# Video ET Conversations with OpenAI CEO Sam Altman

## Q Summary from Sam Altman’s perspective ?

## Q Transcript

good evening ladies and gentlemen welcome to the economic Times conversations today we are delighted to host Sam Altman CEO of open Ai and the founder of chat GPT Sam is one of the most influential voices in Silicon Valley and now the center of all conversation around AI in conversation with Sam will be satyan gajwani Vice chairman of times internet Limited but before we begin a note of thanks to our partners presenting sponsor TCS co-sponsor OnePlus powered by partner Lenovo education partner SDA bocconi Asia Center digital partner land View and

[00:44](https://www.youtube.com/watch?v=undefined&t=44s)

telecast partner ET now this event is being broadcast live on etnow and also streamed on our app and website economictimes.com may I call upon stage Siva CEC of bccl to deliver the opening address good evening and welcome I always had wanted to write poetry but soon not like us so I got this stage chance to speak at the stage today so I'm going to read out a poem in the Realms where dream unfold amidst the Wonders yet Untold they say it's a vishnadi bold Sam Altman his history to be told to Sam's Vision gen AI did thrive

[01:43](https://www.youtube.com/watch?v=undefined&t=103s)

from Deep neural networks it allows a symphony of intelligence nobody knew and so this saga continues to unfold Sam Altman and Jen AI Brave and Bold a tale of innovation Untold and true a testament to what Humanity can do well none of you seem to appreciate this perfectly composed and rhyming poem this is the power of human intelligence and I am sure you already knew that this is not from my heart but AI generated to chat GPT so this perfectly composed poetry was generated by Chad GPT I am sure you have all read about the

[02:37](https://www.youtube.com/watch?v=undefined&t=157s)

student who was caught cheating on an essay about Shakespeare's 12th night because he forgot to remove the line I am sorry but as an AI language model I am not able to complete this assignment so the question before all of us this evening would machine algorithm and AI Trump human emotions intelligence and irrationality in the future it is no surprise that the one the who's who of the business world are here today to listen to the man of the moment himself it is a testament to incredible technology Sam what you have built one

[03:22](https://www.youtube.com/watch?v=undefined&t=202s)

that resonates with everyone from school kids to CEOs closer home to our new own newspaper we have seen a number of stories in the recent past about generative AI it has sky is located since chat gbt arrived on the scene no company wants to miss out on the power of generative AI and this Zoom the packed Hall is a proof of that businesses governments and even individuals clearly want to get smarter more efficient and more AI enabled what chap jpt has done is that it has made artificial intelligence accessible and into something that isn't

[04:08](https://www.youtube.com/watch?v=undefined&t=248s)

intimidating or technical but enjoyable informative while also being resourceful and entertaining with over 100 Millions monthly active users it is the fastest growing application in history today even as we comment all the incredible Innovations and observe the sudden increased competition there are some things we can't ignore it is true that the very pressing need for accountability responsibility and regulation something Sam himself has been very vocal about India is uniquely poised because it is the largest most diverse demographic of

[04:46](https://www.youtube.com/watch?v=undefined&t=286s)

the world a technology like this can be both transformational and also desertive India has the formidable challenge of providing jobs to Millions entering into the workforce every year and as per Goldman Sachs research which suggests that AI can replace the equivalent of 300 million full-time jobs our own Publications have reported that the challenge challenges that come with generative AI in the realm of fraud scams deep fakes misinformation manipulation and more equally it is possible that the power of AI is harnessed for the good of humanity

[05:31](https://www.youtube.com/watch?v=undefined&t=331s)

for the even for the moment even amidst all these risks we have much to celebrate and we shall thank you for being here Sam it is Delight to host you maybe the poem was from chat GPT but rest of what I spoke is from my heart and no matter how much technology progresses my firm belief is that human emotion and intelligence will always Trump machine algorithms or to you Sam and satyan thank you is this working hi everyone thank you for joining and of course the man of the hour Sam thank you for joining uh so what we'll do is I want to ask Sam

[06:27](https://www.youtube.com/watch?v=undefined&t=387s)

some questions myself and then after that we'll open it up to a broader set of people so everyone can can have some time you know Sam just before we start I want everyone to understand your story because you have such an interesting background in the tech ecosystem you know help us walk us through from graduating stand we're not not graduating joining Stanford dropping out Running Y combinator running a different startup before that and now running open Ai and a number of things just help us understand how you came to where you are

[06:57](https://www.youtube.com/watch?v=undefined&t=417s)

right now yeah so um I I started at Stanford where we met and I found I mean I was already in love with computer science but I really fell in love with it once I got there uh I actually went to study AI but at the time AI was really not working at all in fact very memorably one of my professors said the only sure way to have a bad career in AI is to work on neural networks we've decided those don't work um and so I got kind of discouraged and I started a company uh that was a great experience the company didn't work out

[07:28](https://www.youtube.com/watch?v=undefined&t=448s)

that well but I kind of like learned about startups and thought they were a very powerful force and something I was very excited about so I then ran YC for a while and while I was doing that I got newly excited about the idea of startups that take on hard technical challenges and I sort of thought it was curious to me more people weren't doing that um it seemed like a really valuable opportunity with some other people started openai as one of those examples and many other things which have gone on to be pretty

[07:58](https://www.youtube.com/watch?v=undefined&t=478s)

exciting but really fell in love with openai once it seemed clear that we were really going to have a chance at making true general purpose AI like a system that could do what a human can do and contribute new knowledge to society I got like really excited and wanted to go work on that and so stop being an investor and now I do that amazing so so first of all what is open AI is it just chat gbt are they the same thing are they different just help us understand what the company does we are a company that is doing research

[08:33](https://www.youtube.com/watch?v=undefined&t=513s)

and deployment to try to figure out how to build AGI and how to responsibly deploy that into the world for maximum benefit so this is unlike other Technologies well other Technologies are like this too but this is a strong case of a technology that on the one hand is the most exciting most promising coolest thing I think that Humanity will have yet built we can cure all disease we can give everybody a great education Better Health Care massively increased productivity huge scientific discovery all of these wonderful things and we

[09:04](https://www.youtube.com/watch?v=undefined&t=544s)

want to make sure that people get that benefit that benefit is distributed equitably and on the other hand there are the obvious concerns about the power of this technology used in in a negative Direction and so we want to be a force to help manage those risks so that we all get to enjoy the benefits Chad GPT is definitely what we're best known for so I guess they're sort of synonymous at this point but openai is really about this quest for AGI so help us understand I mean all of us have played with it right we have poems

[09:37](https://www.youtube.com/watch?v=undefined&t=577s)

getting written by it we've all asked it fun trivia questions tell her in answers but help us understand you you uh you know without a doubt have a better understanding of how it's getting used all around the world in all sorts of different Industries vocations reasons talk to us a little bit about some of the most interesting things that you've seen like for example what's the most surprising use case of some of the technologies that you guys have built that you've seen recently so the main thing I would say that's

[10:06](https://www.youtube.com/watch?v=undefined&t=606s)

interesting about it is its generality there's a lot of other systems that can go do this thing well or that thing well or this thing and you know many cases better than Chachi PT some not like there's not probably not a AI that can write a better poem or whatever but you know other categories you could find something that's maybe better but the fact that this one system is truly general purpose and can do so many things means that people are integrating into their workflow as a very powerful tool and so the same thing

[10:33](https://www.youtube.com/watch?v=undefined&t=633s)

that can help you write computer code one of the areas that we've seen the biggest impact is what coders are using this for doubling tripling their productivity um you know there was a paper that just came out that when Italy temporarily banned chat gbt developer productivity like fell in half on like a fairly big study and but it can do that it can also you know help you find information it can help you write a poem it can help you summarize documents it can translate things and people are using this which

[11:05](https://www.youtube.com/watch?v=undefined&t=665s)

we hoped would happen as this sort of super assistant that just makes them more and more productive and it's that generality that I think is the coolest part so with with so much ability that maybe even you guys haven't even thought about how people are using it when you when you developed it and launched it um I'm sure you've seen a lot of interesting use cases right here out of India itself can you tell us something or just give us an example of something you've seen that's really inspired you that you've

