

# EXHIBIT 3

1 GIBSON, DUNN & CRUTCHER LLP  
2 JOSHUA A. JESSEN, SBN 222831  
3 JJessen@gibsondunn.com  
4 JEANA BISNAR MAUTE, SBN 290573  
5 JBisnarMaute@gibsondunn.com  
6 ASHLEY M. ROGERS, SBN 286252  
7 ARogers@gibsondunn.com  
8 1881 Page Mill Road  
9 Palo Alto, California 94304  
10 Telephone: (650) 849-5300  
11 Facsimile: (650) 849-5333

8 GIBSON, DUNN & CRUTCHER LLP  
9 GAIL E. LEES, SBN 90363  
10 GLees@gibsondunn.com  
11 CHRISTOPHER CHORBA, SBN 216692  
12 CChorba@gibsondunn.com  
13 333 South Grand Avenue  
14 Los Angeles, California 90071  
15 Telephone: (213) 229-7000  
16 Facsimile: (213) 229-7520

13 Attorneys for Defendant  
14 FACEBOOK, INC.

15 UNITED STATES DISTRICT COURT  
16 NORTHERN DISTRICT OF CALIFORNIA  
17 OAKLAND DIVISION

18 MATTHEW CAMPBELL, MICHAEL  
19 HURLEY, and DAVID SHADPOUR,

20 Plaintiffs,

21 v.

22 FACEBOOK, INC.,

23 Defendant.

Case No. C 13-05996 PJH

**PUTATIVE CLASS ACTION**

**DEFENDANT FACEBOOK, INC.'S  
SUPPLEMENTAL RESPONSES AND  
OBJECTIONS TO PLAINTIFFS' FIRST  
SET OF INTERROGATORIES**

24  
25 **HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY**  
26  
27  
28

1 Defendant Facebook, Inc. (“Defendant” or “Facebook”), by and through its attorneys, and  
2 pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, the Local Civil Rules of the U.S.  
3 District Court for the Northern District of California, the Court orders in this action, and the parties’  
4 agreements, provides the following supplemental responses and objections to Plaintiffs’ First Set of  
5 Interrogatories (the “Interrogatories”).

6 These responses are designated Highly Confidential – Attorney’s Eyes Only under the  
7 Amended Stipulated Protective Order entered by the Court on July 1, 2015.

8 **PRELIMINARY STATEMENT**

9 1. Facebook’s responses to the Interrogatories are made to the best of Facebook’s current  
10 knowledge, information and belief. Facebook reserves the right to supplement or amend any of its  
11 responses should future investigation indicate that such supplementation or amendment is necessary.

12 2. Facebook’s responses to the Interrogatories are made solely for the purpose of and in  
13 relation to this action. Each response is given subject to all appropriate objections (including, but not  
14 limited to, objections concerning privilege, competency, relevancy, materiality, propriety and  
15 admissibility). All objections are reserved and may be interposed at any time.

16 3. Facebook’s responses are based on its understanding that Plaintiffs seek only that  
17 information that is within Facebook’s possession, custody, and control.

18 4. Facebook incorporates by reference each and every general objection set forth into  
19 each and every specific response. From time to time, a specific response may repeat a general  
20 objection for emphasis or some other reason. The failure to include any general objection in any  
21 specific response shall not be interpreted as a waiver of any general objection to that response.

22 5. Nothing contained in these Responses and Objections or provided in response to the  
23 Interrogatories consists of, or should be construed as, an admission relating to the accuracy,  
24 relevance, existence, or nonexistence of any alleged facts or information referenced in any  
25 Interrogatory.

**GENERAL OBJECTIONS**

1  
2           1.       Facebook objects to each Interrogatory, including the Definitions and Instructions, to  
3 the extent that it purports to impose obligations beyond those imposed by the Federal Rules of Civil  
4 Procedure, the Federal Rules of Evidence, the Local Civil Rules of the U.S. District Court for the  
5 Northern District of California, and any agreements between the parties.

6           2.       Facebook objects to each Interrogatory to the extent that it is not limited to the  
7 relevant time period, thus making the Interrogatory overly broad, unduly burdensome, and not  
8 relevant to the claims or defenses in this action. Unless otherwise specified in its responses,  
9 Facebook’s response will be limited to information generated between December 30, 2011 and  
10 December 20, 2012.

11           3.       Facebook objects to each Interrogatory to the extent that it seeks information unrelated  
12 and irrelevant to the claims or defenses in this litigation and not reasonably calculated to lead to the  
13 discovery of admissible evidence.

14           4.       Facebook objects to each Interrogatory as overly broad and unduly burdensome,  
15 particularly in view of Facebook’s disproportionate cost necessary to investigate as weighed against  
16 Plaintiffs’ need for the information. For example, many of the Interrogatories seek broad and  
17 vaguely defined categories of materials that are not reasonably tailored to the subject matter of this  
18 action.

19           5.       Facebook objects to each Interrogatory to the extent that it purports to request the  
20 identification and disclosure of information or documents that were prepared in anticipation of  
21 litigation, constitute attorney work product, reveal privileged attorney-client communications, or are  
22 otherwise protected from disclosure under any applicable privileges, laws, or rules. Facebook hereby  
23 asserts all such applicable privileges and protections, and excludes privileged and protected  
24 information from its responses to each Interrogatory. *See generally* Fed. R. Evid. 502; Cal. Code  
25 Evid. § 954. Inadvertent production of any information or documents that are privileged or otherwise  
26 immune from discovery shall not constitute a waiver of any privilege or of any other ground for  
27 objecting to the discovery with respect to such information or documents or the subject matter

1 thereof, or the right of Facebook to object to the use of any such information or documents or the  
2 subject matter thereof during these or any other proceedings. In the event of inadvertent disclosure  
3 of any information or inadvertent production or identification of documents or communications that  
4 are privileged or otherwise immune from discovery, Plaintiffs will return the information and  
5 documents to Facebook and will be precluded from disclosing or relying upon such information or  
6 documents in any way.

7 6. Facebook objects to each and every Interrogatory to the extent that the information  
8 sought by the Interrogatory is more appropriately pursued through another means of discovery, such  
9 as a request for production or deposition.

10 7. Facebook objects to each and every Interrogatory, Definition, and Instruction to the  
11 extent that it seeks information outside of Facebook's possession, custody, and control.

12 8. Facebook objects to each Interrogatory to the extent that it requests information  
13 protected by the right of privacy of Facebook and/or third parties, or information that is confidential,  
14 proprietary, or competitively sensitive.

15 9. Facebook objects to each Interrogatory to the extent that it seeks documents or  
16 information already in Plaintiffs' possession or available in the public domain. Such information is  
17 equally available to Plaintiffs.

### 18 **OBJECTIONS TO DEFINITIONS**

19 1. Facebook objects to Plaintiffs' definition of "Active Likes" as vague, ambiguous,  
20 overly broad, and unduly burdensome. Facebook further objects to the definition to the extent that  
21 Plaintiffs purport to use this defined term to seek materials that are not relevant to the claims and  
22 defenses in this action, particularly as a result of its reference to the undefined term, "Social Plugin."  
23 Facebook construes the term "Social Plugin" to have the meaning attributed to that term in the  
24 operative versions of Facebook's Data Use Policy.

25 2. Facebook objects to Plaintiffs' definition of "Architecture" as vague, ambiguous,  
26 overly broad, and unduly burdensome. Facebook further objects to the definition to the extent that  
27 Plaintiffs purport to use this defined term to seek materials that are not relevant to the claims and  
28

1 defenses in this action, particularly as a result of its use of the phrase “including but not limited to”  
2 and the undefined term “Your services.”

3 3. Facebook generally objects to Plaintiffs’ definitions of “Communication,”  
4 “Document(s),” “Electronic Media,” “ESI,” “Electronically Stored Information,” “Identify,” and  
5 “Metadata” to the extent that Plaintiffs purport to use these defined terms to request the identification  
6 and disclosure of documents that: (a) were prepared in anticipation of litigation; (b) constitute  
7 attorney work product; (c) reveal privileged attorney-client communications; or (d) are otherwise  
8 protected from disclosure under any applicable privileges, laws, and/or rules. Facebook further  
9 objects to the extent that these definitions purport to impose obligations that go beyond the  
10 requirements of the Federal and Local Rules.

11 4. Facebook objects to Plaintiffs’ definition of “Facebook User Data Profile(s)” as vague,  
12 ambiguous, overly broad, and unduly burdensome. Facebook further objects to the definition to the  
13 extent that Plaintiffs purport to use this defined term to seek materials that are not relevant to the  
14 claims and defenses in this action.

15 5. Facebook objects to Plaintiffs’ definition of “Passive Likes” as vague, ambiguous,  
16 overly broad, and unduly burdensome. Facebook further objects to the definition to the extent that  
17 Plaintiffs purport to use this defined term to seek materials that are not relevant to the claims and  
18 defenses in this action. Facebook construes the term “Passive Likes” as it relates to the practice  
19 challenged in this action (the alleged increase in the Facebook “Like” count on a website when the  
20 URL for that website was contained in a message transmitted through Facebook’s Messages product  
21 during the class period (December 30, 2011 to approximately December 20, 2012)). Specifically,  
22 Facebook construes “Passive Likes” to refer to an increase in the “Like” count on a third-party  
23 website resulting from inclusion of that website’s URL in a Facebook message during the class  
24 period.

25 6. Facebook objects to Plaintiffs’ definition and use of the term “Person” as vague,  
26 ambiguous, overly broad, and unduly burdensome to the extent that Plaintiffs intend to use this term  
27

1 to include “any natural person or any business, legal or governmental entity or association” over  
2 which Facebook exercises no control.

3 7. Facebook objects to Plaintiffs’ definition of “Private Message(s)” to the extent that it  
4 is vague, ambiguous, overly broad, and unduly burdensome. Facebook further objects to the  
5 definition to the extent that Plaintiffs purport to use this defined term to seek materials that are not  
6 relevant to the claims and defenses in this action.

7 8. Facebook objects to Plaintiffs’ definition of “Private Message Content” to the extent  
8 that it is vague, ambiguous, overly broad, and unduly burdensome. Facebook further objects to the  
9 definition to the extent that Plaintiffs purport to use this defined term to seek materials that are not  
10 relevant to the claims and defenses in this action. Facebook further objects to this definition on the  
11 ground and to the extent it is inconsistent with applicable law.

