
DW 2022: THE FUTURE OF ENTERTAINMENT

INTERVIEW WITH ROBERT WILSON

Robert Wilson discusses how new and innovative companies are competing in fascinating ways for our leisure time and our disposable income. This is not just about the rise of the virtual world, it is also about the role of creativity in driving change and innovation.

All investment strategies have the potential for profit and loss, your or your clients' capital may be at risk. Past performance is not a guide to future returns.

MB Hello, and welcome to Disruption Week. I'm Malcolm Borthwick, managing editor at Baillie Gifford. Today, we're going to be talking about one of the most fearlessly fought battles in business. The fight for our free time and how we spend it. So, how do you spend your free time? Is it scrolling through TikTok on your mobile phone? Is it watching films on the TV or in cinemas? Or, is it streaming music on Spotify? Or podcasts for that matter? Gaming or reading? The possibilities are never ending.

And the competition for our attention has become ever more intense, especially among the world's largest tech-enabled companies. Take Microsoft, for example, which has dominated the computer software market for decades. It's launched an audacious bid for Activision Blizzard, the makers of Call of Duty, which is one of the world's most successful games franchises. Other companies have launched similar steps sideways.

Take Amazon, for example. It's purchased MGM, home to James Bond. And Meta, or Facebook as it's known to most of us, which has snapped up virtual reality software developers. So, what will the future of entertainment look like? Will it be dominated by this small group of tech-enabled companies? Or will we see more niche companies challenge their dominance?

That's the topic of today's discussion. And I'm delighted I'll be joined by Robert Wilson, an occasional gamer and full-time investment manager at Baillie Gifford. Robert, welcome to the Baillie Gifford living room and Disruption Week.

RW Good to be with you Malcolm.

MB So, just a reminder, this webinar's 45 minutes, Robert and I will chat for 30 minutes, then we'll open it up to questions from you, the audience. So, we'd love to hear from you. The Q&A function is now live and you can find it at the bottom of your screen. So, entertainment is the theme of today, and how companies are competing for your time. So, we thought we'd start with a poll, just to find out how you are using your free time.



So, that's on your screen at the moment, and the choice is short form videos, such as TikTok, movies maybe in the cinema or on TV, audio streaming on Spotify, possibly podcasts, possibly music. Reading, gaming, and a couple of outliers at the end, which are work and sleeping. So, intrigued about who will pick those. Robert, let's start on the theme of competition for time. Because Reed Hastings back in 2019, the founder of Netflix, he said that he felt his biggest competition was Fortnite made by Epic Games.

As opposed to the likes of HBO which you might naturally think. So, he was framing it as a competition for attention, for screen attention. Is that how we should frame our discussion?

RW Yes, that's a helpful mental model broadly. The risk here is that we make a narrow analytical mistake by trying to assume that the market's smaller than it looks. And the substitution effects aren't broader. In a sense, that lets you think about market shares. And lets you think about risk of other categories disrupting you in a certain sense. But it also lets you think about opportunities. And in that sense, some of the best management teams and management teams we most like are aware of this general point.

That actually, there exist around them a lot of adjacencies. And what's compelling and interesting in those adjacent categories determines both their roadmap for how they develop their company, but also where the competitive threats come from more broadly. So, a good example, sorry, I should have said, is the Chinese consumer internet space has been better about thinking about things in those terms for a longer period of time than we've been in the West. Because they've been further along in terms of consumer internet penetration.

And so, they tend to think about their companies in the large consumer internet space and how they compete with each other based on time rather than just revenue or dollar share. Which is a compelling and interesting way of talking about it.

MB I'm sure we'll touch on some of these areas later in the week when we talk about ecommerce in China. But back to entertainment, why are you excited about this area?

RW There's a huge number of reasons. I'll start with one thing I think is interesting about the whole area in abstract, which is ultimately it's about surplus. It's about how we spend our spare time and how we spend our free money effectively. And that's high margin business effectively for consumers that are willing to spend it with given companies. And so, fundamentally, it's not a commodity business, if you can establish a good business there, the margin and the returns are accretive.

The other thing is it's particularly exciting at the minute for a variety of reasons. Two big themes, one of which is the broader frame of institutional decline in the West more broadly. People less think about themselves in terms of group and institutions than they have in the past. Rotary clubs, local sports teams, religious institutions, they don't define identity in quite the same way as they did historically. And so, people are searching for new symbols and new forms of identity and new forms of meaning in an increasingly digital world.



