# EXHIBIT 158 UNREDACTED VERSION OF DOCUMENT SOUGHT TO BE LODGED UNDER SEAL

From: Sam Lessin </O=THEFACEBOOK/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=SAM LESSIN>

Sent: Sunday, January 20, 2013 8:27 AM

To: Deborah Liu

**Cc:** Mike Vernal; Douglas Purdy

**Subject:** Re: Weekly Platform Monetization HPM

The nekko growth is just freaking awesome. Completely exceeding my expectation re what is possible re ramping up paid products.

I would be really curious to see the stacked bar of spend / how it is growing. Is the growth propelled by a few guys who are really putting weight behind it or a bunch of people coming on in the 10s of K per day? Also, what percent are using the SDK and tracking value all the way through?

Really great stuff

S

On Jan 20, 2013, at 4:17 AM, "Deborah Liu" < debliu@fb.com > wrote:

### Highlights:

- Neko grew another 50% this week! Hit a high of \$725K Friday (see chart below). We are now 5% of total Ads revenue and 21% of mobile ads revenues.
- Team excited about Payments Sprint Kickoff next week

### Payments:

- General
  - Carrier Billing Fraud Continues to be an issue since 40%+ of volume not eligible for refunds, planning for options next week
  - o Sprint Kick off next week focused on top 6 ideas for revenue and credential growth
- Canvas Payments / Payment Engine
  - Payment Engine Goal Achieve 50% TPV through PE by May, 75% by end of June before July 10<sup>th</sup> cutover date
  - Partners First partner likely to start testing in first or second week of February, a few minor launch blocking bugs being worked over the next two weeks in preparation
  - Timeline Working on detailed timeline for Payment Engine migration, including communication plans
- Payments 3.0 / New Initiatives
  - Designed the UI for partner site reviewing this week https://www.facebook.com/pxlcld/hZg9
  - Designs for adding new cards and addresses also proposed:
     https://www.facebook.com/pxlcld/hZgL and https://www.facebook.com/pxlcld/hZgV

# Mobile App Installs Ads (Project Neko)

 Revenue grew 50% and hit \$725K this Friday – Neko is now 5% of total ads revenues and 20% of mobile ad revenue!

- Wechat and other competitive networks are no longer advertising on Neko based on policy. (Please contact me if you have any questions)
- Sales European sales offices are starting to prioritize Neko. We are working with Shyam Rajaram's team to scrape the app store across European markets to help them find high-grossing apps that are not currently Neko spenders. Separately, we are in the process of understanding opportunities across verticals and regions.
- Advertiser Feedback Lots of positive feedback including one from Brazilian advertiser showing Neko drives significantly more volume than competitor networks. Using Neko, the app was able to stay at the top of the Brazilian app store for over 2 weeks. <a href="https://www.facebook.com/groups/350580744990547/permalink/460861407295813/">https://www.facebook.com/groups/350580744990547/permalink/460861407295813/</a>
- User Sentiment Changed Neko rendering on iPad to use smaller image from app center. Collected user sentiment data on m-site which shows no difference between users who see Neko and baseline though the sample size is small. Will get data on Wilde and Mustang in a couple weeks.
- Product Improvements Fixed oCPM underprediction which caused underdelivery. After the fix, we have seen ratio of oCPM to CPC Neko ads rose from approximately 18% to 27% of total impressions and total Neko delivery increased 12% against the backtest. oCPM and general model improvements for Neko is now a priority for the core ads optimization team so we expect lots of incremental improvements here.
- Design The new design for Neko units, which is actor-led and more closely resembles other feed units, is now complete across all interfaces (Wilde, Mustang, and M-site). The new unit made the Wilde branch cut-off this past Thursday.

<image001.png>

<image002.png>

From: Deborah Liu

**Sent:** Sunday, January 13, 2013 1:13 PM

**To:** Sam Lessin; Mike Vernal; Douglas Purdy; Vijaye Raji; Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian Hamilton; Jenny Truong; Siwei Zhu; Bill Richardson; Yi-Wyn Colaco; Chris Daniels; Justin Osofsky; Sean Ryan; Jeff Kanter; Will Cathcart; Mary Ku; Susan Kwok; Namita Gupta; Mike Hudack; David Fisch; Bill Richardson; Vladimir Fedorov

**Subject:** RE: Weekly Platform Monetization HPM

# Highlights:

- Neko continuing its growth this week when we hit the \$500K daily volume Friday!
- New Payments team process has launched, thanks to Jenny, our new TPM. This will provide
  more clarity and discipline on our investments as more teams are requesting payments
  assistance for their monetization projects

