## World Economic Forum: A Conversation with Satya Nadella, CEO of Microsoft



Speakers: Klaus Schwab, Founder and Executive Chairman, World Economic Forum Geneva and Satya Nadella, Chairman and CEO, Microsoft.

Transcribed by Imara De Chickera.

Klaus Schwab: Good afternoon and welcome to what is for me always one of the most exciting sessions. Because like you, Satya I am by origin an engineer and talking about technology and the industry revolution is one of the most exciting moments I have. To talk about technology with Satya Nadella the CEO of Microsoft is of course even more exciting. You have joined Microsoft, 30 years ago and you are also CEO since 2014. You just have to look at the value creation to know how successful those years were. I should also mention Microsoft in the world economic forum you are one of the most engaged strategic partners and I heard that we are engaged together in 36 different initiatives which the forum is running, and so a great thank you. Now we will just have a discussion and not big speeches. When we look now, we discuss a lot during these meetings how the world has changed completely since we met last time. The leadership

style must also have changed. How did you adapt? What did you see as necessary adaptations in your leadership style compared to before let's say the crisis came and overwhelmed us?

Satya Nadella: Yeah, one of the biggest I think points of reflection I have is, we went, all of us simultaneously for the first time, into a tail event together. Right, so the pandemic was where the entirety of the planet was faced with a crisis together. The thing that at least I came out of this with, is a much more keener sense of what caring looks like. So, for example just before the pandemic Microsoft had this Management training program, we put in place called Model Coach Care. I must say it was just great timing. Because that caring became the currency during the pandemic. Because every one of us had to care for each other and every manager had to care for the connection they had with their people. If you ask me what is that leadership quality that I think each of us has to build more muscle in, it's that caring. Because the reality is that all of us are going to be in tail events that are going to be different. And now when we think back on whatever is the normal life, it is that ability to be in other people's shoes and have a sense of caring, I think is probably one of the most important things.

**Klaus Schwab:** So, brains is not enough, you also need the heart today.

**Satya Nadella**: Yeah, For sure. I think if we are going to make it together you need to have your heart and brain functioning together.

Klaus Schwab: Turning to technology, Microsoft of course is a leader in technological development. If you look a little bit more to the future what excites you the most?

Satya Nadella: Look, I think when you think about technology the point to reflect on is what is the opportunity to be 10x, 100x better. Right. What's the thing that we could be doing today, investing in today that's going to change something. You know which is 10x, 100x better. I always go to three layers of technology. And if you look at all the enterprise value creation throughout the history of at least digital technology, it has always come down to what I think of as the core infrastructure, the core middleware and the core interface. Let's take the infrastructure layer. The cloud as we know of, take Ukraine today, the reason why the Ukrainian government and a lot of critical infrastructure are able to continue to function in a very resilient way is thanks to the cloud infrastructure. So, in fact

we were able to work with the Ukrainian government migrate their systems and in some sense have the continuity. So, cloud is becoming more and more ubiquitous. Another great example I came across recently is, NASA for the international space station they need to keep the integrity of the suits very high. So the gloves, can't have any malfunction. So they have now computation that is happening in the space station because the latency is too high. So the infrastructure itself thanks to 5G and thanks to space is really spreading everywhere. The second layer is what is actually happening with these large AI models. Like we used to think of speech being separate from natural language and vision. Guess what going forward when I think of what we have done with our partner open AI, in terms of building these large dense multi modal models like GPT 3 they are showing real emergent intelligence.

In fact, we put something called the copilot in ticket hub. If you take the white-collar job of software developer 30% of the code of anybody who is writing code in visual studio and getup is being generated by these large scale AI models. So having a pilot for every cognitive task is right within our grasp. Then the last area is the metaverse. The idea that you can have the digital and physical come together as in fact what you envisioned in the forum itself with Global Corporation Village I think is a great example of the three areas in which infrastructure is becoming more ubiquitous, AI changing pretty much every application experience and having much more immersive experiences.

If you ask me what is that leadership quality that I think each of us has to build more muscle in, it's that caring. Because the reality is that all of us are going to be in tail events that are going to be different.

Klaus Schwab: I just read that this project in which we are working together is for the public good and it shows also how you can apply new technologies and be pioneer in applying new technology for the public good.

