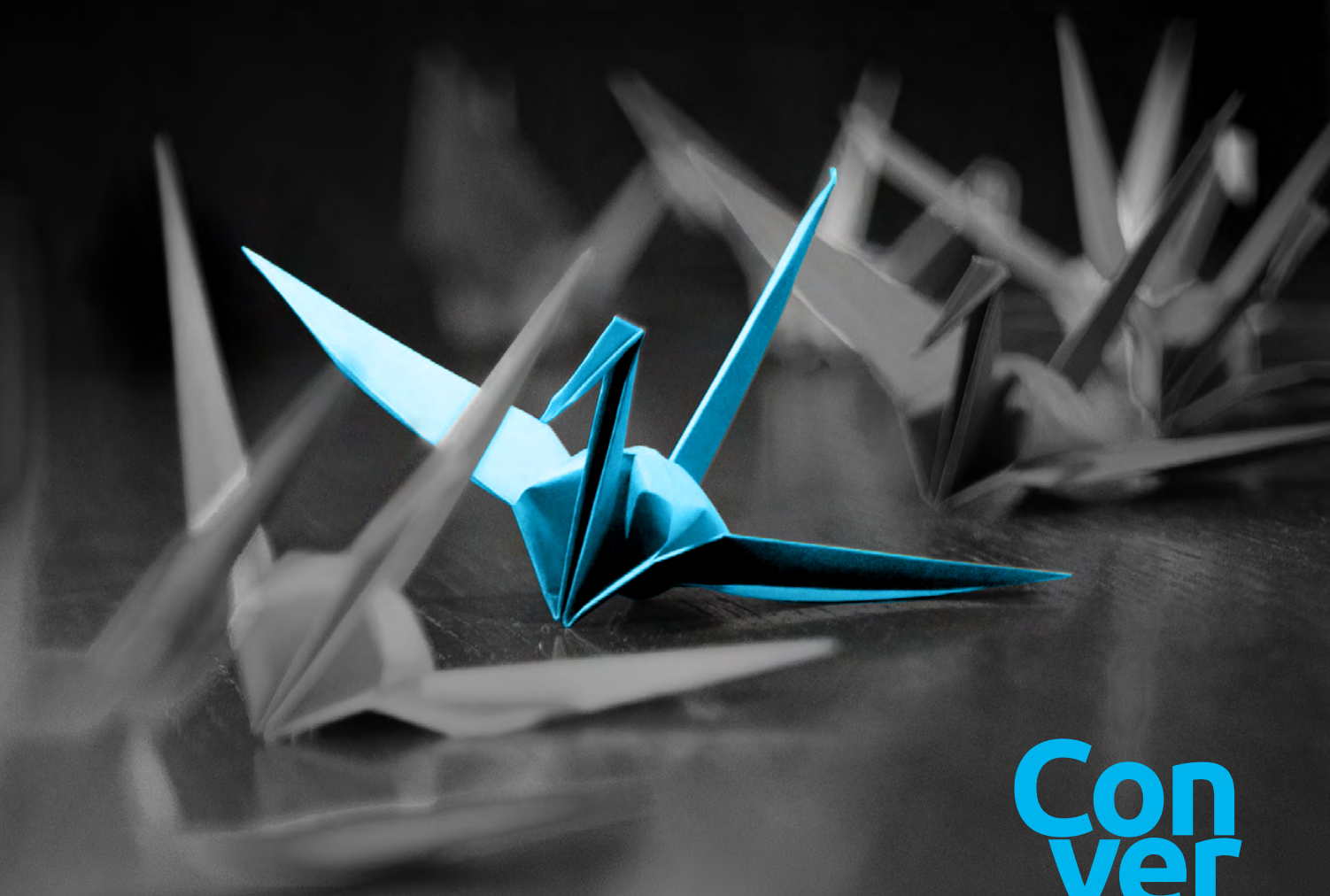


Crafting Tomorrow

Leaders' perspectives on technology



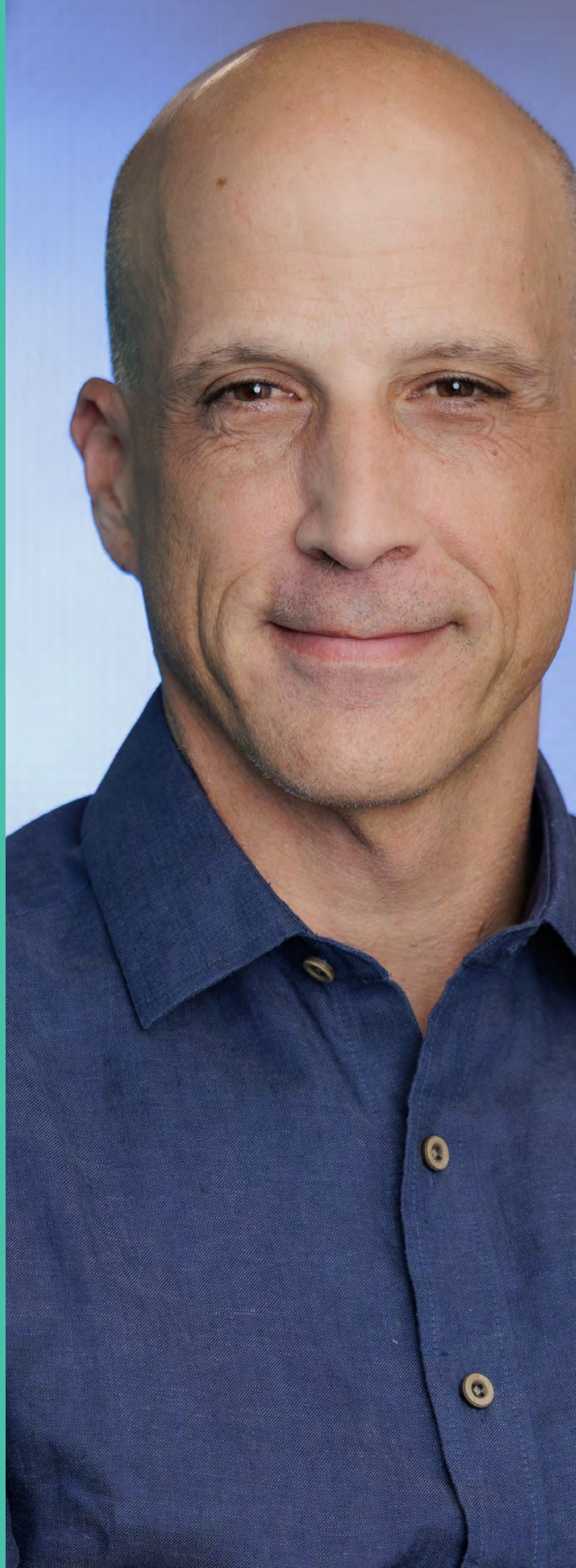


Executive conversations with...



MIKE CRISAFULLI
SVP and CIO, Connectivity &
Platforms

Comcast



WHEN IT MEETS AI

Mike Crisafulli is Senior Vice President and Chief Information Officer, Connectivity & Platforms at Comcast, where he leads the design and operation of the company's digital core to deliver seamless connectivity and exceptional experiences for customers and employees. This entails leading large-scale digital transformation of web, mobile and desktop products and platforms. Before his current role, Mike served as Senior Vice President of Residential Services and SVP of Product and Platform Services Development at Comcast, where he oversaw strategic planning and delivery of systems impacting the entire customer lifecycle. Mike holds a bachelor's degree in Information Systems from George Mason University and an MBA from the University of North Carolina at Chapel Hill. Outside of work, he is a dedicated community volunteer, serving as an emergency medical technician and firefighter for over 25 years.

How has the role of IT at Comcast changed, and which business drivers have pushed that transformation?

Mike Crisafulli: The big tech moves – starting with cloud and microservices, and now AI – have all been about helping us go faster and be more efficient in delivering capabilities across all our lines of business. IT has become primarily an enabler of speed and efficiency.

At the same time, business pressures have increased dramatically. The advent of 5G and fixed wireless broadband created new competitors in connectivity. We operate now in a hyper-competitive environment, where we must do more with less. For IT, that translates into a relentless drive for efficiency, agility, and quality. There's constant pressure to launch new products faster and continuously improve the customer experience [CX], while optimizing existing operations.



Mike Crisafulli
SVP and CIO, Connectivity & Platforms, Comcast

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Our technology function has evolved from back-office support arm to critical strategic partner. We adopt modern tech not for its own sake, but to support business requirements, whether that's launching new streaming experiences or improving broadband reliability. Major external changes (such as wireless broadband competition and streaming) have pushed agility and efficiency in IT, aligned tightly with business strategy.

THE PACE OF CHANGE IN AI OVER THE LAST YEAR HAS BEEN ASTOUNDING

Which new technologies or capabilities will matter most to you and to Comcast in the next two years?