So, that's one element that sets up the appetite for entertainment. Or, the appetite for franchises more generally. And the second side of that, the other element of that on the supply side is the technology is affecting how these companies present themselves.

How they develop their content. How they distribute their content. Both in the sense that they're creating more possibility. Especially on the gaming side, that's notable. Games can just be more immersive and more fun, ultimately. And on the other side, it enables better monetisation of that content as well. An obvious example that we've been familiar with for five, ten, years now is better advertising on the internet than the dumb advertising in the past. For instance, brand advertising is still largely done on television.

But one company we hold, the trade desk, in a couple of different portfolios across Baillie Gifford is a case that's largely predicated on the view that that brand advertising is going to shift online and become more targeted. You're not going to be served a BMW advertisement unless you are theoretically interested in buying a BMW. And the brand value's going to accrue or mean something in that context. And so, the technology's improving in that respect as well.

So, there's a couple of different interlocking recent factors that make it more attractive as well. And then in the more recent period, it's a volatile market, there's a lot of big draw downs in this space. And so, there's potential opportunity for a stock picker there to try and pick apart signal from noise.

MB And which businesses as a stock picker are you excited by?

RW I can give you some examples of ones in particular. It's difficult to try and characterise it broadly from the top down. A good mental model that lets us go further into the companies is looking at the supply chain. That is from the picks and shovels businesses that help create content through into content creation companies themselves, companies that own the IP or manufacture it to some extent.

And then the distribution companies. And some companies necessarily integrate along that supply chain. But we've always been cautious of picking the hit driven companies. It becomes capital intensive if you miss and your product doesn't ultimately resonate with a consumer in the same way as you would before. Having big pieces of franchise intellectual property like Star Wars or something like that as a famous example mitigate that risk to some extent.

But we've erred on the side more broadly of the distribution companies or the picks and shovels companies because of the neutrality of them. So, to give you a lateral example, I would say Nvidia is an interesting example of a company that's well poised in the future of entertainment. Because whatever the nature of creativity is going to come next, it's likely to use some sense of graphical technology, that's relatively uncontroversial. And Nvidia have an effective monopoly to some extent on graphical technology, 80% plus share in professional GPUs.

That's an exciting position to go from and be able to grow with the market, just to give a quick example. Even if it's a recommendation in a text-based format, text based



website, that's going to be done to some extent using Nvidia.

If it's going to be graphics in the movies, that's going to be done using Nvidia. So, that's my point about the neutrality of the approach. And then on the distributional side, more you think about companies like Spotify where it doesn't matter to Spotify if a given particular artist necessarily succeeds. It only matters that people listen to more music and they can make music collectively compelling. Or audio more generally as we'll maybe get onto.

And so, that approach of trying to find some measure of neutrality and only go capital intensive where you have more conviction. That's an interesting mental model that we try and use.

MB Nvidia is interesting from that perspective. And in terms of the scale, they got in earlier. And that protects them in this type of inflation environment as well, given they're a strong market share.

RW That's a fair point. The ROI, the customers who need it is essential. And so, when purchasing power compresses necessarily, you still have to allocate budget in this way. Yes, that's one element of Nvidia.

MB And you mentioned Spotify as well, I know they're going into new areas within audio too. Tell me more about that.

RW Yes, Spotify is one of the best examples of the point I was making at the beginning. About a company that is sensitive to what's going on in the broader space. They've done a great job about moving beyond music and into podcasts. And their recent investor day demonstrates to some extent the underlying economics of those podcasts are accretive to their lower gross margin business. In a way that builds our conviction that this management team is sensible and makes good decisions for the long term, even when they take a while to pay off.

More recently, some moves into audiobooks as well. They're good at defining their core competency in the sense if they're not going too far into gaming, into video, that sort of thing, but nonetheless expanding carefully and incrementally on the core customer proposition. That's the sort of thing we like to see.

MB So, speaking of Spotify, let's go back and have a look at our poll results, which have come in, to see what they tell us about you, the audience. So, short form films, 17%. Movies, 26%. Gaming, 6%. Reading, 26%. So, that's level with movies. And 3% working and 6% sleeping. So, surprised?

