds structure to unstructured work, creating clarity, transparency, and accountability to everyone within an organization. Its workflow solutions include project management, goal management, task management, Kanban boards, Excel project management, PRINCE2 methodology, and project planning. The company was founded by Dustin Moskovitz and Justin Michael Rosenstein on December 16, 2008, and is headquartered in San Francisco, CA.

Check Point Software

Check Point Software provides software blades and appliances that secure traffic between internal networks, the Internet, and private networks. The company became a pioneer through its FireWall-1 and Stateful Inspection technologies, which are still the foundation for most network security technology today. Check Point's Software Blade architecture enables security gateway customization according to customer needs, and combines into one centrally-managed deployment. Customers include tens of thousands of businesses and organizations of all sizes. The company was founded in 1993, employs approximately 3,000 people, and is headquartered in Tel Aviv, Israel.

CrowdStrike

CrowdStrike (CRWD) was founded in 2011 to reinvent security for the cloud era. The company took a fundamentally new approach that leverages the network effect of crowdsourced data applied to modern security through technologies such as artificial intelligence, or AI, cloud computing, and graph databases. With its Falcon platform, it created the first multi-tenant, cloud native, intelligent security solution capable of protecting workloads across on-premise, virtualized, and cloud-based environments running on a variety of endpoints such as laptops, desktops, servers, virtual machines, and Internet of Things, or IoT, devices. CrowdStrike has 2,516 subscription customers worldwide, including 44 of the Fortune 100, 27 of the top 100 global companies and 9 of the top 20 major banks as of January 31, 2019. The company is headquartered in Sunnyvale, California with operations in the UK, Australia, New Zealand/Asia Pacific, and Middle East. CrowdStrike currently has 1,455 employees as of January 31, 2019.

Datadog

Datadog is a cloud-native infrastructure and application performance monitoring platform. The company combines a leading SaaS product with capital efficient growth. Datadog was founded in 2010 in New York City.

Dynatrace

Dynatrace provides software intelligence to simplify enterprise cloud complexity and accelerate digital workloads. With AI and complete automation, the platform provides answers, not just data, about application, infrastructure and user activity. Many of the world's largest enterprises use Dynatrace to modernize and automate enterprise cloud operations, improve software release efforts, and deliver higher value digital experiences.

Elastic

Elastic's enterprise software platform ingests and stores data from any source, and in any format, and performs search, analysis, and visualization on this data in milliseconds. Developers build on top of the Elastic Stack to apply the power of search to their data and solve business problems. Search is foundational to a wide variety of experiences, from being embedded in Wikipedia pages to locating the nearest driver in the Uber app. Elastic makes the power of search—the ability to instantly find relevant information and insights from large amounts of data—available for a diverse set of applications and use cases. Since founding in 2012, ESTC has built additional features that address a wide variety of use cases including app search, site search, enterprise search, logging, metrics, application performance monitoring, business analytics, and security analytics. The Stack can run on premises, in public or private clouds, or in hybrid environments. ESTC has over 5,500 paying customers across 80 countries, including 32% of the Fortune 500.

Intuit

Intuit is the leading provider of accounting solutions for small businesses (the QuickBooks franchise) and tax preparation solutions for consumers (TurboTax). Revenues grew 13% in FY20 to $7.7Bn, with 34.7% operating margin. Over 95% of total revenues come from the U.S.

Mimecast

Mimecast provides email security, archiving, and continuity, all delivered through a multi-tenant SaaS solution and integrated on a proprietary operating system. The company was founded in 2003 with the mission to make email safer and better, and to transform the way organizations of all sizes protect, store, and access their email and corporate information. Mimecast's corporate headquarters is in London, U.K., while the U.S. headquarters is in Watertown, MA.

Microsoft

Microsoft is the world's largest software company and the leading provider of operating systems for the PC and server markets. The company's ubiquitous Windows operating system had 95% share of the global PC market in 2013 and 63% of the global server market. Additionally, Microsoft Office continues to be the dominant productivity suite. The company is also a leading provider of video game and entertainment consoles and video games through its Xbox platform. With its purchase of Nokia Devices & Services, Microsoft is the leading mobile phone vendor and entered the tablet market with its Surface line. Microsoft's Azure is a leading provider of cloud-based Platform as a Service. Founded in 1975, Microsoft's is based in Redmond, WA and has 128,000 employees globally.

Datto

Datto provides cloud-based software and technology solutions built for delivery through the managed service provider. The company offers Unified Continuity, Networking, and Business Management solutions to serve the small and medium-sized business information technology market. Datto also provides servers, networking appliances, switches, and devices.

Cloudflare

Cloudflare provides a cloud-based platform that delivers Internet security, performance, and reliability services to businesses of all sizes around the world. Cloudflare services over 20 million Internet properties globally and its network spans 194 cities in over 90 countries and interconnects with over 8,000 networks globally, including major ISPs, cloud services, and enterprises. As of June 30, 2019, Cloudflare generated LTM revenues of $235 million from nearly 75,000 paying customers and had 1,069 full-time employees.