[11:33](https://www.youtube.com/watch?v=undefined&t=693s)

seen come out of the Indian market so India has been a country that has really truly embraced Chachi BT um in a way maybe you can tell me why I'm sort of curious I'm hoping to learn while I'm here we're very delighted but uh there has been a lot of early adoption and real enthusiasm from the users one of the very earliest things like in the first weeks of launching chat gbt we heard about a farmer in India who wasn't able to access government services and Via like church BT hooked up to WhatsApp and

[12:05](https://www.youtube.com/watch?v=undefined&t=725s)

some sort of complicated way was then able to and I was like that was like one of the early things we're like huh we did not think that was going to happen and and just to you know expand on it so so what I've understood about open AI is chat GPT is one implementation of the things you've built but you have capabilities to real time translate uh to transcribe audio into text and and are you seeing people use these in combination in ways that are surprising well we recently launched an iPhone app

[12:34](https://www.youtube.com/watch?v=undefined&t=754s)

that has uh speech recognition in it which is that's hooking up two of our models together and people love that but the the main point that I would like to get across is none of the current systems really matter uh like we're going to look back at gbt4 and you know I don't know if any of you have like picked up an iPhone the original iPhone in recent years but it's like wow I cannot believe we were excited about this each pixel is like that big you know it's it just feels like this like incredibly Antiquated

[13:04](https://www.youtube.com/watch?v=undefined&t=784s)

thing um the curve here is going to be much much steeper and what the systems are going to be capable of in the not distant future we think is going to be very dramatically different so this is like a system that I don't even know what the right this is like the old first like grayscale Nokia phone that looked like a little candy bar and the iPhone 14 is coming so what I would say is it's a mistake to get too focused on the current systems their limitations their capabilities the impact they're having

[13:39](https://www.youtube.com/watch?v=undefined&t=819s)

the thing that matters here is we are on an exponential curve truly um two two big Miracles I think in the field number one we have an algorithm that can genuinely truly like no tricks learn and number two it gets predictably better with scale and that we're going to look back I think on those two realizations as a turning point in human history when you put them together but what it means is that the rate of progress in the coming years the capability is going to be significant so it's totally cool that Chachi BT can

[14:12](https://www.youtube.com/watch?v=undefined&t=852s)

write that poem when a future system can like cure all disease or help us address climate change or radically improve education uh or make us all like 10 or 100 times more productive at what we do that's quite impactful it's amazing now let's flip to the other side of this because there's no doubt there's incredible power in this technology and you know with that comes challenges I want to play a clip uh maybe you guys can put on a clip of something I recently heard Sam speak somewhere and

[14:44](https://www.youtube.com/watch?v=undefined&t=884s)

we can talk about it a bit could you uh play the clip please hi my name is Sam and I'm happy to be here today thank you all for joining I also wanted to say that the gentleman on stage with me is incredibly good looking and I also want to say that you should be very careful with videos generated with artificial intelligence technology okay so you didn't say that recently clearly that was just a ploy here but and thank you by the way it was very totally agreed um but but nonetheless I think it raises a real

[15:15](https://www.youtube.com/watch?v=undefined&t=915s)

question right when you know this video if you look closely you can see the lips aren't perfectly synced but like you said this stuff is only going to get better and exponentially better fundamental questions are on authenticity what's real and what's fake how do we handle that yeah so that was like deeply in The Uncanny Valley it's very strange to watch but we're not that far away from something that looks perfect and there's a lot of fear right now about the impact this is going to have on

[15:43](https://www.youtube.com/watch?v=undefined&t=943s)

elections and on our society and how we ever trust media that we see I have some fear there but I think we're actually gonna when it comes to like a video like that I think as a society we're gonna rise to the occasion we're going to learn very quickly that we don't trust videos unless we trust the the sort of provenance we'll have techniques like watermarking detectors more than that I suspect at some point if people are saying something really important they'll cryptographically sign

[16:11](https://www.youtube.com/watch?v=undefined&t=971s)

it and you know web browsers or phones or whatever will build in some ability to say okay this is authentic but that part we can that part we can all uh adapt to like we did this with Photoshop there was a period of time where people thought if you see an image it's got to be real we learned we're like okay you know that thing is Photoshop did happen quickly videos like that that'll society would build antibodies quickly but there's a related thing that I think is getting discussed less which is not

[16:40](https://www.youtube.com/watch?v=undefined&t=1000s)

the ability to generate mass media like that but customized one-on-one interactive persuasion and I think people are going to be able to create AIS that are very good at this so it won't just be like you know I'm watching a video of you but it'll be like I'm chatting with you back and forth and it's like the most interesting compelling conversation that I've ever had that's like affecting me in ways I don't know about and that's a new thing that's different than just generated media again I think

[17:11](https://www.youtube.com/watch?v=undefined&t=1031s)

we'll find a way to build societal antibodies to it but I don't think it's discussed as much and it's going to be a challenge I also want to talk about jobs because the the natural fear is AI is going to make us redundant particularly in markets like India where we have so much of a Workforce and a lot of it is oftentimes doing somewhat wrote work should we be worried about this I mean does this affect societal disruption on employment and capitalism and all the things and how we've been running

[17:42](https://www.youtube.com/watch?v=undefined&t=1062s)

I mean to some extent yes every technological Revolution leads to job change and this will be no exception um I guess three thoughts number one job change itself is fine uh you know if you kind of look at the history of this in two generations we can kind of adapt to any amount of Labor Market change and there's new jobs and the new jobs are usually better and that's going to happen here too some jobs will go away there will be new better jobs they're difficult to imagine as we sit here and dream about the future it's going to

[18:14](https://www.youtube.com/watch?v=undefined&t=1094s)

look like the thing that might be different about this is the speed with which it could happen and I think it will require a change to the socioeconomic contract and the way governments think about this if it if it happens at a very fast pace the second thing is it's not going the way people predicted so far and I don't think it will in the future so the current systems are actually not very good at all at doing whole jobs they're very good at doing tasks and so the the nature of the job if you're say a computer programmer to

[18:48](https://www.youtube.com/watch?v=undefined&t=1128s)

stick with that example shifts to you kind of like manage a team of extremely extremely Junior developers that can only do one one minute task at a time and then someday they'll do 10 minute tasks and then they'll do an hour task but you'll still have to think of like the house is all going to fit together what I want to build and you know maybe eventually it learns that too but this idea that instead of replacing jobs it's making people dramatically more efficient and there is such a demand to

[19:15](https://www.youtube.com/watch?v=undefined&t=1155s)

overhang in most places you know if we can overnight make the world create 3x more software because we make every software developer three times more efficient that is not nearly enough that does not nearly fulfill the demand the world has for software and I think we'll see that in many other places um so another example of this is that the consensus not the consensus the like absolute belief of experts around the world 10 years ago first AI is going to come replace the physical labor jobs so truck drivers

[19:47](https://www.youtube.com/watch?v=undefined&t=1187s)

Farmers Factory workers real trouble then it'll come for the sort of easier kinds of cognitive labor then maybe eventually like computer programmers even a mathematician and then you know way in the future or maybe never because maybe it's like magical and human the creative jobs and of course we can look now and say it appears like it's going exactly the other direction but that was like really non-obvious certainly to us we started thinking we were going to build robots and it's still in some deep way sense to

[20:19](https://www.youtube.com/watch?v=undefined&t=1219s)

me seems like it should be much easier to make robots than it is to make gbt4 but here we are I think with other job impacts it's just gonna be surprising but I think the world will get way wealthier you'll have a productivity boom and we will find a lot of new things to do you talked about robots and you know we've talked about sort of the the real practical likely disruption that we're going to see because of AI but we also have to talk about that one percent like Extinction risk or that robots are going to come and take over