RW I'm surprised that gaming isn't a bigger percentage of that. I don't know if that's of the demographics. If you look at youthful cohorts of consumers in general, gaming tends to be a big portion. Maybe not their most preferred but a big proportion of consumer time spent, and is increasing rapidly. And so, that's the only notable one there for me. Movies I'm pleased to hear, I'm a big film buff myself.

MB So, that would have been your choice?

RW Yes, somewhere between movies and games I would have been on there.



MB You talk about the changing demographic. And I wanted to bring up something on the screen which you can see now which shows the stark contrast between Tencent, not Tencent, TikTok and also Netflix in terms of time spent. What does that tell us?

RW First of all, Malcolm, that's an easy mistake to make because people think about TikTokers also having a similar effect on Tencent. The biggest thing here is highlighting this point about the narrowness of consideration and the competition can come from totally new models and spaces you haven't considered before. That has to be the overwhelming takeaway.

What we're seeing in this diagram from Professor Scott Galloway of No Mercy / No Malice, a particular blog favourite of mine, is effectively that the level of engagement is easily twice greater in aggregate in TikTok than Netflix. The revenue distinction is similarly stark and I'll suggest the profit distinction is starker still. What it's highlighting in particular is the strength of user generated content as a new model. Versus professionally generated content.

Netflix has to produce all these big budget productions that are compelling and anchor a consumer proposition. But TikTok just has to let people run effectively. There's a limited, as Scott Galloway discusses in the piece, a limited budget that TikTok has to spend on generating that content or incentivising their creators.

It's there to some extent, but it's small. Whereas when you fully integrate your supply chain and make everything from front to back, it's extremely expensive. And so, the other thing that's relevant in that context is 55% plus of TikTok users make TikToks, make short form content. So, the audience are the creators and the platform enables that exchange. That's something that's ultimately compelling about platforms in general, when you can get both sides to talk to each other like that in a way that's clearly working for ByteDance more broadly.

MB The idea of platforms and bundling which is something we referred to right at the beginning of this section when we talked about Microsoft dominating the software market for so long moving into gaming. Who is likely to dominate this area in the future? Is it the companies which are bundling? Or will we see successful niche players challenging the dominance of these companies?

RW It's a bit of both. And it depends on what category, it depends on what space you're going into. But the bundling thing is a big deal and exciting in some respects. So, to walk through what we're talking about there, this is the idea that your streaming service isn't bundled with your grocery service, to use the most extreme example. So, Amazon recently buying MGM to get access to the James Bond franchise and others as well. That's an interesting and strange thing to consider.

That James Bond's monetisation is no longer just tickets to the Box Office but is selling things on Amazon Prime, shoes and toothpaste and so on. But that helps the franchise monetise in potentially a much more profitable and accretive way over the long term.

And so, that's going to continue to happen. This idea of consumer bundle that effectively lowers the total cost of access to entertainment. It works best in the most commodity entertainment, that would be the thing I would say. It's highly differentiated



and niche content, whilst it has some of those elements of risk that I mentioned before around if it doesn't work, it nonetheless can drive its own distribution to an extent.

So, they don't have to go on Amazon Prime if they don't want to. Or have to go on Netflix if they don't want to. Or in the gaming companies. Fortnite isn't available on iOS because it's so big as a franchise that it chooses not to even appear there. And it makes its users route around the Apple app store in order to retain its economics to a certain extent. So, you get both ends of the spectrum would be my point.

I do think for what it's worth the current environment of higher cost of capital and lower consumer purchasing power probably benefits the bundlers to a greater extent. Businesses that have a lot of cash flow that can purchase other businesses and bundle them in and create a lower total cost of ownership for the consumer, that seems compelling, at least in the short term.

MB And is there a danger that the companies that are bundling are stifling innovation?

RW I do think that's a big risk. And it depends, they can mitigate it to some extent by being decentralised and there are famous examples of companies that are conglomerates of one type or another that bundle their offerings. But still retain innovation by affording the separate business units the ability to create their content as they see fit. But it takes the skin out of the game, to some extent, to quote Nassim Taleb, for the creators.

It always has the element of if you do a misstep here or there in terms of revenue insufficiently generated in the wrong quarter that your corporate overlords might step in and tell you, you need to step it up or you need to homogenise. And so, that can stifle innovation, both in the technical sense and the purely creative sense. And so, it's something we would be sensitive to. Except, as I said at the beginning, more commodity content.

