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13

14   UNITED STATES DISTRICT COURT

15   NORTHERN DISTRICT OF CALIFORNIA

16   OAKLAND DIVISON

17 MATTHEW CAMPBELL and MICHAEL   Case No. C 13-05996 PJH (MEJ)
   HURLEY,
18   **PUTATIVE CLASS ACTION**
                  Plaintiffs,
19   **DECLARATION OF DAN FECHETE IN
          v.   SUPPORT OF DEFENDANT FACEBOOK,
20   INC.'S OPPOSITION TO PLAINTIFFS'
   FACEBOOK, INC.,   MOTION FOR CLASS CERTIFICATION**
21
                  Defendant.
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Crutcher LLP
          DECLARATION OF DAN FECHETE IN SUPPORT OF DEFENDANT FACEBOOK, INC.'S OPPOSITION TO PLAINTIFFS'
          MOTION FOR CLASS CERTIFICATION
          Case No. C 13-05996 PJH (MEJ)

I, Dan Fechete, declare as follows:

1.   I have been employed as a software engineer at Facebook since October 2011, and my current title is Engineering Manager. I am over the age of 18. Since I joined Facebook, I have worked on Facebook's Developer Platform, and, until they were deprecated, my work encompassed Facebook's "Recommendations" and "Activity Feed" plugins and certain Facebook services related to those plugins. The following facts reflecting functionality prior to October 2011 are based on my review of the cited documents and related source code. The following facts reflecting functionality after October 2011 are based on my review of the cited documents and related source code, as well as my personal knowledge. If called and sworn as a witness, I could and would testify competently to these facts.

2.   I provide this Declaration to explain certain facts regarding Facebook's software code as it relates to Facebook's "Recommendations" and "Activity Feed" plugins and certain Facebook services related to those plugins, particularly as they related to uniform resource locators ("URLs") in messages sent and received through the Facebook platform.

3.   I understand that on November 13, 2015, Plaintiffs filed a Motion for Certification of the following proposed class:

> All natural-person Facebook users located within the United States who have sent, or received from a Facebook user, private messages that included URLs in their content (and from which Facebook generated a URL attachment), from within two years before the filing of this action up through the date of the certification of the class.

I understand that Plaintiffs filed their action on December 30, 2013, and that therefore the relevant period for Plaintiffs' new purported class is December 30, 2011 to present (the "Class Period").

4.   I understand that Plaintiffs have submitted an expert report from Dr. Jennifer Golbeck in support of their Motion for Certification, which purports to describe Facebook's "interception and acquisition of the URL attachments in Private Messages," as well as purported "uses" of that data—including use in "External Recommendations," "Taste," and "Activity Feed." I also understand that her report (as well as her deposition testimony) included the statements cited herein.

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5.   I explain below that the source code for the Facebook Recommendations Feed and the Activity Feed (together, the "Feeds") changed a number of times since they were launched in 2010. For certain periods of time prior to the beginning of the Class Period, the primary system for identifying URLs to be displayed in the Feeds relied in part on aggregate data regarding the number of URLs successfully shared in, among other ways, messages. Also, for certain periods of time prior to the beginning of the Class Period, URLs that had only been successfully shared in a message (as opposed to being shared in other ways) could, in highly variable circumstances, have been displayed in the Feeds. As an example, if many people had shared a single URL, it could have been recommended to viewers in the Recommendations Feed or Activity Feed, even if those shares were only in Facebook messages (as opposed to posts).

6.   I also explain below that, for certain periods of time during the Class Period, the primary system for identifying URLs to be displayed in the Feeds did not rely on any data regarding the number of URLs successfully shared in messages (including in an aggregate manner), but its backup system did so (in an aggregate manner). Therefore, for certain periods of time during the Class Period, in highly variable circumstances, it was possible that the Feeds relied in part on aggregate data regarding the number of URLs successfully shared in, among other ways, messages. However, during the Class Period, URLs that had only been successfully shared in a message were never displayed in the Feeds. To continue the example, if during the Class Period many people shared that same URL only in Facebook messages (and never elsewhere, like in a post), and the primary system failed and defaulted to the backup system, it may have considered aggregate data about that URL being shared in messages, but that URL would never actually have appeared in the Recommendations Feed or Activity Feed. I have summarized the variability of this functionality as it relates to URLs in messages in Exhibit PP attached hereto.

