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About Spruce Point Capital Management

Spruce Point Capital Is An Industry Recognized Research Activist Investment Firm Founded In 2009

- Founded by Ben Axler, a former investment banker with 17 years experience on Wall Street
- Ranked the #1 Short-Seller in the world by <u>Sumzero</u> after a comprehensive study of 12,000 analyst recommendations dating back to 2008 (March 2015)
- Ranked the #13 Most Influential FinTweeter on Twitter according to <u>Sentieo analysis</u> (Dec 2016)

Track Record of Prescient Research Calls Emanating From Deep China Due Diligence

	China Integrated Energy (Nasdaq: CBEH)	Camelot Information Systems (NYSE: CIS)	Ballard Power (Nasdaq: BLDP)
Report Date	<u>12/5/10</u>	<u>8/5/11</u>	<u>1/25/18</u>
Market Value	\$320m	\$440m	\$630m
Company Promotion	Leading non-state-owned integrated energy company in China engaged in three business segments: wholesale distribution of finished oil and heavy oil products, the production and sale of biodiesel and the operation of retail gas stations	Leading Chinese provider of enterprise application services and financial industry IT services	Well positioned through partnerships with local Chinese companies to capture the fuel cell bus market on the brink of commercialization
Our Criticism	Spruce Point's research indicated that CBEH's biodiesel business could not possibly produce the margins being represented, and that its capex and cash management policies raised serious concerns about the nature of its business	Our intense fundamental and forensic due diligence uncovered evidence to suggest Camelot was overstating its size and profitability through revenue overstatement and cost understatement. We saw 60% downside risk	Our on-the-ground due diligence uncovered evidence that the China fuel cell industry was stil in nascent stages of development and that Ballard's key partner, Broad Ocean, was under financial distress and unable to place any of the MEA that it had purchased to date
Successful Outcome	May 2011: KPMG auditor resigned and noted concerns about management's representations. Shares delisted and the SEC revoked its registration in Dec 2014	Following our report, CIS's share price collapsed, and a month later management disclosed a margin call. The shares reached a low of \$1; CIS was finally taken private for \$2.05/sh or 77% below our initiation price	Following our report, BLDP's share price collapsed 23%, and on the following earnings cal management slashed 2018 China growth to zero



Executive Summary



Correcting The Momo Misperception Through China-Based Investigative Research

Spruce Point and its China-based investigator has spent months doing primary forensic research into Momo, Inc. (Nasdaq: MOMO or "the Company") and sees \$23 to \$32/sh, 30% to 50% downside risk. Momo's investor base is compromised of two distinct cohorts, fundamental investors taking management's word at face value and momentum/swing traders trying to play the stock's trend. Both of these groups are oblivious to the serious risks underpinning a Momo investment.

Momo Company View

Leading mobile based open social networking and entertainment platform in China. Momo's platform focuses on allowing users to discover (anonymous) connections and build interactions through video, audio, chat and games. Momo's monetization model is focused on facilitating virtual gifting, user subscriptions and marketing. The Company's historical financial performance has been driven by "blowout" results in Live Video (think webcam / Instagram live plus online/offline American Idol) and is expected to continue as a result of the professionalization of Live Video, broad user growth and additional engagement/monetization strategies. Momo recently acquired Tantan, a yet to be proven Chinese version of Tinder, for \$735m

Momo Trader View

A "momo play" is trading vernacular used to represent a momentum trading opportunity. In a momo trade, the investor is not interested in the company's fundamentals, but rather, the stock's very short-term price movements. Alongside of swing traders, who hold positions for days or weeks, these investors are focused on stock technicals and news flows, and have little regard for fundamentals and risks given their holding period. Momo's stock is a poster child for these types of investors with 12.5k StockTwits followers





Momo
Spruce Point
China-Based
Forensic
Research View

Momo selectively reveals / conceals material disclosures from investors and is <u>diverting attention from new challenges in Live Video</u>. For example, Momo did not disclose <u>SAIC charges</u> of "Filing corporate information with the intent to conceal the truth and falsify" in Nov 2017. This may explain why three Momo directors resigned the same month for "personal reasons". We have uncovered that Momo <u>fails to disclose a web of 9 first level subsidiaries and 114 undisclosed second level subsidiaries</u>. <u>Momo also hasn't disclosed an illegal gambling site in China</u>. Lastly, <u>our investigation finds that Momo owns at least two undisclosed talent agencies</u>, evidence of related party dealing and <u>disclosed related-party dealings don't reconcile with local China filings</u>. When <u>visiting the registered business address of Beijing Mushang Culture Media</u>, one of Momo's top five agencies, we found a residential building with a door that said "home delivery, just walk in" – raising the potential for fabricated operations.



Framing The Diligence Challenges And Risks of A Momo Investment

The diligence and risk potential of a China based investment operating under a VIE structure is materially different from a comparable North American investment, and Chinese investments outside of a VIE structure.

As a result, a diligence process focused on conducting forensic financial analysis is a necessity.

- Momo's current investor base is primarily comprised of U.S. retail investors and a select number of institutions, almost exclusively in small position sizes, looking to play the recently white hot China live streaming space through one of a handful of US listed companies
- If Momo were simply a North American based company selling a new technology (e.g., VR, AI), investors could conduct significant English based market research, evaluate the product, understand the regulatory environment and make an educated assessment as to whether this is a fad or the next big thing. However, given the newness of the product space and the evolving nature of the competitive landscape it would still remain a speculative investment
- Additionally, if Momo were a North American based company, investors could take confidence in the fact its activities
 are likely to be transparently disclosed, fairly presented, legal and that management is acting in the best interest of
 shareholders
- Unfortunately, Momo isn't a North American based company and this compounds the risk of an investment substantially. Momo is a China based media company, offering a Mandarin based product to Chinese consumers and conducting business under the oversight of the MOC and SARFT. In order to credibly understand trends in this foreign market, an investor must conduct the same level of company, industry and regulatory diligence in Mandarin that one would conduct in English. Anything short of this is simply a gamble
- When making a Chinese based VIE investment, the emphasis placed on performing forensic research into
 governance, ownership, the legality of operations and related party transactions takes on much greater importance
 than a comparable North American investment given different corporate governance practices in China. Spruce
 Point doesn't believe that an appreciation for the risks of a Chinese VIE based investment can be achieved without
 thorough diligence of the VIE structure and its subsidiaries



Provision

Exemption

nonpublic

information under

Regulation FD

Retail Investors At A Large Disadvantage In Owning Momo Stock As A Foreign Company

Spruce Point believes Momo is a heavily retail-owned company, and its shareholders are at a disadvantage thanks to exemptions Momo uses as a foreign private issuer.

Implications for MOMO Investors

information beforehand are able to make a profit or avoid a loss at the

Key example: Momo is holding a "corporate access" conference call with

The rules under the Exchange Act requiring the filing of quarterly reports on Form 10-Q or current reports on Form 8-K with the SEC	The SEC put these forms in place to facilitate better informed investors. The absence of these reports potentially puts all investors in the dark regarding the financial condition of the entity (e.g., MD&A), changes of internal controls and legal or regulatory proceedings. Key example: Momo failed to notify investors that the SAIC charged its operating VIE with "Filing corporate information with the intent to conceal the truth and falsify". Portions of Momo's conference calls are also in Chinese, making investors' dependent on translator interpretation for quarterly performance updates
The Sections of the Exchange Act requiring insiders to file public reports of	Retail investors are disadvantaged because Momo does not file traditional Form 4 disclosures when insiders sell stock. Form 4's must be filed within 2 business days.
their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time	Key example: Momo has filed numerous Form 144s, which are not required to be filed electronically. Momo's Form 144s come by snail mail, which can extend public notification time (eg. To the right of 1 week). Form 144s are generally accessible on Bloomberg, which is an expensive financial platform for sophisticated institutional investors, not retail owners. We find that Momo insiders have sold \$300m of stock YTD
The selective disclosure rules by issuers of material	Momo retail investors are likely to receive material information only after it has been disclosed to its securities analysts, and then communicated to select institutional investors. Institutions privy to the information beforehand are able to make a profit or avoid a loss at the

Aliya Capital's institutional investor clients June 27

expense of retail investors

6 Days Later Investors Learn Momo Insiders Dumped Stock





Disturbing Momo Findings From Spruce Point's Forensic Diligence Suggest 30% – 50% Downside

• In order to develop a full appreciation of the business case and financial risks of a Momo investment, Spruce Point engaged an experienced China-based research consultant to assist in conducting ~50 detailed Mandarin interviews of the live stream ecosystem, and a forensic analysis of Momo's VIE operations and financials

Momo Diligence Challenges Foreign Sold Product In Evolving Industry Lack of Useful Business Metrics VIE Structure China's Different Governance and Business Practices Spruce Point Diligence Approach Primary Interviews with Agencies / Talent Users / Advertisers Forensic Analysis of China Filings and Transactions

- Our primary industry and company research suggests that the China live video space is maturing, and that it will likely result in lower market share and higher cost of revenue for Momo over time. As a result, we expect growth to disappoint relative to current expectations. Meaningful elements of Momo's "brand" of live streaming are also squarely in the crosshair of regulators. This variant point of view alone suggests a lower stock price for Momo
- However, the true risk of this investment resides in myriad, potentially catastrophic, red flags identified from our forensic analysis. We believe that Momo's multiple will materially rerate to 13x-15x, the bottom end of the range since the introduction of live streaming, and that the Company's operations and financial performance could also be impacted by regulatory actions



Momo's Capital Structure And Valuation

Momo is a \$9 billion China technology company trading near an all-time high share price given recent "blowout" results of its Live Video business. Shares might appear cheap given its blistering reported revenue and earnings growth. However, this view is predicated on taking management's story at face value and turning a blind eye to a multitude of concerning red flags highlighted in this report.

The nature of Momo's disclosures around the funding of the Tantan acquisition should serve as yet another to investors. Investors were to assume that the deal was to be funded out of cash flows until the convertible bond was announced 6/25/18 for \$650m and the bank loan facility disclosed. The convertible, unlike a cash payment, now potentially puts shareholders at risk of future dilution.

\$ in millions, expect per share figures

Stock Price	\$47.00	Street Valuation	2017A	2018E	2019E
Fully Diluted ADS	207.5	EV / Sales	6.8x	4.5x	3.5x
New Tantan shares issued	2.7	EV / Adj. EBITDA	24.0x	16.1x	12.5x
Market Capitalization	\$9,878.8	Price / Adj. EPS	30.1x	19.0x	15.0x
Convertible Bond Outstanding	\$650.0	EV / Free Cash Flow	22.7x	19.2x	12.1x
Total Debt Outstanding	\$650.0	Financial Results and Estimates			
Less: Cash and Equivalents (1)	\$599.4	Sales Growth	\$1,318.0	\$1,999.0	\$2,551.6
Less: Term Deposits	\$578.9	Adj EBITDA	\$373.5	\$555.0	\$718.9
Plus: 2nd cash payment for Tantan	(\$309.2)	Adj Earnings Per ADS	\$1.56	\$2.48	\$3.13
Net Cash and Term Deposits	\$869.1	Free Cash Flow	\$395.3	\$465.6	\$742.9
Less: Long-term investments at book value	\$50.4	Growth and Margins			
Total Enterprise Value	\$8,959.3	Sales Growth	138.3%	51.7%	27.6%
		Adj EBITDA Margin	28.3%	27.8%	28.2%
		Adj EPS Growth	110.8%	59.0%	26.2%



Spruce Point Has Significant Concerns Regarding Multiple Red Flags Identified At Momo

Spruce Point believes that anyone holding, or considering, an investment in Momo must get comfortable with the risks and unknown ramifications associated with the following red flags. We believe that all of these items are unbeknownst to current investors and most (where relevant) to government officials.

- Undisclosed Charges of "Filing Corporate Information With the Intent To Conceal The Truth and Falsify" Against Beijing Momo By the State Administration for Industry and Commerce (SAIC) in China. This Announcement Coincided With The Resignation of Three Momo Directors For "Personal Reasons"
 - In November 2017 Momo's VIE, Beijing Momo, was charged by the SAIC with "Filing corporate information with the intent to conceal the truth and falsify". Beijing Momo's corrected filings changed entities, suggest overstated operating profits, and changed the timing of Purple Sky/Matrix transfer of ownership from Tang Yan to Momo (BVI Company)
 - On November 24th, 2017, Momo directors Ms. Sichuan Zhang, Mr. Feng Yu and Mr. Joseph Tsai resigned
- Spruce Point Has Identified A Significant Number of Undisclosed Momo VIE Subsidiaries. It Is Uncommon For A U.S. Listed Company To Fail To Disclose The Subsidiaries (Subs) of Its VIE
 - The Company discloses that its VIE, Beijing Momo has 6 first level subsidiaries and 1 second level subsidiary. However, Spruce Point has discovered that Momo has 9 undisclosed first level subs and 114 undisclosed second level subs
 - Undisclosed entities, particularly Limited Partnerships (of which Momo has several), provide the opportunity for the legal management of the Company to extract benefits for themselves or hide the true nature of the operations
 - Spruce Point Has Determined That Momo Owns At Least Two Undisclosed Talent Agencies And Is Engaging In Related Party Transactions
 - The unusual nature of these agencies financial statements and discrepancies with Momo's 20-F call into question the integrity of Deloitte's audit of VIE subs and raise the potential that talent agencies are serving other purposes (e.g., money laundering)
 - Based on our investigators findings, we believe that one of Momo's top 5 agencies (Beijing Mushang Culture Media) is partially owned by Momo, operating from an address different from its registered address, and likely illegally employing people without legal entities in other "branches"



Spruce Point Has Significant Concerns Regarding Multiple Red Flags Identified At Momo (Cont'd)



Spruce Point Has Also Determined Another Undisclosed VIE Has Invested In, And Possibly Operated, An Illegal Onshore Gambling Site That Was Shutdown Earlier This Year

- Spruce Point research suggests Momo has invested via an undisclosed VIE, and was possibly operating, a very popular and highly rated illegal gambling operation (Pokermaster 德扑圈) in China. It was exposed by CCTV in February 2018 and has now been shut down
- It just so happens that Momo CEO, Tang Yan, is a well known poker player and gambler. We expect this discovery to garner significant interest from the Chinese government
- Momo has not disclosed the revenue and/or earnings contribution to investors from Pokermaster and we haven't been
 able to determine the full impact. This raises concerns that management is using shareholder funds for self-interested
 purposes, and could be enhancing recent financial results with these activities



