

Investment Insights: What You Need to Know About Technology in 2021

WEBINAR TRANSCRIPT

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PRIYANKA AGNIHOTRI: Good afternoon, everyone. Many thanks for joining us today. My name is Priyanka Agnihotri and I'm Head of International Equity Research at Brown Advisory in our London Office. I'm joined today by John Canning who is an Equity Research Analyst in the Tech Sector and a partner at Brown Advisory. I'm also joined by Lauren Cahalan who is an Investigative Analyst within the Research Team.

Information technology has been the best performing sector within the S&P 500 Index and has also significantly outperformed the MSCI World Index in the last few years. This appeals impact to be driven by the ongoing digitalization of the global economy. A trend that has only accelerated since the breakout of the Covid-19 pandemic last year.

Today we are going to talk about some key themes in the technology sector, including current valuations, regulation and how we view risks and opportunities in the sector. We will focus on software and internet companies as that is where John spends most of his time and where Lauren has focused within the tech sector in the last few years. The discussion will last around 30 to 40 minutes at which point we will turn to audience Q&A and you will have the chance to ask us questions while the Q&A functionality, which you should see at the bottom of your screens.

We want this to be as interactive as possible. So please submit your questions throughout the conversation and we will aim to have them answered after our panel discussion. So I'm going to start with a question for you, John, which I'm sure is on everyone's mind. Do you think there is a bubble in technology stocks?

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JOHN CANNING: Thanks Priyanka and thanks to everyone for joining us today. You know, I know actually don't think it's that simple. I think there are pockets of extreme valuation and I think that there are areas that are almost certainly not in a bubble. So maybe I'll unpack that a little bit. You know, I think it's really important to provide the market context. So you alluded to the S&P 500 technology sector and I would argue that that's not an area of the market that's in a bubble. The biggest weights of that index and of the technology sector within the S&P 500, which include Google, Facebook, Microsoft and others they have cash flow multiples in growth profiles that we can make sense of.

And if you, just to compare it to 2000 today the S&P technology subsector has about an enterprise value to sells of six times and a price to earnings of 27 times. The S&P peaked in 2001 at 70 times price to earnings and 12 times enterprise value to sales. So I think that's a

pretty big difference, particularly amongst these largest companies that are making up the majority of the S&P 500, you know. And in most cases these are better business models. They have better margins. They have better cash flows. They have better growth today, kind of prospects from a durability perspective.

And many are subscription businesses. So the visibility to the cash flow and that growth side that's alluded to is a little more certain in our mind, as opposed to many of the technology companies that were, you know, really one time license businesses or hardware businesses. Now on the other hand, we do see pockets of incredible valuations, particularly in the highest growing software companies. At year end a bucket of software as service companies that are growing revenue faster than 30 percent had an enterprise value to sales multiple of 27 times on average. And enterprise software companies that are a SAS model growing 20 to 30 percent in revenue traded at 18 times sales. Those valuations have essentially tripled from January 2019.

Now there are reasons for expanded valuation that you allude to Priyanka, you know, certainly digitization's been pulled forward due to Covid, and there may have been structural changes to the growth opportunities for many of these companies. But I want to put in context what those valuations really mean and why we think that this may be a pocket of the market that is really extreme.

Many of these companies today have 500 million to 1.5 billion dollars in revenue, little cash flow, and haven't really proven out their ability to scale to multi-billion dollar revenue companies. And so I want to just give an example of a one billion dollar revenue theoretical company and just give an idea of what's priced in at 27 times. If it has one billion dollars today you have to believe that it will continue to grow 30 percent for the next ten years. That's about 18 billion dollars in revenue.

You have to believe from generating zero free cash flow they generate 30 percent free cash flow margins. And you have to believe that after ten years their growth profile and opportunity remains robust and they trade at 25 times cash flow. That's not dissimilar to what Microsoft trades at today or the historical multiples of companies like Intuit and Adobe which are more mature.

You also need to believe that the cash generated is reallocated to higher opportunity, high return on investment opportunities and that capital isn't destroyed. If you believe all that, which I would argue there are inherent risks in each of those assumptions. You can generate about a nine percent annual, you know, annualized return each year over the next ten years.

To me, you know, when we look at risk adjusted returns nine percent given the inherent risk in all those assumptions just is not enough to justify us investing in many areas. There's risk to the revenue kayger as companies look to scale they go to market, they have to continue to innovate and add products in order to go from one billion to 18 billion, even in some of the most dynamic and growing markets.

You have to ensure that the competition is not so fierce that the margins are competed away. And as I mentioned capital allocations are really important assumption. So while

certainly there are companies that fall in this bucket that will be successful, they will go from one billion dollars, 20 billion dollars to more to what we saw Salesforce do over a ten year period, you know, I think it's fair to assume that many of them will not.

And so we have to be extremely selective, particularly when the average company here again is trading at these levels. So why is that not being reflected in the S&P? It's because most of these companies are not in that index. And so when you think about the overall market context it's a little bit different than the pocket I just described. You know, you're not seeing, the last thing I'd really add is you're not seeing many of these investments in our portfolio.

We've tried to reduce areas where we see these risks to justify these valuations. And so for the most part you're seeing companies that have much higher cash flows, have proven their go to market scale and the margins that require. So you're really focused more on the competitive position and the revenue opportunity. The other area of access that I just quickly highlight is around the SPAC and IPO phenomenon. The volume of private company interactions we're having is up significantly, the number of 100 million dollar revenue software company is growing 50 percent that are not generally aware to the market is extremely high.