7.   In none of these circumstances was the identity of a person who had shared a URL only in a message exposed to third parties.

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Overview of Recommendations Plugin and "Taste"

8. Facebook's Recommendations Feed[1] was a social plugin offered to developers that displayed a list of URLs representing the most recommended webpages on that developer's site. If someone was logged into Facebook when he or she visited the developer's website, Recommendations Feed prioritized information that was subject to certain actions by that person's Facebook friends, including friends' clicking on a "Like" button on a given webpage. For example, a site that publishes articles might display the most recommended articles and those articles recommended by a friend of the viewer, as illustrated by the example below:
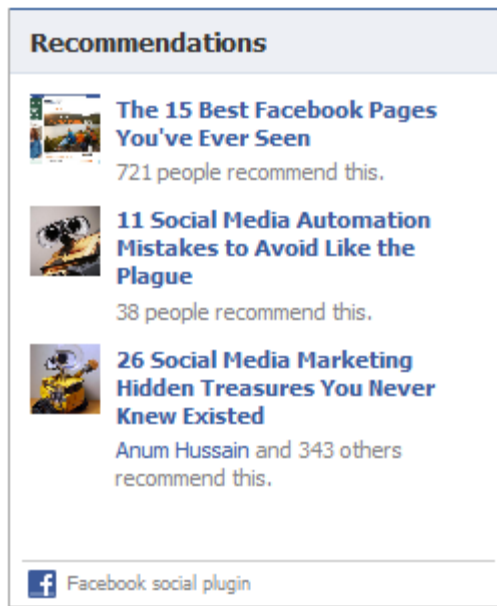
9. The general purpose of the Recommendations Feed was to help people discover web information that they were likely to want to view, enjoy, and interact with. It was part of a set of social plugins announced at the same time (April 2010), all of which were designed to personalize non-Facebook webpages with information that a particular person would find valuable, in order to personalize the internet at large with social context in order to facilitate information discovery and encourage social interaction.

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[1] Dr. Golbeck refers to this as the "Recommendations widget." (Golbeck Report ¶ 60.)

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1   10.   Facebook's Recommendations Feed was announced to the public at Facebook's F8

2   conference in April 2010 (a conference where Facebook announces new products and features). In

3   addition to the Recommendations Feed, the Recommendations "API" was an interface on or from a

4   Facebook webpage that allowed people to write queries to display the same information presented by

5   the Feed.[2] Likewise, the Recommendations "Bar" was a later implementation of the same

6   Recommendations Feed, but also added the ability for the viewer to "Like" or "Share" the

7   Recommended information. It was introduced on July 26, 2012. Unless otherwise indicated below,

8   the Recommendations API and Recommendations Bar reflected the same information displayed by

9   the Recommendations Feed at a given time for a given URL viewed by a given person. The

10 Recommendations Feed (and related Bar and API) were discontinued on June 23, 2015.

11   11.   Over time, two different units of Facebook source code determined the list of URLs

12 that would appear in the Recommendations Feed for a given webpage at a given time.

13   12.   The first of those units of Facebook source code that determined the list of URLs that

14 would appear in the Recommendations Feed was developed in early 2010 in PHP (a programming

15 language) (hereafter "PHP backend").[3] In order to determine the list of URLs to display in the

16 Recommendations Feed, that source code considered (i) certain person-specific actions of the

17 person's Facebook friends with respect to those URLs, as well as (ii) internal Facebook counts

18 intended to measure overall engagement with that URL. The person-specific actions that were

19 considered included friends' affirmatively clicking on a "Like" button on a given webpage, ***but did***

20 ***not include sharing a URL in a Facebook message***.[4] The counts that were considered for each URL

21 included the "share_count" stored in the "tracking_info" field of the global share object for that URL.