There are formulas that are well established. Football games and Call of Duty are not going to change. There's not necessarily that much room for innovation in some of those more well-defined spaces. And so, in those areas bundling makes more sense.

MB And it's fair to say that Amazon and others are increasing their expenditure on R&D a lot. But if they're looking to scale and moving to new areas, it's not something that you can get a return back quickly with R&D. Which is why you need to acquire companies.

RW Yes. Some of that M&A is driven by the desire to acquire the franchises that, as I said, have a lot of consumer goodwill baked into them. And effectively generate audiences.

It's difficult for companies like Amazon to do that from scratch. Even Netflix, which is a genuinely creative company, has had troubles with generating IP that resonates with the customer from scratch. That's one reason why that occurs. But it does, as I said before, exemplify the strength of those businesses in a sense, of deploying cash flow fruitfully. And over a sufficient horizon in a sense of being relatively long term about when the payoff for those things is going to be.

MB And how important is it for the content companies to control distribution or vice versa?

RW So, the broad response to that is quite important in order to retain economics.



Otherwise, you face a supply chain where you have a rational purchaser. One who's likely to push your economics down at some stage along the way. Unless you can flex the power of what is heterogeneous about your product and why it participates. Or increases the end consumer proposition more resoundingly. And so, it's an important aspect.

Like I said before, really distinctive content companies can break through it, can break through a distribution wall. And still generate a profound business. But there are risks to doing that. So, I'll give you two examples. One of which is a lateral one. Hermès is a famous example in the luxury categories.

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It's not an entertainment company strictly said, but it's a company where the sheer force of the level of consumer goodwill and franchise power, the brand power ultimately, enables it to effectively avoid any intermediation. Very little wholesale. Almost a complete direct in the media consumer relationship and extremely high sales density afforded to it. Because it's authentic to itself. It has a distinctive sense of brand values that is non-substitutable.

On the other side you have an example in the gaming category, like CD Projekt RED, which is a company that I admire based in Poland who make the Cyberpunk and Witcher franchises. And they have done a great job about generating real consumer goodwill towards their franchises such that people play them because they're CD Projekt RED games. But in the most recent instance of release of the Cyberpunk franchise, they bungled it in a way.

There were creative problems and technical problems with the end game, quality control issues that exposed that company to a ton of high capital invested, did not meet the immediate returns that it was hoping for in a sense because of those risk elements around it. Whereas had it been a distribution company that solved that onwards, you would have made money regardless. That's the tricky element you're playing with there.

MB So, content companies work as long as the content's good.

RW Pretty much, yes.

MB What about the companies that are getting left behind, or stuck in the middle?

RW That's the risk here, right, that you're a legacy name who gets pushed between you don't have particularly high consumer value and so you can't generate your own distribution and you get squeezed out of the game by more and more powerful distribution companies. And, again, to use a gaming example, some of the more legacy studios are increasingly finding themselves in that space. Where there's a level of customer goodwill, but it's not as compelling enough to break through distribution monopolies to an extent.

And so, we've seen those companies be acquired to a large extent out of some measure of recognition of the fact that the environment is not in their favour. Notably Microsoft has gobbled up almost all of them up at once in some big deals. They



probably do create a strong position for Microsoft that maybe is the best outcome, even for those studios in their particular game franchises. But another side of that, you have these content companies that are still surviving and thriving because they have more evergreen content.

And a control over distribution and a more live approach to maintaining their game in a way that continues to feed engagement. So, Roblox has a certain flavour of that. League of Legends has a flavour of that, that's a slightly older example. But Fortnite has a flavour of that. Some of these companies have done a better job about maintaining an evergreen content that does maintain a distribution purity, to use an interesting phrase.

MB So, we're coming to our audience Q&A soon, so if you do have questions, please use the Q&A function at the bottom of your screen. But we've managed to go nearly half an hour without mentioning the M word, metaverse. Which conjures up images in your mind of this. So, there was a clue in the title there at the end, that was Fortnite from Epic Games. Chapter 3, Season 2. What's interesting about that clip, apart from the immersive experience that Fortnite has, is the use of Marvel characters.

You'll see a virtual Benedict Cumberbatch there or Doctor Strange as his character is. I was playing this at home when I was practising and my son tells me that's already out of date. They're on to Season 3 now and they're using Star Wars.

RW That's the risk.

