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Google Play

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Project Everest - Options for evolving Play's Business Model

(WIP - seeks advice of counsel)

- Last year's context slides: https://docs.google.com/presentation/d/1xy0PMiNgc1B-ywU27Ar-VvjAepCJv3fZp3n5W1B40PQ/edit#slide=id.g62584bfae9_13_335

EXHIBIT 2698.R

EXHIBIT 2698.R-001

GOOG-PLAY-011073526

Exec Summary

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- Model for App Stores likely to change (e.g., competitive and regulatory pressure); Should go beyond a 'one size fits all' model and have segmented pricing and choice of billing system.

- Complaints primarily focus on **Billing Choice** ("I want to use my own billing") and **Pricing** ("I don't want to pay 30%")

- Industry is conflating Billing Choice and Pricing. We believe they are separate (e.g. Play can still charge a service fee even if you use your own billing)

- We have a range of options on Billing Choice and Pricing that balance user experience, business, and regulatory concerns (will review today)

- Open questions:

  ○ Are we striking the right balance of trade offs with our options?

  ○ How aggressively should we move to make changes?

- Time pressure: (1) KR laws. (2) Need to get back to Match, Spotify, Amazon.

Google

- Sameer
- 1. We're here because there are numerous potential actions against Play's business model including in Korea (action to disallow requiring Play Billing is imminent) EU / US, where the EC SO, DMA, and US legislation and lawsuits are in flight.
- 2. The challenges center on Choice and Billing, and we will talk through our thinking for how to respond to hese challenges.
- On choice, we recommend offering some devs the ability to use their own billing - we'll charge them a service fee the cost of billing.
-      Note that while some devs really to want to use their own billing, we believe a bunch of choice arguments are actually pricing concerns. So we will need to address pricing.
- On pricing, we recommend a segmented, targeted approach (a once size does not fit all approach) addressing specific app categories and situations (for instance, games, subs, active buyers with specific duration).
- 3. We'd like to discuss some options for how aggressively we want to make these changes.
- KR compliance approach - Conserative approach, which is to comply with the Korean law, allow alternate billing & charge a service fee but otherwise make no changes. Wi hout addressing pricing, we'd expect that we'll see a lot of pressure particularly on pricing very quickly in Korea, and for Korea to influence action in other markets.
- Focus on apps - This approach addresses the major agita ion of Apps developers

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- wanting to use their own billing and seeking lower service fees - reflecting their specific vertical margin challenges.
- More radical focus on both apps & games offering more choice and lower service fees. This more radical approach would provide the biggest solve. But it may not be necessary to do immediately, and may not solve all agitation.

- The next few slides will cover some key context, and we'll dive in to choice, pricing and these rollout options.

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First, some context...

Reminder: Play revenue is $18.3B (2021)

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2021 FORECAST PLAY REVENUE

Service Fee – Apps
11% of total (17% of Service Fee)
33% Y/Y
41% Y/2Y CAGR

Ads – Games
16% of total
49% Y/Y
52% Y/2Y CAGR

$2.8 Bn $2.1 Bn

Service Fee – Games
56% of total (83% of Service Fee)
7% Y/Y
19% Y/2Y CAGR

Ads – Apps
17% of total
78% Y/Y
51% Y/2Y CAGR

$3.0 Bn

$10.3 Bn

Total Revenue =
$18.3B
23% Y/Y
30% Y/2Y CAGR
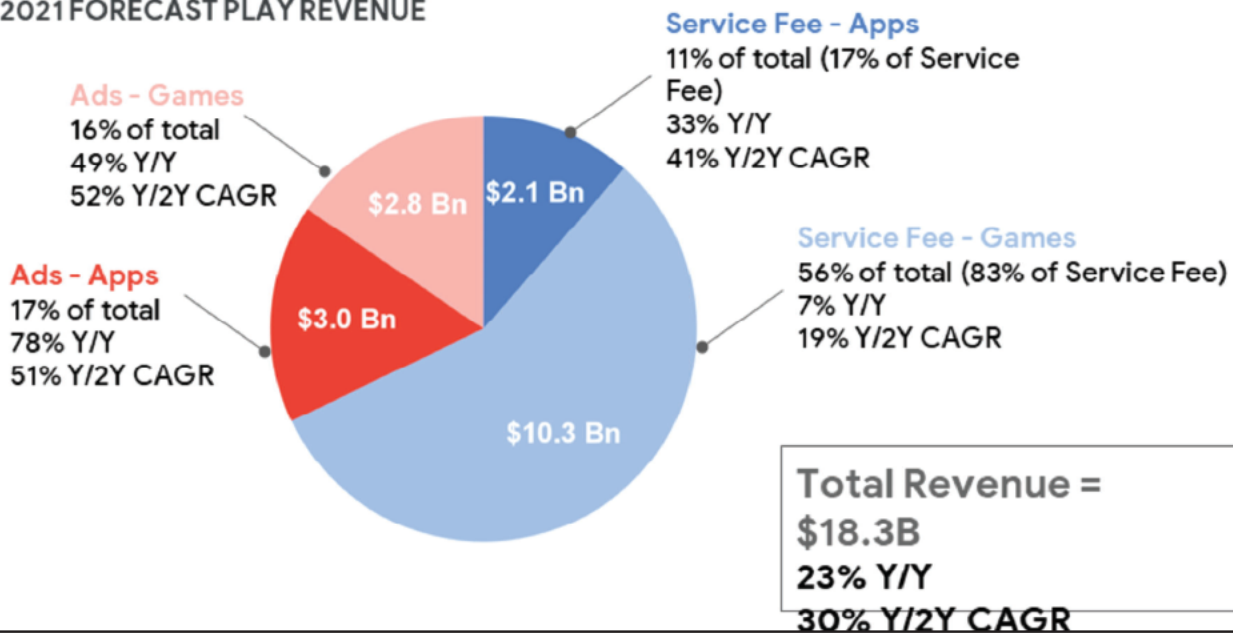
Google

- Sameer
- Play is on track to deliver >$18B revenue this year (V7 revenue forecast on a served, fixed FX basis)
- Service fees account for roughly ⅔ of that at $12.4B, with games being the majority of that
- Ads with strong growth account for just under $6B
- Games revenues overall generate the majority of revenue (through service fees and apps) @just>70% ($13.1B)
- ---
- Biggest Ads advertisers: Facebook, Bytedance, Kauishou, Amazon, Context Logic (Wish)
- BIggest games advertisers: Elex Tech (Clash of Kings), Activision Blizzard (Candy Crush, Call of Duty etc.), Playrix

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GOOG-PLAY-011073530

- Tristan/Wilson

- ----

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Reminder: "Billing Choice" and "Pricing" are the primary complaints

1. Billing Choice:
- **Complaint** - Devs should be able to choose their billing platform
- **Complaint** - Users should know about lower prices elsewhere

2. Pricing:
- **Complaint** - 30% is too high

Equity:
- **Complaint** - Platforms unfairly preference their own products
- **Complaint** - Treatment of developers *across* Play should make sense / A few devs subsidize all others

Google

- Tristan/Wilson
- ---
- Coalition for App Fairness + Kindle: "Apple prevents Amazon from both selling books through he Kindle app available on iOS and doesn't allow Amazon to inform consumers on how to make the purchase   "
- VS Sharma (Paytm): "Google's Android & Play Store dominance in India, gives them even more arbitrary powers and clout on India's businesses.
- They can ask for any money as "charge", take our ad $ and not leave anything here, for our country.
- We have to come together and make India, Atmanirbhar."
- Spotify: "Roughly ⅔ of this money is paid out to music rights holders"
- Sen. Amy Klobuchar: "[T]hey control this whole app market. Basically, you used to go to websites for everything. . . But as the Match people described, the app stores have basically taken over he internet in a lot of ways. You could still have a successful Apple, but still demand more consumer protections to make it easier for people to compete."
- Match quote: "Why do we pay and Uber pays nothing".
- Sen. Amy Klobuchar: "Apple, they've been charging 30 percent to companies like Spo ify, but not to Uber. And the reason given to [Sen.] Mike Lee was, "Well, that's because hat's cars

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- and rides." So, I think there's some real problems in this because of monopoly power.

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- Sameer
- In previous short discussion, highlight three approaches. Ruled out a more 'industry changing' approach of more radically changing our service fee approach to, for example, charge for installs or charge OEMs per device.
- Focus today on approaches 2&3, where 3 is - in reality - a more narrow version of approach 2.
- Considering two key things in this approach 1. Who is eligible for Billing optionality? 2. How do we charge developers using their own billing for our services? What other pricing changes/incentives for developers?

