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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

_____)
MATTHEW CAMPBELL, MICHAEL)
HURLEY, and DAVID SHADPOUR, on)
behalf of themselves and all)
others similarly situated,)
Plaintiffs,)
vs.) Case No.
FACEBOOK, INC.,) C 13-05996 PJH
Defendant.) Volume I
_____)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

Videotaped Deposition of FERNANDO TORRES,
taken on behalf of Defendant, at the offices of
Lieff, Cabraser, Heimann & Bernstein, 275 Battery
Street, San Francisco, California, beginning at
8:10 a.m. and ending at 4:42 p.m., on Friday,
December 18, 2015, before Chris Te Selle, CSR
No. 10836.

Job No. 2194240

PAGES 1 - 307

1 economic methods are able to be applied to determine 08:36:01
2 the benefit that Facebook has derived, and, from the
3 alleged actions; and, and that would be, basically,
4 it.

5 Q. And you said, damages can be measured. 08:36:22
6 Have you measured damages in this case?

7 A. I haven't applied the methodology to the
8 ideal information, because it has not been produced.

9 Q. What do you mean by, the ideal
10 information? 08:36:46

11 A. Well, the data from Facebook.

12 Q. Is there specific --

13 A. That --

14 Q. I'm sorry. Go ahead.

15 A. That relates exactly to the alleged 08:36:56
16 actions.

17 Q. And what are the alleged actions, as you
18 understand them?

19 A. Well, I would summarize it in the
20 interception of private messages, and the data that 08:37:07
21 I would need is mainly the number of those messages
22 that were intercepted that contained URLs, and the
23 total number of messages for the same time periods
24 to assess the relative importance of those numbers.

25 Q. When you say, the total number of messages 08:37:40

1 that contained URLs, and the total number of 08:37:42
2 messages for the same periods, same time periods,
3 can you explain the comparison. I'm not sure I
4 understand the two variables there.

5 A. Well, one of the measures that I would be 08:37:53
6 looking for would be the percentage of messages that
7 contain those URLs and that were intercepted during
8 the class period.

9 Q. And what is your understanding of the
10 proposed class in this case? 08:38:17

11 A. Of the definition of the class?

12 Q. Yes, sir.

13 MR. DIAMAND: Calls for a legal conclusion.
14 You can answer, if you can.

15 THE WITNESS: Well, again, that would be in, 08:38:29
16 the actual definition of the class is either on the
17 motions or on my report. From memory, I can tell
18 you that it would be those members of Facebook that
19 sent private messages and had their private messages
20 intercepted and included URLs during the class 08:38:53
21 period.

22 BY MR. CHORBA:

23 Q. Do you know what a URL attachment is?

24 A. A URL attachment?

25 Q. Yes. 08:39:08

1 A. I'm not sure I understand the use of that 08:39:15
2 particular combination of terms.

3 Q. Earlier, you mentioned data from Facebook,
4 and you said that the ideal information would be the
5 number of messages containing URLs; is that correct? 08:39:30

6 A. Not exactly. The ideal information
7 includes that information that you mentioned.

8 Q. What else?

9 A. There's -- well, for example, exactly the
10 advertising revenue from U.S.-based members, because 08:39:54
11 the only publicly-available information refers to
12 U.S. and Canada.

13 Q. And would that be advertising revenue
14 attributed to the alleged intercepted messages that
15 contained URLs? 08:40:14

16 A. No. It's advertising revenue in general.

17 Q. Were you asked to develop a methodology to
18 identify putative class members in this case?

19 MR. DIAMAND: Objection. To the extent that
20 this addresses communications between your counsel 08:40:46
21 and you, caution you not to answer. If you can do
22 that without doing that, go ahead.

23 THE WITNESS: So, as, as an economic expert, I,
24 that falls outside of my scope.

25 BY MR. CHORBA: 08:41:04

1 opinion in those terms. I can't, as an economist, I 08:43:04
2 can't say if it should.

3 BY MR. CHORBA:

4 Q. So you are not offering an opinion on as
5 to whether or not a class should be certified. 08:43:15

6 A. The matter of should is a legal question.
7 What I'm doing in the report is, assuming it is
8 certified, then it makes sense to analyze damages.

9 Q. Okay. So, your report is triggered and
10 your opinion is triggered only if a class is 08:43:32
11 certified.

12 MR. DIAMAND: Objection.

13 THE WITNESS: Again, that would be a legal
14 opinion.

15 BY MR. CHORBA: 08:43:44

16 Q. All right. We will do this the longer
17 way.

18 Are you offering an opinion on any of the
19 Rule 23 elements, yes or no?

20 A. I don't even know what the Rule 23 is. 08:43:52

21 Q. All right, let's go through them.

22 Are you offering an opinion on
23 commonality?

24 A. I'm not a legal expert; I'm an economics
25 expert. That's not part of my scope. 08:44:00

1 A. No. 08:44:41

2 Q. Ascertainability?

3 A. No.

4 Q. Superiority?

5 A. No. 08:44:45

6 Q. Manageability?

7 A. No.

8 Q. If no class is certified, will you have
9 any expert opinions in this case?

10 MR. DIAMAND: Objection. Calls for a legal 08:44:54
11 conclusion.

12 THE WITNESS: I can have the opinions. I don't
13 know if they'll be useful.

14 BY MR. CHORBA:

15 Q. Have you been asked to give opinions if no 08:45:01
16 class is certified in this case? Yes or no.

17 MR. DIAMAND: Objection. To the extent that
18 this, again, goes into what I didn't, or with
19 counsel, didn't ask you to do, I'd caution you not
20 to answer. 08:45:13

21 THE WITNESS: Right. So, I can't tell you if,
22 if I was asked or not.

23 BY MR. CHORBA:

24 Q. Do you know the answer whether or not your
25 opinions will be used if a class is certified? 08:45:27

1 way in which there would not have been a benefit to 08:57:38
2 Facebook.

3 Q. And what, based on your understanding of
4 the allegations in the complaint, and your
5 assumption that those allegations are true, what was 08:57:48
6 the benefit to Facebook, as you understand it?

7 A. Well, the accumulation of the information
8 gleaned from the messages, basically, the edges
9 between members and the marketers and entities
10 identified by the URLs, is accessible through, as 08:58:12
11 part of the social graph, it's accessible to
12 Facebook in developing the targeted advertising
13 services that, that generate this revenue.

14 Q. Thank you. That's helpful.

15 Let's assume that the information is 08:58:35
16 accessible to Facebook, as the provider of the
17 service, so, information from messages is
18 accessible.

19 A. Uh-huh.

20 Q. I'm asking you this as a hypothetical. 08:58:44
21 It's available, but it's not used for targeted
22 advertising.

23 Would that impact your opinions at all?

24 MR. DIAMAND: Objection. Hypothetical.

25 THE WITNESS: That would be a technical 08:58:58

1 Q. Does your opinion that there were, that 09:01:27
2 there's a methodology to determine damages hinge on
3 whether or not the information resulted in a revenue
4 generating activity for Facebook?

5 MR. DIAMAND: Objection. 09:01:37

6 THE WITNESS: So, my methodology determines the
7 benefit to Facebook from a specific action, and
8 that's, that's what it refers to, the alleged
9 action.

10 BY MR. CHORBA: 09:02:00

11 Q. Why doesn't it examine, your methodology
12 examine, instead of examining benefit to Facebook,
13 why doesn't it examine detriment to the putative
14 class?

15 MR. DIAMAND: Objection. Calls for a legal 09:02:12
16 conclusion.

17 THE WITNESS: So, my report and methodology
18 that I developed was asked to analyze the benefits
19 to Facebook, so that's, so, it doesn't calculate the
20 detriment to the class members, or the potential 09:02:31
21 class members, because it wasn't meant to.