12 9. Facebook objects to Plaintiffs’ definition of “Private Message Transmission” as vague,  
13 ambiguous, overly broad, and unduly burdensome. Facebook further objects to the definition to the  
14 extent that Plaintiffs purport to use this defined term to seek materials that are not relevant to the  
15 claims and defenses in this action. Facebook further objects to this definition on the ground and to  
16 the extent it is inconsistent with relevant law.

17 10. Facebook objects to Plaintiffs’ definitions of “Relate(s) to,” “Related to” and  
18 “Relating to” on the ground that the definitions make the Interrogatories overly broad and unduly  
19 burdensome and impose obligations that go beyond the requirements of the Federal and Local Rules.  
20 Facebook shall construe these terms as commonly and ordinarily understood.

21 11. Facebook objects to Plaintiffs’ definition of “Targeted Advertising” as vague,  
22 ambiguous, overly broad, and unduly burdensome. Facebook further objects to the definition to the  
23 extent that Plaintiffs purport to use this defined term to seek materials that are not relevant to the  
24 claims and defenses in this action. Facebook construes the term “Targeted Advertising” to refer to  
25 the service described under the heading “Personalized ads” on page 5 of Facebook’s Data Use Policy,  
26 dated September 7, 2011, and page 11 of Facebook’s Data Use Policy, dated June 8, 2012 (*see*  
27 FB000000015; FB000000027).

1           12. Facebook objects to Plaintiffs’ definition of “Transmission,” “Transmit,” and  
2 “Transmitting” as vague, ambiguous, overly broad, and unduly burdensome. Facebook further  
3 objects to the definition to the extent that Plaintiffs purport to use these terms to seek materials that  
4 are not relevant to the claims and defenses in this action.

5           13. Facebook objects to Plaintiffs’ definition and use of the terms “You” or “Your” as  
6 vague, ambiguous, overly broad, and unduly burdensome to the extent the terms are meant to include  
7 “directors, officers, employees, partners, members, representatives, agents (including attorneys,  
8 accountants, consultants, investment advisors or bankers), and any other person purporting to act on  
9 [Facebook, Inc.’s] behalf. . . . parents, subsidiaries, affiliates, predecessor entities, successor entities,  
10 divisions, departments, groups, acquired entities and/or related entities or any other entity acting or  
11 purporting to act on its behalf” over which Facebook exercises no control, and to the extent that  
12 Plaintiffs purport to use these terms to impose obligations that go beyond the requirements of the  
13 Federal and Local Rules.

14                           **OBJECTIONS TO “RULES OF CONSTRUCTION” AND INSTRUCTIONS**

15           1. Facebook objects to Plaintiffs’ “Rules of Construction” and “Instructions” to the  
16 extent they impose obligations that go beyond the requirements of the Federal and Local Rules.

17           2. Facebook objects to Plaintiffs’ Instruction No. 2 to the extent that it is not limited to  
18 the relevant time period, thus making the Instruction overly broad, unduly burdensome, and not  
19 relevant to the claims or defenses in this action. Unless otherwise specified in its responses,  
20 Facebook’s response will be limited to information generated between December 30, 2011 and  
21 December 20, 2012.

22           3. Facebook objects to Plaintiffs’ Instruction No. 6 as ambiguous and unduly  
23 burdensome. Facebook further objects to the instruction to the extent it exceeds the requirements of  
24 the Federal and Local Rules.

25                           **OBJECTION TO PURPORTED “RELEVANT TIME PERIOD”**

26           Facebook objects to Plaintiffs’ proposed “Relevant Time Period” (September 26, 2006  
27 through the present) because it substantially exceeds the proposed class period identified in Plaintiffs’  
28



1 Consolidated Amended Complaint, does not reflect the time period that is relevant to Plaintiffs'  
2 claims in this action, and renders the Interrogatories overly broad, unduly burdensome, and irrelevant.  
3 Unless otherwise specified, Facebook's Responses to these Interrogatories will be limited to  
4 information generated between December 30, 2011 and December 20, 2012, which is the proposed  
5 class period defined in Plaintiffs' Consolidated Amended Complaint. (See Pls.' Consol. Am. Compl.  
6 [Dkt. 25] ¶ 59 & n.3.) Facebook otherwise objects to the remainder of Plaintiffs' statement regarding  
7 the "Relevant Time Period" to the extent that it purports to impose obligations beyond those imposed  
8 by the Federal and Local Rules.

9 **SPECIFIC RESPONSES AND OBJECTIONS**

10 **INTERROGATORY NO. 1:**

11 Identify all persons, including Third Parties and Your current and former employees, known  
12 by You to have personal knowledge of any facts or issues involved in this lawsuit, and for each  
13 person please identify

14 (A) the party's first and last name;

15 (B) the party's employer, if not You;

16 (C) the party's job title(s); and

17 (D) the nature of the party's personal knowledge of the facts or issues involved in this  
18 lawsuit.

19 **RESPONSE TO INTERROGATORY NO. 1:**

20 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
21 to "Rules of Construction," Instructions, and Purported "Relevant Time Period" as though fully set  
22 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
23 grounds:

24 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases "Third  
25 Parties"; "any facts or issues involved in this lawsuit"; and "nature of the party's personal knowledge  
26 of the facts or issues involved in this lawsuit."

27 (B) The Interrogatory is compound.

1 (C) The Interrogatory is overly broad in that it purports to seek information regarding each  
2 Facebook employee’s “personal knowledge” of “facts or issues involved in this lawsuit,” over an  
3 extended time period. Facebook will respond to the best of its ability and based on the information  
4 known and identified to date.

5 (D) The Interrogatory purports to request employment information that is not relevant to the  
6 claims or defenses in this action.

7 Subject to and without waiving the foregoing general and specific objections, and subject to  
8 the ongoing nature of discovery in this action, Facebook responds as follows:

- 9 a. [REDACTED] has been an engineer at Facebook during the relevant time period.  
10 Among other topics, [REDACTED] may have information relating to the operation and  
11 security of Facebook’s Messages product.
- 12 b. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
13 other topics, [REDACTED] may have information relating to Facebook’s “Like” social plugin.
- 14 c. [REDACTED] has been an engineer at Facebook during the relevant time period. Among other  
15 topics, [REDACTED] may have information relating to Facebook’s “Like” social plugin.
- 16 d. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
17 other topics, [REDACTED] may have information relating to Facebook’s security-related  
18 efforts.
- 19 e. [REDACTED] has been a product marketing manager at Facebook during the  
20 relevant time period. Among other topics, [REDACTED] may have information relating  
21 to Facebook’s targeted advertising feature.
- 22 f. [REDACTED] has been an engineer at Facebook during the relevant time period. Among other  
23 topics, [REDACTED] may have information relating to Facebook’s targeted advertising feature.

24 Facebook reserves the right to supplement its response to this Interrogatory as its investigation  
25 continues.

1 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 1:**

2 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
3 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
4 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
5 grounds:

6 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases “Third  
7 Parties”; “any facts or issues involved in this lawsuit”; and “nature of the party’s personal knowledge  
8 of the facts or issues involved in this lawsuit.”

9 (B) The Interrogatory is compound.

10 (C) The Interrogatory is overly broad in that it purports to seek information regarding each  
11 Facebook employee’s “personal knowledge” of “facts or issues involved in this lawsuit,” over an  
12 extended time period. Facebook will respond to the best of its ability and based on the information  
13 known and identified to date.

14 (D) The Interrogatory purports to request employment information that is not relevant to the  
15 claims or defenses in this action.

16 Subject to and without waiving the foregoing general and specific objections, and subject to  
17 the ongoing nature of discovery in this action, Facebook responds as follows:

- 18 a. [REDACTED] has been an engineer at Facebook during the relevant time period.  
19 Among other topics, [REDACTED] may have information relating to the operation and  
20 security of Facebook’s Messages product.
- 21 b. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
22 other topics, [REDACTED] may have information relating to Facebook’s “Like” social plugin.
- 23 c. [REDACTED] has been an engineer at Facebook during the relevant time period. Among other  
24 topics, [REDACTED] may have information relating to Facebook’s “Like” social plugin.
- 25 d. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
26 other topics, [REDACTED] may have information relating to Facebook’s security-related  
27 efforts.

- 1 e. [REDACTED] has been a product marketing manager at Facebook during the  
2 relevant time period. Among other topics, [REDACTED] may have information relating  
3 to Facebook’s targeted advertising feature.
- 4 f. [REDACTED] has been an engineer at Facebook during the relevant time period. Among other  
5 topics, [REDACTED] may have information relating to Facebook’s targeted advertising feature.
- 6 g. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
7 other topics, [REDACTED] may have information relating to Facebook’s “Like” social  
8 plugin.
- 9 h. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
10 other topics, [REDACTED] may have information relating to Facebook’s “Like” social plugin.
- 11 i. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
12 other topics, [REDACTED] may have information relating to Facebook’s “Like” social  
13 plugin.
- 14 j. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
15 other topics, [REDACTED] may have information relating to the operation and security of  
16 Facebook’s Messages product.
- 17 k. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
18 other topics, [REDACTED] may have information relating to the operation and security of  
19 Facebook’s Messages product.
- 20 l. [REDACTED] has been a public relations manager at Facebook during the relevant time  
21 period. Among other topics, [REDACTED] may have information relating to the media  
22 coverage of the practice challenged in this action.
- 23 m. [REDACTED] has been a vice president of technology communications at Facebook  
24 during the relevant time period. Among other topics, [REDACTED] may have  
25 information relating to the media coverage of the practice challenged in this action.  
26  
27  
28

- 1 n. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
2 other topics, [REDACTED] may have information relating to Facebook’s security-related  
3 efforts.
- 4 o. [REDACTED] has been an engineer at Facebook during the relevant time period.  
5 Among other topics, [REDACTED] may have information relating to Facebook’s security-  
6 related efforts.
- 7 p. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
8 other topics, [REDACTED] may have information relating to Facebook’s targeted  
9 advertising feature.
- 10 q. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
11 other topics, [REDACTED] may have information relating to Facebook’s “Like” social  
12 plugin.
- 13 r. [REDACTED] has been the deputy chief privacy officer at Facebook during the relevant  
14 time period. Among other topics, [REDACTED] may have information relating to the  
15 media coverage of the practice challenged in this action.
- 16 s. [REDACTED] has been a project manager at Facebook during the relevant time  
17 period. Among other topics, [REDACTED] may have information relating to Facebook’s  
18 targeted advertising feature.
- 19 t. [REDACTED] has been an engineer at Facebook during the relevant time period. Among  
20 other topics, [REDACTED] may have information relating to Facebook’s “Like” social  
21 plugin.
- 22 u. [REDACTED] has been a public policy manager at Facebook during the relevant time  
23 period. Among other topics, [REDACTED] may have information relating to the media  
24 coverage of the practice challenged in this action.