- Acquisition of Tantan Doesn't Appear To Make Much Sense From A Strategic Or Valuation Perspective. The Insertion of Several Limited Partnerships Into The Ownership of Tantan VIE Shortly Before Deal Execution Also Seems Unusual. Spruce Point Believes That It Has Uncovered Pre-IPO Transactions That Would Suggest Management May Have A History of Enriching Insiders
- Spruce Point believes Momo overpaid when it purchased Tantan in Feb 2018 for \$735 million (\$600.9 million in cash and 5.3 million A class ordinary shares). The Tantan Series D financing in June 2017 valued it at \$320 million (source) and it is expected to do \$4.5 million in revenue for the month of June 18 (Q1'18 Earnings) (zero revenues prior). It is not clear, why Tantan's valuation increased by 130% in approximately 8 months between the Series D round and acquisition
- One theory is that Momo needed to use the cash it could not get out of China, a metric it ceased reporting after the Q3'16 earnings call, and something we believe has risen materially since. Momo acquired the Tantan VIE with RMB cash in China. On October 25th, 2017 three equity LPs became shareholders of the Tantan VIE. It's possible that the newly added limited partnerships were put in place immediately before the transaction to hide who actually got paid the cash
- In early 2012, Matrix and Purple Sky became the first two outside investors (~10% each) in Momo via the Momo VIE. Both companies would later enter into a series of transactions with Momo and other investors that mysteriously indicate that both parties independently owned the entirety of Series A-1 shares, something that we are unable to resolve. This raises the obvious question of whether one or both of these companies were used to reward insiders in advance of the IPO



Spruce Point Has Significant Concerns Regarding Multiple Red Flags Identified At Momo (Cont'd)



Recent Key Performance Metrics And Financial Results Are In Disagreement With Industry Data And Feedback From Detailed Interviews With Live Streaming Talent Agents

- Momo's management recently reported record Monthly Active Users ("MAU") for Q1 2018. However, Analysys and QuestMobile data indicate that live stream industry MAU peaked six to twelve months back, and that Momo's MAU is well below stated levels, and potentially in decline (per Analysys). Interestingly, Momo has a risk factor to discuss discrepancies between internal and external reported user data
- The revenues of Beijing Mushang Culture Media, an undisclosed Momo talent agency, would seem to suggest that Momo has been much more dependent on agencies than previously portrayed. <u>This calls into question the legitimacy and efficacy of the "shift" in strategy towards agencies</u>
- During the recent Q1'18 earnings call, Momo management also explained away a decrease in cost of revenues by stating that strength in non-event day revenue resulted in "scaled back the revenue oriented operating efforts around the quarterly competition event. Therefore, cost on bonus or rewards offered to broadcasters during the March tournament, was significantly reduced."
- Spruce Point's research consultant specifically asked 11 agencies, including a Momo owned agency, if there was any change in tournament payouts, and was consistently told there was no such reduction in revenue or incentive removal to agency/broadcasters. Additionally, the agencies all acknowledged the impression that the costs of advertising and running the tournament this year had gone up substantially from last year



Recent Regulations Focused On Content Are Likely To Hit Elements of Momo's "Brand" of Live Streaming Particularly Hard

- New regulations were put in place during 2017 by the Ministry of Commerce (MOC) and the State Administration of Radio, Film and TV (SARFT) limiting the behavior of live streamers and raising accountability for platforms. Agents mentioned that restrictions included no midriff (area between chest and waist) exposure, no filming on beds and limited cleavage, to name just a few. Implementation of these rules has only recently been enforced with many sanctions since February 2018
- Based on countless hours we've spent viewing Momo's website, it appears that Momo has limited interest/capability in shutting down violators of these policies and that these same performers are often the most recommended/viewed performers outside of competitions
- However, there is no need to take our word for it. Four of the agencies that we spoke with gave the unsolicited opinion that Momo has a reputation as a (sex) cam site. We believe that this has directly contributed to Momo's advertising woes



Fundamental Challenges On The Horizon For Momo's Live Video Segment

Momo Has a Demonstrated Track Record of Product Applications Plateauing Over Time

Momo's revenue growth story has been predicated on growth of monthly active users (MAU) and more importantly
Average Revenue Per Paying User (ARPPU). However, the performance of Momo's underlying products (Membership
Subscriptions, Gaming, Marketing and Live Video) along with key performance indicators (revenues, paid users,
revenue/MAU and paid users, respectively) have all plateaued over time

Despite Management's Wishes Otherwise, Momo Remains A Live Video Company

• As of Q1'18, 85% of Momo's revenue was attributable to Live Video and Live Video's ARPPU was ~12x that of Value-Added Services "VAS" (\$84 vs \$7m). Momo's financial performance is inextricably tied to live streaming, a business with low barriers to entry and coming under intense competition from well funded adversaries

Management's Commentary And Financial Results in Q2 and Q3 2017 Indicated Concern About The Live Video Segment And Prompted A Shift In Strategy Towards Agencies

- By the Q3'2017, the Live Video segment was beginning to show signs of fatigue as paying users flattened out and conversion of MAU to paying users was in decline. The revenues of Live Video continued to post strong growth, but this was almost exclusively driven by ARPPU growth
- Management explained on the Q2'17 earnings call it was in the best interest of the Company to transition certain live streaming users towards other use cases even if it meant "divert traffic from our very monetizable live streaming service to more newer used cases." The justification for such a shift, "I think the key thing here is that we've never been positioning Momo as a live streaming company"
- On the Q3'17 earnings call, Momo acknowledged new competition and industry maturation. "At the same time, we are seeing bigger players with strong community ecosystems taking initiatives to upgrade their content offerings and market-share shifting from amateur broadcasters to more professional ones". As well as a strategic shift towards working with agencies, "Historically, agencies have a limited role in Momo's life streaming ecosystem", including "adjusting our operational policies to better support the high value-added agencies in traffic and other resources, as well as economic incentive"
- We remind all investors that these business changes occurred precisely around the time the SAIC charged Momo with
 "Filing corporate information with the intent to conceal the truth and falsify", three Momo directors resigned and new
 Tantan LP entities were created



Fundamental Challenges On The Horizon For Momo's Live Video Segment (Cont'd)

Given the shifting nature of the Live Video strategy and very limited financial and KPI transparency for the segment, Spruce Point relied on 50 detailed Mandarin based interviews with members of the Live Stream Ecosystem (Agency/Broadcaster/Users/Advertisers) to develop a forward view of Momo's prospects.

Undisclosed Insights Into Momo Live Video Strategy

- <u>Fee Sharing:</u> Momo appears to tier fee sharing with Agencies based on their size and allegiance. Momo's take ranges from a high of 60% to a low of 50% in our sample
- <u>Free Virtual Gifts:</u> The majority of our sample indicated that Momo didn't provide them with free virtual gifts. However, several agencies referenced what one referred to as a "commercial secret" that Momo provides free gifts based on the scale, ranking and exclusivity of an agency. <u>It is unclear how these transactions are recognized from an accounting perspective</u>
- <u>Cash Rebates:</u> Several agencies discussed that they also had the option of receiving cash rebates for purchasing virtual currency. <u>It is unclear if these transactions are considered costs of revenues</u>
- Momo Owned Agencies: When we asked agencies about whether or not Momo controls its own agencies we got a range of responses from "No" to their biggest agency is their own. Most folks "in the know" were reluctant to provide specifics, but indicated that this is particularly the case with some of their largest agents. This would indicate related party transactions and again the accounting treatment remains unclear

Live Video Financial Impact From New Competition And Shift In Strategy

- Momo will now face formidable new competition in the live streaming space from well funded public companies and private companies with the backing of Tencent, Baidu, Alibaba and Bytedance
- A majority of agencies we spoke with indicated that they were experimenting with other platforms where there are
 reputations for bigger spenders (e.g., Now) or the popularity of the channel is growing rapidly (e.g., Douyin). A good
 portion of the agencies expressed some concern over Momo's outlook and the value in diversifying platforms. We
 expect Momo's market share to slip over the coming 18 months
- Most of the competing platforms maintain 40%-55% of virtual currency gifting, and emerging threat Now maintains only 30%-40%. We expect Momo's cost of revenues to move up materially over time to match industry levels (50%-70%)



Spruce Point Believes Momo (Nasdaq: MOMO) Is A Strong Sell With 30%-50% Downside

Advertising Unlikely To Pick Up Anytime Soon

- Momo's history of crime related to the site and reputation as a "live cam site for sex and this is something it cannot wash off"
 (Agent Interview #2) will likely weigh on marketing revenues in the intermediate term
- Key Opinion Leaders ("KOL") appear to have almost entirely abandoned Momo as a platform. Our consultant spoke with one KOL agency who pools his data with other leading KOL agencies. The pool of agencies has a total of 3,000 KOLs. In July 2017, 1,500 (50% of the KOLs) listed Momo as a platform they would operate on. By December 2017, that number had fallen to 50 KOLs or 2%
- Momo has always shied away from increasing ad load during times of product transitions. The present shift not only involves new product introductions, but also involves a repositioning of the organization. "Lastly, mobile marketing business bottomed out in the fourth quarter, both the effective CPM and the number of that in question sold increased meaningfully from the third quarter. While we think there is still potential in driving further growth in eCPMs and increasing the ad world.
 We won't get aggressive in doing so as the focus in 2018 is on building user engagement." (Q4 '2017 Earnings Call)

Poor Risk/Reward Owning Momo While Insider Selling Intensifies And Fundamentals Are Strained

- Twenty-one analysts covering Momo have a consensus "Buy", but with a P/E multiple in the middle of Momo's historical range, they are blind to the risks of our report
- Despite deep analyst coverage, institutional holders account for only 30% of Momo's Shares (Nasdaq). Notably absent from the holders list are Large U.S. Technology Hedge Funds. Given the plethora or retail shareholders and institutions holding Momo in small size, we expect that few have conducted rigorous research into the name
- Momo insiders have sold \$2 billion of stock since the IPO. Momo Executives and Directors, except for Tang Yan, are on pace in 2018 to sell more than 2x what they sold in 2017 (\$300 million).
 We believe this is a negative indicator for future business results
- Based on Spruce Point's detailed interviews we expect going forward to see flat to down live streaming revenues, higher cost of revenues and negligible mobile marketing growth. We then apply a significantly discounted P/E multiple due to heightened risks surrounding the significant red flags that we've highlighted in this report. This brings us to a price target of \$23 to \$32/sh and represents 30%-50% downside risk



Red Flags Emanating From Forensic Analysis



Red Flag 1: Undisclosed Charges Against Momo By The SAIC

In November 2017 Beijing Momo was charged by the State Administration of Industry and Commerce (SAIC) with "Filing corporate information with the intent to conceal the truth and falsify". Beijing Momo's corrected filings indicate overstated revenues / costs and changes to the timing of Purple Sky / Matrix transfer of ownership from CEO Tang Yan to Momo.



SAIC charges are serious and can lead to a wide range of restriction on a businesses operations (Source)



经查,你单位因公示信息隐瞒真实情况、弄虚作假,违反了《企业信息公示暂行条例》和《企业经营异常名录管理暂行办法》(或者《农民专业合作社年度报告公示暂行办法》)的相关规定。根据《企业信息公示暂行条例》第十七条第一款和《企业经营异常名录管理暂行办法》第八条(或者《农民专业合作社年度报告公示暂行办法》第十一条)的规定,现决定将你单位列入经营异常名录。

你单位如不服本决定,可在接到本决定书之日起六十日内向北京市工商行政管理 局或者本区(县)人民政府申请行政复议;或者六个月内向人民法院提起行政诉讼。

2017-11-02

Source: SAIC (blocked access from outside of China)

Beijing Chaoyang Branch of Industry and Commerce Administration Bureau

Notice of Decision to List on The Abnormal Operations Directory

(Beijing Industry and Commerce, Chaoyang District Branch Abnormal Operations List Number [2017] No. 49771)

Beijing Momo Technology Co., Ltd.:

Following investigations into your organization disclosure of information that conceals the truth and fraud, it is determined that you have violated the relevant provisions of the "Provisional Regulations on Corporate Information Disclosure" and the "Interim Measures on the Administration of Enterprise Abnormalities List" (or "Provisional Measures for the Announcement of Annual Reports of Rural Cooperatives"). According to the provisions of Article 17(1) of the Provisional Regulations on Corporate Information Disclosure and Article 8 of the Interim Measures for the Management of Enterprise Abnormalities List (or Article 11 of the Interim Measures for the Public Announcement of Rural Cooperatives), it is now decided to include your company in the list as a business with abnormal operations.

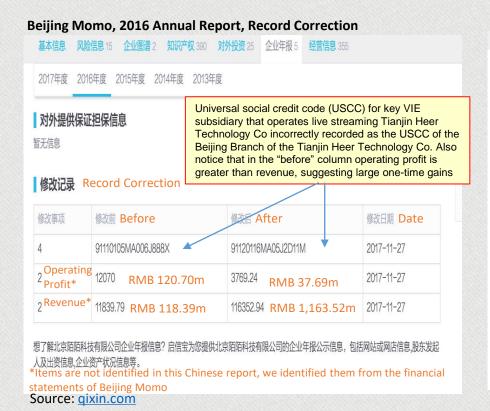
If you fail to comply with this decision, you may apply to the Beijing Municipal Administration for Industry and Commerce or the District (County) People's Government for administrative reconsideration within 60 days from the date of receipt of this Decision; or you may file an administrative lawsuit with the People's Court within six months.



Red Flag 1: Undisclosed Charges Against Momo By The SAIC (Cont'd)

This material information about Tang Yan's ownership of Momo Technology HK Company Ltd and the charge of "Filing corporate information with the intent to conceal the truth and falsify" have never been disclosed to investors.

- Beijing Momo resolved this issue on November 29, 2017 by filling amendments to past financial reports and ownership statements on November 27, 2017. Beijing Momo corrected fillings in each year from 2013 to 2016. Revenues and costs appear to have both been materially misstated
- Importantly, the date on which Purple Sky and Matrix (to be discussed in red flag 5) transferred their share in Beijing Momo to Tang Yan was changed from the October 24, 2013 to October 10, 2013





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Red Flag 1: Three Momo Directors Resign For "Personal Reasons" Following SAIC Charge

The SAIC charges against Beijing Momo were filed on November 2nd, 2017 and later resolved on November 27th, 2017. It was during this period, on November 24th 2017, that three Momo Directors resigned for "personal reasons" without further elaboration.

Recent Development - Resignations and Appointment of Board Directors

On November 24, 2017, each of Ms. Sichuan Zhang, Mr. Feng Yu and Mr. Joseph C. Tsai resigned from the Company's board of directors for personal reasons, effective as of the same date. Upon resignation of these directors, the board of directors of the Company consisted of six members, namely Mr. Yan Tang, Mr. Yong Li, Mr. David Ying Zhang, Mr. Neil Nanpeng Shen, Dr. Dave Daqing Qi and Mr. Benson Bing Chung Tam.

On November 28, 2017, the board of directors of the Company has appointed Mr. Li Wang, the Chief Operating Officer and Co-president of the Company, as a new member of the board. As a result, the board size of the Company has been increased to seven. Mr. Wang joined the Company as its operation director in July 2011. Mr. Wang has been the Company's Chief Operating Officer since June 2014 and Copresident since April 2017. Prior to joining the Company, Mr. Wang worked at NEC China Co., Ltd. Mr. Wang received his bachelor's degree in management from Beijing University of Aeronautics and Astronautics in China in 2004.

Source: Momo Q3 '17 Earnings Press Release



Red Flag 2: VIE Structure Contains Undisclosed Companies

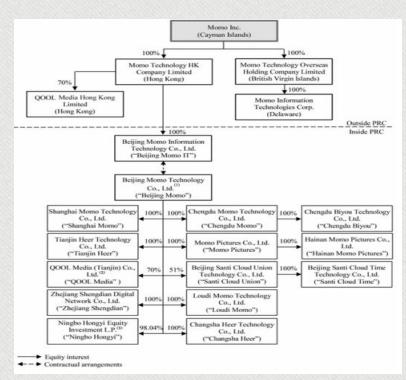
Spruce Point has discovered that Momo has 9 undisclosed first level subsidiaries and 114 undisclosed second level subsidiaries ("subs"). In our experience, it is uncommon for a U.S. listed Chinese company to fail to disclose the subsidiaries of its VIE.