# Payments:

- General
  - New process launched see details here: https://www.facebook.com/groups/fbcredits/permalink/576566245693199/
  - Our January roadmaps are located here:
    - Reporting Eng http://fburl.com/9347771
    - Risk Eng http://fburl.com/9347773

- Payment Engine http://fburl.com/9347774
- Canvas Payments / Payment Engine
  - o Locked Breaking Change Date July 10<sup>th</sup>, will announce likely in March/April timeframe
  - o Payment Engine Goal Achieve 50% TPV through PE by May
  - Partners on Payment Engine Zong and Boku are done, Playspan is fixing some bugs, LiveGamer wrapping up soon, GMG targeting end of Jan, Trialpay preparing to move devs over.
  - Sprints Finalized list of top prospects for Canvas Revenue and Credential Harvesting sprints kicking off in 10 days. Staffed engineers to support
  - Canvas Payment Experience Update Working on flow redesign to support the successful Canvas Growth tests completed by George and Vishu. Currently combining the positive tests into one flow to launch.
  - Carrier Billing Currently rethinking experience in order to support long term growth of Carrier Billing and relationships
- Payments 3.0 / New Initiatives
  - Preparing to test with 3 partners in late Feb
  - Worked on the design for adding/editing credit card and shipping address

- Revenue continues to grow hit \$500K! Note that \$80K is from Wechat who will no longer be advertising with us as of tomorrow (call me if you have questions)
- Policy Change Current Page Post policy in which text cannot be on more than 20% of the ad image will be extended to Neko on Tuesday. Team is spending the weekend reaching out to devs to bring them into compliance. Will monitor impact on revenues and conversion
- Ads Team Improvements Due to the recent growth, ads team has committed to working on our key asks – Feed optimization, OS version targeting, and custom oCPM model.
- Neko Facts deck attached and is an interesting read Thanks Max!

<image009.png>

From: Deborah Liu

**Sent:** Monday, January 07, 2013 12:45 AM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Reshma Khilnani; Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian Hamilton; Jenny Truong; Siwei Zhu; Bill Richardson; Yi-Wyn Colaco; Chris Daniels; Justin Osofsky; Sean Ryan; Jeff Kanter; Will Cathcart; Mary Ku; Teck Chia (teck@fb.com); Susan Kwok; Namita Gupta; Mike Hudack

Subject: RE: Weekly Platform Monetization HPM

### Highlights:

- Exited 2012 on a \$120M 7-day annual runrate for Neko! Going from nothing to \$120M runrate in revenue from mobile developers is a huge accomplishment for the whole platform team.
- Payment Engine developer ramp starting this week planning out final investments and timing

### Payments:

- Canvas Payments / Payment Engine
  - Ramp for Payment Engine kicked off still targeting mid-Feb announcement of breaking change
  - o Currently redesigning Mobile Shortcutting for Payment Engine
  - Carrier billing fraud clean up continues (see last week), losses have been stopped and working on refunds and improving controls
  - Started planning on Canvas Revenue and Credential Harvesting sprint, coding starts week of 22<sup>nd</sup> – led by PJ and Mary

- Payments 3.0 / New Initiatives
  - Working on designs for Payments 3.0
  - o Continuing to engage with partners to get a couple lined up for launch
- Monetization for Other Teams
  - Karma holiday ramp hit 3x spike in volume to about 4500 transactions per day, then back to around 1200 transactions per day, low chargeback rate (0.1%)

- Revenue currently around high \$200K during week and \$300K+ over weekends, CPCs are \$.13, and CTR is about 2.3%. Recently, Neko CPMs have been higher than Page Posts and Page Like stories for short periods of time, meaning that we are competing well in feed. The v2 changes look like they are starting to moving the needle for our metrics.
- Some great follow up press since v2:
  - Tech Crunch about GREE's success <a href="http://techcrunch.com/2013/01/04/early-studies-show-facebook-mobile-app-install-ads-perform-well-for-devs-indicating-big-revenue-potential/">http://techcrunch.com/2013/01/04/early-studies-show-facebook-mobile-app-install-ads-perform-well-for-devs-indicating-big-revenue-potential/</a>
  - Katie Smillie from Miso <a href="http://katiesmillie.com/2012/12/19/facebook-crushes-the-competition/">http://katiesmillie.com/2012/12/19/facebook-crushes-the-competition/</a>
- oCPM underprediction continues to be a problem we are asking devs to bid \$20 to \$30 to get delivery at \$2 to \$3 CPIs. Working with ads team to address.
- Power Editor updates Working on the design of buying ads for Neko via Power Editor some great changes are coming soon which will make it easier to buy.
- Fixed targeting issue where we were delivering ads to incorrect devices 10% of the time
- Focused on v3 adding Install as a goal in Page Posts
- New dashboard with list of spenders is available here: <a href="https://our.intern.facebook.com/intern/data/neko2">https://our.intern.facebook.com/intern/data/neko2</a>, full dashboard still available here: <a href="https://our.intern.facebook.com/intern/data/neko">https://our.intern.facebook.com/intern/data/neko</a>

