



## Splunk Research (12/20/19)

**Description:** Splunk Inc. provides software solutions that enable organizations to gain real-time operational intelligence in the United States and internationally. Its products enable users to investigate, monitor, analyze, and act on data regardless of format or source. Splunk Inc. was incorporated in 2003 and is headquartered in San Francisco, California.

**Ticker:** SPLK

**Price:** \$150.14

**Market Cap:** \$23.4B

**Performance:** +43.2% YTD

**Dividend Yield:** N/A

### Analysis

The company has a ton of offerings but generally speaking Splunk is in the security and information event management (SIEM) market serving cloud and online services, education, financial services, government, healthcare/pharmaceuticals, industrials/manufacturing, media/entertainment, retail/e-commerce, technology, and telecommunications industries with the following products:

1. Splunk Enterprise
  - a. A machine data platform with collection, indexing, search, reporting, analysis, alerting, monitoring, and data management capabilities
2. Splunk Cloud and Splunk Light
  - a. Offers log search and analysis for small IT environments
3. Splunk Enterprise Security
  - a. Addresses security threats and information, and event management
4. Splunk IT Service Intelligence
  - a. Monitors health and key performance indicators of critical IT and business services

5. Splunk User Behavior Analytics
  - a. Detects cyber-attacks and insider threats
6. Splunk Phantom
  - a. Automates and orchestrates incident response workflows
7. Splunk Machine Learning Toolkit and Splunk App for AWS
  - a. Collects and analyzes data from Amazon web services data sources
8. Splunk DB Connect
9. Cisco Firepower App for Splunk
10. Splunkbase and Splunk Answers Websites
  - a. Provide an environment to share apps, collaborate on the use of its software, and provide community-based support and education, as well as offers application programming interfaces and software development kits.

According to a 2018 Gartner study, Splunk is a leader and top player in SIEM beating out companies like IBM, Dell, Fortinet, and McAfee in “ability to execute” and “completeness of vision”.



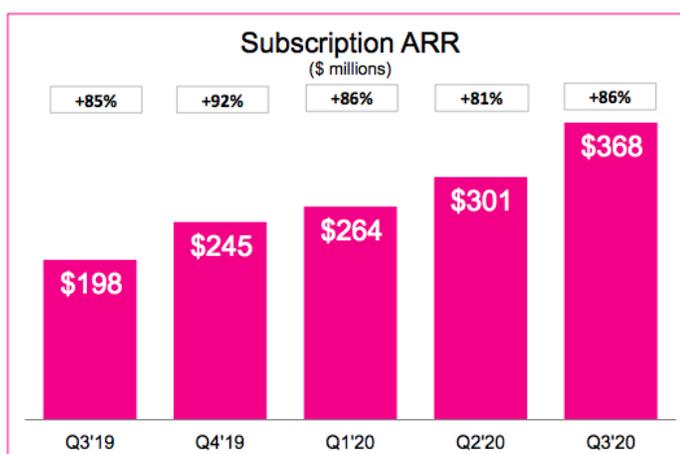
Much of this excellence was once again displayed in SPLK's most recent Q3 report where the company reported non-GAAP EPS of \$0.58 beating Wall Street estimates by \$0.04 on revenue of \$626.34M (+30.2% Y/Y) beating by a solid \$21.14M.

- Software revenues were \$454 million, up 40% year-over-year.
- Total revenues were \$626 million, up 30% year-over-year.
- GAAP operating loss was \$47 million
- GAAP operating margin was negative 7.6%.
- Non-GAAP operating income was \$106 million
- Non-GAAP operating margin was 16.8%.
- GAAP loss per share was \$0.38; non-GAAP income per share was \$0.58.
- Operating cash flow was negative \$135 million with free cash flow of negative \$162 million.
- Signed 440 new enterprise customers.
- Q4 Guidance
  - Total revenues are expected to be approximately \$780 million.
  - Non-GAAP operating margin is expected to be approximately 23%.
- 2020 Guidance
  - Total revenues are expected to be approximately \$2.35 billion (was approximately \$2.30 billion).
  - Non-GAAP operating margin is expected to be approximately 14% (unchanged from previous guidance).

