

TikTok CEO Shou Chew on Its Future — and What Makes Its Algorithm Different | Live at TED2023 - YouTube  
<https://www.youtube.com/watch?v=7zC8-06198g>

Transcript:

(00:00) it's very nice to have you here let's see first of all you know congratulations you really put off something remarkable on on that grilling you achieved something that very few people do which was you pulled off a kind of a bipartisan consensus in U.S politics was great you know the bad news was that that consensus largely seemed to be we must ban tick tick so we're going to come to that in a bit and I'm curious about but before we before we go there we need to know about you um you you seem to me like a remarkable

(00:33) person I want to know a bit of your story and how you came to tick tick in the in the first place okay thank you Chris before we do that can I just check I need to know my audience how many of you here use tick tick just oh thank you for those who don't the Wi-Fi is free so that's another question which is how many of you here have had your lives touched through Tick Tick through your kids and other people in your lives I mean it's oh that's great to see it's basically if you're alive you have

(01:04) had some kind of contact with with Tick Tick at this point Thank you tell us about you so my name is show and I'm from Singapore roughly 10 years ago I met with two Engineers who were building a product and the idea behind this was to build a product that recommended content to people not based on who they knew which was uh if you think about it 10 years ago it was all the social graph was all in the rage and the idea was you know your content and the fee that you saw should be based on people that you knew you know about 10

(01:38) years ago these two Engineers thought about something different which is instead of showing you what you what you know instead of showing you people you knew why don't we show you content that you liked and that's sort of the Genesis and the birth of um you know the early iterations of tick tick and about five years ago with the Advent of um you know 4G short video mobile phone penetration Tick Tick was born and a couple of years ago you know I had the opportunity to run this company and it still excites me

(02:08) every single day so I want to dig in a little more into this about what was it that made this takeoff so explicit because the the language I hear from people who you know spent time on it it's sort of like I mean it it is a different level of addiction to other uh media out there and I don't necessarily mean this in a good way we'll be coming on to it there's good and bad things about this type of addiction but it's the feeling that within a couple days of of uh experience of tick tick it knows you and

(02:38) it and it surprises you with things that you didn't know you were going to be interested in but you are how is it really just instead of the social graph what are these algorithms doing the I think to describe this uh to begin to answer your question we have to talk about the mission of the company now the mission is to inspire creativity and to bring joy and I think you know missions for companies like ours is really important because you have product managers working on the product every single day and they need to have a

(03:09) North star you know something to sort of work towards together now based on this Mission our vision is to provide three things to our users we want to provide a window to

discover and I'll talk about Discovery you talked about this in a second we want to give them a canvas to create which is going to be really exciting with new technologies in AI that's going to help people you know help people create new things and the final thing is bridges for people to connect so that's sort of the vision of what

(03:37) we're trying to build now what really makes Tick Tock very unique and very different is the whole discovery engine behind us so there are earlier apps that I have a lot of respect for but they were built for a different purpose you know for example in the era of search you know there was an app that was built for people who wanted to search things that was so that it's more easily found and then in the era of social graphs it was about connecting people and their followers now what we have done is that

(04:07) we are based on our machine learning algorithms we're showing people what they like and what this means is that we have given the everyday person a platform to be discovered if you have talent it is very very easy to get discovered on Tick Tock and I'll just give you one one example of this the biggest Creator on Tick Tock is a guy called kabi cubby was from Senegal he lives in Italy he was a factory worker um he you know for the longest time didn't even speak in any of his videos but what he did was you know he had

(04:39) Talent he was funny he had a good expression he had creativity so he kept posting and today he has 160 million followers on our platform so every single day we hear stories like that you know businesses people with talent and I think it's very it's very freeing to have a platform where as long as you have talent you're going to be hurt and you have the chance to succeed and that's what we're providing to our users so this is this is the amazing thing to me like we've most of us have grown