**Satya Nadella:** Ya, it is. In fact, for those who have not seen it. It is fascinating. Professor Schwab came up with the idea of saying what does multi lateralism look like or multi stakeholder cooperation or collaboration look like between businesses, governments, civic society and academia in a world where we can, how do you create a space like that using the metaverse. So we along with

Accenture cooperated using our mesh platform built this exhibit for the one trillion trees, which is pretty phenomenal. I think if you visit it what you come out with is a deeper appreciation of how collaboration can be enhanced when you have that in a Co presence, when you are together in a physical space, which immersively are able to feel, in fact, I think your deeper understanding of the challenge and the opportunity is fantastic. And the story behind it is that these are four different corporations working together across six different time zones cooperating. So, they built the digital twin of the space so even the design process was pretty phenomenal to see and the fact that they could land here within less than a day get it all functioning tells the story of what can happen.

Klaus Schwab: And it was only five months since we had the first phone call to discuss this initiative. It is amazing what you can do when you have a clear vision, which is something you have always for the company. Let me come back to our discussions in the earlier years. We talked a lot about regulations and privacy. Now what is needed today you feel what is your thinking? With the regulations of the EU, how can we assure the right regulation to protect the consumer?

Satya Nadella: For sure, at this point given the pervasiveness of digital technology in our society, in our lives in our work I think it's inevitable to have stronger regulatory regimes around all facets of technology. If anything, I think the responsibility of stakeholders or businesses like ours is to both anticipate and adapt to regulations verses ignore it or expect not to have regulations. Obviously with privacy, the European Union with GDPR took the lead and now even with digital services regulation and internet safety and moderation, I think a lot of regulations are coming out of the European Union, which is going to set standards. For example we took the subject rights of GDPR and made it worldwide. I think that is the approach we will take. Another thing about regulation though is that you have to ensure that you have the design process right. So, it not just about how do you meet the regulatory standards. How do you ensure that the entire organization's process of building technology ensures that the regulatory framework of privacy AI ethics internet safety are all things that you take into account starting at the design site? Because in technology it is very hard to fix things at scale. You have to start by really thinking of regulation at unit of scale of one instead of 7 billion people.

Klaus Schwab: So, it's adapting to regulation by design. Now one other

issue we also discussed is trust in the system the digital system you have to have trust not only in technology but also how it affects trust in society. You have to have trust we see in social media and you suddenly you have the additional complication with cyber security and cybercrime. You are so much exposed something could happen. How does Microsoft deal with the whole cyber security and trust issue? I would like to come back to the Ukrainian crisis because it increases the alertness you can imagine. We have a great cyber security team, and you can imagine how much we have invested to protect our system here when we felt particularly vulnerable. Well Satya, what do you do?

**Satya Nadella:** Well in fact it is very related even to the previous conversation we were having on regulations. But trust fundamentally I think is not something that you can claim but it has to be earned. I think that is sort of the place to start. But having said that I also think that trust at least from a Microsoft perspective or a business perspective is you have to start out with something very foundational, which is the social purpose of the company, the business model of the company needs to have trust with the broader society. Because after all if you don't have that then pretty much everything you do is not going to be trustworthy. Assuming that you are a trustworthy participant because when you do well the world around you is doing well. Then all these considerations, privacy cyber security, AI ethics internet safety to take four are super important criteria. In all of these what in engineering we call shift left is very important what I mean by that is take something like cyber security before we think about protection, you want to make sure that by design you're building systems that are secure. So, this is the place where some of the best design work testing work, tooling work, needs to be done so that any digital system that is being built is secure by design. So, we are investing same thing with AI Ethics. So for example What does debugging an AI biased model look like? So, what are the tools available to a software engineer so that they can ensure that bias doesn't get introduced. Or even moderation with internet safety I think these are all very important. Or Governance and privacy for example, you can't say we will deal with privacy as an after-effect, but you want to have real governance on all the data. To me that's at the core.

So, what happened for example in the Ukrainian case was that we were able to because of our cyber capability and the trillions of signals we see long before quite frankly before the attacks started the Russian activity on critical Ukrainian

infrastructure, we are able to work with the Ukrainian government to really evacuate them effectively into our cloud and protect them. Last month we published a very detailed report because our stance is that we will always be there for any of our partners in their defense. So, we are going to use both our security products and security signals to ensure that we protect any organization that is under attack and publish all of that information so that it can be broadly shared.

I think cyber is where again multiple stakeholders come together to improve the cyber readiness of all of our organizations. I think this is going to be very, very important. This is between Governments private organizations and between private organizations across the globe.

The point is resilience, and I think this definitely is an exercise that every business and country is going through. But I do believe that connectivity is still important in some sense connectivity is needed for resilience.

Klaus Schwab: If I just may follow up here. You mentioned you did an analysis of protection in Ukraine, could you share with us what the key conclusions of the analysis were?