MB But the metaverse, generally, is it something that you'd sign up to?

RW Interesting question. There's room for some measure of excitement here, but we need to be relatively careful about it. The word metaverse now conjures up a series of conflated elements that are worth segregating. The word itself might conceal more than it illuminates, as it were. And we're used to seeing this overexcitement happen in various different spaces in the economy. And it has happened to some extent more recently with this particular word.

So, if we peel it back, there's a couple of different connotations and layers to it. The first is this broad idea that gaming, these 3D virtual environments are increasingly social, increasingly monetised, increasingly immersive.

And people are going to spend more and more of their time there. That's relatively uncontroversial. And I'm willing to extrapolate it over the next decade plus. That will continue to be something that we see more and more of. People spending more time in virtual worlds more generally. And more of the apparatuses of the social world and its various structures occur in the virtual world more generally. That's true. There are other elements to it as well.

One of which is this connotation of these intellectual properties extending across different environments. And if I own the Star Wars franchise as an example, I licence that into another world effectively and it synergistically generates value for both because people in the Fortnite world or whatever example you choose to use can engage with the intellectual property that exists in the film world, and so on. That again,



is relatively uncontroversial.

There might come a time when consumers are more fed up of it than we think in the sense of actually, they want a bit of purity. And maybe they want content that's more disciplined as opposed to this constant amalgamation of all these ideas from all these various different pools of creativity. But that core idea of using intellectual property, using franchises to generate and compel audiences to keep going back, that's probably real as well.

There's an idea here of also virtual reality technology being increasingly real. And powerful. That's kind of true, we've come through a little cycle of despair or overhype and then despair around virtual reality. The conclusion there is that all these social worlds and all these virtual worlds are going to be recreated into virtual reality such that we all live in an [unclear] world. And nobody wants to engage with older form factors and everything is in VR.

VR is going to continue to see technical breakthroughs that will make it more compelling. It won't eat those form factors alive. Film is an old form factor as it were now, but it still generates huge audiences. It's still relevant, it's still a medium that has creativity in it. And reading obviously is a famous example that extends a little further back than film. That would be my hesitation around the VR element. And the last bit, at the risk of giving you a long answer, is this broad idea of interoperability between virtual environments.

And the idea of this digital ownership element. So, this is the idea that you buy something in Fortnite and it's available in Roblox. Or that sort of thing. Or just in general, your game worlds all converge and you represent a persistent digital identity across all of them. At the margin, that's true. It's technically more difficult than people probably appreciate to see why that would happen if you map the supply chain in gaming out.

And then there's some elements of this NFT Web 3 thing that are pure fantasy and don't have real substance at all. That's a long answer. Sorry.

MB It's creeping into all forms of marketing and I was doing my research before this session and I see Coca-Cola launched a zero-sugar drink born in the metaverse earlier this year. So, companies like to sell the future but we don't know what the future would look like. So, we should probably take it with a pinch of salt.

RW Yes, that's fair. I do think for what it's worth, it's a real focusing idea in the minds of some companies in an accretive and valuable way. Like Tim Sweeney has been talking about the word metaverse at Epic Games for a lot longer than everybody else has been talking about this concept. And for him, it focuses the strategic vision and it unites the various businesses that you see at Epic. Fortnite, Unreal Engine, Epic Games Store. That's a broad attempt to offer interoperability and move towards more immersive digital environments of the long-term.

That's real and that's conceptually real. And it focuses for Tim Sweeney and Epic Games what they're doing strategically. But the fact that other people have lifted his word and then tried to apply it in all these other contexts, it leads to an emulation and



loss of fidelity that can be tricky.

MB Quick question before we move onto the questions in the audience. You mentioned Unreal Engine there from Epic, that's important, tell me more about that.

RW Yes, so Unreal Engine is another good example. So, earlier we were talking about the supply chain and where we like to be in the supply chain. And this broad idea of neutrality.

Picks and shovels rather than necessarily picking the winners in a lot of cases. And I would say that Unreal Engine is a clean example of picks and shovels. So, Unreal Engine is effectively a software tool that enables games to be made on top of it. If you go back ten, 15 years and you're a games studio, unless you're going to use a clunky engine from outside that's been built for other purposes, another game, in other words, you're going to have to write in C++ or something like that.