From: Deborah Liu

Sent: Sunday, December 23, 2012 6:55 PM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<u>reshmakh@fb.com</u>); Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian Hamilton; Jenny Truong; Siwei Zhu; Bill Richardson; Yi-Wyn Colaco; Chris Daniels; Justin Osofsky; Sean

Ryan; Jeff Kanter; Will Cathcart; Mary Ku

Subject: RE: Weekly Platform Monetization HPM

# Highlights:

- Neko hit a high of \$360K per day during the holiday ramp largely thanks to Zynga and Gyft. Great work from the ads team getting Gyft on board. They are so happy they are looking to spend another \$50K before the holidays.
- Closing the year on payments with Payment Engine ready to go out to devs in Jan.

# **Payments:**

- Canvas Payments / Payment Engine
  - Ramp for Payment Engine set to start in early Q1
  - Mobile Shortcutting and New Payment Promotion are last two major items for the migration though they can stay on Credits for now without affecting ramp. Mobile shortcutting will be available in Feb and NPP is slated for Q2.
  - o Breaking change will probably be announced in mid-Feb. Will be monitoring key partners who will start running volume around the 3<sup>rd</sup> week of Jan before we finalize the date. Goal is to have everything ramped and cleaned up by end of June.

- Huge mobile fraud ring hit us to the tune of \$910K of which \$240K is outside of our clawback window, and most of which was spent on Zynga Poker. BillR and team have stopped the fraud and working on post-cleanup. Separately, we may proactively bring down bulk discounting top prices in flow since we are seeing a lot of it bought in the game of origin and spent in Zynga Poker.
- Kicked off sprint on Canvas Revenue (taking torch from George and Vishu) and
   Credential Growth. Will be focusing on optimizing the payment flows and experience (e.g. mobile) and increasing the base of spenders across the board.
- Payments 3.0 / New Initiatives
  - Decided to scope down so we can launch our test in Feb with Braintree and a couple partners.
  - Designed experience and now currently working with a couple partners including Fab on the launch.
- Monetization for Other Teams
  - New process in place for cross-team prioritization for features that Payments supports (e.g. Karma, Airmail, Boosts). Jenny will roll out in Q1.

- Hit a peak of \$360K yesterday and 1M clicks. Top spenders are Gyft, WeChat, and the A&E/Lifetime/History Apps for iPad
- Last week's v2 launch was successful and got some great press for Neko. Attached is the press summary from David S.
- V3 Plan locked down (see below) some challenges locking down ads resources on device targeting and optimization given their reprioritization, but otherwise on track with new plan
- Teck is leaving to start his own thing, and he has transitioned his work to Max. Please reach out to Max or me for assistance if you have questions.

<image010.png>

<image011.jpg>

From: Deborah Liu

Sent: Monday, December 17, 2012 1:29 AM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<a href="mailto:reshmakh@fb.com">reshmakh@fb.com</a>); Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian Hamilton; Jenny Truong; Siwei Zhu; Bill Richardson; Yi-Wyn Colaco; Chris Daniels; Justin Osofsky

Cc: Jeff Kanter

**Subject:** RE: Weekly Platform Monetization HPM

### Highlights:

- MVP for Payments 3.0 is complete. Prototypes working on both Android and iOS with end-to-end transactions flowing through Braintree.
- Neko reached \$200K again this weekend! With the launch of creative customization and larger unit on Tuesday, we should be able to grow this by 30% over the next few weeks as developers adopt the new sized banner.