(05:07) grown up with say Network television for where for decades you've had thousands of brilliant creative people toiling in the trenches trying to imagine stuff that will be amazing for an audience and none of them ever remotely came up with anything that looked like many of your creators so so the these algorithms by just by observing people's behavior and what they look like have discovered things that thousands of brilliant humans never discovered tell me some of the things that it is looking at so obvious things

(05:41) like if someone presses like or stays on a video for a long time that gives you a clue more like that but is it subject matter what what what are the what are the array of things that you have noticed that you can actually track that that provide useful Clues the I'm going to simplify this a lot but the machine learning the recommendation algorithm is really just math so for example if you if you like videos one two three and four and I like videos one two three and five maybe he liked videos one two three

(06:11) and six now what's going to happen is because we like one two three at the same time he's going to be shown four five six and so are we and you can think about this repeated at scale in real time across more than a billion people that's basically what it is is math and of course you know it Ai and machine learning has allowed this to be done at a very very big scale and what we have seen the result of this is that they learned the interest signals that people exhibit very quickly and shows you content that's really relevant for you

(06:41) in a very in a very quick way now so it's a form of collaborative filtering from what you're saying that the theory behind it is that these humans are weird people we don't really know what they're interested in but if if we see that one human is interested with an overlap of someone else chances are you know you can you can make use of the other pieces that

are in that overlapped humans repertoire to to to feed to feed them and they'll be surprised but the reason they like it is because their power also

(07:09) liked it it is pattern recognition based on your interest signals and I think the other thing here is that we don't actually ask you 20 questions on whether you like a piece of content you know what are your interests we don't do that we build that experience organically into the app experience so you are voting with your thumbs you know by watching a video you know by swiping it by liking it by sharing it you are basically exhibiting interest signals and what it does mathematically is to take those signals put it in a formula

(07:39) and then matches it through pattern recognition that's basically the idea behind it I mean lots of startups have tried to use these these types of techniques I'm wondering what else played a role early on I mean how big a deal was it that from the get-go you were optimizing for smartphones so that videos were shot in portrait format and they and they were short was that was that an early distinguishing thing that mattered I think we were the first to really try this at scale um you know the recommendation algorithm

(08:09) is a very important reason as to why the the platform is so popular among so many people but beyond that you know you mentioned um the format itself so we talked about the vision of the company which is to have a window to discover and if you sort of just open that for the first time you see that it takes up your whole screen so that's the window that we want you can imagine a lot of people using that window to discover new things in their lives then you know through this recommendation algorithm we have found

(08:39) that it connects people together people find communities and I've heard so many stories of people who have found their communities because of the content that they're posting now I'll give you an example I was in DC recently and I met with a bunch of creators I heard yes and uh so one of them was sitting next to me at the dinner his name is Samuel he runs a restaurant in Phoenix Arizona and it's a taco restaurant he told me he has never done this before first you know venture he started posting all this content on

(09:10) Tick Tock and you know I saw his content it looks I was hungry after looking at it it's just great you know content and he's generated so much interest in his business the last year he made something like a million dollars in Revenue just via Tick Tock One restaurant and again and again I hear these stories you know by connecting people together by giving people the window to discover we have given many small businesses and many people your common person a voice that they will never otherwise have and I

(09:39) think that's the power of the platform so you definitely have identified early just how you know we're social creatures we need affirmation I've heard a story and you can tell me whether true or not that one of the keys to your early liftoff was that you wanted to persuade creators who were trying out Tick Tock that this was a platform where you know they would get response early on when you're trying to grow something the numbers aren't there for response so you had the brilliant idea of goosing those

(10:09) numbers a bit basically finding ways to give people you know a bigger sense of like more likes more engagement than was actually the case by using AI agents somehow in the in the process is that a brilliant idea or is that or is that just a myth I I would uh I would I would describe it in a different way so there are other platforms that exist you know before Tick Tock and if you think about those platforms you sort of have to be famous already in order to get followers because the way it's built is that

(10:38) people come and follow people and if you don't if you are not really famous the chances that you get discovered are very very low now what we have done again because of the difference in the way we're recommending content is that we've given anyone any single person with enough Talent a stage to be able to be discovered and I think that actually is the single probably the most important thing contributing to the growth of the platform and again and again you will hear stories from people who use the

