

In AI, I is for India

Global technology majors like SAP, Adobe, IBM and Microsoft are building cutting edge artificial solutions in India for the world. Top CEOs of these firms talk about how the country is becoming an important part of the research, which will drive this disruptive force in the future, report **Romita Majumdar** and **Surabhi Agarwal**



Shantanu Narayen, chairman and CEO, Adobe



Brad Smith, vice-chairman and president, Microsoft



Punit Renjen, incoming chairman of SAP



Arvind Krishna, chairman and CEO, IBM

AI WILL BRING MORE TALENT INTO CREATIVE FIELDS: ADOBE

Adobe Inc's India teams are helping build the next-gen AI-ready solutions for the company, said CEO Shantanu Narayen.

He added that the company is driving development of several global products from India. "There's this recently-released feature called Generative Recolor — think about text, you identify a text and you want to get a prompt or a vector to start your creative process — all of that development is happening here, right here in the Noida office," he explained.

The developments happen on all three layers, Narayen said. "We're developing models here based on our data for the domains in which we are interested, and we're building and collecting data in an appropriate way. And we're also building interfaces for each of our applications," he said, adding that India operations are at the core of the work done globally.

Answering a question on whether AI is a threat for creative industry, he said that the adoption of AI will help bring more talent into creative fields. "We fundamentally believe that they will enable creatives to be more creative. Secondly, it'll allow more people to participate in the creative profession."

However, he added that Adobe will have a role to play in helping to understand how AI models used in its solutions were built, how they will be deployed, and whether the final output was created by humans or machines. "I think those are problems that we're working on, and we've stepped up to them," he added.

Talking about India as a revenue centre for the US headquartered company, he said that while it is still behind other top geographies, the growth rate of the business here has been strong. "If you look at it in terms of the growth rate right now, on the creative side, the documents side or on the marketing side — which is enabling businesses to be digital — India's growth rates are great," said Narayen.

Adobe India is looking to bet on large banks and retail firms among other large organisations to further augment its growth in India. "Take the financial services, look at these giant financial institutions like HDFC, ICICI, SBI, etc, and how they're thinking about digital, that's an opportunity for us," Narayen said.

BUILDING BLOCKS

"Be it on the creative side, documents side or on marketing side, India's growth rates are great. Several global products are being developed from India too."

AI COULD BRING BIG BENEFITS FOR INDIA: MICROSOFT

Microsoft India's teams are at the forefront of research on the efficient use of AI solutions, said Brad Smith, vice-chairman and president, Microsoft. While the India teams work on a variety of global solutions, research on AI has been a big part of the work driven from the country, and at a time when Microsoft itself is leading the global AI discourse.

"What I'm most struck by in some ways is what we're doing in AI. On both, the research side with Microsoft Research Bangalore and on the India Development Centre (IDC). There's a lot of work going on here, and we're figuring out how we can better tune and develop and deploy AI models with GPUs," said Smith, who is the senior most executive at the firm after Satya Nadella.

GROWTH CENTRE

"India is the second most important country for Microsoft after the US when it comes to the development of technology to do that."

"What's unique here, is developing the technical know-how to better use AI across multiple languages. This is an extraordinary place to do that," said Smith. He said that these translation solutions will also have a significant impact in making knowledge more accessible for a large audience within India. "Think about what it does for a country that speaks many languages, and for its ability to translate. Think about what it does for a country where not everyone is literate, and the ability to speak and get answers," he explained. "But we have to focus on how we upskill our people. But that, to me, will be a hugely important priority," he said, adding that Microsoft India works on every global product solution within the company.

There is a flip side too, though. AI is more capital intensive, he added, and the amount of money that's being spent on infrastructure, GPUs, CPUs, energy, fibre and buildings, etc, is huge. So the capital investment on AI will grow much faster than the costs related to people, he predicted. "We're going to see the people side grow slower than the capital side."