# Payments:

- Canvas Payments / Payment Engine
  - o Payment Engine nearly complete Playspan plans to finalize code today
  - Playdom, Zynga, Kixeye all agreed to implement the new Payment Engine in early/mid-January, documentation drafted

- Breaking change announcement is slated for end of Jan or early Feb after a few partners have gone live – will likely go with 120 days to give sufficient time to migrate
- Payments 3.0 / New Initiatives
  - MVP for Payments 3.0 is complete and we have run test transactions through Braintree!
- Monetization for Other Teams
  - Airmail launch slated for 12/19 transactions will run through Payment Engine https://www.facebook.com/groups/airmail/
  - o Boosts Ready to move over to Payment Engine from FB Credits

- Achieved \$200K again this weekend (spend peaks on weekends)
- Three items in Tuesday's v2 release 1) Creative customization with new unit size, 2) Inline installs, and 3) Demographic insights
- Bug in latest Android and iOS apps on Thursday where Neko ads were not getting delivered fixed on Friday

From: Deborah Liu

Sent: Wednesday, December 12, 2012 1:27 AM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<u>reshmakh@fb.com</u>); Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian Hamilton; Jenny Truong; Siwei Zhu; Bill Richardson

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

### Highlights:

- Payment engine work nearly complete waiting on Playspan's last push. Announcement of breaking change slated for January
- Neko hit \$200K per day over weekend after removing subsidy thanks to a feed ad fix which increased CTRs by 74%!

# **Payments**

- Payments 3.0 / New Initiatives
  - o Further fleshed out business model for Payments 3.0
  - Some promising conversations with merchants to get their feedback
  - Completed user research and reviewed results
  - PayPal is open to working without exclusivity
- Canvas Payments / Payment Engine
  - o In final stretch of Payment Engine, waiting on Playspan to make final release of the year. Prepping for announcement in early Jan if all goes well.

# Mobile App Installs Ads (Project Neko)

- Achieved \$200K per day this weekend after removing the subsidy due to an feed ad fix which improved CTRs by 74%!
- Redesigned a unit with the medium sized banner
- Prepping for Neko creative customization launch next week
- Starling and FPAN on hold due to 2013 prioritization

From: Deborah Liu

Sent: Saturday, December 01, 2012 1:40 AM

To: Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (reshmakh@fb.com); Yuji

Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian

Hamilton; Jenny Truong; Siwei Zhu

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

### Highlights:

- Payments 3.0 mobile native app demo for iOS and Android is ready! Really slick experience. First test transaction set for Friday of next week.
- Karma opened up iTunes Gift Cards 73% of attempted sales were fraudulent, but we lost only a couple hundred dollars due to the efforts of the payments ops team

# **Payments**

- Payments 3.0 / New Initiatives
  - Finalized designs for usability testing, testing has begun with some promising early insights, more testing next week
  - Planning first transaction for next week
  - Kicked off planning for credential harvesting sprint
  - Social Plastic Employee testing starting next week, user testing in January
- Canvas Payments / Payment Engine
  - o Boku/Zong ready to go for Payment Engine, Playspan may or may not make the preholiday push, if they miss it, will go out in January
  - Planned announcement of breaking change in early January if Playspan ready, and late
     January if Playspan goes out in late January, will give devs 90 to 120 days
- Core Payments
  - o Investing into preparing for fraud ramp up

# Mobile App Installs Ads (Project Neko)

- \$150K in revenues per day with 2x eCTR and 4x on Wilde in effect looking at how the subsidy is costing us (will follow up with data over the weekend)
- Zuck designed unit did not do as well as our current unit: -25% on CTR to 32% for install rates adjusted for height, kicked off testing a new unit styled after page post ads
- Work on dedicated model has started will launch by the end of the year
- Fab went out with code snippet and started to report back LTV data
- Inline installs went live last weekend in latest Wilde pulling data on the effect on click to install rates

From: Deborah Liu

**Sent:** Friday, November 16, 2012 10:55 PM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<u>reshmakh@fb.com</u>); Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian

Hamilton; Jenny Truong

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

# Highlights:

- Yuji's engineering hiring is on fire! Two Android engineers joined team which will help us take Payments 3.0 to market
- Design for Payments 3.0 flow is set for MVP. Dev is kicking off.
- Welcome to Jenny Truong, who is joining as our new TPM.