25 Facebook reserves the right to supplement its response to this Interrogatory as its investigation  
26 continues.

1 **INTERROGATORY NO. 2:**

2 Identify by name, purpose, sequence, function and physical location each Process and/or piece  
3 of Architecture involved in Private Message Transmission.

4 **RESPONSE TO INTERROGATORY NO. 2:**

5 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
6 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
7 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
8 grounds:

9 (A) The Interrogatory is vague and ambiguous in its use of the phrases “Process and/or  
10 piece of Architecture” and “Private Message Transmission.”

11 (B) The Interrogatory is compound.

12 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
13 this action to the extent it concerns practices other than those challenged in this action (the alleged  
14 increase in the Facebook “Like” count on a website when the URL for that website was contained in  
15 a message transmitted through Facebook’s Messages product during the Class Period (December 30,  
16 2011 to October 31, 2012)).

17 (D) The Interrogatory is overly broad in that it purports to seek information regarding each  
18 “Process and/or piece of Architecture involved in” the transmission of Facebook messages over an  
19 extended time period. Facebook will respond to the best of its ability and based on the information  
20 known and identified to date, and as limited by the practice challenged in this action (as defined  
21 above).

22 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
23 proprietary company information.

24 Subject to and without waiving the foregoing general and specific objections, and subject to  
25 the ongoing nature of discovery in this action, Facebook responds as follows:

26 During the relevant period (December 30, 2011 to October 31, 2012), if a user typed a URL  
27 into the text field in the Facebook Messages product, and the user had JavaScript enabled in her

1 browser, the JavaScript code running in the user’s browser may have detected the existence of a  
2 URL.

3 The JavaScript code may then have requested information from a Facebook server in order to  
4 provide a preview of the typed URL (“URL preview”)—including a brief description of the URL  
5 and, if available, a relevant image from the website. At the time the request was sent to Facebook for  
6 a preview, Facebook assessed whether the URL was in its library of known malicious URLs. If it  
7 was, Facebook would not return a preview. If it was not, Facebook may have returned information  
8 already on a Facebook server to generate a preview. Or, if information to generate the URL preview  
9 was not available already on a Facebook server, a Facebook server may have sent a request to the  
10 website, generated an image and description if available, and delivered those components to the  
11 user’s browser to generate a URL preview. There was variability in the type of preview that may  
12 have been rendered. For example, if the URL a user wanted to send required a viewer to log into the  
13 destination website, the preview may have been blank, the user may have received an “HTTP 404” or  
14 “Not Found” error message, or the preview may have shown the default page for the website.  
15 Similarly, some websites may have provided Facebook with a specific image or description for the  
16 preview, while others did not. Additionally, sometimes, depending on a number of factors (as  
17 discussed above and below), a URL preview was not available despite these steps.

18 Where available, URL previews helped users verify the URL they were sharing before  
19 sending. When the URL preview was generated, it was displayed for the message sender before  
20 sending the message, so the sender could first verify and gain a sense of the information located at the  
21 URL. This feature also allowed message recipients to preview a transmitted URL before clicking on  
22 the URL. Under certain circumstances, a URL preview may not have been generated, such as if the  
23 user did not have JavaScript enabled in her browser, or if a user sent the message before the preview  
24 could be generated, or if the URL was known to be malicious. Additionally, if generated, URL  
25 previews were only created for the first URL typed into a draft message, meaning that subsequent  
26 URLs typed into the draft message did not generate a URL preview. Accordingly, whether or not a  
27 URL preview was generated depended on myriad factors, such as the configuration of the user’s

1 browser, the type of URL entered, the number of URLs entered, and the speed of send, among other  
2 individualized factors.

3 A URL preview is an attachment to the draft message. In other words, while a URL preview  
4 may have been generated based on a URL typed into the text field of a draft message, the URL  
5 preview is an attachment to the message that is separate and distinct from the message itself  
6 (including the characters in the text field). Thus, once the URL attachment was created, changes to  
7 the characters in the text field of the draft message did not impact the URL attachment. For example,  
8 deleting the characters in the text field would not have impacted an existing URL attachment.  
9 However, the user could delete the URL attachment by clicking the “X” in the corner of the preview.

10 If a user proceeded to send a message, the message (including the text of the message, certain  
11 information about the message, e.g., date and time sent, sender, recipient, text formatting) as well as  
12 any attachments (including URLs), would have been sent to a Facebook server. After receiving the  
13 message on a Facebook server, Facebook software processed the message and any attachments while  
14 they were in electronic storage, and sent certain data through Facebook’s abuse- and security-related  
15 platform, which runs the data through certain filters. Depending on the specific data transmitted,  
16 certain data about the message may have been assessed in various ways and against criteria intended  
17 to detect large-scale automated abuse (e.g., spam, malware, phishing, and other abuse). For example,  
18 one filter compares URL text in a message and in any attachments against a library of hundreds of  
19 millions of URLs known to be dangerous. If a URL typed into a message appeared in the malicious  
20 URL library, it may have been blocked and the author of the message may have received a message  
21 from Facebook indicating that the URL was unsafe. By way of further example, once a message  
22 reached a Facebook server and was in electronic storage, the security platform may have taken a  
23 string of the text in the message and determined whether the occurring numbers and letters were  
24 similar (in a statistically significant way) to other messages that appeared to be spam that were being  
25 sent around the same time.

26 In general, if a message was determined to be dangerous for any one of these many different  
27 reasons, it may have been treated in a number of different ways. For example, it may have been  
28



1 blocked in whole or in part from being routed by Facebook to the recipient mailbox, or a user may  
2 have had to pass a CAPTCHA (“Completely Automated Public Turing test to tell Computers and  
3 Humans Apart”) test before Facebook would deliver the message.

4 Once on a Facebook server, the message and attachments were also processed in various ways  
5 to ultimately render the message as the user intended. For example, emoticons—specific series of  
6 keyboard characters used to represent facial expressions—in the text of a message received and  
7 stored on a Facebook server were processed in order to be translated into the images intended by the  
8 sender. Messages were also processed for other reasons related to language rendering and  
9 formatting.

10 If a URL attachment was successfully created (and not deleted by the user) prior to the  
11 message being sent, then, after the message was sent and the message and components were received  
12 and stored on a Facebook server, and if the message was not blocked in the course of abuse- and  
13 security-related processing, the message event was logged in a number of ways, and several records  
14 (“share objects”) were created reflecting the fact that the message had a URL as an attachment (a  
15 “URL share”). In other words, each share object was created based on the receipt of a URL  
16 attachment on a Facebook server; it was not generated based on the text of the message, which may  
17 or may not have included a URL when sent. If a URL preview was not created before the message  
18 was sent or was deleted by the user before sending, no share object was created. Similarly, if a  
19 malicious message or URL was successfully “blocked,” no share object was created. As explained  
20 below in response to Interrogatory No. 4, during the relevant time period (December 30, 2011 to  
21 October 31, 2012), the software that generated and displayed the anonymous, aggregate “Like” count  
22 on a third-party website that contained the “Like” button social plugin obtained the data regarding  
23 URL attachments to messages from the stored repository of share object records—the global share  
24 object record. If a user shared a URL through a message but no share object was created (for any of  
25 the reasons noted above), the sharing of that URL did not increment the “Like” count social plugin on  
26 the destination website. Similarly, if the destination website associated with the URL did not have a  
27 Facebook “Like” button social plugin, the sharing of that URL did not increment the “Like” count on  
28

1 the website (even if a share object was created). Additionally, messages containing URLs sent from  
2 outside of Facebook to a Facebook user (and vice versa) did not create attachments and therefore did  
3 not create share objects.

4 The share data derived from the message data received on the Facebook server was stored in  
5 three formats: user-specific message information, a user-specific share object, and a “global” share  
6 object. The global share object recorded the instances of sharing the same root URL across the  
7 Facebook platform. The user-specific message information was routed through the remainder of the  
8 Facebook infrastructure, to the sender’s mailbox and to the recipient’s mailbox. If the recipient  
9 called the message from her mailbox, the message and URL attachment were processed again  
10 through a subset of Facebook’s abuse- and security-related filters. If the message and attachment  
11 were not partially or completely blocked, the message and attachment were sent to the recipient client  
12 for display. Messages were also processed to the extent necessary to display intended features and  
13 render the appropriate language, and were then displayed to the intended recipient.

14 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 2:**

15 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
16 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
17 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
18 grounds:

19 (A) The Interrogatory is vague and ambiguous in its use of the phrases “Process and/or  
20 piece of Architecture” and “Private Message Transmission.”

21 (B) The Interrogatory is compound.

22 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
23 this action to the extent it concerns practices other than those challenged in this action (the alleged  
24 increase in the Facebook “Like” count on a website when the URL for that website was contained in  
25 a message transmitted through Facebook’s Messages product during the Class Period (December 30,  
26 2011 to approximately December 20, 2012)).

27 (D) The Interrogatory is overly broad in that it purports to seek information regarding each  
28

1 “Process and/or piece of Architecture involved in” the transmission of Facebook messages over an  
2 extended time period. Facebook will respond to the best of its ability and based on the information  
3 known and identified to date, and as limited by the practice challenged in this action (as defined  
4 above).

5 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
6 proprietary company information.

7 Subject to and without waiving the foregoing general and specific objections, and subject to  
8 the ongoing nature of discovery in this action, Facebook responds as follows:

9 During the relevant period (December 30, 2011 to approximately December 20, 2012), if a  
10 user typed a URL into the text field in the Facebook Messages product, and the user had JavaScript  
11 enabled in her browser, the JavaScript code running in the user’s browser may have detected the  
12 existence of a URL.

