



Pre-IPO Coverage: Cloudflare (NET)

Website infrastructure and security company Cloudflare (NET) is expected to IPO on Friday, September 13. At a price range of \$10-\$12 per share, the company plans to sell up to \$483 million of shares with an expected market cap of ~\$3.2 billion. At the midpoint of the IPO price range, NET currently earns our [Unattractive rating](#).

Cloudflare offers a variety of cloud-based services that used to be performed by many different on-premise solutions – such as firewalls, routing, virtual private networks (VPNs), traffic optimization, and load balancing – for businesses and websites. The company’s services have become integral to the operations of millions of websites around the world – but it has struggled to turn that global reach into positive cash flow.

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

Get the best fundamental research

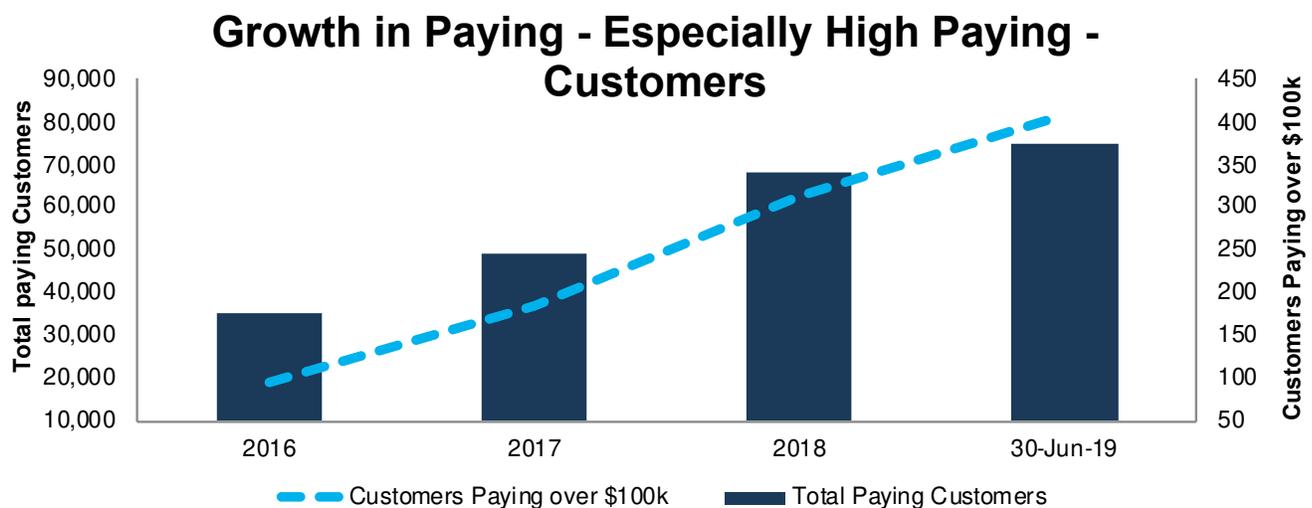
Growing Paid Customers

Like many other recent software-as-a-service (SaaS) IPO’s, Cloudflare operates on a “freemium” model. The company’s free tier protects websites from distributed denial of service (DDoS) attacks, reduces loading times, and protects certain information from malicious attacks. Paying customers get more advanced security offerings, as well as mobile optimization, faster network speeds, and a variety of other customized features.

As with any company that pursues this model, Cloudflare’s key challenge is to move its users up the value chain, getting free customers to pay and getting paying customers to pay more. The company currently provides services for over 20 million internet properties, but it only has ~75 thousand paying users.

As Figure 1 shows, though, the company has rapidly grown its paying user base over the past two and a half years, especially among its highest paying customers. Total paying customers have more than doubled, from 35 thousand at the end of 2016 to 75 thousand as of June 20, 2019. Customers that pay over \$100,000 annually have more than quadrupled over the same time, from 95 to 408.

Figure 1: Total and >\$100k Paying Customers: 2016-June 30, 2019



Sources: New Constructs, LLC and company filings

However, as we saw with [Slack](#) (WORK), growing paid customers doesn’t always lead to positive cash flows. Cloudflare’s revenue grew from \$135 million in 2017 to \$193 million in 2018, a 43% increase. Its [NOPAT](#), on the other hand, declined from -\$8 million to -\$83 million.

**No Economy of Scale**

Cloudflare's mounting losses raise a key concern. Despite rapid top-line growth, the company does not appear to have achieved any economies of scale. As Figure 2 shows, Cloudflare's cost of revenue, sales and marketing, research and development, and general and administrative expenses all grew faster than revenue in 2018.

