IPO ANALYSIS

Research on upcoming IPOs for selected candidate companies.

PagerDuty

Pinterest

Ruhnn Holdings

April 2019

VentureDeal

PagerDuty Readies Plans For $181 Million IPO

Quick Take

PagerDuty (PD) and selling stockholders intend to sell $181 million of common stock in an IPO, according to an amended registration statement.

The firm provides software-based incident response capabilities to enterprises of all sizes.

PD is growing rapidly and has very impressive financial and operational metrics.

My opinion on the IPO is a BUY within the proposed range of $19.00 to $21.00 per share.

Company & Technology

San Francisco, California-based PagerDuty was founded in 2009 by three Amazon developers to help businesses enhance operations and mitigate security risk through the use of data analytics, machine learning as well as automation.

Management is headed by Director and CEO Jennifer G. Tejada, who has been with the firm since 2016 and is currently also a board member at Puppet Labs and The Estée Lauder Companies.

PagerDuty has developed an incident response platform that collects, correlates and interprets signals from software-enabled devices or systems to identify events and combines it with human response data to engage the right team members to take action in real time.

PagerDuty has a global customer base consisting of 10,800 organizations and its platform is used by 350,000 paid users, including teams across IT, software developers, security operations, customer support as well as business operations departments and industrial operations.

Investors in PagerDuty included Wellington Management, Andreessen Horowitz, T. Rowe Price, Accel, Bessemer Venture Partners, Harrison Metal as well as Baseline Ventures among others.

Source: VentureDeal Venture Capital Database

Customer Acquisition

PagerDuty markets its products through an inside sales team that focuses on small- and medium-sized businesses and a field sales team focused on enterprise customers.

Sales and marketing expenses as a percentage of revenue have dropped in the most recent period, per the table below:

Sales & Marketing Expenses vs. Revenue

Period	Percentage
FYE Jan 31, 2019	54.4%
FYE Jan 31, 2018	59.5%

Sources: Company registration statement and IPO Edge

Average Revenue per Customer has increased by 34.1% in the most recent fiscal year, per the table below:

Average Revenue Per Customer

Period	ARPC/U	Variance
FYE Jan 31, 2019	$10,903.48	34.1%
FYE Jan 31, 2018	$8,131.32	

Sources: Company registration statement and IPO Edge

The firm's net revenue retention rate in the most recent period was disclosed as 140% and growing. Any figure over 100% indicates negative churn and a healthy SaaS business.

PD's rate of 140% is extremely favorable and shows that customers are significantly increasing their spend on the firm's services over time.

Market & Competition

According to a 2018 market research report by Markets and Markets, the global incident response services market was valued at $13.4 billion in 2018 and is projected to reach $33.8 billion by 2023, growing at a very strong CAGR of 20.3% between 2018 and 2023.

The main factors driving market growth are the weight of financial losses post incident occurrence, the increasing incidence of security breaches as well as the need to adhere to increased regulations.

Major companies that provide incident response services include:

- IBM (IBM)
- Symantec (SYMC)
- Verizon (VZ)
- BAE Systems (OTCPK:BAESY)
- NTT Security
- Trustwave
- Cisco (CSCO)

- Check Point Software Technologies (CHKP)

Source: Sentieo

Financial Performance

PD's recent financial results can be summarized as follows:

- Strong topline revenue growth
- Increasing gross profit
- High and growing gross margin
- High negative EBITDA, but reduced negative EBITDA margin
- Decreasing cash used in operations

Below are relevant financial metrics derived from the firm's registration statement:

Total Revenue

Period	Total Revenue	% Variance vs. Prior
FYE Jan 31, 2019	$117,823,000	48.0%
FYE Jan 31, 2018	$79,630,000	

Gross Profit (Loss)

Period	Gross Profit (Loss)	% Variance vs. Prior
FYE Jan 31, 2019	$100,568,000	50.3%
FYE Jan 31, 2018	$66,913,000	

Gross Margin

Period	Gross Margin
FYE Jan 31, 2019	85.4%
FYE Jan 31, 2018	84.0%

EBITDA

Period	EBITDA	EBITDA Margin
FYE Jan 31, 2019	-$42,321,000	-35.9%
FYE Jan 31, 2018	-$38,316,000	-48.1%

Cash Flow From Operations

Period	Cash Flow From Operations
FYE Jan 31, 2019	-$5,608,000
FYE Jan 31, 2018	-$11,836,000

Sources: Company registration statement and IPO Edge

As of January 31, 2019, the company had $127.9 million in cash and $93.1 million in total liabilities. (Unaudited, interim)

Free cash flow during the twelve months ended January 31, 2018, was a negative ($9.3 million).