22   13.   The second unit of Facebook source code that determined the list of URLs that would

23 appear in the Recommendations Feed was internally referred to as "Taste." Facebook began building

24

25   [2] Dr. Golbeck refers to this as "an API call in ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓." (*Id.*)

26   [3] *See* source code differential D94144 (Mar. 4, 2010), attached hereto as Exhibit QQ. Dr. Golbeck
      refers to this as ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓ (Golbeck Report ¶ 57.)

27   [4] *See* source code differential D100080 (Mar. 25, 2010), attached hereto as Exhibit RR.

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1 Taste in approximately June 2010.[5] In order to determine the list of URLs to display in the

2 Recommendations Feed, Taste consulted an index of activity associated with the URLs for that page.

3 The Taste index included certain shares of those URLs. In approximately September 2010, Facebook

4 began building the Taste index based on an existing Hive table called ████████████

5 (████████████).[6] One month later, in approximately November 2010, Facebook began building a

6 separate data store (████████████ on which the Taste index would fully rely (instead of

7 ████████████).[7]

8   14.   Less than one month later, it was discovered by Facebook personnel that URLs shared

9 in messages *could* be included in the Taste index due to their potential presence in the ████████████

10 table. On November 29, 2010, the source code was changed to include data in the ████████████l

11 table to distinguish URLs shared in messages, and that data was used to prevent URL shares in

12 messages from being included in the "████████████" store from which Taste developed its index of

13 activity to inform the URLs displayed in the Recommendations Feed.[8]

14   15.   Approximately two months later, on February 20, 2011 the source code was updated

15 again to include a check that ensured that URLs shared only in messages would never be displayed in

16 the Recommendations Feed.[9]

17   16.   Therefore, because Plaintiffs' proposed Class Period does not commence until

18 December 2011, at no point during the Class Period were URLs shared only in messages (and not in

19 posts or elsewhere) displayed in the Recommendations Feed. And again, even during the pre-Class

20 Period, the identity of a person who had shared a URL only in a message was never exposed to third

21 parties.

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[5] *See* source code differential D122427 (July 1, 2010), attached hereto as Exhibit SS; source code

25   differential D121547 (June 8, 2010), attached hereto as Exhibit TT.
[6] *See* source code differential D155812 (Sept. 23, 2010), attached hereto as Exhibit UU.

26 [7] *See* source code differential D179234 (Nov. 6, 2010), attached hereto as Exhibit VV.
[8] *See* source code differential D186382 (Nov. 27, 2010), attached hereto as Exhibit WW.

27 [9] *See* source code differential D211615 (Feb. 11, 2010), attached hereto as Exhibit XX.

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Recommendations Plugin and URLs in Messages

17.   As noted above in paragraph 12, in the PHP backend, shares of URLs in messages were not included in the person-specific activity that informed the prioritization of URLs for the Recommendations Feed. Thus, if a Facebook friend of mine sent a URL to another friend in a message, that URL would not have been any more likely to be "recommended" to me on a third-party website by virtue of it having been sent by my friend.[10] However, I understand from the Declarations of Alex Himel dated June 1, 2015 and January 14, 2016 ("Himel Declarations"), that aggregate shares of URLs in messages using the "Share" button plugin dialog feature on third-party websites may have been included in the "share_count" in the global share object, which was considered in the aggregate with other kinds of engagement in the PHP backend. I also understand from the Himel Declarations that, from the time of the implementation of the "sharescraper" and preview features in the messages product on the Facebook website in August 2010, anonymous, aggregate shares of URLs in messages sent from the Facebook website (as opposed to from a Share plugin on a third party website) *may* have also been included in the "share_count" in the global share object, which was considered in the PHP backend. As discussed in paragraphs 14-16, however, after the source code change on February 20, 2011, it was impossible for a URL shared only in a message to be displayed in the Recommendations Feed. For example, if someone shared a confidential link to a photo album in a Facebook message, and that link was never shared in a post (or anywhere other than in a message), that message might have been part of the aggregate, anonymous data about popularity that the plugin considered, but it would never actually have been shown in the Recommendations Feed.