There are some key points that need to be noted – both good and bad.

The Good:

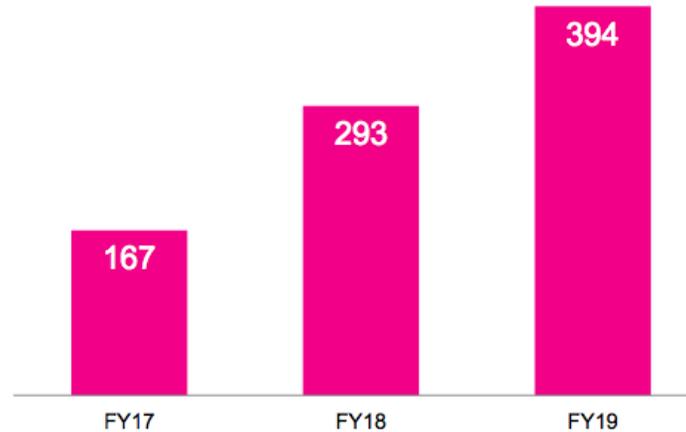
1. Revenues are growing at 30% - this is important as many investors tend to lower how much they are willing to pay (10X P/S for SPLK) on stocks that fall to 20% growth or lower especially in this space.
2. Software revenues grew at 40% - this is extremely good to see because it is higher margin
3. Increased 2020 guidance by \$50M
4. Subscription revenue has been on a tear growing 86% to an annualized run rate of \$368M and up from \$301M last quarter – Wall Street loves predictable and sustainable revenues and as subscription revenue becomes a larger part of revs, SPLK will see a higher multiple on their shares holding everything else constant (view image below).



- License revenue growth from \$279M to \$373M Y/Y in Q3 is phenomenal as cost of revenues for licensing is only a mere \$5.7M down from \$5.9M last year implying gross margins of ~98.5%.
- Gross margins 9 months into 2019 vs. 2018 are also up from 78.8% to 80.7%
- Sales and marketing of \$896M this year makes up a whopping 57% of revenues. This could be looked at as a negative, but CUBE sees it differently. The company is investing heavily to generate sales and it's great to know that this can be pulled back when necessary to boost profits.

(In thousands, except per share amounts)	Three Months Ended October 31,		Nine Months Ended October 31,	
	2019	2018	2019	2018
<b>Revenues</b>				
License	\$ 373,684	\$ 279,603	\$ 855,825	\$ 619,246
Maintenance and services	252,652	201,380	711,919	561,679
<b>Total revenues</b>	<b>626,336</b>	<b>480,983</b>	<b>1,567,744</b>	<b>1,180,925</b>
<b>Cost of revenues <sup>(1)</sup></b>				
License	5,796	5,922	17,414	16,717
Maintenance and services	102,023	83,303	284,536	234,226
<b>Total cost of revenues</b>	<b>107,819</b>	<b>89,225</b>	<b>301,950</b>	<b>250,943</b>
<b>Gross profit</b>	<b>518,517</b>	<b>391,758</b>	<b>1,265,794</b>	<b>929,982</b>
<b>Operating expenses <sup>(1)</sup></b>				
Research and development	158,887	117,722	422,287	310,818
Sales and marketing	319,023	264,223	896,757	726,089
General and administrative	88,092	59,819	226,118	168,405
<b>Total operating expenses</b>	<b>566,002</b>	<b>441,764</b>	<b>1,545,162</b>	<b>1,205,312</b>
<b>Operating loss</b>	<b>(47,485)</b>	<b>(50,006)</b>	<b>(279,368)</b>	<b>(275,330)</b>
<b>Interest and other income (expense), net</b>				
Interest income	12,612	8,571	45,373	15,322
Interest expense	(24,406)	(12,270)	(71,527)	(16,401)
Other income (expense), net	(215)	(186)	(1,408)	(657)
<b>Total interest and other income (expense), net</b>	<b>(12,009)</b>	<b>(3,885)</b>	<b>(27,562)</b>	<b>(1,736)</b>
<b>Loss before income taxes</b>	<b>(59,494)</b>	<b>(53,891)</b>	<b>(306,930)</b>	<b>(277,066)</b>
Income tax provision (benefit)	(1,855)	1,814	7,010	637
<b>Net loss</b>	<b>\$ (57,639)</b>	<b>\$ (55,705)</b>	<b>\$ (313,940)</b>	<b>\$ (277,703)</b>
<b>Basic and diluted net loss per share</b>	<b>\$ (0.38)</b>	<b>\$ (0.38)</b>	<b>\$ (2.08)</b>	<b>\$ (1.91)</b>