And so that's another indicator to us that there may be some froth in this high growth software bucket. And I'm happy to talk more about that later in the conversation, if that's interesting.

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PRIYANKA AGNIHOTRI: So how do you think about splitting up the tech universe into various sub segments? And I think you alluded to it a little bit, but what are the sort of business models that you find the most attractive?

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JOHN CANNING: Yeah. So I think the technology team at Brown Advisory as you alluded to in my introduction, we've kind of split it up between software and internet and hardware. And so my focus has primarily been on the software and internet space. And it's really important to note that we focus on bottom up analysis. So that really means understanding the durable, competitive advantages at the company level that we think we can underwrite for a decade so that we can get comfortable, particularly as valuations have retired generally, not just in the extreme level that I just described with the cash flow profile of the company and we can use our time horizon to our advantage.

So when we do this bottom up analysis, while this is not a perfect fit and we do not invest just in these areas, there have been two key areas where we found a lot of opportunities. One is what we'll call vertical software, which means companies that serve a specific end market—think about a company like Auto Desk, who is serving the construction industry specifically. And we like these businesses because often the addressable markets aren't so large that there's intense competition. And these companies often have 30 years plus of IP that makes the competitive moat pretty strong.

It often results in higher gross margins, more efficient go to market and higher cash flows. And so particularly in an environment, like I described above, those cash flows are something that we find very attractive. We're focused on platform-oriented companies. We

think that data will continue to be an advantage. And so the companies that have scale today that can aggregate that data and layer in predictive analytics with machine learning will continue to widen their competitive advantage from a product perspective.

And we focus on unit economics. So just because a company doesn't generate cash flow today, doesn't mean we won't invest in it today. And so we spend a lot of time thinking about how efficient is their go to market motion? We spend a lot of time looking at churn, so how much of their business are they holding onto on a year over year basis, particularly in the subscription models? And we spend a lot of time on a metric called net retention, which essentially is a monitor of how much an existing book of business grows year over year.

Obviously that leads to, that metric will be higher with an efficient go to market and in a lower churn level. So those are a couple of things, particularly in the software space, that allow us to get comfort in the ability to generate free cash flow long term and hopefully then get, you know, requisite risk adjusted returns as investors.

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PRIYANKA AGNIHOTRI: I'm going to turn to Lauren for a little bit. Lauren, I know you've spent a lot of time in the last couple of years digging into some of the regulatory issues within the tech sector. So can you talk about some of the most important issues here?

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LAUREN CAHALAN: Absolutely. Thank you, Priyanka and thank you everyone for joining. So when we talk about tech regulation this is a project that we've been working on with the tech team for about two years now in trying to understand, you know, when we talk about tech regulation what are we actually talking about? So there's a number of ways to kind of slice and dice this discussion. And we kind of group them into four areas of context that are really important.

So the first is what are the actual issues that we're discussing? We've bucketed this into three different areas. So you have anti-trust, data privacy and content moderation. Now all of these issue areas are discussed in the media and they all kind of overlap. But we separate them distinctly because each one of them has their own kind of set of laws that is how these issue areas are enforced. You have anti-trust law, data privacy and content moderation law.

The second area that we have to be aware of is, you know, who are we actually talking about when we talk about this tech clash so to speak? What are the actual companies that are in the spotlight? So we've seen that the four main companies that have been in the spotlight have been Google, Facebook, Apple and Amazon.

Why is that? It's a little bit ubiquitous because back in 2019 the U.S. government basically said we're going to take complaints, anti-trust complaints for these four companies. And so it kind of shed the spotlight on these companies and moved forward. The broader discussions on data privacy, content moderation, those, of course, these companies are used as the example, but these issues of course impact a variety of different companies across the tech sector.

The third thing that we need to focus on when we talk about tech regulation is that we're talking about a variety of different points in the policy legislation, regulatory process. So

those two areas that we see discussed. The first is the enforcement of existing laws. So any time you hear about an investigation, or a lawsuit being brought forward, you've seen the government deciding we're going to enforce the existing anti-trust laws and bring about a lawsuit. So you've seen that with Google and Facebook with the U.S. lawsuits that have been brought forward.

What you're also seeing concurrently, occurring in both the EU and the U.S. is that we're having this broader societal discussion of do we need new rules? Do we need to look at the rules that we have, do we need to update them for the times that we're living in and this general understanding that technology plays a much larger role in society than it did 20, 30 years ago.

So you're seeing kind of forcing existing laws and this discussion of potentially making new laws, both in U.S. Congress and in the EU. And so this last piece that's really important context when we talk about tech regulation is time line. The time line for tech regulation is in years. This isn't going to change overnight. This has been a discussion that's been occurring for multiple years and will go forward. If we use Google as an example of what time lines look like, you had in the EU the first kind of investigation into Google was brought forward kind of unopened in 2010. You didn't see the first fine against Google until 2017. So seven years looking at anti-trust enforcement.

In the U.S. you're seeing something a little similar. You are also seeing this U.S., Google anti-trust investigation that was opened in 2019. We won't see that go to trial, the lawsuit's been filed, but you're not going to see it go to trial until 2023. So we have to think in a broader context of how long is this going to take?

So most important factors if we summarize them. First, what are issues, antitrust, data privacy and content moderation? The companies in the spotlight are Google, Facebook, Amazon and Apple. We have to look at enforcement of existing laws versus potentially new laws. And then the timeline is in years. So that's how we framed this discussion for our team.

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PRIYANKA AGNIHOTRI: So I have one follow up for that. Why is Microsoft not in the spotlight today?