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- Kara to cover this section

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Reminder: Play pricing today

General rate card

- 30% on IAP
- 30% on subscriptions in year 1, 15% beyond year 1
- 15% for first $1M on earnings (per year) for all developers

Special Programs (with clear participation criteria)

- Accelerator programs for media (7.5 – 15%) [Public as of July 2021]
  - ○ Requires product integrations with TV, Auto, Wear
  - ○ Music, Video, News, Books
- Games Velocity & Apps Velocity programs (1 – 7%) given back in cloud, ads credits [Not publicly disclosed]

Google

- Kara
- Have already moved away from 'one size fits all'.
- Only charge when a developer is successful + only on digital goods.
- Accelerator programs > take into account vertical economics (media) but also has a number of gets (eg. Integrations)

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Draft WIP: Discussion only

Going beyond one-size fits all: Segmenting developers to create more aligned pricing models

Segment	Examples
Size of Developer	Small, Large by $
Business Model	IAP, Premium, Subs
Industry / App Marginal Costs	Music, Movies, Books, Content Creators
Market / Geo	Developed, Emerging app markets
Google Relationship	Ads, Cloud investment

Google

- Kara
- Explored multiple pricing dimensions given developer characteristics

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Pricing for segments under consideration (1 / 2)

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	1. Subscriptions @15%	2. Accelerators (Extended)	3. India / EM
Segment challenge	Subscription businesses have different business model than IAP	Underlying marginal costs are high given vertical structure and/or creator fees	Lower ARPU, market is immature and in growth phase
Proposal	Play service fee of 15% on all subscriptions - from Day 1	Extension of existing accelerators; added eligibility (7.5/10/15%)	Indian devs get X% refund in 2022/3 (TBD)
Who benefits?	All subscriptions. Dating/matrimony (Match), email subs (ProtonMail), etc	Premium media apps + media apps w/ larger creator platforms	India developers serving India users
Benefits	+ Solves for an important segment of agitation + Supports subs model	+ Addresses an additional visible and growing media segment	+ Significant headline & investment in local devs
Risks	- Why only for subs and not IAP?	- Other developers face similar margin concerns eg. IP licensing	- Will this truly be temporary? - India only or all EMs? - Other market contagion?
Est. Margin cost	~$0.3B-0.6B (subs rev+~45% y/y)	~$50M	~$Low for IN (needs vetting for EM)

Google

- Kara
- Considering three new programs to address different segment challenges.
- Subscriptions at 15% from the first purchase. Most straightforward extension of existing subs policy. A more scaled way to address the affordability and value concerns of the likes of devs such as Match. Risk is contagion to IAP. Cost at ~$410-620M - assuming some behaviour changes in games ($350M apps; $60M games)
- Extended accelerators to include Content Creators. Suited to growing segment of 'platform' apps such as Basecamp, Patreon, and potentially Spotify, who have a large creator platform and share the a significant proportion of their sales with creators (usually published rates). Concept would be to charge a service fee of 30% on the proportion they keep - with a minimum of 10% So, for example, if they share 50% of their sales with devs they would pay 15% service fee; if 90% shared they'd pay 10%. Rates still TBD.
- India program a one-off tailored to current IN market conditions as a short term 'boost', providing investment for market development.
- Still working through full details, including costing.
- ---
- Potential gives and gets with all these programs.
- Other potential programs: Better Togethers, Cloud credits / GVP scaled
- Costs:

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- Content creator: -$7M margin against existing GPB developers, excludes Roblox. See <u>Slide 79: Creator Content Program</u>
- Subs @ 15% immediately: cost is $zzz for apps + $zzz for games for a total of $zzz. Assumes that subscription and IAP spend are unaffected by the new pricing.

- Notes on figures:
- Subs revenue growth of 45% is the 2 yr CAGR ending in Q2 2021.

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Pricing for segments under consideration (2 / 2)

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	4. Tenured User Tiering	5. Google Relationship
Segment challenge	High ongoing perpetual payments to Play	Want a special relationship given the size of business with Google
Proposal	30% for buyers in Yr1; 10% service fee for all buyer purchases in Yr2+	Extend scalable portions of AVP / GVP to public (TBD)
Who benefits?	Large App & Game developers who retain users for long duration. mixi nc (Dropbox)	App & Game Developers with significant Play, Ads and Cloud businesses NIANTIC (EA)
Benefits	+ Encourages & rewards better content on Play + Aligns with upfront value creation & ongoing developer investment in retained users + Differentiated vs. competitors	+ Differentiated vs. competitors + Proven value thru GVP + More efficient than "writing a check" + Aligns with top developer asks
Risks	- Still leaves base svc fee @30% - May be seen as not a substantial change	- Competition - Operational Complexity
Est. Margin cost	~$1.8B-$3B	TBD

Google

- Kara
- Tenured user tiering more tailored to reflect user acquisition in Games IAP.
- Google relationship. Scaled version of the GVP more likely for Games.
- Still working through full details, including costing.
- ---
- Potential gives and gets with all these programs.
- Other potential programs: Better Togethers, Cloud credits / GVP scaled
- Costs:
- Content creator: -$7M margin against existing GPB developers, excludes Roblox. See Slide 79: Creator Content Program
- Subs @ 15% immediately: cost is $zzz for apps + $zzz for games for a total of $zzz. Assumes that subscription and IAP spend are unaffected by the new pricing.

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GOOG-PLAY-011073540

Slide 12

1   @Josh O'Connor (Google)
         @Shamini Nair (Google)
         I think this is the last quantification we have for TUD. There's also a slide later in this deck that I'll plus you into that has a dev
         breakdown (I think it's the one Kara wanted).
         Assigned to Josh OConnor
         Brian Brazinski, 9/13/2021

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Anticipated developer response (directional)

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LIKELY APPS PARTER RESPONSE

	Today		Targeted Programs + Choice	
	Fee	Current Outcome	Targeted Program	Fee (+Choice)
Match	28% + AVP	De-Integrate + Agitate	Subscriptions	15% (10%)
Kakao/Naver	15%	3P billing + Agitate	Accelerator	10% (5%)
Spotify	15%	3P billing + Agitate	Accelerator	10% (5%)
Bandcamp	30%	3P billing	Accelerator	10% (5%)
IN Media	15%	3P billing	Accelerator + India	10-15% (5-10%) + Lower Yr 1
IN Dating/Edu	30%	3P billing	Subs + India	15% (10%) + Lower Yr 1
Netflix	15%	Consumption Only	Accelerator?	10-15% (5-10%)
Kobo	15%	3P billing	Accelerator	10% (5%)

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Slide 13

1   If the coloring in the last column is supposed to indicate willingness to take the offer, K/N, Spot, Netflix should be red
         Sarah Karam, 8/16/2021

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GOOG-PLAY-011073543

- We just ta ked about options for pricing.. choice - devs saying I want to use my own billing
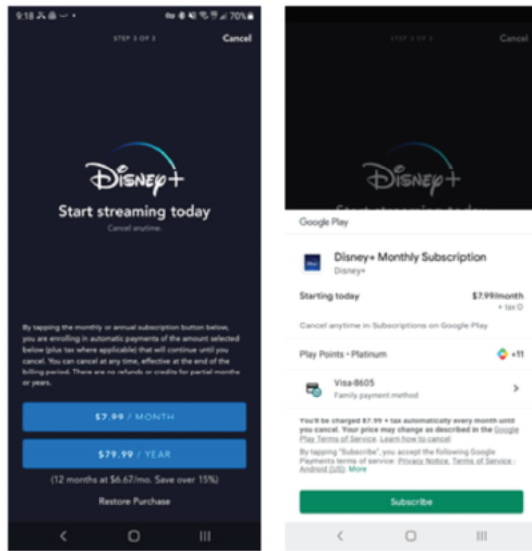- Walk though our thinking on how best to do that...
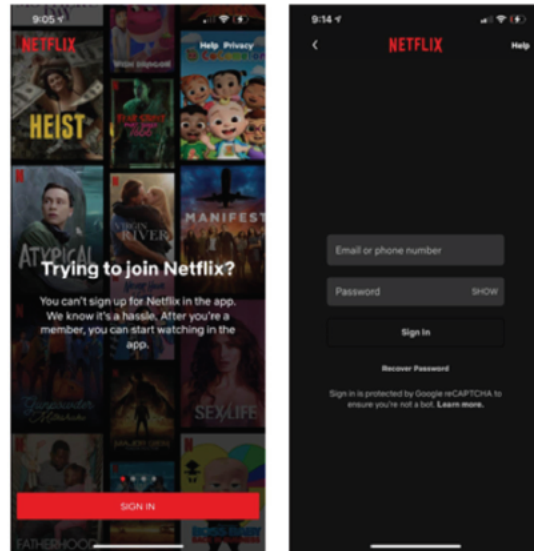
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GOOG-PLAY-011073544