18.   As noted above, Taste utilized the ▮▮▮▮▮▮▮▮ table for some months in late 2010 and early 2011 to populate its index prior to using "▮▮▮▮▮▮▮▮▮" During that time period, the Taste index would utilize share data from ▮▮▮▮▮▮▮▮, which may have included shares of URLs in messages. Again, however, after the source code change on November 29, 2010, referenced

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[10] *See* Ex. RR.

1 above, data regarding shares of URLs in messages were not included in the ███████████ data

2 store at all, and after the source code change on February 20, 2011, it was impossible for a URL

3 shared only in a message to be displayed in the Recommendations Feed. Taste continued to rely on

4 s███████████ until April 18, 2011 when it moved completely to relying on ███████████s," which

5 did not include URLs shared in messages.[11]

6   19.   Because the source code change on February 20, 2011 made it impossible for a URL

7 shared only in a message to be displayed in the Recommendations Feed (whether it was relying on

8 the PHP backend or Taste), *a URL shared only in a message was never displayed in the*

9 *Recommendations Feed during the Class Period*.

10 **Variability Among Class Members and Over Time in Connection with Recommendations**

11   20.   There was considerable variability over time and, during certain periods, there was

12 considerable variability in a given instance, with respect to (i) which unit of source code (the PHP

13 backend or Taste) determined the URLs to be included in the Recommendations Plugin, (ii) whether

14 and how that source code utilized information about URLs shared in messages, (iii) whether that

15 source code could result in the display of a URL only shared in a message in the Recommendations

16 Plugin, and (iv) whether a given URL had characteristics such that the source code would in fact

17 display such a URL.

18   21.   From October 20, 2010 until April 18, 2011, Facebook continued to use the PHP

19 backend but also began testing Taste to determine the URLs listed in the Recommendations Feed

20 seen by a certain percentage of people chosen randomly.[12] From April 18, 2011 until July 9, 2014,

21 when the PHP backend was removed from the operative source code, Recommendations Feed relied

22 on Taste for the majority of instances of displaying URLs but also used the PHP backend as a backup

23 resource if Taste failed to provide information.[13] From July 9, 2014 until the Recommendations

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26 [11] *See* source code differential D236924 (Apr. 18, 2011), attached hereto as Exhibit YY.
    [12] *See id.*; *see also* source code differential D172147 (Oct. 21, 2010), attached hereto as Exhibit ZZ.
27 [13] *See* source code differential D404158 (Feb. 8, 2012), attached hereto as Exhibit AAA.

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1 Plugin was discontinued on June 23, 2015, Recommendations Feed solely relied on Taste to

2 determine the URLs listed in the feed.

3   22.   These changes over time regarding the specific service upon which the

4 Recommendations Feed relied (*see* paragraph 21), coupled with the changes over time to the

5 functionality of the PHP backend and Taste noted above (*see* paragraphs 12-19), resulted in yet

6 further variability over time and among people.

7   23.   From the launch of the Recommendations Plugin in April 2010 until August 2010,

8 anonymous, aggregate data regarding shares of URLs in messages using the "Share" button plugin

9 dialog feature on third-party websites were included in the "share_count" in the global share object,

10 which was considered in the PHP backend, which solely determined the URLs listed in the

11 Recommendations Feed. Therefore, URLs sent in messages using the "Share" button plugin dialog

12 feature on third-party websites may have been considered by the PHP backend and may have been

13 displayed in the Recommendations Feed during this period. But URLs shared in messages sent from

14 the Facebook website were ***not*** considered by the PHP backend during this period, and URLs only

15 sent in messages from the Facebook website also were ***not*** displayed in the Recommendations Plugin

16 during this period.