13 The JavaScript code may then have requested information from a Facebook server in order to  
14 provide a preview of the typed URL (“URL preview”)—including a brief description of the URL  
15 and, if available, a relevant image from the website. At the time the request was sent to Facebook for  
16 a preview, Facebook assessed whether the URL was in its library of known malicious URLs. If it  
17 was, Facebook would not return a preview. If it was not, Facebook may have returned information  
18 already on a Facebook server to generate a preview. Or, if information to generate the URL preview  
19 was not available already on a Facebook server, a Facebook server may have sent a request to the  
20 website, generated an image and description if available, and delivered those components to the  
21 user’s browser to generate a URL preview. There was variability in the type of preview that may  
22 have been rendered. For example, if the URL a user wanted to send required a viewer to log into the  
23 destination website, the preview may have been blank, the user may have received an “HTTP 404” or  
24 “Not Found” error message, or the preview may have shown the default page for the website.  
25 Similarly, some websites may have provided Facebook with a specific image or description for the  
26 preview, while others did not. Additionally, sometimes, depending on a number of factors (as  
27 discussed above and below), a URL preview was not available despite these steps.

1           Where available, URL previews helped users verify the URL they were sharing before  
2 sending. When the URL preview was generated, it was displayed for the message sender before  
3 sending the message, so the sender could first verify and gain a sense of the information located at the  
4 URL. This feature also allowed message recipients to preview a transmitted URL before clicking on  
5 the URL. Under certain circumstances, a URL preview may not have been generated, such as if the  
6 user did not have JavaScript enabled in her browser, or if a user sent the message before the preview  
7 could be generated, or if the URL was known to be malicious. Additionally, if generated, URL  
8 previews were only created for the first URL typed into a draft message, meaning that subsequent  
9 URLs typed into the draft message did not generate a URL preview. Accordingly, whether or not a  
10 URL preview was generated depended on myriad factors, such as the configuration of the user's  
11 browser, the type of URL entered, the number of URLs entered, and the speed of send, among other  
12 individualized factors.

13           A URL preview is an attachment to the draft message. In other words, while a URL preview  
14 may have been generated based on a URL typed into the text field of a draft message, the URL  
15 preview is an attachment to the message that is separate and distinct from the message itself  
16 (including the characters in the text field). Thus, once the URL attachment was created, changes to  
17 the characters in the text field of the draft message did not impact the URL attachment. For example,  
18 deleting the characters in the text field would not have impacted an existing URL attachment.  
19 However, the user could delete the URL attachment by clicking the "X" in the corner of the preview.

20           If a user proceeded to send a message, the message (including the text of the message, certain  
21 information about the message, e.g., date and time sent, sender, recipient, text formatting) as well as  
22 any attachments (including URLs), would have been sent to a Facebook server. After receiving the  
23 message on a Facebook server, Facebook software processed the message and any attachments while  
24 they were in electronic storage, and sent certain data through Facebook's abuse- and security-related  
25 platform, which runs the data through certain filters. Depending on the specific data transmitted,  
26 certain data about the message may have been assessed in various ways and against criteria intended  
27 to detect large-scale automated abuse (e.g., spam, malware, phishing, and other abuse). For example,  
28

1 one filter compares URL text in a message and in any attachments against a library of hundreds of  
2 millions of URLs known to be dangerous. If a URL typed into a message appeared in the malicious  
3 URL library, it may have been blocked and the author of the message may have received a message  
4 from Facebook indicating that the URL was unsafe. By way of further example, once a message  
5 reached a Facebook server and was in electronic storage, the security platform may have taken a  
6 string of the text in the message and determined whether the occurring numbers and letters were  
7 similar (in a statistically significant way) to other messages that appeared to be spam that were being  
8 sent around the same time.

9 In general, if a message was determined to be dangerous for any one of these many different  
10 reasons, it may have been treated in a number of different ways. For example, it may have been  
11 blocked in whole or in part from being routed by Facebook to the recipient mailbox, or a user may  
12 have had to pass a CAPTCHA (“Completely Automated Public Turing test to tell Computers and  
13 Humans Apart”) test before Facebook would deliver the message.

14 Once on a Facebook server, the message and attachments were also processed in various ways  
15 to ultimately render the message as the user intended. For example, emoticons—specific series of  
16 keyboard characters used to represent facial expressions—in the text of a message received and  
17 stored on a Facebook server were processed in order to be translated into the images intended by the  
18 sender. Messages were also processed for other reasons related to language rendering and  
19 formatting.

20 If a URL attachment was successfully created (and not deleted by the user) prior to the  
21 message being sent, then, after the message was sent and the message and components were received  
22 and stored on a Facebook server, and if the message was not blocked in the course of abuse- and  
23 security-related processing, the message event was logged in a number of ways, and several records  
24 (“share objects”) were created reflecting the fact that the message had a URL as an attachment (a  
25 “URL share”). In other words, each share object was created based on the receipt of a URL  
26 attachment on a Facebook server; it was not generated based on the text of the message, which may  
27 or may not have included a URL when sent. If a URL preview was not created before the message  
28

1 was sent or was deleted by the user before sending, no share object was created. Similarly, if a  
2 malicious message or URL was successfully “blocked,” no share object was created. As explained  
3 below in response to Interrogatory No. 4, during the relevant time period (December 30, 2011 to  
4 approximately December 20, 2012), the software that generated and displayed the anonymous,  
5 aggregate “Like” count on a third-party website that contained the “Like” button social plugin  
6 obtained the data regarding URL attachments to messages from the stored repository of share object  
7 records—the global share object record. If a user shared a URL through a message but no share  
8 object was created (for any of the reasons noted above), the sharing of that URL did not increment  
9 the “Like” count social plugin on the destination website. Similarly, if the destination website  
10 associated with the URL did not have a Facebook “Like” button social plugin, or if one of a number  
11 of other conditions was present, the sharing of that URL did not increment the “Like” count on the  
12 website (even if a share object was created). Additionally, messages containing URLs sent from  
13 outside of Facebook to a Facebook user (and vice versa) did not create attachments and therefore did  
14 not create share objects.

15 The share data derived from the message data received on the Facebook server was stored in  
16 three formats: user-specific message information, a user-specific share object, and a “global” share  
17 object. The global share object recorded the instances of sharing the same root URL across the  
18 Facebook platform. The user-specific message information was routed through the remainder of the  
19 Facebook infrastructure, to the sender’s mailbox and to the recipient’s mailbox. If the recipient  
20 called the message from her mailbox, the message and URL attachment were processed again  
21 through a subset of Facebook’s abuse- and security-related filters. If the message and attachment  
22 were not partially or completely blocked, the message and attachment were sent to the recipient client  
23 for display. Messages were also processed to the extent necessary to display intended features and  
24 render the appropriate language, and were then displayed to the intended recipient.

25 **INTERROGATORY NO. 3:**

26 For each Process and/or piece of Architecture identified in Interrogatory No. 2, identify  
27 whether – and the manner in which – such Process and/or piece of Architecture scans, analyzes, or  
28

1 extracts Private Message Content.

2 **RESPONSE TO INTERROGATORY NO. 3:**

3 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
4 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
5 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
6 grounds:

7 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases “Process  
8 and/or piece of Architecture,” “Private Message Content,” “scans,” “analyzes,” and “extracts.”

9 (B) The Interrogatory is compound.

10 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
11 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
12 Facebook “Like” count on a website when the URL for that website was contained in a message  
13 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
14 October 31, 2012)).

15 (D) The Interrogatory is overly broad in that it purports to seek additional information  
16 regarding each “Process and/or piece of Architecture involved in” the transmission of Facebook  
17 messages over an extended time period. Facebook will respond to the best of its ability and based on  
18 the information known and identified to date, and as limited by the practice challenged in this action  
19 (as defined above).

20 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
21 proprietary company information.

22 Subject to and without waiving the foregoing general and specific objections, and subject to  
23 the ongoing nature of discovery in this action, Facebook responds as follows:

24 During the relevant period (December 30, 2011 to October 31, 2012), if a user typed a URL  
25 into the text field in the Facebook Messages product, and the user had JavaScript enabled in her  
26 browser, the JavaScript code running in the user’s browser may have detected the existence of a  
27 URL.

1           The JavaScript code may then have requested information from a Facebook server in order to  
2 provide a preview of the typed URL (“URL preview”)—including a brief description of the URL  
3 and, if available, a relevant image from the website. At the time the request was sent to Facebook for  
4 a preview, Facebook assessed whether the URL was in its library of known malicious URLs. If it  
5 was, Facebook would not return a preview. If it was not, Facebook may have returned information  
6 already on a Facebook server to generate a preview. Or, if information to generate the URL preview  
7 was not available already on a Facebook server, a Facebook server may have sent a request to the  
8 website, generated an image and description if available, and delivered those components to the  
9 user’s browser to generate a URL preview. There was variability in the type of preview that may  
10 have been rendered. For example, if the URL a user wanted to send required a viewer to log into the  
11 destination website, the preview may have been blank, the user may have received an “HTTP 404” or  
12 “Not Found” error message, or the preview may have shown the default page for the website.  
13 Similarly, some websites may have provided Facebook with a specific image or description for the  
14 preview, while others did not. Additionally, sometimes, depending on a number of factors (as  
15 discussed above and below), a URL preview was not available despite these steps.

16           Where available, URL previews helped users verify the URL they were sharing before  
17 sending. When the URL preview was generated, it was displayed for the message sender before  
18 sending the message, so the sender could first verify and gain a sense of the information located at the  
19 URL. This feature also allowed message recipients to preview a transmitted URL before clicking on  
20 the URL. Under certain circumstances, a URL preview may not have been generated, such as if the  
21 user did not have JavaScript enabled in her browser, or if a user sent the message before the preview  
22 could be generated, or if the URL was known to be malicious. Additionally, if generated, URL  
23 previews were only created for the first URL typed into a draft message, meaning that subsequent  
24 URLs typed into the draft message did not generate a URL preview. Accordingly, whether or not a  
25 URL preview was generated depended on myriad factors, such as the configuration of the user’s  
26 browser, the type of URL entered, the number of URLs entered, and the speed of send, among other  
27 individualized factors.



1 A URL preview is an attachment to the draft message. In other words, while a URL preview  
2 may have been generated based on a URL typed into the text field of a draft message, the URL  
3 preview is an attachment to the message that is separate and distinct from the message itself  
4 (including the characters in the text field). Thus, once the URL attachment was created, changes to  
5 the characters in the text field of the draft message did not impact the URL attachment. For example,  
6 deleting the characters in the text field would not have impacted an existing URL attachment.  
7 However, the user could delete the URL attachment by clicking the “X” in the corner of the preview.