(11:05) platform who post regularly on it that if they have something they want to say the platform gives them the chance and the stage to connect with their audience in a way that I think no other product in the past has ever offered them so I'm just trying to play back what what use what you said there you said you were describing a different way what I what I said is is it then the case that like to give someone a decent chance someone who's brilliant but doesn't come with any followers initially that you you have you've got

(11:34) some technique to identify talent and that you will you will almost encourage them you will you will give them some kind of um uh you know artificially increase the number of followers or likes or whatever that they have so that others are encouraged to go wow there's something there and so forth like it's this idea of critical mass that kind of every entrepreneur every party planner kind of knows about of no no this is the hot place in town everyone come and that is how you actually gain critical mass

(11:58) we want to make sure that um every person who posts a video is given an an equal chance to be able to have some audience to begin with but this idea that you are maybe alluding to that we can get people to like something it doesn't really work like that but can you get could you get AI agents to like something could you see the network work with extra AI agents that could kind of you know give someone early encouragement ultimately what the machine does is it recognizes people's interests so if you post something

(12:30) that's not interesting to a lot of people even if you gave it a lot of exposure you're not going to get the virality that you want whereas so it's a lot of you know there is no uh there's no push here you know it's not like you can go and push something because I like Chris you know I'm going to push your content and it doesn't work like that you got to have a message that resonates with people and if it does then it will automatically just have the virality itself that's the beauty of user

(12:56) generator content it's it's not something that can be engineered or over thought you know it really is something that has to resonate with the audience and if it does then it goes viral I'm not speaking privately with an investor who knows your company quite quite well um who who said that actually the the the level of sophistication of the algorithms you have going is is just another order of magnitude to what competitors like you know Facebook or YouTube have going um is that is that just hypo or do you

(13:26) do you really believe you like how complex are these algorithms well I think in terms of complexity there are many companies with a lot of resources and a lot of talent you know they will figure out the even the complex the most complex algorithms I think what is very different is your mission of your company how you started the company like I said you know we started with this idea that this was the main use case the most important use case is you come and you get to see recommended content now for some other

(13:56) apps out there they are very significant and have a lot of users they're built for a different original purpose and if you're built for something different then your users are used

to that because the community comes in and they expect that sort of experience so I think the pivot away from that it's not it's not really just a matter of engineering and algorithms it's a matter of what your company is built to begin with which is why I started this by saying you need to have a vision you need to have a mission

(14:22) and that's the North Star where you you can't just shift it halfway right and is it fair to say that because your start Point has been interest algorithms rather than social off algorithms you've been able to avoid some of the worst of the sort of the filter bubbles that have happened in other social media where you have tribes kind of declaring warning each other effectively and and so much of the noise and and energy is around that do you believe that you've largely avoided that on on Tick Tock the

(14:49) diversity of content that our users see is very key you know to in order for the discovery and the mission is to discover so sorry the vision is to discover so in order to facilitate that it is very important to us that what the users see is the diversity of content um now generally speaking you know there are certain issues that you mentioned that the industry faces you know there are some bad actors who come on the internet they post bad content you know our approach is that we have very clear Community guidelines we're very

(15:21) transparent about what is allowed and what is not allowed on our platform no Executives make any ad hoc decisions and based on that we have built a team that is tens of thousands of people plus machines in order to identify content that is bad and actively and proactively remove it from the platform talk about what some of those key guidelines are we have it published on our website um we just in March we just um iterated a new version to make it more readable so there are many things like for example no pornography clearly no child sexual

(15:55) abuse material and and other bad things no violence for example we also make it clear that there's a differentiated experience if you're below 18 years old so if you're below 18 years so for example your entire app experience is actually more restricted we don't allow as an example users below 16 by default to go viral we don't allow that if you're below 16 we don't allow you to use and the instant messaging feature in app if you're below 18 we don't allow you to use the live