22 BY MR. CHORBA:

23 Q. So, you have not developed a methodology
24 to calculate damages to putative class members.

25 MR. DIAMAND: Objection. 09:02:49

1 THE WITNESS: That, that was not my task, no. 09:02:50

2 BY MR. CHORBA:

3 Q. If you can turn to paragraph 7, I'm going
4 to bounce back a little bit, and I'll show you other
5 documents today, but let's keep this one handy. 09:03:04

6 This is Exhibit 1 for a reason. And, if you look at
7 paragraph 7, Mr. Torres, and it carries over from
8 pages 2 to 3, you state there in your introduction
9 assignment and summary of conclusions, under that
10 heading, you say, the plaintiffs' consolidated 09:03:23

11 amended class action complaint, the CAC, alleges
12 that Facebook utilizes information surreptitiously
13 gathered from purportedly private correspondence
14 sent between Facebook users and uses that
15 information in a number of ways, including, and then 09:03:40
16 it goes on, A, B, C.

17 Did I read that correctly?

18 A. Yes.

19 Q. And you assumed, again, this is a place
20 where you assume the specific allegations in the 09:03:50
21 consolidated amended complaint were true; is that
22 correct?

23 A. Yes.

24 Q. If we go to A, so, if we flip to page 3,
25 and, again, this is one of the uses in the complaint 09:04:06

1 report. If in the future no class is certified, I 09:52:15
2 don't know what happens. The future is unknown to
3 me.

4 BY MR. CHORBA:

5 Q. You'd have to conduct a fresh analysis at 09:52:23
6 that point, is that what I'm hearing?

7 A. I don't know.

8 MR. DIAMAND: Objection.

9 THE WITNESS: I don't know what I would do.

10 BY MR. CHORBA: 09:52:51

11 Q. Have you ever used Facebook?

12 A. Yes.

13 Q. Are you currently a member of Facebook?

14 A. Yes.

15 Q. How long have you had a Facebook account? 09:53:03

16 A. I opened my account around 2009.

17 Q. And has it been active since then?

18 A. Well, I checked yesterday, it was still
19 active, so it hadn't been cut off.

20 Q. You never, you never intentionally closed 09:53:25
21 your account?

22 A. No.

23 Q. That was good.

24 Have you ever sent a Facebook message?

25 A. I think I have. 09:53:46

1 Q. Do you recall whether or not you ever sent 09:53:48
2 a Facebook message with a URL in it?

3 A. No, I don't think so.

4 Q. So I assume, then, you never sent a
5 message with a URL attachment? 09:54:01

6 MR. DIAMAND: Objection.

7 THE WITNESS: No. So, one precludes the other.

8 BY MR. CHORBA:

9 Q. Do you remember if you sent more than one
10 Facebook message containing a URL? 09:54:15

11 A. As I said, I haven't sent a message
12 containing a URL.

13 Q. Oh, I'm sorry. I misunderstood you.
14 Is it possible you did, and you just
15 forgot, or are you pretty confident you didn't? 09:54:27

16 A. I'm pretty confident I didn't.

17 Q. Approximately how many Facebook messages
18 in total have you sent in your life?

19 A. I think it's in the order of two or three.

20 Q. Have you ever received a Facebook message? 09:54:45

21 A. Yes.

22 Q. Do you recall approximately how many
23 you've received?

24 A. One.

25 Q. One. Did that Facebook message contain a 09:54:57

1 Which records are you referencing there? 10:24:47

2 A. So, I would expect class membership to be
3 identifiable, based on Facebook's records as to what
4 messages were sent, what messages could have been
5 intercepted or not. That's where the class 10:25:03
6 membership identification would belong.

7 Q. And are you offering an opinion in this
8 case that class membership is identifiable and
9 ascertainable based upon Facebook's records?

10 MR. DIAMAND: Objection. 10:25:19

11 THE WITNESS: To the extent that's a technical
12 issue as to what records to look at to identify the
13 membership in the class, that's not, that's outside
14 of my scope.

15 BY MR. CHORBA: 10:25:33

16 Q. So, are you assuming that class membership
17 is identifiable and ascertainable based upon
18 Facebook records, or are you opining that?

19 A. I'm considering that that is something
20 that will happen when the class is certified, if it 10:25:46
21 is.

22 Q. And so it would occur after certification?

23 MR. DIAMAND: Objection.

24 THE WITNESS: I would expect that formal class
25 membership would be determined once the definition 10:26:00

1 advertising services to marketers. 10:31:52

2 Q. What do you mean by, marketers?

3 A. In this report, I mean by marketers the
4 same thing that Facebook defines as marketers, which
5 are their clients, the people responsible for 10:32:10
6 advertising, companies, entities, organizations, and
7 whether they are direct entities or agencies in the
8 advertising market.

9 Q. Do you have any specific examples that you
10 can give? 10:32:31

11 A. Well, other than an ad agency or a
12 specific company, like Coca Cola.

13 Q. And why did you use this term, this
14 defined term, Marketers, with a capital M?

15 A. Because it's not any marketer. It's 10:32:53
16 advertisers in Facebook, so it's a shorthand
17 notation for that.

18 Q. Would you include, it says here, third
19 party websites, parentheses, marketers.

20 Is there, are there other, I guess, 10:33:10
21 entities or individuals that fall under the term
22 marketers that aren't third party websites?

23 A. The limitation is the other way around.
24 There are other third party websites that are not
25 marketers in the sense of Facebook. 10:33:26

1 private messages. 10:43:45

2 Q. And do you lay out these calculations
3 anywhere in your report?

4 A. Well, in the body of the report, in
5 section 4, I lay out the methodology and the 10:43:57
6 beginnings of the calculations that can be done with
7 publicly-available information. I haven't finalized
8 the calculations, because I haven't received the
9 precise data from Facebook.

10 Q. And you said, in section 4 of your report. 10:44:23
11 Would that be both sections A and B, or is
12 it one specific section?

13 A. I would say it's probably both.

14 Q. And you said you haven't finalized the
15 calculations. 10:44:36

16 What do you mean? You haven't actually
17 calculated the amount in the aggregate, or for a
18 specific person?

19 MR. DIAMAND: Objection. Vague.

20 THE WITNESS: Right. So, I have not calculated 10:44:47
21 a final number, and definitely not a final number
22 per person. The information has not been provided,
23 and I haven't made any estimates or assumptions, in
24 addition, to try to simulate or substitute for that
25 information. 10:45:12

1 BY MR. CHORBA: 10:45:19

2 Q. Does your methodology account for
3 potential benefits to class members from the
4 challenged practices?

5 A. No. I mean, in calculating the benefits 10:45:36
6 to Facebook, I don't consider benefits to somebody
7 else.

8 Q. And both methodologies in section 4 A and
9 4 B measure benefit to Facebook?

10 A. Correct. 10:45:49

11 Q. So at no point, well, let me ask you, have
12 you attempted to calculate detriment to the putative
13 class?

14 MR. DIAMAND: Objection.

15 THE WITNESS: As I said, that, that's not part 10:46:09
16 of my scope. My scope is to analyze the benefits to
17 Facebook.

18 BY MR. CHORBA:

19 Q. Have you been asked to prepare a rebuttal
20 opinion to any report prepared by Facebook? 10:46:29

21 A. No.

22 Q. Circling back, just in front of you,
23 paragraph 11 B, is your definition of marketers
24 limited to third party websites that have a like
25 button social plugin installed? 10:46:50

1 in the disclosures. 10:59:54

2 Yahoo does a bad job about it, because
3 they really don't have enough information about the
4 person, so it's not well-targeted. I don't know
5 that there is litigation involving any of those two. 11:00:11

6 Q. And -- okay. If Twitter were to engage
7 practices, in practices similar to those alleged in
8 this case, would you change your practices with
9 using Twitter?

10 A. My personal view is that you do have to 11:00:35
11 read what the privacy policy is, and you have to
12 know to expect that if you are not paying for a
13 product, you are the product.