- Momo uses a variable interest entity (VIE) to operate its mobile app business in China to circumvent foreign ownership limits on internet and mobile content platforms. This is now the common accepted way to operate such a company
- The Company discloses that its VIE, Beijing Momo has 10 first level subsidiaries and 2 second level subsidiary. Spruce Point has discovered that it has 9 undisclosed first level subsidiaries and 114 undisclosed second level subsidiaries
- Four subsidiaries are identified in the "Long Term Equity Investment" (Note 5 to the financial statements) as equity investments of the group, but not as subsidiaries of the VIE entity. In the same note, there is an "others" item for both equity and cost method of investment sections that is the grab bag where the undisclosed entities are presumably recorded

Beijing Momo Subsidiaries

Level	Disclosed Entities	Undisclosed Entities	Total
First Level Subsidiaries	14	9	23
Second Level Subsidiaries	2	114	116

Source: SAIC, Spruce Point Consultant, Company Reports



Source: Momo Annual Report page 57



Red Flag 2: VIE Structure Contains Undisclosed Companies (Cont'd)

Below are the nine undisclosed first levels subs that Spruce Point has discovered. Undisclosed entities provide the opportunity for the legal management of the Company to extract benefits for themselves or hide the true nature of the operations. Several of the disclosed and undisclosed entities are limited partnerships. Limited partnerships (LP) are more opaque than limited liability companies. Investments made by LP's are based on the partners agreement, and the returns from the investments can be assigned to other companies or individuals depending on what is specified in the partners' agreement.

Beijing Momo First Level Subsidiaries And Nine Undisclosed Entities Boxed In Red

Disclosure	Company Name In English	Beijing Momo	Date	Capitalization
515016501 6	Company reason	Ownership	Established	RMB mm
Disclosed Equity Investment of the "group" (not as subsidiary of the VIE)	Hunan Qindao Culture Spread Co., Ltd.	26%	6/26/03	19.15
Disclosed Equity Investment of the "group" (not as subsidiary of the VIE)	Jingwei Chuangteng (Hangzhou) (Limited Partnership)	>5%	1/4/15	
Disclosed Equity Investment of the "group" (not as subsidiary of the VIE)	Beijing Autobot Venture Capital (limited Partnership)	>5%	1/16/15	
Disclosed Equity Investment of the "group" (not as subsidiary of the VIE)	Hangzhou Aqua Venture Investments (Limited partnership)	43%	2/9/15	
Disclosed Subsidiary	Momo Pictures Co Ltd	100%	11/11/16	100
Disclosed Subsidiary	Luodi Momo Technology Co Ltd	100%	7/17/17	20
Disclosed Subsidiary	Beijing Santiyun Shidai Technology Co Ltd	49%	6/30/17	1
Disclosed Subsidiary	Tianjin Heer Technology Co Ltd	100%	5/9/13	50
Disclosed Subsidiary	Zhejiang Shengdian Digital Network Co Ltd	100%	9/23/03	10
Disclosed Subsidiary	Chengdu Momo Technology Co Ltd	100%	5/9/13	10
Disclosed Subsidiary	Shanghai Momo Technology Co Ltd	100%	1/19/15	10
Disclosed Subsidiary	Chengdu Biyou Technology Co Ltd	100%	10/16/15	1
Disclosed Subsidiary	QOOL Media (Tianjin) Co Ltd	70%	6/26/16	
Disclosed Subsidiary	Changsha Heer Internet Technology Co Ltd	100%	9/20/17	50
Undisclosed	Hammer Technology (Beijing) Co., Ltd.	>5%	5/28/12	38.5
Undisclosed	Wuxi Jianguo Phase 2 Investment Partnership Enterprise Ltd	33%	4/22/15	21.5
Undisclosed	Chengdu Tianchuang Leyou Network Technology Co., Ltd.	>5%	8/1/13	5.8
Undisclosed	Beijing Fuxin Film Culture Media Co., Ltd.	20%	10/21/04	4.1
Undisclosed	Shanghai iFrostwolf Information Technology Co., Ltd.	10%	1/14/14	3.75
Undisclosed	Beijing Shile Haofeng Culture Media Co Ltd	23%	1/4/16	1.53
Undisclosed	Beijing Kuolie Technology Co Ltd	15%	9/7/16	1.25
Undisclosed	Shanghai Taifeng Network Technology Co., Ltd.	20%	12/3/14	1
Undisclosed	Ningbo Hongsheng Equity Investment Partnership (Limited Partnership)	Unknown	11/1/15	

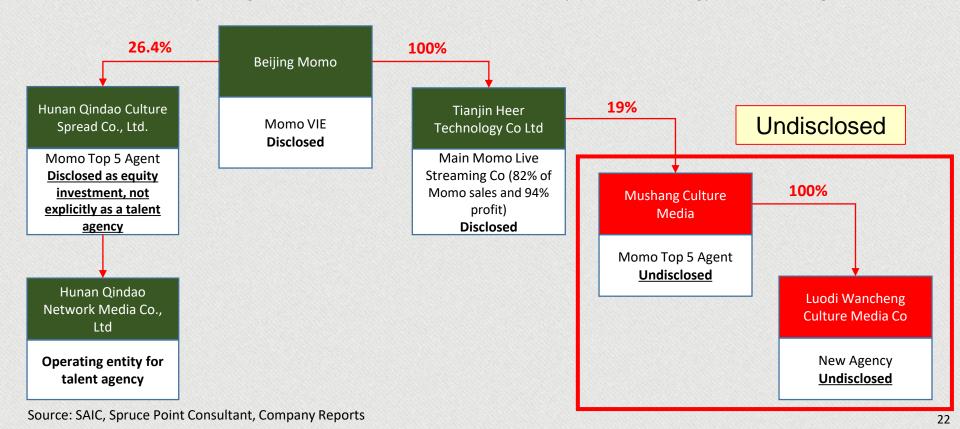
Source: SAIC, Spruce Point Consultant, Company Reports



Red Flag 3: MOMO's Undisclosed Ownership of Talent Agencies + Related Party Transactions

Our forensic analysis has identified that Momo owns at least two, including what we believe to be one of their top five, talent agencies. It is unclear how many additional talent agencies they may own through other undisclosed VIEs, but it appears that Momo is conducting undisclosed related party transactions. It also raises obvious concerns around conflicts of interest around the fairness of treatment across broadcasters/agencies affiliated vs. unaffiliated with Momo.

Hunan Qindao Culture Spread is disclosed in related party transactions in Momo's 20F Filing (Note 15), but has never
been mentioned by management in calls or in the context of Momo's operations or strategy shift towards agencies

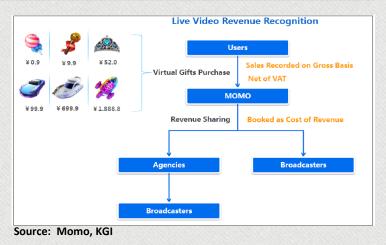


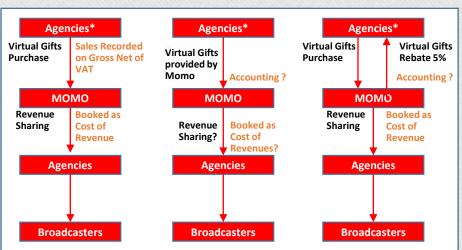


Red Flag 3: MOMO's Undisclosed Ownership of Talent Agencies + Related Party Transactions (Cont'd)

The chain of virtual gifting transactions and accounting discussed publicly by Momo management is rather straightforward ("clean"). However, this chain gets increasingly "murky" once you introduce Momo related party agencies, agencies supporting their own talent, free virtual currency and cash rebates.

- Users purchase virtual currency from Momo and then give virtual gifts to other users (VAS) and broadcasters (Live Video) as a means of showing interest or as a token of appreciation
- Momo then takes a cut of the virtual gift's value, typically 50%-60%, and then pays the remainder out (Revenue Sharing under Cost of Revenues) either directly to a broadcaster or the broadcaster's agent
- Agencies act as representation for broadcasters and assist them with training, compliance with regulation, and online/offline promotion
- This chain of transactions, as described above and in the neighboring image provided by Momo, is relatively straightforward
- Though never discussed publicly by Momo, <u>our</u>
 agency interviews reveal that payments are often
 being made by agencies to promote their own talent
- Additionally, <u>Momo is providing free virtual currency</u> to some preferred agencies and giving cash rebates to <u>others</u>
- The nature of the above (right) transactions, and the fact that some of these agencies are Momo owned entities, creates uncertainty around accounting treatment and opens the door for potentially illegal activities (e.g. money laundering)



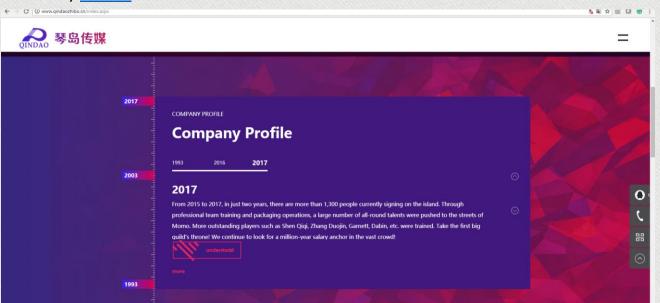




Red Flag 3: MOMO's Undisclosed Ownership of Talent Agencies + Related Party Transactions (Cont'd)

Momo disclosed in its 20-F Hunan Qindao Culture Spread Co as an equity investment of \$4.4 million in 2016 and having shared live streaming revenue of \$3.9 million. It has not been disclosed as a talent agent and we can't understand why it would be receiving a \$5.1 million prepayment from Momo.

In July 2017 Hunan Qindao Culture Spread established a subsidiary, Hunan Qindao Network
Media Co Ltd, that we have discovered is now used to operate a Momo dedicated talent agency
business. The Hunan Qindao Culture Spread branded agency website is registered to this
subsidiary Qindao



- 70% of the revenue payments received by Hunan Qindao Culture Spread reside with Hunan Qindao Network Media Co., Ltd.
- Curiously, this subsidiary received an advance payment of \$5.1 million in revenue sharing from Momo Inc, disclosed in the 2017 20-F (Note 15(1)). Normally an agent will receive its share of revenue from Momo at the end of the month and then pass on the broadcasters share of revenue. We can see no good reason why an agent should receive an advance payment





Red Flag 3: Hunan Qindao Culture Spread's China Financials Don't Match Momo's Reported Numbers

We could not match Momo's reported performance of Hunan Qindao Culture Spread (Hunan Qindao) with the company's statutory fillings in China in a couple of instances. The differences appear to be material.

- Momo reported that it purchased (shared live streaming revenue) \$3.9 million in 2016 and \$9.1 million in 2017 from Hunan Qindao Culture Spread. However, Hunan Qindao only reported \$6.4 million in 2016 and \$2.1 million in 2017.
- It was simply not possible that Hunan Qindao earned \$9.1 million in 2017 from live streaming cooperation with Momo

Momo Financial Transactions w/ Hunan Qindao Culture Spread And Subsidiaries

\$USD thousands	2015	2016	2017
Investment for 16% of Hunan Qindao			
June 8 th , 2016		\$4,441	
Cash paid in by 31 December 2016		\$3,000	
Investment recorded as 26.4% on 31 Dec 2016		\$4,896	
Investment recorded as Equity investment		\$2,016	
Investment recorded as available for sale equity		\$2,880	
Momo Amount Due to Hunan Qindao		\$1,281	
Momo Purchases from Hunan Qindao			
(Share of live streaming revenue)		\$3,929	\$ 9,131
Momo Advance Payment to Hunan Qindao Network			
Media Co Ltd (wholly owned subsidiary of Hunan			
Qindao established 6 July 2017)			\$5,143
Momo Purchases from Hunan Qindao Network			
Media Co (Share of live streaming revenue)			\$20,639
Total Purchases from Hunan Qindao			
and subsidiaries		\$3,929	\$29,770

Source: Momo 2017 20-F

Hunan Qindao Culture Spread Income Statement

indian Qindao Culture Spread income Statement					
2016	2017				
\$6,437,767	\$ 2,145,554				
\$ 5,072,835	\$ 1,573,096				
\$ 96,024	\$ 7,780				
\$ 372,501	\$ 1,627,257				
\$ 1,447,649	\$ 906,298				
\$ 11,553	\$ (37,579)				
\$ -	\$ (50,171)				
\$ -	\$ 552,239				
\$ (562,794)	\$(1,379,059)				
\$ -	\$ 59,806				
\$ -	\$ 59,701				
\$ 44,254	\$ 1,125,022				
\$ -	\$ 909,778				
\$ (607,048)	\$(2,444,275)				
\$ -	\$(14,097)				
\$ (607,048)	\$(2,430,178)				
	2016 \$6,437,767 \$5,072,835 \$96,024 \$372,501 \$1,447,649 \$11,553 \$- \$- \$(562,794) \$- \$44,254 \$- \$(607,048) \$-				

Source: China Filings



Red Flag 3: Hunan Qindao Culture Spread's China Financials Don't Match Momo's Reported Numbers (Cont'd)

These discrepancies indicate that at best the auditor has not checked the relationship between this subsidiary and Beijing Momo. At worst, it is further evidence that the murky undisclosed relationship between Momo and agents may well be used for transactions other than the claimed broadcaster activity.

15. RELATED PARTY BALANCES AND TRANSACTIONS Major related parties Relationship with the Group Hangzhou Alimama Technology Co., Ltd. (i)

Guangzhou UC Network Technology Co., Ltd. (i) Guangzhou Aijiuyou Informational Technology Co.,

Alibaba Cloud Computing Ltd. (i)

Taobao (China) Software Co., Ltd. (i) Zhejiang Tmall Technology Co., Ltd. (i) Shanghai Touch Future Network Technology Co., Ltd. Shanghai Xisue Network Technology Co., Ltd. Hunan Qindao Cultural Spread Ltd. Hunan Oindao Network Media Technology Co., Ltd. Hangzhou Yihong Advertisement Co., Ltd. (i) Guangzhou Jianyue Information Technology Co., Ltd. (i)

Affiliate of long-term investee Affiliates of a Major Shareholder Affiliates of a Major Shareholder

Affiliates of a Major Shareholder

Affiliates of a Major Shareholder

Affiliates of a Major Shareholder

Affiliates of a Major Shareholder

Affiliates of a Major Shareholder

Affiliates of a Major Shareholder

Affiliate of long-term investee

Long-term investee

Long-term investee

The parent company of these entities ceased to be a major shareholder of the Group in November 2017.