[20:55](https://www.youtube.com/watch?v=undefined&t=1255s)

our lives how do you think about that I mean you have actually been probably more so than the average person um cautious about this and and for us we kind of think of it as sci-fi kind of like in the in the realm of not really realistic but interesting to talk about but I think you would say it's it's something real that we have to think about for sure like I want to be super clear I don't think current systems are dangerous I don't think there's any way that gpt4 like causes an existential

[21:24](https://www.youtube.com/watch?v=undefined&t=1284s)

risk to the world but people are very bad at thinking about exponential curves and gpt10 may be a extremely different thing given the importance of getting this right even if it's a one percent chance uh I think putting a lot of effort into thinking studying like how we align an AGI how we design Safe Systems at this kind of scale is super important um and starting that early is really good I think we can totally manage through it I think we're developing techniques to mitigate it this is really why we started the company this was like

[22:00](https://www.youtube.com/watch?v=undefined&t=1320s)

our initial focus and still is our most important Focus um but yeah we need to address this so is there like a power switch in the back of your office that nobody knows about where you can just like the Jurassic Park that giant yeah it has to be big and dramatic but you pull this big thing and it shuts down all the systems if we need it exactly like that okay good okay I'm glad I feel better now okay and it works even if you're traveling right I mean yeah okay anyways um so let's talk about regulation

[22:26](https://www.youtube.com/watch?v=undefined&t=1346s)

because again I think what's really unusual is this company is a few years old but really for the for the consumer it's like less than a year old because a chat gbt and yet here you are traveling the world meeting leaders globally to talk about the importance of Regulation and not only are you doing that you are probably one of the most vocal people saying we need it and not one of those you know we'll regulate ourselves leave us alone type of things you are saying governments need to step up understand this and get

[22:55](https://www.youtube.com/watch?v=undefined&t=1375s)

involved this is very weird this is not like how most startups operate what's going on well again we started the company because we were nervous about AGI risk before you were really before people even talked about AGI um and now I think part of the reason we deploy systems is so that people confront the technology feel it understand the risks the benefits and now a lot of other people are also very excited but sharing the concern I think this is a special moment where the globe can come together and kind of get this right and we certainly

[23:29](https://www.youtube.com/watch?v=undefined&t=1409s)

would like to try to do that let's talk a little bit more about AI in India because it's so unique for us and there's so many interesting use cases that are very India specific you know one of the obvious questions we think a lot about are languages right India has one of the largest depths of languages hundreds of languages in the country now ai is by and large trained on what's publicly available what's available on most of the internet which is you know inevitably going to be mostly English

[23:59](https://www.youtube.com/watch?v=undefined&t=1439s)

probably a lot more Western focused in terms of just the sheer quantity of stuff that goes into training how do you think about biases how do you think about inclusivity how do you think about multilingual countries like India and making a product that's relevant that's useful not just for all of us fancy people sitting in Bombay and Delhi but for you know everyone in the mass of the country yeah it's it's super important to us uh we've had a big step forward from GPT 3.5 to 4 at non-english

[24:29](https://www.youtube.com/watch?v=undefined&t=1469s)

languages so gpt4 is is pretty good at say the top 20 languages and okay at maybe the top hundred we will be able to push this much further uh you know it's challenging for us for very small languages spoken by you know only a few tens of thousands or hundreds of thousands of people that that's difficult but the systems are fundamentally going to be very good at this I think and it's important for us to do now as you were saying it's not just the language it's also the history the culture the values and we want the

[25:01](https://www.youtube.com/watch?v=undefined&t=1501s)

entire world represented in here there will be some areas where the world's got to agree on like here the sort of global bounds of the system but mostly if you want to use it in the US or in India that can be under a different legal framework and then in different parts of the culture in each Place it'll it'll be very different and I think that should all be represented in there we recently launched a new program to give out grants for people that want to run experiments of the ways we can do this

[25:26](https://www.youtube.com/watch?v=undefined&t=1526s)

the way we can collect this but we we really really want to interesting you know India has been particularly unique and successful globally at building a lot of the underlying technology Stacks to support new innovation in digital with India stack UPI Adar things like this do you think India should build its own llm AGI AI engine you know in some sense should we think of this a little bit like nuclear technology where every country should be building its own capabilities and you know a little bit more nationalist in the way we think

[26:02](https://www.youtube.com/watch?v=undefined&t=1562s)

about this I mean how do you think as a country we should think about AI as something in a sovereign sense first of all it's super impressive to see what India has done I think in a way that really no other country has uh with these sort of saying we're going to do National technology really well and like make it a really like a National Asset in terms of AI strategy I think there's like a lot of things that can work I think this question of sort of AI Serenity none of us have an answer to yet feels like it's gonna be at least

[26:35](https://www.youtube.com/watch?v=undefined&t=1595s)

somewhat important but the main thing that I think is is important is figuring out how to integrate these Technologies into other services and that is an area that I think governments are behind on and don't have the answers to yet um but you know I think like hopefully we all start to use llms to make government services way better and both from like how do I enroll in this program to like how do I get better health care but but if you're in the Indian government should you be like we need to set up a

[27:09](https://www.youtube.com/watch?v=undefined&t=1629s)

team of crack Engineers to build our own open AI I mean is there a concern for us to say are we depending on like for fundamental infrastructure are we depending on something that's not owned by our country yeah I think it is good to have certainly some sort of AI research effort what exactly that should do you know should that be training ground up llms should that be pursuing new research directions should that be focused on fine-tuning open source projects I think there's a lot of options there and

[27:37](https://www.youtube.com/watch?v=undefined&t=1657s)

there's I don't yet like have conviction on the right answer but some you know nationally funded AI effort feels like a good idea one of the things that I think is so interesting is that open AI straddles this line of being a non-profit and a for-profit and I don't know how I don't know if I fully understand it I don't know if many people do I know you've raised money from investors and Microsoft is definitely one of your shareholders uh when we think about it is it do we think of open AI as something that's here for

[28:12](https://www.youtube.com/watch?v=undefined&t=1692s)

society to do societal good is it here to make money for its shareholders is it both what happens if those conflict we're definitely here for the societal good like that's super clear and that's why we put up with all this complications can you help us understand what exactly does it look like so there's like a non-profit that has a board that governs this thing that we call a capped profit where our investors can make a certain return um but if we ever need to make a decision that is in favor of societal

[28:42](https://www.youtube.com/watch?v=undefined&t=1722s)

good but not in favor our shareholders were set up to do that and one of the most controversial things I heard was that you don't own equity in open AI why is that what's going on um I mean it started just as like sort of this Quirk of our structure where we needed non-conflicted people on the board who didn't have Equity a certain number of them certain percentage and then I kind of just like never got like I forget about it until it comes up in something like this but it's I don't think it's like a particularly

[29:14](https://www.youtube.com/watch?v=undefined&t=1754s)

noteworthy thing like I made a ton of money early in my career I actively invest so I expect to make a ton more I get far more value from even like personally selfishly speaking I get far more value from like all of the other sort of benefits that come from running openai a very interesting life than I would for more money but most of all like I just believe that this is going to be the most important project of our time and I'm super grateful to work on it if you need me to like send you reminders to to keep up on

[29:45](https://www.youtube.com/watch?v=undefined&t=1785s)

it I'm happy to do that just let me know yeah so look a lot of people have flown in here from all around the country to come hear you and while understanding all this theory about AI is cool help us do our jobs better I wanted to put you in a couple roles and tell me okay you are now the CEO of a hospital in India what should you do and not theoretical go hire a couple people like tell like help me do my job better be my AI for a second here one of the things that we have heard from a lot of doctors uh is that they're they're using chat

[30:16](https://www.youtube.com/watch?v=undefined&t=1816s)

GPT with gpt4 to help come up with new ideas for tricky cases so you know input the symptoms maybe the test results say I can't figure this out what are some ideas for the differential diagnosis and in many cases getting great results back awesome now let's say you're running a bank what do you do this is like rapid fire we're all taking notes to do our jobs better here um like a sort of traditional like bank branch on the street that kind of Bank not like an investment operation yeah like a bank