Reminder: Today, you can use Google Play Billing or go Consumption Only

Draft WIP: Discussion only

- Paul
- Before we get to the details of billing choice, a few background slider. First, what are the GPB billing options today?
- Use Google Play Billing. Here we see screenshots of the Disney+ flow. Tap on buy, go to Play buy flow
- Consumption only. That means if you don't want to use play billing, you can just have an app where users sign in. Here, we see a consumption-only experience in Netflix
- Sophisticated devs, esp big global ones that users use across multiple platforms, often subs, have a point.
- IOS has a similar concept, but they're more restrictive on what categories they allow reader apps in (just content)

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GOOG-PLAY-011073545

- Paul
- This slide covers a set of important buyer / platform features our hundreds of millions of buyers depend on when they use play billing –
- It's why we say Play billing is an integral part of Play
- Buyer protections - include…
- Central subscriptions management,
- Parental controls (approve kids downloads and purchases)
- Budgeting
- Buyer features include
- Famly form of payment
- Family library
- Gift cards and other Forms of payment
- And Play points
- Points - 70M members in 27 countries, 54% spend coverage, including 67% of global HVUs
- So one of the challenges we face is if we let devs use whatever billing they want, he experience of buying digital goods on Play will be fragmented and inconsistent
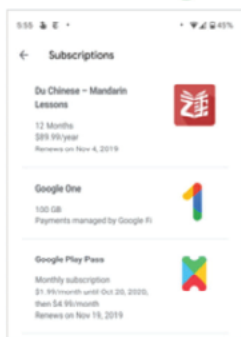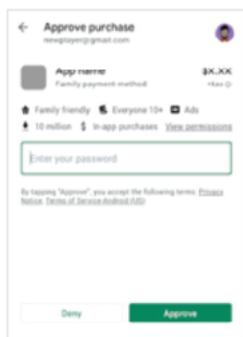
EXHIBIT 2698.R-021

GOOG-PLAY-011073546

Billing Choice Options

Draft WIP: Discussion only

More standardized → ... ← Less standardized

Option 1: "Choice screen" for billing in app

Become a Devvy Insider
$9.99/month after free trial

Try free for 30 days

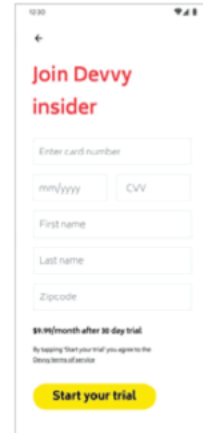Start by choosing your payment method

Continue
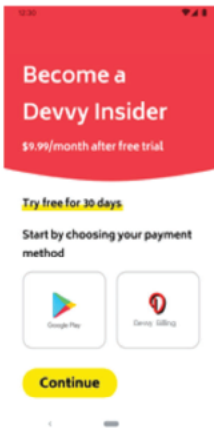
Play Billing *is* required. Developer can opt to also offer their own billing. User chooses which to use.

Option 2: Link out of app to mobile web for 3P Billing

Become a Devvy Insider

Try free for 30 days

Unlimited access to articles and latest industry news

Early bird access to live events around the country

Buy on devvy.io today

You are leaving the devvy app

No thanks   Continue
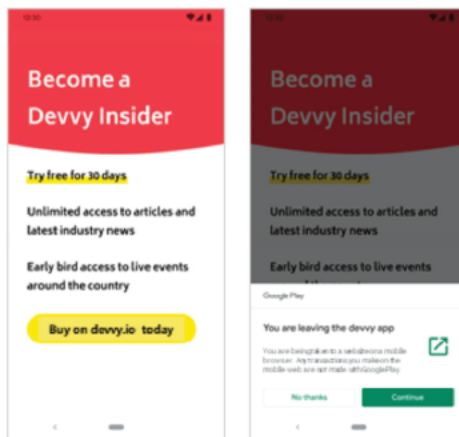
Play Billing *is not* required. The developer can *link out to the web* for their own billing flow.

Option 3: 3P in-app billing

Join Devvy insider

Enter card number
mm/yyyy   CVV
First name
Last name
Zipcode

$9.99/month after 30 day trial

Start your trial

Play Billing *is not* required. Developer can use their *own billing in the app*

Google

- With that, let's ta k about the options we've considered - there are three options laid out according to how standardized, and consistent (with Play) they are.
- Starting on the left, we the "Choice Screen" option - devs to use their own billing flows, but side by side with Play billing - essentially a choice screen for billing.
- The nice thing about this option is that the user gets to choose - if they want the Play features we ta ked about, they can choose Play billing.
- With the middle option we allow developers to link directly to their buy flows on the web, and we don't require play billing.
- This isn't a seamless user experience, and it can be confusing and potentially misleading, so we'd propose adding an interstitial to let users know that they're leaving the app.
- The last option is that we allow devs to use their own billing natively , with no requirements to use GPB. Unless we do something, this option will break a bunch of the features we showed in that features slide.
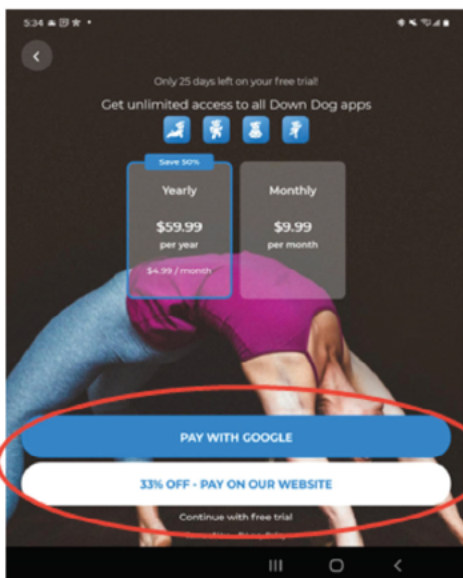
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- A lot of devs who ask for choice in billing are actually conflating billing with price, and assume that if they don't have to use Play billing, they wouldn't have to pay anything.
- So in this real world example, this non-compliant developer is offering two options to pay - Play and the web.
- And because today, they they don't have to pay on the web, they're able to offer 33% off.
- This is not a great user experience… nor is it good for Play and Googles ability to invest in the Android / Play ecosystem.
- That's why any of the choice options we talked about should be coupled with a service fee, regardless of the billing system.
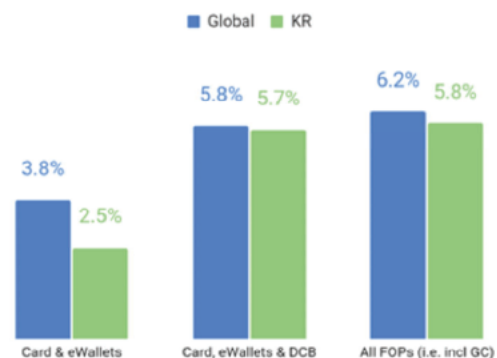
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The cost of billing could be deducted from the service fee based on an average of our global billing costs

Global Payments Costs by FOP mix

- Assuming a developer uses their own billing, we could deduct ~5% from the service fee that applies to them

- Example:
    - Devvy is eligible for a 15% service fee on all subscriptions.
    - If a user signs up with Devvy's billing system, Devvy would pay Play 10% (vs. 15% if Google Play Billing is used)

■ Global ■ KR

	Card & eWallets	Card, eWallets & DCB	All FOPs (i.e. incl GC)
Global	3.8%	5.8%	6.2%
KR	2.5%	5.7%	5.8%

- Cost of payment ~6% including 1P FOPs (DCB and Giftcard), ~4% excluding
- Costs vary by geo, ranging from 3%–10%, largely driven by FOP mix

Google

- We believe the most straightforward way to charge the service fee is to do it the way we do it today - based on a percentage of transaction amount
- We'd subtract just cost of payment processing from he service fee. (5%)
- To come up with 5%, we looked at costs across a bunch of markets and fops.
- And while you can see that there is some difference by country and by form of payment, 5% isn't just a nice neat number, but it turns out to really accurately represent our costs.
- We considered more complex models, including variable cost pricing, per country pricing, but we felt that would be false precision -30% represents all the value play provides, and isn't really intended to be itemized - both for billing (which can fluccutate) and for the rest of the service fee
- Looked at things like fixed acquisition fee, cost per install, app registration fee
- They were very complex to get right, and because of big differences between devs, they would be really inefficient.
- They would also create perverse incentives for devs to switch from Play billing just for economic benefits.