(1) Amount due from related parties-current

	As of I	December 31,	
	2016	2017	_
Hunan Qindao Network Media Technology Co., Ltd. (ii)	\$ —	\$ 5,14	3
Hangzhou Alimama Technology Co., Ltd.	2		
Guangzhou UC Network Technology Co., Ltd.	5	_	
Guangzhou Aijiuyou Informational Technology Co., Ltd.	81		
Total	\$ 88	\$ 5,14	3

The amount of \$5,143 as of December 31, 2017 represented the advance payment of revenue sharing of live video service made to Hunan Qindao Network Media Technology Co., Ltd.

Source: Momo 2017 20-F

Hunan Qindao Network Media Co Ltd was reported to have received an advance payment of revenue sharing from Momo amounting to \$5.1 million

Hunan Qindao Network Media only reported prepayments of \$14,328 (fourteen thousand dollars). There is also no deferred revenue account. The other payables, which could be where a prepayment is recorded was \$3.85 million, closer but still \$2.2 million short of Momo's financial statements

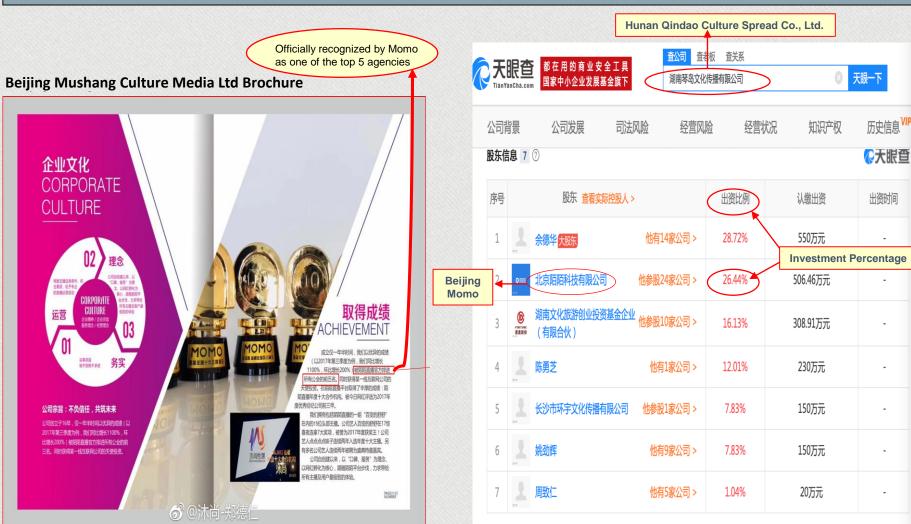
Converted from RMB	Hunan (Culture S	Hunan Qindao Network Media Co	
	2016	2017	2017
Current Assets			
Cash	\$1,375,166	\$1,197,243	\$ 626,117
Accounts Receivable	\$ (474,133)	\$ (474,162)	\$ 100,766
Prepaid	\$ -	\$ 3,296	\$ 37,498
Other receivables	\$ 8,249,515	\$ 7,801,278	\$8,200,974
Inventory	\$ 7,625	\$ 1,580	\$-
Total Current Assets	\$ 9,158,174	\$ 8,529,234	\$8,965,356
Long Term Assets	\$-	\$-	\$ -
Fixed Assets	\$ 4,413,725	\$ 4,550,729	\$344,604
Less Cumulative Depreciation	\$ 3,484,396	\$ 3,587,660	\$6,736
Net Fixed Assets	\$ 929,330	\$ 963,069	\$337,868
Other Long Term Assets	\$-	\$-	\$2,751
Total Long term assets	\$ 929,330	\$963,069	\$340,619
Total Assets	\$ 10,087,504	\$9,492,303	\$ 9,305,974
<u>Current Liabilities</u>			
Accounts Payable	\$ 34,869	\$34,869	<u>\$</u> -
Prepayments	\$ 13,433	\$49,464	\$14,328
Salary Payable	\$ 557,688	\$642,577	\$3,353,870
Tax Payable	\$ 30,625	\$72,031	\$ 236,341
Interest Payable	\$ -	\$-	\$ 630,910
Other Payables	\$ 844,108	\$1,024,223	\$ 3,855,837
Total Current Liabilities	\$ 1,480,723	\$ 1 ,823,164	\$ 8,091,286
Total Liabilities	\$ 1,480,723	\$1,823,164	\$ 8,091,286
Shareholder Equity (Beginning)	\$ 2,858,761	\$2,858,761	\$ 746,269
Paid in Capital	\$ 7,625,495	\$9,118,033	\$ 42,584
Surplus Reserve	\$ 226,172	\$226,172	\$ 425,836
Retained Profits	\$ (2,103,648)	\$(4,533,826)	\$ -
Shareholder Equity (Ending)	\$ 8,606,780	\$7,669,139	\$ 1,214,688
Total liabilities and Equity	\$ 10,087,504	\$9,492,303	\$ 9,305,974

Source: China Filings



Red Flag 3: MOMO's Undisclosed Ownership of Talent Agencies + Related Party Transactions (Cont'd)

Beijing Mushang Culture Media Ltd is officially recognized as a top 5 agency by Momo, but you wouldn't know this by reading its financial filings or listening to its conference calls.



Source: weibo.com Source: Tianyancha.com from SAIC data 27



Red Flag 3: MOMO's Undisclosed Ownership of Talent Agencies And Related Party Transactions

Beijing Momo invested RMB 230,000 in one of its top 5 agencies, Beijing Mushang Culture Media, on November 30th, 2017 and failed to disclose the subsidiary in its 2017 20-F (filed April 2018). Beijing Mushang's financial reports are highly suspicious and may potentially suggest money laundering.

- The 2017 accounts receivable of \$5.8m is approximately equal to the cumulative revenue of the company since it started totaling \$5.7m
- Beijing Mushang works exclusively with Momo, per our interview and marketing materials, so this indicates that Momo has never paid the company

\$USD thousands	2016	2017
Revenue	\$549	\$5,156
Profit	\$4	\$ (120)
Assets	\$219	\$6,530
Accounts Receivables	\$9	\$5,815
Liabilities	\$66	\$5,381
Prepayments		\$4,925
Other Short Term Liabilities	\$64	\$397

Source: China Filings of Beijing Mushang Culture Media

- Beijing Mushang has prepayments of \$4.9 million, which has obviously been keeping the company operating. As Beijing Mushang only works exclusively with Momo, and Momo has not disclosed this prepayment, then it is reasonable to assume the payment must have come from a third party
- Recall from the prior page, Hunan Qindao Network Media received a prepayment of \$5.1 million from Momo and this was disclosed. Deloitte, Momo's auditor, is clear that they audit Beijing Momo and its subsidiaries. Wouldn't Deloitte have noticed \$4.9 million in prepayments? So either Deloitte is ineffective as an auditor, or the payment was made by a third party. So why would a third party prepay Beijing Mushang?
- We believe that this may be evidence that Momo is using this agent to potentially syphon money. Beijing Mushang could use the prepayment to buy virtual gifts on Momo, then Momo could keep or return some portion of the payments to operate Beijing Mushang. If Momo is doing this with agents it owns, than it may well be doing the same with willing agents that it does not own. If auditors cannot track owned agents, it is unlikely they can track the activities of the [likely thousands] of agents that Momo transacts with





Red Flag 3: Does One of Momo's (Undisclosed) Top 5 Talent Agencies Exist? (Cont'd)

The physical location of Beijing Mushang Culture Media appears to be somewhat of a mystery. Spruce Point suspects that these operations may potentially be carried out in Momo headquarters.



Source: Spruce Point private investigators

 Beijing Mushang Culture Media Ltd (北京沐尚文化传媒有限公司) has the following registered address:

Registered Address:



C28-17, C Area, No 40 Yongwai Jiujingzhuang,

Fengtai District, Beijing City

北京市丰台区永外久敬庄40号C区C28-17

- Investigators searched for this office and we believe this address appears to be a false address. This is a photograph of a building in the C Area. Investigators spoke with residents and they claimed this address does not exist
- Beijing Mushang Culture Media Co Ltd also claims to have branches (a legal definition that means a separate legal entity) in Changsha (Hunan), Chengdu (Sichuan) and Xuzhou (Jiangsu) in its brochure
- Investigators checked, and Mushang Culture has no legal entities established in those areas. In addition to these "branches" investigators found job ads indicating that Mushang also has offices in Hangzhou (Zhejiang) and Changzhou (Jiangsu)
- It is illegal to operate a company from an address that is not registered, or to employ people in other provinces without a legal entity. Employees would be unlawfully employed and their benefits are unlikely to be paid. Broadcasters employed by this agency may be paid directly by Momo and the are unlikely to be paying income tax



Red Flag 3: Does One of Momo's (Undisclosed) Top 5 Talent Agencies Exist?

Job advertisements for Beijing Mushang reference a different address than the legal entity. Our investigators visited this address and were surprised to find an unmarked door in a high end residential building welcoming "home delivery, just walk in". Is this what a top 5 agency looks like?



Source: Spruce Point private investigators

Beijing Mushang Culture Media Ltd (北京沐尚文化传媒有限公司)

Address Given in Job Advertisements:

Room 2010, Level 20 Building T9, Contemporary Moma, Dongcheng District, Beijing

北京市 东城区 当代MOMA T9号楼20层2010

- Investigators believe the operations of Beijing Mushang are run out of a high end residential building in Beijing pictured here on the left
- On the right is the door to room 2010 on the 20th floor. The A4 sign on the door says "Home delivery, just walk in". There is no company signage
- Is this the "impressive" operations of one of Momo's Top 5 agents?



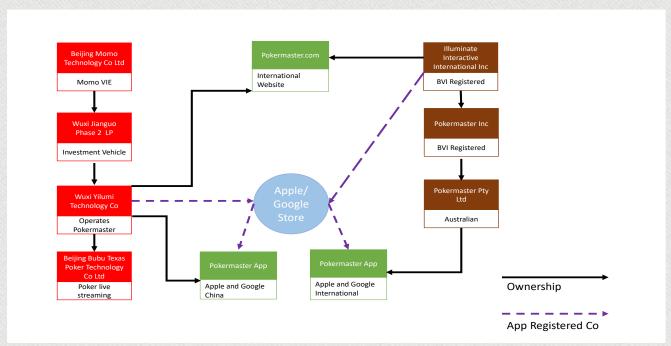
Source: Spruce Point private investigators



Momo has been invested since July 2015 via an undisclosed VIE, albeit in small amount, in a very popular and highly rated illegal (in China) gambling operation (Pokermaster 德扑圈). The website/app was exposed by CCTV on April 15th, 2018 and has now been shut down. It is unknown what action the Chinese government may take once it realizes the connection.



- Momo has invested, via its VIE, in Pokermaster (德扑圈), a Texas Hold'em poker app. The app can be download inside or
 outside China via the Apple or Google stores
- Users can purchase virtual chips, gamble on card games via the app, and then withdraw the funds in China via an agent or offshore if they have an offshore account. The Chinese app and the international app are the same platform and users can gamble across border





• Since the CCTV expose in China on April 15, 2018, the Pokermaster app is no longer available in China or on the Apple store outside China. You can still download the app from the Google store outside of China (Source)

Pokermaster Corporate Ownership Structure

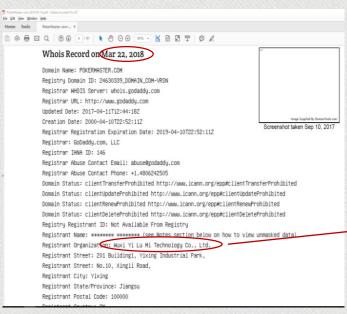
Tokermuster corporate ownership structure							
Company Name	Chinese Name	Address	Ownership Chain	Notes			
Beijing Momo Technology Co Ltd	北京陌陌科技有限公司	20th Floor, Building 6, No. 1, Yuantong East Street, Chaoyang District, Beijing 222002, China	Tang Yan and others	Momo VIE			
Wuxi Jianguo Phase 2 Investment Partnership Enterprise Ltd	无锡坚果二期投资 介 状企业(有限合伙)	Room 201, Building 1, Yixing Optoelectronic Industrial Park, No.10, Xingli Road, Yixing Economic and Technological Development Zone, Wuxi	Beijing Momo Technology Co Ltd and others	Momo undisclosed subsidiary, Established April 2015			
Wuxi Yilumi Technology Co	无锡一路米科技有限公司	Room 201, Building 1, Yixing Optoelectronic Industrial Park, No.10, Xingli Road, Yixing Economic and Technological Development Zone, Wuxi	Wuxi Jianguo Phase 2 Investment Partnership Enterprise Ltd and others	Owner, operator and developer of Pokermaster app and website, registered owner of www.pokermaster.com, China ICP license holder for the site. Established July 2015			
Beijing Bubu Texas Poker Technology Co Ltd	北京步步德扑科技有限 公司	Room 205, No. 40 West Street, Pinggu Town, Pinggu District, Beijing	Wuxi Yilumi Technology Co and others	Live streams poker games at www.bubupoker.cn and www.bubupoker.com			
Pokermaster Pty Ltd		358 Lonsdale Street, Melbourne, Victoria, 3000 Australia	Pokermaster Inc	Identified as owner in Pokermaster App "about" Established April 2016. ABN 611 857 437			
Pokermaster Inc		3rd Floor, Quastisky Building Road Town, British Virgin Island, United Kingdom	Illuminar Interactive International Inc.	Virgin Islands company number 614 724 720			
Illuminar Interactive International Inc.		3rd Floor Quastisky Building, Road Town, Virgin Islands, VG1110		Virgin Islands company number 1816959, ultimate owner of Pokermaster.			

Source: Spruce Point Consultant, SAIC, Pokermaster.com, Pokermaster App

- We believe Momo owned entities may own Illuminar Interactive International Inc. based on the above chain of ownership. We also know that Illuminar claims to own the website (<u>Source</u>) and the app (<u>Source</u>)
- Wuxi Yilumi Technology Co, a Momo VIE owned company, is registered as the owner of the URL www.pokermaster.com as
 of March 2018, and has the Chinese internet content publishing license for the site (<u>license</u>)



Not surprisingly, the registrant organization for Pokermaster.com was changed from an undisclosed Momo VIE to Domains By Proxy, LLC post the release of the CCTV expose. Interestingly, PokerMaster.com shares an IP address with a number of other gambling oriented sites.





WHOIS search results Domain Name: POKERMASTER.COM Registry Domain ID: 24630339_DOMAIN_COM-VRSN Registrar WHOIS Server: whois.godaddy.com Update Date: 2018-04-11T11:37:34Z Registrar Registration Expiration Date: 2020-04-10T22:52:11Z Registrar: GoDaddy.com, LLC Registrar IANA ID: 146 Registrar Abuse Contact Email: abuse@godaddy.com Registrar Abuse Contact Phone: +1.4806242505 Domain Status: clientTransferProhibited http://www.icann.org/epp#clientTransferProhibited Domain Status: clientUpdateProhibited http://www.icann.org/epp#clientUpdateProhibited Domain Status: clientRenewProhibited http://www.icann.org/epp#clientRenewProhibited Domain Status: clientDeleteProhibited http://www.icann.org/epp#clientDeleteProhibited Registry Registrant ID: Registrant Name: Registration Private Registrant City: Scottsdale Registrant State/Province: Arizona Registrant Postal Code: 85260 Registrant Country: US Registrant Phone: +1.4806242599 Registrant Phone Ext: Registrant Fax: +1.4806242598 Registrant Fax Ext: Registrant Email: POKERMASTER.COM@domainsbyproxy.com Registry Admin ID: Admin Name: Registration Private

Source: Domaintools.com

Source: 5/16/18 Godaddy WHOIS database

Domains Hosted on the Same IP Address As Pokermaster.com

Domain	Created	Status	Registrant	Description
52 Fangka.com	Dec 7, 2016	Inactive	Yi Lu Mi Technology Co Ltd Wuxi	Unknown
Illuminargroup.com		Inactive		Ultimate Owner of Poker Master
Otcoins.com		Active		China Bitcoin
Pokermaster.com	Apr 10, 2000	Active	Wuxi Yi Lu Mi Technology Co., Ltd	Texas Hold'em
Risoentertainment.com	Mar 21, 2018	Unclear		Unclear. Possibly German card game Sheepshead

Source: **Domaintools.com**



Our consultant interviewed 18 mobile gamblers, 11 of whom gambled on Pokermaster. Players considered the app one of, if not the most, popular poker gambling apps in China.