IPO Details & Valuation Metrics

PD intends to raise $181 million in gross proceeds from an IPO of its common stock, not including customary underwriter options.

The company will sell 8.5 million shares and selling shareholders will sell 570,000 shares at a midpoint price of $20.00 per share.

Assuming a successful IPO at the midpoint of the proposed price range, the company's enterprise value at IPO would approximate $1.3 billion.

Excluding effects of underwriter options and private placement shares or restricted stock, if any, the float to outstanding shares ratio will be approximately 12.32%.

Per the firm's latest filing, it plans to use the net proceeds from the IPO as follows:

> The principal purposes of this offering are to increase our financial flexibility, create a public market for our common stock, and facilitate our future access to capital markets. We currently intend to use the net proceeds we receive from this offering for general corporate purposes, including working capital, operating expenses, and capital expenditures. We cannot specify with certainty all of the particular uses for the remaining net proceeds to us from this offering.

Management's presentation of the company roadshow is available here.

Listed underwriters of the IPO are Morgan Stanley, J.P. Morgan, RBC Capital Markets, Allen & Company, KeyBanc Capital Markets, Piper Jaffray, William Blair, and BTIG.

Valuation Metrics

Below is a table of relevant capitalization and valuation metrics:

Measure [TTM]	**Amount**
Market Capitalization at IPO	$1,472,220,680
Enterprise Value	$1,344,345,680
Price / Sales	12.50
EV / Revenue	11.41
EV / EBITDA	-31.77

Earnings Per Share	-$0.54
Total Debt To Equity	0.89
Float To Outstanding Shares Ratio	12.32%
Proposed IPO Midpoint Price per Share	$20.00
Net Free Cash Flow	-$9,338,000

Sources: Company Prospectus, IPO Edge

Commentary

I previously wrote about PagerDuty's initial IPO filing in my analysis, First Look | PagerDuty Publishes First IPO Filing.

The firm's financials show impressive growth in topline revenue, gross profit, and high gross margin.

However, the firm still has strongly negative EBITDA although as a percentage of revenue it is dropping. Cash flow from operations is still negative but relatively small and manageable.

Other critical metrics are very impressive: sales & marketing as a percentage of revenue has been dropping and the average revenue per customer has grown markedly.

Perhaps the most important metric of all for a SaaS software business, the dollar net retention rate, is off-the-charts good at 140% in the most recent period.

I've only come across one other company in recent years with a negative churn rate of 140% or more and that was Atlassian (TEAM), whose stock has nearly quadrupled since its IPO in late 2015.

The market opportunity for the firm's service offerings is large and growing quickly.

However, the competition is significant and centers around the ability for much larger firms to effectively 'bundle' some or most of PagerDuty's functionality into their existing offerings. If done on a large scale, this would be difficult for PagerDuty to compete with.

Morgan Stanley is the lead left underwriter and IPOs led by the firm over the last 12-month period have generated an average return of 13.3% since their IPO. This is a middle-tier performance for all major underwriters during the period.

As to valuation, management is asking investors to pay an EV/Revenue multiple of 11.41x for the IPO at the midpoint price of $20.00 per share.

Compared to TEAM’s current EV/Revenue of 25.35, this presents a comparative bargain, although the two firms are not a good match in terms of service offerings.

Still, in terms of growth trajectory, negative net churn, and other financial and operational metrics, the PagerDuty IPO is one of the best Enterprise IT IPOs I’ve seen in some time.

Pinterest Begins U.S. IPO Process

Quick Take

Pinterest (PINS) has filed to raise $100 million in an IPO of its Class A common stock, according to an S-1 registration statement, although the final figure may be higher.

The firm operates an online image search and visual discovery website.

PINS is growing rapidly as it pursues international expansion as well as additional revenue streams and new technologies.

I’ll provide an update when we learn more details about the IPO from management.

Company & Market

San Francisco-based Pinterest was founded in 2010 to provide a destination site for people interested in reimagining their lives.

Management is headed by co-founder and CEO Ben Silbermann, who was previously at Google (GOOG).

Investors include Bessemer Venture Partners, FirstMark, Andreessen Horowitz, Fidelity, and Valiant and the firm has raised approximately $1.5 billion in private investment to-date.

According to management, it views its market as the global advertising market for the CPG and retail industries.

