Fireside Chat with NVIDIA CEO Mr. Jensen Huang and Reliance Industries Limited (RIL) CMD Mr. Mukesh Ambani

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Jensen Huang:

Surely, know him as well. An industry pioneer.

An industry pioneer. Someone, someone we can genuinely said, help digitalize India.

And, Yeah, please. And help build the fabric of, of the modern Internet India that we know.

Ladies and gentlemen, Mukesh Ambani.

Mukesh Ambani:

My friend, how are you? So good to see you.

Jensen Huang:

Very nice to see you. Very, very nice to see you. Please sit down.

Well, you know, we've been. This morning we've been talking about AI. And the last time you and I spent time together, we were talking about AI and the time before that, we were talking about AI. And now you could see we don't really have much to talk about aside from AI. And no one, no one has contributed more, Mukesh, to help India become a high tech and a deep tech India. Now you're at the beginning of that journey. You have great aspirations. I know you have deep aspirations to help India become a deep tech industry. And what gives you that conviction? And why is artificial intelligence that moment for India?

Mukesh Ambani:

So, Jensen, first, let me welcome you to our city of Mumbai.

Jensen Huang:

Thank you.

Mukesh Ambani:

A city with a large heart. We are in what is the Jio World Center, which is new, which is built by my wife. So, if I don't say it's built by my wife, I was instructed to say that.

Jensen Huang:

I'm at her house. Her house is bigger than your house. And I thought your house was pretty big. Just so you know, from Mukesh's house, I could see my house in California.

Mukesh Ambani:

So. And you know, while I was listening to you, you talked about Nvidia being exotic place. And I was thinking that when you were in India, I have got to give you my version of what Nvidia means to me. And I was just thinking about it backstage. There is a very important word link which is called Vidya. Vidya. And in Indian, in Hindi, as we are all determined to make the best LLM, in Hindi, right. In Hindi, Vidya means knowledge.

Jensen Huang:

I knew, I named the company, right? I knew it. So, everybody said, Nvidia, what a horrible name. You will never make it.

So, what it means, I knew it.

I stuck with it.

Mukesh Ambani:

So, you can take credit for this interpretation. No problem. So, it still is getting smart. It gets better, Jensen. So, if we think about Vidya, Vidya is Saraswati, and Saraswati is our goddess of knowledge. So, when you actually devote yourself sincerely to the goddess of knowledge, and you acquire knowledge, then in our tradition, the goddess of prosperity, which is Lakshmi, follows. So, what you are doing?

Jensen Huang:

32 years ago, I knew this. And now the story of Nvidia has been revealed. To all of you.

Mukesh Ambani:

So, our first principle are what you are driving is the knowledge revolution, converting into the international, into what I call the intelligence revolution. And that drives prosperity across the world for all the 8 billion people. And I think that what we are at the doorsteps of is the new intelligence age. And on behalf of everybody, I am very proud to have you as my friend and welcome to India and thank you for actually contributing to the world to bring the intelligence age in our lifetime. And, hopefully together with everybody, this can drive to more prosperity for all the 8 billion people in the world and particularly the 1.5 billion people in India.

Jensen Huang:

Mukesh, it is such an honor and such a great privilege and incredible joy to be able to contribute in this way. And as you know, the IT industry of India is world renowned for its very large scale, and not just in size, but in deep expertise of computer science. Very few countries in the world has this natural resource, this amazing natural resource called IT and computer science expertise. In the last couple of years, we've been working together to upskill and we've now upskilled about 200,000 IT professionals into the world of AI. What do we have to do together? And how can we work together to help transform India at the speed of light, really? Because everything is moving so fast to transform India into a center, not of just IT, but a center of AI.

Mukesh Ambani:

So, from my point of view, Jensen, let me tell you about my own experience in India.

First, as our Prime Minister has said, that this is a new aspirational India. What we have today is we are among the only country in the world where the average age of 1.4 billion Indians is below 35. So, what is driving our economy is not only new technology like AI, but also aspirations.

And I believe that, you know, the Prime Minister and I believe that his leadership in terms of converting India to a premier digital society has been vital and continues to drive activity at the ground level. So, it's demography, it's leadership.

The third factor is that we as Indians have the raw talent. You talked about converting 200,000 people into this, but I believe there are millions. If we now see, India has become home among all the companies across the world. We are. Our fastest growing industry is global competency centers. So, we do space research in India. We do pharmaceutical research in India. I am sure that you are thinking

of building chips in India. We are in our own energy industry. We do bioenergy industry. All the energy majors, Shell, BP, actually do their innovation in India. So, India is fast becoming an innovation hub for the world in terms of where we are and not the manufacturer.