14 Q. If we look, I'm going to flip back to the
15 report, paragraph 18. It's a lengthy paragraph, but 11:01:13
16 I'd like to focus on the last two sentences, so it
17 carries over from pages 7 to 8. Let me know when
18 you are there. I will just read it, to focus you.
19 It's on line 18, on page 7. Facebook's competitive
20 advantage stems from the power of leveraging the 11:01:36
21 deep targeted knowledge available from its unique
22 access to an increasingly complete and computerized
23 social network, including by tracking users beyond
24 the Facebook.com website. Consequently, the two
25 activities providing online social networking 11:01:54

1 Q. But if the claims are not correct, would 11:36:47
2 you have any basis for stating that either Exhibit 4
3 or Exhibit 3 have any information gleaned from
4 messages on Facebook?

5 MR. DIAMAND: Objection. 11:37:01

6 THE WITNESS: Again, these documents are
7 marketing documents from Facebook. This is designed
8 to sell the product and to actually develop the
9 product. This is designed to market Facebook
10 advertising as a medium to other marketers who are 11:37:16
11 looking into online advertising.

12 What you are asking is about the technical
13 information that would allow somebody to make a
14 technical determination of whether that specific
15 information that is gleaned from the private 11:37:32
16 messages eventually makes its way to one or more
17 advertising campaigns.

18 BY MR. CHORBA:

19 Q. And what kind of technical information
20 would you need to make that determination? 11:37:42

21 MR. DIAMAND: Objection.

22 THE WITNESS: I'm not looking for technical
23 data to do a technical analysis. What I would need
24 is a technical expert to determine that, in fact, at
25 least in some way, the information gleaned from the 11:37:57

1 messages is usable to Facebook. 11:38:02

2 BY MR. CHORBA:

3 Q. You stated earlier that the technical
4 information has not been produced.

5 A. To my knowledge. 11:38:10

6 Q. Do you know whether it's been produced,
7 and you just haven't seen it, or it's your
8 understanding it hasn't been produced at all?

9 MR. DIAMAND: Objection.

10 THE WITNESS: My understanding is, it hasn't 11:38:19
11 been produced beyond maybe what pertains to the
12 named plaintiffs, but, information about the class,
13 I don't think it has been produced.

14 BY MR. CHORBA:

15 Q. What about source code? Are you aware if 11:38:33
16 source code has been produced in this case --

17 A. I'm not aware.

18 Q. -- more than 10 million lines of source
19 code?

20 A. I'm not aware of that, because it's not my 11:38:40
21 task to analyze the source code.

22 Q. So, do you have any factual basis to state
23 that either, that any of the targeted options in
24 Exhibit 3 or Exhibit 4 contain information gleaned
25 from Facebook messages? 11:38:58

1 basis to state that objects and associations are 12:53:33
2 created from Facebook messages.

3 A. Again, the factual basis would be
4 technical data, technical information that is not in
5 my scope to analyze. From an economic perspective, 12:53:45
6 if it's information that is made part of Facebook's
7 resources, it's information that is available to
8 use.

9 Q. And if Facebook does not create objects
10 and associations based on URLs in Facebook messages, 12:54:04
11 would that impact your damages methodology?

12 A. Well, to the extent that that hypothetical
13 situation would indicate that there is no, or that a
14 particular course of action or cause of a litigation
15 might not be sustained, my report would not be 12:54:30
16 relevant to that particular hypothetical.

17 Q. Particular hypothetical, again, if it were
18 not true, you are saying your report wouldn't come
19 in in that instance?

20 MR. DIAMAND: Objection. Calls for a legal 12:54:50
21 conclusion.

22 THE WITNESS: Right. So, in, under those
23 circumstances that are in your hypothetical, I don't
24 know, I can't know if my report would be either
25 appropriate, or used, or anything else. 12:55:04

1 is, Facebook in integration is more effective than 01:06:17
2 it really is.

3 Q. Why does it make it appear that the
4 integration is more effective than it is?

5 A. Because the like count is increasing, 01:06:31
6 despite the fact that the person is not clicking on
7 the like button on the third party website.

8 Q. And does that opinion depend on how much
9 the like counter is increasing, based on messages?

10 MR. DIAMAND: Objection. 01:06:46

11 THE WITNESS: Not necessarily.

12 BY MR. CHORBA:

13 Q. Why not?

14 A. Because it depends, it would depend on
15 exactly what the proportion of the enhancement is. 01:06:55
16 During some, at some point, according to some of the
17 experiments reported on The Wall Street Journal, the
18 like count was increasing twice, or, or, in a
19 two-to-one ratio, to including the URLs in the
20 messages. 01:07:20

21 So, if that happens to a website, a third
22 party website that has like counts organic like
23 counts of, in the order of one or two, then it's a
24 100 percent increase.

25 If it happens to Coca Cola, and they 01:07:34

1 already have 500,000 likes on their third party 01:07:36
2 website, that is a miniscule less than a 1 percent,
3 so, they won't be as influenced or as impressed by
4 the increase.

5 Q. And if you look -- thank you. 01:07:54

6 If you look at 34 B, it states, benefits
7 from artificially increasing the like count on third
8 party websites using Facebook's social plugins.

9 What did you mean by, artificially
10 increasing the like count on third party websites? 01:08:10

11 A. Well, because the idea that the, or the
12 description of the counter next to the like button
13 on the third party website is that it represents the
14 number of times people have clicked on that button.

15 And it was being increased not because 01:08:23
16 people were doing that action of clicking there,
17 they were referencing the URL in a private message.

18 Q. What if someone sent a URL in a Facebook
19 message, knowing and intending that the like count
20 would be increased? Would you consider that to be 01:08:43
21 an artificial increase of the like count?

22 A. Well, that could stand as a description of
23 what the experiments reported in The Wall Street
24 Journal article were, that they were noticing that,
25 and the artificial nature of it is that you are 01:09:02

1 the like count. 01:16:16

2 A. Uh-huh.

3 Q. If somebody is paid to click on the like
4 button on a third party website, would you consider
5 that to be an artificial increase of the like count? 01:16:23

6 A. In that situation, an artificial increase
7 is something that is not a click by somebody who's
8 interested in the brand.

9 Q. How about if someone, think of another
10 example, someone is interested in clicking on that 01:16:40

11 brand, but not maybe in the way of developing an
12 affinity or support of that brand. So, let's use an
13 example of a contest. A local hairdresser offers a
14 contest. If you like my page, you get a free
15 haircut this week, and 100 people enter, only one 01:16:57

16 person gets the, gets the, and they enter by
17 clicking on the like button.

18 A. Uh-huh.

19 Q. Would those be artificial increases in the
20 like count? 01:17:07

21 MR. DIAMAND: Objection. Hypothetical.

22 THE WITNESS: In that hypothetical situation, I
23 think you would consider, or, economically, you are
24 still considering that it's artificial, that it's a
25 misuse of the original intent of the likes, of the 01:17:19

1 like count. 01:17:23

2 I think that's what's behind Facebook changes
3 to just using like as the operating verb, and trying
4 to make it more nuanced, going forward.

5 BY MR. CHORBA: 01:17:37

6 Q. What are you referring to there? I'm
7 sorry, I lost you. When you said it's --

8 A. Well, lately, Facebook has hinted at
9 introducing other alternatives for people to express
10 their response or reaction to posts and things like 01:17:49
11 that. I mean, it's always been a curious thing that
12 if somebody posts a death or reports a death in the
13 family, that the summary way to show your, your
14 awareness of the message, or anything else, is to
15 click on like. 01:18:14

16 Q. I follow you, but, for now, we're just
17 dealing with this case, and it's the like, and I'm
18 trying to understand.

19 So, in that contest hypothetical, you
20 would view that as an artificial like, correct, from 01:18:23
21 an economics perspective?