Citing an IDC report, this market is expected to grow from $693 billion in 2018 to $826 billion in 2022.

This represents a CAGR of 5%, which while a moderately low growth rate, is still a very large absolute growth in dollars spent.

Management says its growth strategy is to invest in technical innovations to ‘deepen Pinners’ engagement’ with the service, make Pinterest more ‘shoppable’ by adding ecommerce capabilities directly to the experience, localizing Pinterest to users around the world, and bring high-quality commercial content by partnering with select content creators.

User and Customer Acquisition

Pinterest attracts users through online word of mouth and by enabling easy-to-share information on social media networks.

In 2016, the firm expanded its focus from U.S. users to international audiences and now counts over 250 million users it defines as ‘active.’ Two-thirds of users are female.

PINS has been allowing advertising on the site since 2014 and features large CPG and retail brands that it acquires through a direct sales force to focus on these ‘managed’ accounts.

Additionally, it has built out its online tools for mid-market and unmanaged accounts to use the platform for their advertising efforts.

Sales and marketing expenses as a percentage of revenue have been flat as revenues have increased, as the figures below indicate:

Sales & Marketing Expenses vs. Revenue

Period	**Percentage**
2018	34.39%
2017	34.37%

Sources: Company registration statement and IPO Edge

Average Revenue per User has grown markedly in 2018, per the table below:

Average Revenue Per MAU

Period	**ARPM**	**Variance**
2018	$2.85	30.3%
2017	$2.19	

Sources: Company registration statement and IPO Edge

Financial Performance

PINS’ recent financial results can be summarized as follows:

- Continued strong growth in topline revenue

- Increasing gross profit
- Decreased gross margin
- Reduced negative EBITDA and EBITDA margin
- Reduced cash used in operations

Below are relevant financial metrics derived from the firm's registration statement:

Total Revenue

Period	Total Revenue	% Variance vs. Prior
2018	$755,932,000	59.9%
2017	$472,852,000	

Gross Profit (Loss)

Period	Gross Profit (Loss)	% Variance vs. Prior
2018	$241,584,000	35.2%
2017	$178,664,000	

Gross Margin

Period	Gross Margin
2018	31.96%
2017	37.78%

EBITDA

Period	EBITDA	EBITDA Margin
2018	-$74,721,000	-9.9%
2017	-$137,934,000	-29.2%

Cash Flow From Operations

Period	Cash Flow From Operations
2018	-$60,369,000
2017	-$102,913,000

Sources: Company registration statement and IPO Edge

As of December 31, 2018, the company had $122.5 million in cash and $282 million in total liabilities.

Free cash flow during the twelve months ended December 31, 2018, was a negative ($82.5 million).

IPO Details

PINS has filed to raise $100 million in gross proceeds from an IPO of its Class A common stock, although the final figure will likely be significantly higher.

Class A shareholders will be entitled to one vote per share and Class B shareholders will be entitled to twenty votes per share. However, Pinterest may feature a time limit for such voting control concentration.

Multiple classes of stock are a way for management to retain voting control of the company after losing economic control.

The S&P 500 no longer admits firms with multiple classes of stock to its index.

Management says it will use the net proceeds from the IPO as follows:

> We expect to use the net proceeds for general corporate purposes, including working capital and operating expenses. Additionally, we may use a portion of the net proceeds to acquire or invest in businesses, products, services or technologies. However, we do not have agreements or commitments for any material acquisitions or investments at this time. We may use a portion of the net proceeds of this offering to fund the remittance obligations of the company related to the settlement of the IPO-Vesting RSUs or outstanding stock options.

Management's presentation of the company roadshow is not yet available.

Listed bookrunners of the IPO are Goldman Sachs, J.P. Morgan, Allen & Co. BofA Merrill Lynch, Barclays, Credit Suisse, Deutsche Bank Securities, Baird, UBS Investment Bank, Citigroup, RBC Capital Markets, and Wells Fargo Securities.

Commentary

Pinterest is quickly growing online destination primarily for women.

The firm's financial results are impressive and feature rapidly growing revenue, gross profit, and average revenue per user. Less than impressive is the firm's drop in gross margin.

The market opportunity for PINS' online destination is difficult to quantify and there really is no direct competitor to gauge its results against.