(16:25) streaming features and of course we give parents a whole set of tools to control their teenagers experience as well but how do you how do you know the age of your users in our industry we do we rely mainly on something called age gating which is when you sign up for the app for the first time and we ask you for the age now beyond that we also have we also have built tools to go through your public profile for example when you post a video we try and match what the age that you said with the video that you just posted now there are questions of

(16:56) can we do more and that question is always has for every company by the way in our industry has to be balanced with privacy now if you know for example you know we scan the faces of every single user then I you know we will significantly increase the ability to tell their age but we will also significantly increase the amount of data that we collect on you now we don't want to collect data we don't want to scan data on your face to collect that so that balance has to be maintained and it's a challenge that we are working

(17:25) through together with you know industry together with The Regulators as well so look one thing that is is unquestionable is that you have created a platform for literally millions of

people who never thought they were going to be a content creator you've given them an audience I'd actually like to hear from you one other favorite example of someone who Tick Tock has given an audience to that never had that before I think um you know so when again you know when I meet with when I travel around the world I meet it for a whole bunch of (17:53) creators on our platform I was in South Korea just yesterday and before that you know I met with um before that I met with a bunch of people don't expect for example teachers there is a English teacher from Arkansas my name is Claudine and I met her in person she uses her platform to reach out to students you know there is another teacher called chemical kin and chemical Kim teaches chemistry what she does is she uses our platform to reach out to a much broader student based than she has in her classroom and they're both very very (18:28) popular you know in fact what we have realized is that stem content has over 116 billion views on our platform globally and is so significant in a year cumulative 160 billion is so significant that in the US we have started testing creating a feed just for stem content just for stamp content I've been using it for a while and I learned something new you want to know what it is apparently if you flip an egg you know on your tray the egg will last longer it's signs there's a whole video on this you know I learned this on Tech talk you

(19:06) can search for this you want to know something else about an egg if you put it in just one hand and squeeze it as hard as you can it will never break yes I think I read about that too it's not somewhere we can search for it but look here's the flip side to all this amazingness and it's really it's honestly this is the key thing that I I want to have a an honest conversation with you because it's such an important issue this question of human addiction you know we are animals with a prefrontal cortex

(19:42) that's how I think of us we have these addictive instincts that that go back millions of years and and and we often are in the mode of trying to modulate our own you know Behavior it turns out that the internet is incredibly good at activating our animal cells and getting them so damn excited and and your company the company you've built is better at it than any other company on the planet I think so what are the risks of this I mean how from from a company point of view for example it's in your interest to have

(20:22) people on there as long as possible so some would say is the first pass you want people to be addicted as long as possible that's how advertising money will flow and so forth and that's how your creators will be delighted what is too much I don't actually agree with that I you know as a company our goal is not to optimize and maximize time spent it is not in fact in order to address people spending too much time on our platform we have done a number of things I was just speaking with uh some of your

(20:54) colleagues backstage one of them Tony you know she has encountered this as well if you spend too much time on our platform we will proactively send you videos to tell you to get off the platform we also we will and depending on the time of the day if it's late at night it will come sooner we have also building tools the limit if you below 18 years old by default we set a 16 minute default time limit how many 60 Minutes six hours and we've given parents tools and yourself tools if you go to settings you can set your own time limit we've

(21:25) given parents tools so that you can pair if for the parents who don't know this go to settings family pairing you can pair your phone with your teenager's phone and set the time limit and we really encourage parents to have these conversations with their teenagers or what is the right amount of screen time I think there's a healthy relationship that you should

have with your screen and as a business you know we believe that that balance needs to be met so it's not true that we just want to maximize a time span if you if you were

(21:52) advising parents here what time they should actually recommend to their teenagers what do you think is the right setting well 60 minutes we did not come up with it ourselves so I went to the digital Wellness Lab at the Boston Children's Hospital and you know we had this conversation with them and 16 minutes was the recommendation that they gave to us which is why we built this into the app now so 60 Minutes ticket for what it is you know it's something that you know we've had some discussions of experts