- International review sites claim Pokermaster is a highly rated app with a large number of users and games are conducted in RMB using virtual currency (<u>Source</u>). Deposits and withdrawals may be made using Skrill, Neteller, EcoPayz and Bitcoin
- Pokermaster arranges offline and online tournaments and you can see the details on the website www.pokermaster.com or on its Facebook page
- There are hundreds of clubs and thousands of players at peak times.
 The games are considered to be high stakes
- Players outside of China need to use an agent to join the gambling (access).
 In China, players go through an agent to gamble on the app. Players can add value online but need an agent to convert virtual chips into cash. Players can add value via the Apple store or WePay



Source: Facebook

- We interviewed 18 mobile app gamblers in China, 11 of whom gambled on Pokermaster and found the following:
 - > The typical player is male in his late 20's to early 30's and is based in major cities such as Beijing, Hangzhou and Changsha
 - Players spend between 3 and 6 hours per day gambling on the app
 - Most players spend around RMB1,000 per month gambling on the app. However, one player claimed to spend around RMB200,000 per month. Players claimed to win between RMB2,500 and RMB600,000 per month with most claiming to win more than RMB100,000 per month
 - Players pay a 3%-5% commission of winnings to the club organizers when cashing out of the game
- Gambling on the site was common knowledge and gamblers easily found agents via WeChat and other sites (<u>Douban</u>, <u>Riji1</u>). In fact, it is not to hard to find sites that will help you become an agent (<u>pokercompany.com</u>)



Tang Yan, the Founder and CEO of Momo, is a famous poker player and gambler. Articles about Yan's gambling can be found here, here and here. Momo's annual meeting even had a Vegas gambling theme



Source: Sina



Red Flag 5: Making Sense of The Tantan Deal

The strategic acquisition rationale for Tantan, a dating app in China, appears limited to user base expansion given that operations between Tantan and Momo are to remain almost entirely distinct. Given this fact, and the premium paid to recent private funding rounds, the acquisition seems extremely expensive for client acquisition or speculation.

We believe the Tantan acquisition was likely done to cover up slowing growth that started in Q2'17

"After the acquisition process, Tantan will maintain its separate sets of strategies and product development, operations, branding as well as business development under the leadership of their existing management, and we will be providing full support and expertise in areas including human resources, technology as well as monetization." - Tang Yan Q4 2017 Earning Call

"With one section of the cash to invest or to buy Tantan, almost a management buyout, so how do you incentivize the funding management team to continue to work partly, that's number one. Number two is Tantan working independently, how is the potential synergy between Momo and Tantan can be realized?" – Analyst Tian Hou Q4 2017 Earnings Call

- On February 23rd, Momo announced that it would acquire Tantan for \$735 million of which \$600.9 million would be in cash and 5.3 million A class ordinary shares
- According to QuestMobile and Iresearch Tantan had only 20 million active monthly users at the start of the year
- From the neighboring table, we see that Tantan had no revenue in 2015 and 2016, but more importantly there was very little activity in the Tantan VIE. Tantan is a small company that only started to charge subscription in Q3 2017 and premium VIP service in January 2018 (source)
- During the Q1 2018 earnings call, management guided towards only \$4.5 million in revenue for the month of June 2018

Tantan VIE Financial Results

RMB millions	2015	2016
Revenue	0	0
Total Profit/Loss	(12.6)	(2.4)
Net Profit/Loss	(12.6)	(2.4)
Tax	0	0
Total Assets	1.7	12.8
Total Liabilities	16.6	26.8
Shareholder Equity	(14.8)	(14.0)

Source: China financials



Red Flag 5: Making Sense of The Tantan Acquisition (Cont'd)

One alternative theory is that Momo needed to use the cash it may be having difficulty getting out of China, so it acquired Momo Tantan VIE with RMB cash in China. Momo stopped disclosing the location of its cash holdings after Q3'2016. Three equity LPs mysteriously became Tantan shareholders on October 25, 2017. It's possible that the newly added limited partnerships were put in place immediately before the transaction to hide who actually got paid the cash, and that Momo insiders could be the beneficiaries of the sales. Recall: In Nov 2017 the SAIC charged Momo with of "Filing Corporate Information With the Intent To Conceal The Truth and Falsify" and three Directors abruptly resigned for "personal reasons".

• We believe Momo overpaid for Tantan. The Series D financing in June 2017 valued the Company at \$320 million (<u>Source</u>). It is not clear with the information at hand, and revenue guidance of \$4.5 million for June '18, why Tantan's valuation increased by 130% in little more than 8 months

Tantan Financing Rounds

			Valuation	
		Amount	(if available)	
Date	Round	(\$m)	(\$m)	Investors
1/15/2015	А	\$5		Vision Plus, Spade, Bertelsmann Asia
7/1/2015	В	13		GX Capital, DCM, Kleiner Perkins, LB
5/15/2016	С	32		A & B investors (ex Spade), Snipers
6/21/2017	D	70	\$320	Industrial Innovation, YY Genesis, SAIF, Zhongwei





Red Flag 5: Does The Strange Addition of LPs In The Tantan VIE Structure Have Precedence From Momo Pre-IPO Transactions?

Based on stock sale transactions and IPO filings, it appears as though both Matrix and Purple Sky owned the entirety of Momo's A-1 preferred shares. This is irreconcilable and suggests that one or both vehicles may have been used to enrich Momo insiders prior to the IPO.

- Momo's IPO prospectus in the section "History of Securities Issuance" states that preferred shares were first issued to Matrix and "an individual investor" on April 18th, 2012. The "individual investor" is not shy, Zheng Gang of Purple Sky has identified himself as that investor but claims he put up 49% of the money himself and his Purple Sky limited partners put up the other 51%
- The IPO prospectus states on the April 18th, 2012 the <u>22,272,730</u> Series A-1 preferred shares were issued to Matrix and Purple Sky/Zheng Gang. The split between the two was not stated. The two paid \$1 million for the shares on a valuation of \$10 million and owned approximately 10% of Momo Inc. after the Series A-1 round
- Purple Sky did not participate in any further rounds of financing and disposed of it shares as indicated in the below table

Purple Sky Stock Sale Transactions

Date	Buyer	Shares Sold	Proceeds (\$mm)
July 2012	Alibaba Investments Ltd	4,894,500	\$1.4
Jan 2013	Alibaba Investments Ltd	10,079,373	\$4.3
May 15, 2014	Momo	7,298,857*	\$30.8
		22,272,730	\$36.5

^{*}Note: These shares were later cancelled by Momo. Source: Momo prospectus

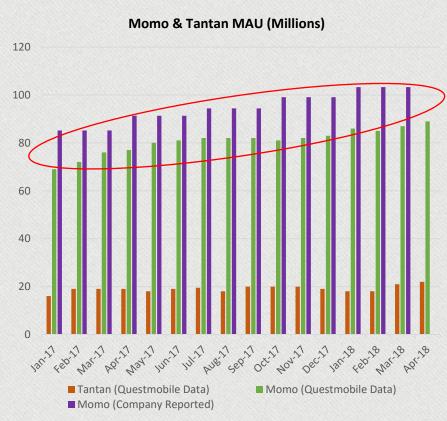
- We estimate that Purple Sky provided Momo around \$560,000 to \$630,000 in financing in April/May 2012 and eventually sold its shares for a total of \$36.5m, a return of between 58x to 65x (Source)
- According to the SAIC company registration, Purple Sky became an investor in Momo VIE on May 29th, 2012 before the date indicated in the IPO documents and that would mean that the investment was made inside China and the payments for those shares when sold were made outside of China
- Matrix was a shareholder at the time of the IPO in December 2014 having 65,970,897 shares. 22,272,730 of those shares were issued to Matrix in the Series A-1 financing. This would indicate that Matrix got all the shares and Purple Sky none

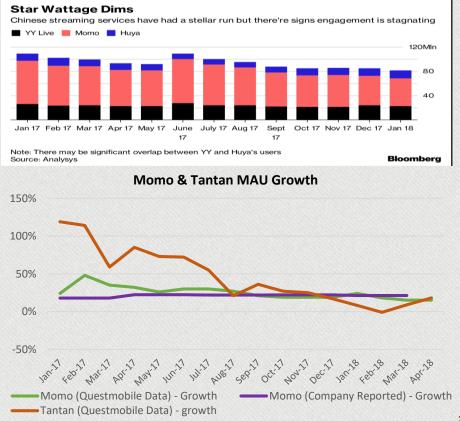


Red Flag 6: Recent Performance Metrics Are At Odds With Industry Data

Analysys and QuestMobile data indicate that live streaming industry users peaked almost six to twelve months ago, and that Momo's MAU growth has been flattening or in decline. This is a different story in direction and / or magnitude from what Momo is reporting. Additionally, according to QuestMobile, Tantan MAU appears to be only 20 million.

Risk Factor From Momo 2017 20-F Annual Report (p.14): "We rely on assumptions and estimates to calculate certain key operating metrics, and real or perceived inaccuracies in such metrics may harm our reputation and negatively affect our business."







Red Flag 6: Momo Undisclosed Talent Agency Financials Indicate A More Significant Historical Role For Agencies

Based on Beijing Mushang Culture's revenues, we estimate that talent agencies likely represented a little less than half of Live Video in 2017, despite management statements about agents being insignificant to the business. Maybe the "shift towards agencies" was more about rhetoric than reality.

 Based on Momo statements about the role agencies played in the Live Video business at the end of 2016, and the reported revenue of Beijing Mushang Culture Media, Spruce Point estimates that agencies accounted for 46% of Momo's Live Video Revenue

RMB millions (US\$ millions)	2016	2017
Beijing Mushang Culture Media Ltd		
Revenue	3.68 (\$0.55)	34.55 (\$5.11)
Profit	0.03 (\$0.00)	-0.81 (\$0.12)
Assets	1.47 (\$0.22)	43.75 (\$6.47)
Accounts Receivables	0.06 (\$0.01)	38.96 (\$5.77)
Liabilities	0.44 (\$0.07)	36.05 (\$5.34)
Prepayments	0.00 (\$0.00)	33.00 (\$4.88)
Other Short Term Liabilities	0.43 (\$0.06)	2.66 (\$0.39)

Source: China filings

"Historically, agencies have a limited role in Momo's live streaming ecosystem" – Wang Li Q3 2017 Earnings Call

Spruce Point Analysis of Agency's Contribution To Live Video

	2017	Assumption
Beijing Mushang Culture Media Ltd		
Revenue in US\$ millions [A]	\$5.11	Based on SAIC Filing
Market Share of Top 10 Agents	16%	Based on Q4'16 earnings call
Assumed Mushang Market Share of Live Video [B]	2%	Spruce Point Assumption based on top 5 agent status
Implied Live Video Agent Based US\$ Sales [C]	\$256	= A / B
% of Live Video Attributable to Agents (1)	46%	= 2*C / Live Video revenues in 2017 of \$1,102.6m

(1) We assume that Live Video revenue share between agents and Momo is 50%



Red Flag 6: Recent Management Statements And Results Rebuffed By Agency Interviews

In Momo's Q1 2018 results, cost of revenue as a % of Live Stream Revenue suddenly declined for the first time since Q4 2016. Management cited a decrease in tournament related bonuses as the key driver, but this was consistently rebuffed by every agency that we interviewed, including a Momo owned agency. Spruce Point finds this change in trend counterintuitive given a growing focus on agencies.

• Spruce Point expected costs of revenues to be increasing given a transition towards agencies and the added incentives that such a strategy requires (not to mention increasing platform competition):

In November, we rolled out a trial plan, whereby the qualified agencies are provided with a different level of additional cash incentives if they reach certain growth targets. Although such incentives will likely cause cost in revenue to continue to fluctuate in the future, we believe it will better motivate the agencies and individual broadcasters to invest and grow their business within our ecosystem, which in turn will grow ours.— CFO Johnathan Zhang Q4 2017 Earnings Call

• During the recent earnings call Momo management explained away a decrease in cost of revenues by stating that strength in non-event day revenue resulted in:

"We scaled back the revenue oriented operating efforts around the quarterly competition event. Therefore, cost on bonus or rewards offered to broadcasters during the March tournament, was significantly reduced."

- Momo CFO Jonathan Zhang on Q1 2018 Earnings Call
- Spruce Point's Consultant specifically asked agents if there was any change in tournament payouts and was consistently
 told there was no such reduction in revenue to agency / broadcasters. Additionally, the agencies all acknowledged the
 impression that the cost of advertising and running the tournament this year had gone up substantially

Consultant Questions	Response From Momo Owned Talent Agency
When a broadcaster takes part in quarterly or year end competition how does the split between Momo and the Talent/agent differ from normal?	No, the split is the same
Does a broadcaster get any additional revenue from participating in quarterly or year end competitions?	They will earn more at these events as their fans will give them more money
Was there any change this year? Was the split of revenue for competition different or any other change in in gifts etc?	In my opinion, there is no change with last year. These are very important events for any agency

Source: Spruce Point Consultant Interviews



Red Flag 7: Regulations Focused On Content Could Hit Momo Hard At Any Time

On February 14th, 2018 the State Administration of Radio, Film and Television (SARFT) issued a notice requesting the strengthening of online audiovisual live broadcast activities, standardizing online communication order, and preventing social risks. Concerns about content could be a contributing factor in Momo's transition towards agencies.

SARFT Requirements

- The contents of live broadcasting dialogue must be correctly guided, <u>vigorously promote the socialist core values and advanced socialist culture, disseminate healthy and beneficial knowledge, and must not disseminate content that is <u>prohibited by state laws and regulations</u>, and must not disseminate content that promotes the worship of money and extravagance
 </u>
- 2. The platform for launching web-based answering programs must have the statutory network audiovisual program live broadcasting qualifications. Any organization or individual that does not hold a "Information Network Broadcasting Audiovisual Program Permit" shall not open a webcast answer program
- 3. A qualified platform for launching online live-answer programs must effectively implement the main responsibilities, strictly fulfill the filing review procedures, improve the content review management system and work program, and ensure timely disposal of the problems and accountability.
- 4. <u>Host of broadcast answering programs should have the corresponding conditions for radio and television program presenters, with high moral qualities and good professional qualities</u>
- 5. Online live-answer activities must not be over-marketed and over-hyped

Source: sohu.com



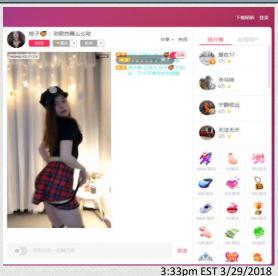
Red Flag 7: Regulations Focused On Content Could Hit Momo Hard At Any Time (Cont'd)

"It's no exaggeration to say that any company could die overnight. It has become an industry joke that almost all of the people in charge of content-audit departments have white hair" - Chen Taifeng, a vice-president at Yixia Technology, the developer of MiaoPai, a popular service for live-streaming. Images below represent questionable recent content found on Momo which may not be in the spirit of the recent SARFT requirements. This exposes Momo to regulatory action.