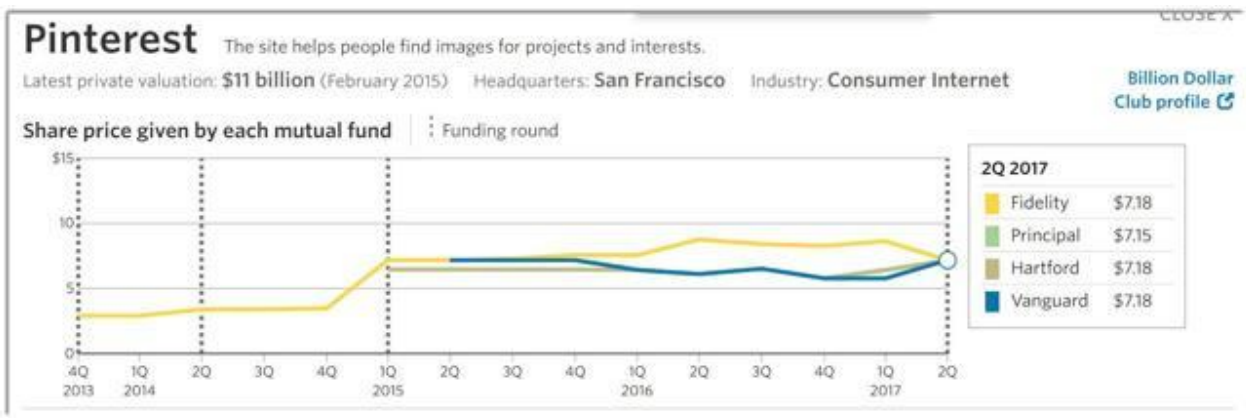
However, I judge the firm's future growth potential to be quite strong, given its continued international expansion as well as its late 2018 announcement that it would begin to offer the ability for users to complete ecommerce transactions through the site's online retail partners.

With the addition of referral ecommerce, the service opens up a new, additional revenue stream that further increases its value to users through increased convenience and improves its position with online retailers as a driver of traffic.

Management's investments in new recommendation and machine learning technologies also promise to continue to improve user experience.

Goldman Sachs is the lead left underwriter for the IPO. IPOs led by the firm over the last 12-month period have generated an average return of 28.2% since their IPO. This is a top-tier performance for all major underwriters during the period.

At its most recent private financing in February 2015, PINS was valued at $11 billion, as the chart shows below. I expect this valuation to be eclipsed by management's proposed valuation at IPO:



Source: WSJ Startup Tracker

Expected IPO Pricing Date: To be announced.

Ruhnn Holdings Proposes Terms For $125 Million IPO

Quick Take

Ruhnn Holding (RUHN) intends to raise $125 million in a U.S. IPO of ADSs, according to an amended F-1/A registration statement.

The company provides brands with access to its online ecommerce network of key opinion leaders.

RUHN has recently posted sharply slowing topline revenue growth which is especially problematic given its favorable relationship with major Internet site Taobao.

My opinion on the IPO is NEUTRAL.

Company & Technology

Hangzhou, China-based Ruhnn was founded to assist companies in finding and managing product ambassadors, or key opinion leaders [KOLs] to enhance their brand resonance among potential customers.

Management is headed by co-founder and Chairman Feng Min, who was previously general manager at Hangzhou Hedi Xiongjia Technology Company.

Company CEO is co-founder Sun Lei, who was also previously at Hangzhou Hedi Xiongjia Technology Company.