You're going to have to write in a low-level language and it's going to be extremely onerous. And you're going to have to programme how the lighting works in the game and how the sound works in the game. And all these technical considerations that ultimately, aren't relevant to you as a game designer. You just want to make a piece of content that you think will reach an audience. Effectively what Unreal Engine does is bundle technologies from companies like Nvidia.

And make them tools so that other games can be made on top of. And we've seen an interesting consolidation in the past year or two of large companies, even Microsoft Studios and that sort of thing, begin to use Unreal Engine for their core franchises. Which seeds a part of their economics, because they're going to have to pay this external developer. But effectively the acknowledgement there is, again, to use the bundling.

The bundling of technologies is so profound and it makes life so much easier that it lets them focus on the core task. So, that's a business I'm excited about.

MB Great. And let's try and get through as many of these questions as possible. They're coming in thick and fast. The first one I want to go to which is a big bold one, do you think cinema is dead with this trend?

RW No is my sure answer to that. It's more likely that over the long-term that it's accretive. So, this increasing penetration of gaming in society won't cannibalise to a large extent cinema or probably other mediums to that much. In the same way as people still listen to the radio. Spotify is a substitute to radio but it's a similar idea. People still want audio content. People will still want 2D content. It's a more passive type of consumption in some cases where you don't want to engage or play.

And in some cases, it lets you tell stories which just can't be told in a 3D gameplay mechanic environment. And so long as people are willing to be imaginative and inventive about that stuff, they'll make content that people will go and see, even if it feels like it's in a medium that's out of date. So, that might not mean that it's the most promising area economically, but it's not dead. At least, I hope it's not dead.

MB Yes, I love radio. Dropping in the conversation. And almost Spotify is just a more



intense version of that to a degree because you're closer to the person who's speaking. So, how does artificial intelligence fit into your view of the future of entertainment?

RW That's a tricky one. Okay, so, there's a lot of elements of that. It depends on what you mean by artificial intelligence. Artificial intelligence is a word like metaverse that has a lot of connotations that are bundled into it conceptually. If we mean it in the sense of the idea of software that writes itself, that ingests huge quantities of data and uses it to refine that data into software models that are intelligent in the way that a human being ultimately is, that's a different answer to if you mean artificial intelligence in the sense of computers that you can talk to and be friends with.

And that's the notion of a general intelligence. On the former, I won't even speculate about the latter because I don't know what it looks like. It's something we're compelled and interested by, but it's a different thing. On the former, the machine learning and deep learning version of artificial intelligence, it's going to make everything better in some respect. Maybe not everything. When it comes to recommendation engines in distribution, they'll be more powerful.

Because they'll be trained on more data sets. They'll be more refined as to what they offer you. When it comes to graphical technology, you'll be able to generate types of improvement by figuring out what the best type of compression to apply is. It might make things like cloud gaming, which is another theme people occasionally talk about here, more compelling and possible. So, it's like Nvidia, it's a pick and shovels improvement. Moore's law generally that makes the whole base of entertainment upstream of it ultimately more compelling, but indirectly.

MB And remind the audience of Moore's law quickly, what that is?

RW That's just the broad idea that semiconductors become more powerful every single year. And so, as the computer gets cheaper and easier to use every single year, the things you can do with a computer improve ultimately.

MB That's a great definition. And there are a couple of questions that are coming in around the issue of regulation. So, I'm going to combine them. Is there a regulatory threat to some of the companies which are bundling? The likes of Microsoft, Amazon, Tencent, Apple, Facebook and others?

RW Yes is the short answer. And that's the difficulty associated with these companies in part. One thing I would say, if you look at examples in bundling under antitrust regulation 20 years ago, they were a lot more hawkish. Or the regulation applied a lot more scrutiny. The level of bundling we have now in the consumer internet is astronomical. For a variety of reasons. And none more so than the fact that the proposition to the end consumer is stronger in a lot of cases.

If you think about Amazon, as an example, the cost is unbeatable to stream and listen to music and to shop on Amazon all in. In a way that offers real value to its consumers. In a way that traditionally, as you'd find antitrust or monopoly regulations, has been to avoid the violation of the consumer in one way or another. Or the flexing of economic power against the consumer. Well, in a lot of these cases of bundles, they have



promised more to the consumer.

And that's the nuance here. But there are examples where some companies are flexing a level of distribution power that seems unhealthy. That's notably the case in Apple with iOS. It cannot be good for anyone that makes an app, entertainment or otherwise, to have to give up 30% of economics immediately.