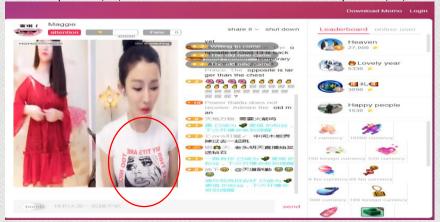


Source: Momo









8:11pm EST 5/17/2018 8:51pm EST 5/16/2018



Red Flag 7: Regulations Focused On Content Could Hit Momo Hard At Any Time (Cont'd)

Four of the agencies our consultant interviewed gave the unsolicited opinion that Momo has a reputation as a (sex) cam site. We believe that this has directly contributed to Momo's advertising woes.

Small Exclusive Agent #2:

"I don't think Momo will be a long lasting platform as its reputation is not good. In most peoples experience it is a live cam site for sex and this is something it cannot wash off."

Super Agency #6:

"Momo is good for publicity. Most people think of Momo as a sex site which has predominantly male users."

Small Agency #9:

"A successful broadcaster on Yizhibo would not survive on Momo. Momo is low level. Momo was successful because it was like a porn cam channel. The users were 30 to 50 year old males in second and third tier cities. Their motives were clear. They wanted to see sex performances. Despite being cleaned up Momo is still this sort of channel and encourages people to climax. If Momo can not change directions then it will have a problem."

Large Agency #11:

"90% of the audience are male. They are not interested in art but more about sex. Older men with their families in the US. They are lonely and spend a lot of money each month."



Red Flag 7: Regulations Focused On Content Could Hit Momo Hard At Any Time (Cont'd)

2017 was a significant year for the MOC and SARFT in terms of establishing live streaming guidelines. However, it appears enforcement activity has escalated significantly in mid 2018.

Date	Company	Charges - Outcome
5/10/18	Weibo, Tencent, Youku, iQiyi	 Management was required to set up a special inventory team to review potentially inappropriate content. A total of more than 1.5 million audio and video programs for off-line issues were cleared up. More than 40,000 illegal accounts were closed, 4,512 were closed, and 2,083 were blocked. Interception problems affected more than 13.5 million messages.
4/18/18	Beijing Microcast Vision Technology Co., Ltd.	 Beijing Municipal Bureau of Industry and Commerce Haidian Branch timely conducted an interview in response to the sensational report that the Douyin short video platform was suspected of releasing fake video. Up to now, a total of 805 videos have been deleted, 677 blocked accounts, and 67 illegal keywords have been added.
4/13/18	Shaw Audio	• Shaw Audio announced the results of cracking down on illegal accounts and content, which involved seven types of violations, including vulgar pornography, insults, fabrications, spam advertisements, and copyright infringement. The results show that from March 1st to March 31st, 2018, the Vibrato platform cleared a total of 27,231 videos, 8,921 audios, 89 challenges and permanently closed 15,234 accounts.
4/12/18	Jinritaueiao	 Watermelon Channel stopped mobile video uploading, and live, barrage and other product features were also temporarily shut down on April 10. From April 4th to the 12th, watermelon videos totaled 500,000 suspect videos, and more than 38,000 accounts were punished and banned.
4/11/18	WeChat and QQ	 WeChat and QQ blocked the direct playback of short video links. WeChat and QQ said that during the short video rectification of the Internet, the direct play function of the short video APP chain was suspended. The APPs involved included microvision, fast hand, vibrato, watermelon video, etc. If the user needs to watch, he can still copy the URL link and use the browser to play it.

Source: sohu.com via Google translation



Business Insights Emanating From Chinese Interviews With Key Stakeholders



Quick History of The Momo You Know

Momo (Nasdaq: MOMO or "the Company") went public in late 2014 seeking to fill a void in the lives of lonely Chinese by serving as an anonymous location based social networking site. Early monetization of the site focused on a subscription (and later Super VIP) model where subscribers received additional functionality to facilitate making new connections. The first traffic monetization product revolved around the distribution of third party video games. Concurrent with the push in mobile games, Momo sought to monetize traffic through mobile marketing. The mobile marketing effort leaned originally on partnerships with the likes of Alibaba and 58.com and later self operated marketing services focused on Dao Dian Tang and app downloads.

Momo's growth during 2015 was impressive, albeit shy of 2016 levels, <u>but the internals of membership subscription services</u>, <u>mobile games and mobile marketing (per monthly active user "MAU") were all showing signs of fatigue in early 2016. During this same period Momo's reputation as a "hook-up site" was further being soiled by the fact that a number of crimes, particularly rape, were being reported in media outlets (sources below).</u>

In Q1 2016 Momo introduced live streaming and was able to reestablish the growth trajectory of the Company. Momo shareholders would later benefit, to the tune of ~215% share price increase over the past two plus years, from the intersection of the J-Curve portion of China live stream adoption (particularly pertaining to user generated "UG" content) and the fact that Momo had an installed (largely male millennial) MAU base of 70 million at the time. Live Video revenues, paying users, Average Revenue Per Paying User "ARPPU" and conversion of MAU to Live Video paying users all exploded during 2016 and live streaming propelled Momo revenues to increase more than 3x.

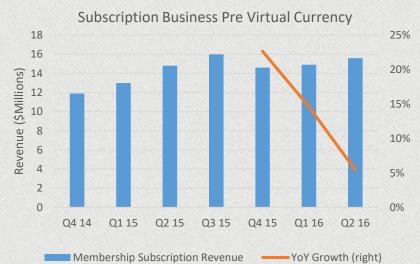
By the 3rd quarter of 2017 the Live Video segment was beginning to show signs of fatigue as paying users flattened out and conversion of MAU to paying users was in decline. The revenues of Live Video continued to post strong growth, but this was predominately driven by ARPPU growth. At this point in time there appeared to be a realization by Momo management that the Live Video business would have to evolve in order to avoid the fate of live gaming before it. Momo Live Video revenues were likely very concentrated (no longer disclosed) amongst a small subset of paying users and broadcasters. The gold rush of user generated content was fading as live streaming was maturing as a business and becoming more professional from a content perspective. This repositioning of Live Video isn't playing to Momo's strengths and also invites new competition from the likes of deep pocketed players like Tencent's Now and the rapidly growing short video players.

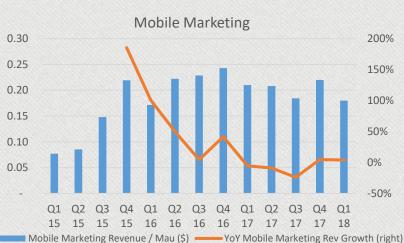
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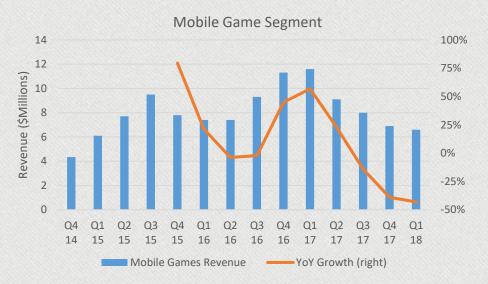


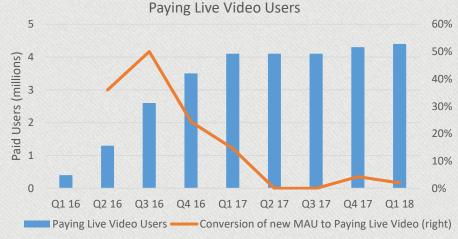
Momo Has A Demonstrated Track Record of Product Applications Plateauing Over Time

Spruce Point believes that Momo has a demonstrated track record of monetizing and hyping product applications only to see interest levels plateau over time.











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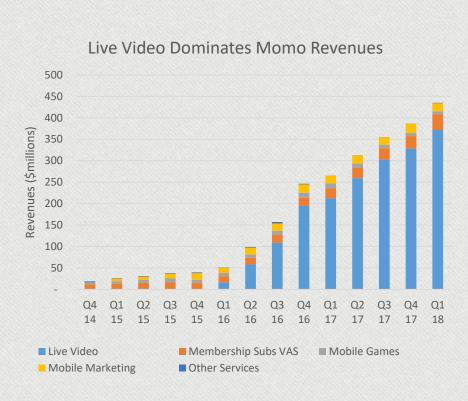
Momo Is Effectively A Live Video Business

Momo's revenue has exploded as Live Video resuscitated MAU growth and dramatically increased ARPPU. Live Video has grown its total share of Momo revenue consistently and currently represents 85%.

Live Video Propels MAU 400 30% 300 20% 200 10% 0% 100 -10% Q3 Q4 Q3 Q4 Q1 Q2 Q3 Q4 Q1 15 15 15 15 16 16 16 16 17 17 17 17 18 Mobile MAU (mln) Live Video Revenues (\$USD mln) YOY MAU Growth (Right) Live Stream Propels ARPU/ARPPU 4 3.5 3 2.5 2 1.5 1 0.5

16 16 16 17 17 17

■ Live Video Revenue / MAU (\$USD) ■ Ex Live Video Revenue / MAU (\$USD)





The Dangerous Goal of Reinventing Momo's Live Video Business

In an attempt to reposition Live Video to preserve market share and avoid the scrutiny of regulators, Momo introduced an agency based content improvement strategy. "The goal is to set up the policies and incentive systems so that increasing number of quality agencies professional performers can feel motivated and driven enough to offer higher quality and more differentiated content through our platform." This is a tectonic shift from Q4 '16 when it was stated on the earnings call that the "number one agency in December only represented somewhere around 3% of the total revenues from Live Video service and the Top 10 you know in aggregate represented somewhere around 16%." Very little transparency has been provided around the agency strategy or the anticipated impact to Live Video's financials

In addition to the proposed changes on the content side of Live Video, Momo also decided to introduce new use cases for the overwhelming majority of live streaming broadcasters that simply viewed it as a means of socializing with friends (rather than a talent based occupation). Momo once again introduced new products (radio, quick chat, quiz show, etc.), most free or without Momo taking a cut for the time being, in hopes of maintaining and attracting new users

Up until this point in time, management had continued to beat the drum of Momo being a location based anonymous social networking site with a large set of monetization opportunities. However, on the Q3'17 earnings call there was a sudden acknowledgement by CEO Tang Yan "On the product side, one of the key hurdles that we had in improving the long-term user retention was the fact that our core use case, which was pretty much based on nearby people and instant messaging was kind of limited". Momo management then doubled down on delivering a "social and entertainment experience" to capture the attention and wallets of the young Chinese

These above paragraphs encapsulate the endeavor that Momo is now undertaking to transform its brand and content from an anonymous hook-up and cam girl site to a social media platform focused on delivering professional entertainment (and marketing opportunities). The magnitude and risk of this transition shouldn't be understated as Momo's historical revenues (and growth) have been partially tied to their legacy "content" and the user base that it attracted

Momo's ability to execute this transition and growth strategy is up for debate and is anyone's guess. This will clearly be a tight rope act as evidenced by the recent acquisition of Tantan, a popular hook-up (and dating) site, that was questioned by an analyst for its strategic benefit on a recent conference call. On one hand, the acquisition makes sense in the hope that it further broadens Momo's MAU and introduces a more female oriented demographic. Conversely, there are no plans to integrate the platforms and recognize material synergies, as it likely reinforces the brand that Momo is trying to distance itself from



Strategic Shift After Flattening Paid User Growth in Live Video During Q2 And Q3 2017

Given the lack of data transparency into Momo's businesses, one must pay particular attention to management's (translated) comments. Based on recent statements, it appears that they are looking to diversify from Live Video while becoming increasingly dependent on agencies.

Q2 '17 Earnings Call, Binnie Wong Merrill Lynch

Q: So, I have two questions here. One is that we see the growth with the number of paid user this quarter has been quite flattish; conversion rate has also been coming down, what is the reason behind that? In relation to that, we understand the latest 8.0 version offers more social networking tools, be online forecasting, say, short video, Quick Chat and NDN, isn't that monetization potential is currently quite limited on this new function. Why would Momo divert its traffic away from live broadcasting, a very good monetization tool? That's my first question.

A: I will try to capture everything. So the question is on the flattish trend in the live streaming paying users in this quarter. I think that can be attributed to the fact that some of the users have shifted part of their activities from the long tail smaller live streaming chat rooms towards newer used cases, I mean the audio and video-based life interaction experiences such as Quick Chat and Werewolf because essentially they kind of fit newer used cases kind of satisfied exactly the same kind of user demand.

I will give you an example here. For the Quick Chat experience on daily basis we had somewhere around 50,000 daily paying users sending wrap packet. On a monthly basis, we had 800,000 these type of paying users sending wrap packer, however because the wrap packets are not recorded as the company's revenues because they were not taking revenue shares from the wrap packets and on the top line, so the revenues going to wrap packet are actually not recorded as the company's revenues, and thus the users that - the users sending wrap packet are not reported as our paying users either.

However, we are seeing for the Quick Chat kind of new social experiences, the paying users who paid to send wrap packet have been increasing pretty rapidly. Your second point is, why we would divert traffic from our very monetizable live streaming service to more newer used cases. I think the key thing here is that we've never been positioning Momo as a live streaming company. We have always been positioning Momo as a social company and we're seeing these - the user experience, the social experience around the newer used cases are actually pretty good in some ways actually better than the live streaming service.

So although the newer used cases currently do not monetize at the same level as the live streaming - traditional live streaming service does, we will like to make more explorations on those front to drive the overall user experience around the social activities. We think that kind of transition is very healthy for the platform. For Momo as a social platform in the long term. So that's for your first question. — Tang Yan

Spruce Point Interpretation

So the Live Video cash cow's best days appear behind it?

Live Video business is really concentrated amongst both Talent and Users.

We've actually redirected these Small Users towards activities where we don't get paid.

We've never been positioning
Momo as a live stream company
(Really??), it's just where we
make all of our money.

Although it's less profitable we have to do it anyway for the sake of the business long-term.



Strategic Shift After Flattening Paid User Growth In Live Video During Q2 And Q3 2017 (Cont'd)

Given the lack of data transparency into Momo's businesses, one must pay particular attention to management's (translated) comments. Based on recent statements, it appears that they are looking to diversify from Live Video while becoming increasingly dependent on agencies.

Tang Yan Q3 '17 Earnings Call

This year as the market consolidation accelerates, live streaming players offering homogeneous products and services are gradually exiting the market. At the same time, we are seeing bigger players with strong community ecosystems taking initiatives to upgrade their content offerings and market-share shifting from amateur broadcasters to more professional ones.