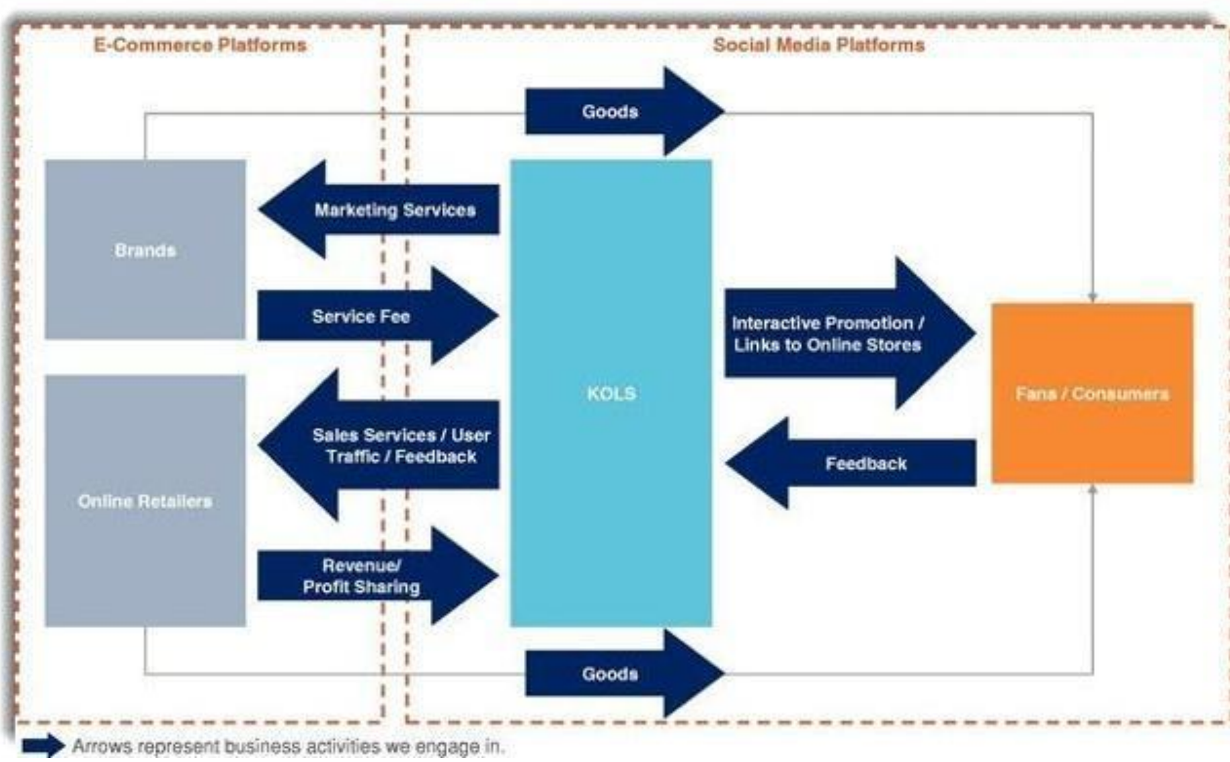
Senior management holds a total of 50.96% of company stock pre-IPO. Alibaba (BABA) is a significant investor in the company, with an 8.56% stake.

Customer/User Acquisition

Ruhnn has developed extensive partnerships with both online and offline players in what it calls the 'new retail industry' that enable it to integrate 'online, offline, supply chain and data' that 'replace traditional sales and marketing channels and enable two-way communication between businesses and consumers.

The firm is partially backed by Alibaba through its Taobao business, but management only generally refers to the relationship and Taobao website, to which it refers its fan base for purchasing products.

The graphic below shows Ruhnn's view of the new ecosystem and the dark blue arrows represent the various forms of business activity the firm operates and generates revenue from:



Source: Ruhnn F-1 Statement

Sales and marketing expenses as a percentage of revenue have been uneven as revenues have increased, as the figures below indicate:

Sales & Marketing	**Expenses vs. Revenue**
Period	**Percentage**
To FY Q3 2018	18%
FYE March 31, 2018	15%
FYE March 31, 2017	17%

Sources: Company registration statement and IPO Edge

Average Revenue per KOL (Key Opinion Leader) has been decreasing as the firm has scaled operations, per the table below:

Average Revenue Per KOL		
Period	**ARPC/U**	**Variance**
To FY Q3 2018	$1,102,000	-33.6%
March 31, 2018	$1,660,482	

Sources: Company registration statement and IPO Edge

Market & Competition

According to a 2018 report by Messe Muenchen citing the Internet portal Business of Fashion, the market for KOLs 'is estimated to be worth over 18 billion dollars.'

KOLs were initially used by luxury and fashion brands who featured existing celebrities as spokespersons.

More recently, KOLs have employed all manner of individuals who brands believe will present their products in the appropriate light via online and offline activities.

Management says it faces competition primarily from other direct competitors in the China KOL ecommerce sector. It believes it can compete effectively due to its first-mover and fan-base size advantages as well as the breadth of its selling and marketing capabilities.