**Satya Nadella:** The key conclusions were that you have multiple cyber actors sponsored in this case by the state going after critical infrastructure that can completely compromise functioning of a government or a broader society. So, the other piece is that the weakest link can be exploited to then hit hard at everything else. So, that is the other issue. In a connected world there no such thing as isolated system. So, one weak link that's why even in the in United States we care so much about every municipality, every state has to be protected because otherwise you can start with an attack in one small space, and it can easily spread.

Klaus Schwab: I am coming back to the answer to my first question, where you mentioned a caring leadership. You know we have had a lot of discussions on the development of ESG metrics. Some people of course could be opposed, and it has become a technical matter but you could argue it's not a technical issue. It's an issue of corporate success. Without taking care of people, without taking care of the planet, you would not have the trust of people anymore. Would you agree? And would you feel

such a company trust comes only out of how you lead the company and how people feel. Or do you have to document your performance in some way.

**Satya Nadella**: It's a great question. That's a great question. I mean in some sense your question is, what is the social purpose of a corporation or a business? Do we need business or not? I mean it's a good guestion to ask. And obviously I believe there is a purpose for a social corporation. I like the definition Klaus, of the definition Collin Mayor came up with, he says that the social purpose of a corporation is to create profitable solutions to the challenges of people and planet. And the keyword for me is being profitable because corporations do need to allocate their resources well, so that they can generate profit for their shareholders, but the solutions are to the challenges of people and the planet, which is the broad stakeholder. But I would even add one additional thing to that definition. I think that every company like ours also now has to earn the license to operate in every country and community at a time. So, when people sort of look at multinational company and say it is a soulless place, where do you belong? You actually have to prove that you belong everywhere you operate in, by creating local surplus, local benefits, to the community. I think that is when I look at Microsoft, I feel that is the core sense of purpose we have and the social contract we have that in every country. When we come to Switzerland, I should be able to point out how are the small businesses of Switzerland more productive because we are participating or the public sector more efficient or the large multinationals of this country that are globally successful because of some input of ours. So, I think that that core is important. But the interesting thing though to your ESG point.

It's not, let's do some ESG on the side. It's integrated into your core business. So, when we think about growth it's got to be equitable growth. So, when we are working in Africa, we got to ensure to create broadband connectivity infrastructure. In fact, we've done that when we worked there for around seven million people. Or we are making sure that our own operations are planet positive, so we are doing that with our own sustainability commitments. I think that, that approach to ESG where it's not on the side but is integrated into the core business model and operation is how we will all be measured.

Klaus Schwab: I think the word integrated is very important because even I have difficulty to accept when people speak about social responsibility.

On the one hand a company is an economic unit to create prosperity and certainly to create profits but on the other hand a corporation is a social unit, it is part of society. So social responsibility is a natural consequence of looking at a company as a social organism who has to take care of society.

**Satya Nadella:** Yeah absolutely. I think the core license to operate comes from that. You can't license to operate as an economic agent. You get in because you created surplus for the society at large.

Klaus Schwab: Now if I take the social dimension and I look in particular to your employees Satya. The last two years have created a completely new conception of the nature of work, and I know you are also at home office. How did the last two years in the pandemic change your relationship with your employees?

**Satya Nadella:** It's also very related to the very first question you asked about the leadership principles that perhaps you've learnt, and I talked about caring. And you know something? I've thought a lot about in relationship with our own employees and our way forward. How does it look like? I think we were interestingly enough coming out of this pandemic have got to a point where we need to refound the company. I borrow this phrase from one my colleagues in the Microsoft board, Reid Hoffman, who wrote about re-founding as something that needs to happen from time to time in companies. And I feel that this is a great time to think about re-founding. But after all, here's the thing. We hired 60,000 people Klaus, over the last two years, that's a lot of growth, that's a lot of people. Over 40% of the company or so. And then we said oh now we need to onboard them, and I realized that it is not only the 60,000 people. In fact, the entirety of the company needs to be re-onboarded. So, we are going through that. So essentially reconceptualizing re-founding the company for a changed world, changed times, because none of us are coming out of this pandemic assuming that we are going back to 2019. We have to find a new way going forward. And in that context employees and their expectations are paramount. And so, I think that it's a great place for all of us. They are one of the most important stakeholders, our employees. We always talk about that, without employees there is no Company.

Whether it's about their compensation. Whether it's about their need for flexibility and their changed expectations from leadership and management. The

lived culture experience I think are all places where we have to re-found our mission and culture and that's definitely something we are hard at work at.

Klaus Schwab: I would define it in the following way when before the pandemic we spoke about work life balance, now since the pandemic we have to talk about work life integration because we have the professional life at home, we should also enable people when they are at work to care of their family. Would you agree?

