

February 21, 2019

VIA E-MAIL

Donald S. Clark, Secretary of the Commission  
Andrew Smith, Director, Bureau of Consumer Protection  
Federal Trade Commission  
600 Pennsylvania Avenue NW  
Washington, DC 20580

Dear Mr. Clark and Mr. Smith,

The undersigned privacy, technology, parent, and consumer advocacy organizations respectfully request that the Federal Trade Commission investigate whether Facebook has engaged in unfair or deceptive practices in violation of Section 5 of the Federal Trade Commission Act and the Children's Online Privacy Protection Act (COPPA).

This request is based on Facebook's practices that recently came to light when a court granted a request from the Center for Investigative Reporting to unseal documents from a class action lawsuit brought in 2012.<sup>1</sup> Plaintiffs in the lawsuit alleged that Facebook tricked children into making in-game purchases and then made refunds almost impossible to obtain. Facebook settled the case in 2016.

The unsealed documents show that for years--at least as far back as 2010 and as recently as 2014--Facebook maintained a system that encouraged children to make unknowing and unauthorized credit card purchases for virtual items in games on Facebook's platform.<sup>2</sup> After parents and minors repeatedly complained about the credit card charges, internal Facebook documents demonstrate the company refused to refund charges and set up a labyrinthine complaint system to deter refund requests. Internal documents also reveal that the company was aware that games on its platform were popular with children as young as five.

The practice of charging children for purchases made without parental consent, and often without parental awareness, constitutes an unfair practice under the FTC Act, 15 U.S.C. § 45(n). Indeed, the FTC and a federal court have already found this type of conduct is unfair. In complaints filed

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<sup>1</sup> *IB v. Facebook*, No. 12-1894 (N.D. Cal. May 26, 2016), and see Halverson, Nathan. "Facebook Knowingly Duped Game-Playing Kids and Their Parents out of Money." *Reveal*, *Reveal*, 26 Jan. 2019, [www.revealnews.org/article/facebook-knowingly-duped-game-playing-kids-and-their-parents-out-of-money/](http://www.revealnews.org/article/facebook-knowingly-duped-game-playing-kids-and-their-parents-out-of-money/).

<sup>2</sup> *IB v. Facebook*, No. 1201894 (N.D. Cal. May 26, 2016)

against Apple, Google, and Amazon, the FTC alleged that the companies acted unfairly in permitting children to make in-app purchases when it was not clear when a purchase was being made and when parents were not given a choice whether to allow the minor child's purchases.<sup>3</sup> Settlement agreements with the FTC required those companies to modify their billing practices to ensure they obtained express, informed consent from consumers for any in-app purchases, and required them to offer refunds of up to \$70 million.<sup>4</sup> Given the similarity of the conduct at issue, Facebook users should be entitled to similar relief.

Facebook's practices also indicate a potential violation of COPPA, which the Federal Trade Commission should investigate. Documents demonstrate that Facebook knew that certain games were highly popular with young children, some as young as five years old. This calls into question Facebook's claims that its entire platform is for a "general audience," as these games appear targeted to youth. In any event, it certainly indicates actual knowledge of child users on the platform for the purpose of the statute.<sup>5</sup>

The need for the FTC to investigate Facebook is not obviated by the settlement agreement reached in the class action suit.<sup>6</sup> First, the class action lawsuit did not address potential COPPA violations and concerned only unfair billing practices. Second, by its terms, the settlement agreement expires in May 2019. Without FTC action, Facebook could resume these unfair practices.

Third, the terms of the agreement are insufficient to prevent consumer harm. Significantly, it does not require Facebook to cease manipulating young children into making unauthorized and/or unknowing purchases. Instead of stopping Facebook from encouraging unauthorized charges, the settlement agreement places the responsibility on minors to get permission from their parents,<sup>7</sup> and if they don't, requires parents to go to the trouble of seeking a refund.<sup>8</sup> Also, it

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<sup>3</sup> See ruling in *FTC v. Amazon*, 2016 [Federal Court Finds Amazon Liable for Billing Parents for Children's Unauthorized In-App Charges](#), and *FTC v. Apple*, [FTC Approves Final Order in Case About Apple Inc. Charging for Kids' In-App Purchases Without Parental Consent](#), and *FTC v. Google*, [FTC Approves Final Order in Case About Google Billing for Kids' In-App Charges Without Parental Consent](#)

<sup>4</sup> *FTC v. Amazon*

<sup>5</sup> See COPPA - 16 CFR § 312.3

<sup>6</sup> *FTC v. Apple*

<sup>7</sup> *IB v. Facebook* Approved Settlement Order, see Paragraph 2(vii) requires Facebook to put language in its Community Payment Terms warning that "If you are under the age of eighteen, you may use Facebook Payments only with the involvement of your parent or guardian." Attached as Appendix 1.

<sup>8</sup> The settlement agreement does require Facebook to add a checkbox to its refund request form to indicate that the in-app purchases were made by a minor, and to implement a dedicated queue for processing these requests. While this may make the process of seeking a refund easier, it does not assure that parents will actually receive refunds.

fails to require Facebook to provide prominent disclosures to parents that by using a credit card, their children can charge items on that card.

Nor does the settlement agreement make whole the consumers harmed by Facebook's unfair practices. The settlement agreement does not require Facebook to refund all consumers victimized by its practices, or to issue refunds for any future unauthorized in-app purchases by minors.<sup>9</sup> Indeed, Facebook's Help Center guidance for games still indicates children can rack up charges on parents' accounts without a parent realizing it.<sup>10</sup> Thus, the FTC needs to investigate Facebook's practices and ensure consumers are able to obtain meaningful redress and to prevent similar unauthorized purchases in the future.

## SECTION 5

Practices are unfair under Section 5 of the FTC Act if (1) they cause or are likely to cause substantial injury to consumers, (2) the injury cannot reasonably be avoided by consumers, and (3) the injury is not outweighed by any countervailing benefits to consumers or competition.<sup>11</sup> It is patently clear that Facebook's actions here were unfair.

First, the court documents demonstrate substantial injury to consumers--one teenager incurred \$6,500 of charges in a few weeks.<sup>12</sup> At one point nearly 10% of the \$3.6 million spent by minors on gaming was in dispute with credit card companies.<sup>13</sup> Facebook deceived consumers for years, and the costs were substantial—for example, in just one three month period, consumers lost hundreds of thousands of dollars they did not intend to spend.<sup>14</sup> The fact that request rates for refunds were 20 times higher than the usual rate of refund requests demonstrates that consumers did not wish to make these purchases.

What's more, Facebook's exploitative practices targeted a population universally recognized as vulnerable—young people. Facebook took advantage of unsuspecting kids, one of whom employees referred to as a "whale," using casino parlance to refer to the child's high volume of purchases.<sup>15</sup> These teens and children were just trying to play games, and without realizing it, they could have charged hundreds or even thousands of dollars on their parents' credit cards.

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<sup>9</sup> See Approved Settlement Order in *IB v. Facebook*, Appendix 1.

<sup>10</sup> See [Facebook's Help Center, Game Payments](#) - "If you see a Facebook charge on your bank statement that you don't recognize, make sure a family member, friend or co-worker didn't use your account to buy something without you knowing."

<sup>11</sup> 15 U.S.C. § 45(n).

<sup>12</sup> Exhibit OO to Plaintiff's Motion for Class Certification (Unsealed Dkt. 194-9), attached as Appendix 2

<sup>13</sup> Exhibit H to Plaintiff's Motion for Class Certification (Unsealed Dkt. 193-9), attached as Appendix 2

<sup>14</sup> Exhibit H (Unsealed Dkt. 193-9), Appendix 2

<sup>15</sup> Exhibit OO (Unsealed Dkt. 194-9), Appendix 2

Through no fault of their own, they were likely made to feel as if they had created substantial, real-world problems for their families. They and their parents expended untold time and energy attempting to acquire refunds. Some simply gave up as Facebook said the charges were not refundable.

Second, it is obvious the consumers could not reasonably avoid these purchases, which appear to have been made largely without knowledge, let alone informed consent. It is well documented that game developers use persuasive and manipulative design tactics to encourage children to spend money.<sup>16</sup> The games defaulted to the highest cost settings, which Facebook knew “can confuse minors.”<sup>17</sup> Facebook knew that a number of in-game purchases were so integrated into gameplay that children did not realize they were spending real money, with one employee noting that purchases with Facebook credits “do[n’t necessarily look like real money to a minor.”<sup>18</sup> Indeed, in what attorneys for users describe as “survey responses,” one mother wrote that her child “is only 7 years old, she did not know that she really paid (real [money].)”<sup>19</sup> Facebook knew that adults did not realize that a credit card they had entered once, possibly for purposes entirely unrelated to a child’s gameplay, would remain in the system and be charged again and again as their child played. Emails and memos from Facebook employees note that “[i]n nearly all cases the parent knew their child was playing Angry Birds, but didn’t think the child would be allowed to buy anything without their password or authorization first,” and “[t]he parent had a stored credential either from previous game spend or from advertising on Facebook. Nearly all stated that they were surprised that the child wasn’t prompted for some sort of authorization first.”<sup>20</sup> Facebook did not even bother to send receipts to many parents--at one point, only half of users were receiving email receipts.<sup>21</sup>

And even though some Facebook employees proposed tools to help consumers avoid these purchases, Facebook declined to implement them. Facebook employees knew something unusual was going on, and they knew that kids and parents were unaware that these purchases were being made. Some employees investigated and proposed some options to lessen the likelihood that kids would unknowingly spend their parents’ money. But countermeasures, such as requiring credit

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<sup>16</sup> Meyer, Marisa, et al. “Advertising in Young Children’s Apps.” *Journal of Developmental Behavioral Pediatrics*, vol. 40, no. 1, 2019, pp. 32–39., doi:10.1097/dbp.0000000000000622.

<sup>17</sup> Exhibit D to Plaintiff’s Motion for Class Certification (Unsealed Dkt. 193-2), and Exhibit M to Plaintiff’s Motion for Class Certification (Unsealed Dkt. 193-8), attached as Appendix 2

<sup>18</sup> Exhibit M (Unsealed Dkt. 193-8), Appendix 2

<sup>19</sup> Exhibit O to Plaintiff’s Motion for Class Certification (Unsealed Dkt. 193-10), attached as Appendix 2

<sup>20</sup> Exhibit N to Plaintiff’s Motion for Class Certification (Unsealed Dkt. 193-9); Exhibit II to Plaintiff’s Motion for Class Certification (Unsealed Dkt. 194-3), attached as Appendix 2

<sup>21</sup> Exhibit Q to Plaintiff’s Motion for Class Certification (Unsealed Dkt. 193-12), attached as Appendix 2

card digits to be entered again, would have cut into revenue.<sup>22</sup> Rather, Facebook counseled developers to “not avoid” what it termed “friendly fraud,” instead encouraging developers to follow business-as-usual practices which encouraged children to spend money.<sup>23</sup>

Consumers could not avoid these purchases; they could also not even unwind them once they were made. Instead of devoting time and resources to making the purchase experience friendlier to families, Facebook set up automatic systems to reject refunds.<sup>24</sup> Facebook even warned users requesting chargebacks, “[i]f you choose to dispute these charges with your credit card company or bank, the account that made these charges may become limited and will lose certain functionality.”<sup>25</sup> Facebook employees themselves described the refund process as “awful.”<sup>26</sup>

There is no benefit to consumers here--not to the parents being charged without permission, nor to the kids who do not realize the digital “sword” they click on in a game costs actual money. The only benefits accrue to Facebook and the developers who have designed a system to dupe children and take their families’ money.

## **COPPA**

COPPA makes it unlawful for an “operator of a Web site or online service directed to children, or any operator that has actual knowledge that it is collecting or maintaining personal information from a child, to collect personal information from a child” unless it has obtained verifiable parental consent and provided appropriate disclosures.<sup>27</sup> Facebook has long maintained that children under 13 may not use its service.<sup>28</sup> For this reason, Facebook has never provided a children's privacy policy; nor does it give any notice or obtain consent from parents for the collection and use of personal information from users under the age of 13.

Nonetheless, the unsealed documents show that Facebook was aware that many of the games it offered were popular with children under age 13, and that these games were in fact being played by children under 13. For example, documents demonstrate that Facebook was aware that Angry Birds was enjoyed by five year olds, but that Facebook kept it and other “lossy [friendly fraud]-minor heavy apps” such as “PetVille, Happy Aquarium, Wild Ones, Barn Buddy, and any Ninja game.”<sup>29</sup> Documents also show that Facebook personnel had actual knowledge that

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<sup>22</sup> Exhibit I to Plaintiff's Motion for Class Certification (Unsealed Dkt. 193-5), attached as Appendix 2

<sup>23</sup> Exhibit K to Plaintiff's Motion for Class Certification (Unsealed Dkt. 193-6), attached as Appendix 2

<sup>24</sup> Exhibit L to Plaintiff's Motion for Class Certification (Unsealed Dkt. 193-7), attached as Appendix 2

<sup>25</sup> 16 CFR § 312.3.

<sup>26</sup> Exhibit Q (Unsealed Dkt. 193-12), Appendix 2

<sup>27</sup> 16 CFR § 312.3.

<sup>28</sup> See Facebook's Terms of Service - <https://www.facebook.com/legal/terms/update> (last revised, April 19<sup>th</sup>, 2018)

<sup>29</sup> Exhibit M (Unsealed Dkt. 193-8), Appendix 2

children under 13 were playing these games. In some cases, a child used a false age to establish an account.<sup>30</sup> In two cases, it appears Facebook closed down an account a child created.<sup>31</sup> In most cases, however, it appears the child used the account of a parent or grandparent, as in the case of the five year olds playing Angry Birds.<sup>32</sup> And in most cases, there are no documents to demonstrate that Facebook closed any accounts or deleted any children's information, despite the rampant problem of "friendly fraud" from underage users.

Given the scale of the fraud, and the extent to which Facebook has been less than straightforward regarding its data policies in the past, we urge the FTC to investigate what personal information Facebook has collected from children, whether it has promptly deleted the information it did collect, whether it has removed accounts established by children under 13, and whether it has taken steps to ensure that in the future, no personal information from children will be collected, used or disseminated without complying with all of the COPPA provisions—including and especially on any games that are popular among young children.

## CONCLUSION

Facebook's internal documents indicate a callous disregard for young people and a culture that prioritized profits over people. This is not the first time Facebook has demonstrated a lack of care towards young people. In 2017, reports surfaced of Australian employees offering marketers the ability to target teens who were feeling low.<sup>33</sup> Facebook's content removal practices have allowed hateful speech to remain if it was targeted at young people.<sup>34</sup> And Facebook's information collection tactics, including siphoning information from friends, are likely to be particularly harmful to teenagers whose entire lives have a digital imprint.<sup>35</sup> Just last month, it was revealed Facebook had been recruiting teens on Instagram and Snapchat (both popular with the younger demographic), and paying them \$20 a month for access to everything on their phones, including screenshots of online purchases.<sup>36</sup>

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<sup>30</sup> Exhibit PP to Plaintiff's Motion for Class Certification (Unsealed Dkt. 194-10), attached as Appendix 2

<sup>31</sup> Exhibit PP (Unsealed Dkt. 194-10), Appendix 2

<sup>32</sup> Exhibit N (Unsealed Dkt. 193-9), Appendix 2, see also Exhibit EE to Plaintiff's Motion for Class Certification (Unsealed Dkt. 194-1), attached as Appendix 2

<sup>33</sup> "Facebook Research into Aussie Teens Feeling Overwhelmed and Anxious." NewsComAu, 1 May 2017, [www.news.com.au/technology/online/social/leaked-document-reveals-facebook-conducted-research-to-target-emotionally-vulnerable-and-insecure-youth/news-story/d256f850be6b1c8a21aec6e32dae16fd](http://www.news.com.au/technology/online/social/leaked-document-reveals-facebook-conducted-research-to-target-emotionally-vulnerable-and-insecure-youth/news-story/d256f850be6b1c8a21aec6e32dae16fd).

<sup>34</sup> Angwin, Julia, and Hannes Grassegger. "Facebook's Secret Censorship Rules Protect White Men From Hate Speech But Not Black Children." ProPublica, ProPublica, [www.propublica.org/article/facebook-hate-speech-censorship-internal-documents-algorithms](http://www.propublica.org/article/facebook-hate-speech-censorship-internal-documents-algorithms).

<sup>35</sup> Baig, Edward C. "Exclusive: Facebook's Policies on Teens Should Be Probed by FTC, Child Advocacy Group Says." USA Today, Gannett Satellite Information Network, 11 June 2018, [www.usatoday.com/story/tech/columnist/baig/2018/06/11/teen-privacy-facebook-cambridge-analytica-concerns-common-sense/685749002/](http://www.usatoday.com/story/tech/columnist/baig/2018/06/11/teen-privacy-facebook-cambridge-analytica-concerns-common-sense/685749002/).

<sup>36</sup> Constine, Josh, and Josh Constine. "Facebook Pays Teens to Install VPN That Spies on Them." TechCrunch, TechCrunch, 29 Jan. 2019, [techcrunch.com/2019/01/29/facebook-project-atlas/](http://techcrunch.com/2019/01/29/facebook-project-atlas/)

The Commission has long recognized the particular vulnerability of young people. We request that you investigate whether Facebook complies with Section 5 and COPPA, and ensure that, in the future, Facebook cannot take advantage of families in this way.

Respectfully,

Common Sense Media

Campaign for a Commercial-Free Childhood

Center for Digital Democracy

Badass Teachers Association, Inc.

Children and Screens

Consumer Action

Consumer Federation of America

Defending the Early Years

Electronic Privacy Information Center

Media Education Foundation

New Dream

Parent Coalition for Student Privacy

Parents Television Council

Peace Educators Allied for Children Everywhere (P.E.A.C.E.)

Public Citizen

Story of Stuff

TRUCE (Teachers Resisting Unhealthy Childhood Entertainment)

# Appendix 1



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20 *Attorneys for Plaintiffs*

21 UNITED STATES DISTRICT COURT  
22 NORTHERN DISTRICT OF CALIFORNIA  
23 SAN JOSE DIVISION

24 I.B., by and through his Guardian ad Litem  
25 GLYNNIS BOHANNON and J.W., by and  
26 through his Guardian ad Litem STEVEN  
27 WRIGHT, individually and on behalf of all  
28 others similarly situated,

Plaintiffs,

v.

FACEBOOK, INC.,  
Defendant.

Case No. 12-CV-01894 BLF

~~PROPOSED~~ ORDER GRANTING  
APPROVAL OF CLASS ACTION  
SETTLEMENT AND ENTERING  
DISMISSAL WITH PREJUDICE

Judge: Hon. Beth Labson Freeman  
Courtroom: 3

[ORDER TO BE ENTERED ON OR AFTER  
APRIL 24, 2016 PURSUANT TO 28 U.S.C.  
§ 1715(D)]

1 Plaintiffs' Motion for Approval of Class Action Settlement (the "Motion") in the  
 2 above-entitled action (the "Action") came on for hearing on March 17, 2016. The Court has  
 3 reviewed and considered the Motion, including all supporting exhibits, and the Class Action  
 4 Settlement Agreement ("Settlement Agreement") attached to the Motion and exhibits thereto, and  
 5 the Court has considered the arguments and authorities presented by the Parties and their counsel  
 6 and the record in the Action, and 90 days having passed on April 24, 2016 from service of notices to  
 7 appropriate state and federal officials under the Class Action Fairness Act ("CAFA") 28 U.S.C.  
 8 § 1715, and good cause appearing,

9 **IT IS HEREBY ORDERED THAT:**

10 1. This Court has jurisdiction over the subject matter of this Action and over all parties  
 11 to the Action, including all members of the class it certified pursuant to Federal Rule of Civil  
 12 Procedure 23(b)(2) consisting of: "All Facebook users who are or were minor children according to  
 13 Facebook's own records for the four years preceding the date on which the original complaint was  
 14 filed through the date on which a class is certified ('the Minor Class'); Within the Minor Class is a  
 15 subclass of Minors from whose Facebook accounts Facebook Credits were purchased. ('the Minor  
 16 Purchasing Subclass')" (the "Class").

17 2. Facebook is enjoined as follows:

- 18 i. Facebook's refund practices and policies with respect to U.S. Minors will  
 19 comply with the California Family Code.
- 20 ii. Facebook will include language in substantially the following form in its  
 21 Community Payments Terms applicable to U.S. minor users (currently at  
 22 [https://www.facebook.com/payments\\_terms](https://www.facebook.com/payments_terms)): "All funding transactions are  
 23 final unless otherwise required by law."
- 24 iii. Facebook will include language in substantially the following form in the  
 25 Developer Payments Terms applicable to U.S. developers (currently at  
 26 [https://developers.facebook.com/policy/payments\\_terms](https://developers.facebook.com/policy/payments_terms)): "You  
 27 acknowledge that transactions with minors may be voidable by law and  
 28 agree that you may be required to refund amounts paid."

- iv. Facebook will add to its refund request form for In-App Purchases for U.S. users a checkbox or substantially similar functionality with accompanying text such that users are able to indicate that the In-App Purchases for which they are seeking a refund was made when the user was a minor.
- v. Facebook will implement a dedicated queue within Facebook to address refund requests in In-App Purchases, made by U.S. Minors subject to verification of minority. The employees staffing the dedicated queue will receive further training regarding how to analyze and process such refund requests in accordance with applicable law.
- vi. Subject to regulatory approval in certain states, Facebook will include language similar to the following draft proposal in (a) the email receipt for transactions for U.S. Minors and (b) refund confirmation emails sent to U.S. Minors: “Please always make sure you have your parent or guardian’s consent to use their payment sources.” Facebook will include an HTML link to the Community Payments Terms in the foregoing email confirmations.
- vii. Facebook will emphasize the following language in the Community Payments Terms, by bolding and putting a box around the text, or by a substantially similar method:

If you are under the age of eighteen (18), you may use Facebook Payments only with the involvement of your parent or guardian. Make sure you review these Terms with your parent or guardian so that you both understand all of your rights and responsibilities.

3. Nothing described in the injunctive relief above will inhibit, prevent, or limit Facebook from making product changes, changes to its terms of use (currently referred to as the “Statement of Rights and Responsibilities”), its payment terms for users or developers (currently titled the “Community Payments Terms” and “Developer Payments Terms”), or other changes, from time to time, as it deems appropriate in the conduct of its business, provided that such changes are consistent with the relief described above, or to comply with the law.

4. The injunction described above shall be in effect for three (3) years from the Final

1 Settlement Date.

2 5. The claims of I.B. and J.W., respectively, arose when they were both minors. I.B.  
3 was a minor user of Facebook who purchased Facebook credits in the amount of \$610.40. I.B. was  
4 able to obtain a refund of \$603.00. J.W. was a minor user of Facebook who purchased Facebook  
5 credits in the amount of \$1268.90. J.W. was able to obtain a partial refund when requested from  
6 Facebook, but did not receive a refund of \$999.30 of that amount. As part of the Settlement  
7 Agreement, I.B. and J.W. have waived all of their rights against Facebook that they might have  
8 arising from these transactions and are providing a complete release.