But, India is continuing to play a more important role for Microsoft and it will continue to play a more important role, he added. "India is the second most important country for Microsoft after the US when it comes to the development of technology," he said.

Smith said that AI could bring more benefits to a country like India or the global South than some of the more advanced economies in the OECD region due to their rapidly aging population.

INDIA'S R&D FACILITIES ARE TOP FOCUS: SAP

The Indian talent base plays a very important role in global software management platform SAP's thought leadership and R&D focus, said Punit Renjen, CEO-emeritus of Deloitte Global and the incoming chairman of SAP.

The company, which has over 20,000 developers and engineers based out of its Bengaluru unit, is also driving a large chunk of its AI focus from this region. "I'll be coming in December and touring the SAP R&D facilities. India plays a really important part in SAP's R&D and thought leadership," said Renjen, adding that Deloitte also has a similar focus for India. "There are 1,00,000 professionals in Deloitte that call India home. Of the company's workforce, 25 per cent are India-based. In the case of SAP today, it's about 17-18 per cent. I can assure you that Christian (Klein, CEO) and his team are focused on getting it to a higher level."

Ranjen said that SAP is making the right investments to boost its presence in the AI marketplace. "We'll be investing over a billion dollars. It's going to be a multifaceted investment thesis — investing in making the product portfolio AI-enabled is just one area," he said.

Investing in new areas of doing work would be a second, and forming ecosystems and alliances will be the third. "SAP and Microsoft have an alliance, SAP and Google have an alliance. So, all of this together is how companies will play the AI game," Renjen said.

In April this year, Sindhu Gangadharan, MD and SVP, SAP Labs India, said that 40 per cent of the global research and development at SAP happens out of Bengaluru. A quarter of the patents filed by SAP are also coming out of Bengaluru.

India is the fastest growing market for the company, and in the past few years, an average of 3,500 employees were hired. And with increasing focus on AI, governments and institutions need to intensify skilling initiatives to effectively tap employment opportunity created by this technology. "Millions of people are coming into the job market. We need to absolutely be reskilling them, so they can work in this new world of digital cloud AI," he said.

He added that while Indian institutes produce a lot of talent, they also need to be prepared for the global talent market. "We churn out a lot of individuals, but they're not all world-class, which is what's required for India to compete globally. We need to enhance the quality of education," he added. And AI can be of great help in that area.

CHANGING TIMES

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AI WILL HELP EXPAND BUSINESS OPPORTUNITIES: IBM

IBM Labs in India, located across Bengaluru, Pune, Ahmedabad and Kochi, are working collaboratively to build solutions for global clients, said Arvind Krishna, chairman and CEO, IBM.

He added that in order to effectively leverage the AI opportunity, India will need skilled workforce numbering a couple of millions.

He said that the company is seeing a lot of work in AI solutions across its India footprint, including research, consulting and BPO teams.

IBM teams in Bengaluru, Pune and Kochi are also involved in building AI products, he added. "We run a globally integrated enterprise. So, our own people can leverage computing facilities in India, like in Chennai and Bengaluru. They can access our computing facilities across the globe," he said.

Citing the example of IBM's Kochi facility, he added that the company has over 1,000 employees building solutions for global clients while adding to the Indian employee base.

While addressing concerns around AI replacing human roles across organisations, Krishna said that AI will only help free up talent to expand business opportunities. "If you presume a constant number of clients and a constant amount of work, AI will probably reduce talent requirements. But in the world that we live in, it is a competitive advantage where people can win more business and increase with a somewhat slower rate of employee additions," said Krishna, adding that it will eventually lead to more employment.

Krishna expects that the demand for artificial intelligence, much like during the BPO and IT services waves, will be a positive opportunity for the Indian tech industry and its workforce to leverage and grow further.

BRIGHT SIDE

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And finally, as AI usage gains prominence, countries will need to work on building their own capabilities in large language models and computing infrastructure to support sovereign AI capabilities, Krishna said, further adding that the government should also possibly consider investing in this area, given that will cost only "millions and not billions".