Palo Alto Networks

Palo Alto Networks provides a network security platform and has established itself as a leader in the market. Its flagship product is the PA series of appliances, which can serve businesses of all sizes. It also offers virtualized firewalls, security management solutions, and endpoint protection. Products can be bundled with a security subscription service, which helps the products protection capabilities. Founded in 2005, Palo Alto Networks completed its IPO in 2012 and is headquartered in Santa Clara, CA.

Anaplan

Anaplan, Inc. engages in the provision of cloud-based connected planning platform that helps connect organizations and people to make better and faster decisions. It also offers professional services, including consulting, implementation, and training.

Palantir Technologies

Palantir Technologies offers a data analytics platform for enterprises and government agencies to derive insights from structured and unstructured data sources. The company was founded in 2003 and is based in Denver, Colorado.

SailPoint

SailPoint provides Identity Governance and Administration (IGA) and Data Access Governance (DAG) solutions. It has established itself as a leader in the identity governance space. Its flagship product is the IdentityIQ platform, which is targeted towards large enterprises. It also offers IdentityNow, a SaaS based identity governance solution; SecurityIQ, a Data Access Governance solution; and IdentityAI, an analytics product. Founded in 2005, SailPoint completed its IPO in 2017 and is headquartered in Austin, TX.

Smartsheet

Smartsheet was founded in 2005 and is a provider of a work management platform that does not require coding capabilities. Smartsheet's vision is to help white collar workers automate processes to free up users' time and enable them to allocate more of their actual time to be creative and complete value add work. Smartsheet's platform serves as a single source of truth across work processes and helps enable teams and organizations to plan, capture, track, automate and report on work at scale, resulting in more efficient processes and better business outcomes. Employees in over 74,000 organizations today across 190 countries deploy Smartsheet, including 90 of the Fortune 100 and two-thirds of the Fortune 500. Smartsheet is based in Bellevue, Washington, and has 787 employees as of January 31, 2018.

SolarWinds

SolarWinds provides infrastructure management software to SMBs, enterprises, and government organizations that enable for the efficient and effective management of networks, systems, and applications within IT infrastructures. SolarWinds' bread and butter was always to provide network management tools to network engineers. Since its product was easy to use and scalable, it gained market share relative to incumbents in the industry. Building on that success, SWI branched out through acquisitions into complementary areas that support IT professionals with overall IT infrastructure and service assurance management. Today, the company has a comprehensive portfolio of products designed to help its clients navigate complex, hybrid IT environments. SWI first went public in 2009 and they were known as the market leading provider of on premise network management software. Since they first went public, SWI has taken active steps towards expanding into adjacent markets-MSP and cloud markets. In February 2016, SWI was acquired by Thoma Bravo and Silver Lake Partners (Take Private). The company utilized the time as a private company to aggressively pursue its ambitions of becoming an important player within the cloud and MSP markets. Today, SWI serves over 275,000 customers, including 499 of the Fortune 500, and also including 22,000 MSP customers that in turn serve well over 450,000 organizations. SolarWinds is based in Austin, Texas, and has over 2,200 employees.

Atlassian

Atlassian (TEAM) was founded in 2002 by Scott Farquhar and Mike Cannon-Brookes to help organizations' technical teams more effectively collaborate, plan projects, and develop software. The use of Atlassian products has expanded virally to teams throughout a business to wherever collaborative efforts are required to accomplish a goal. The flexibility, ease-of-use, and low cost of the software enable IT professionals, software developers, and business unit managers to quickly install and implement it across their collaborative team environments. The company's products, available in the cloud or on premise, include JIRA for team planning and project management, Confluence for team content creation and sharing, Bitbucket for team code sharing and management, and JIRA Service Desk for team services and support applications. Together, these products form an integrated system for organizing, discussing, and completing shared work.

Tufin

Tufin (TUFN) was founded in 2005 to help companies establish a unified security policy across their IT infrastructure from on-premise to Public Cloud; while also helping automate any required policy changes. Security and IT operations management has become an increasingly cumbersome and labor-intensive task given the accelerating pace of network and infrastructure changes experienced by modern day enterprises. Tufin through its SecureTrack and SecureChange products helps companies to generate a topology of its network and associated devices and policies, and then to automate the provisioning and required policy changes to remain compliant. The company's other products SecureApp as well as Iris and Orca allow enterprises to manage application connectivity as well as bring policy management and orchestration to the public cloud and microservices/containers for the world of dev ops. Tufin has 1,566 customers in over 70 countries as of December 31, 2018. Tufin is based in Tel Aviv, Israel with its US headquarters located in Boston and has 424 employees as of December 31, 2018 with 119 located in the United States.