9 6. J.W. will receive \$5,000 and I.B. will receive \$5,000 in incentive  
10 award payments pursuant to the Settlement Agreement. The incentive award payments to minors  
11 J.W. and I.B. shall be made to blocked accounts for each of them. No withdrawals of principal or  
12 interest may be made from the blocked account or accounts without a further written order under  
13 this case name and number, signed by a judicial officer, and bearing the seal of this court, until the  
14 minor attains the age of 18 years. When the minor attains the age of 18 years, the depository,  
15 without further order of this court, is authorized and directed to pay by check or draft directly to the  
16 former minor, upon proper demand, all moneys including interest deposited under this order. The  
17 money on deposit is not subject to escheat.

18 7. The Court has conducted an evaluation of the fairness, reasonableness, and  
19 adequacy of the proposed settlement set forth in the Settlement Agreement (the "Settlement"). The  
20 Court finds that the Settlement appears to be the product of serious and informed arm's length  
21 negotiations; has no obvious deficiencies; does not improperly grant preferential treatment to the  
22 class representatives or any members of the Class; and is fair, reasonable, adequate, and in the best  
23 interests of the Class. The Court finds that the consideration to be given by Facebook is reasonable  
24 and in the best interests of Plaintiffs and the Class, considering the disputed issues, circumstances,  
25 and affirmative defenses asserted in the Action, and the potential risks and likelihood of success of  
26 pursuing litigation on the merits. The complex legal and factual posture of this case and the fact  
27 that the Settlement Agreement is the result of arm's length negotiations between the Parties,  
28 including negotiations presided over by Edward A. Infante of JAMS, support this finding. The

1 Court finds that these facts, combined with the lack of other indicators of collusion and the Court's  
2 observations throughout the litigation, demonstrate that there was no collusion present in the  
3 reaching of the Settlement Agreement, implicit or otherwise. *See In re Bluetooth Headset Prods.*  
4 *Liab. Litig.*, 654 F.3d 935, 947 (9th Cir. 2011). This finding is also supported by, among other  
5 things, the fact that the Settlement Agreement does not provide for a release of Class members'  
6 claims.

7 8. The Court has specifically considered the factors relevant to class settlement  
8 approval (*see, e.g., Churchill Vill., L.L.C. v. Gen. Elec.*, 361 F.3d 566 (9th Cir. 2004))—including,  
9 *inter alia*, the strength of the Plaintiffs' case; the risk, expense, complexity, and likely duration of  
10 further litigation; the risk of not maintaining class action status through trial; the relief provided for  
11 in the Settlement Agreement; the extent of discovery completed and stage of the proceedings; the  
12 experience and views of counsel; the (non-)presence of a governmental participant; and the  
13 reaction of members of the Class to the proposed settlement —and upon consideration of such  
14 factors finds that the Settlement is fair, reasonable, and adequate to all concerned.

15 9. The Court previously evaluated adequacy at the certification stage and found Class  
16 Representatives and Class Counsel adequate in the Court's order on Plaintiff's motion for class  
17 certification. *See* Dkt. 131 at 18-20. The Court now finds that the Class Representatives and Class  
18 Counsel will adequately represent the Class for the purposes of entering into and implementing the  
19 Settlement Agreement.

20 10. Accordingly, the Settlement is hereby finally approved in all respects, and the  
21 Parties are hereby directed to implement the Settlement Agreement according to its terms and  
22 provisions. The Settlement Agreement is hereby incorporated into this Order in full and shall have  
23 the full force of an Order of this Court. Except where otherwise defined herein, all capitalized  
24 terms contained herein shall have the meanings assigned to them in the Settlement Agreement.

25 11. Pursuant to Federal Rule of Civil Procedure 23, direct notice of the Settlement to  
26 members of the Class is not required because the Class is certified under Rule 23(b)(2), members of  
27 the Class are not releasing any claims, and the Class Representatives can adequately represent  
28 absent members without notice.

1           12.     The Court hereby dismisses the Action on the merits and with prejudice. No fees or  
2 costs are awarded, except as expressly provided in the Court's order on Plaintiffs' motion for fees,  
3 or by other order of the Court.

4           13.     Upon the Final Settlement Date, Plaintiffs I.B., by and through his Guardian ad  
5 Litem Glynnis Bohannon, and J.W., by and through his Guardian ad Litem Steven Wright shall be  
6 deemed to fully, finally and forever release, relinquish, and discharge Defendant Facebook and any  
7 and all of its past or present predecessors, successors, assigns, parents, subsidiaries, associates,  
8 affiliated and related entities, employers, employees, agents, representatives, consultants,  
9 independent contractors, directors, managing directors, officers, partners, principals, members,  
10 attorneys, accountants, financial and other advisors, investment bankers, insurers, underwriters,  
11 shareholders, lenders, auditors, investment advisors, and any and all present and former companies,  
12 firms, trusts, corporations, officers, directors, other individuals or entities in which Facebook has a  
13 controlling interest or which is affiliated with any of them, or any other representatives of any of  
14 these Persons and entities (the "Released Parties") from any and all actual, potential, filed, known  
15 or unknown (specifically including "Unknown Claims" as defined below), fixed or contingent,  
16 claimed or unclaimed, suspected or unsuspected, claims, demands, liabilities, damages (including  
17 but not limited to punitive, exemplary or multiple damages), charges, penalties, losses, rights,  
18 actions, causes of action, contracts or agreements, expenses, costs, attorneys' fees and/or  
19 obligations, whether in law or in equity, accrued or unaccrued, whether based on federal, state,  
20 local, statutory or common law or any other law, rule or regulation, including the law of any  
21 jurisdiction outside the United States, and whether brought directly by Plaintiffs or in a derivative  
22 or representative capacity by Plaintiffs' parents, guardians, present, former, and future heirs,  
23 executors, administrators, representatives, agents, attorneys, partners, predecessors-in-interest,  
24 successors, assigns, or legatees (the "Plaintiffs' Released Claims"). "Unknown Claims" means  
25 claims that could have been raised in the Action and that Plaintiffs I.B., J.W., and/or the Class  
26 Members do not know or suspect to exist, which, if known by either Plaintiff or the Class might  
27 affect any Plaintiff or any Class Member's agreement to release the Released Parties of the claims  
28 or might affect his, her or its decision to agree, object, or not object to the settlement.

1           14.     Upon the Final Settlement Date, the above releases of claims and the Settlement  
2 Agreement will be binding on, and will have *res judicata* and preclusive effect on, all pending and  
3 future lawsuits or other proceedings maintained by or on behalf of Plaintiffs.

4           15.     The Court finds that Facebook properly and timely notified the appropriate  
5 government officials of the Settlement Agreement, pursuant to CAFA, 28 U.S.C. § 1715. The  
6 Court has reviewed the substance of Facebook's notice (ECF No. 150), and finds that it complied  
7 with all applicable requirements of CAFA. Further, more than ninety (90) days have elapsed since  
8 Defendant provided notice pursuant to CAFA and the date of this order.

9           16.     Without affecting the finality of this Final Judgment in any way, the Court hereby  
10 retains continuing jurisdiction over the implementation, administration, and enforcement of this  
11 Final Judgment, the Settlement Agreement, and all matters ancillary thereto including Plaintiffs'  
12 motion for attorneys' fees.

13           17.     The Settlement Agreement's provisions, and all related drafts, communications and  
14 discussions, shall not be construed as or deemed to be evidence of an admission or concession by  
15 Facebook of any wrongdoing, by any Person or entity, and cannot be offered or received into  
16 evidence or requested in discovery in this Action or any other action or proceeding as evidence of  
17 an admission, concession, or presumption regarding such matters. However, the Settlement  
18 Agreement may be introduced as evidence of the parties' respective obligations under the Court's  
19 continuing jurisdiction over the injunctive relief set forth in the Settlement Agreement.

20           18.     The Parties, without further approval from the Court, are hereby permitted to agree  
21 to and to adopt such amendments, modifications, and expansions of the Settlement Agreement and  
22 its implementing documents (including all exhibits to the Settlement Agreement) so long as they  
23 are consistent in all material respects with this Order and do not limit the rights of Class members.

24           19.     The Court hereby directs entry of this judgment pursuant to Federal Rule of Civil  
25 Procedure 58 based upon the Court's finding that there is no just reason for delay of enforcement or  
26 appeal of this judgment notwithstanding the Court's retention of jurisdiction to oversee  
27 implementation and enforcement of the Settlement Agreement and Plaintiffs' motion for attorneys'  
28 fees.

1 **IT IS SO ORDERED.**

2 Dated this 26th day of May, 2016

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6 HONORABLE BETH LABSON FREEMAN  
7 UNITED STATES DISTRICT COURT  
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## Appendix 2 - Selected Unsealed Exhibits to Plaintiff's Motion for Class Certification

# EXHIBIT D

REDACTED PER ORDER - DOCKET 192

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
OAKLAND DIVISION

I.B., by and through his  
Guardian ad Litem BRYAN FIFE;  
GLYNNIS BOHANNON; J.W. by and  
through his Guardian ad Litem STEVEN,  
WRIGHT, JULIE WRIGHT, individually;  
and on behalf of all others similarly  
situated,

Plaintiffs,

vs.

No. CV 12-01894 BLF

FACEBOOK, INC,

Defendants.

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VIDEOTAPE DEPOSITION OF BILL RICHARDSON

July 30, 2014

Reported by: KATHRYN DAVIS, CSR No. 3808

*Kathryn* davis & associates  
REPORTING & VIDEOGRAPHY

DEPOSITION OF BILL RICHARDSON

1 regard to your phone call for about an hour that you had  
2 sometime between the first phone call and the meeting  
3 this Monday?

4 A I don't recall reviewing documents, no.

5 Q Okay. Before your meeting on this Monday, did  
6 you review any documents to prepare for your deposition  
7 today?

8 A Yes.

9 Q What did you review, that you can recall?

10 A I reviewed historical email receipts from my  
11 own purchases through Facebook Gift Shop and  
12 Facebook Games, and reviewed an on-boarding document  
13 that a member of my team gives to new contractors  
14 who answer customer emails.

15 Q What is an on-boarding document?

16 A It covers organizational charts, acronyms,  
17 references to policies. You know, things that we  
18 think a new contractor would want to know as they  
19 are coming in.

20 Q What about your email receipts for your own  
21 purchases on Facebook -- how did reviewing those email  
22 receipts inform you the basis for your testimony today?

23 A It helped me understand how our receipts  
24 changed in terms of their look and what information  
25 was brought in the receipts over time.

## DEPOSITION OF BILL RICHARDSON

1 informed him because they showed him how the form of the  
2 receipt changed over time which, I think, is an  
3 appropriate question for 30 (b)(6).

4 MR. SOMVICHIAN: You can ask. I'm just  
5 clarifying --

6 Q BY MR. PARKER: Sure. How have email receipts  
7 for purchases on Facebook changed over time?

8 A Back in -- my earliest receipt was from late  
9 2008, and it was a very short "thank you for your  
10 purchase" from the Gift Shop, text with a link to  
11 our Help Center content.

12 In 2010, they changed to reference Facebook  
13 Credits because Facebook Credits was then live, in  
14 reference to being able to spend those credits  
15 playing games on Facebook.

16 We added a few more links directed both to  
17 the Help Center, as well as a directory of games you  
18 could play on Facebook. And then in the middle of  
19 2011, there was an overhaul of the receipt to make  
20 it more -- to add more information about the  
21 purchase itself -- the time stamp of the purchase,  
22 the item that was purchased, the dollar amount of  
23 the purchase, what payment instrument was used.

24 And then there have been small, like, slight  
25 tweaks since then. I think in, like, December of

## DEPOSITION OF BILL RICHARDSON

1 2011, there was a -- actually going back, as part of  
2 the June 2011 overhaul, there was also a link to an  
3 online receipt that you could click from your email  
4 to an online page which had much of the same  
5 information on it. And then in December 2011, we  
6 added a link within the receipt to dispute a  
7 purchase that would lead to the customers to a  
8 contact form.

9 And then since then, I think there have been  
10 small tweaks on, you know, links to privacy policy  
11 and things like that on the bottom of the receipt.

12 Q These purchase receipts are sent to the email  
13 associated with the Facebook account that originated the  
14 purchase; is that correct?

15 A Yes.

16 Q Okay. There is no email sent to the cardholder?

17 A No.

18 Q Nor any notification to the cardholder, unless  
19 the cardholder happens to be the person who is  
20 associated with the account; is that correct?

21 MR. SOMVICHIAN: Objection. Overbroad and  
22 vague.

23 THE WITNESS: Can you ask the question again?

24 Q BY MR. PARKER: Sure. Does Facebook provide any  
25 notification to a cardholder -- step back for a minute.

DEPOSITION OF BILL RICHARDSON

1 MR. SOMVICHIAN: Objection. Overbroad.

2 THE WITNESS: There were small changes after  
3 that. I don't remember the specific months until a,  
4 like, substantive change in November of 2011.

5 Q BY MR. PARKER: What was the substantive change  
6 in November 2011?

7 A



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18 Q Okay. So you said October 2010 but I think we  
19 were talking about a November 2011 change.

20 A I was referencing the November 2011 change,  
21 compared to the August 2010 change.

22 Q So it had been in place the previous month? I  
23 don't know why you would be talking about October unless  
24 you were talking about October 2011, I think -- or maybe  
25 you didn't mean to say October.