8. Clients generating at least \$1M in revenue for SPLK are up 34.5% Y/Y



We just went over some of the good takeaways from SPLK, now let's turn to the not so good.

The Bad:

1. Operating losses YTD stand at nearly -\$280M which implies operating margins of -17.7%
2. While 30% growth was good Y/Y for Q3, it looks like the implied growth for Q4 given the Q4 revenue guidance of \$780M only amounts to 25.4% growth. This now leads CUBE to wonder if FY2021 revenues will maintain 25%+ growth when compared to 2020. Analysts are expecting 22.5% growth according to Koyfin with revenue in 2021 coming in at \$2.88B.
3. Interest expense has exploded to \$71.5M YTD, up from \$16.4M last year. At this pace, it looks like SPLK will finish the year with nearly \$100M in interest expenses. According to the company's 10Q, in September 2018, they issued \$2.13B aggregate principal amount of convertible senior notes, which included \$1.27B aggregate principal amount of 0.50% Convertible Senior Notes due 2023 and \$862.5M aggregate principal amount of 1.125% Convertible Senior Notes due 2025.
4. Operating cash flow and free cash flow burn is extremely high at -\$228M YTD and -\$282M YTD, respectively. In the same period in 2018, these numbers were +\$169M and +\$153.9M YTD. In other words, a wild swing here into the negative here as the company looks to bolster growth through various acquisitions and general spending (marketing/employees/R&D/etc). Please look at the following images for more details.

(In thousands)	Three Months Ended October 31,		Nine Months Ended October 31,	
	2019	2018	2019	2018
Net cash provided by (used in) operating activities	\$ (134,863)	\$ 59,075	\$ (228,805)	\$ 169,086
Less purchases of property and equipment	(27,090)	(7,319)	(53,524)	(15,177)
Free cash flow (non-GAAP)	\$ (161,953)	\$ 51,756	\$ (282,329)	\$ 153,909
Net cash used in investing activities	\$ (617,472)	\$ (441,746)	\$ (643,284)	\$ (700,344)
Net cash provided by (used in) financing activities	\$ (46,399)	\$ 1,831,647	\$ (129,054)	\$ 1,855,205

(In thousands)	Nine Months Ended October 31,	
	2019	2018
<b>Cash flows from operating activities</b>		
Net loss	\$ (313,940)	\$ (277,703)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	46,079	37,946
Amortization of deferred commissions	75,078	55,592
Amortization of investment premiums (accretion of discounts)	(7,969)	(1,852)
Amortization of debt discount and issuance costs	59,477	8,491
Stock-based compensation	378,928	307,345
Deferred income taxes	(398)	(427)
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable, net	(165,735)	100,873
Prepaid expenses and other assets	(190,037)	(62,784)
Deferred commissions	(84,461)	(80,716)
Accounts payable	(1,129)	6,771
Accrued compensation	(12,821)	36,577
Accrued expenses and other liabilities	18,966	10,498
Deferred revenue	(30,843)	28,475
Net cash provided by (used in) operating activities	(228,805)	169,086
<b>Cash flows from investing activities</b>		
Purchases of investments	(815,685)	(810,264)
Maturities of investments	805,971	525,126
Acquisitions, net of cash acquired	(576,296)	(394,910)
Purchases of property and equipment	(53,524)	(15,177)
Other investment activities	(3,750)	(5,119)
Net cash used in investing activities	(643,284)	(700,344)
<b>Cash flows from financing activities</b>		
Proceeds from the exercise of stock options	624	1,695
Proceeds from employee stock purchase plan	34,482	24,201
Proceeds from the issuance of convertible senior notes, net of issuance costs	—	2,106,225
Purchase of capped calls	—	(274,275)
Taxes paid related to net share settlement of equity awards	(164,160)	(779)
Repayment of financing lease obligation	—	(1,862)
Net cash provided by (used in) financing activities	(129,054)	1,855,205
Effect of exchange rate changes on cash and cash equivalents	(1,552)	(1,778)
Net increase (decrease) in cash and cash equivalents	(1,002,695)	1,322,169
Cash and cash equivalents at beginning of period	1,876,165	545,947
Cash and cash equivalents at end of period	\$ 873,470	\$ 1,868,116