(22:16) but I think for all parents here it is very important to have these conversations with your teenage children and you know help them help them develop a healthy relationship with screens I think we live in an age where it's completely inevitable that we're going to interact with screens and you know digital content but I I think we should develop healthy habits early on in life and that's something I would encourage I'm curious to ask the audience um of um which of you have ever had that video on Tick Tock appear

(22:46) saying come on I mean okay so maybe a third of the audience seem to be active tip-tock users and about 20 people maybe put their hands up there so it's it are you sure that like it feels to me like this this is a great this is a great thing to have and um but are you isn't there always going to be a Temptation in any given quarter or whatever to just push it a bit at the boundary and just dial back a bit on that so that you can hit Revenue goals etc etc is it is it are you saying that this is used scrupulously I I think um

(23:24) you know in terms even if you think about it from a commercial point of view it is always best when your customers have a very healthy relationship with your product it's always best when it's healthy so if you think about very short-term retention maybe but I don't think that's not the way we think about it if you think about it from a longer term perspective what you really want to have is a healthy relationship you know you don't want people to be you know to develop with very unhealthy habits and

(23:49) then at some point they're going to drop it right no so I think everything in moderation there's a there's a claim out there that um in China there's a much more rigorous standards imposed on the amount of time that children especially can spend on the um you know that is uh unfortunately a a very um it's a misconception so that experience that is being mentioned for tawin which is a different app is for an under 14 year old experience now if you compare that in the United States we have under 13 experience in the US it's

(24:24) only available in the US it's not available here in Canada in Canada we just don't allow it if you look at the under 13 experience in the U.S it's much more restricted than the under 14 experience in China it's so restrictive that every single piece of content is vetted by our third party child safety expert and we don't allow any under 13s in the U.

(24:49) S to publish we don't allow them to post and we don't allow them to use a lot of features so I think that that report I've seen that report too it's not doing a fair comparison what do you make of this issue you know in a lot of your you've got these millions of content creators and all of them in a sense are in a race for attention and that race can pull them in certain directions so for example um teenage girls on Tick Tock sometimes people worry that that to win attention they've discovered that by being more sexual that they can gain extra viewers

(25:20) does is this a concern is there anything you can do about this we address this in our

community guidelines as well um you know if you look at sort of the sexualized content on our guidelines if you're below a certain age you know for certain team themes that are mature we actually remove that from your experience again I come back to this you know we want to have a safe platform in fact at my congressional hearing I mean four commitments to our users and to the politicians in the US and one of the first one is that we take safety

(25:51) especially for teenagers extremely seriously and we will continue to prioritize that you know I believe that we need to give our teenage users and our users in general a very safe experience because if we don't do that then we cannot the mission is to inspire creativity and to bring joy right if they don't feel safe I can not fulfill my mission so it's all very organic to me as a business to make sure I do that but in the strange interacting world of human psychology and so forth weird memes can take off I mean you had this

(26:22) outbreak a couple years back of these devious licks where kids were competing with each other to do vandalism in schools and you know get lots of followers from it how on Earth do you battle something like that um so dangerous challenges are not allowed on our platform it's uh if you look at our guidelines we it's violative we proactively invest resources to identify them and remove them from our platform in fact if you search for Dangerous challenges on our platform today we will redirect you to a safety

(26:50) resource page and we actually worked with some creators as well to come up with campaigns and this is another campaign it's the stop think decide before you add campaign where we work with the creators to produce videos to explain to people that some of things are dangerous please don't do it and we post those videos actively on our on our platform as well that's cool and you've got you've got lots of employees I mean how many employees do you have who are specifically looking at these content

(27:18) moderation things or is that the wrong question is it are they mostly identified by AI initially and then and then you have a group who are overseeing and making the final decision um the group is based in Ireland um and um it's a lot of people it's tens of thousands of people tens of tens of thousands it's a huge it's one of the most important cost items of my P L and I think it's completely worth it now most of the moderation has to be done by machines the machines are good they're

