

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 5)*

MOMO INC.

(Name of Issuer)

CLASS A ORDINARY SHARES, par value \$0.0001 per share

(Title of Class of Securities)

60879B107**

(CUSIP Number)

**Timothy A. Steinert, Esq.
Alibaba Group Holding Limited
c/o Alibaba Group Services Limited
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With a copy to:

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(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

March 31, 2017

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

** This CUSIP number applies to the Issuer's American depositary shares ("ADSs"), each representing two Class A Ordinary Shares.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 60879B107

1. Name of Reporting Person
Alibaba Investment Limited

2. Check the Appropriate Box if a Member of a Group

(a)

3. SEC Use Only

4. Source of Funds
Not applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) o

6. Citizenship or Place of Organization
British Virgin Islands

7. Sole Voting Power
16,869,140 Class A Ordinary Shares ⁽¹⁾

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
0

9. Sole Dispositive Power
16,869,140 Class A Ordinary Shares ⁽¹⁾

10. Shared Dispositive Power
0

11. Aggregate Amount Beneficially Owned by Each Reporting Person
16,869,140 Class A Ordinary Shares ⁽¹⁾

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares o

13. Percent of Class Represented by Amount in Row (11)
5.78% of Class A Ordinary Shares issued and outstanding ⁽²⁾ (representing 1.34% of the voting power of the total issued and outstanding Ordinary Shares (including Class A and Class B Ordinary Shares) ⁽³⁾)

14. Type of Reporting Person
CO

(1) The Reporting Persons are deemed to beneficially own 16,869,140 Class A Ordinary Shares, a portion of which are held in the form of American depositary shares (the "ADSs"). Each ADS represents two (2) Class A Ordinary Shares.

(2) Based on an aggregate of 388,948,435 Ordinary Shares (including Class A and Class B Ordinary Shares) issued and outstanding as of December 31, 2016, as disclosed in the Issuer's current report on Form 6-K filed with the Securities and Exchange Commission on March 8, 2017, including 96,886,370 Class B Ordinary Shares issued and outstanding, as disclosed in the Schedule 13D/A filed by Gallant Future Holdings Limited, among other persons, with the Securities and Exchange Commission on August 23, 2016.

(3) Each Class B Ordinary Share is entitled to ten (10) votes per share, and each Class A Ordinary Share is entitled to one (1) vote per share.

1. Name of Reporting Person
Alibaba Group Holding Limited

2. Check the Appropriate Box if a Member of a Group

(a)

(b)

3. SEC Use Only

4. Source of Funds
Not applicable

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization
Cayman Islands

7. Sole Voting Power
16,869,140 Class A Ordinary Shares ⁽¹⁾

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

8. Shared Voting Power
0

9. Sole Dispositive Power
16,869,140 Class A Ordinary Shares ⁽¹⁾

10. Shared Dispositive Power
0

11. Aggregate Amount Beneficially Owned by Each Reporting Person
16,869,140 Class A Ordinary Shares ⁽¹⁾

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares

13. Percent of Class Represented by Amount in Row (11)
5.78% of Class A Ordinary Shares issued and outstanding ⁽²⁾ (representing 1.34% of the voting power of the total issued and outstanding Ordinary Shares (including Class A and Class B Ordinary Shares) ⁽³⁾)

- (1) The Reporting Persons are deemed to beneficially own 16,869,140 Class A Ordinary Shares, a portion of which are held in the form of American depositary shares (the “ADSs”). Each ADS represents two (2) Class A Ordinary Shares.
- (2) Based on an aggregate of 388,948,435 Ordinary Shares (including Class A and Class B Ordinary Shares) issued and outstanding as of December 31, 2016, as disclosed in the Issuer’s current report on Form 6-K filed with the Securities and Exchange Commission on March 8, 2017, including 96,886,370 Class B Ordinary Shares issued and outstanding, as disclosed in the Schedule 13D/A filed by Gallant Future Holdings Limited, among other persons, with the Securities and Exchange Commission on August 23, 2016.
- (3) Each Class B Ordinary Share is entitled to ten (10) votes per share, and each Class A Ordinary Share is entitled to one (1) vote per share.