[30:46](https://www.youtube.com/watch?v=undefined&t=1846s)

like a traditional bank that issues credit cards and checking accounts and all that stuff um foreign I think I would try to just like on a very brief little side journey of my career I once like helped build a mobile banking app and on the side no no it was like it would okay yeah whatever um I still think the consumer experience of banking is terrible and could be a lot of it could be replaced by like chatting with an llm it's interesting let's say you're running a university you're uh you're a

[31:21](https://www.youtube.com/watch?v=undefined&t=1881s)

Chancellor I mean we've all seen how chat gbt can definitely affect the education experience now let's say you're running a university yeah that one I think is pretty clear I would just like go redesign the education experience I would have the equivalent of like personalized tutoring interactive textbooks um I would like I would integrate it into like all parts of the learning process now now just totally theoretically let's say you're running like a large news media company in like a market like India like just as

[31:50](https://www.youtube.com/watch?v=undefined&t=1910s)

an example what would you do and let me just get my pen real quick but uh yeah what would you do just tell me um one of the things that you know there's been a lot of controversy about whether this is going to be good or bad for the publishing industry in news in particular one of the things that we've heard from journalists and reporters who are actually using the the product is that it helps them do the boring parts of their jobs better and they get to spend more time reporting talking to sources thinking of ideas and so I think I would

[32:22](https://www.youtube.com/watch?v=undefined&t=1942s)

just like encourage everyone to just start using it and now let's say you are the ministry in India responsible for overseeing technology AI Etc um you know what what would you do in that situation like what would you be doing today as a regulator I would say you know we have the G20 coming up India can play like a huge role here in global conversation about what this sort of international regulatory thing might look like and we are going to really focus on that between now and September and make sure we prioritize that

[33:01](https://www.youtube.com/watch?v=undefined&t=1981s)

can you tell us something that you haven't told other people about what's coming from open AI like maybe just some Insider information that we could use in some form or you know we kind of tell people what we're working on like it's gonna get smarter it's gonna get multimodal we're gonna try to like teach it to generate new ideas come up with help us like discover more new science we're going to reduce hallucinations we're going to give users like more control so no one feels like it's biased

[33:28](https://www.youtube.com/watch?v=undefined&t=2008s)

or at least it's biased in the way you want it to be biased we don't have like a lot of secret plans here I think always as a company to our strength and weakness we just sort of say what we think and what we're going to try to do it's amazing now the one of the most amazing things about you Sam is that you are running what is going to be one of the most impactful companies in history whenever people say impactful they know they they leave out whether it's going to be a good or a bad impact that is a

[33:55](https://www.youtube.com/watch?v=undefined&t=2035s)

very purposeful leave out because we don't know right but it's you you're going to shape the world with this we know that and this isn't your only job as I understand or maybe it's not really my only like operating it's the only thing that I'm like can you tell us what else you're doing that's like exciting you or motivating you outside of an open AI sure you're side hustle sure if we put it that way um I think we're gonna get nuclear fusion to work in the next few

[34:20](https://www.youtube.com/watch?v=undefined&t=2060s)

years at and importantly not just as a scientific demonstration but as incredibly cheap energy and at global scale so I think other than AI if you could do one thing that would like really help the world get richer increase the quality of life it's very cheap energy I think there's like a huge historical correlation there and I think we've all like lost sight of the appropriate ambition level here of how how much of an impact we could make but if we can get Fusion to work and if we can make enough of it for the world then

[34:53](https://www.youtube.com/watch?v=undefined&t=2093s)

if it can like cut the energy cost 10x plus that's pretty great I'll pick that one so your side gig is nuclear fusion I don't I I I'm an investor and sort of like helper of that one it's amazing so so just so I understand you're you're revolutionalizing artificial intelligence and energy not you specifically I think these are I think those are the two my basic model of the world uh is that the cost of intelligence and the cost of energy are kind of what compound and everything else and if we want a radically better

[35:28](https://www.youtube.com/watch?v=undefined&t=2128s)

future those are the two things we should focus on trying to like make abundant it's incredible so my last question for you is what is the most exciting thing that you are seeing globally in your own company like what is the thing that outside of everything we are all talking about and seeing that excites you about where open AI or even not just AI in general what's the most exciting thing ahead I mean I I think it's this generation of of new scientific progress if these systems can really contribute

[36:09](https://www.youtube.com/watch?v=undefined&t=2169s)

additional understanding of the world to better technology better science that that is like the sustainable way that the world actually gets better and that the quality of life increases we're not there yet it might be soon it might take a while but I believe we are going to get there and that will I think we all underestimate that it's amazing Sam thank you so much thank you to be clear Sam asked me to talk less and to open it up for you all to ask more so uh first I just want to say thank you and everyone please give them

[36:44](https://www.youtube.com/watch?v=undefined&t=2204s)

a real Round of Applause for coming here and being so open um so with that I'm going to hand it over to samidar one of our technology reporters and leads to uh lead maybe an open q a ask her own questions as well and uh and and by all means open it up for everybody here to you know take advantage of what we've got here and ask more please come come accepted okay so um Sam wanted uh okay do I have a seat great so uh sandini from open AI if you can join us [Applause] hi [Applause] um sandini is from the policy team of

[37:38](https://www.youtube.com/watch?v=undefined&t=2258s)

openai um thanks Sam I have I hope you have the bandwidth to take more questions for sure um so I just want to start um I want to refer to this one interview we did with you when you were in YC and you specifically called the big Tech is uh being hyper caps that that was something that you came up during the interview a lot of people think open AI is as powerful or more than big Tech today I I don't think anyone really that's nice of you to say I don't know I'll just come to the question all right

[38:16](https://www.youtube.com/watch?v=undefined&t=2296s)

um and that's that's because when you propose to um regulate the industry that's also because you want to be part of uh writing that regulation which makes it look like that you know the smaller startups and the companies which are sort of still burgeoning may not have a chance to ever become as big so to be very clear we we've explicitly said there should be no regulation on smaller companies on the current open source models that it's important to let that flourish the only regulation we've

[38:51](https://www.youtube.com/watch?v=undefined&t=2331s)

called for is on people ourselves or bigger which include Google yeah I'd be us in Google right now I think okay but really just us I think like we're clearly in the lead if it only we're focused on us right now that'd be fine um you know it's I totally get why people are skeptical of hearing someone running one of the companies in the industry call for regulation but the governments haven't been and we think this is important so we have a moral duty to do it and it's totally reasonable to ask that question

[39:21](https://www.youtube.com/watch?v=undefined&t=2361s)

but we feel strongly about doing it has there been any progress at all from yeah a lot actually it's been a quite a good response um we've met with heads of state in many many countries on this trip and I have been really pleasantly surprised every single time about the Nuance of not slowing down balancing not slowing down uh Innovation all the positive economic benefits everything else and realizing that if this keeps going it can get somewhere that does require Global action do anything to add do you want to add to that

[39:59](https://www.youtube.com/watch?v=undefined&t=2399s)

um uh I think the only thing that I'll add in terms of Regulation and I think something that we've called for is really setting standards and in a way guiding companies as to what we should be building um because we know these technologies will impact the world and it needs to be a two-way conversation so it really has been about kick-starting that conversation um to kind of have it be a two-way street so we're not deciding for the entire world how these Technologies impact everyone on Sam is because uh usually if you've

[40:31](https://www.youtube.com/watch?v=undefined&t=2431s)

and you've seen it for the past 15 years uh regulation always follows you know technology this is the first instance where you are proposing to regulate before it's sort of uh it is big but you know I mean the percentage of people who've used chat GPT or any of the llm models will be very small right now um does that dissuade smaller companies and I I think we'll open it up uh if you have an answer to that then to the audience yeah again we are explicitly saying there should not be regulation

[41:07](https://www.youtube.com/watch?v=undefined&t=2467s)

for smaller companies I think that's important like we're that there's got there's got to be enough Nuance in the conversation where it can't just be like either you're a CEO that says regulation is bad and then you know you are responsible for your industry and bad or you say regulation is good and then you're like trying to like do regulatory capture if that's it like then kind of what what do we want I think what we need is companies to say what they actually believe in not