8 If a user proceeded to send a message, the message (including the text of the message, certain  
9 information about the message, e.g., date and time sent, sender, recipient, text formatting) as well as  
10 any attachments (including URLs), would have been sent to a Facebook server. After receiving the  
11 message on a Facebook server, Facebook software processed the message and any attachments while  
12 they were in electronic storage, and sent certain data through Facebook’s abuse- and security-related  
13 platform, which runs the data through certain filters. Depending on the specific data transmitted,  
14 certain data about the message may have been assessed in various ways and against criteria intended  
15 to detect large-scale automated abuse (e.g., spam, malware, phishing, and other abuse). For example,  
16 one filter compares URL text in a message and in any attachments against a library of hundreds of  
17 millions of URLs known to be dangerous. If a URL typed into a message appeared in the malicious  
18 URL library, it may have been blocked and the author of the message may have received a message  
19 from Facebook indicating that the URL was unsafe. By way of further example, once a message  
20 reached a Facebook server and was in electronic storage, the security platform may have taken a  
21 string of the text in the message and determined whether the occurring numbers and letters were  
22 similar (in a statistically significant way) to other messages that appeared to be spam that were being  
23 sent around the same time.

24 In general, if a message was determined to be dangerous for any one of these many different  
25 reasons, it may have been treated in a number of different ways. For example, it may have been  
26 blocked in whole or in part from being routed by Facebook to the recipient mailbox, or a user may  
27 have had to pass a CAPTCHA (“Completely Automated Public Turing test to tell Computers and  
28

1 Humans Apart”) test before Facebook would deliver the message.

2 Once on a Facebook server, the message and attachments were also processed in various ways  
3 to ultimately render the message as the user intended. For example, emoticons—specific series of  
4 keyboard characters used to represent facial expressions—in the text of a message received and  
5 stored on a Facebook server were processed in order to be translated into the images intended by the  
6 sender. Messages were also processed for other reasons related to language rendering and  
7 formatting.

8 If a URL attachment was successfully created (and not deleted by the user) prior to the  
9 message being sent, then, after the message was sent and the message and components were received  
10 and stored on a Facebook server, and if the message was not blocked in the course of abuse- and  
11 security-related processing, the message event was logged in a number of ways, and several records  
12 (“share objects”) were created reflecting the fact that the message had a URL as an attachment (a  
13 “URL share”). In other words, each share object was created based on the receipt of a URL  
14 attachment on a Facebook server; it was not generated based on the text of the message, which may  
15 or may not have included a URL when sent. If a URL preview was not created before the message  
16 was sent or was deleted by the user before sending, no share object was created. Similarly, if a  
17 malicious message or URL was successfully “blocked,” no share object was created. As explained  
18 below in response to Interrogatory No. 4, during the relevant time period (December 30, 2011 to  
19 October 31, 2012), the software that generated and displayed the anonymous, aggregate “Like” count  
20 on a third-party website that contained the “Like” button social plugin obtained the data regarding  
21 URL attachments to messages from the stored repository of share object records—the global share  
22 object record. If a user shared a URL through a message but no share object was created (for any of  
23 the reasons noted above), the sharing of that URL did not increment the “Like” count social plugin on  
24 the destination website. Similarly, if the destination website associated with the URL did not have a  
25 Facebook “Like” button social plugin, the sharing of that URL did not increment the “Like” count on  
26 the website (even if a share object was created). Additionally, messages containing URLs sent from  
27 outside of Facebook to a Facebook user (and vice versa) did not create attachments and therefore did

1 not create share objects.

2 The share data derived from the message data received on the Facebook server was stored in  
3 three formats: user-specific message information, a user-specific share object, and a “global” share  
4 object. The global share object recorded the instances of sharing the same root URL across the  
5 Facebook platform. The user-specific message information was routed through the remainder of the  
6 Facebook infrastructure, to the sender’s mailbox and to the recipient’s mailbox. If the recipient  
7 called the message from her mailbox, the message and URL attachment were processed again  
8 through a subset of Facebook’s abuse- and security-related filters. If the message and attachment  
9 were not partially or completely blocked, the message and attachment were sent to the recipient client  
10 for display. Messages were also processed to the extent necessary to display intended features and  
11 render the appropriate language, and were then displayed to the intended recipient.

12 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 3:**

13 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
14 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
15 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
16 grounds:

17 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases “Process  
18 and/or piece of Architecture,” “Private Message Content,” “scans,” “analyzes,” and “extracts.”

19 (B) The Interrogatory is compound.

20 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
21 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
22 Facebook “Like” count on a website when the URL for that website was contained in a message  
23 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
24 approximately December 20, 2012).

25 (D) The Interrogatory is overly broad in that it purports to seek additional information  
26 regarding each “Process and/or piece of Architecture involved in” the transmission of Facebook  
27 messages over an extended time period. Facebook will respond to the best of its ability and based on  
28

1 the information known and identified to date, and as limited by the practice challenged in this action  
2 (as defined above).

3 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
4 proprietary company information.

5 Subject to and without waiving the foregoing general and specific objections, and subject to  
6 the ongoing nature of discovery in this action, Facebook responds as follows:

7 During the relevant period (December 30, 2011 to approximately December 20, 2012), if a  
8 user typed a URL into the text field in the Facebook Messages product, and the user had JavaScript  
9 enabled in her browser, the JavaScript code running in the user's browser may have detected the  
10 existence of a URL.

11 The JavaScript code may then have requested information from a Facebook server in order to  
12 provide a preview of the typed URL ("URL preview")—including a brief description of the URL  
13 and, if available, a relevant image from the website. At the time the request was sent to Facebook for  
14 a preview, Facebook assessed whether the URL was in its library of known malicious URLs. If it  
15 was, Facebook would not return a preview. If it was not, Facebook may have returned information  
16 already on a Facebook server to generate a preview. Or, if information to generate the URL preview  
17 was not available already on a Facebook server, a Facebook server may have sent a request to the  
18 website, generated an image and description if available, and delivered those components to the  
19 user's browser to generate a URL preview. There was variability in the type of preview that may  
20 have been rendered. For example, if the URL a user wanted to send required a viewer to log into the  
21 destination website, the preview may have been blank, the user may have received an "HTTP 404" or  
22 "Not Found" error message, or the preview may have shown the default page for the website.  
23 Similarly, some websites may have provided Facebook with a specific image or description for the  
24 preview, while others did not. Additionally, sometimes, depending on a number of factors (as  
25 discussed above and below), a URL preview was not available despite these steps.

26 Where available, URL previews helped users verify the URL they were sharing before  
27 sending. When the URL preview was generated, it was displayed for the message sender before  
28

1 sending the message, so the sender could first verify and gain a sense of the information located at the  
2 URL. This feature also allowed message recipients to preview a transmitted URL before clicking on  
3 the URL. Under certain circumstances, a URL preview may not have been generated, such as if the  
4 user did not have JavaScript enabled in her browser, or if a user sent the message before the preview  
5 could be generated, or if the URL was known to be malicious. Additionally, if generated, URL  
6 previews were only created for the first URL typed into a draft message, meaning that subsequent  
7 URLs typed into the draft message did not generate a URL preview. Accordingly, whether or not a  
8 URL preview was generated depended on myriad factors, such as the configuration of the user's  
9 browser, the type of URL entered, the number of URLs entered, and the speed of send, among other  
10 individualized factors.

11 A URL preview is an attachment to the draft message. In other words, while a URL preview  
12 may have been generated based on a URL typed into the text field of a draft message, the URL  
13 preview is an attachment to the message that is separate and distinct from the message itself  
14 (including the characters in the text field). Thus, once the URL attachment was created, changes to  
15 the characters in the text field of the draft message did not impact the URL attachment. For example,  
16 deleting the characters in the text field would not have impacted an existing URL attachment.  
17 However, the user could delete the URL attachment by clicking the "X" in the corner of the preview.

18 If a user proceeded to send a message, the message (including the text of the message, certain  
19 information about the message, e.g., date and time sent, sender, recipient, text formatting) as well as  
20 any attachments (including URLs), would have been sent to a Facebook server. After receiving the  
21 message on a Facebook server, Facebook software processed the message and any attachments while  
22 they were in electronic storage, and sent certain data through Facebook's abuse- and security-related  
23 platform, which runs the data through certain filters. Depending on the specific data transmitted,  
24 certain data about the message may have been assessed in various ways and against criteria intended  
25 to detect large-scale automated abuse (e.g., spam, malware, phishing, and other abuse). For example,  
26 one filter compares URL text in a message and in any attachments against a library of hundreds of  
27 millions of URLs known to be dangerous. If a URL typed into a message appeared in the malicious

1 URL library, it may have been blocked and the author of the message may have received a message  
2 from Facebook indicating that the URL was unsafe. By way of further example, once a message  
3 reached a Facebook server and was in electronic storage, the security platform may have taken a  
4 string of the text in the message and determined whether the occurring numbers and letters were  
5 similar (in a statistically significant way) to other messages that appeared to be spam that were being  
6 sent around the same time.

7 In general, if a message was determined to be dangerous for any one of these many different  
8 reasons, it may have been treated in a number of different ways. For example, it may have been  
9 blocked in whole or in part from being routed by Facebook to the recipient mailbox, or a user may  
10 have had to pass a CAPTCHA (“Completely Automated Public Turing test to tell Computers and  
11 Humans Apart”) test before Facebook would deliver the message.

12 Once on a Facebook server, the message and attachments were also processed in various ways  
13 to ultimately render the message as the user intended. For example, emoticons—specific series of  
14 keyboard characters used to represent facial expressions—in the text of a message received and  
15 stored on a Facebook server were processed in order to be translated into the images intended by the  
16 sender. Messages were also processed for other reasons related to language rendering and  
17 formatting.