# **Payments**

• Payments 3.0 / New Initiatives

- Technical design for Payments 3.0 flow is set for MVP. Dev is kicking off and MVP should be ready in early January. First integration will be with Braintree.
- Modeled out direct monetization options for Payments 3.0 business vetting direct vs indirect monetization options
- Drafted user testing plans to understand key questions on Pay with Facebook user testing in 2 weeks
- Spending next two weeks working on visual design and experience details for different use cases
- Social Plastic project approved targeting mid-Dec employee launch and January user launch thanks to Ted, Suzie, and PJ
- Canvas Payments / Payment Engine
  - Alt-Pay ready for provider testing after next week's push should be ready for developers to in December sometime
  - Chargeback re-presentments dialed up chargeback re-presentment ops system to fight 100% of Visa and MC friendly fraud chargebacks, will enable \$3M in TPV per year
- Core Payments
  - Investing in quality and stability to ease issues from recent SEVs and oncall issues
  - First "Ops-Eng Hackaday" Risk engineering team worked close with PayOps/Risk teams to work on high impact fixes
- People
  - Reshma is leaving to start her own company. We will miss her, and we will bid a fond farewell at her going away party in January. She has 3 more weeks before her big trip to Antarctica in December.
  - Welcome to Jenny T who is Platform's first TPM. Most recently, she has been working on moving the new hire experience online and building the candidate flow on SaleForce. She also helped build the recruiting tool that we all use today.

- After fixing a bunch of issues and restoring the eCTR overestimation, we are back up to \$100K spend today.
- Completed most of our v2 Roadmap update is in slide below. Biggest levers to launch in next 6 weeks:
  - Inline installs launched with latest Wilde, turning on GK this weekend
  - Ads customization slated for Dec Wilde release
  - Neko dedicated model Waiting on ads team, currently planned for mid-December
- Tested Fab creative customization and the new Zuck unit data should be available tomorrow

<image012.jpg>

From: Deborah Liu

**Sent:** Friday, November 09, 2012 11:34 PM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<u>reshmakh@fb.com</u>); Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani; Dan Rose; P.J. Linarducci; Suzie White; Jillian

Hamilton **Cc:** Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

An eventful week!

Highlights:

- Payments 3.0 partner discussions going well. Opening up about our vision and the user experience has helped us a lot.
- Making millions more annual TPV due to PJ's Zong/Boku allocation change.
- Two SEVS hit the Payments team hard
- Neko had major issues (drop of revenue by 50%+) due to 3 changes, and we are unrolling/fixing all of them.

# **Payments**

- Payments 3.0
  - PayPal: Good meeting with PayPal's working team was followed up with their response for complete exclusivity on Payments 3.0. Met again where we walked through their concerns. They seem open to participating, but they are concerned about losing customers.
  - Braintree: Leaning forward on working with us despite the fact they plan to build a competing service since they want to be where the merchants are. They do use Connect for Venmo, but will use fingerprinting for checkout instead of Connect.
  - Stripe / Cybersource: Ready to proceed without major concerns.
  - Pages team reviewed Buy on Facebook with Zuck. It is a good fit with Payments 3.0, but will likely not get worked on until Q2.
- Canvas Payments / Payment Engine
  - PJ's team reallocated Zong/Boku traffic which will drive up several million in annual TPV by giving more traffic to the outperforming partner by country
  - Reviewed the top recommendations on increasing TPV, working on getting in the top two low hanging fruit
  - Alt-Pay back on track for end of November. That should finish off most of the core work on PE and prepare us to get new games on.
- Core Payments
  - Two SEVs this week. Both were caused by different infrastructure teams. Going to figure out if we can make any process changes to reduce the chance of future SEVs and mitigate the effect of ones that still happen. Also working on more granular ODS reporting.
  - Shipping developer self-editing of financial entity information next week. Previous to this change, Jean Son needed to make all of these changes.

# Mobile App Installs Ads (Project Neko)

- Status Continue to struggle with delivery this week after the avalanche of changes last week continue to hit us. We are down to about \$50K in spend which is 1/2 to a 1/3 of last week.
- Possible Rootcauses
  - Neko can't appear in position 1; reverted on Wendesday
  - Neko appears in lower positions if it loses the auction revert with next feed push. This
    is likely causing our ads to insert low and then not get clicked. Our ads are unique
    because they are tied to an app ID, and we keep ads from showing up more than once
    per 3 days (though other ads get around this by changing designs which we cannot do
    right now).
  - Neko performance boost no longer implemented; David getting in change by 5pm cutoff and will be reverted with next feed push (hopefully tomorrow) – This is likely a huge source of our delivery issues.
- Plans to avoid this Short term, we will manually monitor major feed changes. Longer term, Neko and all other business lines will be included in Ads monitoring tools.
- eCTR Looking at increasing eCTR slightly to push more delivery since a lot of our inventory is
  just above the floor. Starling and FPAN will provide much needed cheaper inventory for us to
  serve Neko Ads. Working on getting a few Neko partners into the Starling tests (see below).