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LAUREN CAHALAN: Yeah, what's an excellent question. And it's one that's been in our minds the whole time we've been doing this work. So there's a variety of reasons of which we understand why Microsoft isn't in the spotlight. The first if we really look at the discussion of what is being looked at from regulatory's perspective, it's these consumer facing products and services.

So you and I go on social media, we decide to buy an iPhone, buy certain apps, we go on Amazon and buy certain products. Microsoft's bread and butter is their B to B business, their enterprise software. So it's a little bit of a different focus. So that's in the first piece.

The second piece is Microsoft has been here before. So about two decades previously they were under anti-trust scrutiny, very large case, and it set the tone for what can we learn from

what happened to Microsoft in understanding what might happen to these companies? So they've been in that enforcement spotlight previously.

And then the third thing is the role that Microsoft has played as almost this advisor. So Microsoft's President, Brad Smith, is also the company's Chief Legal Officer. He has actually advised Congress on how to kind of understand some of these issues when you're talking about these really large companies and what anti-trust could look like in enforcement.

So you see Microsoft playing a different role throughout all of this. And so even though they're not in the enforcement spotlight, they're not under investigation right now, we still recognize, you know, we'll keep it in the back of our minds that Microsoft is there and should any potential new laws impact them we're ready to understand that. But they're clearly out of the spotlight at this point in time.

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PRIYANKA AGNIHOTRI: Can you help us to understand the differences in the approach taken by the U.S. and the European authorities?

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LAUREN CAHALAN: Absolutely. So if we look at the differences between the U.S. and the EU there's a lot of different cultural values that you see in how tech regulation plays out. The two really good examples of how we've seen that play out is through data privacy law and anti-trust law, the enforcement of those.

So let's first look at data privacy. So in the EU, the EU is this global leader in tech regulation. You could see some people have said, you know, they've exported tech regulation as a theme and an understanding for other countries. So if we look at data privacy they were the first jurisdiction to create a widespread data privacy regulation with GDPR.

In the U.S., on the other hand, we don't have a federal data privacy legislation; there's no overarching law here protecting consumer data. You see it a little bit in different sectors, like finance and health care, but there's not overarching law. So there's a large discrepancy there on the data privacy side.

What you're also seeing with the EU is they've set the precedent. They have GDPR and now other countries are looking to say, you know, what are we looking at for data privacy, how should we mold this law, and they're looking at GDPR as kind of this example and the skeleton of which to kind of carry over into their own countries, put in their own values into their laws and then bring it forward. So GDPR is the benchmark that the U.S. will then, if there's a federal privacy law, which we might see, that's the benchmark.

The second piece is with anti-trust where you see a really large difference in how anti-trust law is enforced. So let's level set on what kind of anti-trust looks like. Being big is not bad. It's when you are big and you use that bigness to anti-competitively stay big that is when it is considered bad. Well, we have to have this definition of what is anti-competitive behavior when you are considered a large monopoly, if that's the definition. That is the difference between the EU and the U.S. -- is defining what is anti-competitive.

So both the EU and the U.S. decide that we're going to measure anti-competitive behavior through consumer harm. Consumer harm is you and I have to pay higher prices, we see a decrease in quality in product, or we see a decrease in innovation. So both the EU and the U.S. evaluate and say consumer harm those are ways to measure it.

The EU also includes in their definition of anti-competitive behavior: have any competitors been harmed in this process? Is there a small business, is there an EU native business that has been harmed by some of Google's practices? Is that something that we need to look at? And so when you include that competitor harm with the consumer harm it actually lowers the burden of proof. It's a little easier to prove if a competitor has been harmed. Right?

Where in the U.S. we see, you know, if you're a competitor and you didn't win, you didn't win. And so it comes back to if it's really bad in the U.S. it will flow through to consumer harm. So there's those differences and nuances and kind of the burden of proof, how easy it is to enforce things.

The last thing I'll mention on this is that in the EU the European Commission has direct fining power. So if they do an investigation, they find an answer, they can fine Google right then and there. And you've seen that with the three anti-trust cases brought against Google in the EU.

In the U.S. the federal government does not have direct fining power in anti-trust law. So let's say that with these lawsuits that have come about, the Federal Trade Commission and the Department of Justice both do anti-trust law, they investigate a company, they actually have to file a lawsuit and then win that lawsuit in order to bring about any potential anti-trust changes, breaking up a company, changes in behavior or a fine. So there's a discrepancy there kind of in the mechanisms of enforcement as well.

00:24:35 PRIYANKA AGNIHOTRI: Is there any change in your thinking with the new Administration in the U.S.?

00:24:40 LAUREN CAHALAN: Yeah, that's a great question and we'll kind of go back, you know, this is a project we've been working on for two years, mainly because the U.S. government has been working on it for two years plus with people kind of discussing this. And you saw it pick up speed in the past year as some of these investigations racked up and they were filed as lawsuits.

So essentially the ball was already rolling. There are two ways to look at this. You have to look at the Executive Branch with Biden becoming President as well as the Congressional election that happened as well. There's a different makeup in Congress. So if we start with Biden what he can do is essentially get the ball rolling, we'll look at who he appoints to certain federal agencies, so the Federal Trade Commission and the Department of Justice, but essentially the ball's rolling, things are going to continue.

If we look at Congress, so you have a change in Congress between the last U.S. election. Right? You had a Democrat majority in the House previously and a Republican majority in

the Senate. And so there was a little bit of ... of course you have to pass through both Houses of Congress. Right?