Jensen Huang:

And so, you know, we have over 10,000 engineers here in India ourselves.

Mukesh Ambani:

So that's like our challenge. What we also have is, we also have, what I call the necessary infrastructure. And we've been fortunate that we have the connectivity infrastructure, which is equivalent to the roads. So, if you don't have roads, you will not reach your destination. So, I believe that today, apart from the US and China, India has the best digital connectivity infrastructure, 4G, 5G and broadband in the world. When people talk about Jio, and, you know, we said Jio took India from No. 158 in the world to No. 1 in the world in eight years. We, as a single company, didn't know anything about this domain. But today, we are the largest data company in the world. Our volumes are equivalent to AT&T, T-Mobile and Verizon combined.

Jensen Huang:

I would say size of local market is quite an advantage.

Mukesh Ambani:

But let me tell you, the most satisfying piece.

Jensen Huang:

Well, having one and a half billion customers, that's pretty satisfying.

Mukesh Ambani:

The best part still coming, So, the most satisfying piece is that as Jio, we delivered about 16 Exabytes of data this year. We will deliver this year. And the average in the US, you pay $ 5 a GB, the world average for data is about $ 3.5 a GB and in India Jio delivers data at 15 cents a GB. And what, and what that means is you don't.

Jensen Huang:

Do you encourage your customers to use their phones?

Mukesh Ambani:

We do. And what really that means, Jensen, is a perpetual value that technology has delivered customer value of between $ 500 and $ 700 billion a year, year on year, every year, to Indians. And this is the gift of technology to the people of India. And this is what you described as intelligence we can do to actually bring prosperity to all the people and bring equality to the world. And that is the opportunity why I described this, and this is the reason that India will be one of the biggest intelligence markets. And it's not only our aspirations, but I think it is just the raw gene pool and the raw gene power that exists in India, the youth power that exists in India, that is actually going to drive intelligence. And hopefully, once we drive intelligence for our domestic market, we will use intelligent services beyond software to integrate with the rest of the world. And Indians now, will not only export CEOs to the world's largest companies, but hundreds of millions of Indians.

Jensen Huang:

It's true. It's true. All of my colleagues, all of my friends back home, they're all Indians. All my CEO's.

Mukesh Ambani:

And hundreds of millions will deliver the world AI services, help a better world and that is why your being here is important. Your commitment to this country is important. And working together, this cannot be done by any one company, any one individual. But we all have to work together to bring this intelligence age safely to the world so that we can create a more equal world, a prosperous world, and allow the global south to catch up with the rest of the world.

Jensen Huang:

Yeah, that's what. Terrific. And, you know, one of the things that you've highlighted is just the immense amount of digital data that's available, surely, at Jio and in India. **And this leads to one of the things that I want to announce with you.** As you know, in order to lead an artificial intelligence, you need to have AI model technology that India has. You need to have data, massive quantities of data. The last thing you need is AI infrastructure. **And we're announcing that Reliance and Nvidia are partnering to build AI infrastructure here in India.**

Mukesh Ambani:

Absolutely.

Jensen Huang:

And then the thing that I will say is that in order ultimately to create that into a flywheel is one of the great advantages that India has, which is a very large population of users. And so now you have the fundamental ingredients… AI, data and AI infrastructure, and you have a large population of users that ultimately creates your AI flywheel.

The thing that I really love, and when I met Modi ji, the first time he asked me to meet his cabinet was to, this has got to be about six years ago. He asked me to address this cabinet about Artificial Intelligence. And I was so surprised. It was literally the first time any government leader, any national leader asked me to address his cabinet on this particular topic. It was long before anybody was talking about Artificial Intelligence. And my last visit with him, he said this, and it was really quite profound. He said. I was explaining to him the concept of AI infrastructure and why it's essential for every nation to have their own AI infrastructure, like their own communication, their Internet infrastructure, their roads, energy. Of course. And of course, intelligence should be part of your infrastructure, and the manufacturing of intelligence should be part of your infrastructure. And he said this, he said, makes complete sense that India should manufacture its own AI. Manufacture your own AI. You should not outsource, you should not export data to import intelligence, that India should not export data to import intelligence. And he said, it's like, Modi ji said, India should not just export flour to import bread. We should add value to the data ourselves. And the partnership that we have is to start that journey to build the underlying infrastructure so that India could have your own infrastructure. You surely have your own computer science expertise, and you also have your data, you have a giant population of users to drive that flywheel.