[41:35](https://www.youtube.com/watch?v=undefined&t=2495s)

decided that's that's certainly up to the governments but to be able to give input in our case we think for very powerful models models that are much more powerful than what we have today we do need Global regulatory something um and if the world decides that's not what they want that's fine but there's nothing we've said and in fact we've explicitly said the opposite about anything on smaller companies um do you wanna there are no questions great just in case um let's do it yeah these are uh some of

[42:09](https://www.youtube.com/watch?v=undefined&t=2529s)

the people who had uh sent in questions so if we have the mic um yeah um gaurav uh an academy and maybe you can just introduce yourselves as well so uh hi this is gaurav from an academy five years ago you wrote a blog post which said that the next opportunity that you should pick should make everything else you have done look like footnote now you talk about spoke about Fusion today Etc and there are some clear big opportunities but let's say first entrepreneurs starting out or starting their next company or something

[42:46](https://www.youtube.com/watch?v=undefined&t=2566s)

like that and apart from the market cap or the potential or the USP what are some traits that do you think on day one say that this opportunity can be super big and can make everything else that you have done look like a footnote I mean I I think this is the most exciting time to start a company since the dawn of the internet I think this is going to be bigger than mobile it might turn out to be bigger than the internet I hope it does but it's at least that big and that means that anything you do uh like

[43:16](https://www.youtube.com/watch?v=undefined&t=2596s)

can be huge it's been I think hard to figure out what to work on you know these last 10 years because there has not been a big new technology Trend that's gonna like shake the ground and now we have one so I mean I would definitely do something in AI but what to do I'd pick what you like what you believe in make sure that the business idea has like some basic defensibility to it but like it's open season and this is a tremendously exciting time I want to add to that just put on your investor hat is there too much of frenzy

[43:49](https://www.youtube.com/watch?v=undefined&t=2629s)

around AI you're always critical of uh yeah there is too much of a frenzy Iran AI in the short term so it's it's wildly overhyped in the short term you know people saying like there's crazy stuff happening in Silicon Valley right now but I think it's still probably under hyped in the long term if we if we really do we might be wrong we might hit a wall anytime but if we really do make the progress that we think we're gonna make and we have this like magical system that can just do anything you ask no one knows how to

[44:22](https://www.youtube.com/watch?v=undefined&t=2662s)

think about that no one knows how to value that but whatever they're thinking is too low so it's yeah short-term underhyped long-term it's a short-term overhype long-term underhyped what do you think um I think I definitely agree with that I think one thing that I'd also add with AI something that's really special now is the way it can reach millions of people across the world like something we've seen in India is there's so much demand for things like education and there's just not enough people who can

[44:50](https://www.youtube.com/watch?v=undefined&t=2690s)

often active teachers actors doctors actors Loyals with things like AI although that will slowly become more and more possible so that's a very exciting future and the potential is just very large there yeah to add something to that I think we you know we were talking earlier about oh what what's going to happen to the jobs but maybe the problem is like we don't we don't have nearly enough people to do all of the jobs that we want we're we're in this like massive Crunch and if you can make way more like

[45:22](https://www.youtube.com/watch?v=undefined&t=2722s)

job doing ability available the world would consume a hundred times thousand times more I think we may really see that um more questions um any questions Mohit can we have the mic Sam Rajan here from Peak 15 partners um yesterday was Sequoia capital big 15. I got some questions for you yeah I know I know I don't you're on the hot seat today not me um Sam can you are just going to going to startups I mean as you know we've got a very vibrant startup ecosystem in India um specifically focused on AI are there

[46:10](https://www.youtube.com/watch?v=undefined&t=2770s)

spaces where you see let's say a startup from India building you know you can build on the models you know be it uh chat GPT and many others but if you want to build foundational models how should we think about that where is it that a team from India you know three super smart Engineers with you know not 100 million but let's say 10 million could actually build something truly substantial look the way this works is we're going to tell you it's totally hopeless to compete with us on training

[46:35](https://www.youtube.com/watch?v=undefined&t=2795s)

Foundation models you shouldn't try and it's your job to like try anyway and I believe both of those things I think it I think it is pretty hopeless but uh my name is Ajay Chaudhary and I founded HCL the question I want to ask is Ray goodswill and others have been talking about uh you know achieving singularity in let's say year 2045 with the kind of uh exponential growth that your products are going to do is it going to be a much earlier than 20 or 45 and what's your estimate something you want to go first

[47:14](https://www.youtube.com/watch?v=undefined&t=2834s)

um I can take that question uh maybe for Sam so I'd say timelines that's something we discuss a lot at open AI um different people tend to have different timelines for like when they think that'll happen um I think the thing that you're mentioning around like Singularity though um and some of these sort of more existential risks and like existential opportunities even perhaps um where I think right now where we are and where we really need to think about is like how do we really measure it how

[47:40](https://www.youtube.com/watch?v=undefined&t=2860s)

do we really evaluate it so we're in a place where we don't even have that right now so I think that's the starting point when we can maybe start to get some more structure around these abstract ideas um but in terms of timelines people can have their own sort of estimates and that can really vary a lot I think we're getting close enough that the definition of the term really matters a lot and people do have very different definitions what I what I would say is we need to plan for a world in which 10 years from

[48:10](https://www.youtube.com/watch?v=undefined&t=2890s)

now we have something that is like a very meaningful contribution to all of the cognitive ability of human civilization maybe as much maybe more maybe less but an important fraction and you know Singularity or not that is a very different world Kunal my oh honey sorry go ahead yeah soon I'm a creative professional uh I was just thinking while you were talking and I think a lot of new thoughts coming to my head one of the questions I have is that you know there is a something called creative satisfaction to the individual with the

[48:54](https://www.youtube.com/watch?v=undefined&t=2934s)

creation the tactile sense of it and if the distance and degree of separation starts increasing and the tool becomes so overpowering that it takes away the belonging to the product it can happen to any job actually that the ones who is doing the job sees himself or herself very distance from it completely and it almost the creation creates it's creating itself so what happens to this individual satisfaction which is related to jobs or creation or any of these things would it become self-sufficient in its in its own

[49:29](https://www.youtube.com/watch?v=undefined&t=2969s)

way and then the two lower Powers you I think what happens when you give people better tools is they do better things they do more impressive things um the floor lifts up the expectations lift up and if I feel very lucky and like very grateful to all of humanity all of Humanity's come before me everyone's built the things that I use but I would not be able to do what I do and neither would anybody else in this room without a gigantic Tech Tree of technology and better and better tools um but you know without

[50:12](https://www.youtube.com/watch?v=undefined&t=3012s)

the transistor without the operating system that people figure out how to do without all of the work that that enabled for the next step um without airplanes that let me come here and talk to you none of this would happen and so we build better and better tools that abstract more and more but we still find quite a lot of fulfillment and we operate at higher and higher levels and I think that's just going to keep going I think human creativity the desire for status fulfillment from work wanting to like contribute useful things

[50:42](https://www.youtube.com/watch?v=undefined&t=3042s)

back to the world so other people someday get to build on our stuff like that's not going anywhere the the sort of expectations are just going to go up I think Sam uh two-part questions you can choose to answer one or both uh what have you after doing AI for so long what have you learned about humans uh and what do you think uh uh is your understanding of humans after doing Ai and and if you could be in trenches and be built for more companies what would these companies look like what have you learned about humans so I can think about it for

[51:26](https://www.youtube.com/watch?v=undefined&t=3086s)

longer um sorry oh yeah uh no I can go first um man so so one is I grew up implicitly thinking that intelligence was this like really special human thing and kind of somewhat magical and I now think that it's sort of a fundamental property of matter and that's that's definitely a change to my world view I think kind of like the history of scientific discovery is that humans are less and less at the center um you know we used to think that like sun rotated around us and then maybe at least we were if not that we were like