Now you're seeing that the Democrats have a majority in both the House and the Senate. The point is in the Senate it's a 50/50 split between Republicans and Democrats and so the Vice President has to break any ties. So that doesn't mean that everything's just going to flow through Congress if all the Democrats agree and we're going to move forward with legislation. There's still a lot of bi-partisan support that has to happen in order to potentially pass any legislation for those new laws that we were talking about.

What we're watching as far as anything changing is we look back to the House Anti-trust Subcommittee investigation report. It was a 500 page report. It was put out by the Democrat led committee. David Cicilline led the report. And so he outlined from that investigation, looking at digital markets for each of these companies, what are potential changes that could be put in place.

With this report also came out another report from Ken Buck, who's a Republican in that committee, that described, you know, where they agree and where they disagree. And so we have this road map that we can kind of understand what's on the table moving forward into the next year and multiple years after that, as we've mentioned this discussion is going to take a while.

If we have to summarize what's going to happen with the change in our government makeup in the past few months, the ball has been rolling and we're going to continue to see things follow a path that they've been on.

00:27:14 PRIYANKA AGNIHOTRI: John, how do you think investors should be thinking about some of these risks that we just talked about?

00:27:21 JOHN CANNING: I think the important thing is that this has been in the news for a while and none of this is new and the ball has been rolling for quite a bit of time as Lauren alluded to, and for the most part, you know, equity markets are pretty good at figuring these things out. I would argue if you just look at a multiple perspective and, you know, I started the conversation talking about the S&P 500 and how some of these assets are reasonably valued, I think that some risk associated with some of these future regulatory changes has been priced in.

I think where we have been spending a lot of time is under the current framework in the United States and the EU, as Lauren alluded to, and understanding do we think there are structural changes that are likely to happen under the current frameworks. And as I think through the companies we spend a lot of time on some of the parts types analyses and looking at these anti-trust issues, and, frankly, I'll just talk about a couple of them specifically, but we don't see a ton of risk to the equity prices.

On Facebook, from a financial perspective, the biggest issue would be if they were forced to spin out Instagram and that acquisition, which was originally approved by the FTC was reversed. We see good value on some of the parts perspective between core Facebook,

which is still growing users and revenue nicely, and Instagram. But we also think that because of the innovation and the success that Instagram has had under the umbrella of Facebook, the burden of proof, which lies with the government, which Lauren alluded to, is very high as far as proving that this was an anti-competitive action by Facebook. They generate a lot of positive outcomes for their customers in Instagram.

The other major one that we've talked a lot about is Google. And I think in the press you read a ton about the advertising technology business. And we do think there are some potential issues there. What's important to note is that is not a material driver of gross profit or the future of the company. And so we actually spend a lot more time talking about vertical search, which the best way and the easiest way to think about that is when you go to Google and you go to Google Travel they'll offer you some booking options that compete with, you know, Price Line's bidding or Marriott's bidding for that same query.

And that's an area where we have a little more concern. Now if that were to be ended; they could no longer pursue that, it wouldn't be as if the business fell apart. The search business would grow at a likely a little bit slower rate, as vertical-izing Google's product is a key way in which Alphabet improves conversion for their customers and drives further revenue growth as a result.

But again we don't see it as a real disaster scenario for Alphabet. Particularly again when you look at the sum of the parts you think about the value of YouTube, you think about the value and the progress they've made in the infrastructure business, the importance of search and then many of their other bets including Waymo, we just don't see it as a huge risk to the equity price. We also don't see, you know, many of the actions for all the companies to be extremely likely in the current U.S. framework.

The last thing I would add is there's a reason why Microsoft is a bigger position than these companies across all of our portfolios, and a lot of it has to do with the growth profile and the opportunity and the financial discipline at Microsoft. But there is also not a significant regulatory risk. And so, you know, we have a regulatory thesis that we monitor and have kind of a problemist view on some of these issues.

And interestingly Microsoft doesn't really have a regulatory thesis because they're so out of the spotlight as you all spoke about. So, you know, that is something when we again think about risk adjusted returns that we do incorporate is a regulatory likelihood and the impactful-ness of those outcomes.

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PRIYANKA AGNIHOTRI: Lauren, I'll come back to you with a question. In your work that you've done on regulation is there a sort of disconnect between the work that you've done and the narrative that we hear in the market around regulation?

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LAUREN CAHALAN: It's a great question and one that has kind of caught our eyes as we've continued this work. I'll reiterate what John said -- a lot of what you're hearing, Priyanka, is these eye catching headlines of breaking up big tech and spinning off different pieces of the business. And what it comes down to it, as John mentioned, if you spin off some of these

assets there's still good investable assets for us as investors. And so that's so interesting for us to understand.

What we do look at is looking at taking all this noise and all these varieties of anti-trust, data privacy, content moderation, and going back to our bottom ups analysis and some of the parts to understand, you know, what's actually going to impact the business model that we need to be aware of. So it comes back to what John mentioned about the vertical search and what is also called self-preferencing. And so you've seen that come up in the EU Parliament with the Digital Markets Act looking at self-preferencing as a potential behavior that might need to be monitored or kind of changed.

And so for a little bit more context on self-preferencing, so with Google Flights, for example, let's say you type into Google cheap flights. Maybe ten years ago you got Expedia, a couple different other travel agencies that you've been linked to for a different kind of like database. So what you see is if you do it now Google will have its own little box pop up. And so is Google preferencing its own product, whether or not it's a better product, in order for them to kind of get those conversion clicks.

And so it's understanding that business practice that we have more of a focus on, on what are potential enforcement that's put there, which you see potentially with this data term is case in the U.S. and then what are potential new rules around that which you're also seeing discussed in the EU.