DEPOSITION OF BILL RICHARDSON

1 A I didn't mean to say October. Sorry.

2 Q

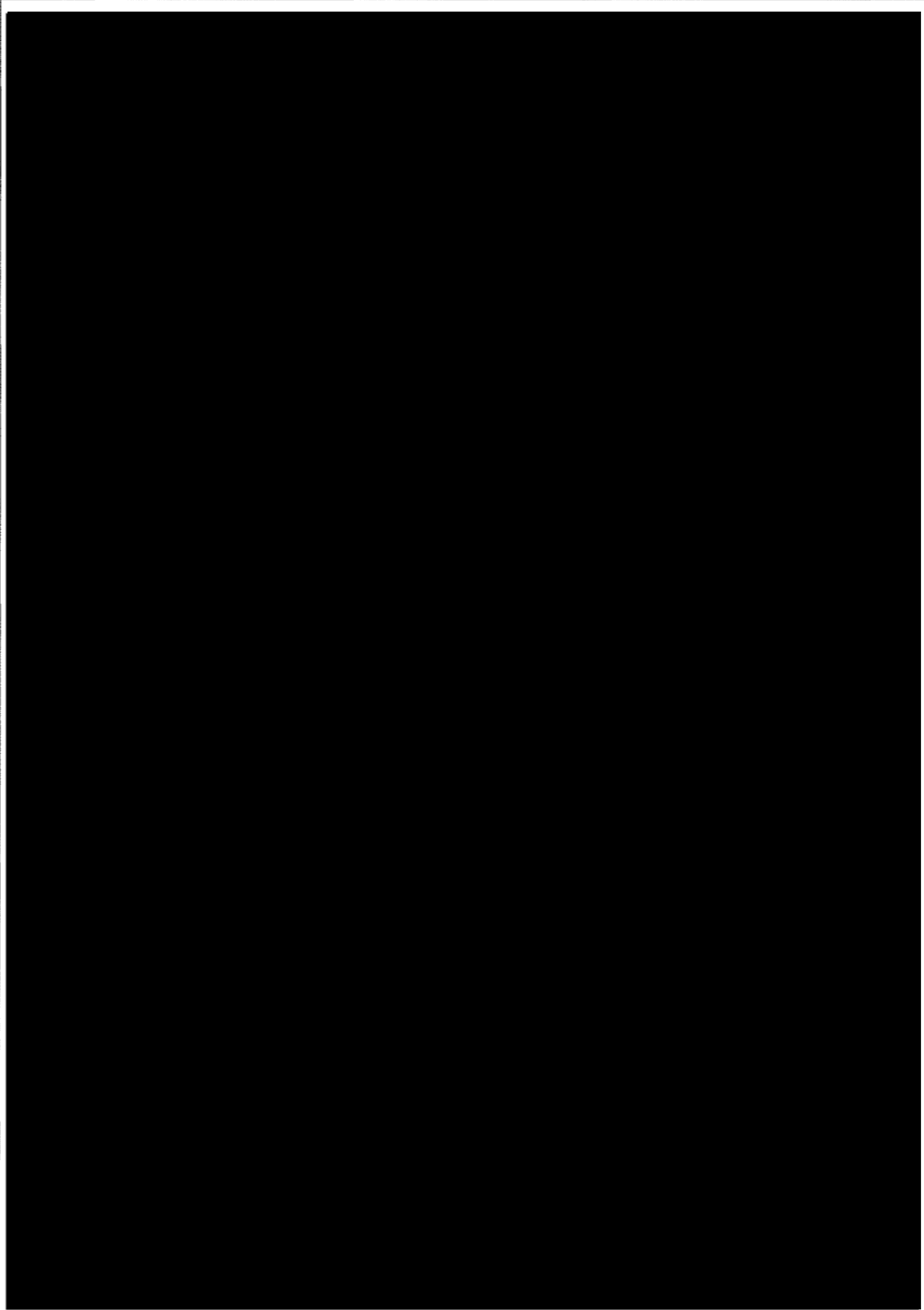


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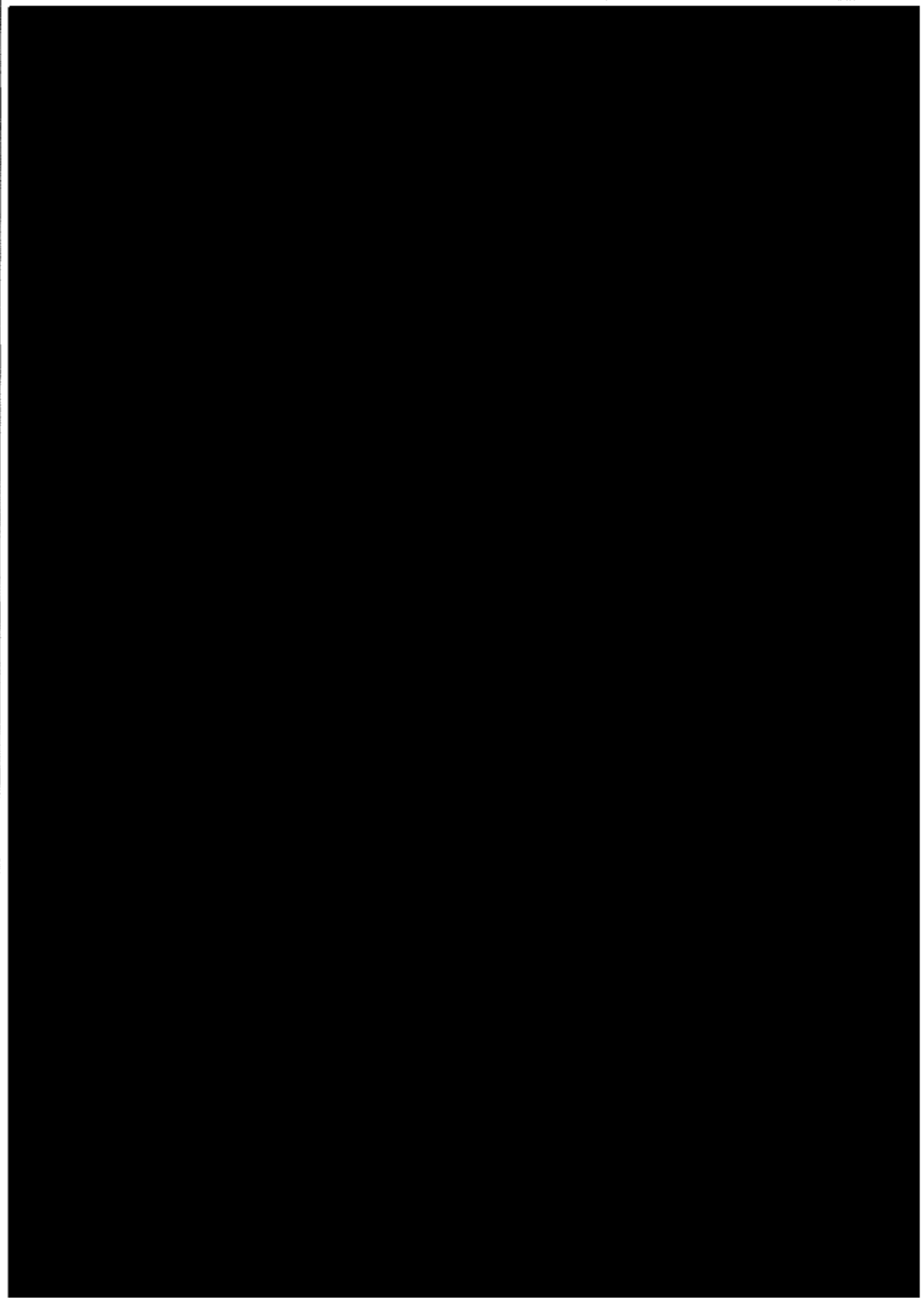
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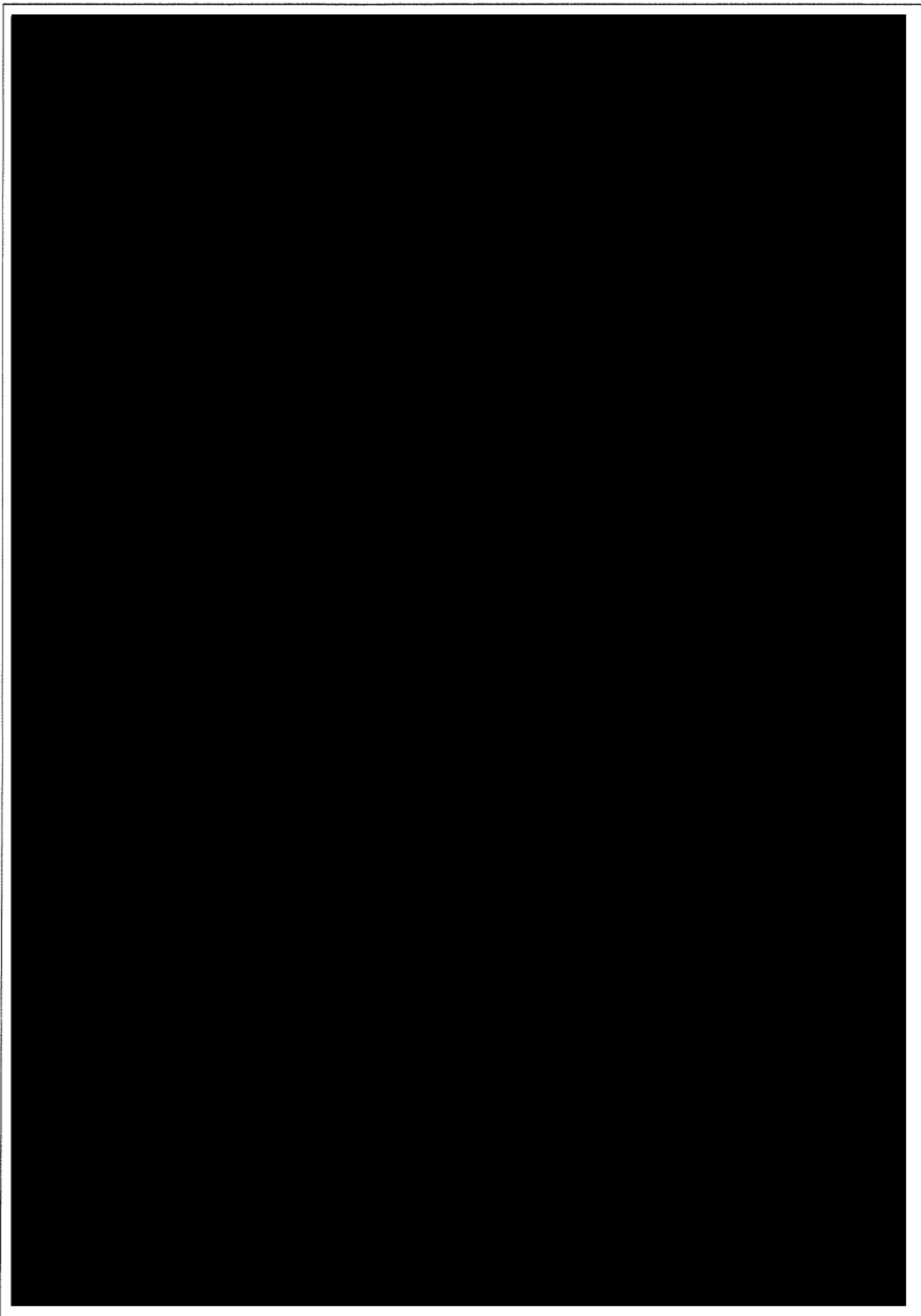
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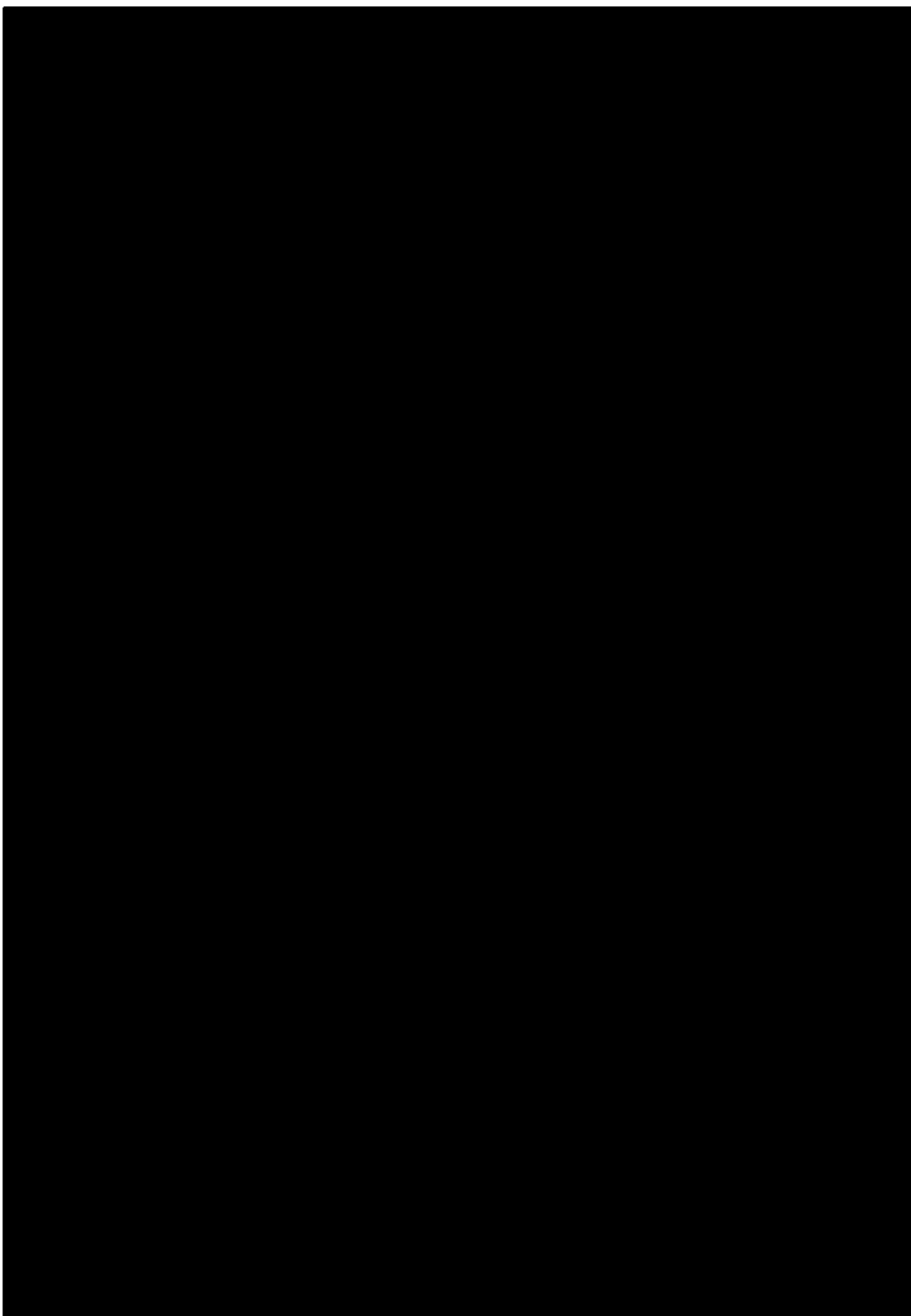
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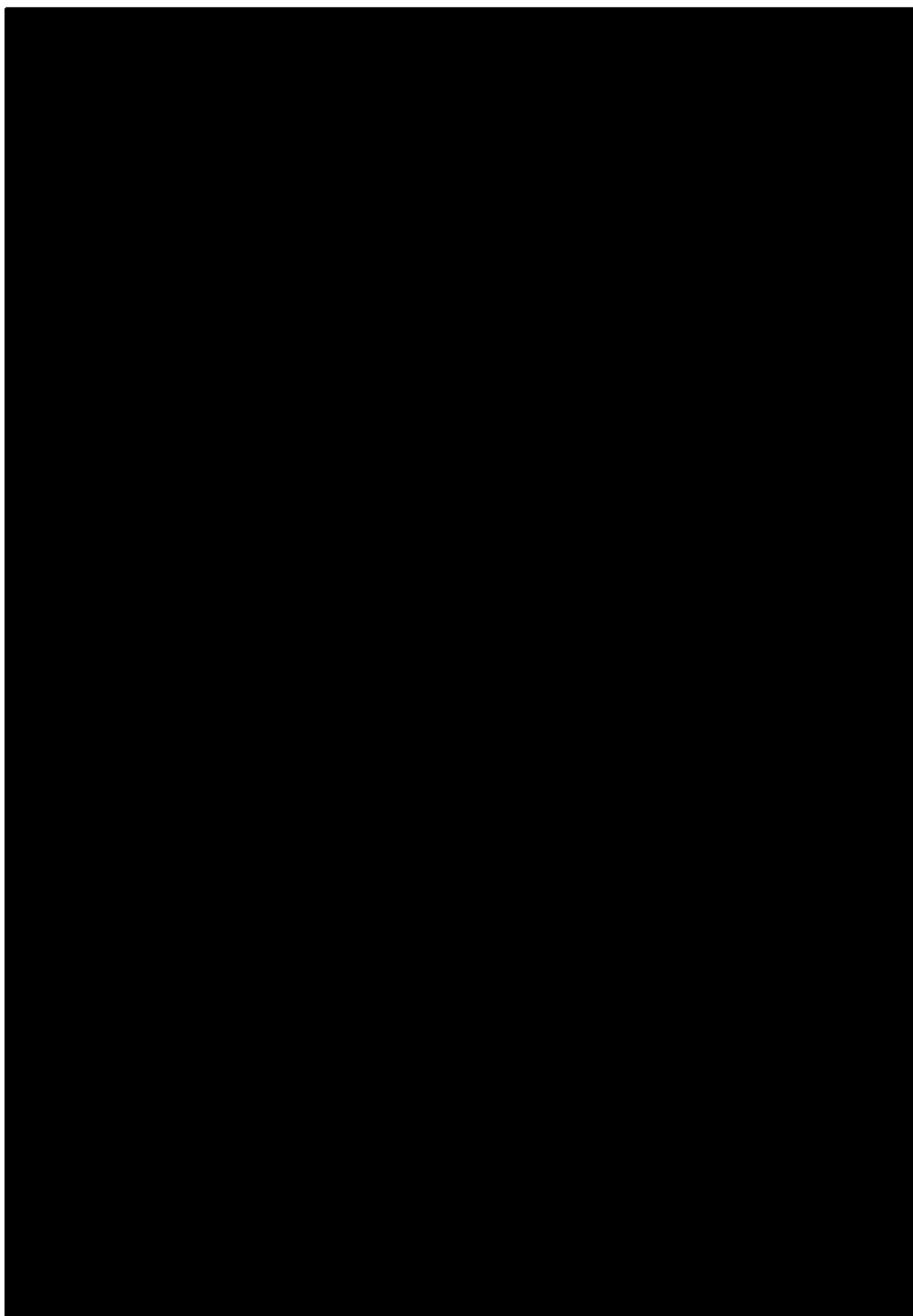
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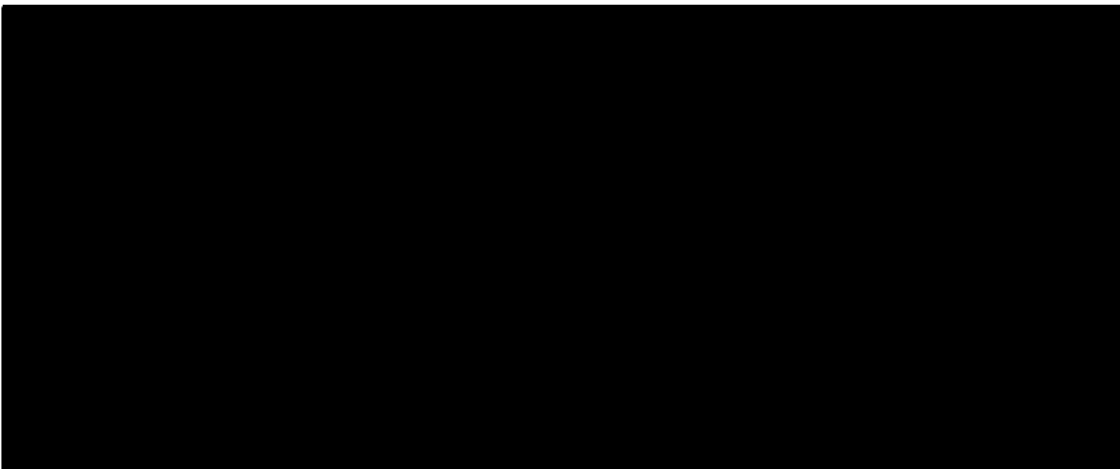


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8 Q All right. We have talked about a couple  
9 different categories of documents that you agreed to  
10 prepare for your deposition -- email receipts,  
11 on-boarding documents for contractors, different  
12 versions of the internal refund policy, historical spend  
13 limits.

14 What other documents have you reviewed to  
15 prepare for your deposition today?

16 A The only other documents were those provided  
17 to me by counsel in the preparation production.

18 Q Sure. I'm entitled to know what documents you  
19 recall reviewing from counsel. I don't want to know  
20 what you discussed about them with your counsel. But if  
21 counsel gave you a document, you reviewed it and you  
22 remember it to prepare for your deposition, then I want  
23 to know what those documents are.

24 MR. SOMVICHIAN: No. I disagree. You are not  
25 entitled to --

DEPOSITION OF BILL RICHARDSON

1 if it is information responsive to a question that you  
2 later ask, he'll provide that information; but the  
3 substance of the communications themselves were done at  
4 the direction of counsel and I'm going to instruct him  
5 not to answer.

6 Q BY MR. PARKER: Did you get a list of questions  
7 to ask from counsel for each of these people?

8 MR. SOMVICHIAN: I'm not going to allow him to  
9 answer that either.

10 Q BY MR. PARKER: Did you have any conversation  
11 with Tara Stewart to prepare for today's deposition?

12 MR. SOMVICHIAN: Asked and answered.

13 Q BY MR. PARKER: Unless he instructs you not to  
14 answer, you still have to answer my question. Did you  
15 talk with Tara Stewart?

16 A Yes.

17 Q How many times did you talk to her?

18 A About the deposition?

19 Q The subjects you are here to testify about  
20 today.

21 A With one informal conversation after our  
22 discussion with counsel.

23 Q What are "Facebook Credits"?

24 MR. SOMVICHIAN: Objection. Overbroad.

25 THE WITNESS: "Facebook Credits" were a virtual



DEPOSITION OF BILL RICHARDSON

1 currency which games' players could purchase to then  
2 spend across game applications on the Facebook platform.

3 (Whereupon, Exhibit No. 26 was  
4 marked for identification.)

5 Q BY MR. PARKER: The court reporter has marked as  
6 Exhibit 26 your 30 (b)(6) notice. Take a minute to flip  
7 through the second page of this document. Have you read  
8 this document or something like it before?

9 A Yes.

10 Q Are you familiar with what it is?

11 A Yes.

12 Q What is your understanding of it?

13 A My understanding, it is a summary of the  
14 subjects that I'll be asked about as a  
15 representative of Facebook.

16 Q Okay.

17 (Whereupon, Exhibit No. 27 was  
18 marked for identification.)

19 Q BY MR. PARKER: This is for the record. Marked  
20 as Exhibit 27 is your deposition notice as an  
21 individual. And as for right now, you are testifying as  
22 a 30 (b)(6) representative of Facebook.

23 A Okay. Can I request a quick bathroom break?

24 MR. PARKER: Yeah, that is fine. Let's take  
25 a short break.

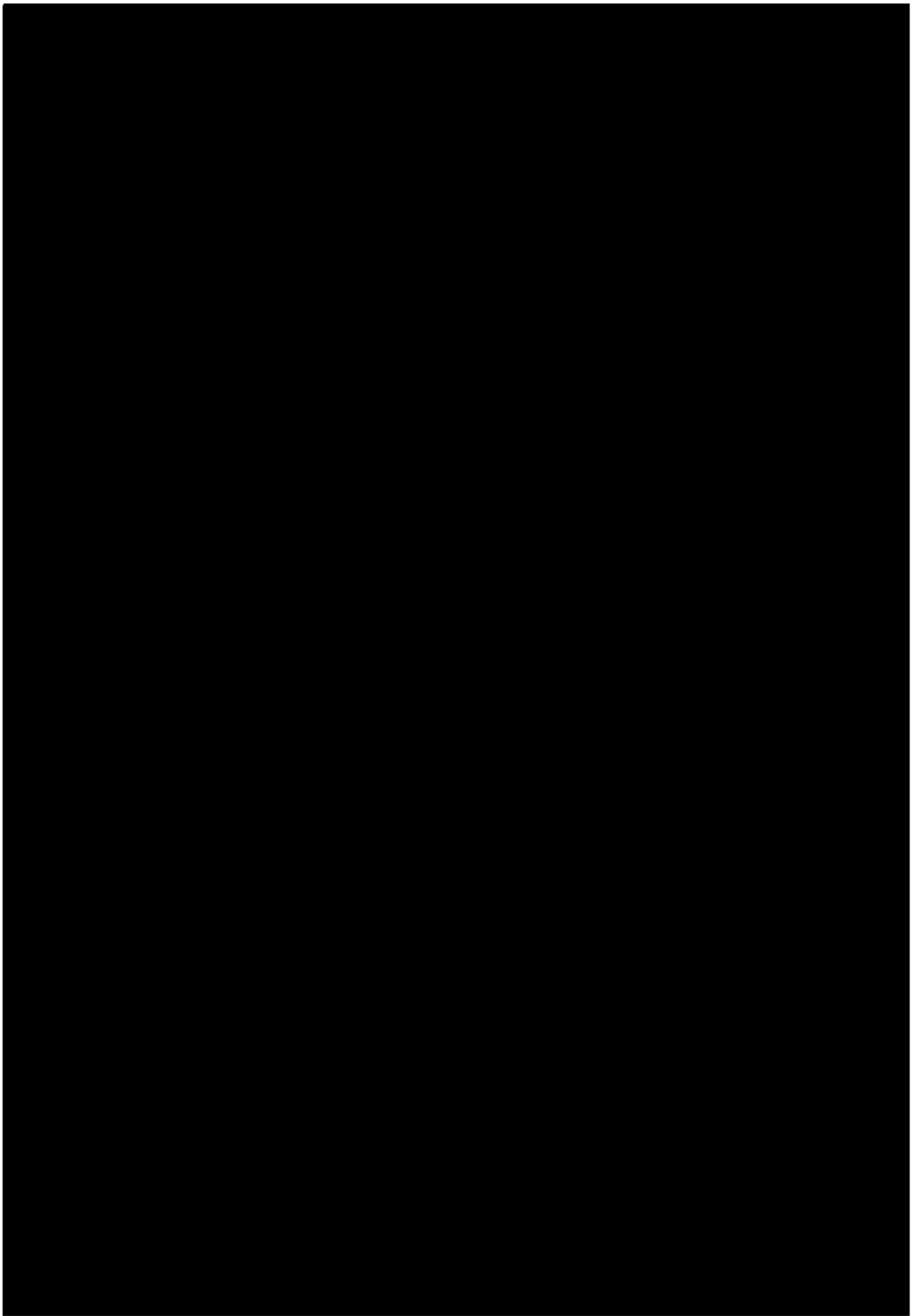
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DEPOSITION OF BILL RICHARDSON

1 A I don't recall -- I don't recall directly  
2 writing the document, no.

3 Q Do you know whether this document, this Customer  
4 Assistance Policy, has any specific policy that would  
5 apply to handling refunds of purchases by minors?

6 A Can you ask the question?

7 MR. PARKER: Sure. Actually, can the court  
8 reporter read it back?

9 (Whereupon, the record was read.)

10 MR. SOMVICHIAN: Objection. Vague.

11 THE WITNESS: By "minors," do you mean under 18?

12 Q BY MR. PARKER: Yes.

13 A No. I'm not aware that it references that.

14 (Whereupon, Exhibit No. 30 was  
15 marked for identification.)

16 Q BY MR. PARKER: Marked as Exhibit 30, take a  
17 minute to look through that document.

18 A (Witness reading.) Okay.

19 Q Are you familiar with this document?

20 A Yes.

21 Q What is it?

22 A It is a discussion thread post made by Tara  
23 Stewart which summarized a data analysis she did.

24 [REDACTED]  
25 [REDACTED]

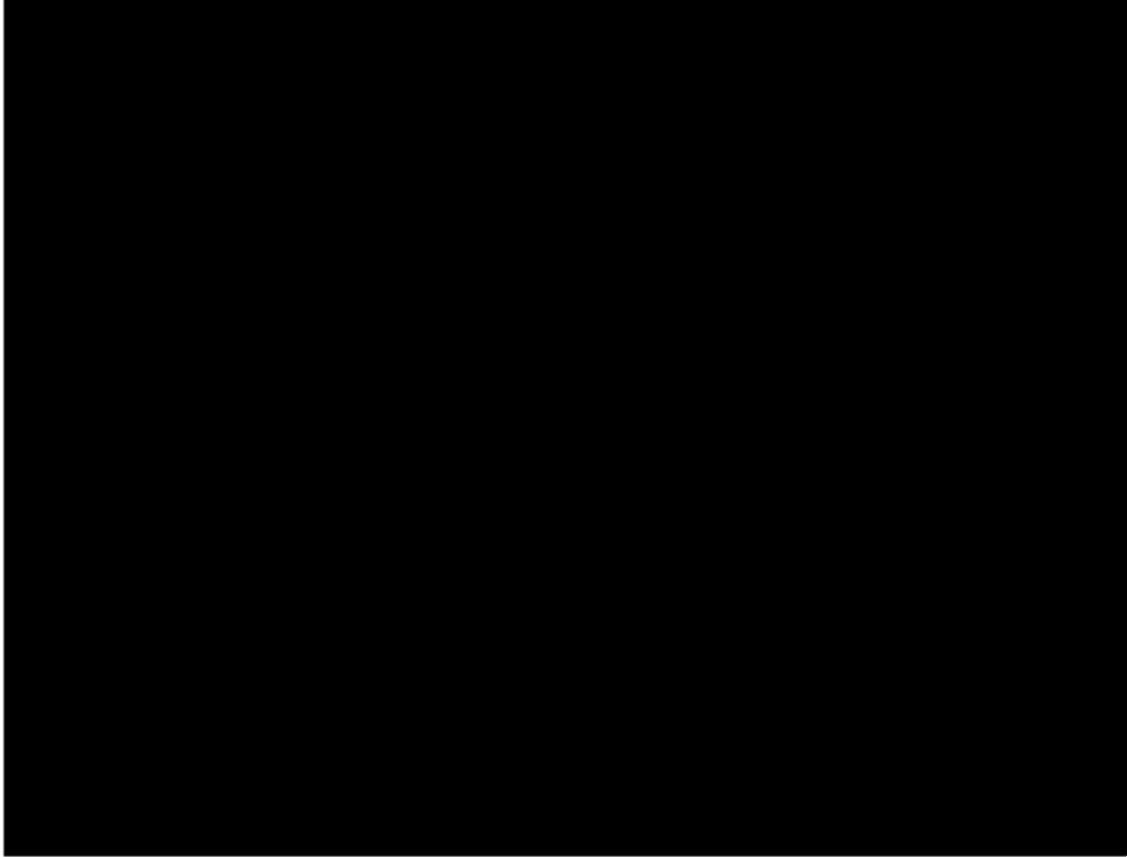
DEPOSITION OF BILL RICHARDSON

1 MR. SOMVICHIAN: Let me just object so we have a  
2 clear record. Exhibit 32 is a different document and  
3 refers to a different study than the one that is  
4 referenced in the 30 (b)(6) topic.

5 The witness can respond to questions about  
6 Exhibit 32 but we view this to be beyond the scope of  
7 the 30 (b)(6) notice. And any testimony will be in the  
8 witness' individual capacity.

9 MR. PARKER: I think that the document deals  
10 directly with Facebook's refunds, policies and  
11 procedures -- whatever Bates number is referenced.

12 THE WITNESS: Can you repeat the question?  
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(Whereupon, Exhibit No. 33 was  
marked for identification.)

Q BY MR. PARKER: Marked as Exhibit 33 is Bates  
number 678, FB-IB 678. Have you seen this document  
before?

A I don't recall seeing it, no.

Q It appears to be another Payment Operations  
friendly fraud internal policy on the Wiki.

A I read this to be the text from emails that  
we send to people who are reporting these types of  
charges.

Q So this is, like, a form or sort of canned text  
that we would put into a response to an inquiry about a  
charge?

A Yes.

Q Do you know how this language has changed over  
time?

MR. SOMVICHIAN: Which language?

Q BY MR. PARKER: The form language sent in  
response to inquiries about charges.

A I know that, to my knowledge, the text has  
changed over time, yes; but what specifically

DEPOSITION OF BILL RICHARDSON

1 changed, I don't know.

2 Q Okay. So the document makes the distinction  
3 between "family plus friendly fraud," and "family plus  
4 friendly fraud pushback." Is that fair to say? Do you  
5 see the heading in the upper middle part of the page?