Figure 2: Cloudflare's Expenses Growing Faster than Revenue: 2018 vs. 2017

Line Item (\$thousands)	2017	2018	Change
Revenue	\$134,915	\$192,674	43%
Cost of Revenue	\$28,788	\$43,537	51%
Sales and Marketing	\$61,899	\$94,394	52%
Research and Development	\$33,650	\$54,463	62%
General and Administrative	\$20,308	\$85,179	319%

Sources: New Constructs, LLC and company filings

Part of the large increase in general and administrative expense comes from unusually high stock-based compensation expense recorded as part of a secondary stock sale, as well as IPO preparation in 2018, but these factors don't explain all of the increase. The company disclosed that general and administrative headcount increased by 63% last year.

Through the first six months of 2019, cost of revenue, sales and marketing, and research and development expense continued to grow faster than revenue. Only general and administrative grew slower due to the unusual expenses in 2018, but it still represented 25% of revenue compared to 15% in 2017.

It's not abnormal to see early stage companies such as Cloudflare spending heavily on marketing and R&D. What is highly unusual is the fact that the company's cost of revenue and general and administrative costs, which should theoretically benefit from scale, are also growing rapidly. The company will need to find a way to reverse these trends in order to achieve profitability.

Tech Giants Could Be Partners, Competitors, or Acquirers

Cloudflare's relationship with the giants of the tech world could play a major role in determining its future. Amazon (AMZN), Alphabet (GOOGL), Microsoft (MSFT), and IBM (IBM) all have major cloud platforms, and all but AMZN currently partner with Cloudflare. Google Cloud, Microsoft Azure, and IBM Cloud integrate Cloudflare into their platforms to deliver its services to their customers.

However, Cloudflare notes in its [S-1](#) that these partnerships may be temporary. On page 143, it writes:

"Today, we work closely with these companies, some of whom are both partners and investors. In the long term, we may increasingly compete with them."

It seems unlikely that these tech giants will want to rely on a third-party for key elements of their cloud platform over the long-term. This disclosure from Cloudflare clearly suggests they expect GOOGL, MSFT, and IBM to try to replicate its services in-house before too long.

Alternatively, any of those companies could be a potential acquirer. An acquisition would allow these large public cloud providers to more fully integrate Cloudflare's technology into their platforms while simultaneously denying that technology to key competitors. In the race to dethrone Amazon's AWS as the dominant cloud platform, that technological edge could prove decisive. Cloudflare's \$3.2 billion market cap would be little more than a drop in the bucket for any of those companies.

Public Shareholders Have No Rights

While an acquisition could be good for investors, Cloudflare's poor corporate governance could derail it. The company plans to go public with a dual-class share structure that will give shares held by insiders and early investors 10 times the voting rights of the shares sold to the public. As a result, executives and directors will control 66% of the voting power in the company, preventing public shareholders from having any say in corporate governance.



This dual-class structure could allow executives to block a potential acquisition that would be in the best interest of shareholders simply because they want to remain in charge.

DCF Model Reveals High Expectations

When we use our [dynamic DCF](#) model to analyze the future cash flow expectations baked into the midpoint of the IPO price range, we find that Cloudflare must achieve impressive growth and profitability in order to justify its expected valuation.

As noted above, Cloudflare's prospects for profitability as a standalone entity seem poor, so it makes more sense to analyze the company's potential value to an acquirer.

To justify GOOGL paying the midpoint of its IPO range of \$11/share, Cloudflare must achieve 18% NOPAT margins – equal to GOOGL and up from its current margin of -43% – and grow revenue by 30% compounded annually for 8 years. [See the math behind this dynamic DCF scenario.](#)

If Microsoft acquired Cloudflare, and the company achieved Microsoft's NOPAT margin of 30% while maintaining the same growth rate, the stock is worth \$18/share today, a 67% upside to the midpoint of the IPO price range. [See the math behind this dynamic DCF scenario.](#)

While these scenarios suggest the company could justify or even exceed its IPO valuation, they rely on acquisitions, that may never materialize, to significantly boost margins. If Cloudflare doesn't get acquired, it becomes much harder to see how this company creates value for its IPO investors.

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 adjustments we make based on Robo-Analyst¹ findings in Cloudflare's S-1:

Income Statement: we made \$8 million of adjustments, with a net effect of removing \$4 million in [non-operating expense](#) (2% of revenue). You can see all the adjustments made to NET's income statement [here](#).