Mike Crisafulli: Without a doubt, AI – especially generative and agentic AI – is front and center. The pace of change in AI over the last year has been astounding. Over the next 24 months, I see these AI capabilities making the biggest impact, both in the products and services we deliver to customers, and in how we operate internally.

We're exploring AI to enhance user experiences and automate more complex functions (network optimization, personalized content recommendations, and so on). But where I'm most excited is applying AI internally to our software engineering and IT operations. There is enormous potential to reduce complexity in our legacy systems, automate routine tasks, and even generate code or test cases using AI. We have other priorities, such as evolving our cloud infrastructure and bolstering cybersecurity, but AI is the new frontier.

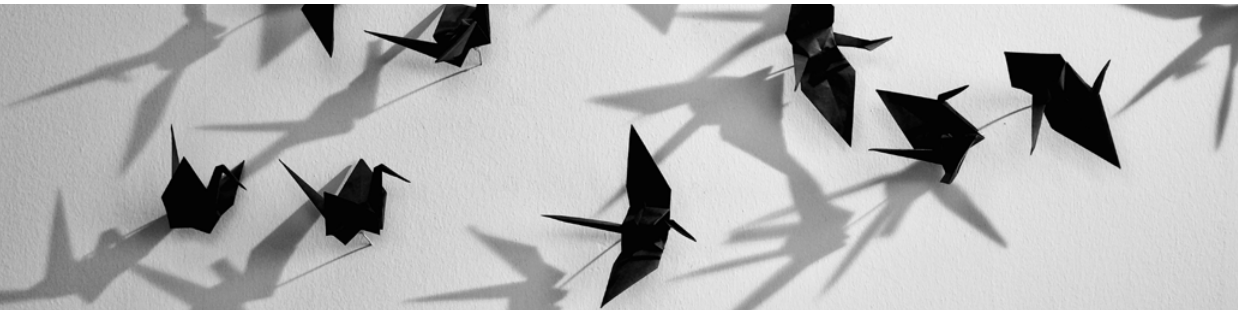
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Where I'm
most excited
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internally to
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engineering
and IT
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STAYING AHEAD OF THE CURVE

How do you keep up with the rapid pace of technological development?

Mike Crisafulli: Personally, I try to absorb information continuously. For example, I listen to tech podcasts that focus on emerging trends. More importantly, we have a large organization full of curious, passionate people, and a lot of knowledge flows in through them.

We've built mechanisms into our operating model to foster continuous learning and innovation and create a grassroots organic flow of knowledge. For instance, we run an internal event called "Knowledgefest," a dedicated day of learning, where employees present to thousands of their peers about cool innovations or lessons learned across a variety of technical tracks. We also have a longstanding tradition of hosting "Lab Week" – essentially a hackathon week – a few times a year, where employees can experiment with new ideas or technologies.



Before Lab Week kicks off, employees start to submit ideas, and teams form around the most promising ones. We also offer up challenges connected to broad strategic priorities (say, CX improvements, entertainment or network innovation). During the hackathon, teams work intensively on their projects, and at the end we hold a science-fair-style demo day. We identify the best projects, which are then developed, potentially into production. Some of our most impactful new solutions have come out of Lab Week. And it's not limited to traditional IT folk. We often have cross-functional participation from business units, which brings in diverse perspectives – and gives employees an opportunity to network and connect with colleagues from other teams.

AI AND THE FUTURE OF SOFTWARE ENGINEERING

Where are you seeing the biggest impact and greatest operational value of the application of AI and Gen AI?

Mike Crisafulli: The biggest AI-driven transformation is in software engineering and IT. We recently used Gen AI to reimagine a core domain of our work: the software development lifecycle. This arose from my team's own experimentation. Over the past few months, we built out a new Gen-AI-powered developer workflow, essentially a GenAI-based SDLC [software development lifecycle]. About 700 of our engineers use this AI-augmented development workflow in their day-to-day work, and it has fundamentally changed how they operate. They're now interacting with AI tools that can generate code snippets, create test cases, draft user stories from plain English requirements, perform impact analysis, and so on. This toolset accelerates the upfront phases of development, from initial requirements to a ready-to-code solution design. Ultimately, we will roll it out to many software engineers across the organization.

There are definitely AI pilots in other parts of Comcast. We also have a couple of major customer-facing AI initiatives underway. But a key part of AI adoption today is really improving our internal software development processes: developer productivity and output quality.