(27:45) quite good but they're not as good as you know they're not perfect at this point so you have to complement them with a lot of human beings today and I think by the way a lot of the progress in AI in general is making that kind of content moderation capabilities a lot better so we're gonna get more precise you know we're going to get more specific and it's going to get you know is going to be able to handle larger scale and that's something I think you know that I'm personally looking forward to

(28:14) what about this perceived huge downside of use of certainly Instagram I think Tick Tock as well where people worry that you are amplifying insecurities especially of teenagers and perhaps especially teenage girls that you see they see these amazing people on there doing amazing things they feel inadequate there's all these reported cases of of depression insecurity suicide and so forth I I take this extremely seriously um so again in our guidelines for certain themes that we think are mature um and not suitable for teenagers we

(28:51) actually proactively remove it from their experience um at the same time if you search certain terms we will make sure that you get redirected to a resource safety page now we're always working with experts to understand some of these new trends that could emerge and



proactively try to manage and try to manage them if that makes sense now this is a problem that predates us the predates tick tock it actually predates the internet you know it's um but it's our responsibility to make sure that we invest enough to

(29:20) understand and to address the concerns to keep the experience as safe as possible for as many people as possible now in Congress the the main concern seem to be not so much what we've talked about but um data the data of users the fact that you're owned by bite dance Chinese company and the concern that at any moment um Chinese government might require or ask for data and in fact there have been instances where I think you've you've confirmed that that some data of journalists on the platform was was made

(29:52) available to bite dancers engineers and from the who who knows what now your your response to this was to have this you know project Texas where you're moving data to be controlled by Oracle here in the US can you can you can you talk about that project and and why if you believe it so why we should not worry so much about this issue I will say a couple of things about this if you don't mind the first thing I would say is that the internet is built on global interoperability and we are not the only company that relies on a global talent

(30:24) pool to make our products as good as technology is a very collaborative effort you know I think many people here would say the same thing so we are not the first company to have engineers in all countries including in China we're not the first one now I understand some of these concerns so you know the data access by employees is not data accessed by government this is very different and there's a clear difference in this but we hear the concerns that are raised in the United States we did not try to avoid you know

(30:54) discussing or we did not try to argue our way out of it what we did was we built an unprecedented project where we localized American data to be stored on American soil by an American company overseen by American Personnel so this this kind of protection firm for American data is beyond what any other company in our industry has ever done it's well money is not the only issue here but it's very expensive to build something like that and more importantly you know we are basically localizing data in a way that no other

(31:28) company has done so we need to be very careful that whilst we are pursuing data what we call digital sovereignty in the us and we're also doing a version of this in Europe that we don't balkanize the internet now we are the first to do it and I expect that you know other companies are probably looking at this and trying to figure out how you balance between protecting protected data you know to make sure that everybody feels secure about it while at the same time allowing for interoperability to continue to happen because that's what

(31:57) makes technology and the internet so great that's something that we are how far are you along that Journey with project Texas we are very very far along today when when when will there be a clear you know here it is it's done as far well this data is protected today by default all new U.S data is already stored in the Oracle Cloud infrastructure so it's in this protected U.

(32:21) S environment that we talked about in the United States we still have some Legacy data to delay eat in our own service in Virginia and in Singapore our data has never been stored in China by the way that deletion is a very big engineering effort so as we said as I said that the hearing is going to take me it's going to take us a while to delete them but I expect it to be done this year foreign how much power do you have over your own ability to control certain things so for for example suppose that for whatever reason the Chinese government

was to look at an

(32:55) upcoming U.S election and say you know what we would like this party to win let's say or we would like Civil War to break out or whatever how and we could do this by amplifying the content of certain troublemaking disturbing people causing uncertainty spreading this information Etc how you were required via bite dance to do this like first of all is there is there a pathway where theoretically that's possible um what what do you what's your personal Line in the Sand on on this so the during the Congressional hearing I made