5. Cash and cash equivalents on hand YTD has fallen by approximately \$1B to \$873M. This should be enough on hand to get them through FY2021 (calendar 2020) but afterwards it would not surprise CUBE to see a secondary issuance of shares or take on additional debt. Look at the following images to see SPLK's operating cash flow expectations.

## Operating Cash Flow Forecast by Splunk



- SPLK expects to burn an additional \$70M in Q4 via operations. They plan on burning around the same amount next year before getting their operating cash flows into the green. For investors willing to buy and hold for the long term, SPLK expects to draw in \$1B in operating cash flow in FY2023 (Calendar 2022). CUBE believes this is achievable as SPLK will probably be generating nearly \$3.50B+ in revenue by then and with some pullbacks in sales & marketing, or even just keeping it flat, this is doable, especially with growing economies of scale. The question is whether SPLK has enough cash on hand to avoid taking on more debt or issuing additional shares before that happens heading into 2021 (FY 2022) and also if they want to continue their aggressiveness on M&A.

## Fundamental Analysis

Splunk is a very unique business so finding direct comparisons is difficult. In addition, it's also hard to do a multiples comparison with many tech companies in this space because so many of them don't generate any positive free cash flow, any positive EBITDA, or any positive EPS. Here are a list of some companies I used for comparison:

- ServiceNow (NOW)
- Twilio (TWLO)
- DataDog (DDOG)
- Okta (OKTA)

If the companies don't appear on the graph it's because they don't generate any figures to use in the multiple. Ex. No earnings = no P/E ratio.



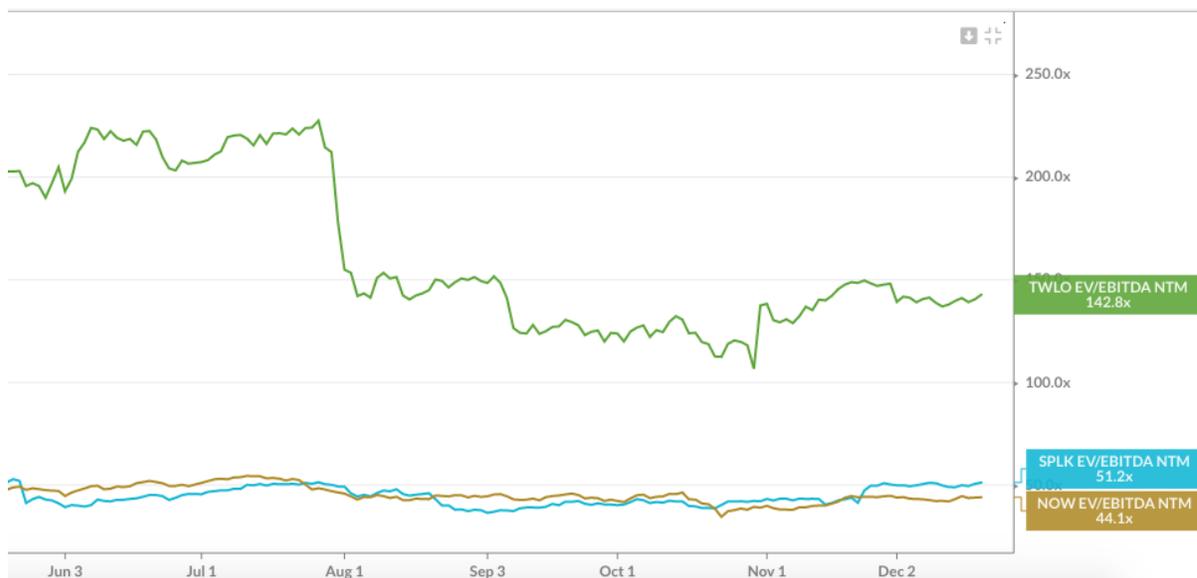
If we first look at yearly growth rates, SPLK is towards the bottom at 33.5%. Since DDOG is a recent IPO the data wasn't provided but DDOG would have been the fastest grower in the list around triple digit growth.