18 If a URL attachment was successfully created (and not deleted by the user) prior to the  
19 message being sent, then, after the message was sent and the message and components were received  
20 and stored on a Facebook server, and if the message was not blocked in the course of abuse- and  
21 security-related processing, the message event was logged in a number of ways, and several records  
22 (“share objects”) were created reflecting the fact that the message had a URL as an attachment (a  
23 “URL share”). In other words, each share object was created based on the receipt of a URL  
24 attachment on a Facebook server; it was not generated based on the text of the message, which may  
25 or may not have included a URL when sent. If a URL preview was not created before the message  
26 was sent or was deleted by the user before sending, no share object was created. Similarly, if a  
27 malicious message or URL was successfully “blocked,” no share object was created. As explained

1 below in response to Interrogatory No. 4, during the relevant time period (December 30, 2011 to  
2 approximately December 20, 2012), the software that generated and displayed the anonymous,  
3 aggregate “Like” count on a third-party website that contained the “Like” button social plugin  
4 obtained the data regarding URL attachments to messages from the stored repository of share object  
5 records—the global share object record. If a user shared a URL through a message but no share  
6 object was created (for any of the reasons noted above), the sharing of that URL did not increment  
7 the “Like” count social plugin on the destination website. Similarly, if the destination website  
8 associated with the URL did not have a Facebook “Like” button social plugin, or if one of a number  
9 of other conditions was present, the sharing of that URL did not increment the “Like” count on the  
10 website (even if a share object was created). Additionally, messages containing URLs sent from  
11 outside of Facebook to a Facebook user (and vice versa) did not create attachments and therefore did  
12 not create share objects.

13 The share data derived from the message data received on the Facebook server was stored in  
14 three formats: user-specific message information, a user-specific share object, and a “global” share  
15 object. The global share object recorded the instances of sharing the same root URL across the  
16 Facebook platform. The user-specific message information was routed through the remainder of the  
17 Facebook infrastructure, to the sender’s mailbox and to the recipient’s mailbox. If the recipient  
18 called the message from her mailbox, the message and URL attachment were processed again  
19 through a subset of Facebook’s abuse- and security-related filters. If the message and attachment  
20 were not partially or completely blocked, the message and attachment were sent to the recipient client  
21 for display. Messages were also processed to the extent necessary to display intended features and  
22 render the appropriate language, and were then displayed to the intended recipient.

23 **INTERROGATORY NO. 4:**

24 For each Process and/or piece of Architecture identified in Interrogatory No. 3, identify all  
25 uses to which the scanned/analyzed/extracted Private Message Content – as well as any additional  
26 data, metadata or other content generated therefrom – are put.

1 **RESPONSE TO INTERROGATORY NO. 4:**

2 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
3 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
4 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
5 grounds:

6 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases “Process  
7 and/or piece of Architecture,” “Private Message Content,” “scanned,” “analyzed,” and “extracted.”

8 (B) The Interrogatory is compound.

9 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
10 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
11 Facebook “Like” count on a website when the URL for that website was contained in a message  
12 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
13 October 31, 2012)).

14 (D) The Interrogatory is overly broad in that it purports to seek additional information  
15 regarding each “Process and/or piece of Architecture involved in” the transmission of Facebook  
16 messages over an extended time period. Facebook will respond to the best of its ability and based on  
17 the information known and identified to date, and as limited by the practice challenged in this action  
18 (as defined above).

19 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
20 proprietary company information.

21 Subject to and without waiving the foregoing general and specific objections, and subject to  
22 the ongoing nature of discovery in this action, Facebook responds as follows:

23 Among other ways to share information on Facebook’s platform, Facebook users may share  
24 information by sending a Facebook message to one or more selected Facebook users, which can be  
25 viewed in the recipient user’s Messages folder on the Facebook website. All shared information,  
26 including messages, is received by Facebook and stored on Facebook servers. Facebook must  
27 receive and host all information shared on the site to provide its service. By joining Facebook, and



1 agreeing to Facebook’s Data Use Policy, all users acknowledge that they understand and agree that  
2 Facebook will receive and employ user data—including information Facebook receives whenever a  
3 user sends or receives a message—for a variety of routine business purposes, including, among other  
4 things, “efforts to keep Facebook products, services and integrations safe and secure,” “to measure or  
5 understand the effectiveness of ads [users] and others see, including to deliver relevant ads to [the  
6 user],” and “for internal operations” such as “data analysis” or “service improvement.” Users also  
7 acknowledge that Facebook may share information, including with “developers that build the . . .  
8 websites [users] use,” where Facebook “has removed your name and any other personally identifying  
9 information from it.”

10 Facebook must process and store messages so that users have an accessible repository of their  
11 messages—a vital component of its Messages product. Facebook also must process messages to  
12 render the basic features of the Messages product (such as language and format) and to facilitate  
13 information sharing. Facebook also generates URL preview functionality. This feature reduces the  
14 transmission of unintended content, and recipients can preview a transmitted URL before visiting the  
15 destination website.

16 Facebook also processes messages to filter spam; detect and block malicious messages,  
17 URLs, and photos; detect conversations that could be related to criminal behavior; and protect the site  
18 from threats to its stability and integrity. Facebook’s anti-abuse efforts continually process data from  
19 across the Facebook service to evolve and enhance Facebook’s ability to protect users and the site.

20 During the proposed class period (December 30, 2011 to October 31, 2012), Facebook offered  
21 websites “social plugins,” or units of embeddable code that allow people to share information using  
22 Facebook directly from third-party websites. For example, a third-party website may embed code for  
23 the Facebook “Like” button plugin on its website, enabling Facebook users to directly “Like” the  
24 website and to share that action with their Facebook connections (without having to return to  
25 <https://www.facebook.com> or the Facebook mobile app to share the content). The “Like” button  
26 plugin also may display an anonymous and aggregate count of all “Likes” for that particular website.

27 During the relevant time period (December 30, 2011 to October 31, 2012), this aggregate count of  
28

1 “Likes” may have included URLs (1) shared (in the NewsFeed), (2) commented on, (3) liked, and (4)  
2 sent as an attachment to a message (and recorded as a share object). The software that generated and  
3 displayed the Like count during this period obtained the data regarding URL attachments to messages  
4 from the stored repository of share object records—the global share object record. If a user shared a  
5 URL through a message but no share object was created (for any of the reasons noted in responses to  
6 Interrogatories Nos. 2-3), the sharing of that URL did not increment the “Like” count social plugin on  
7 the destination website. Similarly, if the destination website associated with the URL did not have a  
8 Facebook “Like” button plugin, the sharing of that URL did not increment the “Like” count social  
9 plugin on the website (even if a share object was created). Additionally, in some cases, even if a  
10 share object was created and the destination website associated with the URL had a Facebook “Like”  
11 button plugin, the “Like” count on the destination website may not have been incremented (for  
12 example, if the URL a user included in a message was not exactly the same as the URL the developer  
13 passed to the plugin).

14 During the relevant period, the generation of a URL attachment (if it occurred) and the  
15 increase in the “Like” count on the associated third-party website (if it occurred) were part of  
16 Facebook’s routine and ordinary course of business and were documented in Facebook’s publicly-  
17 available developer guidance. (Pls.’ Compl. [Dkt. 1] at p. 16 n.40.) On or about October 16, 2012,  
18 Facebook discontinued its practice of including URL attachments to messages in the “Like” count on  
19 associated third-party websites. Following the change in practice, a share object may still have been  
20 created for a successful URL attachment, but the code generating the “Like” count on associated  
21 third-party websites did not include URL attachments to messages. As detailed above, during the  
22 relevant period, whether a URL included in the text of a given message triggered an increase in the  
23 anonymous, aggregate “Like” count on an associated third-party website is a highly individualized  
24 inquiry that depends on myriad variables.

25 Additionally, various message statistics, including all three formats for storing URL share  
26 data—message-specific information, user-specific share objects, and the global share object—were  
27  
28

1 part of the universe of data available to the site integrity and abuse- and security-related platforms for  
2 URL classification and other continuing security efforts.

3 During the relevant period, Facebook did not use URL share data nor any message content to  
4 serve targeted advertisements.

5 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 4:**

6 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
7 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
8 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
9 grounds:

10 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases “Process  
11 and/or piece of Architecture,” “Private Message Content,” “scanned,” “analyzed,” and “extracted.”

12 (B) The Interrogatory is compound.

13 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
14 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
15 Facebook “Like” count on a website when the URL for that website was contained in a message  
16 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
17 approximately December 20, 2012)).

18 (D) The Interrogatory is overly broad in that it purports to seek additional information  
19 regarding each “Process and/or piece of Architecture involved in” the transmission of Facebook  
20 messages over an extended time period. Facebook will respond to the best of its ability and based on  
21 the information known and identified to date, and as limited by the practice challenged in this action  
22 (as defined above).

23 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
24 proprietary company information.

25 Subject to and without waiving the foregoing general and specific objections, and subject to  
26 the ongoing nature of discovery in this action, Facebook responds as follows:

27 Among other ways to share information on Facebook’s platform, Facebook users may share  
28

1 information by sending a Facebook message to one or more selected Facebook users, which can be  
2 viewed in the recipient user’s Messages folder on the Facebook website. All shared information,  
3 including messages, is received by Facebook and stored on Facebook servers. Facebook must  
4 receive and host all information shared on the site to provide its service. By joining Facebook, and  
5 agreeing to Facebook’s Data Use Policy, all users acknowledge that they understand and agree that  
6 Facebook will receive and employ user data—including information Facebook receives whenever a  
7 user sends or receives a message—for a variety of routine business purposes, including, among other  
8 things, “efforts to keep Facebook products, services and integrations safe and secure,” “to measure or  
9 understand the effectiveness of ads [users] and others see, including to deliver relevant ads to [the  
10 user],” and “for internal operations” such as “data analysis” or “service improvement.” Users also  
11 acknowledge that Facebook may share information, including with “developers that build the . . .  
12 websites [users] use,” where Facebook “has removed your name and any other personally identifying  
13 information from it.”

14 Facebook must process and store messages so that users have an accessible repository of their  
15 messages—a vital component of its Messages product. Facebook also must process messages to  
16 render the basic features of the Messages product (such as language and format) and to facilitate  
17 information sharing. Facebook also generates URL preview functionality. This feature reduces the  
18 transmission of unintended content, and recipients can preview a transmitted URL before visiting the  
19 destination website.

20 Facebook also processes messages to filter spam; detect and block malicious messages,  
21 URLs, and photos; detect conversations that could be related to criminal behavior; and protect the site  
22 from threats to its stability and integrity. Facebook’s anti-abuse efforts continually process data from  
23 across the Facebook service to evolve and enhance Facebook’s ability to protect users and the site.