Introductory Note

This Amendment No. 5 to Schedule 13D (this “Amendment No. 5”) hereby amends and supplements the statement on Schedule 13D filed with the U.S. Securities and Exchange Commission on April 7, 2016 (the “Initial Filing”) on behalf of the Reporting Persons, as amended by Amendment No. 1 to the Initial Filing filed on August 19, 2016, Amendment No. 2 to the Initial Filing filed on November 15, 2016, Amendment No. 3 to the Initial Filing filed on March 13, 2017, and Amendment No. 4 to the Initial Filing filed on March 23, 2017 (together with the Initial Filing, the “Original Schedule 13D”), with respect to the Class A Ordinary Shares of Momo Inc., a Cayman Islands company (the “Issuer”), including certain Class A Ordinary Shares represented by ADSs. Except as amended or supplemented herein, the information set forth in the Original Schedule 13D remains unchanged, and capitalized terms used but not defined herein have the meanings assigned thereto in the Original Schedule 13D. The agreement among the Reporting Persons relating to the joint filing of this Amendment No. 5 is incorporated hereto as Exhibit 99.1.

Item 4. Purpose of Transaction

The Reporting Persons acquired the securities covered by this Schedule 13D for investment purposes and intend to review their investment in the Issuer on a continuous basis. Depending upon various factors, including but not limited to the Reporting Persons’ and the Issuer’s business, prospects and financial condition and other developments concerning the Reporting Persons and the Issuer, market conditions and other factors that the Reporting Persons may deem relevant to their investment decision, and subject to compliance with applicable laws, rules and regulations, the Reporting Persons may in the future take actions with respect to their investment in the Issuer as they deem appropriate, including changing their current intentions or increasing or decreasing their investment in the Issuer, with respect to any or all matters required to be disclosed in this Schedule 13D.

Other than as set forth in this Amendment No. 5, the Reporting Persons have no present plans or proposals which relate to or would result in any of the matters set forth in clauses (a) through (j) of Item 4 of Schedule 13D; provided that the Reporting Persons may, at any time, review or reconsider their position with respect to the Issuer and reserve the right to develop such plans or proposals.

Item 5. Interests in Securities of the Issuer

Item 5(a)-(b) of the Original Schedule 13D is hereby amended by replacing the first paragraph of Item 5(a)-(b) in its entirety as follows:

(a)-(b) The responses of each Reporting Person to Rows (7) through (13) of the cover pages of this Amendment No. 5 are hereby incorporated by reference in this Item 5. The percentage of the class of securities identified pursuant to Item 1 beneficially owned by each Reporting Person is based on an aggregate of 388,948,435 Ordinary Shares (including Class A and Class B Ordinary Shares) issued and outstanding as of December 31, 2016, as disclosed in the Company’s current report on Form 6-K filed with the Securities and Exchange Commission on March 8, 2017, including 96,886,370 Class B Ordinary Shares issued and outstanding, as disclosed in the Schedule 13D/A filed by Gallant Future Holdings Limited, among other persons, with the Securities and Exchange Commission on August 23, 2016. Each Class B Ordinary Share is entitled to ten (10) votes per share, and each Class A Ordinary Share is entitled to one (1) vote per share.

Item 5(c) of the Original Schedule 13D is hereby amended and supplemented as follows:

On March 31, 2017, the Reporting Persons disposed of an aggregate of 12,000,000 ADSs beneficially held by the Reporting Persons at a price of US\$33.20 per ADS through brokered trading transactions.

Item 7. Material to Be Filed as Exhibits

Exhibit	Description
99.1	Joint Filing Agreement, dated April 7, 2016, by and between the Reporting Persons.*

*Previously filed on April 7, 2016.

SIGNATURES

After reasonable inquiry and to the best of each of the undersigned's knowledge and belief, each of the undersigned, severally and not jointly, certifies that the information set forth in this statement is true, complete and correct.

Dated: April 4, 2017

ALIBABA INVESTMENT LIMITED

By: /s/ Timothy A. Steinert
Name: Timothy A. Steinert
Title: Director

ALIBABA GROUP HOLDING LIMITED

By: /s/ Timothy A. Steinert
Name: Timothy A. Steinert
Title: General Counsel and Secretary