22 A. Within the context of that hypothetical,
23 yes.

24 Q. And, just to be clear, if the web page had
25 a like button, but no counter next to it -- 01:18:37

1 Q. Mr. Torres, the reporter's just handed you 01:27:14
2 a document that bears the title, we've marked it as
3 Exhibit 5, it bears the title Facebook Q2 2015
4 Results.

5 Can you please take a look at that. 01:27:23

6 A. Yes.

7 Q. And is this, have you seen this document
8 before?

9 A. Yes.

10 Q. Is this the document upon which you relied 01:27:31
11 for purposes of determining that \$1.593 billion
12 figure?

13 A. Yes.

14 Q. Was there any other material you relied
15 upon? 01:27:41

16 A. For that number, no.

17 Q. Precise. I appreciate it. And, more
18 specifically, as stated in footnote 66, you took the
19 numbers from slide 9 of this Exhibit 5 --

20 A. Uh-huh. 01:27:54

21 Q. -- is that right?

22 A. Yes.

23 Q. If you can turn to slide 9. Can you just
24 briefly walk me through how you came up with that
25 number. 01:28:03

1 A. So, the four numbers in the dark portion 01:28:05
2 of the columns of the bars, those are the revenue
3 numbers for the U.S. and Canada region.

4 Q. So that's for Q3 2014 through Q2 2015,
5 those four columns; is that right? 01:28:28

6 A. Yes.

7 Q. So, the numbers, let's just read them off,
8 so we're clear: 1514, 1864, 1739, and 1967?

9 A. Yes.

10 Q. And, what, did you add those together? 01:28:41

11 A. Yes, and then average them.

12 Q. And how did you average them?

13 A. Divide by four.

14 Q. And that's how you came up with the
15 \$1.593 billion figure? 01:28:53

16 A. No. Like it says there, I did another
17 adjustment to, in an attempt to exclude the data
18 from Canada, so I applied 89.96 percent to take into
19 account of the ratio of Canadian population to U.S.
20 population. 01:29:12

21 Q. Thank you. And what was the ratio that
22 you used there, what was the data? It was Census
23 data?

24 A. Yes.

25 Q. Is it commonly accepted economic practice 01:29:25

1 to rely on Census data to back out Canadian revenue 01:29:27
2 versus U.S. revenue?

3 A. Well, in the absence of the right
4 information, because Facebook is not reporting just
5 the U.S. information, so, in the absence of that 01:29:40
6 information, which I believe was asked for, one way
7 to estimate it is to assume that the penetration
8 rate is the same in the U.S. and Canada, and that
9 also means that the ratio population is the same as
10 the ratio of users. 01:30:03

11 Q. But you said that's one way.
12 Is that the best way, in your experience,
13 in lieu of the breakdown from --

14 A. That's a, that's a, I believe, a
15 reasonable approximation, because one of the 01:30:21
16 underlying reasons that companies oftentimes
17 conflate the U.S. and Canada is that the populations
18 are relatively similar for these purposes, so they
19 have the same penetration, they have the same
20 attitudes. For the most part, they share a 01:30:44
21 language, and --

22 Q. Have you relied on -- sorry.

23 A. -- it's a small percentage.

24 Q. I didn't mean to interrupt you, sir.

25 Have you relied on Census data before to 01:30:55

1 make this type of breakdown in giving an expert 01:30:57
2 opinion or making a valuation?
3 A. Yes.
4 Q. And then you deducted expenses of
5 40.75 percent; is that correct? 01:31:08
6 A. Yes.
7 Q. Why did you deduct expenses of
8 40.75 percent?
9 A. Because I want to determine profits, not
10 total revenue. 01:31:18
11 Q. Do you know the actual expenses?
12 A. The actual expenses are not disclosed by
13 user geography.
14 Q. Is it possible that this understates
15 Facebook's expenses? 01:31:29
16 A. Because it's an average for the overall
17 company, it's just as likely to understate it as to
18 overstate it.
19 Q. But it's possible it understates the
20 expenses, correct? 01:31:42
21 A. A lot is possible.
22 Q. But it is possible?
23 A. Well, strictly speaking, there are going
24 to be expenses that cannot be allocated to either
25 one of the geographies, so, in the end, even if we 01:31:58

1 had full access to the information, an apportionment 01:32:07
2 was going to be necessary.

3 Q. And on slide 9, you understand that slide
4 9 concerns revenue by user geography, as noted at
5 the top of the page, correct? 01:32:25

6 A. Correct.

7 Q. And do you understand that the term,
8 revenue, for purposes of slide 9, includes more than
9 just revenue generated by advertising?

10 A. Yes. Did -- 01:32:43

11 Q. Look at slide 8.

12 A. Yeah, so I probably, so, there may have
13 been a mistake in the, in the page number, because I
14 used most of these slides, but the idea is
15 advertising revenue, which is on slide 10. 01:33:09

16 Q. So, you intended to use the figures in
17 slide 10, rather than the figures in slide 9?

18 A. I think I, that's what I used in the
19 calculations. I would have to double-check.

20 Q. Well, I will represent to you, we did the 01:33:31
21 math, and the figures are based on slide 9. If you
22 want to take a break and do the calculations again,
23 they are based on slide 9, as cited in footnote 66.

24 So, is this a mistake in your report?

25 MR. DIAMAND: Just a minute. 01:33:48

1 THE WITNESS: Well, it's an error in the 01:33:49
2 approximation.

3 BY MR. CHORBA:

4 Q. And that would be an error in the
5 approximation on page 18, table 1? 01:33:52

6 A. Yes. It might have adjusted a little bit,
7 because advertising revenue is 90-some percent of
8 the total revenue, so the error, if any, is less
9 than 10 percent.

10 Q. What if I told you the error was 01:34:10
11 \$1.2 billion?

12 Is that a little bit, in your opinion?

13 A. That would be incorrect.

14 Q. Why?

15 A. I don't think there's a way that ad 01:34:20
16 revenue, which, for example, just to take the actual
17 numbers, in the second quarter of '15, advertising
18 revenue from the U.S. and Canada is 1826, and total
19 revenue is 1967.

20 Q. Well, help me understand -- 01:34:38

21 A. That's a difference of 100 million.

22 Q. Look on table 1.

23 Which figure there is populated by your
24 error in relying on slide 9 instead of slide 10?

25 Which number is that? 01:34:50

1 the same number, once corrected, for the whole 01:36:08
2 column, correct?

3 A. Yes.

4 Q. Okay. And then you'd multiple it by the
5 discount factor, and you'd get the discounted value. 01:36:15

6 A. Right.

7 Q. But, if the annual profit number comes
8 down 10 percent each year, the discounted value
9 column is going to come down, as well, correct?

10 A. Right. So, the ratio in which it would 01:36:27
11 come down would be in the ratio of, roughly, the
12 difference is 125 million here, so, 125 in 1800.

13 Q. In one quarter.

14 A. Yes, but the ratio is, is, happens in all
15 four quarters. 01:36:47

16 Q. Mr. Torres, didn't you add up four
17 quarters, then divide by four, then multiply by
18 89 percent?

19 A. That's an average, so that ratio, the
20 ratio is the same across the four quarters, 01:36:56
21 approximately the same, so that ratio is the ratio I
22 would expect the numbers to come down.

