



Pre-IPO Coverage: CrowdStrike (CRWD)

CrowdStrike (CRWD), provider of cloud-based cybersecurity, is expected to IPO on Wednesday, June 12. At a price range of \$28-\$30 per share, the company plans to sell up to \$540 million with an expected market cap of ~\$5.7 billion. At the midpoint of the IPO price range, CRWD currently earns our [Unattractive rating](#).

CrowdStrike has some impressive credentials in the cybersecurity space. The company's technology helped to identify Russia as the source of the [DNC hacks](#) during the 2016 election, and it boasts 44 members of the Fortune 100, including Amazon Web Services (AMZN) as customers. On the other hand, the company has significant losses and will need to grow rapidly to justify an expected market cap that is almost 23 times 2018 revenue.

This report aims to help investors sort through CrowdStrike's financial filings to understand the fundamentals and valuation of this IPO.

Get the best fundamental research

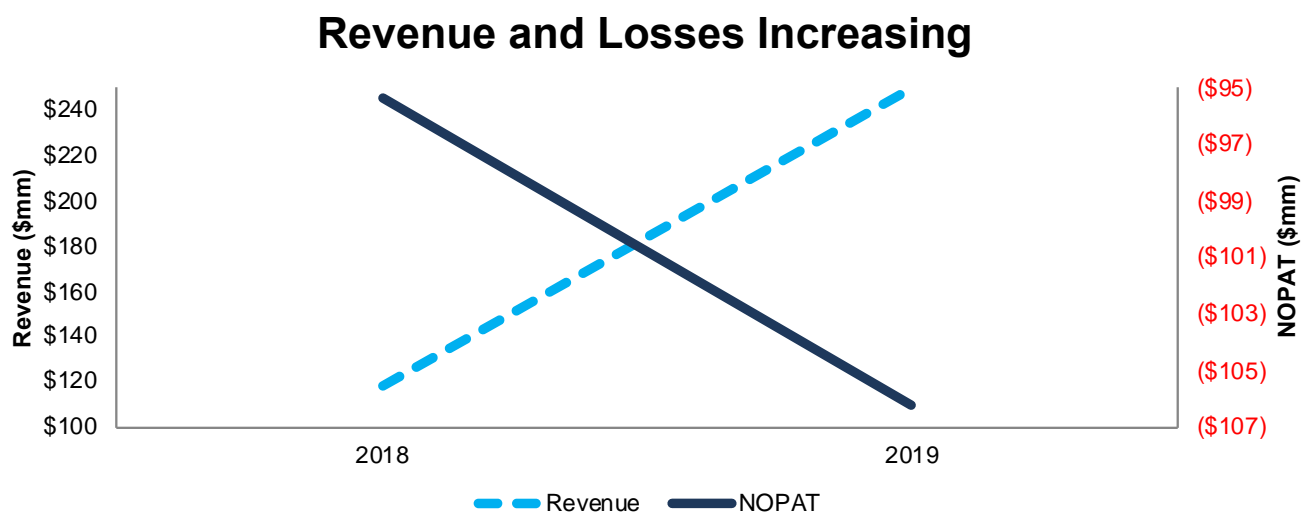
Growing Revenue Leads to Growing Losses

CrowdStrike was founded in 2011 with the goal of using artificial intelligence and cloud computing to create a more sophisticated cybersecurity platform. The company's technology has been used to combat many major hacking incidents over the past five years. In addition to the DNC hacks, CRWD helped identify the perpetrators of Chinese spying on the U.S. defense sector and linked North Korea to the Sony Pictures hack in 2014.

This positive press has helped the company rapidly acquire new customers. CRWD increased its subscription customers from 450 at the beginning of 2017 to 2,516 in 2019, or 137% compounded annually. The company now counts 44 members of the Fortune 100 as customers.

However, CRWD spends a lot of money to acquire these customers. In fiscal year 2019 (which ended on January 31), the company spent \$173 million (69% of revenue) on sales and marketing. As a result, the company's net operating loss after tax (NOPAT) increased by 11%, from -\$95 million in 2018 to -\$106 million in 2019. See Figure 1.

Figure 1: CRWD Revenue and NOPAT: 2017-2018



Sources: New Constructs, LLC and company filings



Encouragingly, sales and marketing costs declined as a percent of revenue, down from 88% in 2018. CRWD will need to keep growing revenue faster than marketing costs in order to achieve profitability.