Financial Performance

RUHN's recent financial results can be summarized as follows:

- Topline revenue growth but at a sharply decelerating growth rate
- Increased gross profit, at a decelerating rate of growth
- Relatively stable gross margin
- Fluctuating negative EBITDA
- A swing to positive cash flow from operations

Below are relevant financial metrics derived from the firm's registration statement:

Total Revenue

Period	**Total Revenue**	**% Variance vs. Prior**
To FY Q3 2018	$124,526,000	9.4%
FYE March 31 2018	$137,820,000	57.4%
FYE March 31 2017	$87,560,909	

Gross Profit (Loss)

Period	**Gross Profit (Loss)**	**% Variance vs. Prior**
To FY Q3 2018	$41,640,000	5.1%
FYE March 31 2018	$44,243,000	37.3%
FYE March 31 2017	$32,223,333	

Gross Margin

Period	**Gross Margin**

To FY Q3 2018	33.44%
FYE March 31 2018	32.10%
FYE March 31 2017	36.80%

EBITDA

Period	**EBITDA**	**EBITDA Margin**
To FY Q3 2018	-$6,903,000	-5.5%
FYE March 31 2018	-$10,523,000	-7.6%
FYE March 31 2017	-$3,306,818	-3.8%

Cash Flow From Operations

Period	**Cash Flow From Operations**
To FY Q3 2018	$6,652,433
FYE March 31 2018	-$4,010,572
FYE March 31 2017	-$36,444,191

Sources: Company registration statement and IPO Edge

As of December 31, 2018, the company had $22.8 million in cash and $123.3 million in total liabilities.

Free cash flow during the twelve months ended December 31, 2018, was a negative ($4.5 million).

IPO Details

RUHN intends to raise $125 million in gross proceeds in an IPO from the sale of 10 million ADSs representing Class A shares at a midpoint price of $12.50 per ADS.

Class A shareholders will be entitled to one vote per share and Class B shareholders, which are senior management, will be entitled to ten votes per share.

Multiple classes of stock are a way for senior management to retain voting control of the company after losing economic control.

The S&P 500 Index no longer admits firms with multiple classes of stock into its index.

Assuming a successful IPO at the midpoint of the proposed price range, the company's enterprise value at IPO would approximate $1 billion.

Excluding effects of underwriter options and private placement shares or restricted stock, if any, the float to outstanding shares ratio will be approximately 12.1%.

Management says it will use the net proceeds from the IPO as follows:

> 40% for identifying additional monetization channels and pursuing strategic investments in our industry;
>
> 30% for identifying and cultivating KOLs;
>
> 20% for investing in technology, AI solutions and big data analytics; and
>
> the balance of the net proceeds for general corporate purposes.

Management's presentation of the company roadshow is available here.

Listed bookrunners of the IPO are Citigroup and UBS Investment Bank.

Valuation Metrics

Below is a table of relevant capitalization and valuation metrics:

Measure [TTM]	**Amount**
Market Capitalization at IPO	$1,033,931,648
Enterprise Value	$1,011,166,648
Price / Sales	6.96
EV / Revenue	6.81
EV / EBITDA	-65.12
Earnings Per Share	-$0.21
Total Debt To Equity	-5.35
Float To Outstanding Shares Ratio	12.09%
Proposed IPO Midpoint Price per Share	$12.50
Net Free Cash Flow	-$4,516,366
Revenue Growth Rate	9.42%

Sources: Company Prospectus, IPO Edge

Commentary

I previously wrote about Ruhnn's IPO prospects in my analysis, First Look | Ruhnn Holdings Aims For $200 Million U.S. IPO.

Apparently, management has significantly downsized its U.S. IPO ambitions, as it now intends to raise only $125 million.

In that piece, I highlighted the firm's underwhelming financial results, especially its current fiscal TTM topline revenue growth rate of only 9.4%, which is quite a drop from its previous growth rate of 57.4%.

This is all the more relevant when we include the fact that the firm enjoys an ongoing relationship with Taobao, which should enable management to leverage better growth results.

The market opportunity for sourcing and matching KOLs with brands is large and there appears to be significant room for firms such as Ruhnn to provide a full-service menu of options for its brand clients

On the legal side, like many Chinese firms seeking to tap U.S. markets, the firm operates within a VIE structure or Variable Interest Entity.U.S. investors would only have an interest in an offshore firm with contractual rights to the firm's operational results but would not own the underlying assets.

This is a legal gray area that brings the risk of management changing the terms of the contractual agreement or the Chinese government altering the legality of such arrangements. Prospective investors in the IPO would need to factor in this important structural uncertainty.

Citigroup is the lead left underwriter and IPOs led by the firm over the last 12-month period have generated an average return of 13.8% since their IPO. This is a middle-tier performance for all major underwriters during the period.

As to valuation, management is asking IPO investors to pay an EV/Revenue multiple of nearly 8x on significantly slowing topline revenue growth.

Given the cloud of Ruhnn's sharply slowing revenue growth and its negative effect on IPO desirability, my opinion on the IPO is NEUTRAL.

Expected IPO Pricing Date: April 2, 2019.