2U

2U, Inc. engages in the provision of education technology for nonprofit colleges and universities. It operates through the following segments: Graduate Program and Alternative Credential. The Graduate Program segment provides technology and services to nonprofit colleges and universities to enable the online delivery of degree programs. The Alternative Credential segment provides premium online short courses and technical, skills-based boot camps through relationships with nonprofit colleges and universities. The company was founded by Christopher J. Paucek on April 2, 2008 and is headquartered in Lanham, MD.

Upland Software

Upland Software was founded in 2010 to provide work management applications to organizations of all sizes – from small-to-medium businesses all the way up to the largest enterprises. These work management applications enable employees across a range of functions (information technology, sales and marketing, human resources, finance and accounting etc.) to more effectively and efficiently plan, execute and manage workflows with an eye to optimizing the use of organizational resources.

Varonis

Varonis (VRNS) is a data management software company, specializing in human-generated data. This type of data is characterized by content (i.e. documents, emails, spreadsheets, presentations, videos, etc.) created by employees, not machines, and generally contains higher value data, such as sensitive/financial information and intellectual property. VRNS provides a framework to analyzing the associated metadata from this content, associate it to proper owners which then provides clear visibility for both IT and the business to monitor and manage the permissions, ownership, and usage of data. These capabilities reduce the risk, complexity and cost associated with the growing volumes of human generated content. VRNS was co-founded in 2004, released its first product, DatAdvantage, in 2006 and has grown to approximately 6,250 customers as of December 2017. The company completed its IPO in February 2014 and is headquartered in New York City with significant development activities in Herzliya, Israel.

Workday, Inc.

Workday, Inc., is a provider of enterprise cloud-based applications for human capital management (HCM), payroll, financial management, time tracking, procurement and employee expense management. It is focused on the consumer Internet experience and cloud delivery model. Its applications are designed for global enterprises to manage complex and dynamic operating environments. The company provides its customers the applications to manage critical business functions for their financial and human capital resources. Workday, Inc. was founded in 2005 and is headquartered in Pleasanton, California.

Company Valuation/Risks

Adobe

Our $600 12-mo. PT is based on 35x EV/EBITDA (slight discount to median for mid/large cap subscription peers), applied to our estimates in 5-8 Qs. Risks: executing at scale; competitive marketing tech market; M&A integration; subs not immune to recessions.

Asana

Our $35 PT is derived via DCF (CoE 10%; TG 5%). Risks include competition, slower market growth, and delayed profitability.

Check Point Software

Our $130 PT is based on a DCF analysis (WACC 5%), which accounts for stock-based comp. Upside risks: greater portion of sales as recurring, new business re-accelerates. Downside risks: lower growth, incumbent vendors re-engaging.

CrowdStrike

Our $275 PT equates to 54x EV/NTM rev and is one of the most expensive in our coverage universe. Downside risks include competition, slower market growth, delayed profitability. Upside risks include outsized growth, faster profitability.

Datadog

Our DCF-based price target of $125 implies a 50x/38x multiple of our CY21/CY22 total revenue estimate. Risks include: 1) competitive inroads as monitoring workloads consolidate; 2) choppiness in enterprise sales execution given that the motion is relatively young; 3) early renewals for certain contracts driving estimate volatility; 4) multiple compression across high-growth.

Dynatrace
Our $45 PT is based on a DCF analysis. Key risks include churn in the Classic installed base with customer losses to competitors rather than Dynatrace Platform, and limited cash flow leverage on lower-than-expected top-line acceleration.

Elastic
Our $175 PT was derived via a discounted cash flow (CoE 10%; TG 5%). Key risks include competition, including open source developments; a modest gross retention rate to date; and the technical nature of the products from a sales perspective.

Intuit
Our $450 12-mo. PT is based on a 44x P/E and 32x EV/EBITDA, applied to EPS ests in 5-8 Qs (i.e., 4-Q sum a yr from now). Risks include: slow int'l traction; disruptive competition; tax season volatility; law of large numbers; Covid-19 impact

Mimecast
Our $55 PT is based on a DCF (WACC 9.7%; TG 5%) and implies 6.6x EV/NTM Rev. Risks: competition, execution.

Microsoft
Our Price Target of $260 is based on a DCF. Key risks include the PC cycle and risks related to revenues and margins as MSFT transitions to the Cloud.

Datto
Our $32 PT is derived via DCF (CoE 10%; TG 5%). Risks include competition, slower market growth, and delayed profitability.

Cloudflare
Our DCF-based $95 PT (CoE 10%; TG 5%) implies 54x EV/2021E Rev, near high growth security and developer-centric infrastructure cos with similar rev growth and margins. Key downside risks include material revenue deceleration due to increased competition or lack of enterprise traction, and delayed profitability. Key upside risks include significant revenue acceleration due to strong upsell/cross-sell and increased enterprise traction, as well as reaching positive cash flows earlier than expected.