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- The spread you see in the payments processing cost is due to FOP mix and also the fixed / variable costs based on average order values
- Note that the fixed fee associated with credit card processing is gradually going away and so these costs may decline in the future

- ---
- Need to address decision as to whether side-by-side is an option & presents CC/Paypal arbitrage on price.

EXHIBIT 2698.R-025

Draft WIP: Discussion only

KR User Trust Protections Overview (still finalizing details)

Qualifications to use your own billing:
- *Payment processing security* (e.g. PCI compliance)
- *Customer service availability* (e.g. availability of customer service contact information, website, etc)

Dev must...
- Tell us *in Console* about (1) intention to use 3P billing, (2) details about items (3) how users get customer service
- Integrate with APIs for Invoicing / User Trust

User Experiences: Store / Install
- Strong pre-download guidance about 3P billing
- Setting to hide 3P billing apps (default off, default ON for Unicorns)

User Experiences: Pre-Purchase / Purchase
- Strong in-app guidance about 3P billing usage in app.
- Budget and Parental Ask-to-buy checks in purchase flow

User Experiences: Post-Purchase
- Post Purchase UX & Support (Award points, update Order History & Subs Center, basic gUp)
- Program Enforcement (Invoicing, Audit/Testing)

- We talked a few slides ago about why Play billing (and the consistency and user protection it provides) is important.
- But as you know, we're going to be forced in Korea allow 3P billing, and so we've been thinking hard about how we can ensure consistency / user protection w/o Play billing. Here's how we're approaching things
- Only devs that meet a minimum bar of offering secure payments processing and customer service will be allowed to use their own billing.
- Devs must then give us some info - using their own billing, what they're selling, how users can get customer service, as well as integrate with a set of APIs.
- 3 With that info, and those integration, we'll be able to ensure that 3rd party billing is reasonably safe and consistent. - focusing on what happens in the store, in the app during purchase, and post purchase.
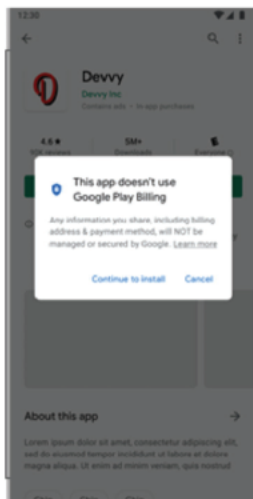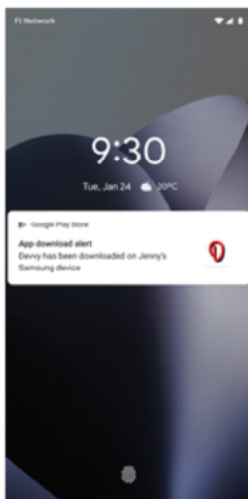
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User Experience: Store / Install

Draft WIP: Discussion only

In-App warning before install | **Parent download notification** | **(TBC) Setting to filter non-GPB apps (on by default for Unicorns)**

Notify parent account when unicorn downloads app with alt billing
(Global: Same)
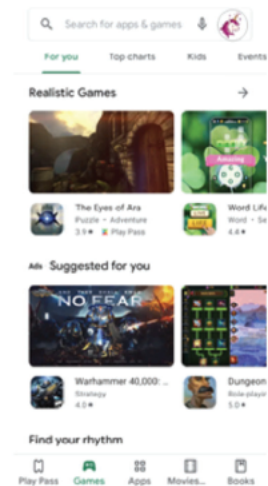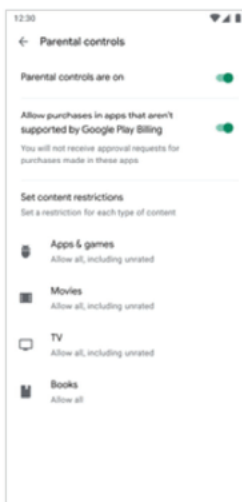
Google

- Pre install, we'll focus on giving users info - that

- they're using apps that don't use play billing, and what that means
- That parents know if their kids are downloading apps that don't use play billing
- We're also looking into whether we can let user (esp parents) filter out play billing apps.
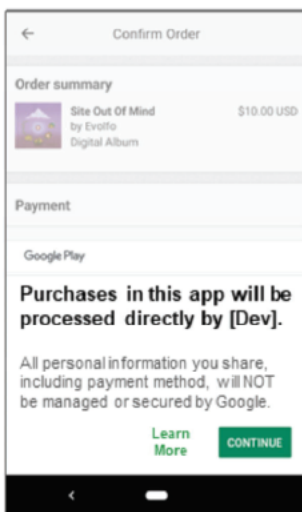
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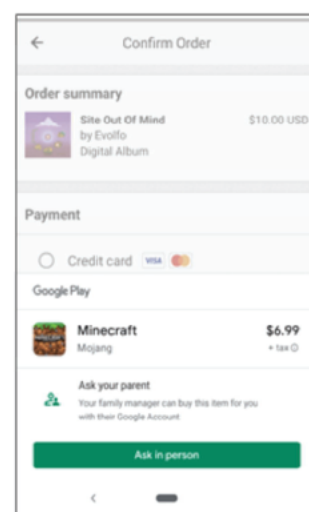
- In the developers app

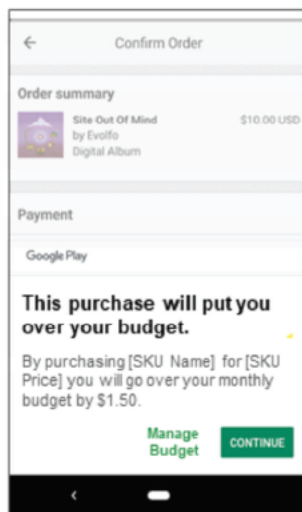- We'll notify them that they aren't using Play billing
- Notify when budget will be exceeded
- Looking into asking parent s to approve purchases (like they can on Play billing)
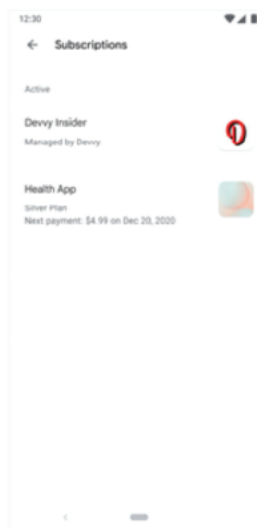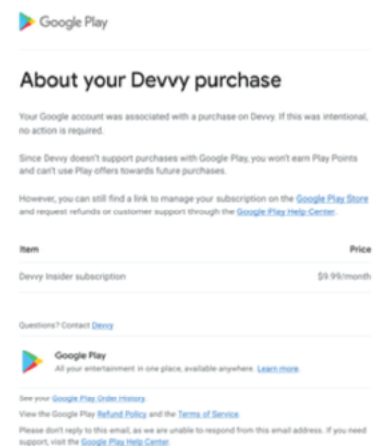
- AFter purchase
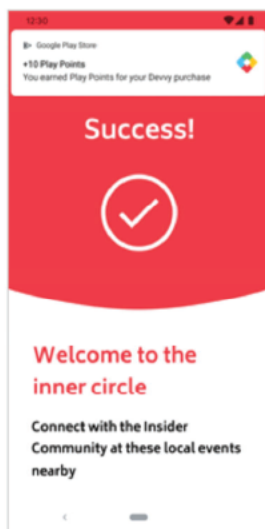- We'll offer Play Points - this is important because we're trying to preserve users' expectations of what the Play experience is, and we think Points is a bit part of that)
- We'll ensure users still have a way to get to customer service.
- And we'll notify users about purchases.
- That's how we're thinking about optiontality, and how to preserve user experience and safety
- Now let's pull it all together.

EXHIBIT 2698.R-029

GOOG-PLAY-011073554

EXHIBIT 2698.R-030

GOOG-PLAY-011073555

Options (for discussion purposes)

Options for discussion

Draft WIP: Discussion only

Privileged + Confidential

Small changes →   ← More radical

1A. KR Model

Apps & Games can use their own billing (in KR only)

No changes to pricing (-5% if developer users own billing)

1B. Narrow Carve-out

Music Apps can use their own billing

Very low fee for music apps (7.5%) (-5% if developer uses own billing)

2. Focus on Apps ($0.3-0.4B)

All Apps (not games) can use their own billing

Subscriptions in apps @ 15%
Content Creator apps @ 30% of NET
Emerging Markets @ 10%

(-5% if developer uses own billing)

2B. Focus on Apps & Games ($0.4-0.9B)

Apps & Games can use their own billing

All of (2) + Games subs@15%

(-5% if developer uses own billing)

3. Change Pricing for Games ($2.2B-3.9B)

Apps & Games can use their own billing

All of (2) + Games subs@15%

Tenured pricing (30/10%)

(-5% if developer uses own billing)

Google

- To bring it all together showing the impact of each option. (Focus on blue box)
-
  All: For discussion
- Questions?
- Preferences?
- Other considerations? Likely competitive response?

