From: Catherine Gluckstein </O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

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CATHERINE G>

To: Phil Spencer

Sent: 2/21/2019 11:05:17 PM

Subject: RE: xCloud (Strategy and GDC)

Sage advice. Great trip.

Looking forward to continuing this discussion.

On a separate but related note I had an interesting call this morning with Rick Heitzman of First Mark Capital – you'll remember we spoke with him about a year ago. He's about the third VC I've spoken to who looked at and passed on shadow.tech (that's the streaming start up that's racked up about three quarters of a million subs at \$35/mth over the past year). He passed on the round for obvious reasons – that said they've all been blown away by their topline subs numbers and speed of ramp.

2 insights form Rick on this:

- The demographic has been much broader than he expected his words not just big in Asia as a substitute for PC cafes. Big with students and across the globe. Shadow doesn't have content – more just service so you can play your Steam games/ other services on your low end PC. Sub-10% games streamed/ played on mobile
- He framed the \$35/ mth much more about a financing plan, which obviously made me think of All Access. These were people with low powered PCs who wanted to play

-Catherine

From: Phil Spencer <philsp@microsoft.com>
Sent: Saturday, February 16, 2019 10:36 AM
To: Catherine Gluckstein <catg@microsoft.com>

Subject: RE: xCloud (Strategy and GDC)

Go to Whistler and we'll discuss when we get back. Have fun on the trip and don't do email. As I sit here at home and the girls are both enjoying their long weekends in CA and CO I'm not missing how much work I did when they were at home! (don't take that one overly seriously but I am being serious). I know "Mom loves this stuff" but it will be here when you get back.

Never disagree and commit with me, always push. Even when I'm grumpy.

Phil

From: Catherine Gluckstein < catg@microsoft.com>

Sent: Saturday, February 16, 2019 10:28 AM To: Phil Spencer philsp@microsoft.com
Subject: RE: xCloud (Strategy and GDC)

OK, totally get your thinking.

>>>> PHILSP> Not any more wrong than I am, we are both just guessing, that's what's fun.

Absolutely right – you can you run these hypotheses multiple ways. You can't connect the dots looking forward,

only when we look back. As Jeff Bezos said, 'we have to have to trust the dots will somehow connect in the future. You have to trust in something – your gut, destiny, life, karma, whatever'. I trust you here.

Getting final clarity on this -

- 1. Are you at a point where you'd like me to 'disagree and commit'? You argument is sound and I can totally get behind it.
- 2. Would it be helpful for me to pull together a group of 'trusted advisors' to further push on this thinking.
- 3. On Amy's 'gold toilet' quote what struck me is are we trying to run one perfect experiment when perhaps we should be running multiple 'ceramic toilet' experiments (smaller scope, more scrappy). Would this be a better way to move on from 'guessing'. Are we pushing ourselves to learn the customer WHY fast enough?

It's been helpful to work this one through, as I say I trust you here, so just tell me what you want.

-Catherine

From: Phil Spencer <philsp@microsoft.com>
Sent: Friday, February 15, 2019 6:55 PM
To: Catherine Gluckstein <catg@microsoft.com>

Subject: RE: xCloud (Strategy and GDC)

I don't find it frustrating at you, these conversations help me think it through. I get frustrated that I'm not clear.

My points inline:

From: Catherine Gluckstein < catq@microsoft.com>

Sent: Friday, February 15, 2019 6:04 PM
To: Phil Spencer < philsp@microsoft.com>
Subject: RE: xCloud (Strategy and GDC)

Really thank you for taking the time to lay this out – I find that helpful. Also, let me clear I'm not looking to frustrate you by talking past each other. I am happy to stop this push if you find it unhelpful.

As I read your email I find myself agreeing with you 95% of our email, it's the final 5% that I do think perhaps I see a little differently.

>>>> We have no strategy to win organically in mobile gaming. I can't come up with one. The only thing we could do is close all the Xbox stuff and with the same OPEX try to start a mobile gaming company inside of MS. This is kind of what BobbyK is trying to do at ATVI.

Agree. To me this is the definition of winning on mobile as mobile content exists today and you're right we can't play in that game. I assume Forza Streets and Gears Pop are our plays but hard to see how they are scale plays – Genoa could have larger impact.

PHILSP> Totally agree

I feel ill equipped to make the next point as you know more about content than I ever will so forgive me – aren't we seeing a content evolution even on console. In January on our console Fortnite was 550M+ of playing hours, RDR2 90M hours (total hours on Xbox 1.9M. Perhaps the mobile gaming market today is the early YT video market and it then developed to a more sophisticated YT market and premium with Netflix content- watched more on a mobile than any other device.