Palo Alto Networks
Our $425 PT is based on a DCF (WACC 10%; TG 5%), which assumes higher growth in the out years and accounts for stock based comp. Downside risks: product sales slow, lower industry growth, incumbent vendors re-engaging.

Anaplan
Our $85 PT was derived via DCF analysis. Key risks include GTM execution issues taking longer than expected to resolve; deep-pocketed incumbents; and extended COVID-19 impact on new deals.

Palantir Technologies
Our DCF-based price target of $30 implies a 50x/39x multiple of our CY21E/CY22E total revenue estimates. Risks include: 1) potential significant lumpiness in quarterly deal bookings resulting in limited visibility; 2) exposure to government budget spending patterns; 3) corporate governance structure that limits the influence of minority shareholders.

SailPoint
Our $65 PT is DCF-based (CoE 10%; TG 5%), accounts for stock based compensation, and implies 16.2x EV/NTM rev. Downside risks: revenue volatility due to large deal sizes; incumbent vendors re-engaging.

Smartsheet
Our $75 PT is derived via DCF (CoE 10%; TG 5%). Risks include competition, slower market growth, and delayed profitability.

SolarWinds
Our PT of $15 is based on a DCF analysis and implies 14x EV to our 2022 uFCF est. Key risks include interest rates; fragmented market competition, including deep-pocketed incumbents; acquisition integration; and applicability of low-touch sales model internationally.

Atlassian
Our $235 PT is derived via DCF analysis. Upside risks: accelerated expansion beyond IT community, accelerated cash flow. Downside risks: fragmented market competition, ability to maintain R&D execution, and margin risk.

Tufin
Our $13 PT (Coe 10%; TG 5%) equates to a 4.4x EV/NTM revenue multiple. **Upside risks.** Acquisition, faster than expected product adoption post COVID. **Downside Risks.** Perpetual model volatility, potential model transition, competition and an evangelical sales process.

2U
Our $50 price target implies 3.6x FY21E total revenue, and is based on current trading multiples and a discounted cash flow valuation. As a result, our price target is a function of assumptions regarding the discount rate and terminal growth rate. Risks include: inability to increase mix of software revenue and reduce services cost, inability to capitalize on COVID-related demand, and an unsuccessful push into the undergraduate market.

Upland Software
Our $58 PT is based on a DCF analysis (CoE 10%; TG 5%) and implies 6.4x EV/2022E revenue. Key risks include lack of consistency in delivering organic growth, limited cash flow leverage and heightened competition for assets to acquire.

Varonis
$200 DCF-based price target (CoE 10%; TG 5%) implies 21.5x EV/NTM revenue estimate. Risks include slow market adoption of its products and execution risks related to evangelical sales process.

Workday, Inc.
Our $280 PT is based on our DCF (10% CoE; 5% TG). Risks include large incumbents with deep pockets (SAP, ORCL), very high R&D, and uncertainty about penetration into the Financials applications market.

For Important Disclosure information on companies recommended in this report, please visit our website at https://javatar.bluematrix.com/sellside/Disclosures.action or call 212.284.2300.

Analyst Certification:

I, Brent Thill, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, Joseph Gallo, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, Parthiv Varadarajan, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, Luv Sodha, CPA, CFA, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, John Byun, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

I, Bo Yin, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, Avi Kumar, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
As is the case with all Jefferies employees, the analyst(s) responsible for the coverage of the financial instruments discussed in this report receives compensation based in part on the overall performance of the firm, including investment banking income. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Aside from certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgement.

Investment Recommendation Record

(Article 3(1)e and Article 7 of MAR)

Recommendation Published	January 11, 2021 , 00:25 ET.
Recommendation Distributed	January 11, 2021 , 00:25 ET.

Company Specific Disclosures

Steven DeSanctis owns shares of Microsoft Inc. common shares.

Jefferies is acting as financial advisor to Avast plc on the announced sale of a minority stake in Jumpshot, Inc to Ascential plc.

James Heaney owns shares in Salesforce.com Stanislav Velikov or a member of his family owns shares and RSUs in Salesforce.com