6 A Yes.

7 Q And then the lower heading you see. What is the  
8 distinction between "friendly fraud" and "friendly fraud  
9 pushback"?

10 A My understanding here is if somebody was  
11 writing in to report charges done, that we determine  
12 to be done by family member or we determine to be  
13 under the definition of "friendly fraud," we would,  
14 in general, send the first block of text, the "CR  
15 - family plus friendly fraud."

16 And if the individual wrote back in to  
17 request the refund again, we would, in general, send  
18 the "CR family plus friendly fraud pushback" email  
19 as a response.

20 Q And that pushback response says, "It is not our  
21 current policy to issue refunds in cases when charges  
22 were made by someone in your household or someone who is  
23 known to you."

24 Is that right?

25 A Yes, that is what it says.

DEPOSITION OF BILL RICHARDSON

1 Q And no statement of policy as to minors in this  
2 language; is that correct, that applies specifically to  
3 minors?

4 A I don't see any, no.

5 MR. SOMVICHIAN: Objection. Document speaks for  
6 itself.

7 MR. PARKER: Sure.

8 (Whereupon, Exhibit No. 34 was  
9 marked for identification.)

10 Q BY MR. PARKER: Marked as Exhibit 34 Bates  
11 number 1369. It is a two-page email that you received.  
12 Just take a minute to look at the two pages.

13 Whitty, can you hand me the copy that you've  
14 got?

15 MR. SOMVICHIAN: Mine?

16 MR. PARKER: Yeah. Hold on. Let me see. I may  
17 have marked the wrong copy there. Hold on.

18 MR. SOMVICHIAN: He has 1369.

19 MR. PARKER: 1369. I have a note on one of  
20 those pages. Yeah, that one. Hand that back. Okay.  
21 Sorry. We all have 1369 - 1370.

22 Q Do you recall receiving this email?

23 A I don't recall reading it, no.

24 Q Okay. Is this something that you reviewed to  
25 prepare for your deposition?



DEPOSITION OF BILL RICHARDSON

1 A I don't remember -- I don't remember reading  
2 it, no.

3 Q But it was sent by Elizabeth Williges. And what  
4 was her position at that time?

5 A She was on the Payments Operations Team.

6 (Whereupon, Exhibit No. 35 was  
7 marked for identification.)

8 Q BY MR. PARKER: Marked as Exhibit 35 is Bates  
9 numbers 1375 through 1388. I do not want you to read  
10 this entire document right now.

11 A Okay.

12 Q But if you can glance at the first couple of  
13 pages, it appears to be an extended -- a further  
14 discussion on the Boot Camp stage two document that we  
15 looked at a minute ago.

16 MR. SOMVICHIAN: I would just say the witness  
17 can look at whatever he wants to.

18 Q BY MR. PARKER: Sure, that is fine.

19 A (Witness reading.)

20 It appears that this was an additional update  
21 on that same task, yes.

22 Q Okay. So this was the test of a potential rule  
23 on friendly fraud for, as it says in the first blocked  
24 paragraph that begins, "Just ran the data..." It says,  
25 "This rule targeted users under the age of 17 and above

DEPOSITION OF BILL RICHARDSON

1 the age of 90 who were trying to spend greater than or  
2 equal to \$75 in a single txn..." Transaction?

3 A Yes.

4 Q "...in Pet Society, Backyard Monsters, or EA  
5 Sports FIFA Superstars, real football and soccer."

6 So the proposal was that the minor user, or user  
7 identified as being over 90, would have to identify the  
8 first six numbers of the credit card for the  
9 transaction?

10 MR. SOMVICHIAN: Objection. Lacks foundation in  
11 the context of this document.

12 THE WITNESS: That is how I read this, yes.

13 Q BY MR. PARKER: But, okay. And so -- but  
14 Facebook has never, other than this specific testing,  
15 has never actually imposed that rule on minor  
16 transactions that the six, first six digits of the  
17 credit card be inputted per transaction; is that  
18 correct?

19 A Not to my recollection, no.

20 Q If you turn to page 1380, there is a note that  
21 says, "Tara Stewart at 1:09 p.m. on July 8th."

22 A Okay. Yeah, I see it.

23 Q It says, "Increased concerns about cb rates from  
24 devs reminded me of the second part of this project. If  
25 the devs are really more concerned about cbs and not

DEPOSITION OF BILL RICHARDSON

1 refunds, it could make sense to start refunding for  
2 blatant FF minor."

3 Did Facebook experience more concerns from  
4 developers about chargebacks than refunds?

5 MR. SOMVICHIAN: Objection. Vague and  
6 overbroad.

7 THE WITNESS: I don't recall the specifics of  
8 what Tara is referencing here.

9 Q BY MR. PARKER: Okay. On 1384, there is a note  
10 from Tara Stewart at 7:50 a.m. on July 29th.

11 A Yes.

12 Q It says: "Josh Kervocian, verify CC, FirstSix,  
13 obviously, isn't the most ideal deterrent but could be a  
14 good first step. It forces the minor to prove he is in  
15 possession of the credit card. Often refunds/cbs occur  
16 because a parent permits his child to spend at a small  
17 denomination and doesn't realize that the CC information  
18 will be stored. Obviously, some kids will be able to  
19 grab the CC again, but this will hopefully curb the  
20 spending of the least savvy minors."

21 Did I read that accurately?

22 A Yes.

23 Q Do you know what she is talking about there?

24 A I read this to be in the context of a  
25 conversation with Josh Krivoshein about the

DEPOSITION OF BILL RICHARDSON

1 effectiveness of the "verify CC FirstSix" action  
2 that we would put in front of customers that hit  
3 this rule.

4 Q But that rule -- I think we have established  
5 that rule outside of this specific test was never  
6 implemented.

7 A I don't -- I don't recall.

8 Q On page 1385 there is a note from Tara Stewart  
9 at 3:52 on August 2nd: "Seems like most of these games  
10 with FF minor problems are defaulting to the highest  
11 cost setting in the purchase flows. This only  
12 exacerbates the problem since it doesn't necessarily  
13 look like 'real' money to a minor."

14 Did I read that accurately?

15 A Yes.

16 Q Do you understand the issue of purchases not  
17 necessarily looking like real money to a minor?

18 MR. SOMVICHIAN: Objection. Beyond the scope.

19 THE WITNESS: It is not clear to me what Tara  
20 meant by this.

21 Q BY MR. PARKER: Well, I'm not actually asking  
22 you what Tara meant because, you know, if you weren't  
23 sitting there when she wrote it or didn't have a  
24 conversation with her about it -- at least that your  
25 attorney would let you testify to me about today.

DEPOSITION OF BILL RICHARDSON

1 I'm asking generally. Do you have an  
2 understanding of an issue that would involve minors not  
3 realizing that they were making purchases with real  
4 money?

5 MR. SOMVICHIAN: Objection. Vague and  
6 overbroad. Lacks foundation.

7 THE WITNESS: My interpretation of this is the  
8 assumption of defaulting the payment flow that the  
9 developers defaulting to the highest-cost price point  
10 can confuse minors who are completing the payment flow.

11 Q BY MR. PARKER: And that was something that  
12 apparently, at least, Tara was aware of?

13 MR. SOMVICHIAN: Objection. Lacks foundation.  
14 Calls for speculation.

15 THE WITNESS: It appears Tara referenced it in  
16 this task, yes.

17 MR. PARKER: Okay. Thanks.

18 (Whereupon, Exhibit No. 36 was  
19 marked for identification.)

20 Q BY MR. PARKER: Marked as Exhibit 36 is Facebook  
21 2011 through 2014. Who is Diarmiud Thoma?

22 A Diarmiud Thoma.

23 Q Diarmiud Thoma.

24 A He was a risk analyst in our Dublin Facebook  
25 office.

DEPOSITION OF BILL RICHARDSON

(Whereupon, Exhibit No. 41 was  
marked for identification.)

Q BY MR. PARKER: I've handed you Exhibit 41,  
Bates numbers 3126 through 3127.

A (Witness reading.) Okay.

Q This looks like it is a continuing discussion  
about refunds on Angry Birds.

A Yes.

Q Do you recall this email thread?

A I vaguely recall us being added to this  
thread in the communication back to our Games  
Partnerships Teams.

Q If you look at the first paragraph, do you see  
in bold where it says, "In nearly all cases, the parent  
knew their child was playing Angry Birds but didn't  
think the child would be able to buy anything without  
their password and authorization first (Like an IOS.)"

A Yes.

Q What's your understanding of how IOS  
authenticates purchases?

A My understanding is for purchases within a  
game in IOS, Apple will prompt to reenter your Apple  
ID password and subsequent purchases. I don't know  
the details of when they throw that password versus  
not.

DEPOSITION OF BILL RICHARDSON

1 [REDACTED]  
2 [REDACTED]  
3 [REDACTED]  
4 Q Okay. Then moving down it says, "The difficulty  
5 with friendly fraud is that we do not have a clear way  
6 to identify it at a purchase level because it looks like  
7 a good transaction. And if we were to build risk models  
8 to reduce it, we would most likely block good TPV."

9 What is "good TPV"?

10 A Good TPV -- so "TPV" in this context would be  
11 total payment volume. And "good TPV" in this  
12 context would mean completed transactions from  
13 people who intend to make that transaction.

14 Q Okay.

15 (Whereupon, Exhibit No. 42 was  
16 marked for identification.)

17 Q BY MR. PARKER: Marked as Exhibit 42, Bates  
18 number 3135.

19 A (Witness reading.) Okay.

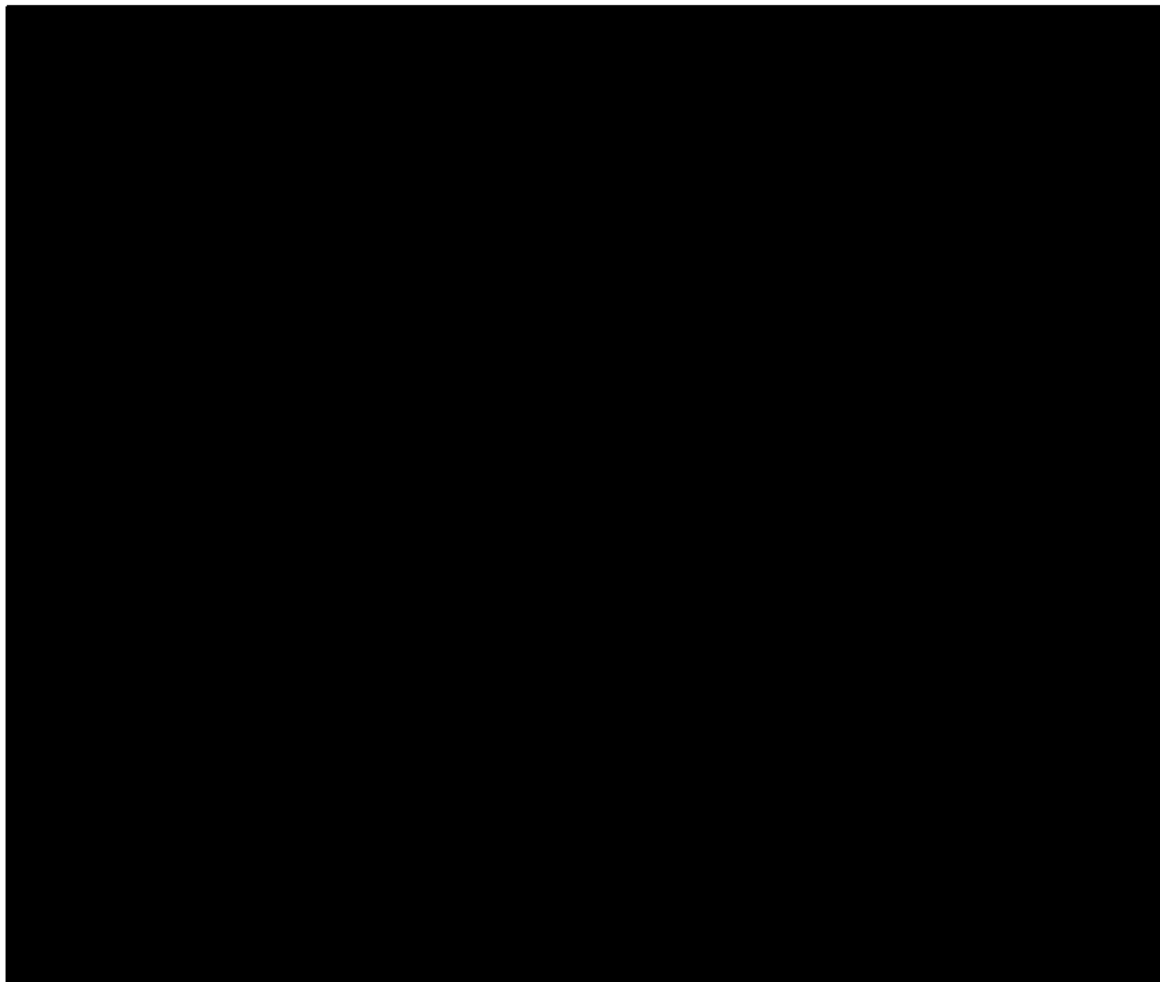
20 Q Have you seen this document before?

21 A I haven't seen the document, no.

22 Q Do you recall this discussion on Angry Birds  
23 refunds?

24 A I don't recall this specific discussion. I  
25 just recall the Rovio escalation in general.

DEPOSITION OF BILL RICHARDSON



16 MR. PARKER: Okay.

17 (Whereupon, Exhibit No. 44 was  
18 marked for identification.)

19 Q BY MR. PARKER: Marked as Exhibit 44, Bates  
20 numbers 3284 through 3295.

21 A (Witness reading.)

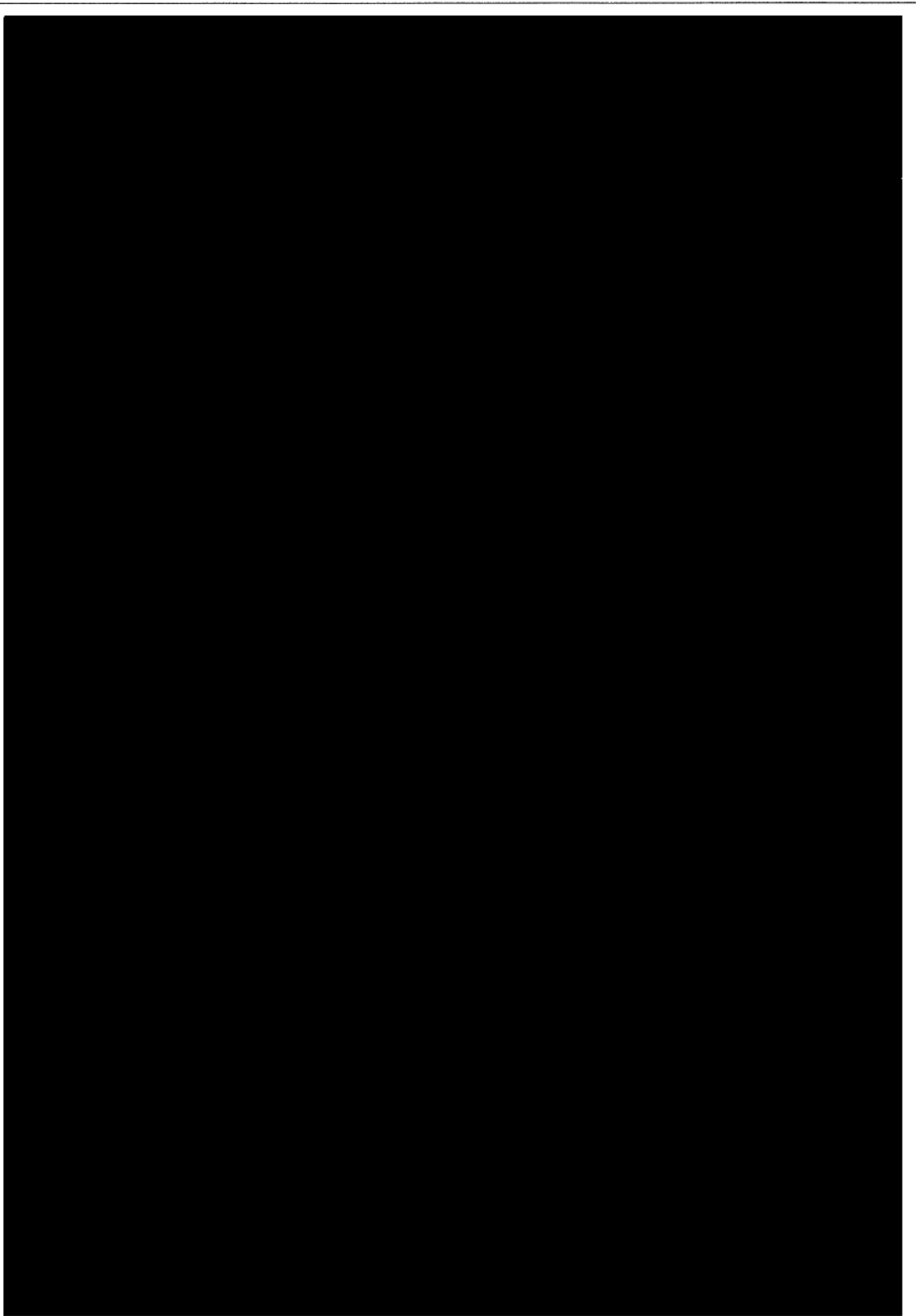
22 Q This looks like a bunch of different  
23 discussions. Who is Bikash Agarwalla?

24 A Bikash was -- he was an engineer on our  
25 Payments Engineering Team.



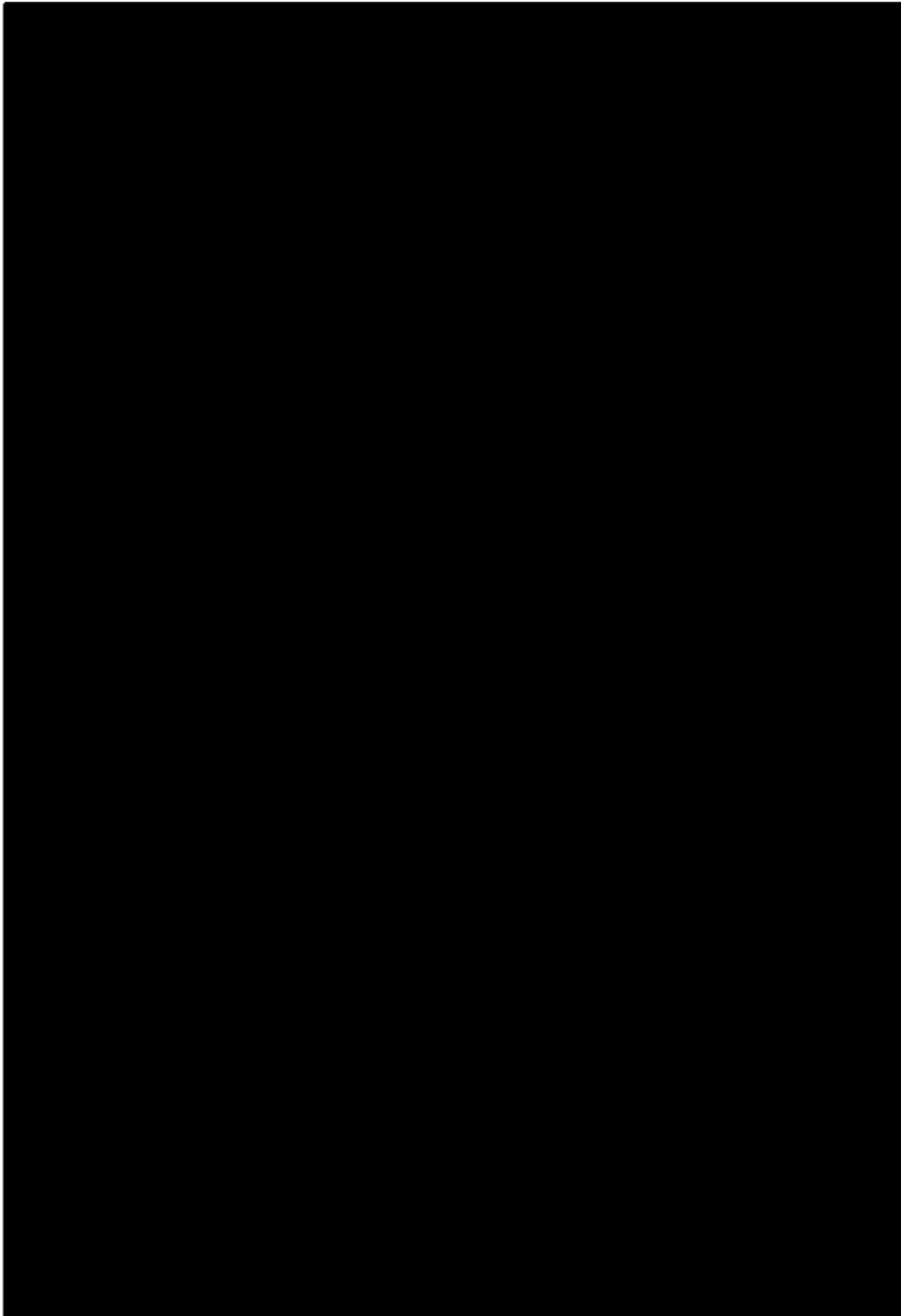
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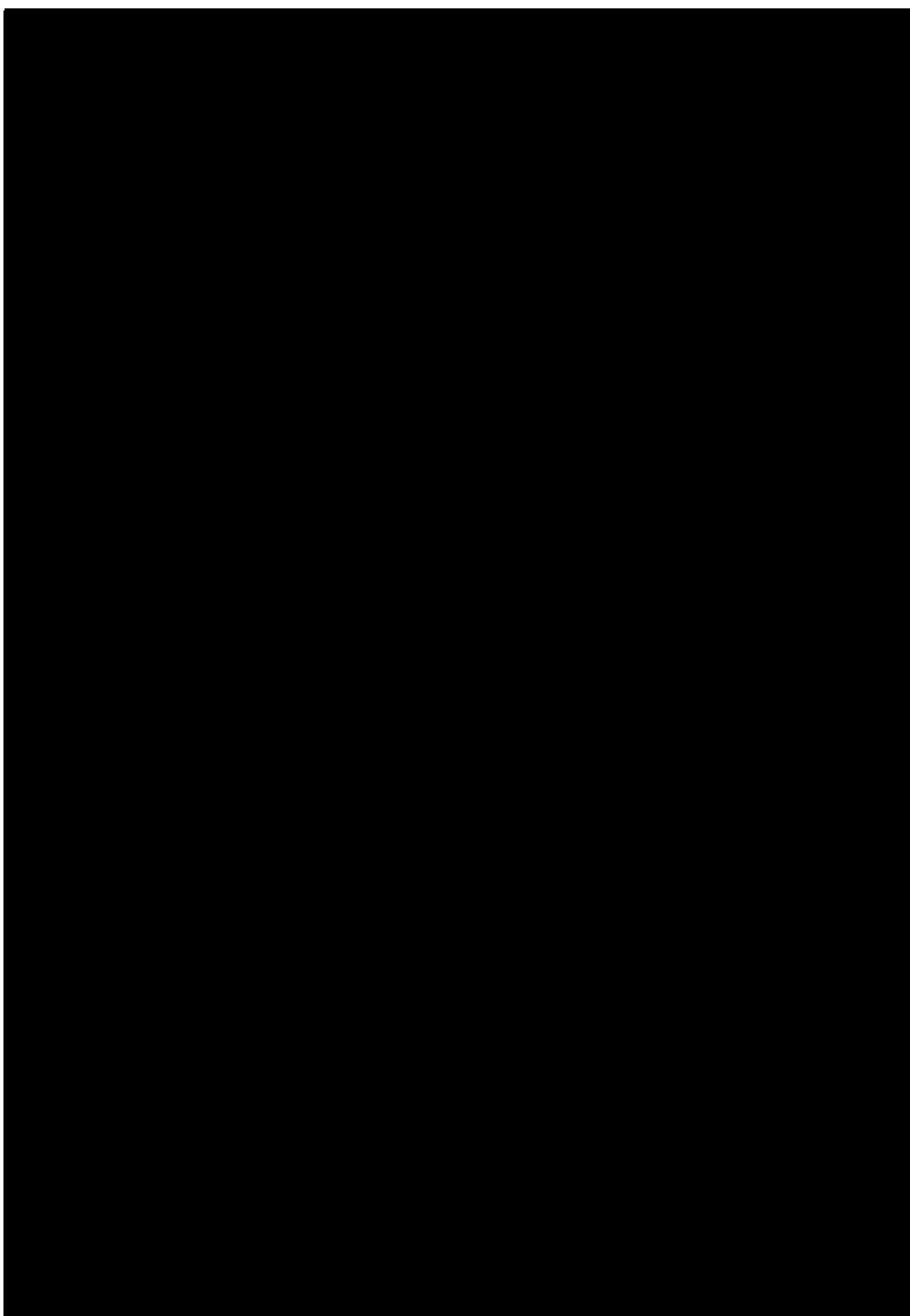
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DEPOSITION OF BILL RICHARDSON

(Whereupon, Exhibit No. 63 was  
marked for identification.)