Balance Sheet: we made \$115 million of adjustments to calculate invested capital with a net decrease of \$27 million. The most notable adjustment was \$44 million in [operating leases](#). This adjustment represented 19% of reported net assets. You can see all the adjustments made to NET's balance sheet [here](#).

Valuation: we made \$258 million of adjustments with a net effect of increasing shareholder value by \$258 million. You can see all the adjustments made to NET's valuation [here](#).

This article originally published on [September 10, 2019](#).

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

Follow us on [Twitter](#), [Facebook](#), [LinkedIn](#), and [StockTwits](#) for real-time alerts on all our research.

¹ Harvard Business School Features the powerful impact of research automation in the case study [New Constructs: Disrupting Fundamental Analysis with Robo-Analysts](#).



New Constructs® - Research to Fulfill the Fiduciary Duty of Care

Ratings & screeners on 3000 stocks, 450 ETFs and 7000 mutual funds help you make prudent investment decisions.

New Constructs leverages the latest in machine learning to analyze structured and unstructured financial data with unrivaled speed and accuracy. The firm's forensic accounting experts work alongside engineers to develop proprietary NLP libraries and financial models. Our investment ratings are based on the best fundamental data in the business for stocks, ETFs and mutual funds. Clients include many of the top hedge funds, mutual funds and wealth management firms. David Trainer, the firm's CEO, is regularly featured in the media as a thought leader on the fiduciary duty of care, earnings quality, valuation and investment strategy.

To fulfill the Duty of Care, research should be:

1. **Comprehensive** - All relevant publicly-available (e.g. 10-Ks and 10-Qs) information has been diligently reviewed, including footnotes and the management discussion & analysis (MD&A).
2. **Un-conflicted** - Clients deserve unbiased research.
3. **Transparent** - Advisors should be able to show how the analysis was performed and the data behind it.
4. **Relevant** - Empirical evidence must provide [tangible, quantifiable correlation](#) to stock, ETF or mutual fund performance.

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.



DISCLOSURES

New Constructs®, LLC (together with any subsidiaries and/or affiliates, "New Constructs") is an independent organization with no management ties to the companies it covers. None of the members of New Constructs' management team or the management team of any New Constructs' affiliate holds a seat on the Board of Directors of any of the companies New Constructs covers. New Constructs does not perform any investment or merchant banking functions and does not operate a trading desk.

New Constructs' Stock Ownership Policy prevents any of its employees or managers from engaging in Insider Trading and restricts any trading whereby an employee may exploit inside information regarding our stock research. In addition, employees and managers of the company are bound by a code of ethics that restricts them from purchasing or selling a security that they know or should have known was under consideration for inclusion in a New Constructs report nor may they purchase or sell a security for the first 15 days after New Constructs issues a report on that security.

DISCLAIMERS

The information and opinions presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or solicitation of an offer to buy or sell securities or other financial instruments. New Constructs has not taken any steps to ensure that the securities referred to in this report are suitable for any particular investor and nothing in this report constitutes investment, legal, accounting or tax advice. This report includes general information that does not take into account your individual circumstance, financial situation or needs, nor does it represent a personal recommendation to you. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about any such investments or investment services.

Information and opinions presented in this report have been obtained or derived from sources believed by New Constructs to be reliable, but New Constructs makes no representation as to their accuracy, authority, usefulness, reliability, timeliness or completeness. New Constructs accepts no liability for loss arising from the use of the information presented in this report, and New Constructs makes no warranty as to results that may be obtained from the information presented in this report. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information and opinions contained in this report reflect a judgment at its original date of publication by New Constructs and are subject to change without notice. New Constructs may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and New Constructs is under no obligation to insure that such other reports are brought to the attention of any recipient of this report.

New Constructs' reports are intended for distribution to its professional and institutional investor customers. Recipients who are not professionals or institutional investor customers of New Constructs should seek the advice of their independent financial advisor prior to making any investment decision or for any necessary explanation of its contents.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would be subject New Constructs to any registration or licensing requirement within such jurisdiction.

This report may provide the addresses of websites. Except to the extent to which the report refers to New Constructs own website material, New Constructs has not reviewed the linked site and takes no responsibility for the content therein. Such address or hyperlink (including addresses or hyperlinks to New Constructs own website material) is provided solely for your convenience and the information and content of the linked site do not in any way form part of this report. Accessing such websites or following such hyperlink through this report shall be at your own risk.

All material in this report is the property of, and under copyright, of New Constructs. None of the contents, nor any copy of it, may be altered in any way, copied, or distributed or transmitted to any other party without the prior express written consent of New Constructs. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of New Constructs. Copyright New Constructs, LLC 2003 through the present date. All rights reserved.