EXHIBIT 2698.R-032

GOOG-PLAY-011073557

Draft WIP: Discussion only

Everest Financial Impact Summary (as of August 2021)

Play Business Proposals (Permanent, Annual Impacts)

USD $Ms	Revenue Impact		Margin Impact	
	Low	High	Low	High
Subscription Give (all devs)	300 M	600 M	280 M	560 M
Billing Optionality (all devs)	250 M	1,290 M	60 M	320 M
Expanding Accelerators	50 M	50 M	50 M	50 M
Credit Risk Costs**	0 M	0 M	TBD	TBD
Total	600 M	1,900 M	400 M	900 M

Potential KR Transitory Impact (from Sept 2021-June 2022)

	Mitigated Impact	Max at Risk	Mitigated Impact	Max at Risk
KR GPB De-Integration	220 M	1,300 M	120 M	1,000 M

**Play will also incur development costs, but these are one-time; not recurring

Google

- Speaker: Christian
- Subs give (revenue estimates from this table).
- Margin estimate backed out the DCB rev share savings based on DCB share of subs transac ions (14%) globally)
- High case assumes 5% of IAP spend (from bo h apps and games) shifts from IAP to subscriptions
- User choice billing work from this trix
- Low case assumes developer tx proc alternative costs he developer specific cc rates and that only 20% of CC users choose 3P card
- High Case assumption include dev cc rate = min (current rates, Play rates (with no fixed charge)), and that 100% of CC users choose 3P (the developer is able to effectively steer CC volume) when offered side-by-side choice
- Margin savings (vs. revenue) driven by Play's CC processing costs
- Expanding accelerators economics driven by Twitch (UGC) IAP rates falling to 15%
- Margin savings driven by DCB share savings
- KR GPB De-integration-
- Max at risk = all KR A&G revenue for the period between Sept 2021-June 2022 (inclusive), costing our full revenue
- Mitigated impact = we are able to bill devs @25% rate, which incentivizes half of devs to stay on GPB. That said, for the half of devs that leave, 20% of spend is under-

EXHIBIT 2698.R-033

GOOG-PLAY-011073558

- reported to Google for billing purposes
- Margin driven by savings on full payment processing stack on the under-reported spend; treated similarly to user choice billing for spend that is reported

Thank you

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EXHIBIT 2698.R-035

GOOG-PLAY-011073560

Detailed Legal / GAPP View

- **Current Landscape:**
  - ○ Regulatory and legislative efforts focused on **billing**, but motivated by perceived high **price**. Need to address both billing optionality and price to mitigate pressure.
  - ○ Outside KR, we can defend the **status quo** for a few months. Proposed federal legislation in the US would necessitate changes to billing optionality. Making proposed changes sooner may help support reasonable legislation, position Google as a leader, and prevent more draconian legislation elsewhere.

- **Billing optionality** with per-transaction pricing is defensible, but strongly recommend pairing with fee reduction from current 30% rate.

- **Billing optionality plus price changes** will reduce regulatory/legislative risks, but some devs will complain about fees being too high. Changes will not completely solve current matters, and we should expect additional investigations into any changes.

- **Segmentation:**
  - ○ **Segmented billing model** where only certain developers have optional billing (e.g., apps, but not games) is likely to come under immediate scrutiny in KR and IN, and may face issues under DMA.
  - ○ **Segmented pricing model** with differential rates likely OK but we need objective criteria.

Google

- Wilson/Tristan

Apps service fee revenue breakdown across key dimensions
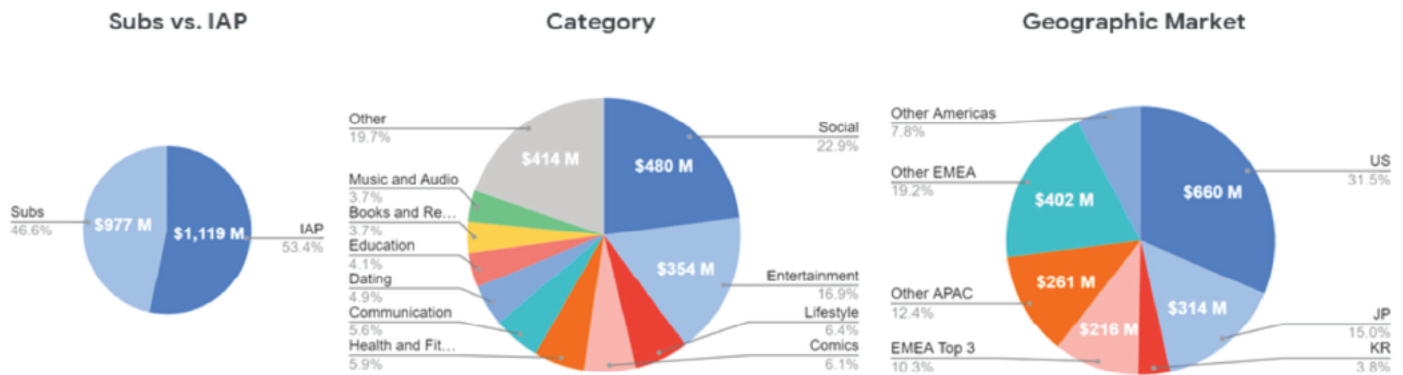
Privileged + Confidential

2021 FORECAST¹ PLAY APPS (NON-GAMES) REVENUE

Subs vs. IAP
- Subs 46.6% — $977 M
- IAP 53.4% — $1,119 M

Category
- Other 19.7% — $414 M
- Music and Audio 3.7%
- Books and Re... 3.7%
- Education 4.1%
- Dating 4.9%
- Communication 5.6%
- Health and Fit... 5.9%
- Social 22.9% — $480 M
- Entertainment 16.9% — $354 M
- Lifestyle 6.4%
- Comics 6.1%

Geographic Market
- Other Americas 7.8%
- Other EMEA 19.2% — $402 M
- Other APAC 12.4% — $261 M
- EMEA Top 3 10.3% — $216 M
- US 31.5% — $660 M
- JP 15.0% — $314 M
- KR 3.8%

1. "Subs vs. IAP" and "Category" are simplified ad-hoc forecasts and not part of the official forecasting cycle

Google

- Paul
- Play is on track to deliver >$18B revenue this year (V7 revenue forecast on a served, fixed FX basis)
- Service fees account for roughly ⅔ of that at $12.4B, with games being the majority of that
- Ads with strong growth account for just under $6B
- Games revenues overall generate the majority of revenue (through service fees and apps) @just>70% ($13.1B)
- ---
- Biggest Ads advertisers: Facebook, Bytedance, Kauishou, Amazon, Context Logic (Wish)
- BIggest games advertisers: Elex Tech (Clash of Kings), Activision Blizzard (Candy Crush, Call of Duty etc.), Playrix

EXHIBIT 2698.R-037

Apps service fee revenue breakdown across key dimensions

Privileged + Confidential

2021 FORECAST[1] PLAY APPS (NON-GAMES) REVENUE

Subs vs. IAP

IAP — $1,119 M

Subs — $977 M

Category

Category	Value
Social	$480 M
Entertainment	$354 M
Lifestyle	$134 M
Comics	$129 M
Health and Fitness	$124 M
Communication	$118 M
Dating	$102 M
Education	$85 M
Books and Reference	$79 M
Music and Audio	$77 M
Other	$414 M

Geographic Market

Market	Value
US	$660 M
JP	$314 M
KR	$80 M
EMEA Top 3	$216 M
Other APAC	$261 M
Other EMEA	$402 M
Other Americas	$163 M

1. "Subs vs. IAP" and "Category" are simplified ad-hoc forecasts and not part of the official forecasting cycle

- Paul
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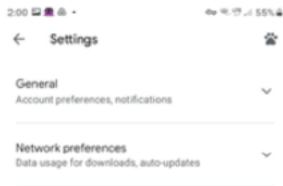
EXHIBIT 2698.R-038

GOOG-PLAY-011073563

Billing Options: Android / Play permission on 3P billing

Draft WIP: for discussion only

Purchases
Play or third-party billing in apps

Allow third-party billing in apps
Non-Google Play billing options will be shown in apps