Q BY MR. PARKER: Looking at Exhibit 63, Bates  
number 4841. Who is Brooke Baldwin?

A Brooke Baldwin was a contractor on the  
Payment Operations Team.

Q Are you familiar with this email?

A No. I don't recognize the email.

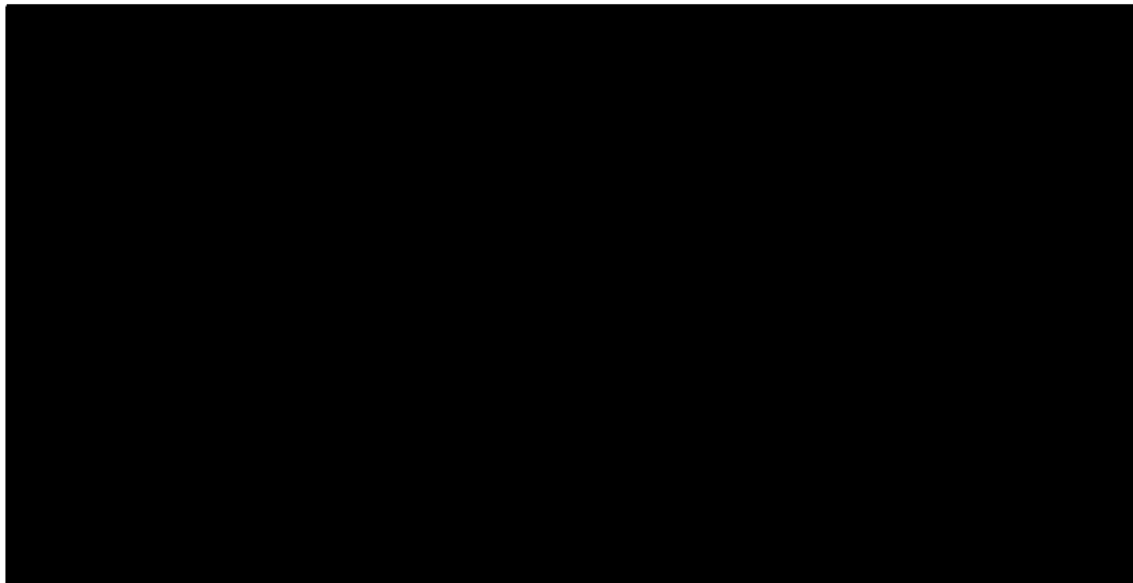
Q Okay.

(Whereupon, Exhibit No. 64 was  
marked for identification.)

Q BY MR. PARKER: Marked as Exhibit 64 is Bates  
numbers 7804 through 7806. This is an email from Tara  
Stewart to Benjamin Duranske and Ellen Silver following  
up on a thread that extends a few days back.

MR. SOMVICHIAN: Can we hold off on this so we  
can take a closer look, since Mr. Duranske is an  
attorney?

DEPOSITION OF BILL RICHARDSON



(Whereupon, Exhibit No. 65 was  
marked for identification.)

Q BY MR. PARKER: Marking as Exhibit 65, Bates  
numbers 7754 through 7767. Take a minute to flip  
through this document.

A (Witness reading.)

Q Do you know what this document is? I want to  
direct your attention to page 9 or 7762.

A The document looks to be a comparison of our  
processes around payment disputes versus other  
companies.

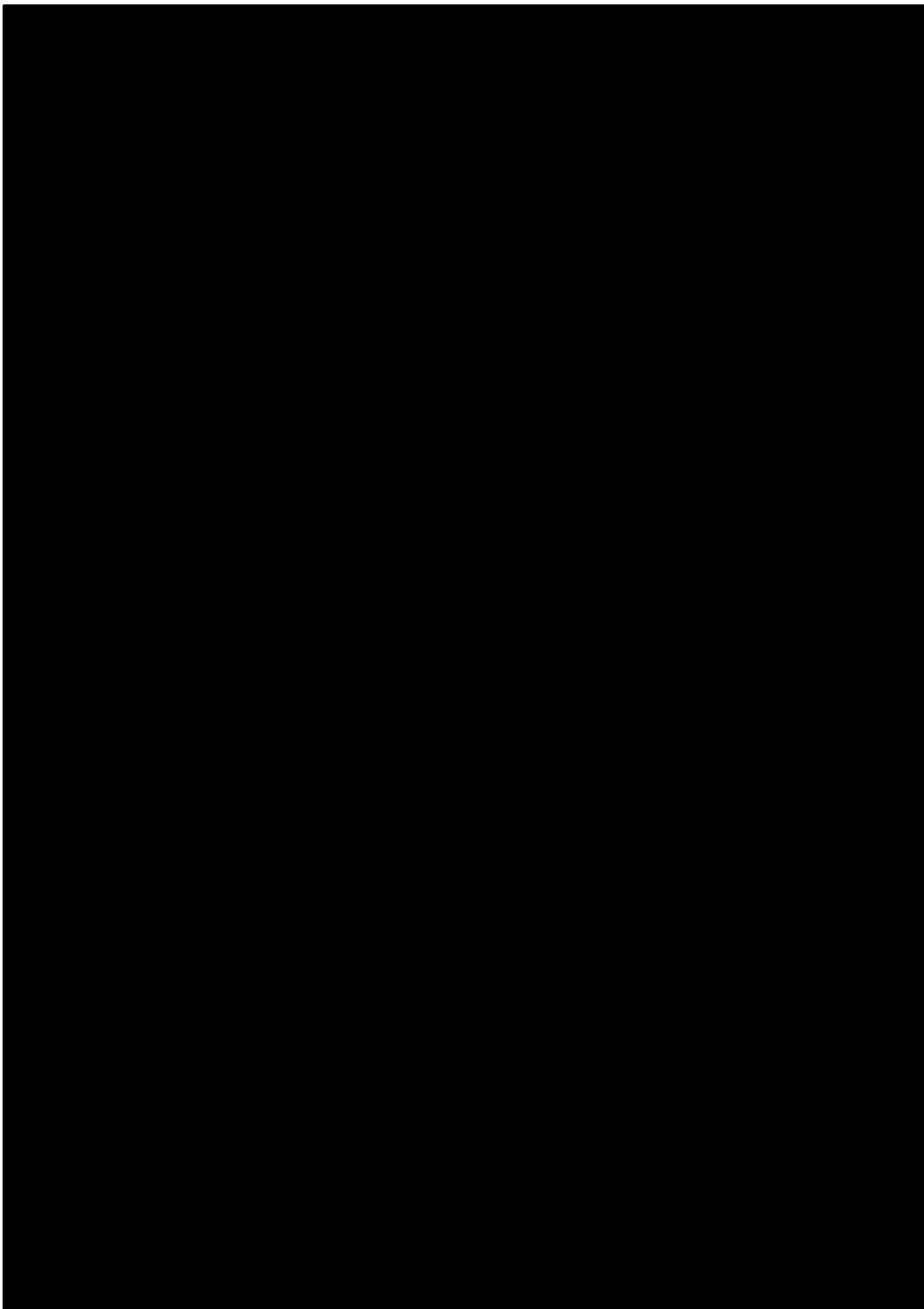
Q Have you seen this document before?

A I believe it may have been presented in a  
meeting that I was in. I don't recall specifically.

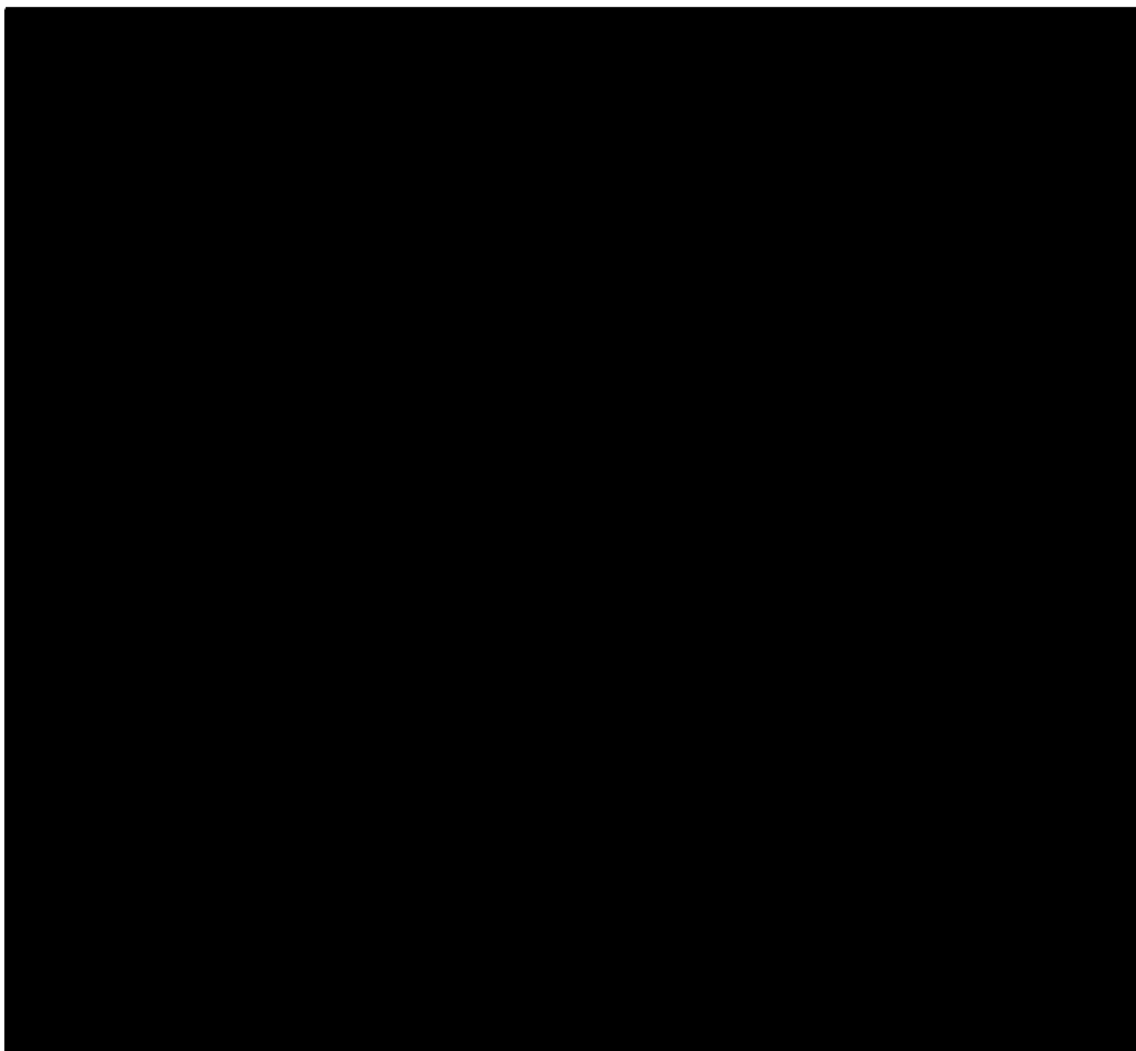
Q Do you know why Facebook was comparing the  
payment dispute processes of Facebook, on the one hand,

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DEPOSITION OF BILL RICHARDSON



17 MR. PARKER: How much more time do we have on  
18 the tape? Two minutes. We'll change the tape and take  
19 a quick break.

20 THE VIDEOGRAPHER: This is the end of tape  
21 number two. We are now off the record at 2:54.

22 (Whereupon, a recess was then taken.)

23 THE VIDEOGRAPHER: We are now on the record at  
24 3:06. This is the beginning of video number three.

25 (Whereupon, Exhibit No. 69 was

DEPOSITION OF BILL RICHARDSON

1 Facebook.

2 And, you know, I'm asking historically about how  
3 Facebook has processed credits and how they process  
4 payments now. The kid enters in the card. The card is  
5 obviously -- well, step back for a minute because this  
6 isn't a question. It is too long.

7 Kids between the ages of 13 and 17 you would not  
8 expect to have their own credit card; is that correct?

9 MR. SOMVICHIAN: Beyond the scope of the notice.  
10 Lacks foundation.

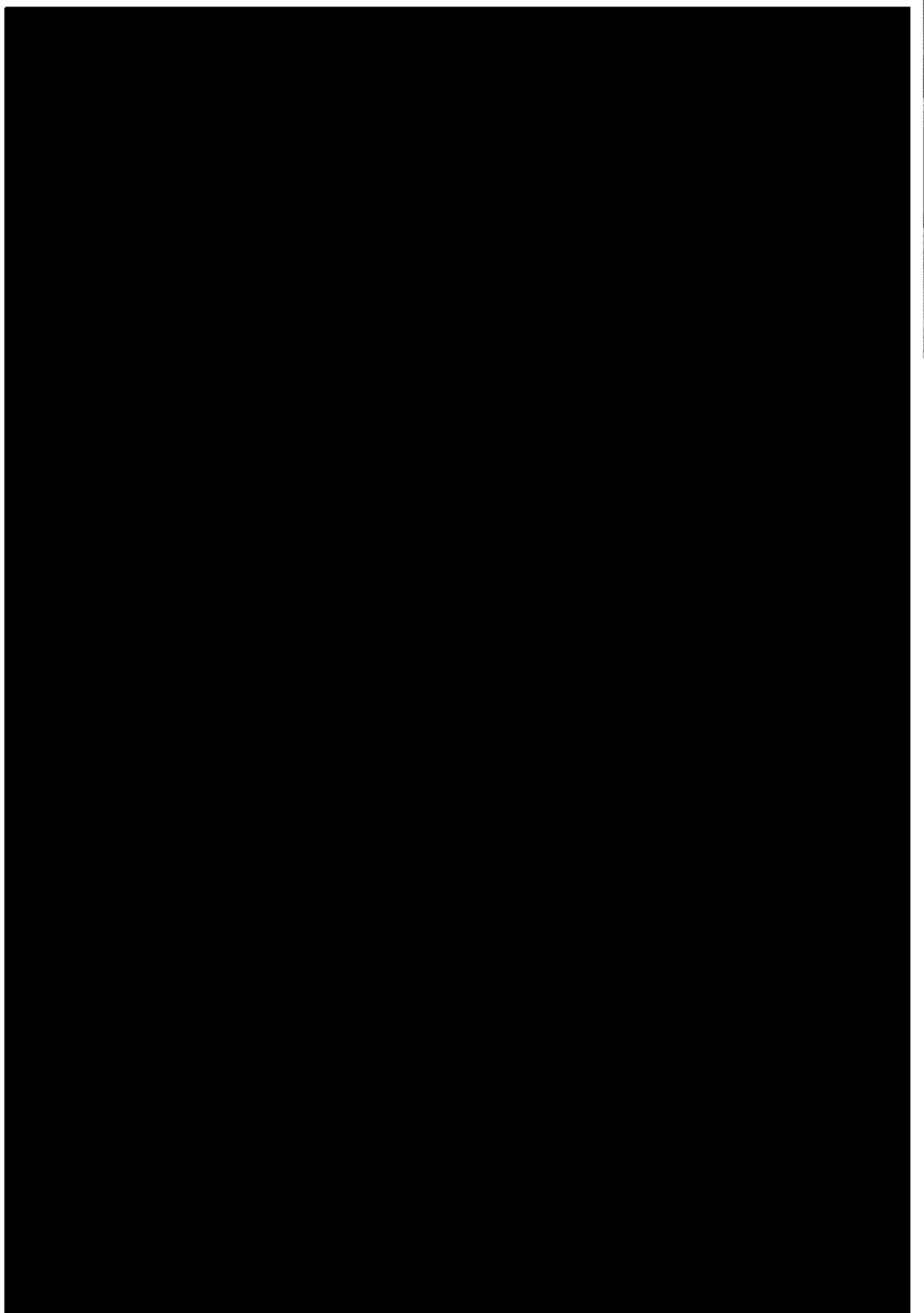
11 THE WITNESS: I don't know. I don't know what  
12 the makeup of credit card usage is.





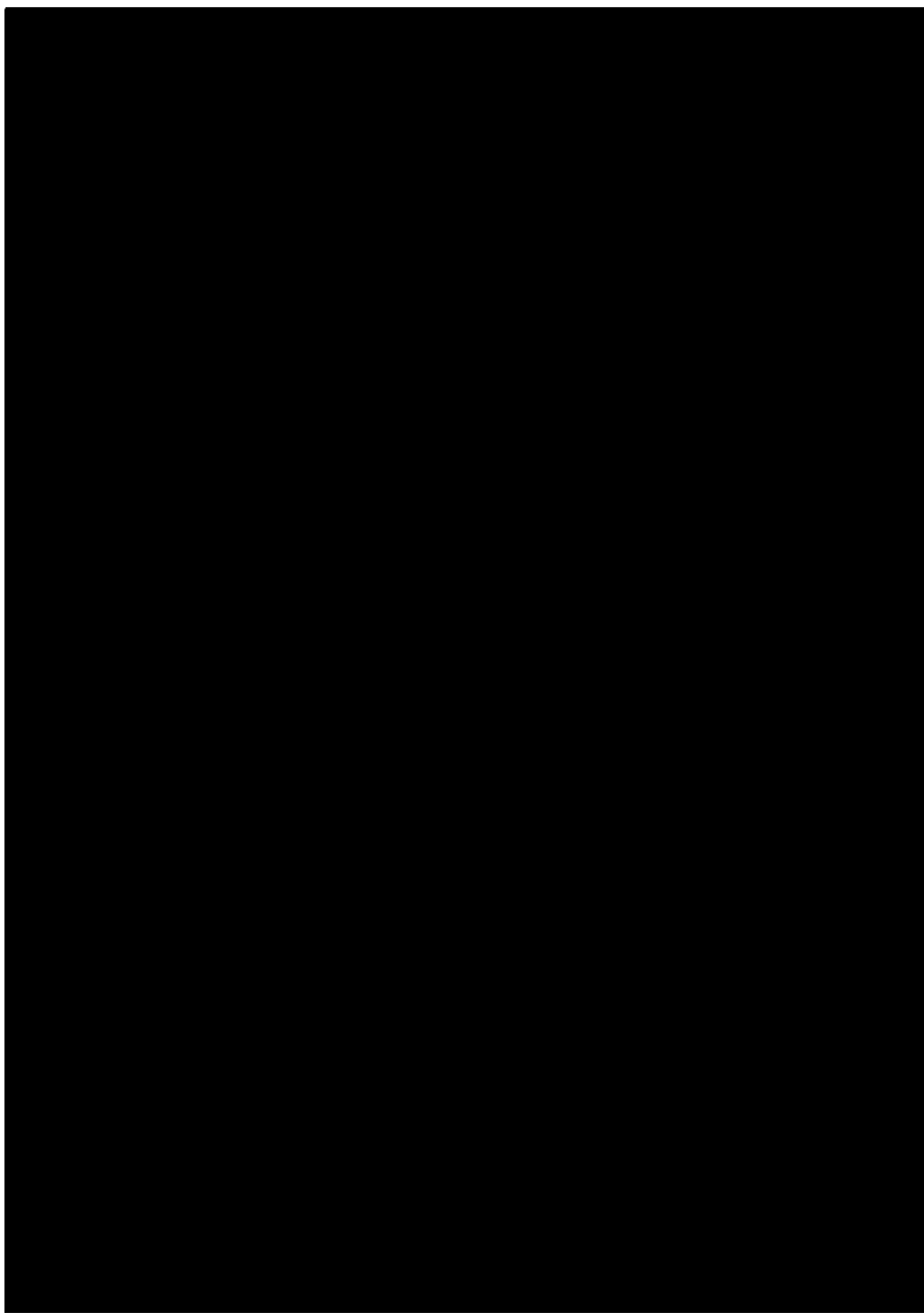
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DEPOSITION OF BILL RICHARDSON

1 it back on as long as they still had the account  
2 password; is that correct?

3 MR. SOMVICHIAN: Can I have the question read  
4 back?

5 (Whereupon, the record was read.)

6 THE WITNESS: In the scenario in which an  
7 analyst on Facebook had not either blacklisted that  
8 payment instrument or disabled the ability to make  
9 payments, my understanding is, in that scenario, the  
10 minor could re-add a payment method.

11 Q BY MR. PARKER: Let's say a parent's child was  
12 using the child's Facebook account to make unauthorized  
13 purchases with the parent's credit card. And the parent  
14 wanted Facebook to not allow the child to make any more  
15 purchases at all. How would the parent be able to make  
16 that request of Facebook?