CONFIDENTIAL FB-01368851

- New design Testing started yesterday on Faceweb and m-site looking at data shortly
- Fab design customization Kicking off test today

<image013.jpg>

From: Deborah Liu

**Sent:** Friday, November 02, 2012 11:07 PM

To: Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (reshmakh@fb.com);

Constantin Koumouzelis; Yuji Higaki; Max Eulenstein; John Anderson; Neha Jogani

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

### Payments -

- Payments All-Hands Shared current status and Payments 3.0 plans with larger cross-functional team team is really excited about new mobile payments direction
- Payments Engine Alt-Pay planned to be complete by the end of November. Sharing more with game developers in the onsite game event in mid-November.
- Payments 3.0 Very promising conversation with Braintree on building Pay 3.0 with us. Meeting
  with PayPal and Stripe next week. Trying to find alignment with PayPal on their integration into our
  wallet.
- Buy on Facebook Zuck excited about Buying on Facebook, Pages, Karma and Payments team
  collaborating on what it would take to build. Payments 3.0 is the exact engine needed to build
  it. Will likely need to partner for inventory management and links to backend systems
- Credential Harvesting Working on plans to test out the cost to acquire credentials for users with a high probability of spending on mobile

### Mobile App Installs Ads (Project Neko) -

- Status Exceeded \$100K every day this week, but total revenues fluctuated between \$110K and \$160K. Ran into a few issues this week including the delay of the new Wilde with bigger unit and the turning off of all OG stories in Wilde. This is the second time the dependency on OG has caused a delivery issue for us.
- Performance Major keys to performance:
  - Neko oCPM model (huge need) Ads team needs at least a month to make the change given their other priorities, so they will likely not get to it until the end of the year. Current oCPM model lacks the right features to optimize for Neko installs.
  - Price floor Many of our ads are close to or just above the price floor, as a result we are
    delivering less than 10% of these
    budgets <a href="https://our.intern.facebook.com/intern/data/nekobasic">https://our.intern.facebook.com/intern/data/nekobasic</a> Our previous price
    floor drops have resulted in significant loss of total revenues since there is no way to
    target lowering of reserve to Neko. We are testing slight increases in the eCTR to see if
    that drives more delivery.
  - New Wilde Next version of Wilde has been held up in Apple review, so larger unit has not launched. This continues to be an issue for us
  - Other Lowering of frequency cap from 7 days to 3 days (this week), in-app install (Dec), creative customization (Dec), bidding inventory into Starling where CPMs will be lower (rolling, most ramp will start at end of Dec to Q1),
- Partners Sales is meeting with all of the top 10 partners (budgets of \$20K+) and asking them about their happiness with Neko ads and how we can help unlock spend.
- LTV End Point Thanks to the efforts of Vijaye and Greg to get the code snippet to Fab. They agreed to include in their next app submission in mid-November. This will be a good test of our end point in the market.
- New Unit Design Checked in, will start testing next week on m-site (see samples below)

• FPAN – FPAN SDK is now with 4 partners, TinyCo and Stitcher are submitting this week, and Gamelot and Flixter will submit in next few weeks.

# <image014.jpg><image015.jpg>

From: Deborah Liu

Sent: Saturday, October 27, 2012 2:19 AM

To: Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (reshmakh@fb.com);

Constantin Koumouzelis; Yuji Higaki; Max Eulenstein; John Anderson

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

### Payments -

- Staffing update 5 new engineers just joined the team from bootcamp in past 2 weeks, including an engineer from Google Payments!
- Canvas Revenue Conversion Sprint Focus on perf, carrier billing, mobile subsidies, and country-by-country investigations Brazilian payments fixes will result in ~\$15M in fixes
- Payment Engine Working on getting Boku and perhaps Zong out by end of November. Alt-pay reports on PE are now live!
- Promoted Posts Made up 20% of our new payers for the week, TPV between \$60K and \$100K day,
   rollout cross-promotions for testing with employees
- Payments 3.0 <u>Fab.com</u>, Sneekpeeq, and Shopify interested in running Payments 3.0 tests with us. Had promising discussions with PayPal and Braintree. PayPal was worried we were going to build another PayPal (master merchant). Braintree open to discussing "universal checkout" with us. We are pushing forward quickly on partnerships discussions over the next two weeks.
- Payments All-Hands on Thursday