23 Q. But what would you expect the total value
24 of \$15 billion in --

25 A. I would have to -- 01:37:14

1 (The following portion was read: 01:37:14
2 Q. But what would you expect the total
3 value of \$15 billion --)
4 Q. -- in table 1, what would you expect that
5 to come down to? 01:37:17
6 A. I would have to revise the calculations to
7 make a determination.
8 Q. And I've done that.
9 And would it surprise you that it's
10 \$1.27 billion off? 01:37:24
11 MR. DIAMAND: Objection.
12 THE WITNESS: But it's not, you are not talking
13 about 1.27 in the quarterly number; it's 1.27 in
14 the --
15 BY MR. CHORBA: 01:37:33
16 Q. That's what I said, sir.
17 A. -- in the capital amount.
18 Q. In the total discounted value, total value
19 at the end, where it's 15 million, that's
20 1.27 million overstated, correct? 01:37:41
21 A. So, the ratio is the same, 1/16th,
22 approximately.
23 Q. Do you think a \$1.27 billion calculation
24 error is insignificant?
25 A. It depends on its relation to the total, 01:37:54

1 so that's why I'm saying it's a 1 in 16 error. 01:37:57

2 Q. But it's still an error.

3 A. It's an error in the calculation, if what
4 you are saying is correct, because --

5 Q. Well, is what I'm saying incorrect? 01:38:11

6 What's incorrect about it? We just went through
7 slide 9 versus 10.

8 A. I didn't say it was incorrect. I said, if
9 it is correct.

10 Q. Well, okay, Mr. Torres, which number is 01:38:21

11 correct? Is it, should the figures be based on
12 slide 9, or slide 10?

13 A. The calculations should have been based on
14 slide 10. I thought I had done it on the basis of
15 slide 10. 01:38:36

16 MR. CHORBA: Do you want to take a break and
17 look at, do the quick calculation to test? We've
18 done it, but I need his testimony on what's right,
19 so we can, let's take a break. I'm not using my
20 allotted time for him to recalculate his table. 01:38:48

21 Shall we go off the record?

22 MR. DIAMAND: Okay.

23 THE VIDEOGRAPHER: It is 1:38. We are going
24 off the record.

25 (Recess: 1:38 p.m. to 1:49 p.m.) 01:38:57

1 THE VIDEOGRAPHER: We are back on the record. 01:49:35
2 It is 1:49.
3 BY MR. CHORBA:
4 Q. Mr. Torres, when we broke, we were looking
5 at table 1, and I think you'd left to just 01:49:41
6 double-check the calculations.
7 Do you have any corrections to make to
8 that table?
9 A. Well, like I, I confirmed that the
10 adjustment that would need to be made to the number 01:49:54
11 derived on line 18 of paragraph 39 is a reduction in
12 the order of 9.17 percent that affects the total
13 value determined in table 1.
14 Q. So --
15 A. So it's within the order of magnitude that 01:50:14
16 I thought.
17 Q. Let's put aside the order of magnitude of
18 the error. What is the correct number? It says on
19 line 18, 3,776,000,000 per year.
20 What's the correct number? 01:50:26
21 A. Well, I didn't make a note. It's
22 9.17 percent less than this.
23 Q. What's the correct number in paragraph 39
24 in your report?
25 A. It's slightly less than this by 01:50:41

1 9.17 percent. 01:50:43

2 Q. You are not going to tell me what the
3 number is?

4 A. I don't have the number at hand.

5 Q. What did you calculate when we left? What 01:50:47
6 did you do?

7 A. I used the spreadsheet to calculate the
8 number. I did the sum of the numbers that I should
9 have used.

10 Q. Can you bring that spreadsheet in so we 01:50:57
11 can get the correct numbers.

12 MR. DIAMAND: Hold on. I don't think we
13 realized that what you were expecting was the
14 corrected number for line, or line 18 --

15 MR. CHORBA: It is. Let's break and get it. 01:51:11

16 MR. DIAMAND: We will provide that. That was
17 not what our understanding was. I'm sorry.

18 MR. CHORBA: Okay. Fair enough. That's fine.
19 Let's break. I should have been clear. We want the
20 corrected figures in the report. 01:51:17

21 MR. DIAMAND: Okay.

22 THE VIDEOGRAPHER: Okay. It's 1:51. We're
23 going off the record.

24 MR. DIAMAND: Hold on.

25 MR. BATES: Just so we don't go off the record 01:51:26

1 again, I just want to make sure we get exactly what 01:51:28
2 you want, so --

3 MR. CHORBA: Yeah. Mr. Bates --

4 MR. BATES: We're trying to --

5 MR. CHORBA: I understand. 01:51:36

6 MR. BATES: -- provide you with what you
7 wanted --

8 MR. CHORBA: I understand.

9 MR. BATES: -- the last time around.

10 MR. CHORBA: So, paragraph, in paragraph 39 and 01:51:36
11 in table 1 on page 18, the corrected figures.

12 MR. BATES: For every single -- okay.

13 MR. CHORBA: Yeah. I mean, I want the right
14 numbers so I can ask him questions today and not
15 bring him back again. 01:51:50

16 MR. BATES: Do you want like all the way
17 through?

18 MR. CHORBA: Yes.

19 MR. BATES: Okay.

20 THE VIDEOGRAPHER: It's 1:51. We're going off 01:51:56
21 the record.

22 (Recess: 1:51 p.m. to 2:05 p.m.)

23 THE VIDEOGRAPHER: We're back on the record.
24 It's 2:05.

25 BY MR. CHORBA: 02:05:57

1 Q. Mr. Torres, when we broke, you were going 02:05:57
2 to take another look at the figures cited in
3 paragraph 39, footnote 66, and table 1.

4 Do you have corrections for us?

5 A. Yes. 02:06:06

6 Q. Can you give those to me, please.

7 A. Okay. So, starting in paragraph 39, at
8 the end of line 13, the advertising revenue is in
9 the order of 1,459,000,000 per quarter. And in
10 footnote 66, at the end of the second line, the four 02:06:31
11 quarters would be the four quarters between
12 July 2014 through June 2015. The correct number is
13 1,622,000,000.

14 Q. That's in place of the 1771?

15 A. 1771. Yes. And then in line 18, at the 02:06:52
16 beginning of the line, the profit is 3,459,000,000
17 per year.

18 MR. DIAMAND: Would you permit me to make one
19 additional point, which is that there's a reference
20 to slide 9 in footnote 66. 02:07:11

21 MR. CHORBA: Thank you, Nick.

22 MR. DIAMAND: Which would be, I think, now,
23 slide 10.

24 MR. CHORBA: Thank you.

25 MR. DIAMAND: I apologize for the objection. 02:07:18

1 BY MR. CHORBA: 02:07:23

2 Q. So, those three corrections on page 15, is
3 that all, Mr. Torres?

4 A. Yes. And then that feeds into the table
5 1, where the annual profit numbers would be 02:07:32
6 3,459,000,000, and the discounted values in that
7 line, for the whole line, for the full column, would
8 be 2915, 2457, 2070, 1745, 1470, 1239, 1044, and
9 880, for a total of 13,820,000,000.

10 Q. Thank you. Was that everything? 02:08:18

11 A. Yes.

12 Q. Thank you for doing that. I appreciate
13 it.

14 Is, you referenced earlier a spreadsheet.

15 Do you have a working sheet that has the 02:08:27
16 calculations for table 1 that you then used to
17 generate table 1?

18 A. Yes. I have a model set up in my
19 software.

20 *RQ MR. CHORBA: Would it be possible for us to get 02:08:46
21 a copy of that, electronic copy of that model? And
22 maybe I should direct this to you, Mr. Diamand, but
23 we have, I'm slightly off, and I think it may be
24 just rounding errors on our part. I'd like to just
25 consult that with our expert, and look at the actual 02:09:00

1 formulas, just to make sure. 02:09:03

2 MR. DIAMAND: Okay, we can address that.

3 MR. CHORBA: Thank you.

4 BY MR. CHORBA:

5 Q. So, setting aside the mathematical error 02:09:16
6 that we discussed, Mr. Torres, do you have any other
7 concerns about the accuracy of the information
8 provided in paragraph 39 on page 15?

9 A. Not concerns. These, because these are
10 estimates, we're still waiting for the information 02:09:34
11 that corresponds to U.S. advertising revenue. These
12 are just my estimates of that number.