17 A Could you read back the beginning of that  
18 question so I'm sure I understand the scenario,  
19 please?

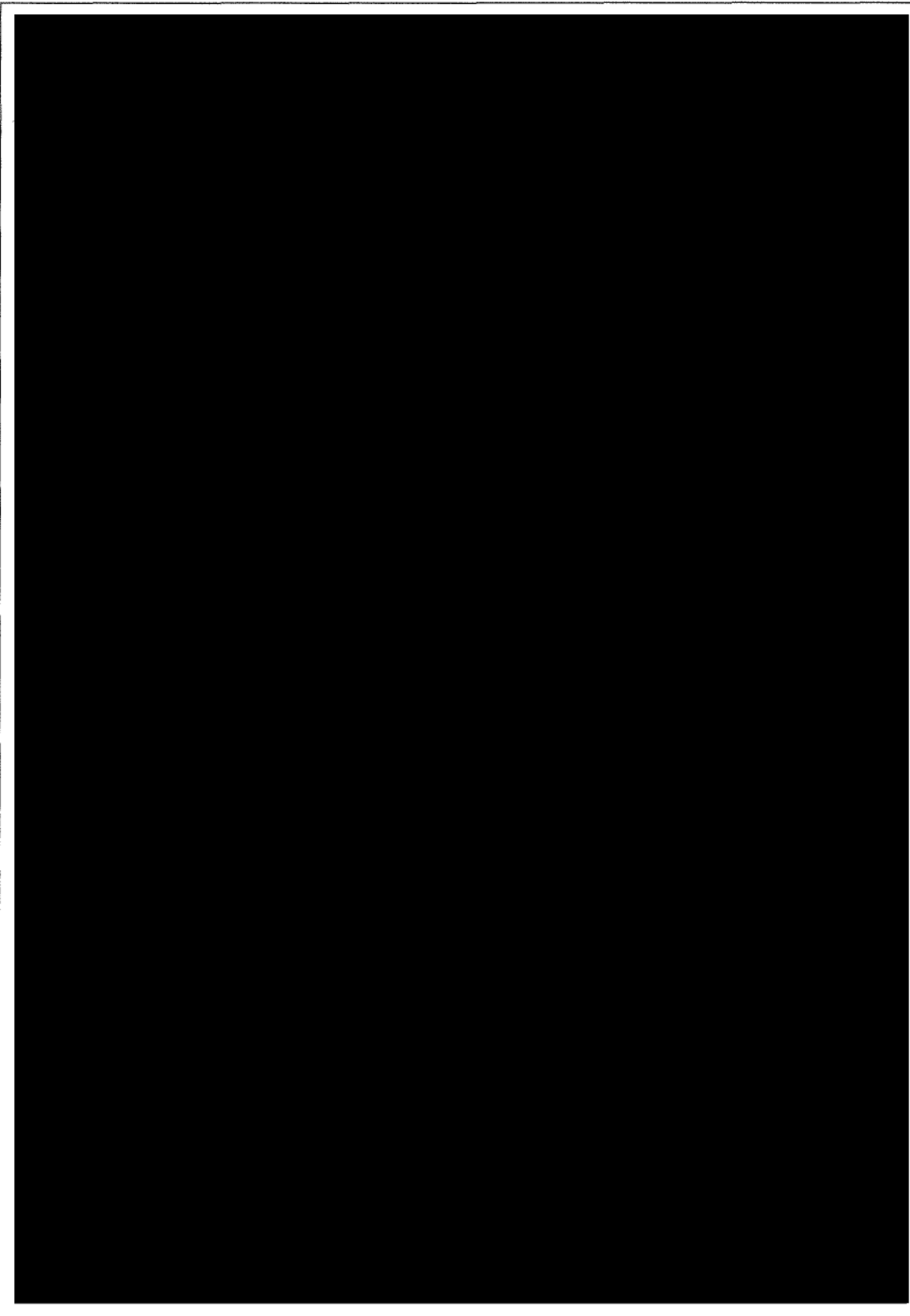
20 (Whereupon, the record was read.)

21 MR. SOMVICHIAN: Objection. Incomplete  
22 hypothetical.

23 THE WITNESS: In that scenario, the parent could  
24 contact Facebook through our contact form and report --  
25 report charges or report the credit card that made the

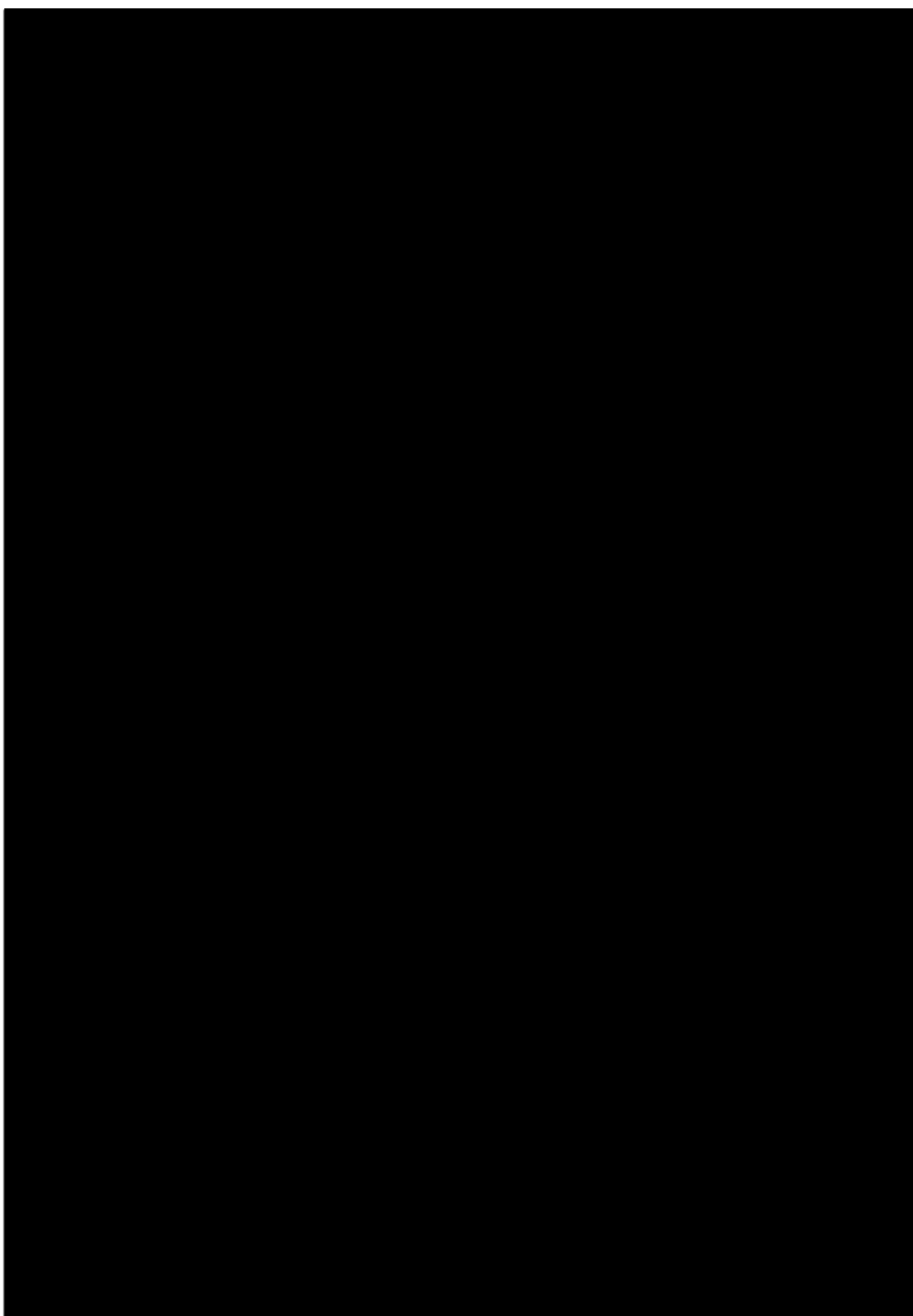
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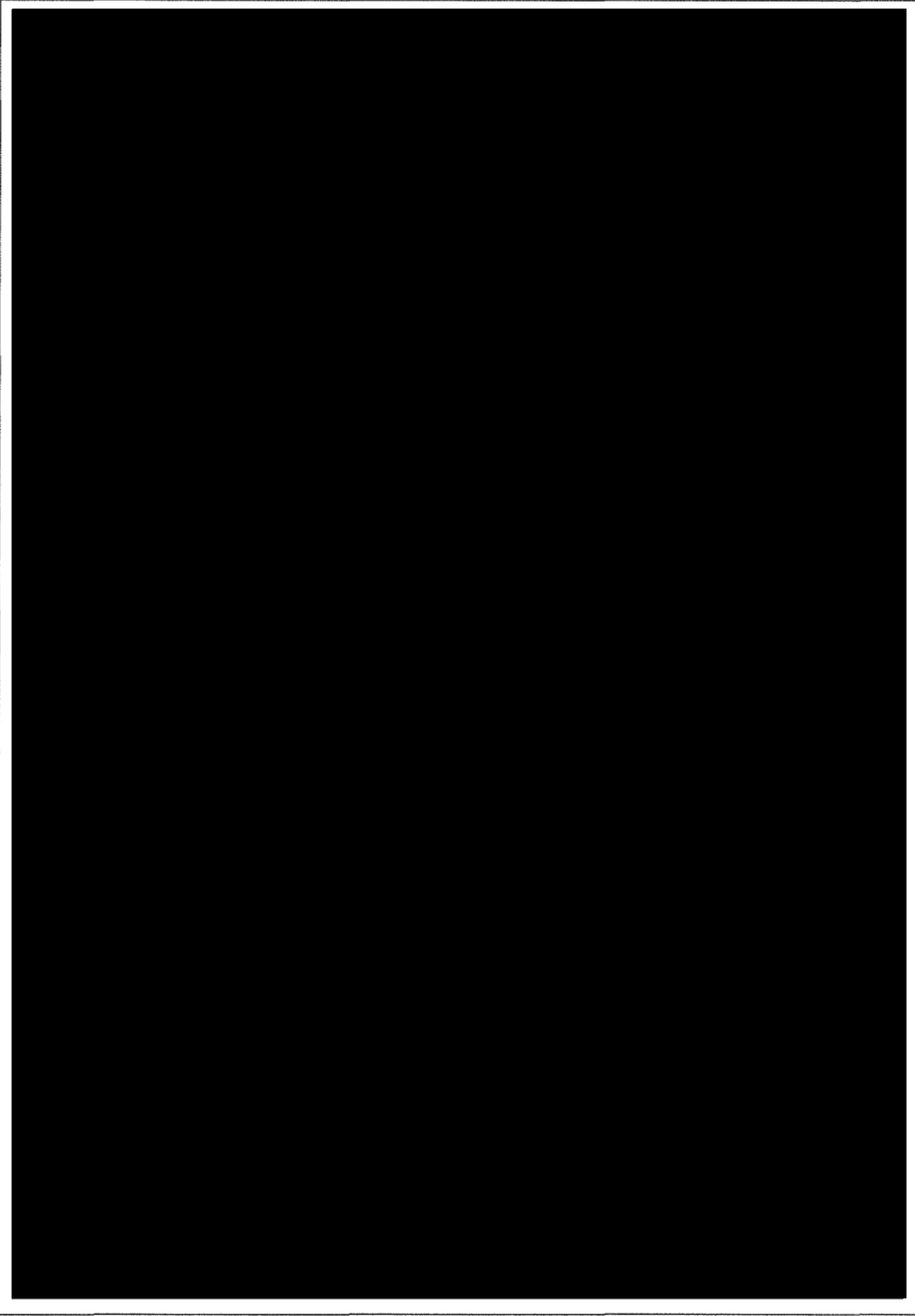
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**EXHIBIT H**



separated out the accounts that were first tagged in the chargebacks queue. Since the tags were not applied preemptively, these accounts should not be included.

i. **3462 accounts** received one of these tags: 3447 in a queue besides chargebacks and 15 in the chargebacks queue.

- **Minor's Accounts that were reviewed and not tagged:** The second query includes all users aged 13-17 as of March 2011 that spent credits between 10/12/2010 and 1/12/2011 and were not tagged as UnderageUser, SuspectTooYoung, or TooYoungforFB. This query should be more representative of the total presence of minors within our gaming ecosystem.

i. **84,030 accounts** belong to FBZ users aged 13-17 and were not tagged in CRT

- It is important to note that minors who make purchases on any account legitimately belonging to someone over the age of 17 will not be included in this study.
- Also worthy of note: when an account is permanently disabled by UO or another team for violating certain policies, all data is erased from that account. Thereby any account that was disabled under UO's Underage Privacy policy will not be included in this data. These accounts are labeled as NULL and are mixed in with legitimate, non-minor accounts that also are missing the age data for some reason. There appear to be a large number of these accounts, and this could bias the results in either direction.

#### 4. Results

##### a. **FBZ Payments from Tagged Accounts Belonging to Minors (see Appendix A)**

i. The 3447 accounts tagged in a non-cb queue spent \$755K on FBZ: \$460K of "good" revenue, \$40K of refunds, and \$255K of chargebacks.

- 61% of total is good revenue
- 34% is charged back
- 5% is refunded

##### b. **FBZ Payments from Non-Tagged Accounts Belonging to Minors (See Appendices B + C)**

i. The 84,030 accounts not tagged in CRT spent a whopping \$3.6 million on FBZ: \$3.2 million of "good" revenue, \$88K of refunds, and \$335K of chargebacks.

- 88% is good revenue
- 9% is charged back
- 3% is refunded

#### 5. Conclusion + Next Steps

When I started thinking about this project, I hypothesized that a large percentage of underage FBZ spend would be refunded or charged back. This is true of the accounts that are tagged in CRT (around 4% of all accounts belonging to minors that were analyzed in this study) where almost 40% of incoming spend was returned to the user as either a chargeback or a refund. However, of accounts that were not tagged in CRT, either because they were not queued for review or because the reviewing analyst believed the user was truthful in reporting their age as 13-17, an overwhelming 88% of incoming spend was ultimately "good" revenue (in that it was not refunded or charged back). This allows me to state confidently that the current policy of not refunding for

# EXHIBIT I

**From:** Danny Stein  
**Sent:** Wednesday, February 22, 2012 5:52 PM  
**To:** Sara Brooks  
**Cc:** Julien Codorniou; Gareth Morris; Will Wirth; Bill Richardson  
**Subject:** Re: Insights update and Credits refunds

+Will/Bill

Hi all,

We dug a little deeper into the refunds occurring on Angry Birds and it looks like most all (~93%) of the refunds are being made due to friendly fraud refund requests. **In nearly all cases the parent knew their child was playing Angry Birds, but didn't think the child would be allowed to buy anything without their password or authorization first (Like in iOS).** The combination of Angry Birds being an existing title on mobile and being targeted at a younger demo most likely explains the higher refund rate they are seeing. The difficulty with friendly fraud is that we do not have a clear way to identify it at a purchase level because it looks like a good transaction and if we were to build risk models to reduce it, we would most likely block good TPV.

I think we all agree that it is really important for Angry Birds to be a success story so if they are really concerned about the refund rate we can increase our focus on their transactions and our processes around them to try and lower their refund rate.

@Sara, can we schedule some time to chat with them next week? I would also push them again to pull their refund codes via the API so they can better understand this behavior themselves.

Best,  
 Danny

---

**From:** Danny Stein <dstein@fb.com>  
**Date:** Tue, 21 Feb 2012 16:08:38 -0800  
**To:** Sara Brooks <sara@fb.com>  
**Cc:** Julien Codorniou <julienco@fb.com>, Gareth Morris <gjm@fb.com>  
**Subject:** Re: Insights update and Credits refunds

Hi guys,

Just an update, this looks to all be friendly fraud (unauthorized charges made by a child or adult that is known to the cardholder) and we haven't seen one case of true fraud. From first glance the the refund rate is low by order count but higher by actual credit amount meaning a handful of high amount orders were refunded. We are digging deeper into the data and should have something to send to Rovio in the next day or two. Just a heads up that we are on the case! @Sara, I'd love to hop on a call with their team in the next two weeks to discuss this and some other payments best practices.

-Danny

---

**From:** Sara Brooks <sara@fb.com>  
**Date:** Tue, 21 Feb 2012 13:33:34 -0800  
**To:** Danny Stein <dstein@fb.com>  
**Cc:** Julien Codorniou <julienco@fb.com>, Gareth Morris <gjm@fb.com>  
**Subject:** FW: Insights update and Credits refunds

Hey Danny-



Looks like Angry Birds is seeing 5-10% in refunds since they launched last week. Can we comment on whether or not that's a high percentage? Also, anything in particular that you see with regard to their refunds that we can help counsel them on?

Sara

---

**From:** Sean Ryan <[seandryan@fb.com](mailto:seandryan@fb.com)>  
**Date:** Mon, 20 Feb 2012 10:14:35 -0800  
**To:** Gareth Morris <[gim@fb.com](mailto:gim@fb.com)>  
**Cc:** Julien Codorniou <[julienco@fb.com](mailto:julienco@fb.com)>, Internal Use <[sara@fb.com](mailto:sara@fb.com)>  
**Subject:** Re: Insights update and Credits refunds

Julien and Sara, please follow up on this question. Sean

Sent from my iPhone

On Feb 20, 2012, at 10:09 AM, "Gareth Morris" <[gim@fb.com](mailto:gim@fb.com)> wrote:

Hi Stefan,

Let me check up to see if that's a high refund rate.

Have you read the section on Disputes and Chargebacks in our docs? <https://developers.facebook.com/docs/credits/disputes/>

You should receive an email when a user disputes a transaction, and then you are able to either "settle" or "refund" it.

If a transaction has been refunded by Facebook, you will see an extra field when you GET /ORDER\_ID via the Graph - refund\_reason\_code

You can also query the Graph API with a GET to /APP\_ID/payments?status=refunded with your app access token to see all refunded transactions.

I noticed Insights data was out of date today too. It's normally a couple of days behind, but this seems like a bug. Looking into it on our side.

Gareth

---

**From:** Stefan Hauk <[stefan.hauk@rovio.com](mailto:stefan.hauk@rovio.com)>  
**Date:** Mon, 20 Feb 2012 18:04:25 +0200  
**To:** Rovio Partnership <[rovio-partnership@fb.com](mailto:rovio-partnership@fb.com)>  
**Cc:** Gareth Morris <[gim@fb.com](mailto:gim@fb.com)>  
**Subject:** Insights update and Credits refunds

Hi,

I have a question about Facebook Credits refunds. We have been seeing refund rates of 5-10% in terms of credits spent so far on Angry Birds. This seems quite high to me, but it might just be normal for games on Facebook. Can you give us an indication of what the average expected refund rate is on the platform? Is there a way to get data about the reason for the refunds?

Also, I noticed that the Insights data have not been updated for Angry Birds (178222352279634) since Tuesday last week, apart from the Credits section. Shouldn't these numbers update the latest 24 hours after

a full day is completed? And which time zone do you use as a cut-off point for the days?

Thanks,

Stefan

**Stefan Hauk**

Lead Server Programmer, Web Games

Rovio Entertainment Ltd.

Keilaranta 17, FIN - 02150 Espoo, Finland

Mobile: +358 (0)50 388 9486

Fax: +358 (0)9 759 3350

[stefan.hauk@rovio.com](mailto:stefan.hauk@rovio.com)

[www.rovio.com](http://www.rovio.com)

# EXHIBIT K

**From:** Elizabeth Williges  
**Sent:** Tuesday, November 08, 2011 11:46 AM  
**To:** discussions+304657336213911@xmail.facebook.com  
**Subject:** Developer education for loss insights

Title: Developer education for loss insights

Sent To: [dstein@fb.com](mailto:dstein@fb.com), [tara@fb.com](mailto:tara@fb.com), [brichardson@fb.com](mailto:brichardson@fb.com), [mandyearhart@fb.com](mailto:mandyearhart@fb.com), [joseph.filip@fb.com](mailto:joseph.filip@fb.com)  
 by Elizabeth Williges

Hi all,

As discussed earlier, there is a huge need to educate developers and improve their understanding of our fraud management and dispute resolution practices. Below is non-comprehensive list of proposed topics to help us accomplish this goal.

### 1. Overview of Losses (Liz)

- **Refunds** – high level overview of our policy
- **Losses** – high level overview of why developers shouldn't focus on them – virtual goods bear no cost
- **API** - "Did you know?" section on what's available today
- **Friendly Fraud** – what it is, why it's challenging, and why you shouldn't try to block it
  - Friendly fraud refunds
  - Friendly fraud CB's
  - Friendly fraud minor
  - Friendly fraud adult
- **Accrual vs. Cash accounting** – definitions and differences
- **Credits Insights** – Overview of existing report

### 2. Fraud Management - Facebook's philosophy (Joseph)

- **Overview of our 1% CB philosophy** - optimizing the ecosystem and maximizing revenue
- **Reasons for refund/CB spikes** – best practices on when to ignore & when to deep dive
- **Fraud management** - What we do to ensure malicious fraud doesn't get out of control (ex. controls to review apps w/ loss rates over 'x'%)
- **Risk rules and fraud models** – any insight we can provide around limiting false positives? Why we think they are best in class and how we're constantly improving them.
- **FB specific advantages to managing fraud** – high precision due to account level info

### 3. Game mechanics/characteristics (Tara)

- **Type of apps** that are expected to have higher losses
- **In-game mechanics** that are expected to have higher losses
- **Countries** that have higher fraud losses
- **Policies and actions taken on fraudsters** - what are they? how they maximize revenue while preventing malicious actors from being repeat offender?
- **Malicious fraud**
  - What is it?
  - When do we refund for it?



#### 4. Developer best practices for customer service (Danny)

- **Dispute process** - how it works, what inquiries go to FB vs. developer
- **Response time** - what we recommend, why it matters
- **Recommended metrics to track** – contact rate, etc.
- **Developer refunds** (definition)
- **Developer refund best practices** - Encourage giving virtual items instead of \$\$\$ and possibly even extra virtual items to improve customer satisfaction
- **User confusion**
  - What is is?
  - When do we refund for it?

#### --Next Steps--

- 1) Define assigned topics
- 2) Disperse to our working group for feedback
- 3) Revise and finalize with XFN stakeholders
- 4) Determine the best distribution channel (blog, email, notification, etc.) & time frame for launching
- 5) Add to the US help center if (4) isn't launching in the next few weeks
- 6) Submit for FL translation and add to the help center when completed
- 7) Add NPS question to the developer surveyPlease share your feedback on the list above, proposed next steps, and add any missing items. Also, feel free to trade topics w/ me or anyone else. -Liz

---

You can reply with a comment, or post it here:

<https://www.intern.facebook.com/intern/discussions/?fbid=304657336213911>

Reply with '!subscribe' to receive replies to this discussion.



**EXHIBIT L**

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**From:** Diarmuid Thoma  
**Sent:** Monday, November 14, 2011 4:17 PM  
**Subject:** Chargeback Representment Milestones  
**Attachments:** CB Waterfall.pdf; CB Filedocx.docx

Diarmuid Thoma has blasted this discussion to: Bill Richardson, Ellen Silver

Hi,  
I just wanted to share some of the recent updates on the chargeback representment project, if you have any questions on any of the topics discussed please feel free to mail me or post on the discussion and I will reply ASAP.

Regards,  
Diarmuid

-----  
Tom Hayden - at 18:21 on 27 October

I think you should also focus on getting a complete analysis of the costs involved in this process. Particularly:

1. Processor Hidden Costs/Fees. I'm 90% certain we're going to get some fees that we didn't know about or that existed. I think it's going to be important to model the costs of these.
2. Analyst Time. I hope you are measuring the overall time to submit these representments. We can focus on process efficiency later, but we need at least an upper bound on the cost to the org.

Also, you mentioned in the meeting today that we're submitting 300 representments but here it seems like you're submitting the full 362. If you have >1 representment for a user, do you only have to submit the one?