17   24.   From August 2010, when "sharescraper" and preview features were implemented in

18 the messages product on the Facebook website, until October 20, 2010, anonymous, aggregate data

19 regarding shares of URLs in a message using the "Share" button plugin dialog feature on third-party

20 websites or sent in messages from the Facebook website may have been included in the

21 "share_count" in the global share object, which was considered in the PHP backend, which solely

22 determined the URLs listed in the Recommendations Feed. Therefore, URLs sent in messages using

23 the "Share" button plugin dialog feature on third-party websites or sent in messages from the

24 Facebook website *may* have been considered by the PHP backend and *may* have been displayed in

25 the Recommendations Feed during this period, but they also may not have.

26   25.   From October 20, 2010, when Facebook started testing Taste, until November 29,

27 2010, when data regarding shares of URLs in messages stopped being included in the

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8

1 ██████████████ data store, the Recommendations Feed was relying (at random) on either PHP

2 backend or Taste, but both relied on data potentially including shares of URLs in a message using the

3 "Share" button plugin dialog feature on third-party websites or sent in messages from the Facebook

4 website. Therefore, URLs sent in a message using the "Share" button plugin dialog feature on third-

5 party websites or sent in messages from the Facebook website *may* have been considered by the PHP

6 backend or by Taste and *may* have been displayed in the Recommendations Feed during this period.

7   26.   From November 29, 2010, when data regarding shares of URLs in messages stopped

8 being included in the ████████████ data store, until February 20, 2011, the Recommendations

9 Feed was still relying (at random) on either PHP backend or Taste. At that time the PHP backend

10 relied on the "share_count" in the global share object, which included aggregate data regarding shares

11 of URLs in messages using the "Share" button plugin dialog feature on third-party websites or sent in

12 messages from the Facebook website. Taste was relying in part on the ████████████ Hive table,

13 which included data regarding shares of URLs in messages, and in part on ████████████ which

14 did not. Therefore, URLs sent in messages using the "Share" button plugin dialog feature on third-

15 party websites or sent in messages from the Facebook website *may* have been considered by the PHP

16 or Taste backend and *may* have been displayed in the Recommendations Feed.

17   27.   From February 20, 2011, when the code was changed to make it impossible for a URL

18 shared only in a message to be displayed in the Recommendations Feed, until April 18, 2011, when

19 Taste became the primary resource for the feed, the Recommendations Feed was still relying (***at***

20 ***random***) on either PHP backend or Taste, and those services relied in part on data regarding shares of

21 URLs in messages using the "Share" button plugin dialog feature on third-party websites or sent in

22 messages from the Facebook website. However, it was then impossible for a URL shared only in a

23 message to be displayed in the Recommendations Feed. Therefore, URLs sent in messages using the

24 "Share" button plugin dialog feature on third-party websites or sent in messages from the Facebook

25 website *may* have been considered by either backend, but never would have been displayed in the

26 Recommendations Feed during this period.

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28.   From April 18, 2011, when Taste became the primary resource for the feed, until July

9, 2014, when the PHP backend was removed from the operative source code, Recommendations

Feed continued to rely on Taste for the majority of instances of displaying URLs but also used the

PHP backend as a backup resource if Taste failed to provide information. Also after April 18, 2011,

Taste began relying only on ███████████████" and not ██████████████, and therefore did not rely on

any data relating to URLs shared in messages in any way. Therefore, URLs sent only in a message

using the "Share" button plugin dialog feature on third-party websites or sent in messages from the

Facebook website were considered (as part of aggregate data) only in the rare instance that Taste

failed and the PHP backend acted as a backup, and were not displayed in the Recommendations Feed

during this period in any event.

29.   From July 9, 2014, until June 23, 2015, when the Recommendations Feed was

discontinued, the Recommendations Feed relied solely on Taste for the list of URLs to display.

URLs sent only in messages using the "Share" button plugin dialog feature on third-party websites or

sent in messages from the Facebook website were therefore not considered (even as part of aggregate

data) and were not displayed in the Recommendations Feed during this period.

30.   From June 23, 2015, when the Recommendations Feed was discontinued, to present,

the Recommendations Feed has not existed.