User setting inside the Play Store allowing apps to use their own billing. Disclosure screen would precede explaining the risks associated with this for consumers
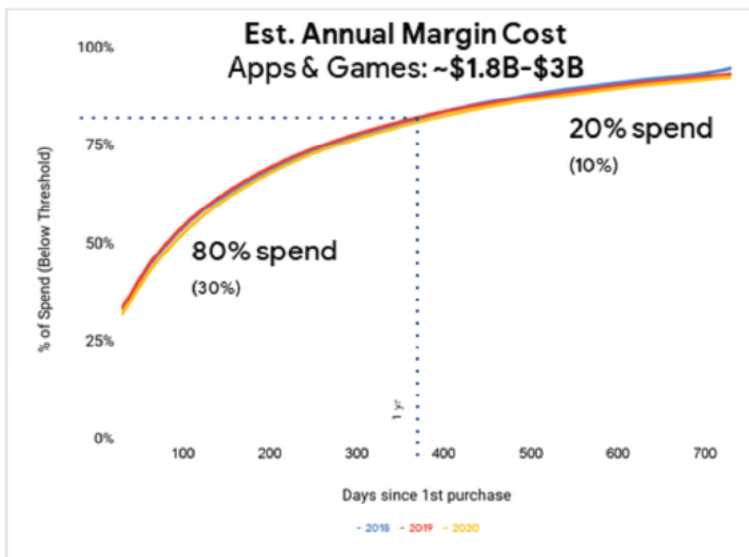
Google

Appendix

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EXHIBIT 2698.R-040

GOOG-PLAY-011073565

Apps *and* Games pricing adjustment:
Tenured user service fee w/ 'low-price' tier

Draft WIP: Discussion only

- ~80% of Play buyer spend is within a year*, trend consistent across years
- Lowest tier directly addresses concerns about high perpetual payments to Play
- Reflect Play's upfront value creation and ongoing developer investment in retained users
- Encourages buyer retention on Play
- Differentiated vs competitors

eg: - effective service fee attained by devs

High growth — Garena 27% — ByteDance TikTok 30%

High retention — mixi 17% — Dropbox 21% Google

* Uses 90D reset clause for buyers

- Kara:
- Considered for Option 3 - broader rate reductions for both apps & games; aligned with Play's upfront value creation. For someone like a Spotify using their own billing, pay only 5% on a buyer retained for >1year.
- Mainly addresses the concern of an 'ongoing tax in perpetuity' but also creates strong developer incentives to retain users.
- Disproportionately benefits larger devs: >$50M earnings @4.8%; $20-50M @3.6%; $5-10M @2.6%
- Note: Equivalent to a 4% service fee reduction (ie. top rate 30% decreases to 26%)
- ---
- Note: the impact of going from 30% → 5% (instead of the base case 30% → 10%) is $2.2 Bn in margin (vs. $1.7 Bn for the base case), appx $500M more.

EXHIBIT 2698.R-041

GOOG-PLAY-011073566

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The effective saving on service fee is more pronounced for large devs

Dev Payout Tier	Tenured User Tiering @ (30/10)% for All Developers			
	# Devs	T. U. Discount	Avg. Service Fee	Service Fee Saving
<$150K	112,416	$3M	29.0%	0.6%
$150K-$1M	2,764	$16M	28.9%	1.2%
$1M-$2M	548	$14M	28.9%	1.5%
$2M-$5M	479	$43M	28.7%	2.2%
$5M-$20M	364	$127M	28.8%	2.6%
$20M-$50M	114	$161M	29.2%	3.6%
$50M+	118	$1,480M	29.4%	4.8%
Total	116,803	$1,846M	29.3%	4.1%

Note:
1). Runway impact is excluded from the analysis
2). Analysis is based on trailing 12 months (Jul'20 - Jun'21) revenue and spend data excluding refunds

Google

- Review of Top 100 devs by discount shows that 87% of savings goes to "strategic" devs (vs to categories we'd be less excited about investing with, ie, social casino)

EXHIBIT 2698.R-042

GOOG-PLAY-011073567

Slide 35

2

@Josh O'Connor (Google)
@Shamini Nair (Google)
This is the slide that supports the low end of TUD @ $1.8B/year.
Assigned to Josh OConnor
Brian Brazinski, 9/13/2021

EXHIBIT 2698.R-043

GOOG-PLAY-011073568

Draft WIP: Discussion only

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Service fee for developers

A different model for non-billing services creates price arbitrage in billing choice

Developer assumes risk ← → Shared risk

Annual listing fee	**Installs/Updates fee**	**Referral fee @first purchase**	**% of transaction value**
Charge upfront, developer assumes all risk of title success	Postponed charge, developer assumes risk of monetizing installs	Postponed charge, developer assumes risk of realizing user's lifetime value	Charge as and when value is realized

- Creates arbitrage opportunity vs current 'all inclusive' service fee
- Sets new precedent. May require change to overall business model

Same model as 'all inclusive' service fee → less price arbitrage opportunity

Recommended

Google

- Overall framing: X% for non-GPB Devs and (X+Y)% for GPB Devs.
- All models require Play to "set the price" in some regard
- No clean solution that doesn't lead to significant arbitrage

- No auction model
- 2 business models
- Create arbitrage between using GPB vs. non-GPB
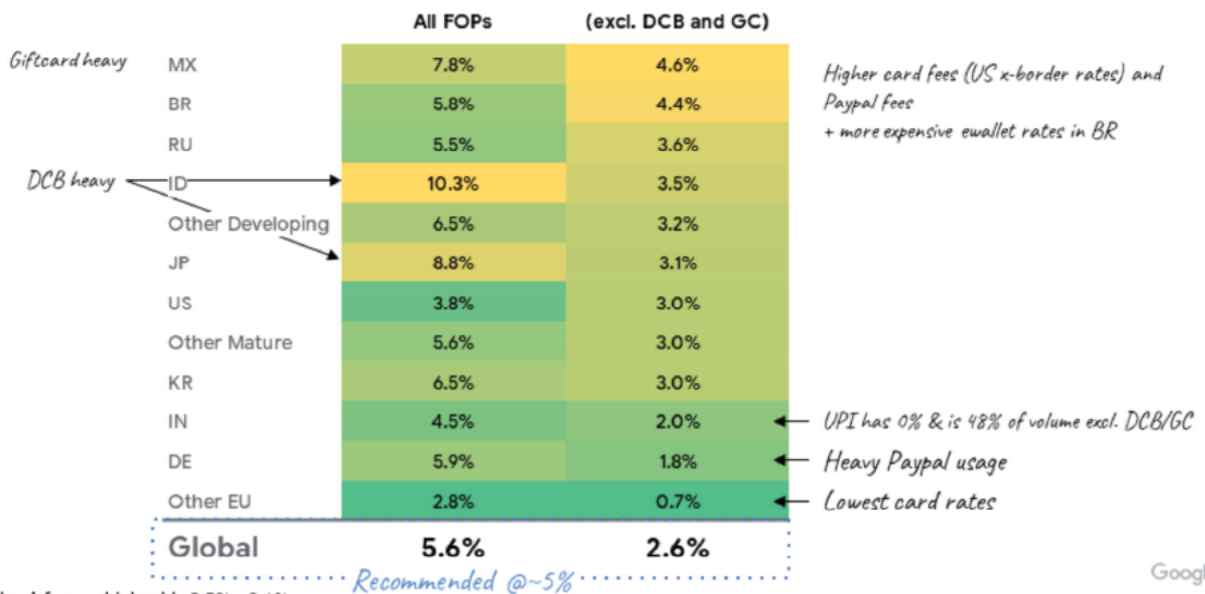- inefficiency

EXHIBIT 2698.R-044

GOOG-PLAY-011073569

Alternative options for service fee
Difficult to set a price due to wide performance spread of apps & games

Draft WIP: Discussion only

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	Price @average Potential for significant loss*: $1-$2B for Apps; $6-$9B for Games	_**Price if only for using own billing**_ Economically indifferent for top developers; unaffordable for rest	
Annual listing fee (per app)	Apps: $30K Games: $200K	$40M $200M	● **Inefficient:** Setting the price 'arbitrarily' ● **Misaligns incentives for developers & Play**
Installs/Updates fee	Apps: $0.02 Games: $0.12	$4 $15	● **Complex & inefficient:** Setting the price 'arbitrarily' (proxy for CPI) and recurring ● **Could lead to very significant fees for top apps ($25M-$5B for a top dev)**
Referral fee (per buyer)	Apps: $8 Games: $36	$130 $500	● **Complex & inefficient:** _Setting the price_ using a blackbox (pRev; proxy for CPA)

Could charge variably based on predicted CLV / user; cannot be auction based as user is already in-app

Google

* Loss calculated assuming model applies only to developers choosing to use their own billing (ie. non-billing service fee)
**Top devs defined as those having the highest rates making up 2 to 3% of Play consumer spend

