so I'm going to talk to you guys about artificial intelligence. and artificial intelligence is still I'm very excited about it I'm very passionate about it. and it's growing at an exponential rate. and what's exciting about it is we're not even at 1% of what artificial intelligence is going to be. and but it is an exponential trend. so by the year 2035 a lot of experts are saying that computers will be just as intelligent as a human. so that's in about 20 years. and by 2045 Ray Kurzweil has projected that computers will be more intelligent than all of humans combined. so this is an exponential trend just to give you a little bit of background about the evolution of technology and everything. we usually develop technology to replace our muscles. right to do to pick up a bigger bolder to bit a bigger truck a bigger this a bigger that and a lot of physical things have been replaced by technology in the past. in the last hundred years we've been replacing we've been doing things to enhance our brains so the calculator would be a simple example of enhancing our ways of doing math. and then we started automating things that were repetitive and then Google's another type of artificial intelligence in a sense that. if I had Google and nobody else here did I would seem like a very intelligent person. what this does is it enhances our experience but

it's not direct artificial intelligence. now if you look at right now in the stock market there's one

company in the u.s. they do 500 million automated trades per month. so this is a robot that takes tons of information makes decisions every millisecond and makes millions hundreds of millions of dollars every year. and so this is just an example of some of the artificial intelligence that's coming. this is going to happen in every industry. there's no way that a human could do that. there's no way that a human could compete with that. because there's so much information going through this system and it's moving at the speed of light. so the next generation of AI is going to be more adaptive. it's going to be self learning and it's going to be intuitive. so when things change that's when automation kind of fails. but the next generation of automation what's going to happen is if something changes it'll be able to change its own rules. and so just as an example I have an artificial intelligence company and what it does is if I give it a simple command. like if I told a person to log into a website. intuitively we know how to log into a website. we know what to do and it's the same thing if you if you can record that pattern of behavior once

you've seen enough websites a computer can do that as well. and eventually basically anything that's done on a computer will be able to be emulated. and eventually these computers will be so intelligent that it will lead to the singularity. which is what Ray Kurzweil calls it. and that will mean that the human race as we know it will become obsolete. exciting isn't it. so a lot of people think this is what's going to happen when that happens. but the reality is this has happened before.

200 years ago ninety percent of people worked in the agricultural age. they worked in agriculture. and so now 2 percent of people work in agriculture . now are we better off or are we worse off. we're better off things got better and the same thing is going to happen in the next 40 years as all these technologies get faster and faster. they're going to be we're going to see we're going to have to shift to do something else. but it's going to be it's going to be good for the for the human race in general because the robots will be working for us. and what's also

important to understand is the AI world will be virtual. most people see AI as a robot but really Google. when you do a Google search. millions of algorithms are running in the background on servers

somewhere else and it's going to be the same ideal. but AI are going to be doing tests in a virtual rule. we can call out the matrix. we can call it whatever we want. but what's going to happen is that if you had if you wanted to get find the cure for cancer. what more effective way to do it then the test on a simulated human being a billion times with a certain drug. right instead of doing it on a right to run a monkey ER and all these things you're going to do it in a simulated environment a million times and let's say this this AI is looking for a cancer drug this one is looking for a Parkinson drug and this AI will develop a theory on try to on trying to find a cure for that disease and it may find something that helps out the Parkinson's. so these

billions of AIS will all be working together and in the next generation most inventions and most cures in medical fields will be found by AI and not by humans.

now when's this going to happen. well Bill Gates said we always overestimate the change that will occur in the next two years. and we underestimate the change that will occur in the next ten. and the reason he says that is because of exponential growth. if you think about Moore's law where technology doubles every two years technology now 25 or 50 years ago if you had a cell phone if you have a cell phone now 50 years ago it's more powerful than all the computers

combined. and so computers getting faster and faster and faster and they're getting cheaper and cheaper and cheaper. and so 25 years from now they're projecting that computers will be able to a cell phone size computer. will be fit able to fit into a cell into a blood cell so you'll be able to take a vaccine and maybe it'll go inside and repair your body who knows what the technology is growing at an exponential

rate as well. so nanotechnology medical technology all these technologies are growing exponentially and we're not even in the baby phase of what's going on these trends are going to start to go up and things are going to change drastically and very quickly. fifteen hundred years ago or fifty nine years ago in the past before the Year Zero it took about fifteen hundred years to double knowledge. so if every fifteen

hundred years you would double knowledge so you have two times a knowledge and then every fifteen hundred years after that double again .and so we started writing books and we started to write things down and language and things like that and it started to happen every 250 years and then we discovered science and then it started happening in every 25 years. and then we create the created information technology happen every eight years and now we're the information age and it's happened every year. so literally every 12 months human knowledge is doubling and so we're getting to a point where the human brain can't comprehend all the information that's coming in. and so what's going to happen is 200 years ago you could have been an expert in ten different fields if you study them enough. now you can barely be an expert in one field you have to go into a section of a section of a section of a field and be an expert

in that. and to make an impact in that field will be very difficult. and so the human brain has about 86 billion neurons it's about four times as much as a chimpanzee. it's not enough so this is where artificial intelligence is going to come in. all this information that's coming in is going to get managed by artificial intelligence. but at the same time human is the human kind is going to learn from this AI. so what if we could add ten times the neurons that you have in your brain. what if you get out of hundred. what if you had at a million. billion times the neurons that you have right now into the cloud. so wirelessly connecting. imagine if you had a doctor that says I don't like technology the Internet's not for me and then you had

another one where information is doubling every year in fact it's going to double every 12 hours at one point according to IBM. so imagine one month goes by. that one month it has doubled 60 times. so you would need to take an 8 year degree to learn what happened last month. right not going to happen so the

doctor that's connected to AI he's going to walk into the doctor's office. he's going to run a Windows Update. Boom. he's learned everything that's happened in the last month and this is how things are going to happen they're going to accelerate at a dizzying pace. and it's going to be incredible. now my last slide

here's the is the matrix so at some point we're going to have to make a choice. right you take the blue pill and you believe whatever you want to believe and I don't believe that people will be forced into this system and you know if you don't want to live in reality you could go and play something or play again it already exists it's called video games. Right. but if you want it to be a world of warcraft' and be a fantasy fighter and do all that stuff you could do it in a virtual world fill your boots. but if you want to take part in the next 50 100 years which 40 years from now we will look back to today and say I cannot believe we used to do that.

in the medical field in every in every field possible we'll look back and we'll say I cannot believe the amount of dances that happen in the next 30 years there's going to be just as much change happen

that happened in the last 2,000. and technology is exploding and but it's going to be good it's going to be good for all of us we're actually going to benefit from it you might even be able to work less right we used to work 80 hours a week right when we used to work in the agricultural age now we work 40 maybe we'll work 20 right I'll probably still work 100 but that's just me. but it's going to be an exciting time and I

hope you're excited about the future. I'm excited about the future. thank you very much.