13 So, when we get it, we'll substitute it,
14 and there won't be any question of these
15 calculations. 02:09:49

16 Q. You said there's U.S. advertising revenue.
17 What information are you waiting for?

18 A. The advertising revenue that reflects only
19 the U.S.

20 Q. And it's your understanding that's been 02:10:03
21 requested?

22 A. Yes.

23 Q. Are you assuming that all advertising
24 revenue to Facebook is attributable to the social
25 graph? 02:10:14

1 that determination, that determination would 02:13:08
2 constitute a quantification of the potential overlap
3 of the calculations, so, if there is information to
4 determine that, by somebody else, I could make a
5 count of that potential overlap. 02:13:24

6 BY MR. CHORBA:

7 Q. But in your report, as stated, you haven't
8 developed a methodology to account for that overlap?

9 A. As the methodology states, I don't have
10 that information available. 02:13:39

11 Q. What if an individual, the same individual
12 sent the same URL in multiple Facebook messages?

13 Would each message be accounted for
14 separately, under your damages methodology?

15 MR. DIAMAND: Objection. 02:13:58

16 THE WITNESS: The methodology depends, is
17 structured in two stages. One is to determine
18 eventually the value per link, and then I would
19 incorporate the number of links captured that fall
20 under the definition of a class. 02:14:20

21 So, it's a technical determination. I would
22 take that number from the technical analysis.

23 BY MR. CHORBA:

24 Q. Turning back to paragraph 39, how did you
25 determine that the average cost of revenue, 02:14:34

1 have you excluded expenses for research and 02:17:20
2 development?

3 A. Yes. In some valuations, yes.

4 Q. But not in all of them?

5 A. No. It depends on what is being measured. 02:17:30
6 In some valuations, the research and development is
7 the only aspect it would take. In some, it's one
8 you would exclude, so, it depends.

9 Q. And in, staying on slide 13 of Exhibit 5,
10 why did you pick these four quarters of Q3 2014 02:17:46
11 through Q2 2015?

12 A. Both in the revenue and the expenses, I
13 used the last four quarters, so, the trailing 12
14 months as of the latest information that I had
15 available by the time I did the report. 02:18:02

16 Q. Are you assuming that costs do not change
17 over time, or will not change over time?

18 A. No. The implicit assumption is that I'm
19 using the cost structure that was prevalent on
20 average in the last, in the trailing 12 months. 02:18:15

21 Q. If you were tasked with valuing the social
22 graph of Myspace in 2007, would you have used a
23 similar methodology as one that you've used here?

24 MR. DIAMAND: Objection.

25 THE WITNESS: Well, in that hypothetical 02:18:45

1 situation, I would have to, to perform a series of 02:18:46
2 due diligence and preliminary analyses. I'm not
3 sure that Myspace had the same revenue model, so I
4 would have to reconsider the revenue model then,
5 and, to see if that is sufficient. 02:19:06

6 BY MR. CHORBA:

7 Q. What about the discount factor? Would you
8 have used the same methodology to come up with a
9 discount factor?

10 A. Yes. The general methodology that I use 02:19:16
11 for the discount factor is the same everywhere.
12 This is the generally accepted way of determining
13 that discount rate.

14 Q. In table 1 on page 18, are you assuming
15 the social graph will generate the same annual 02:19:29
16 profit every year?

17 A. Approximately, yes. The underlying
18 assumption is that in valuing the asset, I'm not
19 considering further growth of the asset. This is
20 just the asset as it was in, at the end of the 02:19:52
21 second quarter of 2015.

22 That asset doesn't go away. It's an
23 asset, so it continues to generate revenue for, on
24 average, an eight year remaining useful economic
25 life. 02:20:12

1 Q. So at the end of paragraph 44, you say, 02:25:24
2 therefore, the impact of additional information
3 intercepted from private messages on Facebook's
4 revenue flows directly to the bottom line,
5 parentheses, profits. 02:25:34

6 What's the basis for that statement?

7 A. The definition of profits. Profits is,
8 or, the incremental profits are the incremental
9 revenue minus incremental costs. If incremental
10 cost is zero, incremental profit is incremental 02:25:50
11 revenue.

12 Q. And if incremental profits isn't zero,
13 then there would be a change, correct?

14 A. Yes. If incremental costs are greater
15 than zero, then the profits would be a little lower 02:26:01
16 than revenue.

17 Q. Thank you. I will read paragraph 45.
18 Again, I'll read it: With the relevant quantitative
19 information, I would estimate the value of the
20 enhancement to the social graph as commensurate with 02:26:16
21 the ratio of, one, intercepted URLs in private
22 messages during the class period, to two, number
23 two, the total number of links on the social graph.

24 What is the relevant quantitative
25 information that you require? 02:26:31

1 A. The number of intercepted URLs in private 02:26:35
2 messages during the class period, and the number of
3 links on the social graph.

4 Q. So, it's those two numbers, one and two?

5 A. Those two classes of numbers. The number 02:26:46
6 is different every day, so there will be a periodic
7 report during the class period.

8 Q. And how would you determine the number of
9 intercepted URLs in private messages during the
10 class period? 02:27:01

11 MR. DIAMAND: Objection.

12 THE WITNESS: It's not my task to determine
13 that. That's a technical determination. I would
14 take it from the technical determination.

15 BY MR. CHORBA: 02:27:12

16 Q. And if it were not possible technically to
17 determine the number of, quote, intercepted URLs,
18 would you be able to complete your analysis?

19 A. In that situation, it would still be the
20 case that I have to rely on whatever is the 02:27:26
21 determination of what the accused activities
22 resulted in, so it would require considering a
23 different measure if intercepted URLs and private
24 messages is not the right one.

25 Q. So, let me just make sure I understand. 02:27:46

1 member sends the same number of messages on average 02:37:53
2 per month, for purposes of this analysis?

3 A. No.

4 Q. Why not?

5 A. I didn't have to, because I didn't 02:38:01
6 consider those, that's not part of the, the analysis
7 in the report.

8 Q. Why not?

9 A. Because I don't have the information about
10 what, how many messages each user sent, et cetera, 02:38:14
11 how many fall into the definition of the class, and
12 I'm going to wait to get that in order to, to use
13 any information in that realm.

14 Q. Did you undertake any analysis of the
15 number of messages that the named plaintiffs in this 02:38:32
16 case have sent?

17 A. No.

18 Q. Have you ever seen those figures?

19 A. No.

20 MR. CHORBA: Let's mark the next one Exhibit 6. 02:38:43

21 (Exhibit 6 was marked for identification
22 by the court reporter and is attached hereto.)

23 MR. CHORBA: And let's do 7, while we're at it.

24 (Exhibit 7 was marked for identification
25 by the court reporter and is attached hereto.) 02:39:09

1 organizations that contemplated hundreds and, if not 03:32:04
2 thousands, of advertising.

3 BY MR. CHORBA:

4 Q. Which ones?

5 A. So, for example, the Comdesk, Nielsen, and 03:32:11
6 the study, in particular, that's behind table,
7 table, table, table 3, from social code, that
8 analysis considered 5 million ads placed over, by 50
9 companies.

10 So I, I reference those kinds of studies 03:32:38
11 that cover a broad spectrum of advertisers, not any
12 one advertiser in particular.

13 Q. And, again, that's just one survey, but
14 you didn't familiarize yourself with the practices
15 of every marketer that advertises on Facebook. 03:32:57

16 MR. DIAMAND: Objection.

17 THE WITNESS: I would think that it's virtually
18 impossible to familiarize yourself with the
19 practices of every advertisers on Facebook.

20 BY MR. CHORBA: 03:33:09

21 Q. Agreed. Turning back to paragraph 62 in
22 your report, we'll save some time if you just keep
23 it open, because we're going to concentrate on that
24 section.