It's understanding those nuances a little bit further –it's a disconnect that we see in the broader discussion. The other thing that I'll hit on is there's never going to be any one event. There's a lot of mini events that are happening. And so we are trying to understand, what's the culmination of a lot of different pressure points together that we need to understand moving forward. And that's a piece that we're able to do with our work and our team that you might not see every day in the headlines. And so that's kind of a disconnect we see as being additionally valuable.

Last thing is that timeline. We're going to keep coming back to that, because that's really important context, is just understanding that this is going to take a long time and putting that into our assumptions. So there's a variety of different pieces here that we're able to see disconnect-- that we're able to really work as a team to understand.

00:34:29 PRIYANKA AGNIHOTRI: Can you also talk about your thinking on the role of regulation and social media?

00:34:38 LAUREN CAHALAN: Absolutely. So this is a really important topic and one that's occurring globally. It really comes back to what role does technology play in society today and one that we all see is this role of social media. We've all seen it with the potential for misinformation around Covid. We would be remiss if we didn't mention kind of the role of social media before, during and after the events at the U.S. Capitol. And it's a really complicated conversation. Right? We're trying figure out what role do social media platforms play in our everyday lives?

And so when we're talking about social media regulation what we're actually talking about on the U.S. side is this law called Section 230 of the Communications Decency Act. This is a law from 1996. It essentially is considered this foundation for the internet. And what it is is that a platform is not liable for any third party content.

If you're a chat message board in the early 2000s you're not responsible if somebody incites some really just wild rhetoric on a platform. Right? And it was meant to help the internet grow. And so now we've reached this discussion point that somewhat intertwines with the anti-trust discussion of do these platforms still need help growing through this law, do they need more responsibility, and do they need to recognize their really important role they play in society?

And it's a really big question to ask. And how we've tried to understand it is really understand what's being discussed. There's actually a variety of different discussions within the Section 230 discussion to understand how that regulation could be impacted. So there's three buckets we can look at. So the first is content moderation around elicit activities, that's kind of your dark things on the internet of human trafficking, drug trafficking, things like that.

You have another bucket of misinformation. Covid is a great example; vaccine misinformation. You've also seen it kind of with election misinformation all around the world. And then there's a third bucket being discussed on political bias. So are platforms bias in their censorship on a political basis? And so each one of these has a different kind of level of discussion and support.

You have a lot of support in Congress to potentially change social media regulation around elicit activities. And we've seen that previously with a law that was looking at human trafficking. What you ended up seeing is that because there was more requirements on regulating that that these behaviors don't go away, they just fall into different parts of the internet that might be harder for law enforcement to follow. So is that a successful way to regulate social media?

When you have misinformation this is an area where platforms have come out and said, we want regulation. We want to be told what to do. As large platforms in social media we don't want to be the arbitrators of truth. This was not our original goal and we would like some assistance in trying to problem solve this. So this is an area that has a lot of Democrats with support in trying to understand these issues. And so you'll see that become a large discussion kind of moving forward as it's already been.

This third bucket of political bias this is where you see a lot of Republican support -- they want to say that these platforms are censoring too much and they should censor less. And so you see this discrepancy of saying, yes, we need to change regulation around social media where you have a group of people saying we need more regulation around misinformation and then others saying we need less regulation and we need more kind of free flowing ideas.

What it comes down to as a level set is there's a lot of discussion of how Section 230 ties into the First Amendment. And it's just clear to acknowledge to people that the First Amendment

is to prevent being censored by the U.S. government, so private companies if you violate their terms and conditions that you signed up for initially they can, you know, decide to put a label on your speech or remove you from a platform. So there's a difference between government censorship and then platforms having to make decisions for themselves.

If I have to wrap that up, what's kind of ironic about this whole discussion on social media and regulating is these platforms that want regulation, they're also the best equipped to deal with regulation. So Facebook, although they get a lot of kind of pushback on how they do content moderation, they're the best in the business at figuring out content moderation and trying to come up with these issues. And they know they're not perfect, and that's why they're asking for regulation.

So it's just understanding that intersection of anti-trust and content moderation that sometimes the biggest players are going to be the ones that are best equipped to handle this regulation and figure out problems and it's just understanding as a society we don't have all the answers and we have to figure this out together.

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PRIYANKA AGNIHOTRI: So I have one final question before we move onto Q&A. So please be thinking of questions for John and Lauren at this point. I'm going to come back to you, John, on a point you made about the strong fundamentals in the sector. What do you think are the most underappreciated trends in the market right now that you think will have a big impact in the next three to five years?

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JOHN CANNING: So maybe I'll just start with what is probably pretty well-appreciated by the market, which is digitization and digital's accelerating, as you eluded to Priyanka. I'm just going to use two anecdotes from Microsoft and Accenture, who are two of the largest enterprise technology partners in the world. Microsoft does probably 100 billion dollars of enterprise-oriented technology revenue and Accenture does about 40 billion dollars of services revenue, helping enterprises implement technology.

And [inaudible] has been talking a lot in the last really three to six months about a new type of digital transformation. And it's that, it's not just about adjusting to the new world. What we've learned throughout Covid is that digital transformation actually enables resilience. It enables, you know, continued operations in a distributed world. And so it's no longer a project to do digital transformation; it's a requirement.

And so as a result you've seen roadmaps accelerate. Microsoft has long predicted that tech spend as a percentage of GDP would double in the next decade. They believe the pandemic has pulled forward that spend and that percentage significantly. And Accenture has talked about the compression of digital transformation cycles as well. They thought it would be a ten-year type environment. And that's now five years. And you've seen this in results of companies.