31.   As noted above, a URL shared only in a message was never displayed in the

Recommendations Feed during the Class Period. During the sole period of time when a URL shared

only in a message could even have been considered for inclusion in the Recommendations Feed (*see*

paragraph 25), its consideration would have been highly unlikely and highly variable. The sole

consideration of such a URL would have been based on a measure of engagement with that URL,

which may have included the number of times a "Like" button had been clicked and/or the URL was

shared (i.e., the number of times when a URL was "shared" and whether that share was recorded

successfully in the "share_count" in the global share object). URLs shared in messages that were

very popular and had been shared or "Liked" many times would have been more likely to be

recommended by the PHP backend, while URLs that were not very popular or not shared or "Liked"

10

often for other reasons (e.g., lack of a "Like" button social plugin), would have been less likely to be recommended by the PHP backend.[14]

32.   Taking all of this variation together, at a minimum, determining whether a putative class member's share of a URL in a message was considered and/or displayed in the Recommendations Plugin would require the following individualized inquiries *for each message*:

    a. Was the URL successfully "shared"?

    b. Was that "share" successfully recorded in the "share_count" in the global share object or in the s███████ table?

    c. When was the URL shared?

    d. Was the URL shared through a Share Plugin dialog or through the Facebook website?

    e. Did the owner of the website at that URL implement a Recommendations Feed?

    f. Was the Recommendations Feed for a related site actually viewed?

    g. Was the Recommendations API for a related site actually called?

    h. Did the Recommendation Feed rely on Taste or the PHP backend at that time?

    i. Did the Taste backend rely on ███████ or ███████ at that time?

    j. Did the Taste service fail to provide information, triggering reliance on the PHP backend?

    k. How much engagement had that URL been subject to at that time?

    l. Was the URL actually displayed in a Recommendations Feed or API call?

33.   To my knowledge, neither Facebook nor any other entity possesses the data that would be required to ascertain the answers to the inquiries in paragraph 32, either on an individual or bulk basis, for putative class members.

34.   As described above, during the proposed Class Period, URLs solely shared in messages did **not** appear to other people and were not searchable using public APIs. They may have been included in data consulted for the backend PHP service that acted as a backup resource for the

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[14] I understand from the Himel Declarations that whether a URL was successfully "shared" and whether that share was successfully recorded in the internal counters is also variable.

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Recommendations Feed if Taste was unavailable, but its use would be highly unlikely and highly

variable, if used at all. Plaintiffs' expert, Dr. Golbeck appears to have conceded this point both in her

report and in her deposition. In her report, after discussing several source code fixes in late 2010 and

early 2011 (*see* Golbeck Report ¶¶ 46-51), she says that the new code is "used to separate out private

message shares." (*Id.* ¶ 51.) In her deposition she confirms this point. After counsel asks if she

knows "when they fixed that," she replied "2011." (Golbeck Deposition Transcript at 314:13-15.)

35.   As described above, during the Class Period, Taste did not rely on data regarding

URLs in messages. Plaintiffs' expert, Dr. Golbeck appears to have conceded that she did not

conclude otherwise, saying "I think 2011 is the only year I know." (*Id.* at 314:15-16.) When asked

whether "that was before the class period started in this case," she responded, "That's correct." (*Id.*

at 312:20-22.) When asked whether "for the duration of the class period, if Taste has used

information from URLs shared in messages," she replied, "I don't know." (*Id.* at 322:10-13.)

36.   As discussed above, before the Class Period, URLs in Facebook messages may have

been included in data that was consulted for the backend PHP service that acted as a backup resource

for the Recommendations Feed if Taste was unavailable, but its use would have been highly variable,

if used at all.

37.   Moreover, if, at any time, the Recommendations Feed or related API or Bar displayed

a URL that had been shared in a message, it would have been highly variable and the URL would

have been displayed in an anonymous form. Dr. Golbeck accurately testified to that effect:

> Q. . . . But is your understanding that it wouldn't say "Jen Golbeck," you know, "shared
> this link." It would just – that – it would recommend that link or the – it would say
> "Someone shared this" in the activity feed. I mean is that your understanding?
>
> A. I believe the latter is correct. Right.