PHILSP> To me FN is a core game that 10s of millions of people play. I don't think it's a broad game (again, the Minecraft point). So I do think that more games are becoming more mainstream, that's kind of what happened in China and I hope that happens here, that would really help us.

>>>> That said, there are a couple of data points that give us a glimmer of hope. More core games like PUBG, Fortnite and a slew of Chinese mobile games are way more like core PC/console games

Agree 100%. Perhaps I see this as rather more than a glimmer when I consider Roblox, MC, etc. and the TAM expansion points. And then I look to other markets and I say Google Docs doesn't do half of what excel, word and powerpoint do and for the super sophisticated user, just like the HVG, they seem unappealing. But to the broad swathe of the market they were enough. Playing games on mobile phones may never appeal to HVGs just as CFOs would never use Google Sheets. Google reframed what was product market fit for a broader user set and that's what we need to do here

>>> So in that context I think our first mobile Xbox customer is a console gamer who already knows the content, already knows the controller and is willing to be an early adopter on a franken-scenario and is willing to pay something to play.

This is where I think we're different – I say trying to persuade the CFO to use Google Sheets over Excel is a game you're always going to lose, and that's what I think our strategy is doing. I now see where I've run myself back to the content issue – perhaps broad aggregation and a free layer begins to solve this?

PHILSP> Having played a lot of games on xCloud so far I'd say it's actually more core than console. The hurdle is higher. So I don't see it as Google Sheets to Excel. I think it's more like Excel app to Excel on the web. Our early adopters for Excel on the web have not been Google Docs customers (which is actually a problem for us) but rather hardcore Excel users who want collaboration and portability of the web. They actually ask for more core Excel features than the app users. Same with Outlook on the web. If fact if you try outlook.com for your MS account and turn on the new features you actually see an Outlook that is functionally better than the win32 app. I think our early adopters will be hardcore Xbox fans who want to keep playing when they are away from their TV. I could be wrong but that's my view. If we can get them to love it they will evangelize (which is actually what happened with Fortnite). Fornite started with the PUBG base and expanded.

>>>> Second step is that our current game developers/studio partners will want see the increased engagement and start to program for it and find it accretive to their business.

Agree.

>>>> Third step would be that now that we have play happening on a mobile device we can bring more mobile based games into the fold (local or streamed) via XGP and start to build our control plane on mobile. This is kind of what Fortnite is doing.

Agree. I call the control plane our distribution choke point and where you layer XGP (aggregation, discovery, identity) on top of streaming and you reach scale with the free layer then just perhaps you have a chance. We drew that in the developer stack you reference below.

>>>Fourth would be that we win when all developer adopt your development platform



Now you're talking (3) I spent several hours on this one with Liz and James today – we built a pretty interesting idea which we'd like to pitch you on strategic positioning. I hope that's OK.

I've just never seen disruption from the core – iStock made people pay for photos that they'd previously stolen and took the market form 1M to 50M licensed images in a year (low cost, friction) - this wasn't the high end Creatives at first, it was the random design agencies, Amazon didn't persuade aficionados of book stores to shop with them first and Google I suspect never persuaded a CFO to use Sheets.

PHILSP> I think Fortnite is our best disruption from the core example. Maybe Twitch as it grows beyond YT in terms of size?

It has been a long day and perhaps I'm just plain wrong on this one – there is still thinking to evolve here.

PHILSP> Not any more wrong than I am, we are both just guessing, that's what's fun.

-Catherine

From: Phil Spencer <philsp@microsoft.com> **Sent:** Friday, February 15, 2019 12:06 PM To: Catherine Gluckstein < catg@microsoft.com >

Subject: RE: xCloud (Strategy and GDC)

I think you and I talk past each other on this one a lot so I'll try to write up my pov so we can align.

First, we are exactly like Polaroid. We are core gaming which isn't growing it's TAM (analogous to film photographers) while mobile gaming MAU is growing WW at a significant rate (like digital photography was growing).

We have no strategy to win organically in mobile gaming. I can't come up with one. The only thing we could do is close all the Xbox stuff and with the same OPEX try to start a mobile gaming company inside of MS. This is kind of what BobbyK is trying to do at ATVI.

So you and I have to center on that. Our strategy with mobile is just a hope, there is nothing that gives us insight that this will work. The customer there isn't asking for what we are going to offer.

That said, there are a couple of data points that give us a glimmer of hope. More core games like PUBG, Fortnite and a slew of Chinese mobile games are way more like core PC/console games than they are like traditional mobile games (candy crush, clash royale etc) but still the vast majority of non-Chinese mobile gaming revenue is in areas where we have no strength.