Microsoft Teams which people may be familiar with, they had roughly 13 million daily active users in September 2019. They had 115 million daily active users in September 2020. Digital content creation at companies like Adobe accelerated. DocuSign, Twilio, which are both companies that enable digital interaction with customers saw accelerating results.

And Accenture who I mentioned is really a key partner in implementing technology solutions for a lot of enterprises. They saw an acceleration in their cloud bookings to mid-teens growth. That may not sound that high, but why that's interesting is they essentially have to generate new revenue for each project and so the number of projects they're doing and the scale of these projects is actually accelerating, which I think speaks to this pull forward of digital demand.

And so that may not be really new to people or underappreciated, but what I think may be underappreciated is that digitization is not one to one. It drives new growth and opportunity. It's not just shifting processes that used to be done in a linear fashion; think moving advertising budgets from newspaper and TV to digital. It actually generates more dollars for that type of environment, because of the efficiency that these digital experiences provide.

So even some of the most mature industries in people's minds as far as digitization; think digital advertising, actually have a long way to go. And I think that that durability of growth is going to end up being under appreciated by the market in many cases.

So I'm just going to run through a couple of examples to try to bring this to light. Digital advertising today is less than 50 percent of the overall advertising market. But what's happened is the efficiency that people have gained from targeting and, you know, query based advertising on Google has led to more advertisers; meaning MSBs who couldn't, small and medium businesses who couldn't afford to advertise on a more mass scale to enter the market.

It's also shifted trade promotion dollars and marketing services dollars; think mail orders to your home or place them in the supermarket, which often have been bigger than advertising budgets, theme to advertising budgets. And so this opening up of budgets is actually going to lead to durable double digit digital advertising growth, even as GDP might be low single digits. And, you know, that seems surprising given how long digital advertising has been around.

I think Cloud is another really great example. We've been reading about Amazon Web Services and Microsoft Azure for a long period of time. The market today is probably 70 billion dollars. But infrastructure is less than 20 percent in the Cloud. And we actually saw last night that Microsoft's Azure product, their Cloud base product, accelerated growth at a 28 billion dollar run rate, growing now 50 percent.

And what this means is obviously there's a long way to go in shifting, you know, workloads that are on a premise into the Cloud. But the Cloud also requires less capital investment and has greater ability for burst use cases. So it creates new workload opportunities. So not only are we going to see this massive shift over the next decade or so, but we'll see a lot of new use, a lot of new use cases because the barriers to creating those have gone down.

I think dating is a really interesting example. You know, people probably think a lot of people today are meeting on apps. In North America and Europe the most penetrated markets, in

2019 only 50 percent of singles from 18 to 24, which is the demographic that uses the apps the most, had an app. And it's lower in other geos and other demographics.

And this is an example of a category where there wasn't a lot of revenue generated from brick and mortar or dating services or from introducing someone to your friends, but now as a multi-billion dollar industry that has a long runway for growth because of the efficiency which a digital experience provides. I think interactive entertainment's another great example. It's still the cheapest form of entertainment per entertainment hour. And the category's growing as mobile devices move throughout the world and 5G becomes persuasive, we're going to see accelerated accessibility of gaming. And that will be another revenue opportunity for these companies.

The last thing I'll highlight is there's a lot of industry that you might think of as more legacy industries that have neglected to invest as heavily in technology. Construction is a great example. Oil and gas is a great example. And what the pandemic has shown is that some of these new cutting edge cloud-based products actually drive a lot of efficiency in these industries and they had to adopt them during the pandemic. But now budget has been created to further investment.

And this is not replacing other technology spend. It's really growing technology spend because of the efficiency that people can get in delivering some of these projects. You know, it's the same in professional services. Something like Intuit, which does bookkeeping in the United States and competes with Sage in the UK, there's still 40 percent of small businesses that use pen and paper to do their bookkeeping, but they've launched a live product, which enables small businesses to interact with accountants, wherever, globally. And it's added a new revenue opportunity for the company as they improve the bookkeeping service for those who might not be comfortable to do it themselves. They now have an expert who they can interact with digitally.

But it's also allowed accountants to generate new customers in geographies that they might not have been able to serve in a brick and mortar framework. I do think that while everyone is talking a lot, and rightfully so, and we're seeing it reflected in the market, about the move to digital has really accelerated, I think what might not be fully appreciated is the compound affect that this move to digital will have and the efficiencies of these experiences might really generate more durable growth than people fully appreciate today.

00:47:52

PRIYANKA AGNIHOTRI: Thank you. With that we'll move to the Q&A session.

So I'm going to start off with the first question, one for Lauren, and perhaps John feel free to chime in if you think you want to add to it. With all the regulatory issues within the sector, do you think that the acquisition of startups by big tech might slow down?

00:48:29

LAUREN CAHALAN: That's an excellent question. So you have to piece it back a little bit. Looking at this framework we understand the enforcement of existing laws versus the potential of writing of new laws. So if we look at the world we live in right now, you can expect to see some of these companies ramp up acquisitions knowing that, you know, trying to get

things under the wire would things potentially change? So that's one line of thinking that's potentially there.

What changes is when we think about the things that are on the table for potentially new rules. So you're seeing this discussion of these big techs being defined as this different category. So in the EU, for example, you're seeing in the Digital Markets Act this definition of gatekeepers. So do these gatekeepers, so your big techs that do a lot of acquisitions, do they fill a different role and fall under use scrutiny? And so you're seeing a different role where they're acknowledged as different.