(33:33) four commitments uh we talked about the first one which is safety the third one is to keep Tick Tock a place of freedom of expression by the way if you go on Tick Tock today you can search for anything you want as long as it doesn't violate our community guidelines and to keep it free from any government manipulation and the fourth one is transparency and third-party monitoring so the way we are trying to address this concern is an unprecedented amount of transparency what do I mean by this we're actually allowing third-party

(34:02) reviewers to come in and review our source code I don't know any other company that does this by the way um just so because everything as you know is driven by code so to allow someone else to review the source code is to give this a significant amount of transparency to ensure that the design areas that you described there's Kylie hypothetical cannot happen on our platform now at the same time we are releasing more research tools for researchers so that they can study the output so you know the source code is

(34:31) the input we are also allowing researchers to study the output which is the content on our platform I think the easiest way to sort of defend this office is transparency you know we give people access to to monitor us and we can just make it very very transparent and that's our approach to the problem so you will say directly to this group that the scenario I talked about of Chinese theoretical Chinese government in interference in an American election you can say that will not happen I can say that we are building all the

(35:02) tools to to prevent any of these actions from happening um and I'm very confident that with an unprecedented amount of transparency that we're giving on the platform we can hide we can reduce this risk to as low as zero as possible to a slow a zero as possible to as close to zero as possible as close to zero as possible that's fairly reassuring fairly um I mean how would the world know and what would like if you discovered this or you thought you had to do it is this is this a align in the sand for you like are you

(35:42) at a situate you would not let the company that you know now and that you are running do this absolutely that's the reason why we're letting third parties monitor them because if they find out you know yeah they will disclose this we also have transparency reports by the way where we talked about talk about a whole bunch of things the content that we remove you know that violates our guidelines government requests you know it's all published online all you have to do is search for it so you're super compelling and

(36:07) likable as a CEO I have to say and I I would like to as we wrap this up I'd like to give you a chance just to paint like what's the vision what as you look at what Tick Tock could be let's let's move the clock out say five five years from now what what how should we think about your contribution to our Collective future I think it's still down to division that we have so in terms of the window of Discovery I think there's a huge benefit to the world when people can discover new things you know

(36:37) people think that Tick Tock is all about dancing and singing and there's nothing wrong

with that because it's super fun there's still a lot of that but we're seeing science content stem content listening have you heard about book talk it's a it's a viral Trend that talks about books and encourages people to read that book talk has 120 billion views globally 120 billion billion with a B people are learning how to cook people are learning people are learning about science people are learning how to

(37:04) golf well people are watching videos on golfing I guess I haven't gotten better and I think there's a huge opportunity here on Discovery and giving the everyday person a voice if you talk to our creators you know a lot of people will tell you this again and again that before Tick Tock they they would never have been discovered and we have given them the platform to do that it's important to maintain that we talk about creation you know there's all these new technology coming in with with AI generative content that allows that will

(37:38) help people create even more creative content I think there's going to be a collaboration between and I think there's a speaker who's going to talk about this within people in AI where they can unleash their creativity in a different way you know like for example I'm terrible at drawing personally but if I had somebody I had to help me then maybe I can express myself even better then we talk about bridges to connect and connecting people in the communities together this could be products this could be

(38:04) Commerce five million small business 5 million businesses in the US benefit from Tick Tock today I think we can get that number to a much higher number and of course if you look around the world including in Canada that number is going to be massive so I think these are the biggest opportunities that we have and it's it's really very exciting so courtesy of of your experience in Congress you actually became a bit of a Tick-Tock star yourself I think um some of your videos have gone viral how about you've got your phone with you

(38:33) little Tick Tock video right now if the audience doesn't do this if you don't mind we're just going to do a selfie together how's that okay so why don't we just say hi hi hello from Ted all right thank you I hope it goes viral if that one goes viral I think I've given up on your algorithm actually I think it's gonna it's gonna take better um you're one of the most influential and powerful people in the world whether you know it or not and I really appreciate you coming and sharing your vision I

(39:09) really really hope the upside of what you're talking about comes about thank you so much thank you thank you thank you thank you thank you thank you