"About 700 of our engineers use this AI-augmented development workflow in their day-to-day work"



If we project forward – to the year 2030, say – how much of IT work will be AI-driven versus human driven?

Mike Crisafulli: I'm pretty bullish. Based on what we've seen just in the last 6–12 months, I think in five years we could see on the order of 80% of software development tasks being automated or AI-generated in some way.

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We don't have end-to-end automation but there's already a lot of human-assisted automation happening in generating code, testing, deployment.

Developers today spend a considerable part of their time coding, and the rest on requirements, design, test cases, impact analysis, user story generation. So, when we started automating the upfront parts, it's already had a huge impact – and when you add in the rest of the lifecycle, like automated testing and auto-deployment, it's hard to imagine less than 80% of it being AI-driven within five years.

With AI coming into play, how do you ensure your teams remain innovative and that the IT–business partnership thrives?

Mike Crisafulli: At Comcast, IT doesn't operate in a vacuum. I've always pushed for a tight partnership with our business stakeholders. With the emergence of Gen AI, that partnership is becoming critical. To develop AI use cases and scale them, you need deep integration of technical and business expertise.

That said, we're still learning which are the best models of collaboration in an AI-driven context. One thing we learned from our internal AI rollout is that change management is huge. Rolling out AI-powered tools is the easy part – we've needed to put a lot more energy and focus into change management and helping teams adapt to new ways of working.

Introducing AI isn't just a technical exercise. It changes how people do their jobs. Now, if I extend that lesson to the broader business, the change management challenge is even bigger.

For our most strategic AI initiatives, we've started creating cross-functional "AI pods." In these AI pods, product owners, business analysts, and engineers are all part of one agile team. It's like forming a mini startup within the company, focusing on a specific business problem and using AI as an accelerator. We're piloting it on a couple of high-priority projects. But, already, it's promising. We have business stakeholders working with developers, and even using the AI tools together to define a solution. This brings a shared understanding and much faster iteration. That real-time collaboration is powerful.

Different areas across Comcast have different maturity in product ownership. Historically, some platforms didn't even have formal product owners on the business side. In our customer-facing digital experiences, we have UX designers and business leads deeply involved, whereas some back-end systems were more IT-driven. So, we will need to vary our approach to rolling out this new integrated model. But broadly, I see AI acting as a catalyst for closer IT-business integration. To get the most out of these AI tools, we have to rethink roles and break down silos that have existed for decades.

AI technologies are changing fast. We'll continue to have opportunities to educate our business partners about what AI can and cannot do, so they can ideate with us. The more tech-fluency on the business side, the better. It means everyone speaks the same language, at least to some extent.

I believe this "one team" approach will yield a whole new level of partnership. To succeed, AI relies on tech and business working in concert. Culturally, we are fostering curiosity, continuous learning, and listening closely to the business on what will move the needle for them. It's an exciting evolution in how we work together.

I SEE AI ACTING AS A CATALYST FOR CLOSER IT-BUSINESS INTEGRATION

BALANCING SPEED OF PROGRESS AND AVOIDANCE OF TECHNICAL DEBT

How do you balance delivering new features quickly with the need to manage technical debt and maintain stable platforms?

Mike Crisafulli: This is a classic dilemma for any large IT organization. The advent of AI cuts both ways here. On one hand, AI will let us deploy new features faster. But, if we're not careful, that could exacerbate technical debt, because we might spin up new services rapidly without the usual constraints, potentially increasing the complexity of our estate. For example, we don't want to launch 100 new microservices powered by AI and forget to retire the 50 old ones they were meant to replace.

On the other hand, I see a huge opportunity to use AI to tackle technical debt. Imagine AI tools that can analyze legacy codebases and propose simplifications or even automatically refactor code into more modern languages/frameworks. Or AI-assisted testing that makes it easier and safer to decommission old systems. So, I'm optimistic that we can apply the same AI power to "cleaning up" as we do to building new things. In the best case, AI helps us simultaneously accelerate feature delivery and the retirement of obsolete stuff.

It still comes down to discipline and prioritization. We need to bake platform simplification into our roadmap, even as we speed up features. The goal is a balanced approach: using AI both to accelerate and simplify. But it requires conscious effort: governance to ensure we're decommissioning as fast as we're adding, and maybe even dedicating some AI capacity to hunting down inefficiencies in our architecture.

"I'm optimistic that we can apply the same AI power to "cleaning up" as we do to building new things"

How do you prevent teams from being overwhelmed by the pace of change?

Mike Crisafulli: It does feel like the tech is moving faster than many teams can absorb, on the business side as well as the IT side.