SPLK and NOW are the only ones with projected non-GAAP EPS profits. Analysts anticipate SPLK will bring in around \$2.00 in non-GAAP EPS. While 74.4x is steep, SPLK simply isn't focused that hard on bottom line right now.



If we subtract cash and add back debt to get an enterprise value, DDOG is at the top as most expensive at 22.6x next year's sales. SPLK is actually the cheapest at 8.7x sales. Much of this reason is because SPLK is most likely going to fall into the low-to-mid 20% growth range next year and analysts and investors will be looking for more profits now that 40-50%+ growth is no longer in the picture. Generally speaking, the cheapest you're going to see for a decent big data/cloud play with recurring revenue and little growth is around 2.5-3.0x sales. In CUBE's view, this isn't an eye-opening valuation for SPLK given their high-end position in SIEM and the fact that the company is a ripe takeover target for a larger tech enterprise looking to extend their offerings.



When looking at forward EBITDA (earnings before interest, taxes, depreciation, and amortization), SPLK is in the middle of the pack at a fairly expensive 51.2x. Like we said earlier, SPLK is spending over 50% of their revenues on sales and marketing and profits are just not a priority right now. As the company matures, much more of the revenues should make their way to the bottom line as it also becomes easier to scale.

Overall, we like SPLK but think shares have taken off quite a bit as seen in the technical analysis below. It's a very volatile stock and actually has a habit of creating great opportunities for investors to scoop dips. Compared to many charts in this space, the trajectory is usually just upward with little pullbacks but SPLK is unique in the sense that it does fall quite a bit and has made it up every time. In the event that SPLK does pullback once again, it may be something CUBE considers in the \$125-130 range as we feel the company should lean closer to the 7.0-7.5x EV/Sales and, as you can see in the image below, SPLK has trouble holding an EV/Sales greater than 9x over the last several years when growth was far greater than it is today.



Nonetheless, SPLK has done a terrific job growing their business and their transition to getting more customers as subscribers and recurring revenue is also a huge positive. In addition, they have recently received FedRAMP approval which allows them to provide services to the U.S. government which will also serve as a catalyst. The company continues to make the right moves with relentless execution and is a lot of the reason we do see SPLK being a strong takeover candidate in the next couple of years.

## Technical Analysis



Based on the charts, it looks like SPLK still has room to run as it has broken past many major resistance levels. Right now, the next big resistance levels are \$156.13, which is the upper BB, and \$161.88, which is the R1 resistance level. Considering the MFI is not overbought yet and the W%R tends to run deep into overbought and it's not currently overbought yet either, it looks like SPLK has some more room to the upside to test those levels. CUBE doesn't expect them to break on the first try and will need to reassess the charts afterwards to see if it can on a second attempt. From the looks of it, it will be quite overbought on every metric in the \$160 level. Looking at the opposite direction, the next support line for SPLK is the pivot point of \$138.60. Put simply, in the near-term we see additional movement to the upside followed by a rejection at the next resistance levels.