25 And, again, you didn't perform any actual 03:33:26

1 THE WITNESS: Yes. 03:34:25

2 BY MR. CHORBA:

3 Q. Which case?

4 A. In the Fraley v. Facebook case.

5 Q. Did that report ultimately provide an 03:34:31

6 estimated amount of damages to the putative class?

7 A. If I recall correctly, I may have an

8 estimate, but I don't think I, I gave a definite

9 number, because the -- I have an estimate based on

10 broad averages based on one study that was done by 03:35:00

11 Facebook.

12 Q. And do you have a broad estimate based on

13 averages for damages in this case?

14 A. In this section of the methodology, no;

15 that's why I'm using the literals Y and Z. 03:35:14

16 Q. And how about for your other portions of

17 your methodology? Do you have a rough estimate of

18 damages?

19 A. No. I have a rough estimate of part of

20 the components of the methodology. I'm waiting for 03:35:28

21 the full information about the messages that are

22 subject to the class.

23 Q. And what is your rough estimate of the

24 amount that you were able to calculate?

25 MR. DIAMAND: Objection. 03:35:43

1 THE WITNESS: So, I only calculated the, as an 03:35:45
2 estimate, the value of the social graph as of the
3 second quarter of 2015.

4 BY MR. CHORBA:

5 Q. And what is that value? 03:35:56

6 A. That's the value from table 2. Table 1.

7 Q. That's the one that we corrected earlier?

8 A. Yes.

9 Q. So, \$13 billion?

10 A. 13.8 billion, yes. 03:36:12

11 Q. And have you opined on how, if that's a
12 component of the damages, how those will be
13 allocated, apportioned to putative class members?

14 MR. DIAMAND: Objection.

15 THE WITNESS: Yes. I believe that is in the, 03:36:26
16 in the report.

17 BY MR. CHORBA:

18 Q. Where are you pointing, sir?

19 A. To paragraph 60, on page 22, where it says
20 that it's, it is my opinion that a proper 03:36:42
21 attribution of damages among plaintiff class
22 members, calculated as benefits derived by the
23 defendant, should be based on the number of links,
24 URLs intercepted.

25 Q. So, how would you apportion that, pursuant 03:36:55

1 to that statement, how would you apportion the 03:36:57
2 \$15 billion, or I think it's now \$13 billion?

3 MR. DIAMAND: Objection.

4 THE WITNESS: Well, first, the 13 billion is
5 not the amount of damages. That's the value of the 03:37:07
6 social graph.

7 BY MR. CHORBA:

8 Q. What's the amount of damages, then?

9 MR. DIAMAND: Objection.

10 THE WITNESS: I didn't calculate it. 03:37:15

11 BY MR. CHORBA:

12 Q. How are you going to calculate it?

13 MR. DIAMAND: Objection. Asked and answered.

14 BY MR. CHORBA:

15 Q. How are you going to calculate it? 03:37:20

16 MR. DIAMAND: Also, objection.

17 THE WITNESS: Applying the methodologies set
18 out in section 4 A.

19 BY MR. CHORBA:

20 Q. Are certain class members under your 03:37:33
21 methodology going to get more than other putative
22 class members?

23 A. I don't know for a fact. It is possible.

24 Q. Will certain class members get zero
25 dollars, under your methodology? 03:37:48

1 THE WITNESS: Correct, so I don't have in front 03:40:46
2 of me the information that I would need to make that
3 determination. So, assuming complete information,
4 that's my answer.

5 BY MR. CHORBA: 03:40:59

6 Q. So, again, I'm asking you to assume that
7 there was no social plugin on this Craigslist
8 website on July 11, 2012. If that's true, then
9 there wouldn't be damages under section 4 B for that
10 particular message, correct? There might be under 4 03:41:11
11 A, but not under 4 B.

12 MR. DIAMAND: Objection.

13 THE WITNESS: So, in that hypothetical
14 situation, if the information that has not been yet
15 provided fits that construct, probably not. 03:41:25

16 BY MR. CHORBA:

17 Q. And the information that has not been
18 provided would be whether or not that Craigslist
19 website had a social plugin at the time of that
20 message. 03:41:42

21 A. For this aspect, yes, that's what we would
22 like to know.

23 Q. Thank you. Let's turn back, and, again,
24 I'm in your report, I think we're on paragraph 62,
25 where you have the X, excuse me, the Y and the Z 03:41:52

1 A. Yes. 03:45:57

2 Q. And what is that market?

3 A. I believe there are reports that marketers
4 are able to acquire likes, or increases to their
5 counts, for a fee. I see that advertised on 03:46:11
6 Twitter, et cetera.

7 Q. And does, to the extent there is such a
8 market, does the market value all likes the same
9 way?

10 MR. DIAMAND: Objection. 03:46:28

11 THE WITNESS: The concept of the market value
12 refers to everything in the market, depending on the
13 definition of the market. So, in that sense, it's
14 the same, but not all likes have the same value,
15 depending on their use. 03:46:54

16 BY MR. CHORBA:

17 Q. And would the likes differ based on the
18 third party website, for example, Coca Cola versus a
19 personal blog?

20 MR. DIAMAND: Objection. 03:47:05

21 THE WITNESS: Yes. In principle, each like can
22 be leveraged in different ways so it's valued
23 differently. The point is, the benefit is to
24 Facebook, ultimately.

25 BY MR. CHORBA: 03:47:21

1 Q. And it's your opinion that that benefit to 03:47:21
2 Facebook is the same?

3 MR. DIAMAND: Objection.

4 THE WITNESS: No, that's not my opinion.

5 BY MR. CHORBA: 03:47:29

6 Q. What is your opinion?

7 A. That Facebook benefits from the aggregate.

8 Q. So the aggregate, even though if
9 individual increased likes are valued differently,
10 in the aggregate, it's benefiting from the 03:47:42
11 collective total of all of those.

12 MR. DIAMAND: Objection.

13 THE WITNESS: Yes. That's, that's the type of
14 economy that Facebook works in.

15 BY MR. CHORBA: 03:48:00

16 Q. If you look at paragraph 64 on the next
17 page, in the middle of the page, or middle of that
18 paragraph, and you can review the whole paragraph,
19 but I want to direct your attention to like 11,
20 where it states, while the cost is relatively 03:48:24
21 straightforward to ascertain, in the digital
22 advertising environment, gains from advertising are
23 susceptible to estimation in a variety of ways, such
24 as by the number of visitors to a web page, the
25 number of incoming links, the activity on social 03:48:39

1 overcompensated in that hypothetical? 03:57:18

2 MR. DIAMAND: Objection. Misstates prior
3 testimony.

4 THE WITNESS: In that hypothetical situation,
5 you are also assuming that the URLs were intercepted 03:57:28

6 by Facebook during the time when they were

7 incrementing the likes, and the methodology is

8 attributing, is not measuring the effect, the

9 detriment, for example, to the class member, so it's

10 allocating to class members as a whole the benefits 03:57:57

11 to Facebook as a whole.

12 BY MR. CHORBA:

13 Q. I understand. But, once it's allocated --

14 that's how you are measuring it -- but, then, once

15 you get to the stage when you are allocating it to 03:58:08

16 individual class members, if it is allocated to a

17 class member who sent a message containing a URL,

18 but there was no incrementation of the like count,

19 would you agree that that would overcompensate that

20 specific class member? 03:58:21

21 MR. DIAMAND: Objection.

22 BY MR. CHORBA:

23 Q. Yes or no?

24 A. No, it wouldn't, because it would be,

25 actually, it would be exact, because Facebook had to 03:58:26

1 inflated like count; do you know that? 04:04:52

2 A. I don't understand the question.

3 Q. What is the value?

4 MR. DIAMAND: Objection.

5 THE WITNESS: The numeric value? 04:05:00

6 BY MR. CHORBA:

7 Q. Yeah, let's start there.

8 A. I don't know what the number is.

9 Q. What would you need to know that?

10 A. So, the information that I list here is 04:05:07

11 the, how many URLs were intercepted that had, that

12 eventually led to like counts being increased, and

13 the ratio of those increases to the total like

14 counters, and that applied to the value of the

15 advertising revenue perceived by Facebook. That's a 04:05:37

16 small portion.