We don't want teams so paralyzed by new options that they stop experimenting. We give them an open environment to try out new tools and



ideas (within reason), so they stay engaged with the latest technology. That's the whole idea behind Lab Weeks: create safe spaces to play with what's new. But there's always a focus on business outcomes. We have to prioritize the problems we're trying to solve.

This ties into the classic build-vs-buy and portfolio management discussions. In the past, you might buy a technology solution and expect it to serve you for 2–3 years. Now, something new might emerge in six months that upends that assumption. So, we have to stay nimble. We're trying to keep a hybrid approach in our tech stack, rather than locking ourselves into one vendor or architecture, which might be outdated in a year. We modularize where we can, so if a better component comes along, we can swap it in. And we re-evaluate our portfolio priorities every quarter, or even more frequently.

In practice, it becomes a cycle: keep experimenting, while delivering incremental value. We want to be aware of what's around the corner, without that distracting us from what's possible today. There's so much we can do with the tools at hand, even if they're not perfect or the very latest, that can give us 80% of the benefit we're looking for. Let's deliver something tangible, get value, and then we can iterate when the next improvement comes. It's a balance of staying adaptable without losing focus on execution.

We also put great emphasis on an adaptive mindset. You hear clichés like, "Today is the slowest rate of change you'll experience going forward." Well, it's true. We have to internalize that. For example, I tell my leaders: we might spend four months implementing a solution and then a new technology makes part of it obsolete. And that's okay. We delivered value for those four months, and now we adapt again. The old mindset of "Set a 3-year plan and stick to it" doesn't fully work in this environment. Instead, we plan in smaller chunks, deliver in smaller increments, and be ready to pivot when needed.

This is a big cultural shift, especially in a large enterprise like ours that traditionally valued predictability and long-term roadmaps. We're retraining

Executive Conversations

ourselves to think more like, “What value can we deliver in the next month or quarter with what we know now?” and then iterate. It’s an agile mentality taken to the next level due to the extreme pace of change. We still have an overall strategy, but we’re fluid in how we get there.

In short, to prevent overwhelm, we narrow focus to what matters (business value) and cultivate an adaptive culture. Encourage the team to try new things, but also to accept that not every new thing will stick. Celebrate quick wins and learning, not just big, long-term projects. The goal is that our people don’t fear the change but see it as exciting – as long as we’re delivering outcomes along the way.

How will automation and AI change your approach to IT governance and oversight?

Mike Crisafulli: I think AI is going to reshape governance significantly. A lot of governance today is about policy enforcement, approvals, auditing what people do – tasks that could be automated. If we apply generative and agentic AI to these areas, we can imagine things like automated policy definition and real-time compliance monitoring. I see governance shifting to be much more about strategic oversight of the AI, rather than humans doing all the checking. For example, you might have AI agents that handle certain approvals or keep audit trails. Our job is to audit the auditor. We’ll need robust traceability of exactly what the AI did, what decisions it made, and why.



As AI takes over routine governance tasks, humans will focus on meta-governance: designing the policies, reviewing exceptions, and guiding the AI"

We're working on an orchestration layer for AI agents. Think of it as a management framework for AI "employees." In many respects, we're going to treat those agents as we would human team members. That means assigning roles, monitoring performance, setting up controls and logs for everything they do. So, as AI takes over routine governance tasks, humans will focus on meta-governance: designing the policies, reviewing exceptions, and guiding the AI. It's a shift from doing the work to overseeing the work. And because AI can give more visibility into processes than we've ever had (through logs, analytics, etc.), we might actually get more transparency and accuracy.



What is your biggest takeaway from this transformation journey?

Mike Crisafulli: We're all learning. We're at various stages across domains. I'm sticking to this: change the way we work. Don't just automate something that's already broken. Prepare your workforce for change and being adaptive and keep your eye on outcomes.

Much of it is change management. Much of it is new tech, governance, and privacy. For our consumers, our ways of thinking need to change as much as the tech.

That's the key. Otherwise, we're just "AI-ing" what exists today – maybe faster, maybe more efficient but if we don't have the talent to reimagine what's possible, especially for our products and consumers, it's all for nothing. That's why we're focused on talent alignment, change management, and adaptability as much as the tech.

Reimagine, don't just replicate. Invest in your people and change management, and stay laser-focused on the outcomes you want. It's a daunting, but truly exciting time. I'm confident that, by keeping those principles in mind, we'll navigate whatever the future holds.



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