24 During the proposed class period (December 30, 2011 to approximately December 20, 2012),  
25 Facebook offered websites “social plugins,” or units of embeddable code that allow people to share  
26 information using Facebook directly from third-party websites. For example, a third-party website  
27 may embed code for the Facebook “Like” button plugin on its website, enabling Facebook users to  
28

1 directly “Like” the website and to share that action with their Facebook connections (without having  
2 to return to <https://www.facebook.com> or the Facebook mobile app to share the content). The “Like”  
3 button plugin also may display an anonymous and aggregate count of all “Likes” for that particular  
4 website. During the relevant time period (December 30, 2011 to approximately December 20, 2012),  
5 this aggregate count of “Likes” may have included URLs (1) shared (in the NewsFeed), (2)  
6 commented on, (3) liked, and (4) sent as an attachment to a message (and recorded as a share object).  
7 The software that generated and displayed the Like count during this period obtained the data  
8 regarding URL attachments to messages from the stored repository of share object records—the  
9 global share object record. If a user shared a URL through a message but no share object was created  
10 (for any of the reasons noted in responses to Interrogatories Nos. 2-3), the sharing of that URL did  
11 not increment the “Like” count social plugin on the destination website. Similarly, if the destination  
12 website associated with the URL did not have a Facebook “Like” button plugin, the sharing of that  
13 URL did not increment the “Like” count social plugin on the website (even if a share object was  
14 created). Additionally, in some cases, even if a share object was created and the destination website  
15 associated with the URL had a Facebook “Like” button plugin, the “Like” count on the destination  
16 website may not have been incremented. For example, if the URL a user included in a message was  
17 not exactly the same as the URL the developer passed to the plugin, the “Like” count on the  
18 destination website may not have been incremented. Other examples of circumstances that could  
19 have led to no incrementing of the “Like” count on a destination website, even if a share object was  
20 created, included race conditions and database failures and contention. Race conditions occur when  
21 multiple people share the same URL at the same time and Facebook only processes one increment to  
22 the count; this happens more frequently when many people try to share at once. Database failure or  
23 contention can occur for many reasons, including the interplay between different databases stored in  
24 different locations contributing to a single count.

25           During the relevant period, the generation of a URL attachment (if it occurred) and the  
26 increase in the “Like” count on the associated third-party website (if it occurred) were part of  
27 Facebook’s routine and ordinary course of business and were documented in Facebook’s publicly-

1 available developer guidance. (Pls.’ Compl. [Dkt. 1] at p. 16 n.40.) On or about October 16, 2012  
2 and December 20, 2012 (as explained in the June 1, 2015 Declaration of Alex Himel), Facebook  
3 discontinued its practice of including URL attachments to messages in the “Like” count on associated  
4 third-party websites. Following the change in practice, a share object may still have been created for  
5 a successful URL attachment, but the code generating the “Like” count on associated third-party  
6 websites did not include URL attachments to messages. As detailed above, during the relevant  
7 period, whether a URL included in the text of a given message triggered an increase in the  
8 anonymous, aggregate “Like” count on an associated third-party website is a highly individualized  
9 inquiry that depends on myriad variables.

10 Additionally, various message statistics, including all three formats for storing URL share  
11 data—message-specific information, user-specific share objects, and the global share object—were  
12 part of the universe of data available to the site integrity and abuse- and security-related platforms for  
13 URL classification and other continuing security efforts.

14 During the relevant period, Facebook did not use URL share data nor any message content to  
15 serve targeted advertisements.

16 **INTERROGATORY NO. 5:**

17 Identify by name, purpose, sequence, function and physical location each Process and/or piece  
18 of Architecture involved in the creation, development, or maintenance of Facebook User Profiles.

19 **RESPONSE TO INTERROGATORY NO. 5:**

20 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
21 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
22 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
23 grounds:

24 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases “Process  
25 and/or piece of Architecture,” “Facebook User Profiles,” “purpose,” “sequence,” “function,” and  
26 “physical location.”

27 (B) The Interrogatory is compound.

1 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
2 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
3 Facebook “Like” count on a website when the URL for that website was contained in a message  
4 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
5 October 31, 2012)).

6 (D) The Interrogatory is overly broad in that it purports to seek information regarding each  
7 “Process and/or piece of Architecture involved in the creation, development, or maintenance of  
8 Facebook User Profiles” over an extended time period. Facebook will respond to the best of its  
9 ability and based on the information known and identified to date, and as limited by the practice  
10 challenged in this action (as defined above).

11 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
12 proprietary company information.

13 Subject to and without waiving the foregoing general and specific objections, and subject to  
14 the ongoing nature of discovery in this action, Facebook responds as follows:

15 Facebook does not create individual “User Profiles” to serve targeted advertisements to its  
16 users. Rather, Facebook offers advertisers a range of audience targeting options, and advertisers can  
17 choose from one or a combination of these options. To create an ad set, advertisers define the  
18 Facebook audience that will be eligible to see ads in their ad set, and ads are then only shown (if they  
19 are shown) to users who match the criteria advertisers select. During the relevant time period  
20 (December 30, 2011 to October 31, 2012), advertisers could choose from one or a combination of  
21 these options:

- 22 a. Location: Advertisers could enter the name of one or more states, cities, and zip codes to  
23 show their ads in those locations.
- 24 b. Demographic Targeting Options:
- 25 i. Age & Gender: Advertisers could select the minimum and maximum age of the  
26 people who would find their ad relevant. Under “Gender,” advertisers could choose  
27 “All” unless they only wanted to target either men or women. Some people don’t

1 specify their gender on Facebook, so the only way to reach everyone was to select  
2 “All.”

3 ii. More Demographic Targeting Options: Advertisers could use demographic targeting  
4 options to select audience segments related to categories such as relationships,  
5 education, work, and life events.

6 c. Interests Targeting Options: Advertisers could reach their audience based on their interests.  
7 This could have included interests shared on their profile, apps they used while logged into  
8 Facebook, and Facebook Pages they affirmatively “liked.”

9 d. Connections: Advertisers could control whether or not their ad was served to people who had  
10 already connected with them on Facebook.

11 e. Custom Audience: Starting in September 2012, a small percentage of U.S. advertisers could  
12 create or select a Custom Audience that they could use with their other targeting options. A  
13 Custom Audience would let advertisers find their offline audience among people who use  
14 Facebook. This feature became available to all U.S. advertisers in November 2012.

15 During the relevant time period (December 30, 2011 to October 31, 2012), data or  
16 information derived from messages (including URLs shared in messages) was not a criterion  
17 available to advertisers in choosing the audience for their ads, and Facebook did not use data or  
18 information derived from messages (including URLs shared in messages) to match ads to users.

19 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 5:**

20 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
21 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
22 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
23 grounds:

24 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases “Process  
25 and/or piece of Architecture,” “Facebook User Profiles,” “purpose,” “sequence,” “function,” and  
26 “physical location.”

27 (B) The Interrogatory is compound.



1 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
2 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
3 Facebook “Like” count on a website when the URL for that website was contained in a message  
4 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
5 approximately December 20, 2012)).

6 (D) The Interrogatory is overly broad in that it purports to seek information regarding each  
7 “Process and/or piece of Architecture involved in the creation, development, or maintenance of  
8 Facebook User Profiles” over an extended time period. Facebook will respond to the best of its  
9 ability and based on the information known and identified to date, and as limited by the practice  
10 challenged in this action (as defined above).

11 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
12 proprietary company information.

13 Subject to and without waiving the foregoing general and specific objections, and subject to  
14 the ongoing nature of discovery in this action, Facebook responds as follows:

15 Facebook does not create individual “User Profiles” to serve targeted advertisements to its  
16 users. Rather, Facebook offers advertisers a range of audience targeting options, and advertisers can  
17 choose from one or a combination of these options. To create an ad set, advertisers define the  
18 Facebook audience that will be eligible to see ads in their ad set, and ads are then only shown (if they  
19 are shown) to users who match the criteria advertisers select. During the relevant time period  
20 (December 30, 2011 to approximately December 20, 2012), advertisers could choose from one or a  
21 combination of these options:

- 22 a. Location: Advertisers could enter the name of one or more states, cities, and zip codes to  
23 show their ads in those locations.
- 24 b. Demographic Targeting Options:
- 25 i. Age & Gender: Advertisers could select the minimum and maximum age of the  
26 people who would find their ad relevant. Under “Gender,” advertisers could choose  
27 “All” unless they only wanted to target either men or women. Some people don’t

1 specify their gender on Facebook, so the only way to reach everyone was to select  
2 “All.”

3 ii. More Demographic Targeting Options: Advertisers could use demographic targeting  
4 options to select audience segments related to categories such as relationships,  
5 education, work, and life events.

6 c. Interests Targeting Options: Advertisers could reach their audience based on their interests.  
7 This could have included interests shared on their profile, apps they used while logged into  
8 Facebook, and Facebook Pages they affirmatively “liked.”

9 d. Connections: Advertisers could control whether or not their ad was served to people who had  
10 already connected with them on Facebook.

11 e. Custom Audience: Starting in September 2012, a small percentage of U.S. advertisers could  
12 create or select a Custom Audience that they could use with their other targeting options. A  
13 Custom Audience would let advertisers find their offline audience among people who use  
14 Facebook. This feature became available to all U.S. advertisers in November 2012.

15 During the relevant time period (December 30, 2011 to approximately December 20, 2012),  
16 data or information derived from messages (including URLs shared in messages) was not a criterion  
17 available to advertisers in choosing the audience for their ads, and Facebook did not use data or  
18 information derived from messages (including URLs shared in messages) to match ads to users.

19 **INTERROGATORY NO. 6:**

20 Identify all possible fields or data points that can comprise a Facebook User Profile.

21 **RESPONSE TO INTERROGATORY NO. 6:**

22 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
23 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
24 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
25 grounds:

26 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases  
27 “Facebook User Profile” and “all possible fields or data points.”

1 (B) The Interrogatory is compound.

2 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
3 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
4 Facebook “Like” count on a website when the URL for that website was contained in a message  
5 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
6 October 31, 2012)).

7 (D) The Interrogatory is overly broad in that it purports to seek information regarding “all  
8 possible fields or data points that can comprise a Facebook User Profile” over an extended time  
9 period. Facebook will respond to the best of its ability and based on the information known and  
10 identified to date, and as limited by the practice challenged in this action (as defined above).

11 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
12 proprietary company information.