[52:06](https://www.youtube.com/watch?v=undefined&t=3126s)

going to be the center of the Galaxy and there wasn't this big universe and then Multiverse like really is kind of weird and depressing and if intelligence isn't special like again we're just like further and further away from like main character energy but that's all right that's sort of like a nice thing to realize actually um I I feel like I have learned something deep but I'm having a hard time putting it into into words and but it's like something about it even if like humans aren't special in terms of

[52:39](https://www.youtube.com/watch?v=undefined&t=3159s)

intelligence we are incredibly important you know we I won't have the Consciousness debate here but like I think there's something strange and very important going on with humans and I really deeply hope we we preserve all of that the second part was like four other companies I would start um I think I would just like pick the verticals that I felt I knew the best and think about how AI could revolutionize them so maybe the meta answer is I should be like thinking about how you use AI to Make a Better Faster AI company

[53:19](https://www.youtube.com/watch?v=undefined&t=3199s)

that's it right yeah um yeah can we get people from yeah we see I've got many questions I didn't want to take over from the incredibly handsome guy in the room but uh many questions one is I really liked what you said in Abu Dhabi I've been reading about your various speeches around the world that seemed the most important about it being regulated like atomic energy so could you explain that more because that seems extremely important to regulate Harare has been making negative remarks or cautions

[54:04](https://www.youtube.com/watch?v=undefined&t=3244s)

about AI mainly what I've understood he says think of AI in the worst politician that you have in mind you obviously meant without naming the typical warring dictators the next question is are you able to share what you had a conversation with the prime minister and coming to human aspects I had the great opportunity of also meeting coursewell at Google and the most incredible thing he said and it stayed with me please explain that I met him eight years ago and even then he said we are able through AI to make classical music

[54:49](https://www.youtube.com/watch?v=undefined&t=3289s)

equal or better than the greatest Masters the frontier will be when we make AI or robots capable of love he was very serious about this and I haven't read much about this as if it was his own personal passion has this aspect of humanity which I hope competes with intelligence as an aspect of man progressed that AI will make something like a robot capable of Greater Love than man and dog man and wife father and son is that progressing so on the iaea yeah basically we think and we're not sure if this is the best answer we're

[55:43](https://www.youtube.com/watch?v=undefined&t=3343s)

kind of contributing one idea of many good ones to the global conversation um in the same way that we say you know nuclear materials provide some real danger some real benefits uh but they affect all of us they affect the globe let's have a system in place so that we can uh audit people who are doing it we can license it we can have safety tests you have to pass as you're doing training these systems before you deploy them there's uh there's visibility for Regulators I think that's an important idea

[56:15](https://www.youtube.com/watch?v=undefined&t=3375s)

we have been very pleasantly surprised by how much enthusiasm there is for it from around the world and you know maybe someone has a better idea which would be great I had dinner with Harari a couple of nights ago we talked we talked about this in Tel Aviv uh I do think there's a lot of like very sci-fi concerns that are pretty far out there and probably will turn out to be quite wrong but this idea of misuse by a dictator using it to oppress people is a very scary thing and that's not super far away so I think we need to

[56:51](https://www.youtube.com/watch?v=undefined&t=3411s)

and we spent a lot of time at openly thinking about us I think we need to build these systems in a way to address that risk and I think it's going to be a very complicated Global geopolitical challenge the Prime Minister we're going to see tomorrow schedules got shifted around but really looking forward to doing that and love I hope that we don't all fall in love with robots that would be a deeply depressing um what I hope happens is we are all the best versions of ourselves we all can like figure out how to be better

[57:29](https://www.youtube.com/watch?v=undefined&t=3449s)

these systems can like help us as coaches as maybe like therapists in the future as as sort of like guides and assistance and make us more present for each other and treat each other better and I really believe that can happen but they'll like all fall in love with the robot thing I'm okay with the good classical music I don't really want that future personally what do you think um I think on that I'd also say it fundament fundamentally gets to some questions about like what you believe AI can and can do I think it's still a

[57:59](https://www.youtube.com/watch?v=undefined&t=3479s)

debate whether AI models can feel emotions either now or ever um so definitely not settled um will again play into how we even measure things like that so definitely a ongoing conversation right now um yeah Alessandro yep Sam Alessandro from SDA bukuni School of Management the Asia Center education so you talked about education and indeed it has already is helping a lot but I'm looking at it from the other side uh you said it will generate a lot of new jobs we will all be more productive and gather different jobs

[58:37](https://www.youtube.com/watch?v=undefined&t=3517s)

under ourselves so what do you think are the skills that we should be teaching for the future for the future future managers to nicely manage this gai in order like right now we are teaching about leadership about strategy would it be something like psychology design thinking or a mix of everything something he probably has a better answer on this one than me I'll just add to that there has been a lot of concern raised about chat GPD becoming like a like for a lot of people and while it is fine at a very basic level there have

[59:18](https://www.youtube.com/watch?v=undefined&t=3558s)

been questions about and concerns about yeah I think one thing that I'll add to that and then I'll take that question as well is we actually also in the Democratic call for AI inputs have asked that as a question like should AI models offer emotional support or like psychological help to humans I think that's an open space and Society needs to decide what role AI will play um but I think to that question I think many of the skills you mentioned um why they're unique is because I think they play into this fundamental aspect

[59:47](https://www.youtube.com/watch?v=undefined&t=3587s)

of like people skills EQ and like long-term planning and long-term strategy um these are three things that I'd say right now ai models unclear where the growth isn't unclear how and when they're going to get there um so those three things I think are like perhaps the key things to focus on right right now um these aspects which feel fundamentally human because they rely on these things around EQ human connection sort of understanding people um so those areas might be some good areas to focus on yeah just just one question to Sam uh I

[1:00:22](https://www.youtube.com/watch?v=undefined&t=3622s)

think in April sometime you had said that open AI would start training um gpd5 but you stalled it because of concerns raised by Elon Musk and others no and it's been a few months so uh no I didn't say we were going to start training gpt5 and I didn't say anything in response to Elon uh it was We There was a letter that some people signed we didn't people asked us are you currently training gpt5 and we said no we're not current again for my earlier statement we just kind of say what we're doing we're we're not

[1:00:59](https://www.youtube.com/watch?v=undefined&t=3659s)

training it so we said we weren't that's all but it was not like we were started and then that letter came out and we stopped but is it happening anytime soon training of we have a lot of work to do before ready to go start that model like these things take a long time you can see how long it took us between gpd3 and gpt4 this is like it's not like you just like push a button and say okay today we launched gpt5 uh it you know takes hundreds of people and a lot of research that happens on somewhat unpredictable

[1:01:25](https://www.youtube.com/watch?v=undefined&t=3685s)

timelines so uh we're working on the new ideas that we think we need for it but we're not we're certainly not close to ready to start and what you stand on Elon and a bunch of others writing letters wanting to stop any sort of progress to be made on AI um I think a better framework is external audits red teaming safety tests when we finish gpt4 it took us more than six months until we were ready to release it we did your team did a lot of work on it so did many other teams to get ready to be confident that we could

[1:02:04](https://www.youtube.com/watch?v=undefined&t=3724s)

put something out that was safe but six months would not have been a magic number and we weren't going to put it out until we were ready and this was a lot of internal work external work future systems may take longer they may take less Long what I think matters is a set of safety standards and a process to ensure compliance with those because otherwise like you stopped for six months and then you you know how do you know if you made enough safety progress but you're not committing to a d ude what to a date for the next yeah

[1:02:36](https://www.youtube.com/watch?v=undefined&t=3756s)

I wish I could tell you uh like it's research doesn't like work on a calendar [Applause] no questions okay I think yeah okay I'm Raju kanoria I'm a businessman uh my question to you is that how do you make ethical choices when it comes to using AI and one example is obviously in case you are involved in an accident in a self-driving car or in a situation which can cause an accident or for that matter what you mentioned about medical science that you know in the use of medical science uh you can come up with

[1:03:25](https://www.youtube.com/watch?v=undefined&t=3805s)

different ideas on how to deal with a disease but when it comes to ethical choices how how do you think AI will play out in the future you want to go first you want me to go first all right um I think the main thing that I would say we could talk about any of those specific examples but the main thing I would say is those aren't open ai's decisions to make we really want to figure out a way that we engage with society and that we democratize the decision making on these trade-offs so uh the the the projects we've launched