### Mobile App Installs Ads (Project Neko) -

- Performance Had a huge day yesterday and delivered 150% of the ads impressions from the week before! Unfortunately, Wilde click logging was broken so we were not charging for ads for the past 2 days (discovered accidentally by our analysts). This makes up 1/3 of our revenues. For example, Big Fish Games has budget caps up to \$150K per day, and we were making <\$1000. Note that the long term impact is not known since it would appear that our impressions were not getting any clicks, so the models may push prices up for these ads in the future. Currently at around \$85K per day until the Wilde logging fix is out and we get updated reports.
- LTV End Point Fab really excited about the end point for calculating LTV and bidding oCPM against paying users. We are looking for a way to get into their app which will be submitted shortly.
- New Unit Design New unit suggested by Zuck has been designed. Will code it up for testing.
- FPAN TinyCo integrated our Ad SDK into the latest app and submitted it to app store once approved, we will be in alpha with first partner! Two others coming along by early November.
- Finalized v2 roadmap see below

<image016.jpg>

From: Deborah Liu

Sent: Saturday, October 20, 2012 12:32 AM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<u>reshmakh@fb.com</u>);

Constantin Koumouzelis; Yuji Higaki; Max Eulenstein; John Anderson

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

### Payments -

- Staffing is a major issue on the team right now with the loss of 5 engineers. Ramp in asks from multiple teams plus the prep for 3.0 has crunched the team quite a bit. This week 3 bootcampers agreed to join. Met with all of the key stakeholders who have payments ask and kicking off new process to prioritize needs from across the company.
- Payment Engine Alt-Pay is behind due to engineering attrition, working on a new timeline given the resourcing situation.
- Boosts is fully rolled on 10/11. Saw a single \$100K day and then down to the \$50 to \$70K range. 60% of payers are new to our system. Rolling out the ability for friends and fans to promote posts. Contact rates (mostly due to confusion) are 3% which is very high relative to game payments.
- Major subscription sev last week where we charged users over and over some dozens of time. Ops
  proactively working on making users whole including some who got NSF charges due to us
  overdrawing their account.
- Payments 3.0 workplan and key milestones drafted Signed on our first app, promising discussion with Stripe, and due diligence with Braintree showed integration should be straightforward. Biggest risk is being able to sign on the right partners.

# Mobile App Installs Ads (Project Neko) -

- Launched this Wednesday! First full day had revenues of \$86K and 128 apps.
- Huge unbreak-now with the launch of the new Android app yesterday which caused major mobile devs' apps to crash when they try to access our attribution ID. Working on getting fix out over weekend or on Monday.
- Fixing a few other scattered bugs which are causing issues with delivery.
- Kicking off v2 roadmap work next week.

## **Topline Stats**

	10/16/2012	10/17/2012	10/18/2012	<b>Grand Total</b>
Count of Unique Apps	39	63	128	230
Clicks	137,299	316,845	425,552	879,696
Impressions	15,467,280	41,511,003	48,577,310	105,555,593
Revenue	\$38,454	\$72,924	\$86,944	\$198,323
CTR	0.89%	0.76%	0.88%	0.83%
CPC	\$0.28	\$0.23	\$0.20	\$0.23
CPM	\$2.49	\$1.76	\$1.79	\$1.88

From: Deborah Liu

**Sent:** Monday, October 15, 2012 1:55 AM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<u>reshmakh@fb.com</u>);

Constantin Koumouzelis; Yuji Higaki; Max Eulenstein

Cc: Jeff Kanter

**Subject:** RE: Weekly Platform Monetization HPM

**Payments** – Reviewed the strategy for Payments 3.0 (Facebook Identity + Wallet) with Zuck and got approval to start designing the product and engage with potential partners. Looking forward to building out one-click mobile payments linked to Facebook identity. Working on process to field, prioritize and support payments requests from various orgs in the company. Running into an issue where Facebook

Gift Cards in retail stores cannot be used on Karma gifts, a point of user confusion without an easy solution.

**Sponsored App Installs (Project Neko)** – Launching on Wednesday, the 15<sup>th</sup>! Cleared the final bugs, delivered Device Targeting, and have 5 partners spending at scale. We are currently bringing in around \$70K+ per day. Partners actually have more budget, but we are starting to run into delivery issues. Working on improving performance of ads with some promising results including the Google Play icon (click to install rate improved by 2% - from 7.5% to 9.5%) and creative customization (improved +20% to 50% CTR). Also building out Neko specific features into ads optimization.