13 Subject to and without waiving the foregoing general and specific objections, and subject to  
14 the ongoing nature of discovery in this action, Facebook responds as follows:

15 Facebook does not create individual “User Profiles” to serve targeted advertisements to its  
16 users. Rather, Facebook offers advertisers a range of audience targeting options, and advertisers can  
17 choose from one or a combination of these options. To create an ad set, advertisers define the  
18 Facebook audience that will be eligible to see ads in their ad set, and ads are then only shown (if they  
19 are shown) to users who match the criteria advertisers select. During the relevant time period  
20 (December 30, 2011 to October 31, 2012), advertisers could choose from one or a combination of  
21 these options:

22 a. Location: Advertisers could enter the name of one or more states, cities, and zip codes to  
23 show their ads in those locations.

24 b. Demographic Targeting Options:

25 i. Age & Gender: Advertisers could select the minimum and maximum age of the  
26 people who would find their ad relevant. Under “Gender,” advertisers could choose  
27 “All” unless they only wanted to target either men or women. Some people don’t

1 specify their gender on Facebook, so the only way to reach everyone was to select  
2 “All.”

3 ii. More Demographic Targeting Options: Advertisers could use demographic targeting  
4 options to select audience segments related to categories such as relationships,  
5 education, work, and life events.

6 c. Interests Targeting Options: Advertisers could reach their audience based on their interests.  
7 This could have included interests shared on their profile, apps they used while logged into  
8 Facebook, and Facebook Pages they affirmatively “liked.”

9 d. Connections: Advertisers could control whether or not their ad was served to people who had  
10 already connected with them on Facebook.

11 e. Custom Audience: Starting in September 2012, a small percentage of U.S. advertisers could  
12 create or select a Custom Audience that they could use with their other targeting options. A  
13 Custom Audience would let advertisers find their offline audience among people who use  
14 Facebook. This feature became available to all U.S. advertisers in November 2012.

15 During the relevant time period (December 30, 2011 to October 31, 2012), data or  
16 information derived from messages (including URLs shared in messages) was not a criterion  
17 available to advertisers in choosing the audience for their ads, and Facebook did not use data or  
18 information derived from messages (including URLs shared in messages) to match ads to users.

19 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 6:**

20 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
21 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
22 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
23 grounds:

24 (A) The Interrogatory is vague and ambiguous in its use of the terms and phrases  
25 “Facebook User Profile” and “all possible fields or data points.”

26 (B) The Interrogatory is compound.

27 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
28

1 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
2 Facebook “Like” count on a website when the URL for that website was contained in a message  
3 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
4 approximately December 20, 2012)).

5 (D) The Interrogatory is overly broad in that it purports to seek information regarding “all  
6 possible fields or data points that can comprise a Facebook User Profile” over an extended time  
7 period. Facebook will respond to the best of its ability and based on the information known and  
8 identified to date, and as limited by the practice challenged in this action (as defined above).

9 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
10 proprietary company information.

11 Subject to and without waiving the foregoing general and specific objections, and subject to  
12 the ongoing nature of discovery in this action, Facebook responds as follows:

13 Facebook does not create individual “User Profiles” to serve targeted advertisements to its  
14 users. Rather, Facebook offers advertisers a range of audience targeting options, and advertisers can  
15 choose from one or a combination of these options. To create an ad set, advertisers define the  
16 Facebook audience that will be eligible to see ads in their ad set, and ads are then only shown (if they  
17 are shown) to users who match the criteria advertisers select. During the relevant time period  
18 (December 30, 2011 to approximately December 20, 2012), advertisers could choose from one or a  
19 combination of these options:

20 a. Location: Advertisers could enter the name of one or more states, cities, and zip codes to  
21 show their ads in those locations.

22 b. Demographic Targeting Options:

23 i. Age & Gender: Advertisers could select the minimum and maximum age of the  
24 people who would find their ad relevant. Under “Gender,” advertisers could choose  
25 “All” unless they only wanted to target either men or women. Some people don’t  
26 specify their gender on Facebook, so the only way to reach everyone was to select  
27 “All.”



1 (B) The Interrogatory is compound.

2 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
3 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
4 Facebook “Like” count on a website when the URL for that website was contained in a message  
5 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
6 October 31, 2012)). Facebook interprets this Interrogatory as limited to the practice challenged in  
7 this action.

8 (D) The Interrogatory is overly broad in that it purports to seek information regarding  
9 “each field or data point identified in Interrogatory No. 6” over an extended time period. Facebook  
10 will respond to the best of its ability and based on the information known and identified to date, and  
11 as limited by the practice challenged in this action (as defined above).

12 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
13 proprietary company information.

14 Subject to and without waiving the foregoing general and specific objections, and subject to  
15 the ongoing nature of discovery in this action, Facebook responds as follows:

16 Information responsive to Interrogatory No. 7, subject to Facebook’s objections, is contained  
17 in the following records produced by Facebook pursuant to Rule 33(d): FB000000011,  
18 FB000000017. Additionally, during the relevant time period (December 30, 2011 to October 31,  
19 2012), neither website developers nor owners nor advertisers were provided the identities of any  
20 Facebook users who included a URL in a message, even if a share object was created and included in  
21 the anonymous, aggregate “Like” count on the associated third-party website.

22 **SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 7:**

23 Facebook restates and incorporates its Preliminary Statement, General Objections, Objections  
24 to “Rules of Construction,” Instructions, and Purported “Relevant Time Period” as though fully set  
25 forth in this Response. Facebook further objects to this Interrogatory on the following additional  
26 grounds:

1 (A) The Interrogatory is vague and ambiguous in its use of the terms “field,” “data point,”  
2 “Developers,” and “Third Party websites.”

3 (B) The Interrogatory is compound.

4 (C) The Interrogatory seeks information that is not relevant to the claims or defenses in  
5 this action to the extent it concerns practices other than those challenged (the alleged increase in the  
6 Facebook “Like” count on a website when the URL for that website was contained in a message  
7 transmitted through Facebook’s Messages product during the Class Period (December 30, 2011 to  
8 approximately December 20, 2012)). Facebook interprets this Interrogatory as limited to the practice  
9 challenged in this action.

10 (D) The Interrogatory is overly broad in that it purports to seek information regarding  
11 “each field or data point identified in Interrogatory No. 6” over an extended time period. Facebook  
12 will respond to the best of its ability and based on the information known and identified to date, and  
13 as limited by the practice challenged in this action (as defined above).

14 (E) The Interrogatory seeks information that reflects trade secrets, confidential, and/or  
15 proprietary company information.

16 Subject to and without waiving the foregoing general and specific objections, and subject to  
17 the ongoing nature of discovery in this action, Facebook responds as follows:

18 Information responsive to Interrogatory No. 7, subject to Facebook’s objections, is contained  
19 in the following records produced by Facebook pursuant to Rule 33(d): FB000000011,  
20 FB000000017. Additionally, during the relevant time period (December 30, 2011 to approximately  
21 December 20, 2012), neither website developers nor owners nor advertisers were provided the  
22 identities of any Facebook users who included a URL in a message, even if a share object was created  
23 and included in the anonymous, aggregate “Like” count on the associated third-party website.

24 DATED: September 8, 2015

GIBSON, DUNN & CRUTCHER LLP

25 By:                     /s/ Joshua A. Jessen                      
26 Joshua A. Jessen

27 Attorneys for Defendant FACEBOOK, INC.

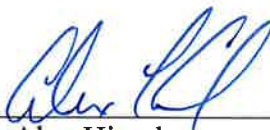


1 VERIFICATION

2 I, Alex Himel, declare as follows:

3 I am an Engineering Director at Defendant Facebook, Inc. ("Facebook") and am authorized to  
4 execute this Verification on behalf of Facebook. I have read the foregoing DEFENDANT  
5 FACEBOOK, INC.'S SUPPLEMENTAL RESPONSES AND OBJECTIONS TO PLAINTIFFS'  
6 FIRST SET OF INTERROGATORIES. I understand that the facts stated in Facebook's Responses  
7 were assembled by authorized employees, agents, and/or legal representatives of Facebook and am  
8 informed and believed that, subject to any inadvertent errors or omissions, the information contained  
9 in those Responses is true and correct based on the records of Facebook and information reasonably  
10 available to its employees, agents, and/or legal representatives. Facebook reserves the right to correct  
11 any inadvertent errors or omissions in this document that may come to its attention.

12 I declare under penalty of perjury under the laws of the United States of America that the  
13 foregoing is true and correct and that this Verification was executed on September 8, 2015 in Menlo  
14 Park, California.

15   
16 \_\_\_\_\_  
17 Alex Himel

1 **PROOF OF SERVICE**

2 I, Ashley M. Rogers, declare as follows:

3 I am employed in the County of Santa Clara, State of California, I am over the age of eighteen  
4 years and am not a party to this action; my business address is 1881 Page Mill Road, Palo Alto, CA  
94304-1211, in said County and State. On September 8, 2015, I served the following document(s):

5 **DEFENDANT FACEBOOK, INC.’S SUPPLEMENTAL RESPONSES AND**  
6 **OBJECTIONS TO PLAINTIFFS’ FIRST SET OF INTERROGATORIES**

7 on the parties stated below, by the following means of service:

8 David F. Slade  
9 [dslade@cbplaw.com](mailto:dslade@cbplaw.com)  
10 James Allen Carney  
11 [acarney@cbplaw.com](mailto:acarney@cbplaw.com)  
12 Joseph Henry Bates, III  
13 Carney Bates & Pulliam, PLLC  
14 [hbates@cbplaw.com](mailto:hbates@cbplaw.com)

15 Melissa Ann Gardner  
16 [mgardner@lchb.com](mailto:mgardner@lchb.com)  
17 Nicholas Diamand  
18 [ndiamand@lchb.com](mailto:ndiamand@lchb.com)  
19 Rachel Geman  
20 [rgeman@lchb.com](mailto:rgeman@lchb.com)  
21 Michael W. Sobol  
22 Loeff Cabraser Heimann & Bernstein, LLP  
23 [msobol@lchb.com](mailto:msobol@lchb.com)

- 24  **BY ELECTRONIC SERVICE:** On the above-mentioned date based on an agreement of  
25 the parties to accept service by electronic transmission, I caused the document to be sent to  
26 the persons at the electronic notification addresses as shown above.
- 27  I am employed in the office of Joshua A. Jessen and am a member of the bar of this court.
- 28  I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 8, 2015.

\_\_\_\_\_/s/  
Ashley M. Rogers