Diarmuid Thoma - at 18:51 on 27 October

Hey Tom, we have met with Paymentech regarding the costs involved in this process and I can confirm that we do incur a \$5 transaction processing fee for IE Gateway transactions and a \$2.50 fee for for US Gateway transactions. If we successfully dispute these transactions we do not incur any further transactional costs or penalties with any of the issuers.

If we are unsuccessful in our dispute of the chargebacks we only incur a penalty fee on Visa 83 codes and from what Paymentech have told us this is only if the Issuer (the bank) processes arbitration directly with Visa, all other chargeback codes do not apply a rejection penalty. On any eventuality I will be reporting on all costs involved in this process as part of the overall findings of the project.

In relation to the analyst time, I have tracked the amount of time this process has taken operationally, however this overall processing time will not be relevant to any future development of this project because we will never launch a process of manual file generation as it would be completely inefficient and not operationally cost effective. If the win rate from representments is sufficient enough we will be able to dedicate resources to syncing with the Paymentech system directly and ideally will have a "dispute" button in CRT which will automatically generate the necessary information for a successful dispute, this will be considered the second phase of this project as it is dependant on the success of the first phase.

The reason we now only have 300 rather than the 362 we originally created is because 62 were misclassified and were in fact SFI or Compromised which meant we could not dispute these. This is actually a dramatic improvement as when we did this process in August we found that 40% of all FF CB's were misclassified and

# EXHIBIT M

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**From:** Tara Stewart  
**Sent:** Friday, December 02, 2011 12:51 AM  
**To:** Tara Stewart  
**Subject:** Re: [tasks] #578748: Bootcamp Project, Part 2: Transaction Level Data [risk-ops] [riskproject] [risk credits projects]

Bennett Woo - at 2:59pm yesterday  
\* changed the subscribers. Added: Bennett Woo.

[ To see this task, go to: <http://our.intern.facebook.com/intern/tasks/?t=578748> ]

Tara Stewart - at 4:47pm  
Already posted this on the MC IE discussion, but posting the relevant data here too:

Regarding the First-6 Inflow Response:

Just ran the data for my friendly fraud inflow project. This rule targeted users under the age of 17 and above the age of 90 who were trying to spend greater than or equal to \$75 in a single txn in Pet Society, Backyard Monsters, or EA SPORTS FIFA Superstars: Real football & soccer!. The rule response was the first-6 CC inflow. I included refunds and chargebacks in the same loss bucket because together they constitute total friendly fraud. This rule was active from 8/2/2011 to 10/31/2011.

Users who passed inflow and made subsequent txns in any of the 3 test apps:

13.3% of the count of txns were charged back or refunded 27.8% of the sum total of txns were lost as a result of chargebacks + refunds 14.9% of these users (count) charged back or were refunded

Users in the control group for this rule:

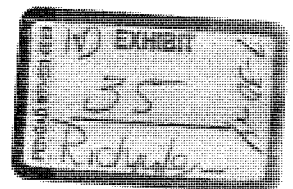
19.2% of the count txns were charged back or refunded 39.9% of the sum total of txns were lost as a result of chargebacks + refunds 13.2% of these users (count) charged back or were refunded

Users who passed inflow and didn't spend in the 3 test apps or users who failed inflow:

From a statistically significant sample, 6% of these users charged back or were refunded. 32% of users in the Inflow group fall into this segment.

The results from my project indicate that first-6 inflow slightly altered the chargeback and refund rates. While a smaller percentage of the control group users charged back or were refunded, they charged back a greater number of transactions and a larger total sum. Fewer transactions were ultimately charged back or refunded from the users who passed inflow. Though the inflow didn't make a huge dent in the loss rate, it blocked a fair amount of users from purchasing in the test apps. If this were run at a larger scale, it could decrease the denominator of the segment we are targeting.

Anecdotally, many of the minors who did not spend in the test apps after inflow went on to spend in other apps. Unfortunately, due to time constraints, I didn't have time to dig deeper into the users who passed inflow but didn't spend or all-out failed the inflow. This could be a next step.



Ultimately, I would recommend a first-6 inflow to the lower threshold users.

---

Title: Bootcamp Project, Part 2: Transaction Level Data

Created: 8:48am May 27th, 2011 by Tara Stewart

Tags: risk-ops, riskproject, risk credits projects

Priority: low-pri

Assigned to: Tara Stewart

Related to this original discussion on underage users:

[http://www.intern.facebook.com/intern/discussions/#!/intern/discussions/index.php/Boot\\_Camp\\_Project\\_\\_The\\_Financial\\_Impact\\_of\\_Permitting\\_Minors\\_to\\_Spend\\_Facebook\\_Credits/?fbid=123396701073369](http://www.intern.facebook.com/intern/discussions/#!/intern/discussions/index.php/Boot_Camp_Project__The_Financial_Impact_of_Permitting_Minors_to_Spend_Facebook_Credits/?fbid=123396701073369)

Now focusing exclusively on users tagged with one of the three minor tags in CRT to determine if we should be refunding after a certain spend threshold during review

Next steps:

1. Sort the users in the original query by tagID 2. Determine the size of each of the samples (# of AIDs) and record the median CB amt per account, median refund amount, and median successful amount 3. Repeat steps 1+2 with the second query to get an idea of the total population of minor's spending credits...break this query out by age: 13-17 4. Instead of summing by AID, run a third query that pulls all transactions individually to determine the typical number of cbs per account and the actual impact on compliance

To see this task, go to: <http://our.intern.facebook.com/intern/tasks/?t=578748>

Reply to post a comment.

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Full History

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Tara Stewart - at 8:48am on May 27th

\* created the task.

Tara Stewart - at 8:48am on May 27th

\* changed the title to "Bootcamp Project, Part 2: Transaction Level Data"

Tara Stewart - at 8:48am on May 27th

\* changed the description to "Related to this original discussion on underage users:

[http://www.intern.facebook.com/intern/discussions/#!/intern/discussions/index.php/Boot\\_Camp\\_Project\\_\\_The\\_Financial\\_Impact\\_of\\_Permitting\\_Minors\\_to\\_Spend\\_Facebook\\_Credits/?fbid=123396701073369](http://www.intern.facebook.com/intern/discussions/#!/intern/discussions/index.php/Boot_Camp_Project__The_Financial_Impact_of_Permitting_Minors_to_Spend_Facebook_Credits/?fbid=123396701073369)

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Tara Stewart - at 8:48am on May 27th

\* changed the subscribers. Added: Tara Stewart, David Clune, Ross Worden.

Tara Stewart - at 8:48am on May 27th

\* claimed the task.

Tara Stewart - at 8:48am on May 27th

\* added the attachment "MOREFUNWITHHIPAL2.xlsx".

Tara Stewart - at 8:48am on May 27th

\* changed the tags. Added: 'riskproject', 'risk-ops', 'credits'.

Tara Stewart - at 8:48am on May 27th

\* added the attachment "FUNWITHHIPAL.xlsx".

Tara Stewart - at 8:48am on May 27th

\* added the attachment "bootcamppart2work.xlsx".

Tara Stewart - at 12:01pm on May 31st

FYI...project has been slightly delayed as we work on de-bugging the third query (step 4) which will determine the actual impact on compliance

Tara Stewart - at 1:50pm on June 6th

Ran the third query and it returned 8 billion lines....needless to say, some more debugging is in order.

Ross Worden - at 1:55pm on June 6th

CREATE TABLE tarastew\_project\_bootcamp\_extended\_part1

TBLPROPERTIES('RETENTION'='0','WEEKLY\_GROWTH\_RATE'='0') AS SELECT DISTINCT v.source\_account\_id, v.amtsucc, v.amtref, v.amtcb, v.orderid

FROM(

SELECT a.source\_account\_id as source\_account\_id, a.c\_reference\_id as orderid, x.amtsucc as amtsucc, c.amtref as amtref, e.amtcb as amtcb FROM cn\_risk\_ultloss\_alltxns\_p a

LEFT OUTER JOIN

(

SELECT z.source\_account\_id, z.c\_reference\_id, z.amount\_usd as amtsucc

FROM cn\_risk\_ultloss\_alltxns\_p z

```

WHERE z.product_name = 'credits' and z.ds='2011-04-25' AND z.created_date>='2010-10-12' AND
z.created_date<='2011-01-12' AND ((z.refund_amt=0 AND z.cb_amount = 0) OR (z.refund_amt IS NULL AND
z.cb_amount IS
NULL))
) x
ON a.source_account_id = x.source_account_id

```

```

LEFT OUTER JOIN

```

```

(
SELECT b.source_account_id, b.c_reference_id, b.amount_usd as amtref FROM cn_risk_ultloss_alltxns_p b WHERE
b.created_date_refund>='2010-10-14' AND b.ds='2011-04-25' AND b.product_name='credits' AND
(b.refund_amt>0 OR b.refund_amt IS NOT NULL)
) c
ON a.source_account_id = c.source_account_id

```

```

LEFT OUTER JOIN

```

```

(
SELECT d.source_account_id, d.c_reference_id, d.amount_usd as amtc b FROM cn_risk_ultloss_alltxns_p d WHERE
d.cb_date>='2010-10-14' AND d.ds='2011-04-25' AND d.product_name='credits' AND (d.cb_amount>0 OR d.cb_amount
IS NOT NULL)
) e
ON a.source_account_id = e.source_account_id

```

```

WHERE a.product_name = 'credits' and a.ds='2011-04-25' AND a.created_date>='2010-10-12' AND
a.created_date<='2011-01-12')v;

```

Ross Worden - at 1:55pm on June 6th

```

CREATE TABLE tarastew_project_bootcamp_extended_part2 TBLPROPERTIES('RETENTION'='30',
'WEEKLY_GROWTH_RATE'='0') AS

```

```

SELECT a.*, g.age, CASE WHEN
q.tagid= 131902480193255 OR q.tagid = 144022365627990 OR q.tagid =112900575408907 THEN 1 ELSE 0 END AS
tagged

```

```

FROM

```

```

tarastew_project_bootcamp_extended_part1 a

```

```

LEFT OUTER JOIN pb_user_account f ON

```

```

a.source_account_id=f.account_id

```

```

LEFT OUTER JOIN dim_all_users_info g ON f.user_id=g.userid AND g.ds='2011-05-01' AND g.age<=17 AND g.age IS NOT
NULL

```

```

LEFT OUTER JOIN

```

```

(SELECT y.objectid as objectid, y.tagid as tagid FROM object_to_tag_assoc y WHERE ds>='2010-10-12'
) q

```

```

ON q.objectid=f.user_id;

```

Ross Worden - at 1:56pm on June 6th

I'm pretty sure the dupping is due to joining on account ids and not txn ids in the first query

Tara Stewart - at 7:53am on June 8th

Joined on txn\_id in the first query, but this still returned a huge amount of rows...

Ross Worden - at 8:10am on June 8th  
what # of rows?

Ross Worden - at 8:12am on June 8th  
without joining on txn\_id (instead, join on aid) the count is 173,640,493. I'm almost certain that the 1:many component of acct:txn and the join structure is responsible for dupping

Ross Worden - at 8:14am on June 8th  
also, update the second query to:

```
CREATE TABLE tarastew_project_bootcamp_extended_part2 TBLPROPERTIES('RETENTION'='30',
'WEEKLY_GROWTH_RATE'='0') AS
```

```
SELECT a.*, g.age, CASE WHEN
q.tagid= 131902480193255 OR q.tagid = 144022365627990 OR q.tagid =112900575408907 THEN 1 ELSE 0 END AS
tagged, q.tagdate as tagdate
```

```
FROM
tarastew_project_bootcamp_extended_part1 a
```

```
LEFT OUTER JOIN pb_user_account f ON
a.source_account_id=f.account_id
LEFT OUTER JOIN dim_all_users_info g ON f.user_id=g.userid AND g.ds='2011-05-01' AND g.age<=17 AND g.age IS NOT
NULL
```

```
LEFT OUTER JOIN
(SELECT y.objectid as objectid, y.tagid as tagid, min(ds) as tagdate FROM object_to_tag_assoc y WHERE ds>='2010-10-
12'
) q
ON q.objectid=f.user_id;
```

that min(ds) is going to help too

Tara Stewart - at 8:21am on June 8th

Joining on transaction returned 16,338,159 rows...so definitely a lot smaller than your original pull. Just not sure how to make this manageable since I can't even export that many rows to Excel. I'll think on it...

Ross Worden - at 8:32am on June 8th

I think that # makes sense given the query parameters. can you post the query # or the code so i can integrate it? We won't have to export to excel - you can run queries on the new table to get the txn level info, or just randomly sample



Tara Stewart - at 9:17am on June 8th  
Query number: 413850. Table name: bootcampjoinontxn

Tara Stewart - at 5:25pm on June 17th  
\* changed the tags. Removed: 'credits'.

Tara Stewart - at 5:25pm on June 17th  
\* changed the tags. Added: 'risk credits projects'.

Tara Stewart - at 1:09pm on July 8th  
The increased concerns about cb rates from devs reminded me of the second part of this project. If the devs are really more concerned about cbs and not refunds it could make sense to start refunding for blatant FF-minor. Ross and I will have to revisit this data when he has time!

Tara Stewart - at 8:45am on July 11th  
\* changed the subscribers. Added: Joseph Filip.

Ross Worden - at 3:21pm on July 13th  
This should work (running in hipal2\_447118) and you can add in whatever else you want to the top SELECT clause from risk\_json\_buy...:

```
SELECT q.objectid_x as uid, q.tagid_x as tagid, q.tagdate_x as tagdate, get_json_object(a.features, '$.RefAppId') as
appid, u.name as appname, a.order_id, a.amount_fbcents as amount_fbcents, (CASE WHEN a.refund_time > 0 OR
a.chargeback_time > 0 THEN 1 ELSE 0 END) as fraud, get_json_object(a.features, '$.UserAge') as UserAge

FROM
(
SELECT x.objectid_y as objectid_x, x.tagid_y as tagid_x, min(x.ds_y) as tagdate_x FROM ( SELECT y.objectid as objectid_y,
y.tagid as tagid_y, y.ds as ds_y FROM object_to_tag_assoc y WHERE y.ds>='2010-10-12' AND y.tagid IN
(131902480193255,144022365627990,112900575408907)
) x
GROUP BY x.objectid_y,x.tagid_y
)q

LEFT OUTER JOIN risk_json_buy_transactions_completed a ON q.objectid_x = get_json_object(a.features, '$.SourceId')
AND a.ds = '2011-07-11' AND (to_date(from_unixtime(a.transaction_time)) >='2010-10-12') AND
(to_date(from_unixtime(a.transaction_time)) <='2011-01-12')

LEFT OUTER JOIN pb_launched_apps u ON get_json_object(a.features, '$.RefAppId')=u.app_id;
```

Tara Stewart - at 9:54pm on July 13th  
That data is pretty sweet. I like that you just plugged it in at the app level. It is definitely different than the data set we were originally looking at, but I'm ok with that. I'll make some pivot charts tomorrow.

Tara Stewart - at 4:07pm on July 14th

\* added an attachment that was later deleted.

Tara Stewart - at 4:08pm on July 14th

Underagedataplevel is fun to play around with if you are interested in app-level losses per user.

Tara Stewart - at 11:30am on July 18th

\* added the attachment "underagedataplevel(1).xlsx".

Tara Stewart - at 11:35am on July 18th

Fixed the data in underagedataplevel. You can now research the following:

1. Total loss and good spend in FBZ per Underage Tag per App 2. Total loss and good spend in FBZ per UID per App

The data set includes transactions that occurred between 10/12 and 1/12 from users that were tagged with one of the three minor tags. The app environment has changed a bit since then (with some different apps arising as most popular with the under-18 set). We could use the numbers in this report to determine if we should start refunding for specific apps in CRT at a certain threshold. I'm open to suggestions on the best way to utilize this data.

Tara Stewart - at 2:58pm on July 20th

I was talking with Joseph and Dave yesterday about how we should use this data to choose apps that would be good recipients for an automatic underage inflow. Lossy FF-minor heavy apps that come to mind: PetVille, Happy Aquarium, Wild Ones, Barn Buddy, and any Ninja game.

We can check out a rule catered to users under the age of 18 and over the age of 100 playing these games to guess how many transactions this would impact. I'm for putting underage users into this inflow that are trying to purchase more than \$75 in a single transaction or who are spending at smaller levels with a high frequency. We'll see what the data shows...

Tara Stewart - at 2:57pm on July 22nd

Backtested a rule with the following conditions:

WHERE

(d.ds='2011-07-19') AND

(to\_date(from\_unixtime(d.transaction\_time)) >='2011-06-01') AND ((get\_json\_object(d.features,

'\$.UserAge') <= 17) OR (get\_json\_object(d.features,

'\$.UserAge') >= 90)) AND

(get\_json\_object(d.features, '\$.AmountReceiving') >= 75000)

AND

((get\_json\_object(d.features,

'\$.AccountBuyCredits\_count\_payPal\_30d') >0) OR (get\_json\_object(d.features, '\$.CreditsBalance') <= 0) OR

(get\_json\_object(d.features, '\$.AccountBuyCredits\_count\_creditCard\_30d') > 0)) GROUP BY get\_json\_object(d.features, '\$.Appid')

Since the date range was only 6/1 to 7/19, the "false positives" aka spendy kids, aren't necessarily valid. I'm betting most of the spend for this age range will be charged back. We can use these conditions to inflow for specific FF-heavy apps. I tested with PetVille, and this rule looks BOMB.

Tara Stewart - at 3:31pm on July 22nd

Ok, after consulting with Josh, we've determined that it makes the most sense for now to focus on the Buy Credits-CC context. CC\_VERIFY\_FIRST6 was not designed to work in Spend. The only actions you can use in Spend are too drastic for potential FFminor cases: Block, Verify Compromised, DPO, Disable, Blacklist. The downside is that we have no appropriate action right now to take if a child is using his parent's PayPal account. I'm going to test again for PetVille in the Buy-Credits CC context for the last week only to see the kind of results we could get. This is a good first step.

Tara Stewart - at 1:27pm on July 26th

\* added the attachment "underagebacktestjuly1to24.xlsx".

Tara Stewart - at 1:40pm on July 26th

underagebacktestjuly1to24 shows the results for V1 of the CC inflow rule for the buy credits-cc context. Keep in mind that this is unlike traditional fraud-based rules in that we don't take action on underage spend until after the fact (we don't "know" it is fraud until a cb occurs or a refund is issued). Based on these numbers (we needed a large enough sample size) combined with corework insights, v1 is going to run on the following apps:

1. Pet Society (11609831134): popular app for minors that already has fraud-specific rules pushed for it...we can see how this underage inflow will supplement the rules already in place to drive down the cb rate
2. Backyard Monsters (342684208824): "green" app in that we haven't pushed any specific rules for it...huge minor population
3. EA SPORTS FIFA Superstars: Real football & soccer! (113719625324737): another "green" app with a large minor population

For v2: I'm going to look at apps that we know are FF-heavy but didn't have a high enough sample size (PetVille, Monster Galaxy, Ninja Saga). I'm going to pull cbs and refunds that were labeled as FF-minor to check out the characteristics of those accounts.

Some ideas for looking forward: We need to determine an appropriate response for PayPal users. Maybe auto-actioning on users, regardless of app, once they are tagged with "suspecttooyoung." Monitoring and modifying the v1 apps. Adopting a lower spend limit for all underage users.

Tara Stewart - at 1:41pm on July 26th

\* assigned the task to Ross Worden.

Tara Stewart - at 1:41pm on July 26th

\* changed the priority to "hi-pri".

Ross Worden - at 8:25pm on July 26th

```

(UserAge <= 17 || UserAge >= 90) &&
AmountReceiving >= 75000
&&
(
AccountBuyCredits_count_payPal_30d > 0 || CreditsBalance <= 0 || AccountBuyCredits_count_creditCard_30d > 0
)
&&
(
RefAppId == 11609831134 ||
RefAppId == 342684208824 ||
RefAppId == 113719625324737
)

```

thoughts?

Tara Stewart - at 7:08am on July 27th  
Looks good, Ross!

Ross Worden - at 9:59am on July 27th  
Arwa Husain, can you push this in buy\_cc with verifyfirst6?

Ross Worden - at 9:59am on July 27th  
\* changed the subscribers. Added: Arwa Husain.

Ross Worden - at 9:59am on July 27th  
\* assigned the task to Arwa Husain.

Arwa Husain - at 6:31pm on July 27th  
UnderAgeInflowV1 is throwing Verifyfirst6 at users and control group is queuing to hipri

Arwa Husain - at 6:31pm on July 27th  
\* assigned the task to Tara Stewart.

Josh Krivoshein - at 9:53pm on July 28th I'm not sure that the VERIFY\_CC\_FIRSTSIX response is actually an effective deterrent to FF...if we don't see cb reduction, it may not be the targeting of the rule.

Note that a new order id is generated upon completion of the inflow, so figuring out which order ids we threw inflow at that still received cbs is tricky. I'll see if the VERIFY\_CC\_FIRSTSIX inflow will be included in the nexus metrics that Yihua is working on (it may just be the compromised inflow he's looking at).

Joseph Filip - at 7:44am on July 29th  
Isn't the whole point of first 6 inflow to combat FFMinor?

April Wharton - at 7:48am on July 29th

\* changed the subscribers. Added: April Wharton.

Tara Stewart - at 7:50am on July 29th

Josh Krivoshein, Verify\_CC\_FirstSix obviously isn't the most ideal deterrent but could be a good first step. It forces the minor to prove he is in possession of the credit card. Often refunds/cbs occur because a parent permits his child to spend at a small denomination and doesn't realize that the cc info will be stored. Obviously some kids will be able to grab the CC again or write the info down, but this will hopefully curb the spending of the least savvy minors.

I hadn't been planning on looking at the specific order ids that were inflowed, but rather the overall spending of the UIDs that are flagged. I'm definitely open to suggestions!

Tara Stewart - at 8:12am on July 29th

Also, Arwa Husain, when we grepped this rule today it didn't hit anything. Could you check the syntax? Should be in the buy credits-cc context and look something like this: (UserAge <= 17 || UserAge >= 90) && AmountReceiving >= 75000 && ( RefAppId == 11609831134 || RefAppId == 342684208824 || RefAppId == 113719625324737 )

I think the problem might be because I first tested this rule in the spend context and had the logic to remove app2user purchasers. If we kept this logic in (which we probably did), it might be messing things up.

Ryan Kelly - at 8:25am on July 29th

\* changed the subscribers. Added: Ryan Kelly.

Josh Krivoshein - at 12:06pm on July 29th Joseph Filip the whole point of first 6 inflow is to combat FFMinor, but I wouldn't make the assumption that it is actually effective at doing this. Hopefully, analysis of the rules created by this task should help confirm this or not.

The response was created about 9 months ago, when FF was a big issue. Since that time, it has become less of an issue, but this could be due to other factors (people became more used to credits after all head devs were onboarded, and we now process a lot more volume which drowns out the FF in terms of cb compliance) rather than the impact of the first 6 inflow response which is on very few rules.