Jefferies Group LLC makes a market in the securities or ADRs of 2U, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Adobe Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Atlassian Corp.
Jefferies Group LLC makes a market in the securities or ADRs of Check Point Software Technologies Ltd.
Jefferies Group LLC makes a market in the securities or ADRs of Cloudflare, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of CrowdStrike Holdings, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Datadog.
Jefferies Group LLC makes a market in the securities or ADRs of Dynatrace, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Elastic NV.
Jefferies Group LLC makes a market in the securities or ADRs of Intuit Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Microsoft Corporation.
Jefferies Group LLC makes a market in the securities or ADRs of Mimecast Limited.
Jefferies Group LLC makes a market in the securities or ADRs of SailPoint Technologies Holdings, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Smartsheet Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Tufin Software Technologies Ltd.
Jefferies Group LLC makes a market in the securities or ADRs of Upland Software, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Varonis Systems, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of SolarWinds, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Avast Plc.
Jefferies Group LLC makes a market in the securities or ADRs of BigCommerce Holdings, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Citrix Systems, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Dropbox, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of HubSpot, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of NICE Ltd.
Jefferies Group LLC makes a market in the securities or ADRs of Oracle Corporation.
Jefferies Group LLC makes a market in the securities or ADRs of PAR Technology Corporation.
Jefferies Group LLC makes a market in the securities or ADRs of SAP SE.
Jefferies Group LLC makes a market in the securities or ADRs of Softcat.
Jefferies Group LLC makes a market in the securities or ADRs of Snowflake Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Splunk.
Jefferies Group LLC makes a market in the securities or ADRs of Sumo Logic.
Jefferies Group LLC makes a market in the securities or ADRs of Wix.com Ltd.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Asana, Inc..
Within the past twelve months, Asana, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Jefferies Group LLC, its affiliates or subsidiaries has acted as a manager or co-manager in the underwriting or placement of securities for Asana, Inc. or one of its affiliates within the past twelve months.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Cloudflare, Inc..

Within the past twelve months, Cloudflare, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Jefferies Group LLC, its affiliates or subsidiaries has acted as a manager or co-manager in the underwriting or placement of securities for Cloudflare, Inc. or one of its affiliates within the past twelve months.

Jefferies Group LLC, its affiliates or subsidiaries expect to receive or intend to seek compensation for investment banking services from Datto, Inc. within the next three months.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Datto, Inc..

Within the past twelve months, Datto, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Jefferies Group LLC, its affiliates or subsidiaries has acted as a manager or co-manager in the underwriting or placement of securities for Datto, Inc. or one of its affiliates within the past twelve months.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Dynatrace, Inc..

Within the past twelve months, Dynatrace, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Within the past twelve months, Jefferies LLC and/or its affiliates received compensation for products and services other than investment banking services from non-investment banking, securities related compensation for client services it provided to Microsoft Corporation.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Palantir Technologies Inc.

Within the past twelve months, Palantir Technologies Inc has been a client of Jefferies LLC and investment banking services are being or have been provided.

Jefferies Group LLC, its affiliates or subsidiaries has acted as a manager or co-manager in the underwriting or placement of securities for Palantir Technologies Inc or one of its affiliates within the past twelve months.

Jefferies Group LLC, its affiliates or subsidiaries is acting as a manager or co-manager in the underwriting or placement of securities for Tufin Software Technologies Ltd. or one of its affiliates.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Upland Software, Inc..

Jefferies Group LLC, its affiliates or subsidiaries is acting as a manager or co-manager in the underwriting or placement of securities for Upland Software, Inc. or one of its affiliates.

Within the past twelve months, Upland Software, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Varonis Systems, Inc..

Within the past twelve months, Varonis Systems, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Jefferies Group LLC, its affiliates or subsidiaries expect to receive or intend to seek compensation for investment banking services from BigCommerce Holdings, Inc. within the next three months.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from BigCommerce Holdings, Inc..

Within the past twelve months, BigCommerce Holdings, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Jefferies Group LLC, its affiliates or subsidiaries has acted as a manager or co-manager in the underwriting or placement of securities for BigCommerce Holdings, Inc. or one of its affiliates within the past twelve months.

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Link Mobility Group Holding ASA.
Within the past twelve months, Link Mobility Group Holding ASA has been a client of Jefferies LLC and investment banking services are being or have been provided.
Jefferies Group LLC, its affiliates or subsidiaries has acted as a manager or co-manager in the underwriting or placement of securities for Link Mobility Group Holding ASA or one of its affiliates within the past twelve months.
Jefferies International Ltd, its affiliates or subsidiaries has, or had, within the past 12 months an agreement to provide investment services to Link Mobility Group Holding ASA.
Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from PAR Technology Corporation.
Jefferies Group LLC, its affiliates or subsidiaries is acting as a manager or co-manager in the underwriting or placement of securities for PAR Technology Corporation or one of its affiliates.
Within the past twelve months, PAR Technology Corporation has been a client of Jefferies LLC and investment banking services are being or have been provided.
Jefferies Group LLC, its affiliates or subsidiaries expect to receive or intend to seek compensation for investment banking services from Softcat within the next three months.
Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Softcat.
Within the past twelve months, Softcat has been a client of Jefferies LLC and investment banking services are being or have been provided.
Jefferies Hoare Govett a division of Jefferies International Limited acts as a corporate broker for Softcat.
Jefferies International Ltd, its affiliates or subsidiaries has, or had, within the past 12 months an agreement to provide investment services to Softcat.
Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Sumo Logic.
Jefferies Group LLC, its affiliates or subsidiaries is acting as a manager or co-manager in the underwriting or placement of securities for Sumo Logic or one of its affiliates.
Within the past twelve months, Sumo Logic has been a client of Jefferies LLC and investment banking services are being or have been provided.