(*Id.* at 312:18-25.) She also appears to have conceded the variability discussed above based on "how

popular that particular URL was, and thus, you know, how likely it was to be recommended on a

third-party Web site." (*Id.* at 316:5-14.) She also does not dispute that "at some point Facebook

stopped including [] URL attachments in privates messages in that calculation," noting that "[t]he

code has changed." (*Id.* at 316:20-317:1.)

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Activity Feed Plugin

38.   Facebook's Activity Feed was a social plugin offered to developers that displayed a list of recent activity taken on that developer's site. If someone was logged into Facebook when she visited the developer's site, Activity Feed prioritized actions by that person's Facebook friends, particularly friends' clicking on a "Like" button on a given webpage. If the person was not logged in, or there was not enough activity to fill the Activity Feed, the Activity Feed would have reflected URLs from the Recommendations Feed. Developers also could have configured the plugin to show both the Activity Feed and Recommendations Feed.

39.   The general purpose of the Activity Feed was similar to the Recommendations Feed, to help people discover web information that they were likely to want to view, enjoy, and interact with.

40.   Facebook's Activity Feed was announced to the public at Facebook's F8 conference in April 2010. The Activity Feed was discontinued on June 23, 2015.

41.   The personalized person-specific actions listed in the Activity Feed never reflected shares of URLs in Facebook messages.

42.   To the extent that the Activity Feed relied upon the Recommendations Feed, its functionality was the same as described above for the Recommendations Feed, and was characterized by the same variability over time and across class members described above.

43.   The list of inquiries described above (*see* paragraph 32) that would be required to determine whether a given share of a URL in a message was considered and/or displayed in the Recommendations Feed would also be required to determine if it was in the Activity Feed, as well as at least the following additional inquiries:

    a.   Did the owner of the website at that URL implement an Activity Feed?

    b.   Was the Activity Feed for a related site ever actually viewed?

    c.   Did that Activity Feed actually backfill with Recommendations information?

    d.   Did any developer of a related site configure his or her plugin to display
          Recommendations?

13

1   e.   Was the URL actually displayed in an Activity Feed?

2   44.   Again, to my knowledge, neither Facebook nor any other entity possesses data to

3   ascertain the answers to the inquiries in paragraph 43, either on an individual or bulk basis, for the

4   members of the putative class.

5   45.   Dr. Golbeck accurately notes the reliance of the Activity Feed on the same

6   functionality used for the Recommendations Feed. (Golbeck Report ¶¶ 75-78.) As with the

7   Recommendations Feed, she relies only on the same early 2011 emails and code fixes referenced

8   above in paragraph 34 for her conclusion that, with respect to the Activity Feed, "shared URLs within

9   Private Messages were not treated differently than public shares, and as a result, evidence of that

10   private activity was visible to others." (*Id.* ¶ 78.) She again draws no conclusions regarding the

11   Class Period, and, as discussed above, conceded in her deposition that the issues she discusses in her

12   report occurred and were fixed before the Class Period. Nothing in her report contradicts that, as

13   with the Recommendations Feed, during the Class Period, the Activity Feed never exposed URLs

14   shared only in messages, and the only touchpoint to URLs shared in messages was in its reliance on

15   aggregate, anonymous share counts that included URL shares in messages during part of the Class

16   Period and that may or may not have been consulted as part of the Recommendations process during

17   part of the Class Period.

18

19   I declare under penalty of perjury under the laws of the United States of America that the

20   foregoing is true and correct and that this declaration was executed on January 15, 2016 in Menlo

21   Park, California.

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23   /s/ Dan Fechete
                                 Dan Fechete

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Gibson, Dunn &
Crutcher LLP

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__ATTORNEY ATTESTATION__

2   I, Christopher Chorba, attest that concurrence in the filing of this Declaration of Dan Fechete

3 has been obtained from the signatory. I declare under penalty of perjury under the laws of the United

4 States of America that the foregoing is true and correct. Executed this 15th day of January, 2016, in

5 Los Angeles, California.

6

7 Dated: January 15, 2016   */s/ Christopher Chorba*
                                                                      Christopher Chorba

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