I checked with Yihua, the inflow metrics are in the nexus dev tier and will be pushed to prod soon. They do include metrics regarding VerifyCCFirst6, however they are currently measuring compromised activity that occurs post inflow. I'll work with Yihua to change this to measure FF that occurs after this inflow.

Josh Krivoshein - at 12:10pm on July 29th

\* added the attachment "card verification inflow stats.png".

Joseph Filip - at 1:00pm on July 29th

Josh Krivoshein that is a primary reason we are running this. It will let us know weather this approach even works, and if first 6 inflow is the right/effective tool to get the job done!

This won't be great at stopping FFAdult or buyer regret but it should keep kids from running rampant with their parents CC's which is a problem in certain apps.

Tara Stewart - at 3:21pm on August 1st

We're going to have to recheck the syntax since this rule still hasn't hit any UIDs. Ran the backtesting query from 7/28 to 7/30 and it should have hit 11 UIDs in EA Sports, 6 in Backyard Monsters, and 5 in Pet Society.

Query 467940 (underagebacktest\_july28tojuly30)

Tara Stewart - at 3:21pm on August 1st

\* assigned the task to Arwa Husain.

Ross Worden - at 7:07am on August 2nd

grep'ing shows 23 tags on seer\_UnderAgeInflowV1 since 2am this morning (7 hours elapsed)

Arwa Husain - at 8:31am on August 2nd

\* assigned the task to Tara Stewart.

Tara Stewart - at 9:03am on August 2nd

Just perused the first sample of accounts that hit this rule. Looked at 18 tags, of which 10 were unique, perhaps showing that minors are more likely to attempt to make rapid, high-cost purchases in a row. The inflow did work to stop some purchases (ie 1311307878). Other minors passed the inflow. Only one user in this group was over 18 (he listed his age as 106 and was playing Backyard Monsters). We will continue to monitor the hits to this rule to learn more about spending patterns. We will also look to see how total spend is affected in these apps.

Tara Stewart - at 3:52pm on August 2nd

Seems like most of these games with FF-minor problems are defaulting to the highest-cost setting in the purchase flows. This only exacerbates the problem since it doesn't necessarily look like "real" money to a minor. I'm going to pull some data for FF-heavy apps to see how many default dollar transactions have already been refunded/charged back in the past week. We can compare this to lower, non-default amounts to see if the chargeback/refund to good percentage is higher for the default setting. If so, we can recommend that they default to a lower dollar amount.

Tara Stewart - at 9:04am on August 4th

\* changed the subscribers. Added: Doug Fraser.

Tara Stewart - at 9:07am on August 4th

Action Items from meeting on 8/4:

1. Tara- continue FF minor analysis; inflow study; minor spend limit analysis 2. April - FF adult analysis, chargeback-specific 3. Doug - User confusion analysis, refund-specific; root-cause analysis 4. Joseph - SMS messaging; FF minor

Meeting up in a week to talk about results.

Tara Stewart - at 8:31am on August 16th

I've been neglecting this task and focusing on lossy app rehab for the past week. However, the refund rates for our test apps have declined to normal levels, though we'll have to pull data to determine how much of this can be attributable to the new inflow process. From a quick skim of accounts that were recently hit by our V1 inflow rule, it appears that while a significant portion can pass inflow, they typically go on to make lower denomination purchases (again this is just anecdotal). In the queues, the FFminor I'm seeing for these test apps typically occur on their parents' accounts or accounts where age>20. I'll revisit this when I return from PTO, but any pressing questions can be directed to Joseph Filip.

Ayşe Dibek - at 1:45am on August 25th

\* changed the subscribers. Added: Ayşe Dibek.

Tara Stewart - at 3:41pm on August 30th

Joseph Filip, which apps do you think would be good to look at moving forward? Off the top of my head, I'm thinking Car Town and PetVille.

Joseph Filip - at 5:12pm on August 30th

Tara Stewart, these are apps that have been identified as having strong/moderate FFMinor problems contributing significantly to losses.

Social Empires: <https://our.intern.facebook.com/intern/tasks/?t=658960>

Pocket God: <https://our.intern.facebook.com/intern/tasks/?t=665294>

Wild Ones: <https://our.intern.facebook.com/intern/tasks/?t=627002>

MiniPlanet: <https://our.intern.facebook.com/intern/tasks/?t=646869>

Ninja Warz: <https://our.intern.facebook.com/intern/tasks/?t=686239>

Diamond Dash: <https://our.intern.facebook.com/intern/tasks/?t=646898>

These would be excellent starting points as we begin to roll out this rule more broadly.

Tara Stewart - at 9:13am on September 6th Talking with Pat and Joseph now about potentially providing suggestions to developers about ways to deal with FF. Since you authorize an app to access your information, and the dev can thus see your birth year, it could be beneficial to provide different price packages to minors. Instead of the max package of \$100 or \$150, they could offer a max of \$50 or something if age < 18. We'll discuss this further later on in the week.

Tara Stewart - at 4:35pm on October 25th Hi Arwa, could you pause UnderAgeInflowV1? We should stop and analyze the data if this is something we want to continue to work on. Thanks!

Tara Stewart - at 4:35pm on October 25th

\* changed the priority to "low-pri".



Tara Stewart - at 4:35pm on October 25th

\* assigned the task to Arwa Husain.

Arwa Husain - at 10:34am on October 31st I have deleted UnderAgeInflowV1 from sigma buy\_cc

Arwa Husain - at 10:34am on October 31st

\* assigned the task to Tara Stewart.

Bennett Woo - at 2:59pm yesterday

\* changed the subscribers. Added: Bennett Woo.

Tara Stewart - at 4:47pm

Already posted this on the MC IE discussion, but posting the relevant data here too:

Regarding the First-6 Inflow Response:

Just ran the data for my friendly fraud inflow project. This rule targeted users under the age of 17 and above the age of 90 who were trying to spend greater than or equal to \$75 in a single txn in Pet Society, Backyard Monsters, or EA SPORTS FIFA Superstars: Real football & soccer!. The rule response was the first-6 CC inflow. I included refunds and chargebacks in the same loss bucket because together they constitute total friendly fraud. This rule was active from 8/2/2011 to 10/31/2011.

Users who passed inflow and made subsequent txns in any of the 3 test apps:

13.3% of the count of txns were charged back or refunded 27.8% of the sum total of txns were lost as a result of chargebacks + refunds 14.9% of these users (count) charged back or were refunded

Users in the control group for this rule:

19.2% of the count txns were charged back or refunded 39.9% of the sum total of txns were lost as a result of chargebacks + refunds 13.2% of these users (count) charged back or were refunded

Users who passed inflow and didn't spend in the 3 test apps or users who failed inflow:

From a statistically significant sample, 6% of these users charged back or were refunded. 32% of users in the Inflow group fall into this segment.

The results from my project indicate that first-6 inflow slightly altered the chargeback and refund rates. While a smaller percentage of the control group users charged back or were refunded, they charged back a greater number of transactions and a larger total sum. Fewer transactions were ultimately charged back or refunded from the users who passed inflow. Though the inflow didn't make a huge dent in the loss rate, it blocked a fair amount of users from purchasing in the test apps. If this were run at a larger scale, it could decrease the denominator of the segment we are targeting.



Anecdotally, many of the minors who did not spend in the test apps after inflow went on to spend in other apps. Unfortunately, due to time constraints, I didn't have time to dig deeper into the users who passed inflow but didn't spend or all-out failed the inflow. This could be a next step.

Ultimately, I would recommend a first-6 inflow to the lower threshold users.

---

To see this task, go to: <http://our.intern.facebook.com/intern/tasks/?t=578748>

# EXHIBIT N

---

**From:** Michael Morrison  
**Sent:** Wednesday, February 22, 2012 3:39 PM  
**To:** Bill Richardson; Will Wirth  
**Cc:** Danny Stein  
**Subject:** RE: Rovio Concerned About Angry Birds Refund Rate

Will,

Here is a breakdown of the users refunded in the spreadsheet you provided:

- **7% Buyer's Remorse**
- **93% Friendly Fraud: Minor using app on parent/grandparent's account**
- **Over half admitted the age of their child**
  - **Average age of child playing: 5 years old**
- **In nearly all cases the parent knew their child was playing Angry Birds, but didn't think the child would be allowed to buy anything without their password or authorization first. (Like in iOS)**

Are we able to talk with our partners about project kid? If so, this would be one way to show that we are going to get ahead of this type of friendly fraud.

-----Original Message-----

From: Bill Richardson  
Sent: Tuesday, February 21, 2012 9:55 PM  
To: Will Wirth; Michael Morrison  
Cc: Danny Stein  
Subject: RE: Rovio Concerned About Angry Birds Refund Rate

Thanks Mike.

-----Original Message-----

From: Will Wirth  
Sent: Tuesday, February 21, 2012 4:33 PM  
To: Michael Morrison  
Cc: Danny Stein; Bill Richardson  
Subject: Re: Rovio Concerned About Angry Birds Refund Rate

Awesome, thanks Mike! They reached out to Sara directly, so we'll probably funnel this specific thing through her for now. That said, we should take advantage of the relationship and the addition of such a large name to the platform to be much more hands on with them through the whole ramping up process. We'll be sure to include you in the calls so we can have insights from the ATX side of things!

Will

On 2/21/12 4:27 PM, "Michael Morrison" <mikeymo@fb.com> wrote:

>We'll jump on this right away and have some information for you tomorrow.  
>Let me know if you need me to jump on a call with them.  
>

>Sent from my iPhone

>

>On Feb 21, 2012, at 6:24 PM, "Will Wirth" <williamwirth@fb.com> wrote:

>

>> Hey Mike,

>>

>> Rovio reached out to us regarding an alarmingly high refund rate by  
>>sum for Angry Birds in the week or so after the launch. It looks like  
>>it is ~1.5% by count so far, but has been as high as ~9% by Sum on any  
>>given day (been between 4-9% steadily). Of the orders that we've  
>>refunded, the vast majority have been for FF Adult or FF Minor with a  
>>few User Confusions, while none have been classified as actual fraud.  
>>We're hoping that one of the contractors can deep dive into the  
>>tickets to get a better sense of the story so we can communicate that to Rovio.

>>

>> We're looking for some specifics on the exact issues users are  
>>having, whether it be the payment flows, specific packages or items,  
>>confusion in general, or something else that could be leading to these refunds.

>>

>> I attached a list of UIDs from users that we've refunded on our end,  
>>let me know if you think this is something one of the contractors has  
>>bandwidth for.

>>

>> Thanks!

>> Wil

>> <Rovio Angry Birds Refunded UIDs.xlsx>

**EXHIBIT O**

No. I don't plan to spend any more money on any of the games.

My dispute was handled in a timely and professional manner. I was satisfied all around.

Needs to listen to the customer and answer question

Give me the 5000 coins I paid for and did not receive.

so far so good

Yes, find the record and fix it....

be more proactive

yes, answer a request from a customer.

When I contacted slotamania they said i had to contact facebook, the incident took place at the end of July. I purchased 5,000 tokens my credits and bank account were used but i rece

N/A

CHECK EXTENSIVELY

I don't think the problem was with you - but rather Treasure Madness - who don't care as they never responded.

Not that I can think of.

Nothing

no

The assistance support works very well, and that's cool. You should give customers more gifts to motivate them to buy. See ya

most of us that play the games are either senior citizens or kids the least likely of the population to have excess money. Might as well gamble on line.

Well it would be nice, if it didn't add tax without informing me that it is doing so... and when its being treated as currency I don't see why there should be taxes on it to begin with.

I was charged on my debit card twice and was to get credit from accumulated bonus tokens conversion to extra playing tokens, NOT having to pay. And noticed in my emails that I was

Yes, it should prompt you before the final purchase is made. This has happened to me on 2 separate games. I have hit the box and there is no prompt before it takes your facebook cr

Don't make mistakes in the first place

It is difficult to understand the process of to make a claim on facebook it took me a while to figure it out. Maybe there is a simpler method to be able to contact you. However, I neve

Make it right away for credit

I don't know I think the problem was with the game developer who took forever and really never sent any meaningful e-mail responses

I wish you would make me feel comfortable. Every time the csr agent makes me feel like I am cheating zynga and I do not like it. I am honest to a fault. I still have the honeymoon missio

Worked well

yes take care of my dispute and pay my credits back

Creo que será a bueno que cãmo el juego está dentro del Face, sean uds los que les ajusten mäs los terminos y condiciones

You to pourrier to understand(include) that that arrives the errors! My daughter took my computer and to buy credits, she is only 7 years old, she did not know that she really paid(real

yes..... how about a faster response or even some kind of a response this is the first time I have had anything asked about it

Refund my money.

give me what i purchase (250 facebook credits)

no it was fine, but what I can't figure out is why the game locks when I buy something with the credits because this happened once before

no but thanks for asking

just the response time. never heard from game company at all, never let me know that the problem was resolved.

I went to inform face book about this, face book said I have to get intouch with the developer, I got intouch with the developer, they said I have to get intouch with face book, so as I :

None

its ok now

Yes. resolve the issue or issue a refund!

# EXHIBIT Q

Given that we already have a dispute link from the receipt, I'm not sure what impact having the link in the email will be, but if we were to put a link there I'd want it to be consistent with the online receipt, which is different from all three links you list here. I'm hesitant to add 3 links that all lead into different stages of Lombard.

Finally, I think that a more important task is to figure out how many users are attempting to contact us through Lombard but don't make it to TPS. If the number is very small then we should prioritize this task and other similar tasks (such as jewel notifications who've made orders we predict will be likely to charge back). That's why I created task 825767. We know that only < 2% of users who chargeback make it to TPS but I don't think we know why yet. All the data is available to answer this question we just need to do it.

Until we resolve the above issues I don't think this is a high pri task so I'm downgrading for now. Let me know if you have thoughts are can help with the above issues.

Alexander Strehl - at 7:55pm on December 2nd

- \* changed the priority to "mid-pri".

Alexander Strehl - at 7:58pm on December 2nd

- \* changed the subscribers. Added: Elizabeth Williges.

Joseph Filip - at 8:06am on December 5th Those are good points Alex, the reason for the three links was to address the key issues that we had identified as being root causes for people charging back.

There is another part of this though. If you are not logged into Facebook and click on the "View Receipt Online" it directs you to a general page that doesn't have a clear path to dispute with us: <http://www.facebook.com/cc/>

There is a link about 3 or 4 questions in but I think it is an awful user experience for a user who thought they were getting a receipt or wants to dispute a purchase with us.

I know there are lots of other questions and projects to work on around this but I still think this is an important addition to our process.

Brad Ferry - at 12:41pm on December 5th

- \* changed the subscribers. Added: Bill Richardson.

Brad Ferry - at 12:43pm on December 5th

I know that this might be slightly off topic for this specific thread, but does relate to the overall discussion around receipts. It appears that only 50% of users are currently receiving email receipts. See task: <https://our.intern.facebook.com/intern/tasks/?t=834081> for more detail.

Joseph Filip - at 2:11pm on December 6th 8.8% of users who charged back in November entered a Lombard queue, this is consistent with our normal Lombard enter/submit rates across the board.



**EXHIBIT EE**

**From:** Bill Richardson <notification+mmqsnaga@facebookmail.com>  
**Sent:** Thursday, February 23, 2012 9:27 PM  
**To:** Payments  
**Subject:** Re: [Payments] Rovio reached out to Payops regarding a higher...

Bill Richardson [commented on Will Wirth's post in Payments](#)



**Bill Richardson**

23 February 21:26

potential iteration on this sort of a/b test - prompt user for password if making purchase > X days since previous purchase. if a user hasn't paid for 9+ months, i don't think it's unreasonable to ask this. i believe either the risk or payments team attempted some analysis on what % of FF would get caught by this sort of rule but don't recall the results. may not have been impactful, but just a thought.

Comment history



**Will Wirth**

23 February 19:10

Gareth, yep, I was referring to the escalation through you and Sara. 5-10% is definitely on the higher side, but virtually none of it has been "real" fraud (ie stolen financial, compromised account, etc). It'll be interesting to see how it progresses, we'll keep an eye on it for the call.



**Gareth Morris**

23 February 12:57

Will, did they reach out to you directly or was this in response to the question that came in via myself / Sara Brooks? Just want to check we are all in sync on comms.

Thank you for looking into this - I spoke with their engineering team this morning and they were happy with the explanations. They were asking if 5-10% was high "on average" but I said this was hard to answer given the game is new and demographics typically differ between games. I'll set up a call for next week now and loop you in.



**Josh Krivoshein**

23 February 01:41

Prashant, sorry for the confusion, I meant new payer in the app, not new payer to FB.



**Prashant Fuloria**

23 February 00:59

Josh Krivoshein - hold on, why would we need to test this on new payer conversion? Isn't this only relevant for users who already have their credit card or PayPal on file?



**Michael Morrison**

23 February 00:47

Loren, let me know how I can help in getting the test off the ground!

[View all comments](#)

Original post



**Will Wirth**

23 February 00:06

Rovio reached out to Payops regarding a higher than expected level of refunds (5-10% daily) since they launched Angry Birds last week. We dug a little deeper into the refunds (shoutouts to Michael Morrison and the ATX team!) and it looks like most (~93%) of the refunds are being made due to friendly fraud refund requests. Over half of the people writing in admitted the age of their child (avg age of a 5 yrs old!) and in nearly all cases the parent knew their child was playing Angry Birds, but didn't think the child would be allowed to buy anything without their password or authorization first (Like in iOS).

We've sent back some insights and are waiting for their response as they are in Finland. We're also adding them to our dev outreach pilot in hopes of getting better feedback from a large/successful mobile developer on-boarding with our payments platform for the first time.



# EXHIBIT II

**From:** Michael Morrison [notification+fl=rophz@facebookmail.com]  
**Sent:** Thursday, February 23, 2012 12:15 AM  
**To:** Payments  
**Subject:** Re: [Payments] Rovio reached out to Payops regarding a higher...

Michael Morrison commented on your post in Payments.



**Michael Morrison**

4:14pm Feb 22

These were all being played on the parent or grandparent's account. The parent had a stored credential either from previous game spend or from advertising on FB. Nearly all states that they were surprised that the child wasn't prompted for some sort of authorization first.

Comment History



**Loren Cheng**

4:11pm Feb 22

Will Wirth, Danny Stein, Michael Morrison:

1. Which fb account was being used for purchases (and playing) -- parents or child's?
2. If parents, had parents previously purchased and creds were on file? Or were they entering in at child's behest?
3. Doubt you have this but if they were entering in creds at child's behest, were they handing creds to child? Or were they entering it themselves?



**Will Wirth**

4:08pm Feb 22

+props to Danny Stein!

Original Post



**Will Wirth**

4:06pm Feb 22

Rovio reached out to Payops regarding a higher than expected level of refunds (5-10% daily) since they launched Angry Birds last week. We dug a little deeper into the refunds (shoutouts to Michael Morrison and the ATX team!) and it looks like most (~93%) of the refunds are being made due to friendly fraud refund requests. Over half of the people writing in admitted the age of their child (avg age of a 5 yrs old!) and in nearly all cases the parent knew their child was playing Angry Birds, but didn't think the child would be allowed to buy anything without their password or authorization first (Like in iOS).

We've sent back some insights and are waiting for their response as they are in Finland. We're also adding them to our dev outreach pilot in hopes of getting better feedback from a large/successful mobile developer on-boarding with our payments platform for the first time.



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# EXHIBIT OO

REDACTED PER ORDER - DOCKET 192

**To:** Michael Levine[mlevine@fb.com]; Gillian Shewaga[gillians@fb.com]  
**From:** Gillian Shewaga  
**Sent:** Thur 9/19/2013 8:43:35 PM  
**Subject:** Message summary [REDACTED]

Gillian Shewaga:  
>Would you refund this whale ticket?

>

>user is disputing ALL charges that are ff- only go back to Sept 2nd but amount for about 6000

Michael Levine:  
>what's the user's total/lifetime spend?

Gillian Shewaga:  
>its 6,545- but the card was just added on Sept 2nd

Gillian Shewaga:  
>they are disputing all of it i belive

Gillian Shewaga:  
>believe

Gillian Shewaga:  
>that user looks underage as well

Gillian Shewaga:  
>well, maybe not under 13

Michael Levine:  
>is the user writing in a parent, or is this user a 13ish year old

Gillian Shewaga:  
>its a 13ish yr old

Gillian Shewaga:  
>says its 15

Gillian Shewaga:  
>looks a bit younger

Gillian Shewaga:  
>she\* not its

Gillian Shewaga:  
>lol

Michael Levine:  
>sorry for this delay

Michael Levine:  
>i wouldn't refund

Gillian Shewaga:  
>oh thats fine

Gillian Shewaga:

>cool

Gillian Shewaga:

>agreed. Just double checking

**EXHIBIT PP**



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**From:** Michael Morrison  
**Sent:** Friday, May 04, 2012 4:31 PM  
**To:** Michael Morrison  
**Subject:** Re: [tasks] #1050074: BBB Complaint [bbb]

Michael Morrison - at 9:29am

Refunded all purchases and disabled the minor's account. There are no records of this user attempting to contact us. Here is what we would have sent had they reached out to us:

When making a Facebook Credits purchase, Facebook saves your payment information for easy access during future in-app purchases. As such, it seems that purchases were made using your funding source without your knowledge.

We have refunded all purchases to your funding source. Please allow 7-9 business days for the money to be available in your account. Unfortunately, I am unable to refund any overdraft or other service fees that may have occurred.

Additionally, please note that we have disabled the minor's Facebook account. Facebook requires its users to be at least 13 years old before they can create an account. Providing false information to create an account is a violation of our Statement of Rights and Responsibilities.

For more information, please visit: <http://www.facebook.com/help/?page=937>

[ To see this task, go to: <https://our.intern.facebook.com/intern/tasks/?t=1050074> ]

Michael Morrison - at 9:29am

\* marked the task completed.

---

Title: BBB Complaint

Created: 11:30am May 1st, 2012 by Eric Weitzel

Tags: bbb

Priority: none

Assigned to: Michael Morrison

Email of user:

[REDACTED]@HOTMAIL.COM

MY DAUGHTER IS NINE YEARS OLD, SHE OPENED A FACEBOOK ACCOUNT WITHOUT PERMISSION. SHE THEN ACQUIRED DEBT CARD INFORMATION AND CHARGED \$291 DOLLARS IN ELECTRONIC FISHFOOD AND DINOSAURFOOD FOR FACEBOOK ELECTRONIC GAMES. MY DAUGHTER IS A MINOR, SHE FALLS UNDER THE LEGAL AGE THAT IS GUIDED BY FEDERAL GUIDELINES (IT IS ILLEGAL FOR A MINOR TO OPEN A FACEBOOK ACCOUNT WITHOUT PARENTAL PERMISSION). WE HAVE TRIED TO CONTACT FACEBOOK THROUGH THE NUMBER THAT WAS GIVEN;(650)543-4800. ALSO THROUGH THEIR EMAIL ADDRESS, AND HAVE LEFT A PHONE MESSAGE. IT HAS BEEN OVER A WEEK AND WE STILL HAVE NOT HAD A RESPONSE.

Product\_Or\_Service: ELECTRONIC GAME POINTS

To see this task, go to: <https://our.intern.facebook.com/intern/tasks/?t=1050074>

Reply to post a comment.