Google’s Mitesh Agarwal: “When you embed AI into your workflows, it’s magic”

The tech expert explains how generative AI is transforming search and why every business needs to embrace AI or get left behind.



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They say it’s not the strongest of the species that survives but the one most adaptable to change. And someone who has experienced a lot of change over three decades in tech is

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Mitesh Agarwal, Managing Director of Solutions & Technology for Google Cloud Asia-Pacific.

With a background at Sun Microsystems and Oracle before moving to Google, Agarwal has spent his career helping organizations transform themselves via data-powered innovation.

Now, with artificial intelligence (AI) at a critical juncture, we are about to experience a revolution unlike anything before, he said during a special session in Singapore with Philip Moscoso, professor in the Operations, Information & Technology Department at IESE.

Here they discuss how we'll need to adapt to survive.

There have been many tech shifts over the years: personal computers, the internet, smartphones. Now we have generative AI. How do you see this latest shift?

Everything goes through seasons. So, with generative AI, it feels hot right now, but eventually we will have to evaluate: Does this help me run my company better, save time, launch products faster and be more profitable? Are my employees happier?

Think of the pandemic: videoconferencing tools had been around for a long time, but people insisted they needed face-to-face relationships to do sales, for example, until that became impossible, and then everybody pivoted overnight and realized you could do sales virtually.

So, one thing is having the technology, but the shift happens when people collectively decide it makes their lives better. I think the difference with generative AI compared with other big historical shifts, like the telephone, is that it is happening much faster.

Moore's Law speaks to this phenomenon of the accelerating speed of technology, but some say there are limits to this. And we have seen tech bubbles in the recent past. Do you think generative AI is being overhyped?

When people treat it as a silver bullet for everything, then yes. But if people start using it to search for information in a different way than they used to, discovering new things like a child discovers, then there may be genuine possibilities for change and innovation, for making our lives better, as I mentioned before.

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Regardless of whether generative AI is hype or a bubble, the point is, tech shifts and changes are happening, and will continue to happen, whether we like them or not, and the important thing is: how do we approach change?

As an operations professor, I often see companies start with enthusiasm, putting in a lot of money and effort, but then they start questioning return on investment. How do you see this in relation to the current tech?

For me, tech needs to pass three tests. The first is what I call the toothbrush test, where it becomes a user habit — the tech becomes default.

The second concerns what you mentioned: ROI. With tech, the costs will go down over time. The question is whether you want to be the first, when the tech is still new and expensive, as it is with virtual reality (VR). A key question is whether generative AI will improve productivity. So, ROI could be measured as: I have 100 employees; if each employee is wasting an hour a day doing something that AI could have done, then it's one hour of productivity, multiplied by the average dollar you pay them, multiplied by the total number of employees.

A third test is: can we truly change the way we sell to and service our customers? For example, how many of you, when you contact a call center, have ever experienced the lovely one hour wait? Fundamentally changing that would impact your customer experience and your bottom line.

Of course there are other considerations — such as is the tech going to be net harmful — but basically these are the main tests the tech has to pass or else it's not going to be adopted or workable.

But what about the perceived harms, such as people losing their jobs?

I think there's more hope than challenge there. Every single technology that's been disruptive throughout history has raised the same fear of losing jobs. With AI, some jobs will need to be enhanced, the same as when data-driven economies were born — data operators evolved into data scientists and analysts — and the same thing is going to happen with generative AI.

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The real issue is: how can employees become more efficient? Studies show most employees spend an average of 30-45 minutes per day searching for solutions or information. If I can reduce that to two minutes, that's adding productivity and maybe we can all go home earlier or experiment with a four-day work week and have better work-life balance.

Again, it goes back to our willingness to change. The fact is, the era of AI is with us, so are we going to upskill ourselves or get left behind? And going back to what I said before about the faster pace of change, what used to take 10 or 15 years before it got us might now get us within a year or two.