For Important Disclosure information on companies recommended in this report, please visit our website at https://javatar.bluematrix.com/sellside/Disclosures.action or call 212.284.2300.

Explanation of Jefferies Ratings

Buy - Describes securities that we expect to provide a total return (price appreciation plus yield) of 15% or more within a 12-month period.
Hold - Describes securities that we expect to provide a total return (price appreciation plus yield) of plus 15% or minus 10% within a 12-month period.
Underperform - Describes securities that we expect to provide a total return (price appreciation plus yield) of minus 10% or less within a 12-month period.
The expected total return (price appreciation plus yield) for Buy rated securities with an average security price consistently below $10 is 20% or more within a 12-month period as these companies are typically more volatile than the overall stock market. For Hold rated securities with an average security price consistently below $10, the expected total return (price appreciation plus yield) is plus or minus 20% within a 12-month period. For Underperform rated securities with an average security price consistently below $10, the expected total return (price appreciation plus yield) is minus 20% or less within a 12-month period.
NR - The investment rating and price target have been temporarily suspended. Such suspensions are in compliance with applicable regulations and/or Jefferies policies.
CS - Coverage Suspended. Jefferies has suspended coverage of this company.
NC - Not covered. Jefferies does not cover this company.
Restricted - Describes issuers where, in conjunction with Jefferies engagement in certain transactions, company policy or applicable securities regulations prohibit certain types of communications, including investment recommendations.

Monitor - Describes securities whose company fundamentals and financials are being monitored, and for which no financial projections or opinions on the investment merits of the company are provided.

Valuation Methodology

Jefferies' methodology for assigning ratings may include the following: market capitalization, maturity, growth/value, volatility and expected total return over the next 12 months. The price targets are based on several methodologies, which may include, but are not restricted to, analyses of market risk, growth rate, revenue stream, discounted cash flow (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF, premium (discount)/average group EV/EBITDA, premium (discount)/average group P/E, sum of the parts, net asset value, dividend returns, and return on equity (ROE) over the next 12 months.

Jefferies Franchise Picks

Jefferies Franchise Picks include stock selections from among the best stock ideas from our equity analysts over a 12 month period. Stock selection is based on fundamental analysis and may take into account other factors such as analyst conviction, differentiated analysis, a favorable risk/reward ratio and investment themes that Jefferies analysts are recommending. Jefferies Franchise Picks will include only Buy rated stocks and the number can vary depending on analyst recommendations for inclusion. Stocks will be added as new opportunities arise and removed when the reason for inclusion changes, the stock has met its desired return, if it is no longer rated Buy and/or if it triggers a stop loss. Stocks having 120 day volatility in the bottom quartile of S&P stocks will continue to have a 15% stop loss, and the remainder will have a 20% stop. Franchise Picks are not intended to represent a recommended portfolio of stocks and is not sector based, but we may note where we believe a Pick falls within an investment style such as growth or value.

Risks which may impede the achievement of our Price Target

This report was prepared for general circulation and does not provide investment recommendations specific to individual investors. As such, the financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions based upon their specific investment objectives and financial situation utilizing their own financial advisors as they deem necessary. Past performance of the financial instruments recommended in this report should not be taken as an indication or guarantee of future results. The price, value of, and income from, any of the financial instruments mentioned in this report can rise as well as fall and may be affected by changes in economic, financial and political factors. If a financial instrument is denominated in a currency other than the investor's home currency, a change in exchange rates may adversely affect the price of, value of, or income derived from the financial instrument described in this report. In addition, investors in securities such as ADRs, whose values are affected by the currency of the underlying security, effectively assume currency risk.

Other Companies Mentioned in This Report

- Amadeus IT Group SA (AMS SM: €57.10, BUY)
- Avast Plc (AVST LN: p548.50, BUY)
- BigCommerce Holdings, Inc. (BIGC: $64.65, HOLD)
- Blue Prism Group Plc (PRSM LN: p1,880.00, BUY)
- Citrix Systems, Inc. (CTXS: $130.85, HOLD)
- Dropbox, Inc. (DBX: $22.50, BUY)
- GoDaddy, Inc. (GDDY: $82.05, BUY)
- HubSpot, Inc. (HUBS: $402.85, BUY)
- Link Mobility Group Holding ASA (LINK NO: NOK52.00, BUY)
- NICE Ltd. (NICE: $273.90, BUY)
- Oracle Corporation (ORCL: $63.38, HOLD)
- PAR Technology Corporation (PAR: $62.11, BUY)
- RingCentral, Inc. (RNG: $387.95, BUY)
- Salesforce.com (CRM: $222.04, BUY)
- SAP SE (SAP GR: €106.18, BUY)
- ServiceNow Inc (NOW: $529.64, BUY)
- Shopify, Inc. (SHOP: $1,188.92, BUY)
- Snowflake Inc (SNOW: $300.10, HOLD)
- Softcat (SCT LN: p1,507.00, BUY)
- Splunk (SPLK: $165.40, BUY)
- Sumo Logic (SUMO: $27.70, HOLD)
- VMware, Inc. (VMW: $142.86, HOLD)