[1:03:59](https://www.youtube.com/watch?v=undefined&t=3839s)

recently the funding that we've provided it's it's to figure out a way to get the global value system in the pre the moral preferences of people to decide what these systems do we could go off and make those and it's like very interesting to think about them and we have our own opinions but it shouldn't be like up to open AI to decide and one of the things that I think is so cool about this technology that's different from anything that's come before is this is a technology that can

[1:04:27](https://www.youtube.com/watch?v=undefined&t=3867s)

actually learn the collective preferences of the world for decisions like that should we take a few more questions then no um I have the mic here should I go yeah yeah swapping yeah hi I'm swathi I'm the co-founder of cash Guru we are the Performance Marketing space firstly thank you so much Sam for sharing everything so generously and being so transparent about everything uh I would personally love to know a little bit more about the company culture you've built as an entrepreneur at open IAI because it's not just you who's inspired

[1:04:59](https://www.youtube.com/watch?v=undefined&t=3899s)

it's your entire team that is building creating something that doesn't exist today so how did you inspire others as well in your team uh you should take that one that's hard for me yeah um I think I can answer um something about the company culture um what you're seeing right now here on the transparency around sort of setting this vision and being very open at the company um that's something we actually have at open AI um something that's really good about the company is how all teams can come

[1:05:31](https://www.youtube.com/watch?v=undefined&t=3931s)

together and really work together on Big Ideas together um that requires collaboration that requires sharing ideas that requires not being territorial about work um and kind of collaborating in this manner I think that's what the company is really good at and that's something that I think fam and like others have sort of set from the get-go um I think something else that's really good about the company is like no idea is a bad idea so like no matter how crazy your idea might be or like how sort of far out or how sort of like

[1:06:02](https://www.youtube.com/watch?v=undefined&t=3962s)

ridiculous it may sound in the beginning people always hear you out people always engage um so the sort of appetite for always having a discussion is also something that's really good about the company the two other things I was thinking about we we really care about Talent density so I think a lot of companies have talented people but if you have like even a few mediocre people mixed in through there they kind of like act like the neutron absorbers and stuff just goes wrong so we really try to have like extreme Talent density and the trade-off

[1:06:32](https://www.youtube.com/watch?v=undefined&t=3992s)

of that is we don't have that many people relative to what we do and so we really try to be focused like gpt4 was a whole company effort we could not have gone and done three other things at the same time um yeah somewhere there sure okay abroad I work for government of India I'm secretary to government of India and we like assistance so I asked jrgbt at 5 PM that I'm meeting Sam what should I ask him and you know the responses that I got were so easy so I think the hypothesis that it is biased is totally confirmed

[1:07:11](https://www.youtube.com/watch?v=undefined&t=4031s)

but jokes apart uh there are concerns about energy consumption in large language models and just like the crypto thing do you think for quick adoption in public spaces like the Indian government the lightweight AI is that the way forward of course there is the issues on accuracy and uh so what are your views on lightweight Ai and since you also talked about nuclear fusion I think the energy consumption is at the back of your mind for llms yeah I think look I think this energy conversation about llms has become like

[1:07:49](https://www.youtube.com/watch?v=undefined&t=4069s)

a real Sideshow these current models are just not consuming a material amount of energy compared to any like anything else I I don't understand why it's become such a topic of debate I think it is important in the long term if we really keep scaling these models up they will start to consume lots of energy but will need to be on Fusion or Renewables or something like that anyway by that point um just to get enough energy so I don't know how this has become such a meme but I I don't think it is a material Factor

[1:08:24](https://www.youtube.com/watch?v=undefined&t=4104s)

I I think you can certainly use small models for some tasks but on on the whole I think you kind of want to use the best intelligence you can unless there's a good reason not to uh and you know like we always want to make AI way cheaper and way more available and way smarter and fusion will certainly help us do that um so that's that's I think why we're excited about it we have another 10 minutes um from Excel okay okay sorry to come in again it's a conversation so I took the liberty on you said about

[1:09:09](https://www.youtube.com/watch?v=undefined&t=4149s)

AI not wanting to be human or not competing with human perhaps that's the hint I got not to take over but just like AI will take over jobs because they do it AI will do it better than say the truck driver so similarly when you say human the first thing we know about humans is it's it's human to make mistakes it's it's a human being makes he us to air is human so all we have to do is to make AI human all the qualities of a conversation but it does not air so we have always told our beloved you

[1:09:55](https://www.youtube.com/watch?v=undefined&t=4195s)

know mother wife daughter I love you but you know just this one aspect of you it really Riles me it's difficult to believe that everybody in the room hasn't said that to a beloved so this AI robot will displace your most beloved person by having a much better conversation with you without error and what you find irksum about the lover you can program it to not make that mistake and therefore you'll get the perfect lover do you want that yeah it's in in technology I'm a neophyte I haven't been the first mover I'm a late

[1:10:52](https://www.youtube.com/watch?v=undefined&t=4252s)

follower so that's how it'll go [Music] look uh first of all I think this question of whether AI is a tool or a creature is something that really confuses people and it confused me for a while too but I now think we are are very much building a tool and not a creature and I'm very happy about that and I think we should and will continue in that direction on the question of mistakes and errors uh I believe that creativity um and certainly the creation of new knowledge is very difficult slash maybe impossible

[1:11:33](https://www.youtube.com/watch?v=undefined&t=4293s)

without the ability to make errors and come up with bad ideas and so if you made a system that was certain to never tell you to never say something that it wasn't absolutely sure was a fact um I think you would lose some creativity in that process and I think one of the reasons that people don't like Chachi BT is because it hallucinates and makes stuff up but one of the reasons they do like it is because it can be creative and what we want is a system that can be creative when you want which means you know sometimes being wrong or saying

[1:12:06](https://www.youtube.com/watch?v=undefined&t=4326s)

something you're not sure about or experiment with a new idea and then when you want accuracy you get accuracy so I think there's something there uh yeah you know if people want like a and some people clearly do if people want to chat with the like perfect companionship bot that never upsets you and doesn't do that one thing that irks you you can have that and I think it'll be deeply unfulfilling and a sort of hard thing to feel loved for I think there's like something about watching someone

[1:12:36](https://www.youtube.com/watch?v=undefined&t=4356s)

screw up and grow and you know like Express their imperfections that that's the very deep part of love is I understand it um and I think like humans care about other humans in a very Inhumans care about other humans do uh in a very deep way um so that you know that like perfect lover chatbot doesn't sound so compelling to me you want to add anything all right yeah Sam yeah Hi Sam okay uh I just wanted someone at the back because they tend to get ignored all right uh Sam hi this is a bit louder oh this is Manish Manish

[1:13:19](https://www.youtube.com/watch?v=undefined&t=4399s)

I'm the CTO of TCW we're an asset manager in La so my question is um we're fully expecting uh chat upd to to have a Monumental impact in the the composition of organizations so as we start planning for the future as we start working towards the target State organization and you can use technology as an example how best do we um how best do we create a Target State organization so we have a soft Landing so we have one a soft Landing oh [Music] um I think just like a rapid adoption of the tools in a tight feedback loop for

[1:14:03](https://www.youtube.com/watch?v=undefined&t=4443s)

what what to do with them it's it's too hard to predict the future we say it's not open eye all the time it's too hard to predict the future a tight feedback loop is how we manage through it and we just try something we observe we correct and do that again and again and again and I think the world is going to reward um adaptability and speed and resilience like more than ever before because the rate of change will be so fast so I'm great to hear your views about AI I'm curious to hear your views about

[1:14:33](https://www.youtube.com/watch?v=undefined&t=4473s)

energy as well so per what the models suggest the energy consumption and Reliance on fossil Fields as of 20 years ago and today is largely the same and we have this great revolution in AI which will you know hopefully revolutionize a lot of things but I'm curious to hear your views on helion and your view on what the next chat GPT for code and code energy would be I don't know quite with Chachi BT for energy means but uh I think if we get Fusion to work and number one we can have the cost of it be like less than one tenth of current