- Note: Example is based on spotify in the range of 2c to $4. (1.2B installs/updates last year).
- All models require Play to "set the price" in some regard
- No clean solution that doesn't lead to significant arbitrage

- No auction model
- 2 business models
- Create arbitrage between using GPB vs. non-GPB
- inefficiency

EXHIBIT 2698.R-045

GOOG-PLAY-011073570

Proposing ~5% as the payment processing fee adjustment
Adjustment applied to current eligible service fee (X-5%)

ESTIMATED PAYMENT PROCESSING COST BY MARKET* (Google Rates)

		All FOPs	(excl. DCB and GC)	
Giftcard heavy	MX	7.8%	4.6%	Higher card fees (US x-border rates) and Paypal fees
	BR	5.8%	4.4%	+ more expensive ewallet rates in BR
	RU	5.5%	3.6%	
DCB heavy	ID	10.3%	3.5%	
	Other Developing	6.5%	3.2%	
	JP	8.8%	3.1%	
	US	3.8%	3.0%	
	Other Mature	5.6%	3.0%	
	KR	6.5%	3.0%	
	IN	4.5%	2.0%	UPI has 0% & is 48% of volume excl. DCB/GC
	DE	5.9%	1.8%	Heavy Paypal usage
	Other EU	2.8%	0.7%	Lowest card rates
	Global	5.6%	2.6%	

Recommended @~5%

* Excludes chargeback fees, which adds 0.5% - 0.6%

Draft WIP: Discussion only

Google

- Paul
- Last, we wanted to talk about how we would charge devs who don't use Play billing.
- As noted, one of our key principles is that Play delivers a ton of value, and we will continue to charge.
- Another key principle is that we don't want to encourage devs to not use Play billing. Thus, a key element of this optionality proposal is we don't want to give any artificial reasons to incent devs to switch off play billing.
- To do that, our proposal is to price the service fee for devs not using GPB at 5% less than those using GPB - essentially replacement value.
- Based on this analysis of countries and FOP types, we believe 5% (to be finalized) is quite reasonable.
- Of course, as we noted, at a reduction of 5%, we don't think this solves the problems of any devs who are complaining about price. (which is sometimes mixed together)

EXHIBIT 2698.R-046

GOOG-PLAY-011073571

- The spread you see in the payments processing cost is due to FOP mix and also the fixed / variable costs based on average order values
- Note that the fixed fee associated with credit card processing is gradually going away and so these costs may decline in the future

- ---
- Need to address decision as to whether side-by-side is an option & presents CC/Paypal arbitrage on price.

EXHIBIT 2698.R-047

GOOG-PLAY-011073572

- Paul
- AS noted, the option of 3P and GPB is the option that probably best preserve's play's features and protections, with users selection which option they want.

- The concerns are that choices are hard, and we may not be abe to avoice UI pricing differences.

- But perhaps most importantly, we don't think that some of our key devs who are agitating will be inclined to accept an option that requires GPB as well, and that will not resolve our developer agitation issues.

EXHIBIT 2698.R-048

GOOG-PLAY-011073573

- Paul
- Allowing devs to link out to web flows is also an option we've considered.

- It's the simplest change, and it doesn't disrupt how Play billing works - able to be used without play billing or with it.
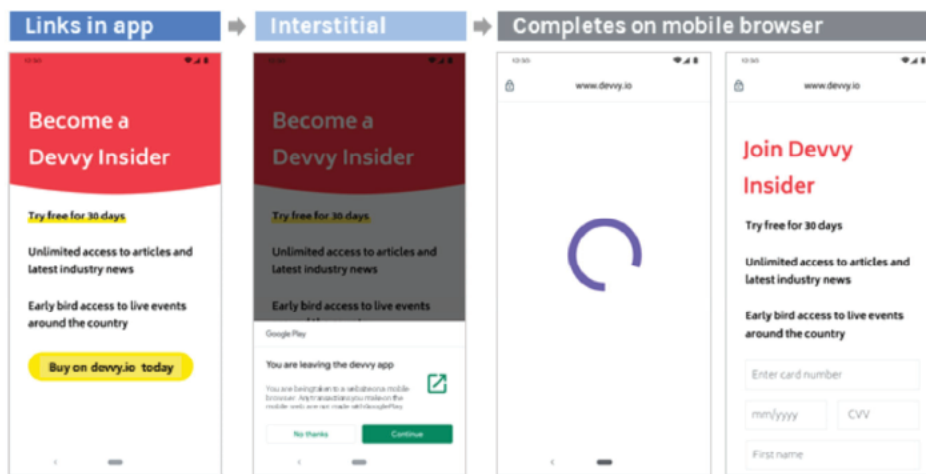
- The concerns with this option, and why we discount it, are because the user experience is disjoint for users, and likely considered unappealing by developers.
- It's also likely not responsive to all billing choice agitation.

EXHIBIT 2698.R-049

GOOG-PLAY-011073574
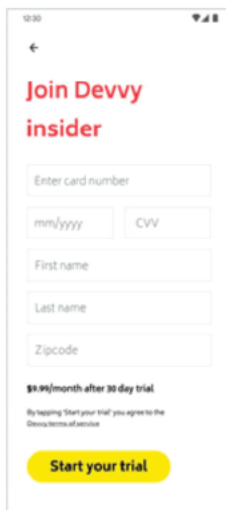
- That's why our recommendation is this third option, where we allow developers to use their own billing,
- First, we think it's a good buy flow user experience.
- Second, we think it's the option most likely to appeal to developers.
- Of course, without Play billing (it would just be optional) for devs that use this option, users would lose the play trust and safety features we were discussing, and we would need to bolster those protections.
- To to that, we're looking into these options
- Encouraging GPB
- Requiring Trust an Safety APIs to enable, parental controls…
- Warning users about feature limitations
- Limiting to trusted devs only