• Wix.com Ltd (WIX: $263.53, BUY)

Distribution of Ratings

Distribution of Ratings						
			IB Serv./Past12 Mos.		JIL Mkt Serv./Past12 Mos.	
	Count	Percent	Count	Percent	Count	Percent
BUY	1547	58.87%	145	9.37%	17	1.10%
HOLD	947	36.04%	26	2.75%	6	0.63%
UNDERPERFORM	134	5.10%	2	1.49%	1	0.75%

Other Important Disclosures

Jefferies does business and seeks to do business with companies covered in its research reports, and expects to receive or intends to seek compensation for investment banking services among other activities from such companies. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Jefferies Equity Research refers to research reports produced by analysts employed by one of the following Jefferies Group LLC ("Jefferies") group companies:

United States: Jefferies LLC which is an SEC registered broker-dealer and a member of FINRA (and distributed by Jefferies Research Services, LLC, an SEC registered Investment Adviser, to clients paying separately for such research).

United Kingdom: Jefferies International Limited, which is authorized and regulated by the Financial Conduct Authority; registered in England and Wales No. 1978621; registered office: 100 Bishopsgate, London EC2N 4JL; telephone +44 (0)20 7029 8000; facsimile +44 (0)20 7029 8010.

Hong Kong: Jefferies Hong Kong Limited, which is licensed by the Securities and Futures Commission of Hong Kong with CE number ATS546; located at Suite 2201, 22nd Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

Singapore: Jefferies Singapore Limited, which is licensed by the Monetary Authority of Singapore; located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950.

Japan: Jefferies (Japan) Limited, Tokyo Branch, which is a securities company registered by the Financial Services Agency of Japan and is a member of the Japan Securities Dealers Association; located at Tokyo Midtown Hibiya 30F Hibiya Mitsui Tower, 1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006; telephone +813 5251 6100; facsimile +813 5251 6101.

India: Jefferies India Private Limited (CIN - U74140MH2007PTC200509), licensed by the Securities and Exchange Board of India for: Stock Broker (NSE & BSE) INZ000243033, Research Analyst INH000000701 and Merchant Banker INM000011443, located at 42/43, 2 North Avenue, Maker Maxity, Bandra-Kurla Complex, Bandra (East), Mumbai 400 051, India; Tel +91 22 4356 6000.

Australia: Jefferies (Australia) Securities Pty Limited (ACN 610 977 074), which holds an Australian financial services license (AFSL 487263) and is located at Level 22, 60 Martin Place, Sydney NSW 2000; telephone +61 2 9364 2800.

This report was prepared by personnel who are associated with Jefferies (Jefferies International Limited, Jefferies Hong Kong Limited, Jefferies Singapore Limited, Jefferies (Japan) Limited, Tokyo Branch, Jefferies India Private Limited), Jefferies (Australia) Pty Ltd; or by personnel who are associated with both Jefferies LLC and Jefferies Research Services LLC ("JRS"). Jefferies LLC is a US registered broker-dealer and is affiliated with JRS, which is a US registered investment adviser. JRS does not create tailored or personalized research and all research provided by JRS is impersonal. If you are paying separately for this research, it is being provided to you by JRS. Otherwise, it is being provided by Jefferies LLC. Jefferies LLC, JRS, and their affiliates are collectively referred to below as "Jefferies". Jefferies may seek to do business with companies covered in this research report. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only one of many factors in making their investment decisions. Specific conflict of interest and other disclosures that are required by FINRA and other rules are set forth in this disclosure section.

* * *

If you are receiving this report from a non-US Jefferies entity, please note the following: Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, as amended, this material is distributed in the United States by Jefferies LLC, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6 under the US Securities Exchange Act of 1934, as amended. Transactions by or on behalf of any US person may only be effected through Jefferies LLC. In the United Kingdom and European Economic Area this report is issued and/or approved for distribution by Jefferies International Limited ("JIL") and is intended for use only by persons who have, or have been assessed as having, suitable professional experience and expertise, or by persons to whom it can be otherwise lawfully distributed.

JIL allows its analysts to undertake private consultancy work. JIL's conflicts management policy sets out the arrangements JIL employs to manage any potential conflicts of interest that may arise as a result of such consultancy work. Jefferies LLC, JIL and their affiliates, may make a market or provide liquidity in the financial instruments referred to in this report; and where they do make a market, such activity is disclosed specifically in this report under "company specific disclosures".