Because of this our solution here is not customer led really, it's led by what we have and a hope. I don't like this but I'm not smart enough to come up with anything else. If I ask mobile gamers what they want, they won't tell me that it's to play Halo on their phone with a BlueTooth connection to an Xbox controller. That's probably as far from what they want to do on their phone as anything. They also don't pay for any games, all the mobile games are F2P. So even the business model around our games that mobile players don't want is wrong. The whole this is Xbox led, not customer led and yes that's wrong. We don't get some asks from our console customer to play games away from their console, that's the most aligned signal we have but like Amy's push, this is building the gold seat (for our existing TAM). It doesn't help us grow.

As I said, the only other option I can come up with is stop what we are doing and either leave it at that (save the money) or maybe try to buy some IP (WB?) with the savings and start building mobile games based on known IP or buy a company like Nexon and try to scale into global mobile gaming since that's the TAM that is growing. I don't think we can do WB and/or Nexon in addition to Xbox so it's an either/or with what we are doing now in my mind.

So in that context I think our first mobile Xbox customer is a console gamer who already knows the content, already knows the controller and is willing to be an early adopter on a franken-scenario and is willing to pay something to play. I think our only hope is that core gamers find this scenario interesting. If they don't find it interesting I don't think there is any way a mobile only player is going to find it interesting. That's our first path dependent step.

Second step is that our current game developers/studio partners will want see the increased engagement and start to program for it and find it accretive to their business.

Third step would be that now that we have play happening on a mobile device we can bring more mobile based games into the fold (local or streamed) via XGP and start to build our control plane on mobile. This is kind of what Fortnite is doing.

Fourth would be that we win when all developer adopt your development platform



But that first step is us manufacturing (mostly) a customer scenario based on our assets of content, community and cloud.

I do believe that in the end cloud based XPA games will win but I think that game will be way more casual than anything we have today. Just like even today Minecraft is bigger than Fortnite but kind of ignored by most of the media/core. Same with Roblox. It's likely something like those that will become the true instantiation of our vision, not RDR5 everywhere.

So I agree with you, my xCloud deck is a "what do you have to believe for us to win" not a "what does the growing TAM of mobile gamers want.

Phil

From: Catherine Gluckstein < catg@microsoft.com>

Sent: Friday, February 15, 2019 10:35 AM To: Phil Spencer < philsp@microsoft.com Subject: xCloud (Strategy and GDC)

Whilst I found your memo on PC very clarifying I've struggled to find the same level of clarity with the xCloud one. I've read and re-read and maybe it's just me.

As I think about our strategy here we seem to first be framing it from our console view and not from one of customer obsession (ie: thinking all gamers and understanding their motivation/ WHY). In doing so we are making assumptions about customer behavior. I get that we want leverage our product strengths but I feel we have to first frame from a customer context. I think once you really understand the WHY then you can leverage to the product strength. By framing first in console I think we're impacting our GTM, really harsh analogy but it got me thinking, going back to Polaroid, which I was reading about today, they had the faulty assumption that customers would always want the hard copies of pictures.

For streaming customers who already have a console, streaming will be a substitute not replacement product. Is the motivation stronger for them or for those who have access to a lower end PC/ Chromebook/ mobile? My hypothesis is that early adopters could be more motivated in the latter group. In trials I'm hearing from startup products it's the low powered PCs/ Chromebooks that are driving adoption, just anecdotal. Totally agree with you that Android is the global endpoint thinking more about where it's important to move the needle along the path — what the sequence looks like.

So going back to our xCloud test rolling out later this year – I'm confused what we're actually testing for right now and what part it really plays in our GTM. Amy's words from the meeting in the Fall still ring in my ears – "don't build a gold toilet".

I've made that mistake on too many products, and I'm sure everyone else has too, when we've built features before we answered the core questions.

If I stand back and think what a test really needs to achieve it's the following:

- Testing tech?
- Testing preferred device type (low powered PC/ mobile)?
- Testing content type? What content is in the test?
- Testing customer type (current console owner/ not)?
- Testing market impact?
- What part in the road to true GTM?

Testing price is always tricky – you get better signal from focusing on engagement/ usage as the key indicator at this stage.

On a separate note, I loved your framing of the beats for xCloud. Really clarifying and a good map for the team.

Got me thinking about GDC with the insight on Google. Of course Google may do nothing in March, but it's coming in the next few months and we'll still be out of position.

I've set up time with Kenny/ Kareem/ you to work on this – the team isn't there yet. In the interim I played around with a few ideas – crazy and unachievable – but something to work back from, perhaps. Every week we are making life harder for ourselves in this space – catch up always is.

So bare thoughts:

- Lie low wait for E3
- Break a large story on Gold (turning them into XGP) gets us a huge number. Free layer on XGP likely
 makes more sense at E3. We can't end FY20 at 1.5M PC (I think that's current plan) it's too slow for the
 market
- To your points on the xCloud news beat should we name it or is that E3?

Thinking aloud. No need to respond.

-Catherine