That said, I think we're better prepared than ever before to be able to rescale ourselves. And I think it's the responsibility of companies like Google to make tech adoption as invisible as possible.

So, now you're composing an email in Gmail without having to think much about it, you only need to edit it, rather than spending 10 minutes thinking about what you want to say. This is a simple example of how AI becomes a really efficient assistant.

As such, if someone were to tell me they didn't have the ROI for this, I wouldn't believe them.



IESE professor Philip Moscoso discusses the future of AI with Mitesh Agarwal of Google Cloud Asia-Pacific in Singapore

Some companies say these new AI developments are leveling the playing field. How do you see the competitive landscape reconfiguring itself?

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At Google, search has been, and for the foreseeable future will be, our primary function. Almost everything we do today starts with a search, and our experience of that search remains super important. It's no longer about who came up with the first product or technology, but who dramatically changes the experience. And generative AI is going to fundamentally disrupt search — making it more contextual, using natural language rather than keywords to search, where it's predictive, where it's semantic, meaning it understands intent.

If that's the future of the search experience, then the question for us is: how can we use AI to get ahead, so the search experience starts on Google rather than someplace else? AI has democratized the ability to solve the same user problems; the challenge is to come up with solutions better than anyone else.

The great differentiator is going to be user information, which belongs to me, and knowing how my users interact with me. That's where natural language processing can differentiate the experience because your users keep training the system, again and again, which gets embedded into your workflows. That creates competitive advantage.

What are some different consumer versus enterprise considerations?

There are many useful and fun applications for generative AI in the consumer domain. But when we look at business fundamentals, what are the choices for a company to integrate this tech? Are there guarantees it won't use your proprietary data to train the model? If everyone is using the same foundational model, how do you differentiate? Is your data protected and how can you monetize it?

In whatever workflow process — whether HR, payroll, admin, customer experience, support — see how you can embed AI in that process, because when you do, it's magic.

Finally, can you generate positive feedback loops that get continuously fed into an AI model that you own and operate? This is key.

For companies, I would recommend you start by looking at three or four things you think the tech is mature enough to help you solve. And keep revising those areas every six months. Explore how generative AI can solve real business problems around productivity, customer experience and support. Those are good places to begin.

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You've raised a lot of issues that demand some kind of regulation, but regulators are frequently behind the curve. How should regulators act?

When we talk about "regulating AI," what is AI? Is it the tech we've already gone ahead and produced or what we announced we were going to do?

In 2016, Google came up with eight responsibility principles on AI, which we still adhere to and use to govern ourselves. Do we ask governments if they would like to use a version of that?

Different countries and regions take a different regulatory approach: the EU's is very different from Asia-Pacific's. I think Singapore took a proactive approach — making sure the general population and government were both embedded in the process — instead of just letting things happen or leaving it to one authority to regulate how banks should use AI, for example. It's better to regulate early rather than after the fact.

Beyond the challenge of the tech itself is the management culture. How do you navigate that?

There are three aspects to technologies like generative AI: how they impact us as users and consumers; how they impact businesses, organizations and governments; and how they impact society. And in all those cases, culture may be the biggest barrier.

I often hear companies say they want to become data-driven but I rarely see it. And the adoption issue never has to do with the technology, it's always the organizational culture, the silos, the lack of top-down commitment.

It all comes down to humans, because humans need to make decisions: is the board going to support this? Culture is absolutely central.

Should we be concerned about the effects of generative AI on the next generation, the leaders of tomorrow?

I believe AI, if used responsibly, will have a net positive influence on the next generation.

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Responsible AI habits will have to be taught, just as we had to teach children how to search for information online when everyone thought the introduction of internet search was the end of education.

Think of AI like having your own personal tutor. Just as the internet and mobile phone revolution enables the remotest of towns to be reached, a personalized AI tutor could double, triple, quadruple or even multiply your per capita knowledge base by 100. Imagine that!

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