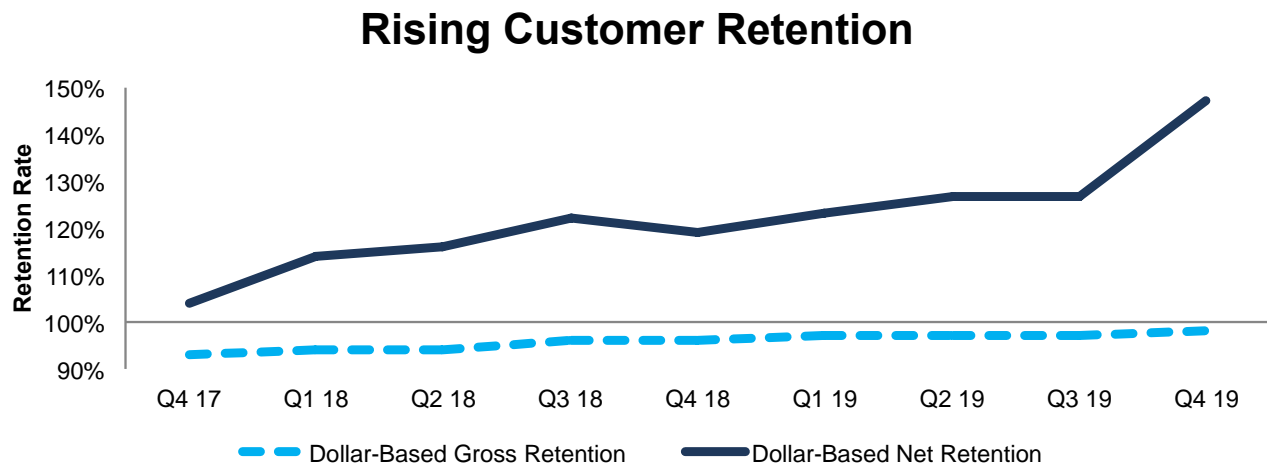
Best in Class Cybersecurity System

CRWD estimates that its addressable market is ~\$25 billion, but it faces significant competition in its industry. Legacy antivirus providers like McAfee and Symantec (SYMC), network security vendors like Palo Alto Networks (PANW) and FireEye (FEYE), and endpoint security providers BlackBerry Cylance and Carbon Black (CBLK) compete with CRWD.

Even in this crowded field, CRWD has managed to stand out. [Gartner Peer Insights](#) recognizes the company as the highest-rated vendor for Endpoint Detection and Response Solutions based on customer reviews.

In addition, CRWD’s customer retention rate backs up its high level of customer satisfaction. CRWD measures customer retention in two ways: Gross Retention and Net Retention. Gross Retention measures the year-over-year loss of customers, while Net Retention measures the year-over-year change in total spending from existing customers. Figure 2 shows that both Gross and Net Retention rates are high and increasing.

Figure 2: CRWD Dollar-Based Gross and Net Retention: Q4 2017- Q4 2019



Sources: New Constructs, LLC and company filings

CRWD’s Gross Retention rate of 98% in Q4 means it lost just 2% of customers year-over-year. For comparison, competitor Carbon Black had an 87% retention rate last year. Meanwhile, CRWD’s Net Retention rate of 147% means it grew revenue by 47% year-over-year in Q4 before even factoring in the revenue from new customers acquired during the year.

CRWD’s superior retention explains how it managed to grow revenue by 110% last year while Carbon Black grew revenue by just 30%. The two companies started the year with a similar level of revenue and spent similar amounts on marketing, but CRWD is retaining and attracting customers at a much higher rate.

Building a Moat Around Data

The bull case for CRWD rests on the assumption that the company can leverage big data to turn its current leadership position in the industry into a self-reinforcing cycle. As CRWD attracts new customers based on its superior service, it gets more data with which to train its AI, which makes its system even better, which attracts even more customers, and the cycle continues.

At the same time, many of CRWD’s competitors are significantly larger and have a major resource advantage. If CRWD can’t turn its data into a real competitive advantage, it may struggle to stay ahead of competitors that can afford to spend significantly more on R&D.



Public Shareholders Have No Rights

CRWD is going public with a dual-class share structure. The Class A shares sold to the public will have one vote per share, while the Class B shares held by insiders and early investors get 10 votes. Upon the completion of the IPO, Class B shareholders will hold ~99% of the voting rights in the company, which means public shareholders will effectively have no say in corporate governance.

DCF Model Reveals High Expectations

Our [reverse discounted cash flow \(DCF\) model](#) shows the expectations implied by CRWD's IPO price are high, but achievable.

In order to justify the midpoint of its IPO range, \$29/share, CRWD must grow revenue by 40% compounded annually for 10 years and achieve NOPAT margins of 10%, the same as Fortinet (FTNT) in 2018, the most profitable cybersecurity company we cover. [See the math behind this dynamic DCF scenario.](#)

In this scenario, CRWD would earn \$7 billion in revenue in 2029, about ~30% of its projected addressable market.

Overall, the expectations implied by CRWD's valuation are high but not as impossibly high as we've seen with other IPOs. The current valuation presents significant downside risk if the company fails to maintain its leading position in the market.

Critical Details Found in Financial Filings by Our [Robo-Analyst Technology](#)

As investors [focus more](#) on fundamental research, research automation technology is needed to analyze all the critical financial [details in financial filings](#). Below are specifics on the adjustments¹ we make based on Robo-Analyst² findings in CrowdStrike's S-1:

Income Statement: we made \$38 million of adjustments, with a net effect of removing \$30 million in [non-operating expense](#) (12% of revenue). You can see all the adjustments made to CRWD's income statement [here](#).

Balance Sheet: we made \$70 million of adjustments to calculate invested capital with a net decrease of \$26 million. You can see all the adjustments made to CRWD's balance sheet [here](#).

Valuation: we made \$461 million of adjustments with a net effect of decreasing shareholder value by \$461 million. Our largest adjustment is \$439 million (8% of market cap) in [employee stock option liabilities](#). You can see all the adjustments made to CRWD's valuation [here](#).

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Disclosure: David Trainer, Kyle Guske II, and Sam McBride receive no compensation to write about any specific stock, style, or theme.

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¹ Ernst & Young's recent white paper "[Getting ROIC Right](#)" demonstrates the link between an accurate calculation of ROIC and shareholder value.

² Harvard Business School Features the powerful impact of research automation in the case study [New Constructs: Disrupting Fundamental Analysis with Robo-Analysts](#).



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Value Investing 2.0: Diligence Matters: Technology is Key to Value Investing With Scale

Accounting data is only the beginning of fundamental research. It must be translated into economic earnings to truly understand profitability and valuation. This translation requires deep analysis of footnotes and the MD&A, a process that our [robo-analyst technology](#) empowers us to perform for thousands of stocks, ETFs and mutual funds.



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