And then in the U.S. what you're seeing is, in Congress there's this discussion of do we need to decide that if you're of a certain size or if you're one of these companies that the initial assumption is if you are acquiring someone that we're going to assume it's anti-competitive until proven otherwise? So that's not a current way of thinking. But that's something that people are thinking about as a potential change in thinking.

Given your current framework you could see more acquisitions trying to get things in before things change. But in that long run, right, our year's timeline, could there be potential changes in rules to understand that any acquisition by these companies has to be looked at a little bit differently? So there's a little bit of difference between the current and this future expectations that's to be determined.

00:50:17

JOHN CANNING: The only thing I would add is that it depends a little bit on your definition of big tech. As we've spoken about in this discussion, much of the pressure is on the consumer-facing technology companies. But if you consider, you know, Adobe, SAP, Microsoft and others, Salesforce.com to be big tech, you know, certainly the regulatory pressure doesn't feel as heavy today.

And we've seen a lot of those companies execute very materially sized acquisitions in the last 12 months including the SAP with a multi-billion dollar acquisition this morning, or yesterday. So, I think it really depends a little bit about how we're thinking about big tech.

00:51:02

PRIYANKA AGNIHOTRI: I have a question on stock buy backs and it's mainly around whether, do you think that big tech is engaging in a lot of stock buy backs? And in the end is that leading to other investing in R&D and innovation which might eventually impact the prospects for those businesses?

00:51:23

JOHN CANNING: I think that they are not under investing. And I would say that for a couple of reasons. One, is the scale of these R&D budgets is extremely significant. And in most cases it's still double digit growth. So I don't have Microsoft's R&D budget off the top of my head, but let's say it's 20 billion dollars growing double digits, that's a significant increase in R&D dollars that is enabling them to support a broad range of their product portfolio.

And it's very true with Google and Facebook as well. These are models where they have continued to grow engineering resources in the 20 percent range for the most part. And, you know, with Google I think one of the major criticisms of the company is then they haven't

actually flowed through as much of the profits into free cash flow, because they have invested in other projects and other opportunities.

So, I think the problem that some of these companies have is they cannot engage in mega acquisitions in a lot of cases. They're generating significant free cash flow to the tune of three percent, four percent of the market cap, which is 30, 40, 50 billion dollars a year and there's just not that many places for that capital to go. And what they have decided to do is start to return it to shareholders as the cash balances on the balance sheet have gotten in some cases well above 50 billion dollars, U.S. dollars.

So I don't think it's a function of R&D stringency as much as it is they've realized that at some point having that much cash on the balance sheet is not aiding their equity value or their optionality. And so they've decided to start to return it and more aggressively, particularly in the case of Google over the last 18 months of so.

00:53:29 PRIYANKA AGNIHOTRI: The next question I have is on how do we think about the ethics of some of the IA products and services that tech companies are building out?

00:53:42 LAUREN CAHALAN: Absolutely. It's an excellent question. And so if we look at how this tech regulation project has gone for the past two years, it's a variety of different themes that come into play over time that we need to be aware of. And so AI ethics is an absolutely massive and really important discussion that's happening across almost every industry of what role does AI play and how do we think about the foundation of it now for any future implications.

This is an area that's a large discussion. We've partnered with our ESG team to think a lot about these issues, because there's a lot of ESG factors that come into play and we need to understand how to think about them. And then the second piece of this is part of my role as the investigative analyst is understanding that we don't have all the answers. Right? And so it's talking to experts in these industries that are thinking about this every single day that are better equipped to solve these problems.

And so it's engaging with these people to understand, you know, our role as shareholders what are certain questions that we can ask the companies we're invested in in order to understand these issues? So it's a combination of working across our team to understand that this is a big topic and will be going into the future and knowing that that we don't have all of the answers and making sure we educate ourselves on these issues moving forward.

00:55:03 PRIYANKA AGNIHOTRI: The next question I have is for you John. So Tesla has increased in price ten-fold since the start of 2020. Does the long term focus equate to missed opportunities in the short term?

00:55:19 JOHN CANNING: Yeah, sure. So I'm not going to speak to Tesla specifically, because I don't cover it, but my I'll just talk more broadly about our investment approach and how that may be reflected in short term versus long term opportunities. So I think what we really try to do is start at the company level look at the valuation framework that we are comfortable with as I mentioned that really sits around how durable do we think the competitive mode is, how

long do we think the growth rate can continue. It includes what do we think the long term margin structure of business might be? It includes capital allocation.

And, you know, I think we come up with what we're willing to pay for given assets. We're never going to get everything. Right? We're never going to own every company that goes up ten-fold, but I think that over the long term the focus on those quantifiable characteristics that we think drive risk adjusted returns is what's going to allow us to continue to deliver returns that are that are above and beyond relative indices.

There's going to be short term periods where certain stocks perform exceptionally well for a multitude of reasons. I mean, I'm sure everyone has read in the news about GameStop and AMC in the last couple of days. You know, those are in a lot of cases momentum trades that can go very strong for a long period of time. Tesla's obviously a very impactful and disruptive company. But it has to come back to our fundamental bottom up process. Even if we think there's a larger addressable market and we think there's a lot of momentum behind the stock, that doesn't mean that we're going to participate.

We're only going to participate in equities and make investments when we feel comfortable about the fundamentals and the price we're paying to drive those outsized risk adjusted returns and, you know, we'll see what happens with Tesla. Certainly being a ten-fold likely means that regardless of what happens over the next five years that we missed that one.

But I would say it's not that we never looked at the company. It's just a function of it didn't fit into our framework and there will be times where unfortunately we miss opportunities because of the framework and in that valuation plus fundamental discipline.