MB And here's another good question. Where do you see the provision of data storage and distribution heading with the drive for increased market share and content? Especially in regard to the metaverse. And in some respects that might explain the synergies between the likes of Microsoft and Activision Blizzard. Tell me more about that.

RW These are some technical questions. It's an interesting one. Yes, that's an interesting connection. Immediately as you asked it, my mind went to Microsoft and Activision Blizzard in the sense that Microsoft would be good at provisioning and where things are stored and being compliant with GDPR and that sort of thing. That's effectively the core task of cloud service providers in large part is solving complexity for their customers.

And if they can solve regulatory complexity for their customers around where data is stored, even better still. So, that strikes me as an example where, yes, as you move towards games that may harvest more consumer data in various types of ways that there might be interesting connotations there. But, yes, it's also a sense in which that's a potential bottleneck to some of these more radical metaverse theorisations.

About what are we comfortable with as a society? It doesn't feel like we've found particular limits on that yet in terms of regulations slowing technology. But it might absolutely come.

MB And we've got a question here on Netflix. Since its value has fallen dramatically over the last six months, how and why has that affected your thinking?

RW Yes, let me talk about what I think is going on there. The big context that needs to be born in mind is the pull forward of demand related to the pandemic. People stuck at home, they have to have access to consumer bundles to spend this excess free time that they have. And so, Netflix added more subscribers in that initial pandemic year than it would have added in a couple of other normal years. And so, it pulled forward a lot of that demand in a way that then the market was at large anticipating it would just be able to sustain at that same level of rate and accrued extrapolation. It's a clear example of focusing on the arithmetic average as opposed to the geometric average. The year-on-year number as opposed to the broader compounded annual growth rate. In a way that the market gets ahead of itself and then it gets overly disappointed. What it did expose though that has made me slightly more wary of Netflix in general is that Netflix has struggled to achieve product market fit in some of these emerging markets that it wants to be present in.

I do think Netflix is an interesting example of a genuinely global company. A company that has tried to make content focus on its product in given geographies, in India, in Japan, in Brazil. That is totally different from the model of film and TV companies 20



years ago where they were focused on one market. And Hollywood started to distribute content globally through lots of partners in a complex supply chain. Netflix has tried to have that relationship with customers globally directly.

And make its content directly. That's interesting and valorous and a big risk. That risk hasn't paid off to some extent. And that might be because the content isn't sufficiently compelling. It might be because the subscription model just doesn't fly in some of these markets and they need to move onto an advertising tier in the way that other companies like Spotify have done. But it does pose a level of risk to Netflix because they do have to scale.

The economics of that business can be compelling if you analyse them in an underlying basis. But only at great scale. There are just shy of two billion cable users globally, historically. There are just over 200 million Netflix subscribers. That's not a high enough level of penetration. It needs to be able to get higher to live up to the promise that we've always wanted to see in Netflix. And so, unless they get a growth rate going again, that's tricky for them.

MB It's hard to repeat success across different geographies. So, we're out of time with the questions. Thanks to you, the audience, for your questions. If you wanted to leave everyone watching with one thought in maybe 30 seconds, a minute, Robert, what would it be?

RW The thing I would come back to is the level of excitement I have about the space more broadly in so far as it facilitates creativity.

It's easy to get lost in technology in this more speculative excitement about semiconductors on one side or metaverse from another. What is interesting here is not the change in the technology itself, but the level of creativity that that's fostering. That level of creativity will make some companies capable of having a much more profound level of relationship with its end customer. That tends to result in good economics. But it's also highly aligned.

The customer wins, the customer's respected. And the shareholders ultimately win as well. And that's exciting.

MB That's a great positive to end on Robert, thanks very much. And I hope you, the audience, have enjoyed the conversation as much as we have. And if you'd like to learn more about Disruption Week and some of the topics that we'll be talking about later this week such as ecommerce in China. And also, how we at Baillie Gifford are disrupting our own process of research, check out bailliegifford.com/disruptionweek.

And we hope you'll join us tomorrow where I'll be talking about Greentech and we'll be looking at companies that aren't just reducing the impact of climate change but also potentially reversing it. So, how does that work? Interested? Well, join us tomorrow. In the meantime, thanks for investing your time in Disruption Week.



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