We believe content building, as well as talent recruitment and management are becoming increasingly important as core competitive advantages in live streaming business. In that regards, we will in the future push harder to enhance constant offerings, as well as talent development. That will translate into several new priorities of ours.

Number one, we will dedicate more resources to drive quality content in verticals that are highly compatible with Momo's platform attributes. For example, singing, dancing, and musical instruments performances. We are also going to drive the content diversity by exploring opportunities in some of the non-talent show areas to appeal to a broader user base.

Number two, we are working more closely with the professional agencies in talent discovery and management, optimizing our incentive plans and making them better motivated to help us improve the content quality and diversity.

Moreover, we're planning to go deeper with our exploration in the area of professional entertainment content production and distribution, both within and beyond the Momo platform. Other than the direct economic value that we potentially - we can potentially drive from it, we have two additional goals to achieve. Number one goal is to widen the career potentials of our top performers and that's better motivate them to improve the quality of content. The other goal is to boost Momo's brand image and bring new users to our platform.

...What we do is that, we hand pick outstanding talents in those verticals and support them with additional traffic and promotional resources. The goal is to give performers with real entertaining talent, bigger opportunity to stand out, and build our career on our platform.

Spruce Point Interpretation

Industry is maturing and competition is about to become much more credible.

Gone are the days where talent just appeared from our User Base at no cost to us.

The move towards professional content requires us to be dependent on agencies.

"Cam girl" isn't a sustainable career compared to pushing products for our competitors. Changing our image can't hurt advertising revenue either.

No longer looking to diversify across talent w/ our algorithm, look to concentrate instead.



Strategic Shift After Flattening Paid User Growth In Live Video During Q2 And Q3 2017 (Cont'd)

More critical analysis of management's recent (translated) comments

Tang Yan Q3 '17 Earnings Call

Other than these efforts, we are also working to strengthen our collaborations with professional agencies in building our talent pool and improving the content offerings. <u>Historically, agencies have a limited role in Momo's live streaming ecosystem</u>. We have noticed, since earlier this year that some quality talent agencies and MCNs are becoming increasingly mature in terms of talent management and content development.

As a result, we are adjusting our operational policies to better support the high value-added agencies in traffic and other resources, as well as economic incentive. We believe that such adjustment will give the quality agencies bigger room to develop and does better motivate them to help us in developing talent and driving constant quality and diversity. It will also allow them to grow their business in a bigger way within our ecosystem, which in turn will grow ours.

In November, we rolled out a trial plan, whereby the qualified agencies are provided with a different level of additional cash incentives if they reach certain growth targets. Although such incentives will likely cause cost in revenue to continue to fluctuate in the future, we believe it will better motivate the agencies and individual broadcasters to invest and grow their business within our ecosystem, which in turn will grow ours

Moving on to mobile marketing business, the new homepage design of 8.0 has diverted traffic from nearby people to other product modules. At the same time, we have also reduced the number of ad units in the nearby posts from 3 to 1. As nearby people and nearby posts are the two major carriers of the ad impressions. The 8.0-related changes have led to a significant decline in the ad inventory supply resulting in a sequential decrease in mobile marketing revenues during the third quarter.

On the product side, one of the key hurdles that we had in improving the long-term user retention was the fact that our core use case, which was pretty much based on nearby people and instant messaging was kind of limited. In the past two years' time, we have made a lot of progresses in expanding the social use cases.—

Spruce Point Interpretation

Complete 180 degree shift on the role that agencies play in supporting the business.

New business model will require greater strategy and likely costs, but will be worth it.

The move towards professional content requires us to be dependent on agencies.

Is our limited ad load already too much? Hmmm.

Core use case of nearby people and instant messaging are limited. There goes the baby with the bath water.



Evaluating the Live Video Business Is Extremely Challenging Given Current Metrics

Is Momo intentionally obfuscating performance trends? The only management provided insights into Momo's Live Video business are the revenue and the number of paying users. Momo actively avoids disclosing certain business practices (e.g., virtual rebates), Key Performance Indicators (including those previously provided) and complete segment financials. Additional information should be easy for a technology and data-driven company that promotes its "Artificial Intelligence" abilities.

Spruce Point believes the following information would be required to effectively assess the health and prospects of the Live Video business

Discussion of Business Practices

- Rationale for owning their own talent agencies (undiscussed/undisclosed)
- Rationale for refund and rebate strategy for agencies (undisclosed)
- Instances when fee sharing with talent and agencies are reduced
- Strategy for agency value added services and client acquisition

KPIs (Segments & Counts)

- · Talent by monthly earnings (previously disclosed) and agency representation
- · Paying users by monthly giving (previously disclosed), aging, and frequency of giving
- Agents by size, exclusivity to Momo, and recipient of value added services
- · Details around competition metrics

Financials

- Concentration of revenues by talent/paying user (previously disclosed) and agency/competition KPIs
- Effective fee sharing rate and accounting of virtual gift rebates & refunds
- Segment level information: Allocation of costs, segment margin, capital expenditures



Overview of Talent Agencies Interviewed

In order to develop a deep, unbiased, understanding of the outlook for Momo's Live Video business, Spruce Point's consultant interviewed 18 agencies and 6 paying users.

Description of Agencies Interviewed

	i oi Agencies ili			Turinal		
		Tenure in	Agency Size	Typical Broadcaster	Represented /	
Discussion		Business	Cohort	Earns per month	Current Talent on	
Ref #	Location	(Years)	(Broadcasters)	(RMB)	Momo	% of Talent on Momo
1	Beijing	Established (1-3)	Large (1k-10k)	80% < 5k	Yes	50%
2	Shenyang	Established	Small (<1k)	6k-10k	Yes	~0%
3	Beijing	Established	Large	20k-50k	Yes	60%
4	Guiyang	Emerging (<1)	Small	Best 100k	Yes (exclusive)	100%
5	Shanghai	Undisclosed	Undisclosed	5k	Yes (exclusive)	100%
6	Dalian	Tenured (>3)	Super (>10k)	20k	Yes	7%
7	Dalian	Tenured	Super	5k	Yes	7%
8	Zhengzhou	Tenured	Super	30k	Yes	Undisclosed
9	Beijing	Established	Small	50k	Yes	33%
10	Beijing	Established	Large/Small	8k-20k	Yes (exclusive)	100%
11	Shenyang	Established	Large	7k-8k	No	1.5%
12	Beijing	Established	Large	10-20k	Yes (exclusive)	100%
13	Beijing	Tenured	Super	5-20k	Yes	43%
14	Tiancheng City	Tenured	Super	4-5k	Yes	2%
15	Hefei	Tenured	Super	5k	Yes	2%
16	Wuxi	Tenured	Super	5k	Yes	3%
17	Zhuhai	Tenured	Super	8-10k	Yes	2%
18	Beijing	Established	Small	10k	Yes	17%



Key Implications From Talent Agency Interviews On Live Video Financials

Based on the new strategic direction being chartered in Live Video, and the findings from our interviews, we estimate that the earnings power of Momo Live Video is likely to be impaired by 30%

Area of Discussion	Key Implication	Potential Financial Implication
Fee Sharing	Consolidation of Live Streaming Industry & Preferred Momo Agency Relationships Leads to Decline in Momo Premium Fee Share	Pushes Fee Share to 45%-50% over time
Talent Consolidation	As consolidation also plays out across Talent the cost of promoting Talent will eventually result in less "supporting our talent revenue"	Eliminates some portion of tail revenue
Agency Consolidation	As Agencies consolidate and gain power we expect their negotiating power with Momo to increase	Pushes Fee Share to 45%-50% over time
Agency Alignment	Once the "commercial secret" of offering select agencies refunds and rebates is out of the bag we expect that it will have to be offered much more broadly or eliminated completely to avoid disenfranchising agencies	Eliminates 5-10% of revenue through additional rebate or loss of "preferred" clients
Competition	The presence of extremely large, well funded, competitors likely drives down Fee share rates for the entire industry	Industry fee share levels compress over time, lost market share
Advertising	Momo's reputation as a "cam site" will limit its ability to generate product placement revenue through live streaming and limit career paths of their Talent	Limits TAM
New Regulation	The new regulations, which agencies referenced and we also believe Momo is ignoring, will translate into lost revenues and potentially increased costs	Potentially reduces revenue pool and TAM



Undisclosed Insights Into Momo Live Video Strategy Based On Talent Agency Interviews

Fee Sharing

- Momo appears to tier the fee sharing with agencies based on their size and allegiance
- Momo's take ranges from a high of 60% to a low of 50% in our sample. Platform take rates on competitor's platforms ranged from a high of 50%-55% to a low of 30%. Logic would suggest that Momo's rate will come down to match peers over time

Free Virtual Gifts

- Momo once again appears to treat agencies differently depending on their size. The majority of our sample indicated that Momo doesn't provide them with free gifts, unless they are trying to "steal talent". One agency from each size cohort indicated that they receive free gifts from Momo and one indicated that this is a "commercial secret"
- "This is a commercial secret. Depending on the ranking and scale of your agency you will get virtual gifts. I don't want to disclose how much. Anyway there is this sort of thing. It all depends on if your agency has that right. It depends on who you know and how good your broadcasters are." Large Agency #3
- "In the initial promotion period we will talk with Momo. We can discuss with Momo that we get a rebate on all of the gifts that we give a new broadcaster. They will return 100%. To establish a broadcaster we will spend more than RMB100,000. Hard to say how many new broadcasters we develop each month as it depends on the new peoples talent." Super Agency #7



Undisclosed Insights Into Momo Live Video Strategy Based On Talent Agency Interviews

Cash Rebates

- Based on our interviews Momo support to agencies ranges from better positioning on lists, support for external events and <u>cash rebates of 5% on virtual gifts</u>. These benefits generally appear to accrue to exclusive and large scale agents. <u>Agencies primary complaint in regards</u> to Momo is that their share of revenue is too low
- "Better positioning on the APP. Sometimes we can add value and get 100% free. So if we add 10,000 they will give us 10,000 or a rebate of 5%. We don't work with Momo as their take is too high. We also have to pay 6% tax. We care about our ability to make money on a channel. Agents and broadcasters care more about how much money they can earn than traffic." – Large Agency #11
- "We are both aiming to make money. Momo will give us better positioning and place us on hottest lists. When we add value on Momo we will get a 5% rebate. In the back end system we can take this out as cash." — Super Agency #6

Momo Controlled Agencies?

- When we asked agencies about whether or not Momo controls its own agencies we got a range of responses from "No" to their biggest agency is their own
- "Yes there are. Momo has one official agency. You will notice broadcasters that are called "official" broadcasters. Momo's own staff open agencies. They do this privately. They keep it out of the spotlight. To do the agency business relies on your relationship with the platform. If you have a good relationship with the platform than you can get anything passed. Every platform has the underground agencies." Small Agent #2
- "Yes, Momo directly contracts broadcasters. Momo gave these people money to establish their own agencies. This agency is in Qingdao. For confidentiality reason I cannot tell you the name. This is Momo's largest agency." Small Agency #9



Undisclosed Insights Into Momo Live Video Strategy Based On Talent Agency Interviews

Supporting Talent

- Every Agency we spoke with indicated that they support their own talent by giving virtual gifts. Some agencies do so reluctantly as Momo keeps 60% of the money they are spending on their talent. Others spend significant portions of their own revenues back into their talent, particularly at year end. Two agencies estimated that their own spending represents 10%-20% of their revenues
- "Yes, we will help broadcasters to become popular. We estimate about 10% of the revenue of Momo is from this type of activity. Sometimes we will pay this cost to help a broadcaster."

 —Super Agency #6
- <u>"We have to. This is just the same as Taobao fake sales.</u> Everyone does it. <u>Each month about 10-20% of our revenue is us spending money on broadcasters.</u> We share the loss equally with the broadcaster." Large Agency #11



Live Video Financial Impact From New Competition And Shift In Strategy

Competition / Market Share

- Half the agencies that we questioned had very favorable things to say about Now (backed by Tencent) and Douyin (backed by Bytedance) sounds as if it is the hottest channel at the moment
- "It looks like Now will overtake Momo, no other platforms look likely to overtake Momo. <u>Now has the huge Tencent platform for promotion.</u>" Large Agency #1
- "Now is becoming much better. The audience is fresher and the broadcasters are more authentic. Now only approves 30% of broadcasters compared with Momos 45%. The big spenders spend more on Now." Small Agency #6
- We are trying out other channels, <u>Now is really good at the moment</u>, <u>Douyin has just started</u>
 doing live broadcasting, so we are just monitoring it. <u>Douyin is the hottest channel recently</u>. –
 Small Agency #4
- <u>"Now platform traffic development is really good. Their traffic is constantly increasing. Momo's traffic is not as good. For us older agencies we can make money, new agencies cannot make money."</u> Super Agency #7
- <u>Momo growth is stabilizing after rapid expansion, current growth is very weak and it is a very risky period.</u> Momo was the No 1 now it is not. Now entertainment media is the leading content online. Fans like Douyin the most. Super Agency #8

Cost of Revenues

- Based on publicly available information and our interviews, Spruce Point believes most of the credible competing platforms maintain 40%-55% of virtual currency gifting and emerging threat Now maintains only 30%-40% (higher cost of revenues)
- Momo's virtual currency gifting retention rate was described by agencies as being between 50%-60% depending on the size of the agency
- Spruce Point believes that increased competition amongst platforms and consolidation amongst agencies will force Momo to lower virtual gift retention and increase cost of revenues going forward



Live Video Market Size And Competitor Overview

We believe that live streaming may have peaked as a phenomenon as has Momo's market share. Iresearch claims that industry MAU peaked in November 2016 at 141 million users and has been falling since, and was 104 million in April 2017.