EXHIBIT 2698.R-050

EXHIBIT 2698.R-051
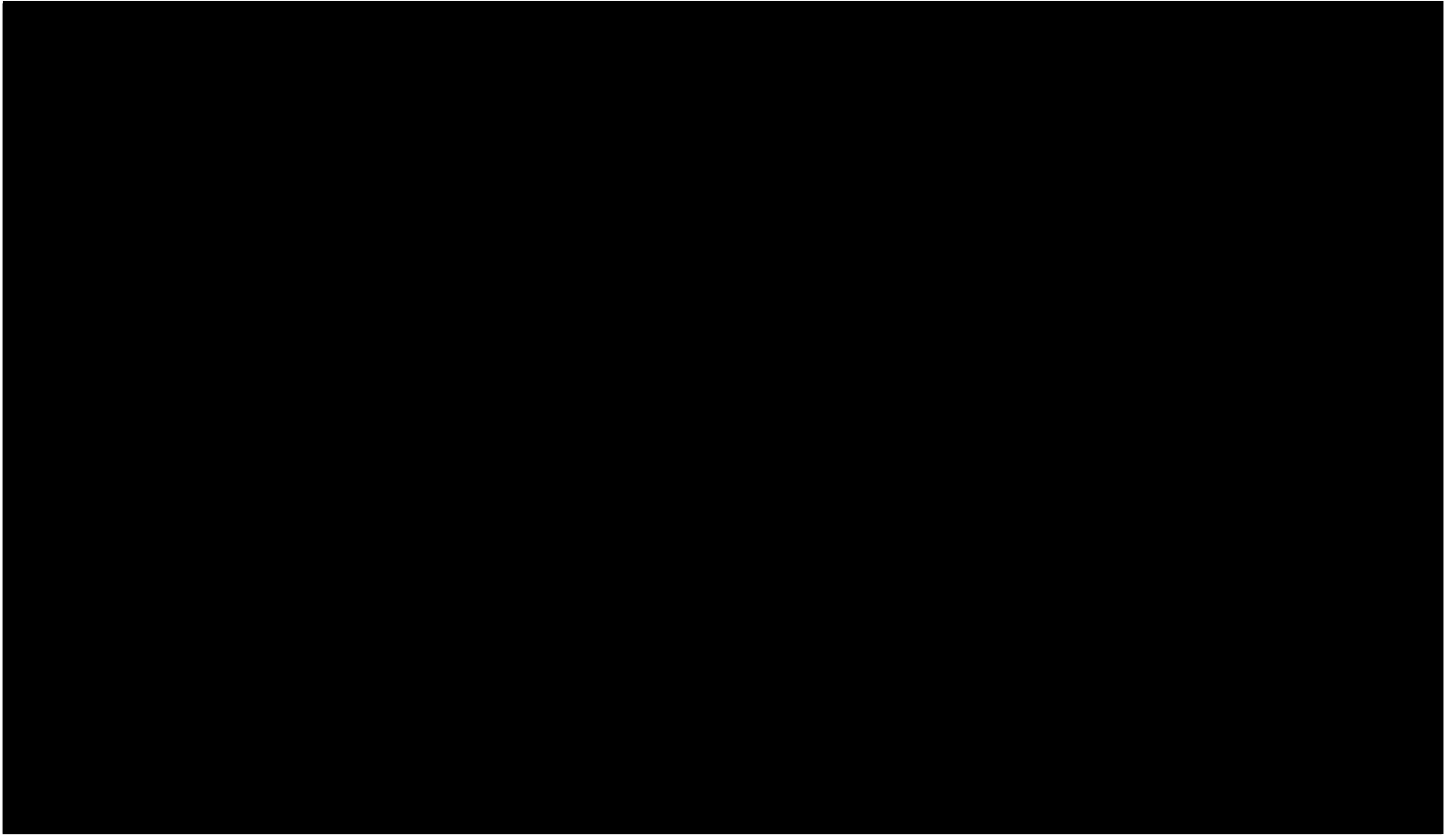
GOOG-PLAY-011073576

EXHIBIT 2698.R-052

GOOG-PLAY-011073577
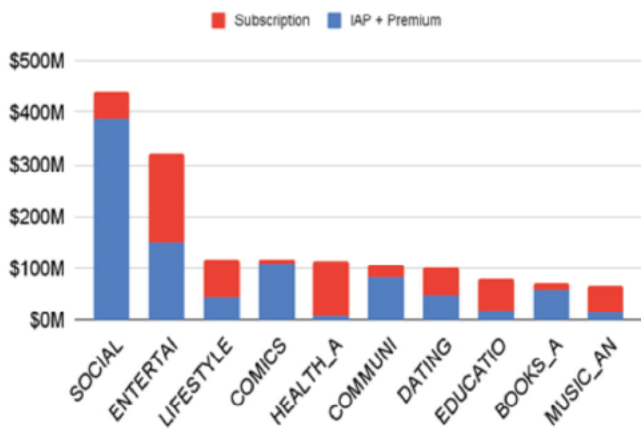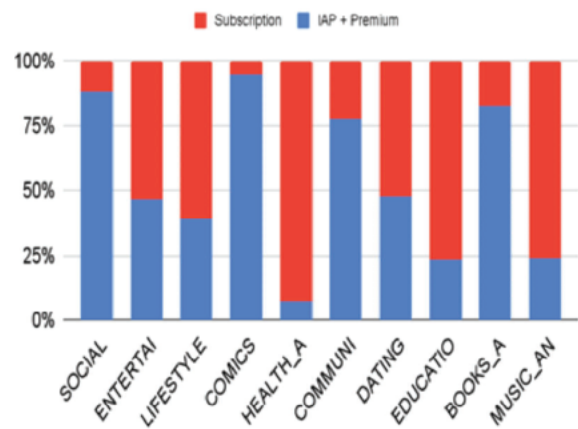
Non-Game App Revenue by Transaction Type

EXHIBIT 2698.R-053

GOOG-PLAY-011073578

Non-Game App Revenue by Transaction Type
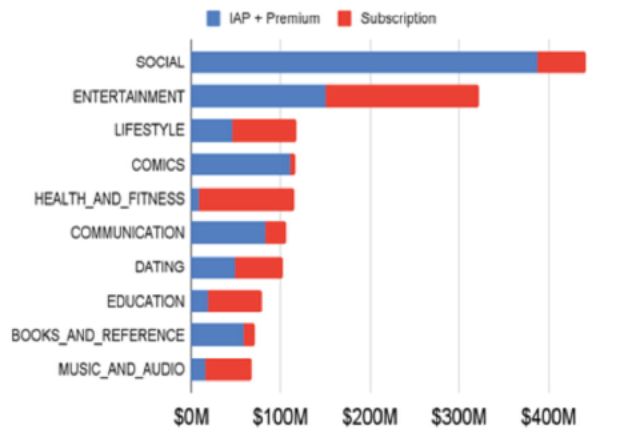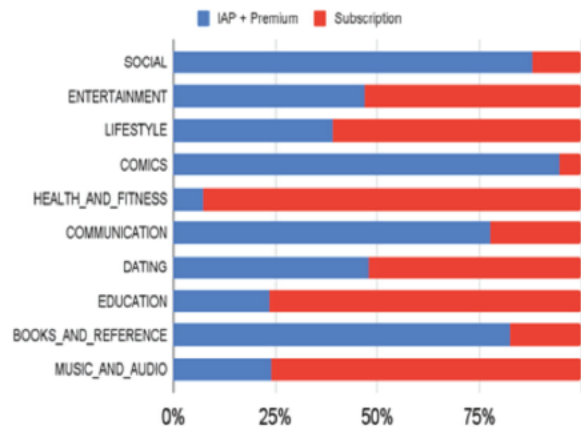
EXHIBIT 2698.R-054

GOOG-PLAY-011073579

Options for discussion

Draft WIP: Discussion only

Privileged + Confidential

Small changes ← → More radical

1A. KR Compliance

Apps & Games can use their own billing (in KR only)

No changes to pricing (-5% if developer users own billing)

1B. Narrow Carve-out

Music Apps can use their own billing

Very low fee for music apps (7.5%) (-5% if developer uses own billing)

2. Focus on Apps ($0.3-0.4B)

All Apps (not games) can use their own billing

Subscriptions in apps @ 15%
Content Creator apps @ 30% of NET
Emerging Markets @ 10%

(-5% if developer uses own billing)

3A. Focus on Apps & Games ($0.4-0.9B)

Apps & Games can use their own billing

All of (2) + Games subs@15%

(-5% if developer uses own billing)

3B. Focus on Apps & Games ($2.2B-3.9B)

Apps & Games can use their own billing

All of (2) + Games subs@15%

Tenured pricing (30/10%)

(-5% if developer uses own billing)

Google

- To bring it all together showing the impact of each option. (Focus on blue box)
-
  All: For discussion
- Questions?
- Preferences?
- Other considerations? Likely competitive response?

EXHIBIT 2698.R-055

GOOG-PLAY-011073580

Slide 46

1   @Sameer Samat (Google)
    Paul and I have a few options for how to set up the options discussion (see next two pages as well). Any preference?
    Kara Bailey, 8/10/2021

EXHIBIT 2698.R-056

GOOG-PLAY-011073581

Options for discussion (Alt 1)

Draft WIP: Discussion only

Privileged + Confidential

	Small changes		More radical
Who	Targeted devs	Apps Only	All: Apps and Games
Pricing	Payments adjustment only	Targeted pricing adjustments	Broad pricing adjustments
Billing Optionality	Choice screen (3P + GPB)		3P billing
			($2-4B)

We'll likely take a more incremental approach Globally...

Korea (transitory impact)		Global ($0.4-0.9B)	
Choice	Apps & Games can use 3P billing	Choice	Apps & Games *choice screen*
Price	• Payments adjustment + • 15% for subs • Targeted reductions for media verticals (expanded accelerators)	Price	• Payments adjustment + • 15% for subs • Targeted reductions for media verticals (expanded accelerators)

Google

- To bring it all together showing the impact of each option. (Focus on blue box)
-
  All: For discussion
- Questions?
- Preferences?
- Other considerations? Likely competitive response?

EXHIBIT 2698.R-057

GOOG-PLAY-011073582

Options for discussion (Alt 2)

Draft WIP: Discussion only

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Small changes ←→ More radical

Who	Targeted devs	Apps Only	All: Apps and Games
Pricing	Payments adjustment only	Targeted pricing adjustments	Broad pricing adjustments
Billing Optionality	Choice screen (3P + GPB)		3P billing
			($2-4B)

A spectrum of options for discussion . . .

Korea (transitory impact)			Global ($0.4-0.9B)			Global - Broad ($2-4B)	
Choice	Apps & Games can use 3P billing		Choice	Apps & Games *choice screen*		Choice	Apps & Games can use 3P billing
Price	• Payments adjustment + • 15% for subs • Targeted reductions for media verticals (expanded accelerators)	+	Price	• Payments adjustment + • 15% for subs • Targeted reductions for media verticals (expanded accelerators)	or	Price	• Payments adjustment + • 15% for subs • Targeted reductions for media verticals (expanded accelerators) • Tenured pricing (30/10%)

Google

- To bring it all together showing the impact of each option. (Focus on blue box)
-
   All: For discussion
- Questions?
- Preferences?
- Other considerations? Likely competitive response?

EXHIBIT 2698.R-058

Slide 48

1	mention potential transitory impact
	Christian Cramer, 8/10/2021