00:57:41 PRIYANKA AGNIHOTRI: My next question is for Lauren. I think you've looked at this in the past. Is Google likely to withdraw from Australia?

00:57:50 LAUREN CAHALAN: Yes, this is a really interesting question. Thank you for whomever asked it. So for the group what is this question referring to? So there's a broader discussion around, in Australia, discussing should Google have to pay for news content and publisher content that shows up in search? And it's actually a global discussion that's happening as well and so you see France actually having a similar debate and Google kind of deciding that under certain copyright laws they're going to pay certain publishers.

And so Australia is kind of following a similar path and asking those questions and Google has said we're not going to do it and has threatened to withdraw. And so I won't speak to the likelihood on what will happen. I'll admit I don't have enough information there and we'll have to see how things play out. But what this is referring to is a really interesting theme that we're going to continue to hear, and you're going to hear it in the U.S. as well, of what role do social media platforms and search platforms play around local news, your national news and how publishers are paid.

It comes up actually in one of the anti-trust lawsuits in trying to understand: is this a market that's been potentially harmed in an anti-competitive way? It's interesting. We'll have to see if that fits the current anti-trust framework to actually be enforced. But it's a broader

discussion you're going to see it come to fruition a lot more and that you've actually seen in the past few weeks with what's occurred with France and then the discussion you're seeing in Australia.

So this is a growing issue that's been there, we're going to continue to follow, and we'll have to watch play out. But something that's definitely on our radar.

00:59:42 PRIYANKA AGNIHOTRI: As more value accrues to private market investors, how has that changed your focus, John? And how are you thinking about participating in IPOs?

00:59:52 JOHN CANNING: I don't think it's changed the focus very much. I would say the major significant change is that when we think about our mutual fund family and where we're participating in these potential deals, it's that they're more mid cap oriented companies that are more mature as opposed to, you know, what used to be smaller cap companies. So companies are staying private longer certainly. And so in a lot of cases they're more mature and as a result they're often finding a home in our mid cap portfolio as opposed to our small cap portfolio.

I think from a due diligence perspective, in some ways that allows us to get to know these private companies a lot better. I mentioned that I've been spending a lot more time meeting private companies. That's helping us build relationship with management teams, helping us improve our allocations on the IPOs, which we want to pursue and participate in. Which is really important given, particularly in this environment, where the price action on day one has been really enormous.

I think it changes the opportunity set a little bit for all our different products. But as far as a platform and how we think about it as investors, you know, we've put a lot of emphasis in getting to know these companies and put a lot of emphasis on remaining selective. And so in instances where we've been able to build a relationship with the company while they're private, we've had really good success in increasing our yields on the deal and a lot of times those become multi-year holdings for different products.

The last thing I would just note is the volume right now of companies becoming public, including through SPACS [ph.], which, you know, the amount of money raised is significant, and yet to be deployed, is really high and it makes us a little concerned about the quality of the companies.

And again, you know, the quality of the average company, obviously there are great companies that are also becoming public, but we are, as a result, increasingly as I mentioned leaning on, meaning these companies when they're private so that we can be really comfortable about the quality of the team, the quality of the product, and do that due diligence prior to what is a pretty short marketing environment generally with the IPO for about a week to ten days to make an investment decision.

01:02:24 PRIYANKA AGNIHOTRI: So I have time for one last question and I don't know, John and Lauren if you both want to address this or one of you, but the question is on how can U.S. companies compete with China given our privacy rules?

01:02:40

JOHN CANNING: I can start. So I think it's really important to think about what market a lot of the Chinese companies are serving. I think we need to just keep in mind-- where are we talking about competing? Are we talking about competing in the U.S.? Are we talking about competing in Europe? Are we talking about competing in Africa and Southeast Asia? That's one really important note that I would make.

The second would be, privacy for the most part is a major issue in the consumer tech platforms, as Lauren eluded to. And so when we think about the IP required in the semi-conductor industry or the IP that's often built in a lot of the software as a service companies, it's not a privacy issue, it's really more of an IP and a distribution issue.

I'm not as worried about the different privacy implications as it relates to traditional enterprise software and hardware. I think on the consumer technology side, you know, it becomes a user preference question. I think in many cases, as Lauren's eluded to, the consumers of the products are dictating how the privacy rules and how the companies must act.

I think about with everything that's gone on with GDPR. That's not a function of Google and Facebook saying they want to be more privacy centric. And so it's a question of whether consumers are going to be willing to adopt some of these maybe more relaxed privacy issues as it relates to more consumer-oriented internet companies within China.

Now, as it relates to the Chinese domestic market, I think that that's a very difficult uphill climb for most software and internet companies and from the West to compete. And so you'll see a very robust and healthy ecosystem there for domestic Chinese companies serving their domestic constituents. But, you know, as we think about expanding beyond that these [inaudible] I think a lot of it will come down to consumer preference.

The hardware pieces is a little bit more nuanced so I'm not going to get into it. But the supply chain and the strength of many of the component suppliers in the U.S. puts the Chinese hardware industry, you know, in a difficult position to try to close the gap, particularly when there may be tariffs and other restrictions around selling these tool companies to the Chinese semi-conductors to allow them to compete, which is another thing that I want to actually think about as I think about those companies expanding their international operations.

01:05:23

PRIYANKA AGNIHOTRI: With that we will conclude our discussion. Thank you to John and Lauren and to everyone for being part of this conversation.

01:05:32

JOHN CANNING: Thank you for your time.

01:05:34

LAUREN CAHALAN: Thank you very much. Have a nice day.