- Mobile live streaming went mainstream in 2016, the year after Momo launched its live streaming service along with another 100 providers. The market leader at that time, Yingke, now barely exists
- Spruce Point believes that Momo's cost of revenues will increase to match competitors at 50%-70%. This equates to a potential 40%-50% increase in cost of revenues

China Live Streaming Market

	2015	2016	2017
Market Size RMB	7.4	20.8	43.2
Market Size \$bn	1.1	3.1	6.4
Momo Revenue \$bn	0.1	0.6	1.3
Market Share	12%	18%	21%

Source: Iresearch, company reports

China Top Ten Live Streaming Companies

Company	Established	Mkt Cap \$bn	% Rev to Platform	Funds raised US\$	Investor	Notes
Kuaishou	2011	\$18	40%	\$1.35 bn	Tencent, Baidu, Alibaba	Market Leader
Huoshan	2015	11	40%		Bytedance (\$20 bn digital co)	Key challenger
Huya	2011	5.75	50%	\$700m pre IPO	US listed (YY and Tencent backed)	Listed May 2018
Momo	2015	9.9	60%		US Listed / Alibaba	Slowing growth
ΥΥ	2005	6.9	55%		US listed	Original live streaming site
Now	2016	5	30%-40%	\$300m	Tencent 100%	Key challenger
Yizhibo	2016	5	50%		SIna and Weibo	Leader in celebrity live streaming
Douyu	2014	4	55%	\$1 bn	Tencent	Leading live gaming site, like Twitch,
Bilibili	2015	4.5	40%		US listed (Tencent backed)	Listed March 2018
Inke	2015	1	70%		Beijing Kunlun	Failed to IPO, death spiral

Source: SP Consultant, company reports



Key Advertising and Regulatory Findings From Talent Agency Interviews

Image

- Four of the agencies gave the unsolicited opinion that Momo has a reputation as a (sex) cam site. We believe that this has directly contributed to Momo's advertising woes
- "I don't think Momo will be a long lasting platform as its reputation is not good. In most people's
 experience it is a live cam site for sex and this is something it cannot wash off." Small Exclusive
 Agent #2
- "Momo is good for publicity. <u>Most people think of Momo as a sex site which has predominantly male users.</u>" Super Agency #6
- "A successful broadcaster on Yizhibo would not survive on Momo. Momo is low level. Momo was successful because it was like a porn cam channel. The users were 30 to 50 year old males in second and third tier cities. Their motives were clear. They wanted to see sex performances. Despite being cleaned up Momo is still this sort of channel and encourages people to climax. If Momo can not change directions then it will have a problem." Small Agency #9
- <u>"90% of the audience are male. They are not interested in art but more about sex.</u> Older men with their families in the US. They are lonely and spend a lot of money each month." Large Agency #11

New Regulation

- Two different agencies spoke about how new regulations have been introduced to "clean up" aspects of Live Broadcasting. The new rules appear particularly relevant to Momo given the sites perceived image
- "There are lots of new restrictions like you cannot show breast area, 2/3 of the breast area must be covered. If you wear a short skirt you cannot drop things. You cannot broadcast lying in bed. There are broadcasters breaking all of these rules. Momo does not try to clean it up unless they are caught because they want the traffic and the money. We do not have that sort of broadcaster on our roster." Small Agency #9
- "Last year was a revolutionary year for our industry. This year is a difficult year. There are more regulatory restrictions on the industry. Some popular broadcasters have been kicked out. They were on the edge of regulations and using words and actions they should not use. There are a lot of restrictions on clothing now." Large Agency #6



Key Takeaways From Interviews With Advertisers

To enhance our understanding of Momo's advertising prospects, we spoke with three local advertising companies. Momo's user demographic and brand were repeatedly cited as challenges to achieving broader appeal from a platform marketing perspective.

Marketing Manager in Shenyan

"Momo's approval of advertisers and brands is not as strict as Tencent's and Momo has advertising from every industry such as medical care, automobiles, and tourism. Tencent does not allow advertising for loans but Momo does."

"Momo prices are 30%-50% cheaper than Baidu and Tencent. <u>However, the click through rate for Momo advertising is poor and no comparison to Baidu.</u> Baidu is doing precision marketing."

"Momo and Tencent may have similar results, but the number of Momo users is much smaller than that of Tencent. <u>Momo needs to improve ad optimization to be useful."</u>

"The reputation of Momo in Shenyang is not very good. In the past year, there have been a dozen customers who had used Momo, and 80 customers that used Tencent. Momo is more suitable for national brands in a launch phase. Momo is not good for regional advertising."

News Feed Advertising Operations in Shenzen

"We are the company that does hair and freckle removal. We find ads placed on Weibo the most effective. This is because of the high percentage of young female users on Weibo. The impact on Momo is terrible."

"I see that other large beauticians advertise on Momo so they must be getting results. <u>I think that the biggest disadvantage for a company like us is that there are too many male users and I cannot think of any advantages."</u>

"Everyone knows that the reputation of Momo and it has a lot of negative news. Men use the site to find people to have sex with them."

Marketing Manager in Beijing

"The coverage of Momo is too narrow. Their advertising impact is very low for the hotel industry. Compared with the news app "Headlines" and iqiyi (Search engine Baidu's video service like YouTube), it is very ineffective."

"Momo has one advertising option that is okay, it the location based advert. If someone is within 5 km of our shop then they can see your ad. Apart from that you have to place ads by city. We have found that very ineffective."



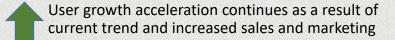
Valuation Downside Case

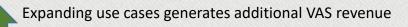


The Bull Case From Momo Analysts Is Easy To Refute Based On Our Research

Stock Promoter View

Agency model is a boon as improved content quality and diversity drives higher engagement and monetization in Live Video





- Mobile Marketing revenue continues to improve on a trajectory towards peers
- Tantan acquisition is successful in expanding users and delivers attractive performance on a standalone basis

Spruce Point View

- Live Stream demand has potentially already peaked and the shift in strategy may carry significant execution risks. Many existing agencies are shifting talent away from Momo and considering diversifying their platform exposure. Relative to self-directed talent, agencies are likely to demand higher payouts and additional incentives driving-up cost of revenues and pressuring margins. Agency and related Momo agency ownership and accounting is a major red flag
- Smart phone sales have been weak in recent periods, and this may act as a headwind to near-term user growth rates.

 Management's comments of looking towards 2nd and 3rd tier cities don't sound like big revenue opportunities
- VAS revenue is likely to continue to grow, but not all paid users are equal from a monetization standpoint. Momo's ability to maintain top talent and big spenders, a potential issue based on our interviews, is the biggest driver of financial results
- Based on our interviews, advertisers don't want to be associated with Momo given the Company's tainted brand and reputation as a (sex) cam site. Management continues to table advertising out of fear for limiting engagement
- Momo likely overpaid for Tantan given the need to deflect attention from core live video slowing growth. Tantan is unproven as a profitable business model and may be a drag on earnings for the foreseeable future



The Entire Institutional World Is Bullish Momo, But Blind To The Risks Highlighted In Our Report

There is not a single dose of skepticism expressed with a "Sell" recommendation amongst the analyst community when it comes to Momo's 12 month outlook. Despite this view, analysts believe Momo is worth 23% more than its current price. Spruce Point cannot find any evidence that analysts have done the same level of forward looking due diligence or risk analysis that we have.

Broker	Stock Rating	Price Target
First Shanghai	Buy	\$76.00
Morgan Stanley	Overweight/in-line	64.00
Jefferies	Buy	60.00
Benchmark	Buy	60.00
KGI Securities	Buy	59.00
BOCOM	Buy	55.00
ICBC Research	Buy	55.00
Bank of China	Buy	54.00
Value Investment Principals	Buy	54.00
Credit Suisse	Outperform	54.00
Nomura	Buy	53.00
JP Morgan	Overweight	52.00
CCB Int'l	Outperform	52.00
CMB International Capital	Buy	51.00
CICC	Buy	50.00
TH Capital LLC	Buy	50.00
Hua Tai Securities	Buy	48.00
Haitong International	Neutral	47.00
New Street Research	Buy	45.00
Blue Lotus Capital	Buy	42.00
Standpoint Research	Hold (recent d/g June 18 th)	N/A
	Average Price Target	\$54.01
ource: Bloomberg	% Implied Upside	23%



Despite Analyst Endorsements, Few Institutional Investors (Especially Technology Funds) Own Momo

The top 15 institutional holders account for less than 30% of Momo's diluted shares outstanding. Notably absent from this list are technology focused investors. We estimate that a majority of Momo owners are retail investors

Name	Description	Value in \$ millions	% of Fully Diluted Shares
Pendal Group (JO Hambro)	Australian Inv. Manager (UK subsidiary)	\$561.6	5.1%
Prime Capital	HK China Tech Focused Hedge Fund	\$335.9	3.1%
Blackrock Inc	Global Index / Asset Manager	\$332.8	3.0%
Alibaba Group	Strategic Investor	\$260.0	2.4%
Fosun International	Listed HK Company	\$213.2	2.0%
Acadian Asset	US Quant Manager	\$192.4	1.8%
Fidelity	US Mutual Fund Company	\$182.0	1.7%
Swedbank	Swedish Inv Manager / Global Equity	\$175.8	1.6%
Old Mutual	UK Wealth manager	\$134.2	1.2%
Vanguard	US Index Manager	\$129.5	1.2%
Neuberger Berman	US Investment Manager	\$121.2	1.1%
Krane Funds	Manager of KWEB ETF	\$118.0	1.1%
Renaissance Technologies LLC	US Quant HF	\$113.9	1.0%
State Street Corp	US Index Manager	\$103.0	0.9%
Morgan Stanley	US Investment / Wealth Manager	\$98.8	0.9%

Source: Bloomberg and based on share count pro forma for Tantan stock issuance



While Analysts Say Buy, Momo Insiders Have Been Significant Sellers

Momo insiders have sold \$2 billion of stock since the IPO. Momo Executives and Directors, except for Tang Yan, are on pace in 2018 to sell more than 2x what they sold in 2017.

Entity \$ millions	Description	2015	2016	2017	YTD 2018	Grand Total
Gallant Future Holdings Ltd	Trust of Tang Yan (CEO)			\$152.8	\$74.0	\$226.8
Li Yong	Director	36.0	8.0	6.7	138.9	189.7
Wang Li	President			29.2	27.9	57.1
Zhang Xiaosong	CFO			19.1	27.8	46.9
First Optimal Holdings Ltd	family of Lei Xiaoliang (Founder)			9.6	18.5	28.1
Zhang David Ying	Director (Matrix)			3.8	12.4	16.2
Li Zhiwei	Officer		5.4			5.4
Zhang Jingping	Former President		0.4			0.4
OS SJ Holdings Ltd	Cayman Co. of Insider			0.1	0.1	0.2
Alibaba Investment Ltd	Alibaba Entity		117.8	828.9		946.7
Rich Moon Ltd	Jack Ma Vehicle		148.3	154.9		303.2
Sequoia Capital China GF Holdco III-A Ltd	Sequoia Vehicle		84.5		23.0	107.4
SC China Growth III Co-Investment 2014-A LP	Sequoia Vehicle		38.4			38.4
SCC Growth I Holdco A Ltd	Sequoia Vehicle		15.4		4.2	19.5
Sequoia Capital China UR Holding Ltd / N. Sher	Sequoia Vehicle			5.6	13.3	18.9
	Total	\$36.0	\$418.1	\$1,210.8	\$340.0	\$2,004.9

Source: Bloomberg and Form 144 filings



Spruce Point's View Diverges From Consensus Based On Live Video's Gross Margin Compression Worries

Based on our significant number of live stream related interviews, we believe that the Street's base case is materially overstating Live Video and Mobile Marketing revenues while understating costs of revenues associated with Live Video services.

\$ millions	Q1 '18 Annualized	Spruce Pt. FY18 Forecast	FY18 Consensus	MS Base Estimate FY18	MS Bear Estimate FY18	JEFF Estimate FY18	Spruce Pt. FY19 Forecast	FY19 Consensus	MS Base Estimate FY19	MS Bear Estimate FY19	JEFF Estimate FY19
Live Video	\$1,486	\$1,597		\$1,641	\$1,081	\$1,700	\$1,438		\$2,102	\$1,146	\$2,080
Marketing	75	75		78	78	88	82		79	82	106
Value Added Services	148	170		239	231	211	230		419	391	335
Mobile Gaming	26	26		26	26	28	26		26	26	26
Total Revenue	\$1,735	\$1,869	\$1,999	\$1,990	\$1,421	\$2,032	\$1,776	\$2,551	\$2,632	\$1,648	\$2,552
Estimated Cost of Live Video Revenue	(\$760)	(\$900)					(\$901)				
Remaining Cost of Other Revenues	(78)	(90)					(121)				
Total Cost of Revenue	(\$838)	(\$990)	(\$1,019)	(\$1,019)	(\$717)	(\$1,029)	(\$1,023)	(\$1,311)	(\$1,310)	(\$839)	(\$1,271)
Gross Profit Live Video	\$726	\$697					\$536				
Consolidated Gross Profit	\$897	\$879	\$980	\$978	\$705	\$1,003	\$754	\$1,239	\$1,292	\$809	\$1,281

Note: We use Morgan Stanley and Jefferies reports to illustrate the break-out of business segments since not all brokers provide granular level detail

Segment	Spruce Point Key Assumptions
Live Video	 FY18 assumes Q1 '18 plus 10% growth Q2, then flat through rest of year due to increased competition, regulation, shift in content FY19 assumes a 10% YoY reduction in revenue due to lost market share to new competitors
Mobile Marketing	 FY18 assumes flat marketing based on Q1 '18 and Management focus on engagement over monetization FY19 assumes a 10% YoY increase
Value Added Services	 FY18 assumes Q1 plus 20% growth Q2, then flat through rest of year based largely on MAU growth and continued delay in monetization FY19 assumes 35% growth based on slowing of VAS Growth rate and general slowing of MAU
Mobile Gaming	FY18 and FY19 assumes flat revenues
Cost of Live Video Revenues	 Q1 '18 Ann based on Q1 '18 actuals of 91% of revenue sharing, 100% bandwidth and 85% of remaining cost of revenues FY18 assumes bandwidth growth inline with live stream, allocation inline with total revenue growth, and revenue sharing inline with live stream growth plus 12.5% based on higher fee sharing with agencies & industry maturation FY19 assumes bandwidth decline inline with live stream, allocation decline inline with rev share loss to VAS, and revenue sharing decline inline with live video business against growth of 12.5% based on higher fee sharing with agencies & industry maturation
Remaining Cost of Other Revenues	 Q1 '18 Ann derived from the difference between Total Cost of Revenues and Cost of Live Video Revenues Grows in FY18 and FY19 inline with VAS growth



Spruce Point Price Target of \$23 to \$32 Represents 30% - 50% Downside Risk

Combining our gross profit assumption from the prior page with a meaningfully discounted P/E multiple to reflect the heightened risks surrounding significant red flags that we've highlighted in the report yields a price target of \$23 to \$32 and represents approximately 30% to 50% downside

\$ millions	Spruce Point FY18 Forecast	Spruce Point FY19 Forecast	Assumptions
Revenues	\$1,869	\$1,776	See prior page
Cost of Revenues	(990)	(1,023)	See prior page
Gross Profit	\$879	\$754	
Sales & Marketing Expense	(261)	(231)	• Based on 14% and 13% of sales in '18 and '19, respectively
Product Development Expense	(80)	(76)	 Based on 4.3% of sales in '18 and '19
General and Admin. Expense	(47)	(46)	• Based on 2.5% and 2.6% of sales in '18 & '19, respectively
Operating Profit	\$490	\$400	
Income Tax	(88)	(76)	 2018 based on reported rate from 2017 Annual Report 2019 assumes a 19% rate as tax breaks start to roll off
Net Income	\$402	\$324	
ADS Diluted Share Count	210.2	210.2	Pro forma for Tantan stock issuance
Earnings Per ADS	\$1.91	\$1.54	
P/E Multiple	13x - 15x	13x - 15x	 Assumes it trades in bottom of historical band from 2016 forward based on increased risks we've identified
Valuation Target Range (base business)	\$25 - \$29	\$20 - \$23	
Plus: Value of Tantan per share	\$735m \$3.50	\$735m \$3.50	Given limited information, it is difficult to model and value Tantan. We assume its recent acquisition value approximates its current market value, despite our noted concerns that Momo overpaid for the acquisition and possible self-dealing
Total Estimated Momo Value % Downside Risk from \$48.50/sh	\$28 to \$32 -28% to -37%	\$24 to \$27 -40% to -47%	