[1:15:10](https://www.youtube.com/watch?v=undefined&t=4510s)

energy and number two we can manufacture enough generators for like the whole planet in 10 years then we're in that's great now what of course if you drop the price that much the demand will go up I don't know how much but a lot so we'll have to make even more but we'll figure that out as we go and if we can just start with replacing all base load that's pretty good yeah just um I'm curious what is your biggest fear um if you've you yourself said it could either go completely big or go wrong uh

[1:15:43](https://www.youtube.com/watch?v=undefined&t=4543s)

what is your biggest fear about AI I would like to hear something his answer um so honestly my biggest answer right now and I'll share in the five-year tank span um it is the economic displacement question and I know My Views here might differ from like many people at the company um I think the economic displacement question um for example with the Industrial Revolution when that happened long term it was great for the world great for society a lot of progress but they meet you at 50 years after the aftermath were

[1:16:15](https://www.youtube.com/watch?v=undefined&t=4575s)

really painful so I think that's what we need to figure out how do we manage this transition how do we make it least painful for society um I think in order to do that there's a lot of work that like governments people have cut out for themselves so I think that's what I'd say in the now is one of my biggest fears in worries I have a lot um I I guess the thing that I lose the most sleepover is that we already have done something really bad I don't think we have but the hypothetical that we

[1:16:49](https://www.youtube.com/watch?v=undefined&t=4609s)

by launching Chachi Pati into the world shot the industry out of a railgun and we now don't get to have much impact anymore and there's gonna be an acceleration towards making these systems which again I think will be used for tremendous good and and I think we're going to address all the problems but maybe there's something in there that was really hard and complicated in a way we didn't understand and you know we've now already kicked us off um yeah uh srivatsa Krishna from the Indian

[1:17:20](https://www.youtube.com/watch?v=undefined&t=4640s)

administrative service great to see you again Sam uh the question I have I think the smartest move you've done is to go to the regulators and say regulate us that's like saying ask the sun to stop shining because you're way ahead and the audit you talk about of every node of every server of every network will require so much of energy it's impossible for any regulator in the world to do Point number one point number two you often cite the IAA most of the UN bodies are past their expiry date if the U.N had worked Russia would

[1:17:49](https://www.youtube.com/watch?v=undefined&t=4669s)

have never invaded uh Ukraine IAA many regard is not a success but actually a failure because Collective action among nations is very very hard to bring about so how did you think of this very smart move to get ahead of government because government always almost always regulates the lowest common denominator it is not designed to do Nuance thank you that's a very cynical take and I really hope you're wrong um and and surely the smartest thing we've done is like create magical intelligence in a computer like rather than like go to

[1:18:26](https://www.youtube.com/watch?v=undefined&t=4706s)

Congress and ask for regulation I think they're like I hope incomparable in terms of the impact or the the impressiveness of them but I I totally disagree I think the world can come together on important things I think the UN is in bad shape for sure I think iea is deeply imperfect let's go do something better but those are the best analogies we have um and to say like oh the governments are just hopeless so call for regulation is some sort of 40 chess move it's just like not how we think uh it's

[1:18:57](https://www.youtube.com/watch?v=undefined&t=4737s)

this is an existential risk there's many ways to solve it if the governments don't get their act together we will try our hardest to get the companies to cooperate but we can't control what every company does and we'd at least like to ask for like the dream world and if we can't have that we'll get the companies that want to play ball together and do our best hi we can take maybe a couple of more hi Sam you know I heard Elon Musk talk about the origin of open Ai and his role in it and the argument he was making when he

[1:19:34](https://www.youtube.com/watch?v=undefined&t=4774s)

was talking about Microsoft's investment in open AI seemed to give the impression that he had an economic claim upon open AI of some sort although he was heading towards that is that completely off the charts yeah I don't really want to get into like an Elon food fight I like the dude I think he's like totally wrong about this stuff you can sort of say whatever he wants but uh I'm like proud of what we're doing and I think we're going to make a positive contribution to the world and I'll try to stay above all

[1:20:01](https://www.youtube.com/watch?v=undefined&t=4801s)

of that hi my name is srikanta AI firm called fractal I read your um the paper called Sparks of AGI which was written by the Microsoft researchers in March which is very interesting and it already shows gpd4 already shows several clues that it is it's close to AGI so my question to you is what are some of the tests that you have internally to know that you're getting really close are there any tests and can you share how you would test for that yes and you already talked about the definitions and how AJR their several

[1:20:45](https://www.youtube.com/watch?v=undefined&t=4845s)

definitions but what is the definition that you're working with and what are some of the tests that you have to test that it is close yeah great question I think this this is one of the most important like rarely asked questions about what what are the right evals for what an AGI would be um first of all that was not our paper and I don't think we're particularly close I don't think gbt4 is particularly close for me the fundamental thing that gpt4 can't do at all that an AGI could do is go figure something out go

[1:21:16](https://www.youtube.com/watch?v=undefined&t=4876s)

discover new knowledge go learn how to solve a new problem it's never seen before figure out that it needs to go do complicated planning study some things in a particular order build something write some test code and the tests that I'm interested in the evals are all around that ability there's plenty of other things you probably have different answers but that's the one that for me would be like all right this is an AGI yeah I think the only thing I'll add to that is we've actually published pretty

[1:21:43](https://www.youtube.com/watch?v=undefined&t=4903s)

much every eval we ran on gpd4 so they're there in the gpd4 technical report and the system card some of the tests that Sam mentioned are currently more qualitative so they're done by individual researchers running experiments on gpd4 there's one under the arc section that we've published so should be possible to read about it as well please hey hey Sam nitin Sharma antler uh I want to I have a question about AI with respect to web3 you're also involved with World coin a while back people were saying that AI is

[1:22:19](https://www.youtube.com/watch?v=undefined&t=4939s)

a force for centralization and web3 will take it the other way as someone involved on both sides I'd love to get your take I think AI will be a force for decentralization in a very powerful way I think whenever you can give people pretty Democratic access to very powerful tools you it is a force for decentralization and we're seeing this already with the API with Chachi BT so I also had a sort of like fear that air was going to be a big Force for centralization I think without even like being explicit about

[1:22:49](https://www.youtube.com/watch?v=undefined&t=4969s)

this my model was that like there was going to be one super intelligence in the sky that like you know we better hope was good and liked us and now what I think is it's much more like we all have like a bunch of systems that help us be more productive and you know you use AI for one thing I use it for another you and I are both like way more capable than we were in the old world but sort of still like doing our thing and amplifying our own will Just One Last Question yeah uh hey I'm Cavalier from zepto We're actually OIC

[1:23:21](https://www.youtube.com/watch?v=undefined&t=5001s)

uh and YC continuity company so thank you for all of the work you've done before opening as well um you had a conversation recently with Patrick ollison and uh within that the two of you discussed the problem of not enough Founders working on high-risk High reward very Capital intensive and over a long period you know those types of companies and those types of problems you talk briefly about giving a grant to 100 the smartest people someday I just need to get around to it I I think this is a really good idea any other ideas in

[1:23:52](https://www.youtube.com/watch?v=undefined&t=5032s)

terms of how to solve for that um I mean I think there's like a lot of things one could do uh and I think maybe the most important is just like keep like I want to keep trying to deliver the message I'm grateful of other people trying to deliver the message just talking about the importance of this and the feasibility of it and that you actually can raise money and you can get people to work on it and like sure they're gonna like you know it's a little bit harder to get started and people like it

[1:24:23](https://www.youtube.com/watch?v=undefined&t=5063s)

takes a long time and people are getting patient but like it's the most fun thing to work on and I think if we just can kind as a society like keep reinforcing that message that it is hard but possible and maybe less hard than an easy startup um I think that's that's the way to do it so uh we're gonna have to wrap this up but Sam are you going to be around yeah so Sam's here if you guys have more questions um you can come up to him he's around for a bit yeah thank you all thank you thank you very much