17 That, divided by, so, that value divided

18 by the inflated like count, the total inflated like

19 count, gives the value of the average or the, of,

20 each, an average, in my sense there, is the same. 04:06:00

21 Q. How do you propose, or do you propose a

22 way to determine the number of URLs that you claim

23 were intercepted?

24 MR. DIAMAND: Objection.

25 THE WITNESS: No. That's a technical question 04:06:13

1 THE WITNESS: So, not here, but, typically, in 04:08:54
2 statistical inference, a 5 percent error is
3 customary and generally accepted.

4 BY MR. CHORBA:

5 Q. And if you are dealing with many billion 04:09:07
6 number of messages, in the aggregate, not containing
7 URLs that had like counts incremented, but I'm
8 referring to table 2, what would a 5 percent error
9 rate, in your estimation, translate into?

10 A. It wouldn't translate into a number that 04:09:25
11 can be compared to the number of messages. The
12 5 percent refers to something else, to the
13 probability of making a mistake in the calculation
14 of the average with respect to the population mean.

15 Q. So you said, a 5 percent error rate is 04:09:45
16 customary and generally accepted.

17 Would the error rate be higher or lower
18 when you are dealing with tens of billions of
19 messages?

20 MR. DIAMAND: Objection. 04:09:56

21 THE WITNESS: Again, in a statistical analysis,
22 the error rate refers to those two probabilities.
23 It does not refer to multiplying it by the number of
24 elements in the set.

25 BY MR. CHORBA: 04:10:08

1 Q. So, are you able to say the bare minimum? 04:10:08

2 Well, let me ask you, based on the
3 messages that are contained in Exhibits 6 and 7, are
4 you able to come up with an estimate?

5 MR. DIAMAND: Objection. 04:10:19

6 THE WITNESS: An estimate of what?

7 BY MR. CHORBA:

8 Q. An estimate of the number of intercepted
9 URLs?

10 A. I don't understand the question. 04:10:26

11 Based on, based on what?

12 Q. Based on the messages that are summarized
13 in Exhibits 6 and 7 in the chart.

14 MR. DIAMAND: Objection.

15 THE WITNESS: [REDACTED] 04:10:38

16 [REDACTED]

17 [REDACTED]

18 BY MR. CHORBA:

19 Q. [REDACTED]

20 A. [REDACTED] 04:10:49

21 [REDACTED]

22 The reference point I would take or the
23 comparison that I would do is that a 5 percent error
24 rate for a sampling of the U.S. population requires
25 a sample size in the thousands of people. 04:11:15

1 So, a poll, to be statistically 04:11:18
2 significant to represent the views of 300 million
3 people, would need to take a look at 5 or 6,000. It
4 depends on the estimates of the variance that's
5 relevant for the variable being measured. 04:11:35

6 So, because Facebook is covering such a
7 large proportion of the population in the U.S., I
8 would expect that a proper determination of the
9 sampling techniques that would be applicable if
10 Facebook doesn't come up with the actual 04:11:54
11 information, would be in the order of the thousands
12 of people, as, as a representative sample that would
13 give, its averages would give a statistically sound
14 representation of the population mean.

15 Q. And so it wouldn't be a number of 04:12:14
16 messages; it would be a number of people who use
17 Facebook?

18 MR. DIAMAND: Objection.

19 THE WITNESS: Well, I would think that it would
20 depend more on the number of members, because the 04:12:28
21 number of messages per member can vary, but it might
22 be necessary to consider the joint distribution of
23 messages and members, as well.

24 BY MR. CHORBA:

25 Q. Turning to paragraph 73 -- 04:12:41

1 this benefit may have been converted to advertising 04:25:07
2 revenue benefiting Facebook.

3 Do you know what the fraction of the
4 benefit is?

5 A. Not as of this date, no. 04:25:18

6 Q. And does your report assume that
7 advertisers would have passed 100 percent of their
8 cost savings on to Facebook?

9 A. Is that my assumption, that they would --

10 Q. Yes. Is that your assumption? 04:25:37

11 A. No.

12 Q. What is your assumption, then?

13 A. That a fraction would have been converted.

14 Q. Which fraction?

15 MR. DIAMAND: Objection. 04:25:49

16 THE WITNESS: I don't have the information to
17 determine that fraction.

18 BY MR. CHORBA:

19 Q. Can you tell me if it's more than
20 50 percent? 04:25:55

21 A. I can't tell you, because I don't have the
22 information to determine it.

23 Q. So you can't give me any estimate on the
24 range of zero percent to 100 percent?

25 A. No. Without information, all I can tell 04:26:05

1 spending, because there is an overlap in the time 04:29:13
2 periods, and that is basically what creates that
3 overlap that has to be accounted for.

4 So, if it were to be the case that benefits
5 from one perspective are the same as the benefits 04:29:28
6 from the other perspective, then, yeah, the overlap
7 with, would mean that you wouldn't add them
8 together. You would just have one.

9 BY MR. CHORBA:

10 Q. And what if the benefits were greater than 04:29:42
11 the calculated effect from the incremental
12 advertising revenue? That would result in a
13 negative number?

14 A. In, it would be a very strange
15 hypothetical situation where that would even be the 04:30:06
16 case, because of the length of the time period.

17 Q. But, if it were the case, it would be a
18 negative number?

19 A. So, whatever the methodology determines
20 for those two numbers would have to do the analysis 04:30:16
21 of the overlap, and, if the overlap overwhelms the
22 situation, then only one of them would be
23 appropriate.

24 Q. So, you would never have a negative
25 number; you'd just pick the higher one? 04:30:30

1 A. No. The net. I would always pick the net 04:30:32
2 damages.

3 Q. But how would the net, if you are saying
4 that you would deduct the amounts, the analysis in
5 this section shall be deducted from the benefits 04:30:43
6 calculated under the methods described in the
7 previous section, okay, I'm saying, if the benefits
8 were greater than the calculated --

9 A. Now, what this means is that --

10 MR. DIAMAND: Objection. 04:30:59

11 THE WITNESS: -- what this means is that the
12 overlap has to be taken into account. That overlap
13 can be calculated, when everything is said and done,
14 and that overlap means that only one of the two
15 calculations will prevail. 04:31:12

16 BY MR. CHORBA:

17 Q. One of the two, meaning A or B?

18 A. So, if you add A and B, you would then
19 have to take away the overlap.

20 Q. I see. Okay. So, that calculation is 04:31:21
21 just attempting to deduct that overlap for the time
22 period.

23 A. Yes. It would avoid double-counting.

24 Q. Does your damages methodology account for
25 the possibility that the benefit of the challenged 04:31:37

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby
3 certify:

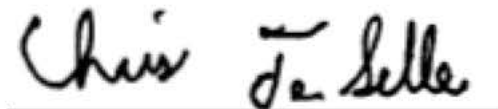
4 That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were duly sworn; that a record
8 of the proceedings was made by me using machine
9 shorthand which was thereafter transcribed under my
10 direction; that the foregoing transcript is a true
11 record of the testimony given.

12 Further, that if the foregoing pertains to the
13 original transcript of a deposition in a Federal
14 Case, before completion of the proceedings, review
15 of the transcript [X] was [] was not requested.

16 I further certify I am neither financially
17 interested in the action nor a relative or employee
18 of any attorney or party to this action.

19 IN WITNESS WHEREOF, I have this date subscribed
20 my name.

21 Dated: 1/5/2016

22
23 

24 CHRIS TE SELLE

25 CSR No. 10836