For Canadian investors, this material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a "Designated

Institution" as defined by the Securities Act (Ontario). In Singapore, Jefferies Singapore Limited ("JSL") is regulated by the Monetary Authority of Singapore. For investors in the Republic of Singapore, this material is provided by JSL pursuant to Regulation 32C of the Financial Advisers Regulations. The material contained in this document is intended solely for accredited, expert or institutional investors, as defined under the Securities and Futures Act (Cap. 289 of Singapore). If there are any matters arising from, or in connection with this material, please contact JSL, located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950. In Japan, this material is issued and distributed by Jefferies (Japan) Limited to institutional investors only. In Hong Kong, this report is issued and approved by Jefferies Hong Kong Limited and is intended for use only by professional investors as defined in the Hong Kong Securities and Futures Ordinance and its subsidiary legislation. In the Republic of China (Taiwan), this report should not be distributed. The research in relation to this report is conducted outside the People's Republic of China ("PRC"). This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. In India, this report is made available by Jefferies India Private Limited. In Australia, this report is issued and/or approved for distribution by, or on behalf of, Jefferies (Australia) Securities Pty Ltd. It is directed solely at wholesale clients within the meaning of the Corporations Act 2001 of Australia (the "Corporations Act"), in connection with their consideration of any investment or investment service that is the subject of this report. This report may contain general financial product advice. Where this report refers to a particular financial product, you should obtain a copy of the relevant product disclosure statement or offer document before making any decision in relation to the product. Recipients of this document in any other jurisdictions should inform themselves about and observe any applicable legal requirements in relation to the receipt of this document.

This report is not an offer or solicitation of an offer to buy or sell any security or derivative instrument, or to make any investment. Any opinion or estimate constitutes the preparer's best judgment as of the date of preparation, and is subject to change without notice. Jefferies assumes no obligation to maintain or update this report based on subsequent information and events. Jefferies, and their respective officers, directors, and employees, may have long or short positions in, or may buy or sell any of the securities, derivative instruments or other investments mentioned or described herein, either as agent or as principal for their own account. This material is provided solely for informational purposes and is not tailored to any recipient, and is not based on, and does not take into account, the particular investment objectives, portfolio holdings, strategy, financial situation, or needs of any recipient. As such, any advice or recommendation in this report may not be suitable for a particular recipient. Jefferies assumes recipients of this report are capable of evaluating the information contained herein and of exercising independent judgment. A recipient of this report should not make any investment decision without first considering whether any advice or recommendation in this report is suitable for the recipient based on the recipient's particular circumstances and, if appropriate or otherwise needed, seeking professional advice, including tax advice. Jefferies does not perform any suitability or other analysis to check whether an investment decision made by the recipient based on this report is consistent with a recipient's investment objectives, portfolio holdings, strategy, financial situation, or needs.

By providing this report, neither JRS nor any other Jefferies entity accepts any authority, discretion, or control over the management of the recipient's assets. Any action taken by the recipient of this report, based on the information in the report, is at the recipient's sole judgment and risk. The recipient must perform his or her own independent review of any prospective investment. If the recipient uses the services of Jefferies LLC (or other affiliated broker-dealers), in connection with a purchase or sale of a security that is a subject of these materials, such broker-dealer may act as principal for its own accounts or as agent for another person. Only JRS is registered with the SEC as an investment adviser; and therefore neither Jefferies LLC nor any other Jefferies affiliate has any fiduciary duty in connection with distribution of these reports.

The price and value of the investments referred to herein and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

This report may contain forward looking statements that may be affected by inaccurate assumptions or by known or unknown risks, uncertainties, and other important factors. As a result, the actual results, events, performance or achievements of the financial product may be materially different from those expressed or implied in such statements.

This report has been prepared independently of any issuer of securities mentioned herein and not as agent of any issuer of securities. No Equity Research personnel have authority whatsoever to make any representations or warranty on behalf of the issuer(s). Any comments or statements made herein are those of the Jefferies entity producing this report and may differ from the views of other Jefferies entities.

This report may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Jefferies does not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and is not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third-party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Neither Jefferies nor any third-party content provider shall be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Jefferies research reports are disseminated and available electronically, and, in some cases, also in printed form. Electronic research is simultaneously made available to all clients. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of Jefferies. Neither Jefferies nor any of its respective directors, officers or employees, is responsible for guaranteeing the financial success of any investment, or accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents. Nothing herein shall be construed to waive any liability Jefferies has under applicable U.S. federal or state securities laws.

For Important Disclosure information relating to JRS, please see https://adviserinfo.sec.gov/IAPD/Content/Common/crd_iapd_Brochure.aspx?BRCHR_VRSN_ID=483878 and https://adviserinfo.sec.gov/Firm/292142 or visit our website at https://javatar.bluematrix.com/sellside/Disclosures.action, or www.jefferies.com, or call 1.888.JEFFERIES.