See attached doc for the exec update we are doing tomorrow – Thanks to Max, Teck and Vijaye for helping to pull together.

From: Deborah Liu

Sent: Friday, October 05, 2012 11:54 PM

To: Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (reshmakh@fb.com);

Constantin Koumouzelis; Yuji Higaki

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

**Payments** – Promoted posts out this week as a test in the US. Congrats to Reshma who has been leading this effort! Finalizing timeline for Payment Engine migration – 90 day breaking change announcement in early Jan with final cutover in April. Fleshing out test plan for Payments 3.0 including Buy Button on site.

Sponsored App Installs (Project Neko) – Revenues for yesterday = \$70K+, 3x what we were seeing earlier in the week. This resulted from the mid-week fix for the eCTR overestimation from last week. We are spending through partner budgets and are seeing 3x delivery at the prices partners are willing to pay which hovers around \$2 to \$2.50 CPI. Already today we are seeing increased budgets from partners. True device targeting (iOS + iPhone/iPad) is now checked in. We will open up to partners over the weekend. Those are final two gating changes for launch. Now we are waiting on getting 5 partners spending \$10K+ as the final gate to launch. Early results from our first oCPM test shows it is about 2x more efficient than straight CPC buying and will get further results next week. We are also running a few tests on how to improve performance like adding the word "free" and testing the Google Play icon in the ad. Given we cleared the final launch blocking items this week, we are aiming to launch October 15<sup>th</sup>.

### <image017.png>

[note this includes only spenders of \$500 or more and the CTRs are lower than most other feed stories due to the 3 unit in Wilde – new Wilde unit goes out in next release]

From: Deborah Liu

**Sent:** Monday, October 01, 2012 10:32 PM

To: Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (reshmakh@fb.com);

Constantin Koumouzelis; Yuji Higaki

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

Just a quick update.

We pushed out the CTR overestimation on Friday and CPCs went down by half. Unfortunately, while we achieved the CPCs (and thus CPIs) we wanted, there was a bug introduced in the way the overestimation was coded up which caused us to deliver the same number of ads. So basically, we served exactly the same number of ads and made half of the money. This issue affect us and offers. The ads engineer who is helping us with this is going to push an fix tomorrow, so we should see improved results from there.

From: Deborah Liu

Sent: Saturday, September 29, 2012 9:47 AM

**To:** Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (<u>reshmakh@fb.com</u>);

Constantin Koumouzelis; Yuji Higaki

Cc: Jeff Kanter

Subject: RE: Weekly Platform Monetization HPM

Neko spend is currently about \$35K.

From: Deborah Liu

Sent: Saturday, September 29, 2012 12:48 AM

To: Mike Vernal; Douglas Purdy; Vijaye Raji; Teck Chia; Reshma Khilnani (reshmakh@fb.com);

Constantin Koumouzelis; Yuji Higaki

Cc: Jeff Kanter

Subject: Weekly Platform Monetization HPM

**Payments –** Karma integration went live this week and is v1 of the internal payments platform. Kudos to Reshma for delivering on this important system! This sets the stage for many future monetization initiatives within FB. Finishing up the final subscriptions features over next couple of weeks, and then focusing on getting adoption. Promising discussions with PayPal, Braintree, and Stripe on partnering with us on Payments 3.0. Currently designing tests for wiring up onsite Buy buttons.

Sponsored App Installs (Project Neko) – After a couple weeks of focused work by the team, all major Power Editor issues are now resolved! Today we turned on overestimation of CTR to 4x on Wilde and 2x everywhere else, effectively halving CPC from about \$.23 to \$.11. We picked this level because our tests show that we have sufficient improvements in the pipeline (e.g. single unit in Wilde, exclusion for apps, customization), so that we can dial this back without affecting overall CPIs. The goal is to get within the right CPI levels to trigger developer spend, get our SDK adopted, and move to oCPM buying which will be likely 20% to 50% more efficient. Phase 1 of Device Targeting launched in the API, and a couple PMDs are starting with test with it. This will also be available in Power Editor next week which should remove at least 5 to 10% of wasted inventory and benefit all advertisers who want to focus ads on a specific device. Our first oCPM test is set up to run over the weekend which will start the process for CPI buying.

Note that oCPM is a variant of CPI though there are small differences in how we bill.

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