**Satya Nadella:** Absolutely. When we talk about flexibility, we have to harmonize our work and life, so that each of us has to have flexibility. In fact, one of the interesting data points, I have is that when you look at LinkedIn, if you go and look at the jobs, which now publicize the flexibility they provide. It's one of the fasted growing attributes of new jobs. I think now it's becoming an expectation that workplaces will integrate with people's need for flexibility so that they can achieve what you just described as the harmony between work and life.

Klaus Schwab: You could also take this point a little bit more forward and you could say in order to create this harmony, the purpose of the work is much more important. In the old world you went to work in order to make your living. But now in this new world when you have the two combined you speak about your life purpose.

**Satya Nadella:** Yeah, in fact when people talk about the labor market as the great resignation. In reality if you look at the data it's not the great resignation, it's the great reshuffle. Because people are not actually leaving the workforce. They are changing jobs because they want either a different profession, a different industry, a different company. It is finding meaning in your work, and whether what you want and what the company is doing are resonating. I think that is becoming more and more important. An empowered employee, an empowered labor movement is a much needed thing for companies to get to the place where they are going to thrive. Because if otherwise, work is a transactional, I think the company suffers.

Klaus Schwab: But Satya in reality in the daily life of Microsoft how do you implement it, what would you say are the key facets of this integration?

Satya Nadella: To me that's why I look at even my job and every leader and

every employee is a lived culture. Ultimately what is a company? A company is what happens to me every day when I walk into the company. Am I able to bring my best and do my best and get deep satisfaction and meaning? And if that is not achievable it is very, very hard to talk about a lot of concepts in the abstract. That is why I bring it down to lived experiences. Lived experiences are not always going to be perfect, no company is going to be perfect all the time. In our case, one of the greatest blessings we have is, we took Carol Dweck's work on child psychology around growth mindset. We took that and adapted that as our cultural meme in terms of confronting our fixed mindset each day. And that is being super helpful Klaus. I mean I am not perfect, but can I go learn and help to get better and that attitude and approach to culture I think is the only way to help everyone to implement a lived culture that really thrives and strives to get better.

Klaus Schwab: To change the subject and take something up that's very much in the mind of participants here. It is the value chain and how do you home shore or reshore to create much more resilience in your system. There is a term I have coined, trust shoring, which means you not only look at your company partner to have trust, but also the government which is behind. Does this have an influence on your corporate policies?

**Satya Nadella:** Yeah, for sure, I think what the world sort of realized is, a super optimized value chain may not be the most resilient value chain in times of crisis. So therefore, thinking about the tail event impact or your resilience is not just a tabletop exercise but every board, every company, every country is going through. But take Ukraine for example, it's very interesting. If Ukraine in the name of sovereignty did not have the ability to migrate all their critical systems to a public Cloud running in Europe, it wouldn't be resilient. I think the definition of what resilience looks like, what continuity looks like also has multiple dimensions.

But there is a certain amount of near shoring a certain amount of reconfiguring, a certain amount of multiple sourcing. This I think, is all going to become very, very key. Because that means we have to test for all kinds of tail events. The next tail event could not be the type of thing we had. It could be something else. But the point is resilience, and I think this definitely is an exercise that every business and country is going through. But I do believe that connectivity is still important in some sense connectivity is needed for resilience. But what type of configurations are there in the connective tissue. That's what I think is the real question.

Klaus Schwab: So, it's the inter-operation ability? Satya Nadella: Yeah, I think it's the network paths. See the thing is whenever you have got a graph that has only got a single path it's problematic. But if you have multiple paths you can traverse the graph much easier. That's why it's a supply web and not a supply chain.

Klaus Schwab: One last question. You are now the highest valued company. Where do you see the limit? You have had such tremendous success in the last years. Where do you see a limit? If there is a limit.

**Satya Nadella:** At the end of the day, our growth is subject to the following limit. Which is, the world around us. I always say this, Microsoft will only do well when the world around us is doing much better. So, there is no way for Microsoft to be successful given our business model if the input we produce, which is digital technology is not creating tons of value-added output that is leading to economic growth in the world. So, if there's one thing, we all have to still strive for, is inflation adjusted economic growth in the world that is aligned with the planet that is more equitable. And that to me is going to be the most important thing that we will have to achieve in the world to earn our right to continue as a business.

**Klaus Schwab:** On behalf of the participants I wish you a good path in the future.

**Satya Nadella:** Thank you.



Klaus Schwab, Founder and Executive Chairman, World Economic Forum Geneva.



Satya Nadella, Chairman and CEO, Microsoft.