And then one more comment. This is the thing that he was most inspired by six years ago. He said that Artificial Intelligence has the ability to elevate the entire population of India. And the reason for that, I was talking earlier to him about the fact that there are so few people in the world who knows how to program a computer. Programming is not easy. Here in India, it's the largest population of any programmers in the world. However, still, programming is not easy. Most people don't know how to program Python or C++ or, you know, Pascal or Fortran or Java, but everyone knows how to program an intelligence. And so, the ability to program computers is available to a small population. But the. The ability to program AI is something that everyone can do. And if AI could be put into the hands of every citizen, it would elevate and put into the hands of everyone. This incredible

capability you and I get the benefit from called computers. And this computer could now benefit everybody in society. He explained that back to me.

Mukesh Ambani:

Absolutely. And I think that that is why I started by saying that we are very fortunate to have a visionary leader who believes not only in vision, but in execution. And you know, Jensen, where I see our partnership and is really, in a sense, I was waiting for your GB 200's to mature, because like you from first principles, I don't like doing anything but the best technology. And now your GB 200 is undoubtedly the best technology. Looking forward…

Jensen Huang:

Mukesh, all my technology is the best technology, including the next one.

Mukesh Ambani:

India will start with what is the absolute best that you have. And I'm happy to like what we are doing at Jamnagar is we are now ready for big scale up. So, we are building infrastructure, and we think big. So, we are building infrastructure for 1 GW, which can be expandable to multiple at one location. We already have the green power so that we are not dependent on anybody else for power. We are building this so that we can scale this. And as your multiple order of magnitude technologies come, we will build our infrastructure, and we will. One important piece that I believe is important is that for India and Indians, we have to repeat a Jio for intelligence to be really affordable, available to the common people. And towards that, it is important that we design and build infrastructure so that to use AI, our customers don't have to change a phone, don't have to change their computers, but they can still get good quality AI. And we take the burden of putting that infrastructure together, and I think that is what we are counting on, you and us to do. On top of that, I have again, great respect for my friend Mark Zuckerberg, because by bringing open source to the world of intelligence, he has given everybody the opportunity to participate in this revolution.

Jensen Huang:

Yes, Llama 3 has activated every single company, every single industry around the world. It's incredible.

Mukesh Ambani:

And what you have done with Llama 3 also, right? And all of us, we can build on top of that. And to my mind, this move of Mark will be written in the history, right, when we look at it a hundred years from now, that open source, all the big things in the world have, have helped an open source like Linux was open source. And I think that at least from an India point of view, we can use Llama as a base model. It allows all of us to develop on top of a state-of-the-art model. And surely then we can fine-tune, train, retrain, and do everything else. And I am sure that there is somebody in this audience who is very bright and very young, and we will have into the future an Indian model, as you very rightly said, which might be 10X of Llama. And that will happen from India. And I hope and pray that our young people will do that. But to start off with open source is great. On top of that, all your tools. So, the foundry tools that we have, we are looking forward to a development center where we take more of your tools and train hundreds of thousands of developers in India to use all the enterprise tools, to use the omniverse tools, so that we can really apply intelligence in a practical way. And to me, this is just the starting of this intelligence age. It's a multi-decadal journey.

Jensen Huang:

Mukesh is talking like an engineer. Guys, listen. Listen to him go. He's starting to sound like a 28-year-old engineer. What do you guys think? I like it. I like it.

Mukesh Ambani:

And that's why that's what we are going to do together. And that's true. I can assure you that, like we did in data, in a few years from now, we will surprise the world with what India and Indians can achieve in the intelligence market.

Jensen Huang:

Thank you. Mukesh, it will, certainly, certainly, we would agree that this is an extraordinary time for the world, and this is an extraordinary opportunity for India to have precisely the conditions that have such a large population and large industry of computer scientists at a time when this industry, the computing industry, is going to become the intelligence industry. Leveraging on everything that you have, leveraging on everything that you know and your indigenous advantage, enormous amounts of data, a large population of consumers to drive that flywheel of intelligence to data. Data to intelligence. Intelligence to data. And have the national will to go do something about it. This is such an extraordinary time. And, I am honored and privileged to be partnered with you to do this. And let's make it a

promise today that we will work together so that India could take advantage of the intelligence revolution that's ahead of us. Okay, Thank you very much.

Mukesh Ambani:

Thank you. Thank you so very much. Thank you.

Jensen Huang:

Ladies and gentlemen, Mukesh Ambani.

Mukesh Ambani:

Thank you. Thank you.

Thank you, and Jensen, my friend, right. You are here only a few days before Diwali. Diwali is our new year. It is where we worship the goddess of prosperity. So, on behalf of all of us, we wish you. A very, very prosperous new year. And to all of you, a happy Diwali and a Happy Happy Diwali, everyone.

Thank you, my friend. Thank you.

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